

Newsletter – 2016 Predictions/Results

My name is Max Rudolph. I consult with institutional investors, companies, and individuals about enterprise risk management, asset-liability management and strategic planning topics. I also do research projects and read quite a bit about current and historical financial topics. I am a private investor focusing on individual stock selection and value investing techniques. I believe you can reduce risk and increase return simultaneously. In addition to client work, I develop and present continuing education programs and am an adjunct professor at Creighton University working with students completing a Masters in Investment Management and Financial Analysis. I live in Omaha, Nebraska, USA, am credentialed as an actuary and hold a CFA charter. I write a monthly newsletter and each January post my predictions for the year. Late in the year I review and analyze what actually happened. Some topics are written at a high level, dealing with the general economy. Some are more detailed, covering specific topics like incentives or modeling financial assets. Most cover issues that I am stewing over and need to do a brain dump. In March I update my intrinsic value calculation for Berkshire Hathaway and in the fall I update the scenarios I think should be tested. I am a lifelong learner, and that impacts how my current thinking evolves. My newsletters are educational in nature and do not constitute investment advice. They are released publicly at www.rudolph-financial.com with a delay after they are released to subscribers.

For those interested in a 12-month subscription, and having input on topics, corporations should send \$1,000 and individuals \$100 in US currency payable to

Rudolph Financial Consulting, LLC
5002 S. 237th Circle
Elkhorn, NE 68022 USA

The newsletters are distributed via email, so please include an active email address.

You can also follow me on twitter @maxrudolph.

Predictions for 2016

Please remember that these predictions are for fun and to encourage deeper thinking across topics and a longer time horizon. If I really knew what was going to happen, I would not share that information with you! You must make your own personal investment and risk decisions, consider your unique financial circumstances, and not hold others (especially me) responsible for your own financial planning or lack thereof. If you don't accept these conditions you should stop reading now. For those still with me, Enjoy!

- Results: This document does not change anything from what I wrote early in 2015 but adds sections that discuss the results.

General happenings

2015 was a transition year, with currency wars driving trends that played out in oil prices, geopolitical risk and economic growth. I would argue that the underlying world economy never recovered from the imbalances that built up prior to 2008 and that Chinese growth and fracking in the United States masked that reality. Central banks, by keeping rates low and following quantitative easing programs, encouraged projects that were short term in nature as well as various financial engineering attempts to grow profit metrics. With the Federal Reserve starting to tighten there are many similarities to 1937, when the Great Depression was reenergized by the Fed. I'll be very surprised if the Fed raises rates beyond 50 bp before it has to take action to ease (they have several options, several of which are very odd – e.g., getting rid of paper money).

- Results: Chinese growth is now slowing, and fracking has been down and now rising again with the price of crude oil. Unfortunately the upsurge of populism makes 1937 a very appropriate year for consideration. It looks like my prediction of 50 bp at the end of 2016, made in 2015, will be accurate.

Debt levels remain high but growing more slowly in the US, and much of Europe continues to see negative interest rates on government debt (note that I no longer refer to it as risk free). Velocity of money continues to hit new lows, reflecting some trust remaining in the financial system but still a lot of concern. So far the oil and junk bond bubbles have burst. In 2016 additional bubbles will blow up, but the response will inflate new ones. Interestingly, many are only available to sophisticated investors, and most are illiquid. When they burst the fall will be substantial. It is not a time to be buying on margin. Investors have been forced to take additional risk by the Fed, and many accepted risks they don't understand. I expect them to be better understood by this time next year, and it will be interesting to see who gets hit hardest. I will be surprised if hedge funds and private equity have a good year. The US continues to be in a good position relative to other countries, which isn't saying much, but will this be helpful or give politicians an excuse to maintain gridlock and ignore needed reforms.

- In the US the election dominated the news, and while lots is being talked about by president elect Trump I'm not hearing much about needed reforms. Oil has come back high enough to keep the fracking fields flowing, VM continues to hit new lows, and junk bond spreads have continued to drop (about 420 bp). Hedge funds have not had a good year, and a big story of 2016 is the move to passive investment strategies. The US remains the reserve currency, mostly due to the ineptitude of others. There are rumors of a move to SDRs as the global currency following the next crisis, and China and Russia have bulked up their gold supplies so they have a seat at the table.

The Presidential election will be impacted by the economy, and I don't see it helping the Democrats as the incumbent party (Congress somehow avoids their portion of the blame). Geopolitical tensions are now high throughout South America and Eurasia. In South America assets are leaving, helping to create a real estate bubble in south Florida. Assets

in China and Russia will increase market prices in large cities like Seattle, New York and Washington much as Japanese investors did in the late 1980s. Venezuela is in worsening shape, Brazil is having one of its periodic periods of economic malaise, but Argentina might have turned the corner with the new regime.

- Results: the only surprise here is the economic rebound in Brazil. We'll see if it lasts. The latest trick is for economies to eliminate large denomination bills – so far India and Venezuela have announced plans to do this following Ken Rogoff's claims that it will reduce crime by moving to electronic cash (in his book *The Curse of Cash*).

The Zika virus may build unintended consequences and interact with economic forces (and the Olympics) if not contained. Russia has little room for error, Iran is desperate to free up trade, China is slowing at the same time as there are political stresses, and Saudi Arabia wasted the last century and has limited industry beyond oil and few citizens who know what hard work is. Africa is leaving what may be known in the future as its democracy phase. Climate change and other sustainability issues are making water and other resources the driving force behind regional conflicts.

- Results: climate change and the new administration's response (or lack of) will be the story 50 years from now. Zika continues to spread during the summer season and is present mainly in Florida and Texas so far in the US. The implications for adults are greater than originally thought. Saudi Arabia opened the taps to try to hurt Russia, Iran, and US frackers, but has lost this bet so far. It is said that they need breakeven oil at \$80 for their budget to balance (currently just over \$50). The pressures inside China are growing, and it will be interesting to see how they respond to name calling by the US. There is much at stake.

The cyclical El Nino has made this the warmest period in history, but the next several years will trend to lower temperatures than 2015-6. We should not be comparing against a single year but a solar cycle. Especially in places like Brazil and California, water needs to be priced appropriately to allow market forces to adjust. Financially the signs continue to point toward both deflation and inflation. The FOMC is now tightening while everyone else is loosening monetary policy. We wait until the last minute to deal with problems, and some day our luck will run out.

- Results: the US has started to formally tighten monetary policy, and it will be interesting to see if a war is brewing between fiscal expansion and monetary tightening. We are already seeing fake news stories talk about how the earth is now cooling, just as they did following the El Nino year of 1997.

At this point President Obama is in his last year, using executive orders to move the agenda. I hope he is successful with gun control, women's rights and Obamacare. Republicans have become part of the problem, and the front runners in the Presidential race are embarrassing the country with their backward views regarding topics like climate change and gun control. As I write this in mid-January, an issue with Iran was recently

defused because there is already a relationship between administrations. This is a good thing. Moderates are nowhere in sight, and I don't see an obvious candidate for me to support. Clinton knows the issues but scares me because of her poor relationships with "little people". She comes across as knowing what is best for all of us, and may be right, but has no empathy. Maybe that is what Bill will bring to the White House.

- Results: my positions have not changed. I fear "Davos Man" but not as much as I fear what Donald Trump could accomplish. Very sad.

Companies dependent on fracking that are leveraged are on their last legs. I wonder if it was they who championed selling US oil overseas. Otherwise it makes little sense. Hillary Clinton is still the Democratic frontrunner, but needs to get past mistrust of her and several scandals. The Republican side is more jumbled. Jeb Bush and Marco Rubio remain the favorites in my mind, but Trump and Cruz are the current leaders. There are still rumblings of a late Joe Biden run if Clinton stumbles.

- Results: I still haven't heard why oil can now be exported. Frackers may not be profitable but are better off financially to run the pumps than not. The Republicans lost the popular vote but carried the electoral college for Trump. They hold both houses, although not by enough to push things through. Several Senators, notably John McCain, will make it tough on Trump to bully the Senate.

Europe remains a mess, with immigration now a major issue. They may not be able to maintain the European Union, with the UK's limited role on the ballot this year. If they exit it will encourage others to try. The Middle East is very hard to read over the next 10 years. The uncertainty that groups like ISIS bring and lack of moderates don't lead to happy outcomes. Iran may emerge as the consolidator. China has its work cut out for it. Slowing growth, historical tensions between haves and have-nots, climate change and political stresses will be interesting to watch. North Korea will provide a surprise or two, or China may decide to try out some of its new toys and merge it into the Middle Kingdom. Australia will struggle as commodity prices falter and the climate evolves.

- Results: The UK voted for Brexit and Italy voted against the incumbents. Germany will vote next year. Of late there is higher correlation between countries than I can remember. Populism is on the rise, and in Europe this party is aligned with ditching the EU. Immigrants and Jews should plan accordingly. Taiwan is a big issue in December due to a simple call between the PE and Taiwan's leader. China just launched its first aircraft carrier. It's too early to call it as correct, but Iran continues to work toward being the leader of Shia Muslims.

Some scenarios are completely discounted by the public but have probabilities over the next decade or so that are material. Extreme events happen every year. They are rarely identified in advance. Weather and seismic events continued to be present in 2015, with a combination of El Nino and jet stream adjustments leading to heavy flooding in the UK, drought in California and typhoons in Asia. Extreme events, especially those covered by insurance, overall were limited in the US last year. The economy is a complex adaptive

system, so short-term forecasts are unlikely to be accurate. Stocks have now risen for seven consecutive years, a record. January 2016 results are confirming that it is unlikely we will make it to eight. It would not surprise me to see stock prices down 20% or more this year, with a small chance for 50% drops over the next couple of years. The dollar remains the reserve currency, mainly due to a lack of acceptable substitute.

- Results: El Nino continued its path from 1997 to be a local maximum with regard to climate change. We will likely see temperatures a bit cooler when compared to 2016 while still being materially higher than earlier periods. The southeast, in a very short period, experienced both Hurricane Matthew and strong wildfires. Thanks to the Trump rally stocks will be higher for an eighth consecutive year, but it is hard to find investments with large margins of safety. Some are comparing the current rally to the 1920s, with a nasty surprise when it corrects. Treasury rates have perhaps bottomed in the US while remaining negative in Europe and Japan. Chinese and Japanese insurers are desperate to buy businesses in the US in a bid to lessen their exposure to their home currency. The US\$ has strengthened to nearly 120 yen and the renminbi continues to weaken despite calls for it to be named as a currency manipulator amid China's attempts to prop it up.

Scenarios

Here are some outlier scenarios I think are more likely to happen than consensus in the next several years (some may not happen for a decade or more). Due to the long-term nature of these scenarios, in some years they might not change or only slightly be tweaked.

- Cyber-terrorism impacts the banking system or shuts down power stations
 - Results: several breaches announced, most notably to Yahoo. Reports that lots of probing is going on, from both sides.
- Space junk knocks out a satellite used for public communications
- Atmospheric river hits California and dumps rain on San Francisco for a month
- A severe earthquake (or volcanic eruption) hits California, St. Louis or Seattle
- Super-volcano becomes active
- Fracking is declared illegal in the US or Canada due to environmental impact
 - Results: Oklahoma fracking practices continue to trigger faults.
- China erupts in civil war or regional conflict with a neighbor over resources
- Eurozone breaks apart – could be north/south, poor countries/rich countries or just kicking out individual members
 - Results: Brexit and Italian election leads me to think this is closer, but will be ugly and have ramifications in the US.
- Venezuela erupts in violence, shutting down their oil industry – contagion in neighbors risk making this a regional hot spot
 - Results: unfortunately poor management leaves many without food.
- A virus develops drug resistance and becomes transmissible by air – mosquito borne Zika virus is one to watch out for

- Results: Zika continues to expand with the seasons, and influenza is returning to bird flocks in Europe.
- Iran encourages regional conflict and becomes the Middle East's consolidating superpower
 - Results: happening as I write this.
- Water resources trigger a regional conflict (likely Himalayas or Europe, with water issues expanding in the Americas)
- S&P500 down 30% from high point, combined with double recent bond defaults and real estate collapse in the largest US cities. GDP down for 3 consecutive years.
 - Results: not yet.

While I tweaked some of these, the major change is to call out the Zika virus, but several are much closer (e.g., virus, Eurozone, Venezuela, cyber risk, China, Iran).

These predictions were made in January 2016.

- Politics and currency wars: Prediction – President Obama's legacy will be as the fracking President who used drones to assassinate opponents. If he stays within ISIS that will probably be supported by the world establishment. Amazingly he has not had the scandals found in recent two-term Presidencies. Obama won the Presidency during a disastrous scenario, and could go out with the country in the same shape. He will use executive orders and Congress will be useless this year, failing even to pass common sense gun control laws. Who will the Republicans run for president in 2016? Jeb Bush or Marco Rubio are still my expectation, but one of them needs to step up and act as if they want the job. No concerns there with Hillary Clinton. If she runs in November the Republicans will choose a female vice president. If she doesn't I think it will be John Kasich. Clinton has more health risk and scandal risk than the other democrats. I am not excited about a Joe Biden run but it is possible if she falls out. If Trump runs as an independent it likely means the democrats will win. The taper and minor increases in rates by the Fed, along with devaluations in other countries, will continue to strengthen the dollar and lower the price of oil. There won't be more than one rate increase in 2016 from the Fed due to the economic turmoil and as Europe/Japan/China all continue loose policy. Venezuela will continue to lead South America into turmoil. Saudi Arabia has no Plan B, and with Sunni and Shia tensions building, could erupt in the next few years. Low oil prices may be a short-term phenomenon as frackers go bankrupt and geopolitical issues bring volatility to the market. Europe needs to develop an exit strategy, but those in the east will push to maintain a military alliance. Japan has been the most aggressive in its currency war, but eventually will implode as demographics drive rates and economic growth lower. Eventually a Bretton Woods type meeting of the world's powers will be needed to resume stability. Some are even calling for a gold standard, but more likely is a global currency using many countries rather than the US\$ as the reserve currency. This will be a good thing in the long run but will impose controls on US politicians that reduces flexibility but increases controls. The risk

of China experiencing an economic hard landing and consolidating around nationalism is quickly increasing. This could have major consequences, everything from an internal revolt to a selloff in US Treasuries to a regional armed conflict about resources. The next major wars will start in cyber-space, as all parties are probing for weakness and hiding in the shadows.

- Results: except for the political results I did really well. There may not be many changes for 2017 as these scenarios continue to play out. Amazingly, I anticipated the exact number of Fed interactions (1) over the last 2 years.
- Stocks: The US raised rates once in 2015 and its trend is diametrically opposed to everyone else. Japan, Europe and China are all loosening, leaving oil and emerging markets in a bad spot. I expect the US market to lose about 20% in 2016 and come out of its funk once the US Presidential election loses its uncertainty. This could occur before November if the race is not close. There is still a small probability of a larger crash due to contagion due to the previous stimulus that took it out of sync and created a bubble. Emerging markets will suffer through a major bear market similar to 1997. I continue to avoid bonds, although lower rates (even negative) are possible, using highly rated dividend stocks for this type of exposure. Single year predictions are unlikely to ever be right, but I look at -20% returns in the first three quarters and some rebound in the fourth quarter. I see the economy performing similarly, with a recession early in 2016 lasting through the summer. The disaster scenario for interest rates is down and then spike up. Hyperinflation will appear somewhere in the world over the next couple of years, with South America a leading candidate (Argentina is already there). I expect consolidation in the insurance industry as foreign buyers seek diversification and US domiciled firms take advantage of the strong dollar. The S&P500 closed 2015 at 2,044, nearly unchanged for the year. Dividends made the total return slightly positive.
 - Results: Again, I was not close in anticipating the presidential election. This surprisingly led the markets even higher, up over 10%, due to expectations of lower tax rates and reductions in regulations. We'll see how much of this gets done and how much is offset by monetary policy. The three decade long bond rally has ended and the dollar continues to strengthen. This will impact exporters going forward, especially if borders are restricted and tariffs are increased. Venezuela now has hyperinflation. Hopefully it will not export it to other South American countries. US insurers continue to be bought by Asian counterparts.
- Unemployment: Structural unemployment has risen in the last decade as it becomes harder to go between jobs (locked into mortgage or health insurance, last in first out mentality for layoffs). Pension plans are doomed for failure, with funding levels 20% below that needed even after 7 years of gains. I expect the unemployment level to rise from 5% to at least 7% in 2016.
 - Results: The uncertainty about the Affordable Care Act has likely increased structural unemployment even higher as Trump voters realize that he wants to take away their subsidized health care. More pension plans are attempting to offload their risk to third party insurers. The

unemployment rate reduced to 4.9% as more left the workforce. Many remain under-employed. The skill set needed for open positions is not held by the unemployed. Make sure your kids become lifelong learners. This will be key to their success.

- Residential home market: US regions continue to have lower correlation with each other. Fannie and Freddie are the only game in town right now to facilitate mortgages. That is a problem.
 - Results: one of the most disappointing of Barack Obama's legacies is that he did nothing to move the GSEs away from too big to fail. Higher rates will lead to a mortgage surge and then a slowdown.
- Volatility: The VIX closed 2015 at 18.21. I have thought for several years that if VIX was a predictor of the future it would be higher. Known risks include heavy personal and government debt levels, and loose monetary policy. I find it impossible to predict VIX but I think a reasonable "normal" range when debt is high would be 20-25. A single digit VIX is definitely too low and above 35 is too high, but as usual I see more possibilities for a higher result in 2016, especially if we experience both a recession and 20% drop in the stock market.
 - Results: The VIX never moved below 10, and briefly reached above 30, but generally was lower than it started the year. I still think it should be higher, and perhaps will rise with interest rates.
- Oil: WTI oil on December 31, 2015 was about \$37. I have lost all comfort in predicting the price of oil, but with Iran coming back online and others (frackers, Russia, Venezuela) desperate for revenue, it won't see \$100 for a while. Saudi Arabia will eventually drive high cost producers from the market, but the unintended consequences may not suit their own long-term needs. A desperate Russia or Iran will not roll over. We could see \$20/barrel oil.
 - Results: Despite OPEC's efforts to limit supply I see this scenario as early rather than wrong. The dollar is strengthening and Saudi Arabia is racking up debt. It is said that they need oil to be \$80 per barrel to balance their budget.
- Credit risk: much of the junk bond issuance recently has been to energy companies that are now in free fall. Watch out for defaults here and in emerging markets where the strong dollar is causing problems for dollar denominated bonds. These issues will cause spillover in other markets and industries as hedge funds sell "safe" assets to cover losses.
 - In December 2016 we are starting to see some leading indicators of problems. Platinum Partners Ponzi scheme and selling of energy firms assets seem like a precursor to broader issues. Some frackers are said to be losing money but continue pumping as that provides enough cash to pay interest payments. European banks have a heavy debt overload, with Italy bailing out their largest bank and rumors of bank bail-ins swirling. US junk bond spreads have not widened to reasonable levels yet.
- Currency/Inflation: The US will not raise rates more than once in 2016. With other countries loosening and the US entering a recession (watch manufacturing in the future for leading indicator) they will be forced to back off and may even

enter into a new round of QE. I expect the dollar to continue to strengthen against China, Europe and Japan.

- Results: The Fed raised rates in December for the first time this year. The dollar continues to strengthen. Nailed it!
- Fed policy: The US continues to be susceptible to a large catastrophe, financial disaster, or armed conflict. This will be an issue leading into the Presidential election and throw into question the independence of the Fed especially if a right wing Republican is the nominee.
 - Results: this issue has not gone away and will continue into 2017.

Emerging Risks - Concerns

- Infectious disease - increased resistance to antibiotics (e.g., tuberculosis, staph infections or pneumonia), coronaviruses, Ebola (and similar), avian flu types that are transmissible by air. Mosquito borne diseases are making a comeback led by Zika and Dengue, quickly becoming endemic in Brazil and moving north.
 - Results: Recent Ebola vaccine tests have been positive, while Zika continues to move north with Florida and Texas among its current environments. The Olympics followed mosquito season, which no one seemed to mention ahead of time so there were not a rash of outbreaks at that time. As we enter 2017 we should watch for outbreaks in the southern hemisphere. Avian flu has been active in wild bird populations in Europe and China.
- Global warming – unexpected side effects like new viral/bacterial attacks, along with coastal flooding, more concentrated coastal storms at unusual times of year, stronger and more frequent convective storms, and shifting weather patterns that impact farming through changes to the jet stream. It is going to be increasingly difficult to be a farmer over the next 50 years as climate warms and modifies. Whether we like them or not, genetically modified foods may be the only thing that adapts quickly enough. We'll continue to see extinctions as conditions change too quickly for most species to adapt. Record high temperatures for the planet will subside as el Nino moves through its cycle. The proper comparison will be against the years right after the last el Nino strongest year. It makes sense to look at a graph rather than compare single year data points. It makes it too easy for politicians to lie with statistics.
 - Results: El Nino peaked in 2016, with record global warmth reported monthly. Anyone who looks at the data quickly becomes convinced that there is a problem. The strong 1997 El Nino data point continues to be used as a way for climate change deniers to convince the gullible. The solar cycle is the key to understanding the ebbs and flows of climate change. The new president will see the impact personally as his Mar-a-Lago club will be worthless in 20 years if not sooner. The problem is that you can't put up a wall to keep the water out – the area around Miami is built on limestone that allows water to seep up from beneath. The previous owner found a sucker, and there is currently a real estate boom in Miami. I believe this is because wealthy South Americans are trying to get their

money to a more stable economy and feel they know Miami. They don't. The same is true with home prices in Vancouver and Toronto as Chinese renminbi is fueling speculative prices.

- Earthquakes and hurricanes – the US is overdue for a major quake on the west coast and areas not normally thought of for seismic activity due to long dormant periods (e.g., Seattle, Yellowstone super volcano, St. Louis, New York City) are well into their cycle. I'm starting to worry more about an atmospheric river event on the west coast. The drought is strong enough that there is no longer a season when wildfires are not common in California and Australia. Due to warmer air, more moisture is held by the atmosphere, with unknown results (so far it looks like this breaks up hurricanes but leads to stronger convective storms and nor'easters).
 - Results: it looks like we can add the US southeast to the areas susceptible to wildfires. Luckily the main earthquake story in 2016 was from Oklahoma, which could be managed by a reasonable person. Seismic activity impacted other areas of the world; New Zealand, Italy, and Chile among them. The Philippines seems to have a target on it for cyclones to aim at. The last few years have gotten worse.
- Levees in California, earthquakes/volcanos, water poisoning in big cities, cyber hackers, transportation of oil and oil based products via rail through urban centers (e.g., downtown Chicago).
- Malthus – too many people, not enough resources – 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? Are there unintended consequences associated with the “giving pledge” by the rich? Is it really so bad to have aging demographics and a shrinking population? Should we look at GDP growth by splitting it between population growth and economic growth? In the long run we are more susceptible to war, famine and disease through population growth, and this interacts with climate change issues. Hopefully more billionaires will follow the Zuckerberg model to rebuild infrastructure.
 - Results: we seem closer to a need for a ratchet than ever – hopefully it is not too late. By 2040, over 1/3 of young people under age 14 will be from Africa. This will lead to ongoing immigration issues.
- Student loans – not only will millennials default due to student loans, there are many instances where their parents co-signed for them. This situation will have much more impact on the economy in the future than we have seen previously (negative).
 - Results: we now have Social Security income being garnished for student loans, which is a new low.
- Concentration risk – this will be a hot topic over the next few years. 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, especially if leverage is involved. Margin debt is at record levels, not a good sign. Identifying concentrated exposures should be a focus during strategic planning efforts at companies.
 - Results: I walked right into Donald Trump on this one.

- Terrorism – in the US, political extremists may become active leading into the election cycle. It amazes me that we have not had more attempts to injure politicians, especially with the lack of gun controls.
 - Results: unfortunately, this is an ongoing story. Events were more common in Europe this year, with terror impacting France and Germany in high profile attacks.

Top Actuarial Issues

- Defined benefit plan valuation – valuation methods need to be revamped to front end funding levels for both private and public plans.
 - Some plans are being investigated for funneling money using bribes, while other plans think a 7% return assumption (down from 9%) is all they need to do.
- ORSA implementation – regulators have moved toward checklists, but can still make it worthwhile if they outsource review of the reports to experts who understand how risks aggregate and diversify.
 - Results: I saw signs from regulators that ORSA might be worthwhile, both from training or from bringing in external risk experts to peer review the reports.
- Product design – be sure to look at exposures in case hedges are not available.
 - Results: I am seeing others talk more about gross versus net exposures, especially as drivers of systemic risk.
- Obesity/smoking – how will the various drivers of mortality and morbidity interact (some good, some bad)?

Strategic Scenario Planning

Look at stress scenarios qualitatively and graphically in addition to quantitative focus. Consider a combination of several deterministic scenarios, including one where the Wall Street tool kit (e.g., derivatives) is not available.

Pick some of these to do every year, some can be done qualitatively, some rotate every 3 or 5 years. Total stress scenarios completed should be 10 or fewer.

- Negative interest rates
- Spike interest rates over 10%
- Level
- High credit risk – double default rate for BIG assets
- Equities – down 35% and options market dries up
- Mortality – pandemic .6% excess mortality
- For companies writing indexed products – model/report separately – test product if derivatives market dries up
- Higher interest rates and inflation: grade 3% per year until you get to 12%
- Qualitatively consider 20% inflation environment (if you have annuities you should be testing 1,000 scenarios from the VM scenario generator)

- Low interest rates – Japan scenario
- Flat equity markets combined with higher inflation
- Falling dollar – combine with high interest rate scenario
- Global climate change – how will this impact your business and suppliers (e.g., look out 20 years to consider new agents or a mortgage in southern Florida, where over \$100 billion of property value is at risk from a 3 foot rise in sea levels)
- Liquidity risk – consider your largest markets and what would happen if they dried up or were regulated out of business. Have you accepted risks that you thought were mitigated? A core line of business should not be at risk here. If it is then it should be a satellite line. What would you do if no one offered a derivative position for you to hedge against? Are there protections written into liabilities?
- No diversification is allowed between risks. Do you have enough capital to survive?
- If you are ambitious run a scenario with equity markets down 35% and 10 years' worth of deflation

Predictions from January 2010

I posted my first annual financial predictions in 2007. Each year I will look back and share interesting comments I made that seem accurate in hindsight. I have deleted sections but not changed the wording in what remains.

These (mainly) economic predictions were made in January 2010.

- Political instability throughout the world will be a problem, driven by the liquidity crisis, price of oil, and/or terrorism. Countries most at risk are Iran, Venezuela, Pakistan, Mexico, and the Philippines. China could see a negative surprise here.
- Unemployment: Fiscal stimulus has helped to bottom out unemployment, and I don't expect it to get worse than the current 10%. We have entered an era where saving is more popular, but this will only be complete when some who choose not to save are allowed to fail. There is enough money on the sidelines that this should not cause a slowdown in growth. Budget imbalances will eventually create inflation, but long term treasuries will increase first. Taxes will not be impacted until unemployment returns to a more normal level but will eventually need to rise.
- Securitization/Mortgages: The securitization market will thaw a bit but capital requirements will continue to be high for banks, discouraging loans. Some are saying that the Fed will have major balance sheet issues if interest rates rise. Are these unintended consequences or just a plan that was not thought through? Probably some of both.
- Volatility has fallen all the way back below 20, indicating to me that investors think the government will bail them out no matter what and no matter when. This is clearly wrong in the long term.
- If oil prices fall back below \$50, political instability in Russia and South America will quickly follow in the next couple of years.

- Results: Russia has tried to maintain morale through foreign involvement, while Venezuela has imploded due to oil price drops.

Here are some risks I was worried about over a longer time horizon.

- Can an internal CRO be strong enough to stand up and be counted, or will fears for their job keep them “in line”. Every firm needs a Chief Skeptical Officer.
- US political environment – can they say no to anyone requesting a bailout?

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!

Warning and disclaimer: The information provided in this newsletter is the opinion of Max Rudolph and is provided for general information only. It should not be considered investment advice. Information from a variety of sources should be reviewed and considered before decisions are made by the individual investor. My opinions may have already changed, so you don't want to rely on them. Have fun!