

Newsletter

My name is Max Rudolph. I am a credentialed actuary and CFA charter holder working as a sole practitioner in Omaha, Nebraska, USA. I write a monthly newsletter, covering a variety of topics. It has varied from 1 to 4 pages, but most are less than 2 pages. 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. I try to write something about the current financial environment, and there have been plenty of topics to choose from. The newsletters are educational in nature and do not constitute investment advice. The newsletters are released publicly at www.rudolphfinancialconsulting.com after 3-6 months.

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Financial Predictions for 2010 – How Did They Turn Out?

Each of these predictions was made at the beginning of 2010. Now it is December 2010 and each one will be reviewed for accuracy. Let's find out how I did.

Please remember that these predictions are for fun. If I knew what was going to happen, I certainly would not share that information with others! You must make your own decisions regarding your financial future and not hold others, including me, responsible for your own results. Enjoy!

Results: General happenings.

Here are some of the events that occurred in 2010. Natural disasters will occur regularly and perhaps cycle.

- Haiti earthquake and cholera outbreak
- Iceland volcano and transportation upheaval
- Chile earthquake
- New Zealand earthquake
- Indonesian volcano
- Gulf oil spill – story of the year
- Auto safety issues – what should we believe – good example of reputation risk

- Egg recall due to salmonella
- Floods in Central Europe
- Wildfires in Russia
- Flooding in Pakistan
- South/North Korea tensions
- European sovereign debt crisis – Greece, Ireland, Portugal

Current likely bubbles

- Junk bonds
- Commodities
- Treasuries
- Emerging markets

Emerging risks I became aware of in 2010

- Wheat rust
- Wheat shortages due to interaction with drought
- Dam maintenance shortfalls
- Monopoly manufacturing (e.g., Ipad)
- Dictators pushed into a corner (e.g., Castro, Kim) – nuclear war for last bit of glory?
- What will the next war look like? Technology has evolved a lot since the last major conflict.
- Cosmetic surgery in low cost venues allows superbugs access to airplanes
- Municipal bond concentration in casualty firms

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

- Politics: every year I write about the political cycle, and this year is no exception. Barack Obama was a disappointment in his first year, working a strictly democratic agenda rather than being a consensus President. His initiatives have focused on political expediency rather than bringing Americans together. In the 2010 elections he will surely lose his 60 seat filibuster proof Senate and will lose some seats in the House while maintaining a majority in both houses (this actually happened already as the democrats lost Teddy Kennedy's seat in Massachusetts, mainly because they took it for granted). Once he loses the 60 seats he will become a lame duck President unless there is a new armed conflict for US citizens to rally around. Personal accountability has been ignored, with only the "rich" expected to pay taxes. A better plan would be to have an income based tax like FICA taxes but that is unlikely to happen anytime soon from either political party. The lack of 60 Senate votes has cost the democrats their big issue, health care reform, so now they will take on reregulation of the financial sector. God help us all! 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.

- **Results:** Politics. The Republicans did even better than I expected as the Tea Party subgroup, pulling the Republicans even further to the right, continued to mobilize. The Democrats maintained their majority in the Senate but actually lost their control of the House. Assuming the Tea Party nominee for President does not win the Republican nomination, the Democrats will be on the outside looking in after 2012. Recent efforts (long overdue) by President Obama to work with the Republicans may have isolated him from his own party but allowed needed legislation regarding taxation to move forward. The countries listed have had challenging years, with the uncertainty on the Korean Peninsula dominating the recent news. The price of oil has delayed crises in Venezuela and Russia (it has risen). Health care reform was pushed through but much remains for it to be implemented. As it stands right now it will lead to nationalized health care as insurers will not be able to compete with government entities.
- Stocks: The stock market is currently overvalued, having anticipated a quick recovery. The stock market will be volatile in 2010 but end up within 10% of its starting point. My gut feel is up slightly, but it is hard to get it right over such a short period of time. Over the next 3 years I expect the market to operate within trading ranges as increased productivity is offset by higher valuation discount rates. Good companies to buy now are ones that can pass on their inflationary cost increases to their customers like those in the transportation and utilities sectors.
- **Results:** Stocks. The S&P 500 index closed 2009 at 1,115.10 and has mostly operated within a 100-point trading range on either side of the open until a recent surge in the 4th quarter has taken the index to roughly a 13% (pre dividend) gain for the year. The market has done better than I expected, but until December I was right on my prediction. I expect a correction early in 2011. Leaders in 2010 included emerging markets and small caps.
- Unemployment: Fiscal stimulus has helped to bottom out unemployment, and I don't expect it to get worse than the current 10%. What worries me is the higher percentage of government workers as a percentage of all workers. We can't all work for the government. That would wipe out the creative destruction process that is capitalism and leave us with socialism. 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. 2010 will be a year when firms cut expenses so far (training, travel, new hires) that it begins to impact their ability to profitably grow. The "survivors" at big firms will no longer be the best and brightest, and these firms will need to hire creative minds from outside to succeed. 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.
- **Results:** Unemployment. A direct hit. Unemployment remains high but did not rise above 10%. I still believe that the structural unemployment rate is higher than

- it used to be (when I was in college I remember it at about 5%). I still haven't found anyone (except individuals) who has been allowed to fail. The Bush tax cuts were extended through the Presidential cycle, and FICA taxes lowered to boot for additional stimulus.
- **Securitization/Mortgages:** The securitization market will thaw a bit but capital requirements will continue to be high for banks, discouraging loans. I don't think we are done with the bad news from home mortgages either. 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. I don't understand why there are so many governmental organizations designed to oversee residential mortgages. One positive development would be for GSEs to eliminate their lobbying arms. Higher interest rates will drive another round of foreclosures on home mortgages as ARM contracts reset their rates.
 - **Results:** Securitization/Mortgages. This prediction was pretty accurate but did not have much impact. Basel III was just announced and the uncertainty kept deals from happening. What I believe is a leading indicator of the coming consolidation wave is the many mergers of HR and actuarial consulting firms. Economies of scale and concentration will rule in that market going forward. The home market is rebounding at the entry level, and some regions are starting to come around, but higher entry point homes will have slow turnover until the home mortgage deduction issue is resolved.
 - 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. A reasonable VIX seems to be about 25 for 2010 unless there is political instability.
 - **Results:** Volatility. I missed this one again, as the VIX remains low (in my opinion) at about 17 and has been monotonically falling since its high of 45 in May after the BP oil spill. I don't understand why it is so low with what seems to be so many risks lurking just over the horizon.
 - **Oil:** Oil is currently about \$80, at the bottom end of my long-term mean reversion rate of \$80-110 range, but volatility continues to make short term predictions very risky. If oil prices fall back below \$50, political instability in Russia and South America will quickly follow in the next couple of years. With the recent devaluation of the Venezuelan currency this may occur no matter what the price of oil is. As the world economy improves the price of oil should increase. The interesting dynamic will be whether natural gas takes market share as a green substitute as well or if the world continues on as if nothing has happened. This will have currency implications as well, with higher oil leading to a falling dollar.
 - **Results:** Oil. I got this one pretty much right. Oil has traded in a range between \$70-95 in 2010 and is currently just over \$90. It has started to rise as the economy starts to rebound and winter storms are hitting the east coast. Interestingly, natural gas has fallen to nearly \$4. The dollar has traded between \$1.20 and \$1.45 per Euro and currently is just over \$1.30. It continues in flight to safety mode but will

- eventually return to its steady drop. Quantitative easing 2 has virtually guaranteed inflation and currency devaluation, so don't pay off your mortgages early unless the rate floats.
- Credit risk: commercial mortgages and junk bonds will especially impact smaller firms, while CDOs and credit default swaps continue their negative cycle. Government entities are at risk and a major state or municipality in the US is likely to default on their bonds. These governments have always pointed to their balanced budgets, but accruals have not been honestly assessed. Unions in general will have to deal with these unfunded benefits, whether for legacy manufacturing firms, school districts, or governments. Investigative reporters will find easy pickings and will drive the market to make these balance sheets more transparent. Junk bond spreads need to widen before investing in that market.
 - **Results:** Credit risk. While CDS spreads have widened, so far only small/mid sized banks have had a wave of defaults. The rest are timing issues and will come. Corporations are ahead of the curve on this one and will do better than cities and states. Junk bonds have not gone bad as I expected, and liberal covenants are being written again. What did we learn?
 - Financial Services Consolidation: Bank consolidation will continue, with mid-sized and smaller banks merging to gain economies of scale and consumer trust. Bank capitalization will get a lot of tough talk, and may drive a "tax" on investment banks. Expenses at insurance companies are too high and industry overhead will need to be reduced. Insurance consolidation will accelerate, with household names as well as smaller firms being merged into other firms. Larger, supposedly sophisticated, firms accepted the investment and product risks knowingly, and many smaller firms were led along with the crowd to the cliff by statements like "all the sophisticated insurers are doing this". AIG and its subsidiaries will become known for setting market prices low and keeping industry profitability down. Long term, AIG will be dismantled and the government will take a loss. GM, GMAC, and Chrysler will never pay back the government either and GM/Chrysler will eventually be merged into one company. Despite a lot of bluster, GLB will stay on the books but with some modifications that will be material only if unemployment stays high. Capital requirements will drive risk out of banks. Insurers will join this crusade once the federal charter is put in place and principles based approaches are put in place, but this will not happen in 2010. Goldman Sachs will return to the partnership model and privatize. This will reduce transparency into their books as well as monetize restricted options.
 - **Results:** Financial Services Consolidation. I got the bank issues right but somehow the government loans to corporations are being repaid in full. It's still not clear to me how these loans are being fully repaid but that is what is being reported. It is interesting that the transparency required by Dodd-Frank showed that GS borrowed billions of dollars to invest at the bottom of the market at low rates funded by taxpayers. Why does anyone do business with these guys? What's

- good for me is all that matters seems to be their mantra (although I know a number of people who work there who seem quite nice).
- **Currency:** Eventually the dollar will revert to its trend and fall based on imbalances in our trade and borrowing policies. Other scenarios focus on countries heavily invested in dollars, such as China, Japan, and the oil exporters, choosing to dump them. US Treasuries would then spike and the US economy could find itself in a vicious cycle resulting in stagflation. This would take several years to play out. Various energy subsidies will play out here, from ethanol subsidization to wind farms, with unintended consequences following the well intentioned efforts of politicians (latest example is forcing auto makers to make “green” autos). Watch for others to make vehicles that people will buy, making it even tougher for the auto industry to survive. Unless another economy steps up to provide a flight to safety currency the dollar will only be down moderately in 2010.
 - **Results:** Currency. I got this one right with the dollar dropping about 10% in 2010 relative to the Euro. It hit its low for the year in June.
 - **Unintended consequences**
 - **Energy subsidies:** Ethanol subsidies caused regional food shortages. Now subsidies for things like wind farms and green cars are creating unintended consequences. Who knows what technology is not being worked on because of the focus on wind power? Congress likes to tout that they are making Detroit make green cars, but they are ignoring the supply/demand balance that is so necessary for a profitable company. If they make green companies but the price of oil stays low, people will go back to buying SUVs and pick-ups. The market will determine who wins, not the politicians. Sometime in the next 5 years Hugo Chavez will either implode or try to cut OPEC production of oil. He continues to nationalize firms which will lead to poor performers. My prediction is that poorly designed energy subsidies will continue.
 - **Results:** the Cash for Clunkers program had a nice unintended consequence that was obviously going to happen. My 2002 SUV with 120,000 miles on it is worth about twice what I expected since the CFC program forced these types of vehicles to be destroyed. Those who can’t afford a new car or truck are paying for that program now.
 - **Global warming:** while Al Gore has been winning the Nobel Prize and appearing on Saturday Night Live, engineers have designed cheap potential solutions that don’t see the light. Governments naturally design complex systems, while often a simple solution will work. Is carbon dioxide the right focus? I am reading material now that says no.
 - **Results:** more international climate conferences and no results. Individuals will need to tackle this problem. Maybe we can get Mr. Gates and Mr. Buffett to save the world at low cost. I still remember Charlie Munger making a comment about how rising seas should not be a big deal

because you have time to react. Watch for future implications in Canada and Russia as tundra becomes accessible as farmland or as a source of oil.

- o Airline cost saving on maintenance will result in increased numbers of crashes worldwide.
- o Education – many companies are reacting in 2010 with restrictions on travel and continuing education. This may look good in the short run on the income statement but will lead to long term negative balance sheet consequences. Watch for investment banks to offer to provide this education for “free” and describe products they are selling. I see this all the time at my local CFA chapter.
- o Continued low interest rates by the Federal Reserve – the US needs to reload the bullets in its gun over the next couple of years to be ready when the next disaster or catastrophe occurs. It would be hard today to react to a major terrorist attack and its economic impact.
- o **Results:** I expect this prediction to be unchanged in 2011.

Emerging Risks - Concerns

- There are many physical disasters that could happen, and a really bad one could stimulate the country to work together and build cohesion. I continue to be worried about unintended consequences of actions today, with the FHA and FHLB on the radar. I expect the economy to double dip into a second recession by the end of 2010. It will be mild if the Obama administration pulls back on stimulus early and deeper but occurring after the election if they do not. The stock market will anticipate this and end up close to where it starts with volatile swings in both directions this year. Inflation will remain low while longer term Treasuries creep up, although the seeds of inflation are already planted. This will cause a problem for ARMs at reset as the higher rates will lead to higher defaults.
- **Results:** they did not pull back on stimulus so no double dip so far. Rates are low and resets at higher rates have not occurred. These mortgages are also being adjusted to help families stay in their homes.
- Levees in California, earthquake in NYC/St. Louis/San Francisco, water poisoning of NYC, hackers of Windows – all potential issues to develop contingent plans for.
- 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. There is career risk to doing your job as a Chief Risk Officer. Speaking out, even (or especially) if you are accurate, does not lead to a long career. Perhaps skeptics should be for hire and independent. Regulators and rating agencies are not strong enough in this regard. NAIC risk focused exams could be so much more than they are so far, and rating agencies have perceived/real conflicts of interest since the company being rated pays for the rating.
- **Results:** Companies are doing Enterprise Risk Management for compliance purposes with external stakeholders rather than to help make better decisions.

- This means that those who take that next step have a competitive advantage over those who don't.
- Tort reform needed – the world continues to become more litigious at its peril
 - Infectious disease - increased resistance to antibiotics (e.g., tuberculosis, staff infections or pneumonia). Watch for Nassim Taleb's new book which is expected to address issues such as these. It is getting more dangerous to visit a hospital.
 - Global warming – unexpected side effects like new viral/bacterial attacks, along with coastal flooding and increased hurricane activity.
 - Terrorism
 - Earthquakes and hurricanes – the US is overdue for a major quake on the west coast and other areas not normally expected for seismic activity are well into their cycle (the Haiti earthquake occurred as this was being written). The US is also due for a strong hurricane season.
 - Principles-based capital in the financial services industry will be abused by some and not always caught initially by peer review. Currently it is doubtful that the US will have a major influence on PBA worldwide due to the NAIC's political games.
 - Lots of games but nothing has passed yet. The SOA research project will help companies better understand the implications of implementation. The NAIC is moving away from including multiple product types in the analysis. This eliminates much of the real diversification that occurs.
 - The games being played by the NAIC regarding stochastic analysis and the interest rate generator in particular are embarrassing to the institution. I believe these types of politically based discussions with other entities pulling strings in the background will lead in the next 5 years to a federal charter and the dissolution of the current form of the NAIC. Just like all good ERM practices, the NAIC needs more transparency and peer review.
 - **Results:** the NAIC continues to ask volunteers to spend lots of time to develop principles based approaches but seems to be moving toward a Basel approach. This will be interesting since a major difference between the banking and insurance methods is whether to drive diversification benefits between risks through to economic capital calculations. The NAIC, under Teri Vaughan, has started to put together a solid national staff. This has been needed for years, and adding Larry Bruning is a great addition. Larry is very knowledgeable while recognizing that others have valuable opinions too.
 - Home building sector will finish bottoming and level or slightly improve over the next couple of years depending on interest rates (up would be worse). It will take longer for the upscale market to recover. It is probably time to buy stocks in materials firms that serve this market and have low debt. Discussion will start in the next couple of years about a tax overhaul that could include a reduction of the mortgage deduction. Perhaps the AMT will form the model tax law and many deductions will be eliminated. While this might be good incentive, it would hit the home market hard.

- US political environment – can they say no to anyone requesting a bailout? Who is next?
- Malthus – too many people, not enough food – will good intentions of the rich to save lives in the 3rd world lead to mass starvation and unstable regions?
Genetically modified seeds will delay this into the future. Perhaps it will never happen, but unstable regions will come from low economic activity and lots of people, along with the Chinese high male population ratio. This will drive internal unrest in China over the next 20 years.
- Economy – risk of stagflation and the lack of an internal hedge for investors holding both equities and bonds. There is currently a large interest rate risk in long bonds. Make sure you are laddered so you grade to the current rates as they rise.
- Pandemic influenza – 2009 provided a test that countries and businesses should learn from. Recent signs show the opposite as Europeans claim it all was a hoax. What is scary is the ability to create these superbugs in the lab. At some point terrorists (or someone entrusted to guard the bugs) will create a pandemic of some kind as Tom Clancy wrote about years ago (his example was Ebola).
- Counterparty risk – will losses be allowed? AIG provided a great example of concentration risk. A central clearing house is needed that keeps track of net exposures. How Bernie Madoff survived all these years is a mystery to me. Where was the due diligence? Much of the US economy continues to be concentrated in a few parties, and now the American taxpayer is one of them. This is not a positive consequence and will lead to more contagion in the system and more correlation in the tails. Plus you will have stupid comments like Nancy Pelosi saying that GM will eventually pay back the government loans. It's not going to happen. More qualitative analysis needs to be done by financial experts rather than relying on models that aren't accurate in the tail or focus on top line rather than bottom line growth. Relying on Black-Scholes models to both determine value and confirm prices has been a disaster. If you can't understand a risk without complicated mathematics it should be avoided.
- 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, 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.
- Risk combinations – some of my research is showing that, even as risk managers, we tend to anchor based on current events and have trouble getting our hands around how multiple risks interact.

Top Actuarial Issues

- Defined benefit plan valuation – needs to reflect marketplace economics, mean reversion and conservatism. Actuaries from other disciplines should be welcomed, along with those from outside the profession. Focus should be on cash flows rather than regulatory requirements. An estimate of fair value of these liabilities should be calculated and shared with stakeholders. Firms had the

- opportunity to get out of DB schemes when the stock market was up for 5 consecutive years after the bursting of the tech bubble. Why more did not do so shows how little scenario planning was being done. Municipal plans and teacher plans especially are going to default. This may be the issue that causes unions to lose power, although that will not happen until democrats are out of the White House. Whatever DB plans are still active will shut down as soon as they become completely funded. Another trend I expect is for companies to pre-fund this risk and get it off their books, passing it to insurers or to the unions to manage.
- Demographics – designing products that are economically sound to both policy owner and company. Variable annuity writers seem to have learned and adjusted with their new products, but will anyone sell or buy them? Have UL with secondary guarantee writers learned anything? What role will AIG subs play in supply/demand? Will they price at a lower rate given the government guarantees? Will the government walk away at some point and let them default (my prediction)?
 - Obesity – how will the various drivers of mortality and morbidity interact (some good, some bad)
 - Lack of rudimentary knowledge of assets and how to value them – need teaching sessions that are short of stochastically based financial economics. Focus on transparency and peer review.
 - Peer review – how to make it extend beyond a regulatory requirement to help manage the business by identifying and exploiting advantages as part of a strategic planning process.
 - National health care – we continue to need actuarial solutions with transparency. Tort reform is not happening but is necessary for cost reductions.
 - Systemic risk – this is another topic where actuaries can help but are not being engaged. I personally don't think it can be done due to the political pressure surrounding the topic.

Scenario Planning

In one of my 2009 newsletters I promised 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.

- Higher interest rates and inflation: either deterministic scenarios grading 3% per year until you get to 12% or a mean reversion process that does the same would provide some eye-opening results.
- Flat equity markets combined with higher inflation: defined benefit plans are especially vulnerable to this risk.
- Health care – assume a national plan takes over. How would that impact your business? What should you do at that time?
- Falling dollar
- Global climate change – how will this impact your business



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