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Musings of a Long-term Investor: Framing the Past (Part 1)

By James Cheng (April 2013)

My First 25 Years

The past 25 years in the financial industry had been great fun for me; it was one great secular bull market. The Golden Age of Financial Globalization replaced the Era of Financial Repression (1945-1980). Moore's Law drove the information technology revolution from the 1980s, and that fundamentally changed the financial industry. The stars of practice, theory and technology were aligned, resulting in a virtuous cycle of innovation as the best and brightest were attracted to the industry. I rode the greatest leverage cycle and I got to work with a Wall Street Legend, Mr. Barton Biggs (1932-2012). One cannot ask for more in life!

This financial product innovation cycle resulted in fundamental changes in the financial system. It reduced the cost of financial intermediation through better risk allocation enabled by new products that took advantage of faster, more and better information. This enabled the Washington Consensus thesis to take hold – the primacy of the "market price". Marketization reduced the need to engage in deep fundamental research for information.

In hindsight, it also resulted in a massive buildup in leverage as regulators lost their ability to monitor the financial system using traditional tools. Risk was transformed and spread over a larger group of investors, but risk remained. The un-intended consequence of innovation is that the resulting leverage massively increased systemic risk. Spreading risk around just makes it harder to get a holistic picture. The inability to understand the reflexive nature of innovation (e.g., risk pricing did not account for the impact of an increase in the volume of risk) led to a massive mis-pricing of risk. The question now is - what's next? Before we get there, we need to understand what changed in the past 25 years.

Great Moderation, in actuality, was a classic leveraging cycle, but on an unprecedented scale, so massive that the classic boom and bust economic cycles were masked by the powerful leverage-driven secular cycle. According to McKinsey's 2009 Global Financial Asset Report, in the developed world, private debt grew from US$10tn in 1990 to US$48tn in 2008, government debt grew from US$9tn to US$27tn. Over the same period GDP only grew from US$25tn to US$42tn. In other words, public and private debt went from 80% of GDP to 180%. Real estate values in Europe and US grew from US$28tn in 1995 to US$64tn in 2008 providing the basis for the asset-backed leveraging cycle. Effectively, debt compounded at an annual rate of 8% during this period, way outpaced US nominal GDP growth of 4.5%. Great Moderation, in hindsight, was really just the result of the Great Leveraging. Volatility was bottled up in derivative instruments and warehoused with investment banks. It was fun while it lasted. It was even more fun for the smart on Wall Street who figured a way to extract upfront payments for a 10 - 20 year uncertain cash flow stream through derivatives.

So, what is the impact of this Great Leveraging? What caused the large increase in leverage? What changed in the ecosystem to blindside its experienced participants? Isn't leverage as old as financial markets?

The unprecedented leverage created in the past 20 years was a confluence of unique events, unlikely to be recreated in the near future. Going forward, we will need to absorb these innovations, which are here to stay and to learn to properly master them to serve our economy better. We need to go back to basics, understand the financial tools properly, and not be awed by its technology or mathematics, and keep in perspective that these innovations are not an end in itself but tools, if properly utilized, that makes the economy more efficient. The outsized financial returns over the last 20 years will not be repeated; hence we need to avoid anchoring our investment decisions on the returns achieved during the Great Leveraging period. It indeed is a scary thought for anyone whose entire career spanned the Great Leveraging period. In order to map out the path for the next 25 years, it is important we understand what happened in the past 25 years. What led to the Great Leveraging?

What changed to enable this massive leveraging?

1. Timeliness of information flow - When I joined the industry, we had barely just invented faxes. I still remember the telex room, where trades were confirmed. Most global investments, barely in its inception state, were of the "long duration" spectrum, e.g., Foreign Direct Investment and long-term holders of public equity. There were no emails. Communication was essentially one-to-one and primarily printed research sent via mail – it was expensive and not timely. The Internet and email changed everything.

This fundamentally changed the way of making a living for many investors. In the past, there was a hierarchy to timeliness of information flow. NY and London, where the research capability resided, got information first. Even there, the big firms and connected players received information via phone calls (one to one, high cost and the process also created a hierarchy of flow). Floor traders were advantaged versus retail investors as they saw order flows that got reported at day's end via the exchanges. Today, I get research instantaneously, but so does everyone! Exchange information is now disclosed in real time. This timely flow of information was enabled by the widespread adoption of the Internet, which democratized information and effectively removed the return from simple "time arbitrage".

2. Information flow - Computer information technology led to an increased volume of information in the 80's, but the Internet made the same information widely available. Not only did absolute volume increase, but variety increased tremendously as well. Financial information flow was no longer geographically constrained. Reuters, which dominated financial information flow before 1995, segmented information flow into equity, fixed income and foreign exchange, and charged an arm and a leg for access to each module. By the late 90's, Bloomberg largely decimated Reuters by offering all information for a single price. Before the Internet, the cost of distribution was very high, which restricted research distribution. Today, we have instantaneous access to investment bank websites that effectively made research available to many, greatly expanding the number of players. Global Macro traders were the first to arbitrage this, and their outsized returns in the initial years suggest that they were very effective in using this increasing cross asset class information flow to their advantage.

At the onset of this crisis, information from different segments of the financial world were so segmented that panic set in. Collateralized Debt Securities (CDS), which existed in its own world for a small group of players, suddenly became the primary pricing benchmark for financial institutions. Financial institutions cried murder when they became the receiving end of the trades! Which market was pricing the risk correctly – bond, equity or CDS? It turns out there was reflexivity that was never properly priced. Many today argue that AIG is a prime example of how the market was wrong since the US government ended up making money on the rescue. But how do you measure the value of the US sovereign guarantee that backed all the derivatives on AIG's books?

3. Computing power - Computing power not only increased the availability and timeliness

of information, it also increased massively our ability to process the information. When I joined the industry in the late 1980's, it took days to produce a crude correlation chart. The data was not even available for most emerging markets! Today, one can get or generate hundreds of charts in real time. This ease of availability of processing power has unfortunately made us somewhat dumber - today we spend a lot less time thinking about the underlying cause, developing the theories, etc. We barely have enough time to decipher the hundreds or thousands of correlation charts generated. Barely a day goes by without someone coming up with a new X/Y correlation. Humans just love to search out rules and patterns. But somehow, the widespread availability of data has turned it into a superficial pursuit. Our economists' forefathers, like Keynes, relied on a keen eye for the perception of real problems and dedicated deep thoughts to explain phenomena. Today, we have more data available than they have, but our ability to theorize seems to have declined. As we become more data reliant (especially at the macro-economic level), definition of data and how it is collected become extremely critical. One problem I faced time and again was to assume that data with the same nomenclature is the same everywhere. They are not - wage rates can be defined differently in different countries! Computerized information processing requires data and data needs to be classified, and hence classifications like emerging markets, developed markets, credit ratings were created. Again, often times, these classifications defy underlying economic logic or more often, it became obsolete over time. It began to represent an institutional definition rather than underlying economic logic, e.g., why is Korea an emerging and not a developed market.

4. Marketization - Both increases in timeliness and flow of information has led to an increase in investors' perceived confidence and increased liquidity in the market. The massive increase in leverage from 1990 to 2008 was the result of this information technology revolution and the Washington Consensus' bias towards free market and de-regulation. Leverage means additional liquidity for the market. Today, we rely on the "market price" extensively, often times at the expense of in depth knowledge of fundamentals. Market reactions become more important and theoretical truths no longer relevant.

The issue now is whether this has created a classic vicious cycle. The head of research of a global investment bank once told me that his team of fixed income analysts shrunk from over 200 to less than 50 in the past 20 years. He saw no need to do as much research as he can rely on market price and rating agencies. In the meantime, volume of credit exploded. Naturally, financial market participants got paid more - they were doing more with fewer heads! The granularity and idiosyncratic risk of each credit were wrapped into a statistic. Strangely, the widespread availability of information also sowed the seed of its own destruction over time - investors came to rely on this "market price", and gave up fundamental research to rely on rating agencies, hence creating a vicious cycle in the decline of information quality. There is nothing wrong with this process, as long as liquidity is ample and investors are willing to provide liquidity at any price, and take risk with the knowledge that the market is liquid enough for them to unwind any mistakes in pricing. Moreover, de-emphasizing fundamental research by investors also fundamentally changed the eco-system by making investors more trading oriented, i.e., investments were made with the assumption that investment decisions can be unwound in the market. Market liquidity also created the outsized return of private equity in the years passed as they effectively took advantage of the liquidity to exit in the IPO market. They could execute more deals, and at a faster rate, because due diligence was less onerous if there is an exit easily available. I think this era has come to pass also. PE returns will trend lower, along with all market returns. We just benefitted from the huge leveraging cycle!

5. Skill set for analysing information - In the past 20 years, the skill set has shifted in favor of short duration analysis as the increase in speed and volume led to more investors concentrating on shorter durations. This is a natural outcome of the tectonic shift in information availability and computing power. Things just get played out faster. Investors providing capital in the short duration spectrum now dominate the financial ecosystem. Real estate used to be a long duration investment. Today, with REITs, it has become a short-term asset. We have also become more siloed in our knowledge because of the specialization, despite the fact that fast and seamless flow of information means investors today need more holistic knowledge and also deep silo knowledge, a strange combination. Specific product knowledge also gets arbitraged out quickly. As a consequence, is a more consulting like skill-set to go in-depth now more important?

6. Financial Innovations and pricing of risk - Advances in information technology also enabled rapid innovation of financial products. MBS, ABS, CDOs required massive amounts of data crunching and statistical analysis. They do not fundamentally change the underlying risk, but allowed risk to be repackaged to satisfy different risk profiles of investors. Regulatory arbitrage products like swaps accounted for a large proportion of innovations. Many of these products did not reduce underlying risk but made risk less transparent. Other products like CDS allowed for a better pricing of risk by enabling more transparent risk discovery rather than lower risk itself. These are possible only because of the

widespread increase in low cost computing power. In hindsight, one of the reflexive impacts of these innovations was to greatly increase the volume of these products, which led to an increase in systemic risk. Unfortunately, regulatory authorities had not developed the ability to classify many of these new products, allowing them to exist outside the realm of our current "categorizations" and hence a mis-perception that risk is lowered. They have hardly adapted to the massive increase in information flow, preferring to look for and fit data into outdated models!

Conclusion

My last 25 years in the industry was marked by unprecedented changes that resulted in a rapid shift in the skill sets required to do well. The question now is how will it evolve in the next 25 years? More of the same?

Bill Gross (A Man in the Mirror – April 2013) remarked "All of us, even the old guys like Buffett, Soros, Fuss, yeah – me too, have cut our teeth during perhaps a most advantageous period of time, the most attractive epoch, that an investor could experience". Sense of an end of an Epoch.

They can retire, but I can't! So what do we do now? We have innovated new technologies that changed our world. We cannot stuff the genie back into the bottle and neither do we want to do that. New technologies did not cause the problems we faced in the Global Financial Crisis. All disruptive new technologies go through an exuberance stage; in this case it resulted in the Great Leveraging. The question now is how can we harness this technology and co-exist with it to serve us better?

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