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The Endgame

When I started Duquesne in February of 1981, the risk free rate of return, 5 year treasuries, was 15%. Real rates were close to 5%. We were setting up for one of the greatest bull markets in financial history as assets were priced incredibly cheaply to compete with risk free rates and Volcker's brutal monetary squeeze forced much needed restructuring at the macro and micro level. It is not a coincidence that strange bedfellows Tip O'Neill and Ronald Reagan produced the last major reforms in social security and taxes shortly thereafter. Moreover, the 15% hurdle rate forced corporations to invest their capital wisely and engage in their own structural reform. If this led to one of the greatest investment environments ever, how can the mirror of it, which is where we are today, also be a great investment environment? Not a week goes by without someone extolling the virtues of the equity market because "there is no alternative" with rates at zero. The view has become so widely held it has its own acronym, "TINA".

{Switch to slide 3} Not only valuations were low back in 1981 but financial leverage was less than half of what it is today. The capacity of credit inspired growth was still ahead of us. The policy response to the global crisis was, and more importantly, remains so forceful that it has prevented any real deleveraging from happening. Leverage has actually

increased globally. Ironically from where I stand, that has been the intended goal of most policymakers today.

{Slide 4} Let me focus on two of the main policies that have not only prevented a clean-up of past excesses in developed markets but also led to an explosion in leverage in Emerging markets. The first of these policies has been spearheaded by the Federal Reserve Bank in the US. By most objective measures, we are deep into the longest period ever of excessively easy monetary policies. During the great recession, rates were set at zero and they expanded their balance sheet by \$1.4T. More to the point, after the great recession ended, the Fed continued to expand their balance sheet another \$2.2T. Today, with unemployment below 5% and inflation close to 2%, the Fed's radical dovishness continues. If the Fed was using an average of Volcker and Greenspan's response to data as implied by standard Taylor rules, Fed Funds would be close to 3% today. In other words, and quite ironically, this is the least "data" dependent" Fed we have had in history. Simply put, this is the biggest and longest dovish deviation from historical norms I have seen in my career. The Fed has borrowed more from future consumption than ever before. And despite the US global outperformance, we currently have the most negative real rates in the G-7. At the 2005 Ira Sohn Conference, looking at a more muted but similar deviation, I argued that the Greenspan Fed was sowing the seeds of an historical housing bubble fed by reckless sub-prime borrowing that would end very badly. Those

policy excesses pale in comparison to the duration and extent of today's monetary experiment.

The obsession with short-term stimuli contrasts with the structural reform mindset back in the early 80s. Volcker was willing to sacrifice near term pain to rid the economy of inflation and drive reform. The turbulence he engineered led to a productivity boom, a surge in real growth, and a 25 year bull market. The myopia of today's central bankers is leading to the opposite, reckless behavior at the government and corporate level. Five years ago, one could have argued it was in search of "escape velocity." But the sub-par economic growth we are experiencing in the 8th year of a radical monetary experiment and in Japan after more than 20 years has blown that theory out of the water. And smoothing growth over a cycle should not be confused with consistently attempting to borrow consumption from the future. The Fed has no end game. The Fed's objective seems to be getting by another 6 months without a 20% decline in the S and P and avoiding a recession over the near term. In doing so, they are enabling the opposite of needed reform and increasing, not lowering, the odds of the economic tail risk they are trying to avoid. At the government level, the impeding of market signals has allowed politicians to continue to ignore badly needed entitlement and tax reform.

Look at the slide behind me. The doves keep asking where is the evidence of mal-investment? As you can see, the growth in operating

cash flow peaked 5 years ago and turned negative year over year recently even as net debt continues to grow at an incredibly high pace. Never in the post-World War II period has this happened. Until the cycle preceding the great recession, the peaks had been pretty much coincident. Even during that cycle, they only diverged for 2 years, and by the time EBITDA turned negative year over year, as it has today, growth in net debt had been declining for over 2 years. Again, the current 5-year divergence is unprecedented in financial history!

And if this wasn't disturbing enough, take a look at the use of that debt in this cycle. While the debt in the 1990's financed the construction of the internet, most of the debt today has been used for financial engineering, not productive investments. This is very clear in this slide. The purple in the graph represents buybacks and M/A vs. the green which represents capital expenditure. Notice how the green dominates in the 1990's and is totally dominated by the purple in the current cycle. Think about this. Last year, buybacks and M&A were \$2T. All R&D and office equipment spending was \$1.8T. And the reckless behavior has grown in a non-linear fashion after 8 years of free money. In 2012, buybacks and M&A were \$1.25T while all R&D and office equipment spending was \$1.55T. As valuations rose since then, R&D and office equipment grew by only \$250b, but financial engineering grew \$750b, or 3x this! You can only live on your seed corn so long. Despite no increase in their interest costs while growing

their net borrowing by \$1.7T, the profit share of the corporate sector peaked in 2012. The corporate sector today is stuck in a vicious cycle of earnings management, questionable allocation of capital, low productivity, declining margins, and growing indebtedness. And we are paying 18X for the asset class.

{Slide 7} A second source of myopic policies is now coming from China. In response to the global financial crisis, China embarked on a \$4 trillion stimulus program. However, because they had engaged in massive infrastructure investment the previous 10 years, and that was the primary stimulus pipe they chose; this only aggravated the overcapacity in the investment side of their economy. Not surprisingly, this only provided a short term pop in nominal growth. While we were worried about bank assets to GDP in 2012, incredibly, credit has increased by 70% of GDP in the 4 years since then. Just to put this in perspective, this means that since 2012 the Chinese banking sector has allowed credit to grow by the amount of the entire Brazilian GDP per year! Picture the entire Brazilian production in new houses and infrastructure. Incredibly, all this credit growth has been accompanied by a fall in nominal GDP growth from 15% to 5%. This is an extremely toxic cocktail for companies that have borrowed at 10% expecting 15% sales growth. Our strong suspicion therefore is that a large part of this growth is just credit flowing to otherwise insolvent borrowers. How else to explain the

lack of NPL problem in heavy industries hit by lower prices and sales growth?

As a result, unlike the pre-stimulus period, when it took \$1.50 to generate a \$1.00 of GDP, it now takes \$7. This is extremely rare and dangerous. The most recent historical analogue was the U.S. in the mid-2000's when the debt needed to generate a \$ of GDP increased from \$1.50 to \$6 during the subprime mania. Two years ago, we had hope the Chinese were ready to accept a slowdown in exchange for reform. Unfortunately, with the encouragement of the G-7, they have opted for another investment focused fiscal stimulus which may buy them some time but will exacerbate their problem. They do not need more debt and more houses.

As the chart shows, this will remove a major cylinder from the engine of world growth.

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I have argued that myopic policy makers have no end game, they stumble from one short term fiscal or monetary stimulus to the next, despite overwhelming evidence that they only produce an ephemeral sugar high and grow unproductive debt that impedes long term growth. Moreover, the continued decline of global growth despite unprecedented stimulus the past decade suggests we have borrowed so

much from our future for so long the chickens are coming home to roost. Three years ago on this stage I criticized the rationale of fed policy but drew a bullish intermediate conclusion as the weight of the evidence suggested the tidal wave of central bank money worldwide would still propel financial assets higher. I now feel the weight of the evidence has shifted the other way; higher valuations, three more years of unproductive corporate behavior, limits to further easing and excessive borrowing from the future suggest that the bull market is exhausting itself.

If we have borrowed more from our future than any time in history and markets value the future, we should be selling at a discount, not a premium to historic valuations. It is hard to avoid the comparison with 1982 when the market sold for 7x depressed earnings with dozens of rate cuts and productivity rising going forward vs. 18x inflated earnings, productivity declining and no further ammo on interest rates.

The lack of progress and volatility in global equity markets the past year, which often precedes a major trend change, suggests that their risk/reward is negative without substantially lower prices and/or structural reform. Don't hold your breath for the latter. While policymakers have no end game, markets do. On a final note, what was the one asset you did not want to own when I started Duquesne in 1981? Hint...it has traded for 5000 years and for the first time has a positive carry in many parts of the globe as bankers are now experimenting with

the absurd notion of negative interest rates. Some regard it as a metal, we regard it as a currency and it remains our largest currency allocation.