



2018 Annual Letter



DR. YIPING WANG
CEO and CIO



DR. ZHIFENG ZHANG
Head of Quantitative Research

Success Amid the Storm

No doubt 2018 was a very hard year for markets, particularly China's A-shares. Tightening financial conditions across most developed markets conspired with the rise of populist nationalism in Europe and the United States to shock markets in waves. The rise of trade tensions dominated investor psychology, which ultimately translated into weighing on real economic activity and sentiment as trade volumes collapsed in tandem with expectations.

This volatility negatively affected major exporters, such as Germany, and many emerging markets, notably China, which was already suffering from a deteriorating domestic scenario that ultimately led to a bear market in equities. What was supposed to be the shining moment for A-shares following their inclusion in MSCI equity indices faded quickly as retail investors fled the equity market for most of the year as trade concerns, tightening credit conditions, and the pains of an economic rotation dampened the vigorous risk appetite for which the Chinese market is known. These domestic factors will continue to drive returns in 2019 as policymakers continue to strategically ease.

As much of the pessimism with the outlook worked its way into market prices, retail investors started to dip their toes back into the market towards the end of the year—a testament to the resilience of the Chinese people, who have not seen a dramatic slowdown in growth a generation. But to say that there were no opportunities in the onshore market amid the chaos would be false as Chinese sovereign bonds posted some of the best returns of any asset class. And Jasper Capital's α Shares handily outperformed the market as well as most of our peers in the region.

While 2018 was a difficult environment, Jasper Capital calmly expanded our quantitative team, quadrupled our alpha signal library, continued to improve our integrated alpha model, became more nimble in response to market volatility, explored new technologies, and continued to invest in acquiring and retaining the best talent in machine learning, artificial intelligence, and data science. Our mission is to maximize the production of high quality alpha for our investors, and the steps we took last year clearly demonstrated our ability to deliver on our promises. α Shares, our flagship quantitative long-only model, delivered 11.8% alpha for strategies tracking the CSI-500 and 6.8% alpha for strategies benchmarked to the CSI-300.

We will continue to invest in our people and our platform, and expand our services to our investors. We established Jasper Capital Hong Kong in 2018 in response to the growing need for international institutions to invest in the A-share market without the regulatory burdens, legal obscurity, and capital controls of the mainland.

A Hong Kong entity carries with it the added benefit of operating in an environment defined by world class legal structures, financial services, and regulatory oversight that provide investors with the transparency and accountability they deserve. While significant progress has been made, we believe that the Chinese onshore market will slowly adapt to global standards. In the meantime, Jasper Capital Hong Kong stands ready to serve the needs of international institutions and investors.

We also successfully launched two new products to strong interest from our international investors. Jasper Capital's Argo Fund and our market neutral strategy have been specifically designed for the byzantine nature of Chinese onshore market and have α Shares at their heart. We successfully raised capital, despite the difficult environment for quantitative and China-focused funds, and we will continue to seek new partners that appreciate our methodical approach to building our brand, and share our vision for the construction of a world class quantitative investment management platform specific for the Chinese A-Share market.



Dr. Yiping Wang
CEO and CIO,
Jasper Capital International

Of Evolution and Regime Shifts

Markets were beset by challenges last year, and 2019 will be no different, particularly for the A-Share market where the emergence of new regimes and structural changes will persist. The breakdown of investor sentiment and rapid shift in market psychology that followed the escalation of trade tensions magnified an already very difficult domestic situation that, in our opinion, led to a breakdown in the undercurrents of market fundamentals that dominated in 2017 and led to a structural shift higher in volatility.

Every quantitative model has assumptions at its heart that are based on the unique characteristics of each market, asset class, and operating environment. Our teams are experts in the unique operating environment of China's A-share market, and our daily task is to continue to develop our understanding of its characteristics and leverage this knowledge to generate alpha signals that produce consistent excess returns. Part of our structured research process involves defining assumptions of the global and domestic environment and their possible effects on the onshore market. These factors ran counter to our initial assumptions at the start of the year.

New entrants into the onshore market following the MSCI inclusion along with the more macro aspects, such as the igniting of the trade war and the rapid tightening in onshore credit conditions, led to the decline in onshore retail trading volumes that forced quant managers, such as ourselves, to adapt. This period of adaptation was the defining characteristic of the A-share market in 2018, and for Jasper Capital's quantitative framework. We expect this continue in 2019 and 2020.

If necessity is the mother of innovation, the rapidly changing and challenging environment of 2018 compelled significant advancements in our processes and thinking. For example, Jasper Capital developed advanced tree models to combine our technical sub-signals into one refined alpha signal that increased the precision of our excess return predictions by 30%. Further, our new method of signal integration using machine learning, which we pioneered in the first half of the year and implemented in June, boosted excess return by 15% in second half of 2018 compared to a conventional linear integration model. This is despite the increase in volatility witnessed across factors, rise in cross-asset correlations, and significant drawdowns experienced in October and December.

The team also started building and integrating a high frequency trading platform to improve our trade execution, which reduced our slippage by five basis points round trip. Jasper proprietary high frequency trading model is expected to launch in the first quarter of 2019.

Not only are we developing new techniques and implementing new strategies, we continue to refine and upgrade existing signal combinations and strategies to maximize their potential and add diversity to our alpha pool and library of strategies. For instance, we continue to upgrade our low frequency signals pools and more fully develop our event-driven research capabilities, developing dozens of tested strategies and several have already been successfully implemented. For example, new regulations on corporate

buybacks were issued in early November. Jasper noticed changes evolving in price action, and quickly revamped our buyback signals with positive results.

Finally, our technology platform proved robust last year as we were able to successfully implement a multi-strategy approach that effectively leveraged winning strategies. The platform is the bedrock of our business, and has helped refine our process, improve the accuracy of return forecasts, and increase information ratios. What markets learned in 2018 is that those who invest in technology infrastructure, data, and human capital were the most successful. We share this view and have endeavored to do so. Our success is evidenced in our ability to maintain our edge over our competitors in various markets, such as microcap stocks, which outperformed the broader index by more than 30%. We are excited for 2019, and the challenges and opportunities it will present.

A handwritten signature in black ink, appearing to read 'Zhang Zhifeng', with a large, stylized flourish at the end.

Dr. Zhifeng Zhang
Head of Quantitative Research,
Jasper Capital International

“Long is the way and hard, that out of Hell leads up to the light.”

– John Milton, Paradise Lost

Long is the way, or a long way off?

By Carlo Passeri, Director of Research and Macro Studies

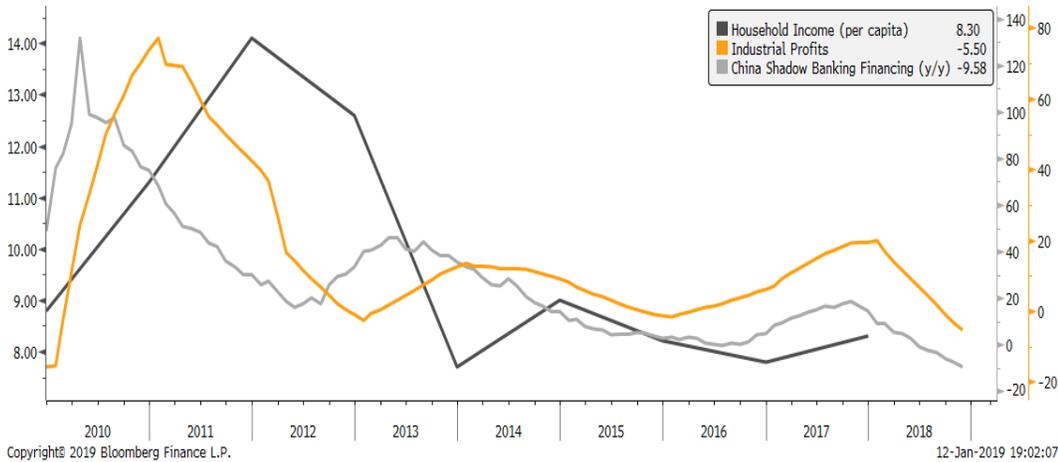
Last year was among the hardest in recent history for both the Chinese equity market and economy. As many already know, the market experienced a drawdown only matched by the crash of 2015. And the economy underwent its steepest deceleration in the last decade. Both were due to a panoply of issues that were revealed and exacerbated by a difficult external environment. The current slowdown is the inevitable consequence of correcting a litany of historical policies that temporarily alleviated short-term pains to the detriment of long-term sustainability.

“...the external environment is complicated and severe, and the economy faces downward pressure...”

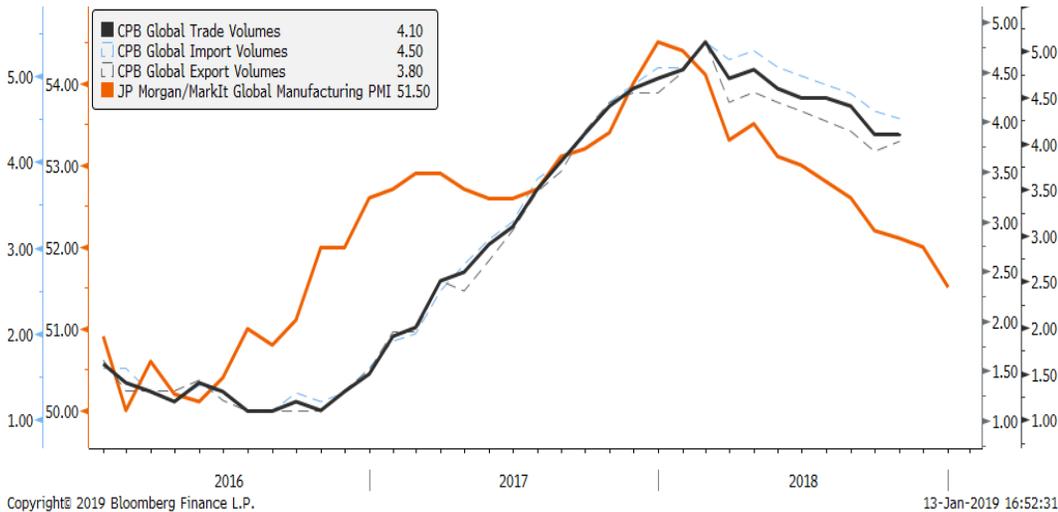
Central Economic Work Conference Readout, December 2018

Beijing sought to address some issues in 2015 with the initiation of supply-side reforms. This corrective path accelerated in 2016, when the Central Economic Work Conference deemed the economy and the financial system a matter of national security, from which flowed the current framework of aggregate deleveraging and deployment of macroprudential policies, specifically credit channel refinement via the dissolution of shadow banking, local government accountability, property market curbs, and state owned enterprise reform. The current rolling set of domestic shocks is justified given that the Chinese economy has never seen any of these policies before, so their outcomes are uncertain and the process of revelation will be painful. Property market policies are worth particular attention given that this market is the sacred cow of the Chinese economy.

The bitter pill of various corrective policies implemented simultaneously was at the root of the collapse in credit growth and slowdown in consumption, investment, and, ultimately, the significant deceleration in the private sector. Property market curbs also added downward pressure on the propensity to consume due to real estate having the largest wealth effect in China. Regular readers will recognize the below chart, which is one of our favorite for illustrating the link between shadow banking and the two main aspects of the economy--the industrial sector and the household sector.



As with most emerging market episodes experienced in the last 100 years, China’s domestic weaknesses were ultimately revealed and exacerbated by external shocks. A progressively tighter monetary policy in the United States and its higher interest rates, mounting concerns with the health and lifespan of the global technology cycle, the signaling of the end of asset purchases by the European Central Bank, and the collapse in global trade volumes all conspired to make life in 2018 difficult for global investors.

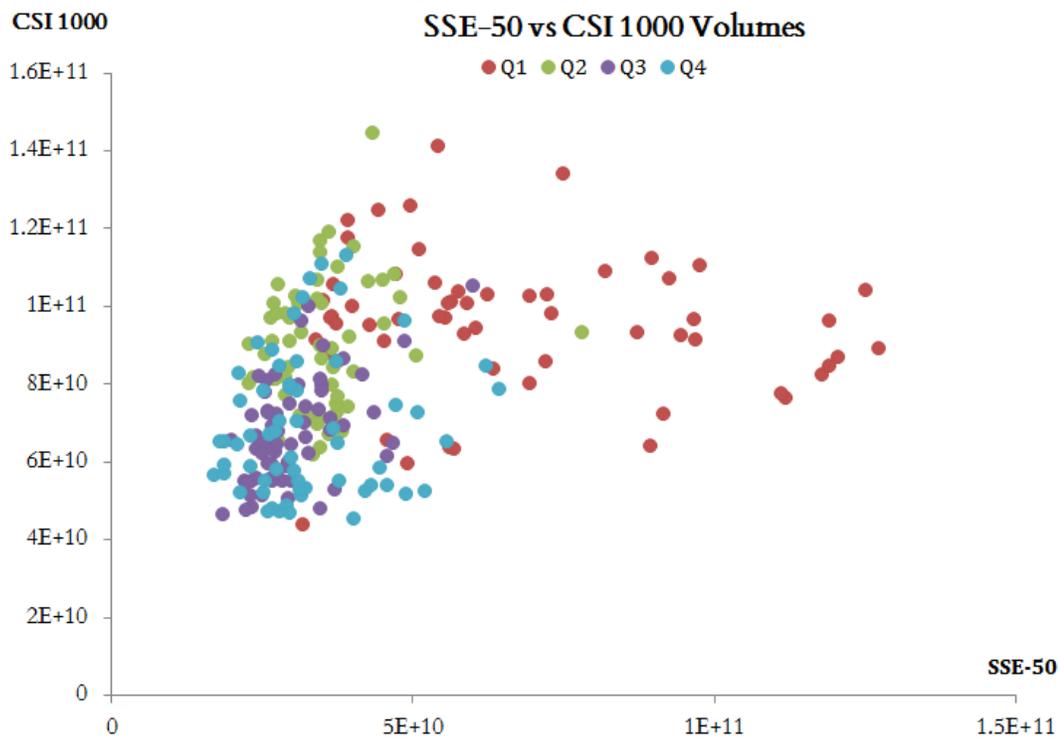


These cross-currents magnified China’s existing tribulations. And China’s problems are global problems. Economically and geopolitically, it is no longer correct to think of China as an isolated nation. As the second largest economy in the world, global affairs now push and pull on the strings of political decision making, business confidence, and consumer preference. This is of particular importance as last year marked the first time in recent memory whereby the State Council was forced to respond to external political pressures.

But the door swings both ways. As the Chinese system opens to the world, domestic politics and the goings-on of the domestic economy, particularly shifts in

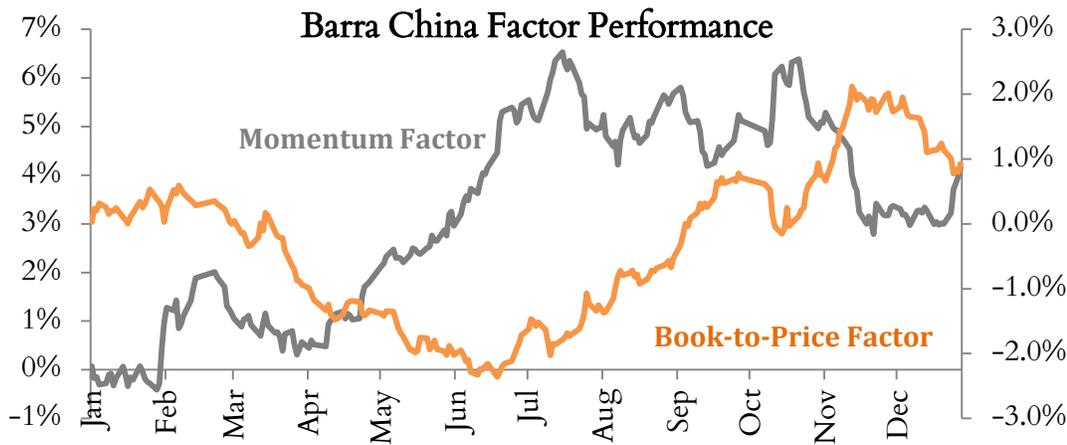
consumer behaviors, will shape corporate decisions and contribute significantly to the evolution of investor allocations. The purchasing power of Chinese consumers already makes their preferences and consumption patterns a vital element for many of the world's most valuable brands. Recent policy measures meant to support the Chinese consumer will not only help support the Chinese economy, if tax savings are spent instead of used for deleveraging household balance sheets, but will also boost global corporate profit margins.

Last year's combination of external shocks and domestic contractions exerted immense pressures on Chinese consumers and investors alike, causing a palpable slowdown in activity and sentiment with a corresponding decline in retail trading volumes—the ultimate source of alpha in the onshore market. Volumes across mega-cap and small-cap indices declined, hurting quantitative strategies active across indices with the trough in volumes experienced in the third quarter (October), and a slight recovery nascent in the fourth quarter.



In our estimation, the deterioration in alpha contribution from retail investors throughout the vast majority of the year led to a downward spiral for onshore managers, particularly those operating quantitative strategies, as factors became extraordinarily volatile and highly correlated. This was the natural consequence of the uncharacteristic domination of institutional investors in trade flows, which led to the subsequent dispersion paradoxes and rapid regimes shifts that dominated in 2018. Pockets of the market, however, were able to retain deep alpha potential, such as in the small- and micro-cap markets, particularly in the fourth quarter.

As with any equity market shock, institutional and retail investors alike desperately sought capital preservation. Retail investors leave the market and hold cash, or move into illiquid assets, such as real estate. Institutional investors with a mandate to be fully invested move into blue chips, which offer the appearance of value and liquidity, and factor performance follows these types of flows. This manifested in momentum trades tracking the performance of value-family factors, such as earnings yield, and influencing fundamental factors, such as book-to-price. This was also a natural consequence from the significant decline in prices beyond the implicit value of companies, and illustrates the significant value proposition many Chinese equities and the aggregate market, in general, provides.

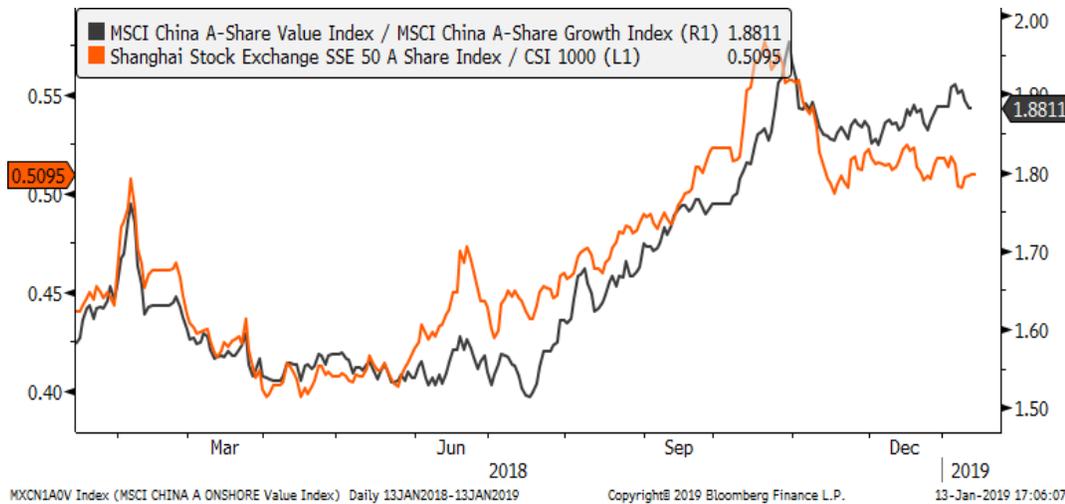


The curious case of China is that many “blue chip” names tend to be large, state enterprises whose balance sheets would never quite meet the definition in other markets. But in China, value can be defined as implicit government support and explicit government subsidy. This is also the central reason why private sector lending remains in the doldrums.

Barra China Factor Performance



In the end, the Chinese financial system has an inherent preference for valuing companies based on the possession of collateral and political resources instead of from analyzing balance sheets and deriving value from business cash flows, the strength of management, and competitive positioning (presence of moats). Hence, we witnessed the outperformance of the SSE-50 Index (China's version of the Dow Jones Industrial Average) and underperformance of CSI 1000 (China's version of the Russell 2000) for much of the year, and along with it the outperformance of value versus growth.

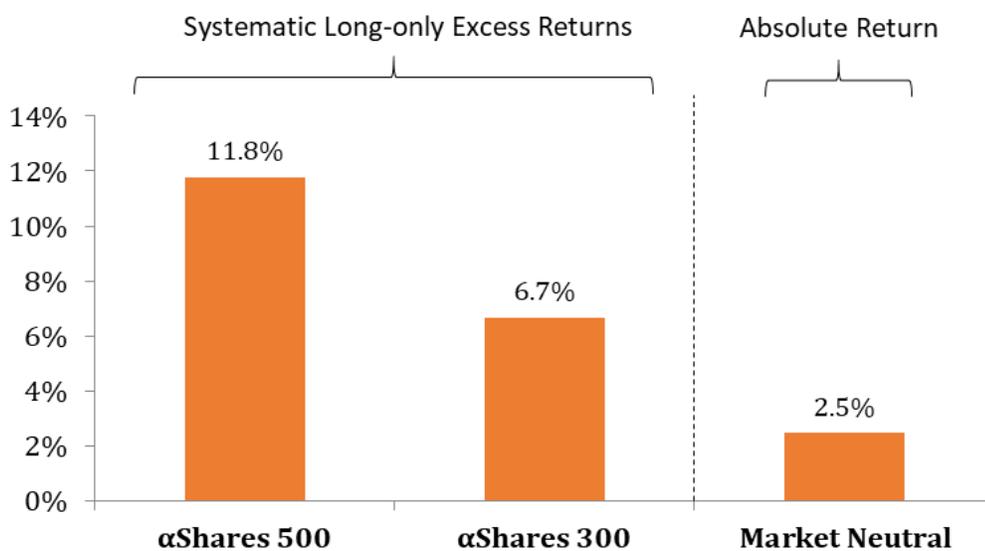


This is also the reason why private sector support has become a political imperative at all levels of government, from the State Council and Politburo all the way

down to Ministries and provisional governments. The People’s Bank of China also started a scheme whereby it would post collateral to backstop private sector loans. This addresses the issue but misses the point. Still, we expect these policies to continue as efforts to support the private sector were starting to take hold in the last months of the year. As we forecasted in our 2017 annual letter, small caps did indeed post a stunning reversal at year-end.

The combination of the Sino-U.S. trade war, global slowdown in trade volumes, contraction in domestic credit availability, and dramatic tightening in financial conditions served as significant headwinds for quantitative equity strategies last year. Jasper Capital adapted throughout the year, evolving our signal mix, researching new methods and techniques, testing new strategies, and experimenting with high frequency trading, convolutional neural networks, and deep learning. We consistently demonstrated our value to our investors as seen in our ability to generate significant excess returns with our long-only strategies despite the historic volatile in the operating environment.

Jasper Capital Strategies 2018 Performance



We believe that while 2019 will be challenging, as growth will be slower and the global geopolitical landscape will continue to be uncertain, China’s equity market environment will improve given the bounty of policy support that has been implemented and has yet to manifest. Beijing’s acceptance of lower growth indicates to us that policymakers are refusing to sacrifice long-term success for short-term gains as they press forward with eliminating the excesses from the financial sector as well as from heavy industry, local governments, and state owned enterprises. As we have stated ad nauseum, this is positive. Hence, we do not believe that authorities will flood the economy with stimulus once again. We have faith that what policy has been announced

will be fully executed as stricter Party discipline is the top Party tenet for the year as deemed by President Xi. This will help to dramatically lower policy implementation risk.

More fiscal and macroprudential measures are also on the way, targeting the broad economy (via tax cuts for households and corporations alike), private enterprises (via preferential funding, tax cuts, business fee reductions), and credit channels (via liquidity injections and looser bond rules). This should be positive for balance sheets across the spectrum. That said, defaults and bankruptcies are set to rise given expectations for further progress in cleansing the system of zombie companies with the additional headwinds from slowing domestic demand, higher funding costs, and significant debt loads. Progress in the development of China's bankruptcy policy and legal frameworks will also allow more companies to file for bankruptcy.

This begs a crucial question, will the stimulus translate to increased activity or will it be used to reduce debt burdens. An interesting historical anecdote is the U.S. experience of 2016, where the 60% collapse in oil prices was expected to pass through to consumer spending, but was instead used to pay down debt. It was not until the tax cuts of 2018 when we saw a robust consumer response. Either way, stimulus should improve domestic sentiment with the path of policy and the economy. This much policymakers can control. What is outside of their hands is the external environment, which will be more volatile.

Across the Pacific, lies a monumental political challenge that is hard to calculate, and a stock market that has yet to fully price a slowdown in U.S. consumer spending that most likely will occur later this year as the tailwinds of the tax cuts fade and the labor market starts to soften in tandem with an economy that starts to wean itself off of stimulus. Washington will be consumed with political warfare as a Democratically-controlled House is set to investigate the President, his Administration, his family, and his business. The Southern District of New York is already investigating the latter with evidence stretching from New York to Panama and Istanbul to Moscow.

We list a few investigations that have been discussed in our meetings in Washington:

- Permanent Select Committee on Intelligence: Trump's Russian and Saudi financial connections
- Judiciary Committee: Justice Department firings and immigration policy
- Ways and Means Committee: Affordable Care Act changes
- Energy and Commerce: Environmental Protection Agency rollbacks of climate as well as leadership scandals within it
- Natural Resources Committee: Investigations in Interior Department leadership
- Financial Services Committee: Consumer Financial Protection Bureau policy changes
- Oversight Committee: All of the above and more. They will begin next month when they question President Trump's lawyer, Michael Cohen, about the possibility of campaign finance violations.

Indeed, the United States will once again dive into political turmoil as the Presidency comes under scrutiny. Markets will most likely remain volatile as this President “punches back” and shows little regard for collateral damage in his attempts to parry attacks. Hence, the outlook for the Sino-U.S. trade war is uncertain and unlikely to end anytime soon. While China has made addressing the dispute a key priority, the key fear is that President Trump may use it as a weapon in his domestic political battles. A similar tactic is already being implemented as his is using own government as ransom for a border wall.

We believe that the road to China’s new normal will be long and tortuous, but the end is not a long way off. This much we feel will be reflected in equity markets this year.