January 2019

Dear Investor,

Global markets progressed through 2018 like a rolling wave cresting in different parts of the world throughout the year. For most equity markets, such as in Europe, most of Asia and Latin America, the wave crested in January and prices fell throughout the rest of the year. In other areas of the world, such as the U.S. and Canada, it didn't crest until later, but prices fell precipitously into year-end once the wave broke.

In the U.S., the past four years have featured some of the highest equity valuations in the history of the stock market, which simply means that future long-term returns from the peak of this period will very likely be among the lowest in history. And it's important to point out that such low returns from periods of extremely high valuations are not bound by the zero line: long-term returns can be, and have been, significantly below zero from periods of extremely high valuations. In January 2018, the valuation of the S&P 500, based on its cyclically adjusted earnings, reached the same level it reached at the market peak in 1929, and from that infamous peak investors had to wait 25 years for the index to fully recover. In those tumultuous years between 1929 and 1954, the S&P 500 spent most of the time trading at less than half its 1929 peak inflation-adjusted value.

Nor is such a hostile performance from high valuations a worthless artifact from an earlier era. More recently, the S&P 500 lost 65% of its value in the decade following the peak of the tech bubble in 2000, and it was not until 15 years later that the real price of the index fully recovered to break-even. In the 4th quarter of last year, various measures of the total value of corporate equity to GDP hovered around the same level reached at the tech bubble peak, which, until this past year, was the high-water mark for the post-war era.

The clear lesson from these periods is that once market valuations reach into the stratosphere, investors who desire a positive long-term return must be very careful about where they commit themselves, because they will not likely find a positive long-term result with a broad, passive allocation to stocks. However, it is also clear that doing anything other than passively holding onto stocks during a market bubble is one of the most difficult things for investors to do. A bubble promulgates a self-reinforcing market dynamic which places immense pressure on both professional and non-professional investors to play along, because not playing along reflects so poorly in comparison. Even those investors who know deep down they are playing with fire during a market bubble, and who are aware they may face large losses following the peak before they change their approach, find themselves using contorted rationalizations to justify their irrational actions. It's unfortunate that it is often only years later, when the fog of the bubble has cleared, that investors see clearly again.

We have, at various times, called the current market environment by different names: The Fed Bubble, The QE Bubble, and The Everything Bubble. Beyond its label, what this period has really been is an all-encompassing market response to the extraordinary monetary policy of the Federal Reserve and other major central banks following the financial crisis in 2008. Between 2008 and 2018, the combined balance sheet of the Federal Reserve, the European Central Bank, the Bank of Japan and the People's Bank of China climbed from just over $6 trillion to over $20 trillion, and the bulk of that monetary expansion was used to purchase financial assets. In addition, short-term interest rates in Europe, America and Japan were held near zero (or below) much of that time, and this encouraged those who could, such as many of the largest corporations, to borrow as much as they could. This was the largest and fastest monetary expansion since the Great Depression, and it spawned an equally rapid inflation of financial markets.

The reason the above is written in *past* tense is because 2018 marked a pivot point in that post-credit-crisis monetary response: for the first time since 2008, the Federal Reserve raised interest rates significantly above zero, and the combined balance sheet of the four largest central banks began to shrink. This effectively marked an end (whether temporary or permanent, we'll have to wait and see) of the monetary regime that ruled the realm for an entire decade after the financial crisis. It also marked an end to the underlying force which propelled risk assets into one of the largest bubbles in history, and it is no coincidence that market volatility has increased significantly with this underlying monetary shift.

The period following the current bubble will be decisive for an entire generation of investors, and the volatility in 2018 was probably just the first hint of what life in the financial markets will be like without central banks playing the role of the mythical Atlas. In many ways, 2018 was a very chaotic year to manage through – especially for those with a value focus. Many equity markets outside the U.S., which began 2018 modestly undervalued, were among the year's worst performing markets. And some of the most overvalued markets, like the U.S., continued to defy gravity for much of the year, until ending the year lower. This characterized the dynamic within the U.S. equity market as well: some of the most overvalued stocks continued to outperform for most of the year.

However, change arrived suddenly and forcefully late in 2018, and the evidence suggests the fever of this bubble *may* have finally broken. According to a Deutsche Bank study, 93% of financial assets posted a negative return in 2018, a broad-based result we discussed as a possible outcome in our annual letter a year ago. It was also the first year since the peak of the tech bubble in 2000 that quietly sitting in cash outperformed stocks and bonds. Although this was a result that didn't lend itself to any dramatic headlines, it was one which entirely justified our high cash balances throughout the year. Our guess is this result will be repeated in the years ahead, as the value of money appears poised to begin an era of outperformance versus financial assets.

We'll review the market action in 2018 and summarize our market outlook going forward throughout this letter, which will update you on the reasoning behind our portfolio allocations. However, this year we will do so in more of a narrative form. We'll begin by traveling back in time to another period of growing tension between the financial markets, the federal government and the Federal Reserve, to give some important macroeconomic context to the current market environment.

In our estimation, the key factors that will determine the performance of debt and equity markets in the years ahead will have less to do with the details surrounding whether the economy grows by 2.8% or 2.2% over the next year, or whether the unemployment rate ticks up or down, and much more to do with the decisions the Federal Reserve and the federal government will be forced to make. Such decisions have had a strong impact on asset returns for the past 20 years, but they will likely play a decisive role over the next decade. This letter will focus on detailing just what we think those decisions will be, and our how our approach to the markets already anticipates the impacts from those decisions.

Over the past year (Q3 2017 to Q3 2018), the federal government borrowed $1.27 trillion to finance its spending, and over the next year the federal government will again run a budget deficit of over $1 trillion. These deficits are likely only the beginning of a more or less continuous stream of trillion-dollar deficits over the next decade, a spiral higher in debt which will be extremely difficult to alter. At the same time, this spiral in government debt will occur while the economy continues down the the path of deleveraging that began with the financial crisis.

In short, the value of the dollar has not faced this much prospective pressure since the 1960s, and just how the federal government and the Federal Reserve respond to this pressure in the years ahead will have a defining impact on long-term trends in stocks, bonds and other financial assets. For clues to what we can expect, we'll start by looking at some of what went on behind the scenes in Washington, D.C., and in Johnson City, Texas, following the fateful pivot in the financial markets in 1965, at the very beginning of the Great Inflation.

The 1965 Pivot, and a Rhyme of History

> *You went ahead and did something that you knew I disapproved of, that can affect my entire term here. You took advantage of me and I'm not going to forget it…You've got me into a position where you can run a rapier into me and you've run it. Martin, my boys are dying in Vietnam, and you won't print the money I need.*
>
> - President Lyndon Johnson to Fed Chairman William McChesney Martin, December 6, 1965

The study of history can be a surreal experience at times. Any look back at events comes with the knowledge of many things which did or did not unfold afterwards, and this inevitably puts the events into a dreamlike context when they are looked at long after they happened. Some decisions and actions look prophetic, while others appear predictably tragic. Still others look much more intentional than they really were. It is easy to make judgements from a safe perch in the future, which comes only after we know how things turned out, yet it is not so easy to imagine what it would have been like to live through some period in history without knowing how the future would unfold. But it is a great challenge. Suspending any judgement stemming from our privileged place in the future while looking at history must be an exercise in vigilance and perseverance, if we are to distill the lessons relevant to our present time. Otherwise, we will fail to appreciate just how and why decisions are made, and how we can do better in the future.

The 1960s is a period that will be studied for a very long time, because it was such a pivotal era in our nation's history. A new generation took up leadership of the country at the beginning of the decade, but at that optimistic moment few could have imagined the social and political chaos that would rain down by the end of the decade. Many of the events and trends in the 1960s are well known and thoroughly studied, and they are also well outside the scope of this letter. However, other events and trends in the 1960s remain largely unknown, and these are not only directly relevant to this letter, but to any investor in the financial markets today. One such series of events was the role the Federal Reserve played in initiating the Great Inflation, a trend which eventually led to inflation-adjusted losses in the financial markets that exceeded the real losses during the Great Depression.

The Great Inflation refers to the years between the mid-1960s and the 1980s, during which time prices throughout the economy more than tripled. The Consumer Price Index, which represents only one attempt among many to track prices throughout the economy, rose from a value of 31 in 1964, all the way up to a value of 100 in 1983. Prices continued to rise after 1983, but the period between 1964 and 1983 represents, by far, the largest and fastest rise in consumer prices in all of U.S. history.

Among Fed historians, the Great Inflation is considered to be the second major policy error in the history of the Federal Reserve; the first major error being the decisions made in the early years of the Great Depression. The rise in prices between the 1960s and the 1980s was not the result of an unpredictable series of random events, nor was it the result of many of the convenient scapegoats that were blamed at the time: greedy corporations and overbearing unions causing "cost-push" inflation, or an out of control "inflationary psychology" infesting the country. It also was not the result, at least directly, of the war in Vietnam, or of all the Great Society programs enacted by the Johnson administration. Prices have risen during every major war in U.S. history, as the sudden surge in government borrowing and spending during wartime inevitably results in scarcity. Yet the rise in prices which began in the 1960s was different: prices began to rise with the increase in war spending, but instead of falling back when the wartime spending wound down, prices *accelerated* higher into the 1980s. Long after our involvement in Vietnam came to an end, prices continued higher, and long after the Great Inflation came to an end, the Great Society programs remained. While the war and increased spending on social programs were certainly factors, the root cause of the Great Inflation ran deeper.

At the time, there were many issues and parties that were blamed for rising prices, but the Great Inflation began, and was sustained, by the same force that has propelled all major inflations throughout history: it was a monetary phenomenon. The Great Inflation happened because the policies of the Federal Reserve in the 1960s and 1970s not only enabled it to happen, they fostered it, and it ended precisely when the Fed decided to change those inflationary policies. Although we can never know how history would have unfolded if the Fed had changed course earlier, or had pursued another course from the beginning, it remains almost certain that the Great Inflation would not have happened had the Fed not pursued an overly expansionary monetary policy beginning in 1965.

Pivotal events in history, events which come to affect millions of people, sometimes turn on the decisions and personalities of only a few people. In the case of the Great Inflation, the chairman of the Federal Reserve was one of those few people. Among all those who have led the Federal Reserve in the century since its founding in 1913, the longest tenure has been that of William McChesney Martin Jr., who served as chairman of the Fed from 1951 to 1970.

Martin came of age, professionally, in the wake the Great Depression, and his father, William McChesney Martin Sr., had been a Fed governor and was one of the authors of the legislation which created the Federal Reserve system in 1913. Martin Jr. was a banker by trade, and a close follower of the financial markets, and he began his career at the head of the Fed surrounded by other market-focused colleagues, before it came to be dominated by the best and the brightest later in the 1960s – i.e. those with economics PhDs. Thus, his early tenure at the Fed was defined by a pragmatic focus on financial market conditions, as can be expected from a banker, and he naturally trusted real-time statistics from the real world over economic models, theories and forecasts.

Martin was a consensus builder, and he tended to take in all sides of a debate and wait to make final decisions on policy until there was a clear majority in favor of one direction over another. He also had clear views regarding Fed independence. Yet for someone looking back from the present time, those views were not as independent as you might think. He viewed the Fed as independent *within* the federal government, but not independent *of* the federal government. Although at first glance this may seem like a distinction without much of a difference, this subtlety would eventually prove to have enormous consequences for the country by the end of his time as chairman of the Fed. In a May 1956 speech to a group of bankers in Pennsylvania, he summarized his views this way:

> The Federal Reserve's task of managing the money supply must be conducted with recognition of the Treasury's requirements, for two reasons: one, the Federal Reserve has a duty to prevent financial panics, and a panic surely would follow if the Government, which represents the people as a whole, could not pay its bills; second, it would be the height of absurdity if the Federal Reserve were to say in effect that it didn't think Congress was acting properly in authorizing expenditures, and therefore it wouldn't help enable the Treasury to finance them.

In other words, he considered it to be Congress' exclusive constitutional authority to determine the federal government's levels of spending and taxation, and if Congress approved a budget that ran a deficit, the Federal Reserve was required to respect that constitutional authority and help finance it – or, at the very least, not pursue policies that made it difficult to finance the "the people's" deficit. This is quite different from how the Fed views its independence today, but for a Fed chairman appointed in 1951, these views were not controversial. In 1961, the Fed had only just begun to recover some control over monetary policy after the takeover of monetary policy by the Treasury department during the 1940s. In the years that followed, the Fed remained in close communication and coordination with the Treasury throughout the Eisenhower administration, and that coordination continued during the Kennedy and Johnson administrations.

Thus, it was generally accepted at the time that one of the key roles of the Federal Reserve was to support the Treasury in meeting its financing requirements. On a more practical level, this most often meant it was the Fed's *responsibility* to ensure the Treasury's debt sales succeeded. This was well before the time when the Treasury began auctioning its bills, notes and bonds in the 1970s – at this time, Treasury debt was mainly purchased directly by banks, at interest rates that were set ahead of time by the Treasury. Since the Treasury generally wanted to sell debt at the lowest interest rate possible, and its buyers' demand for additional debt hinged on the volume of excess reserves on hand in the banking system, reserves which were in large part influenced by the Fed's reserve requirements, there was a constant underlying pressure on the Fed to 1) keep interest rates low, 2) keep interest rates steady, and 3) keep the banking system stocked with enough excess reserves to cover the Treasury's anticipated debt sales when the government ran a deficit. All three of these pressures are inherently inflationary.

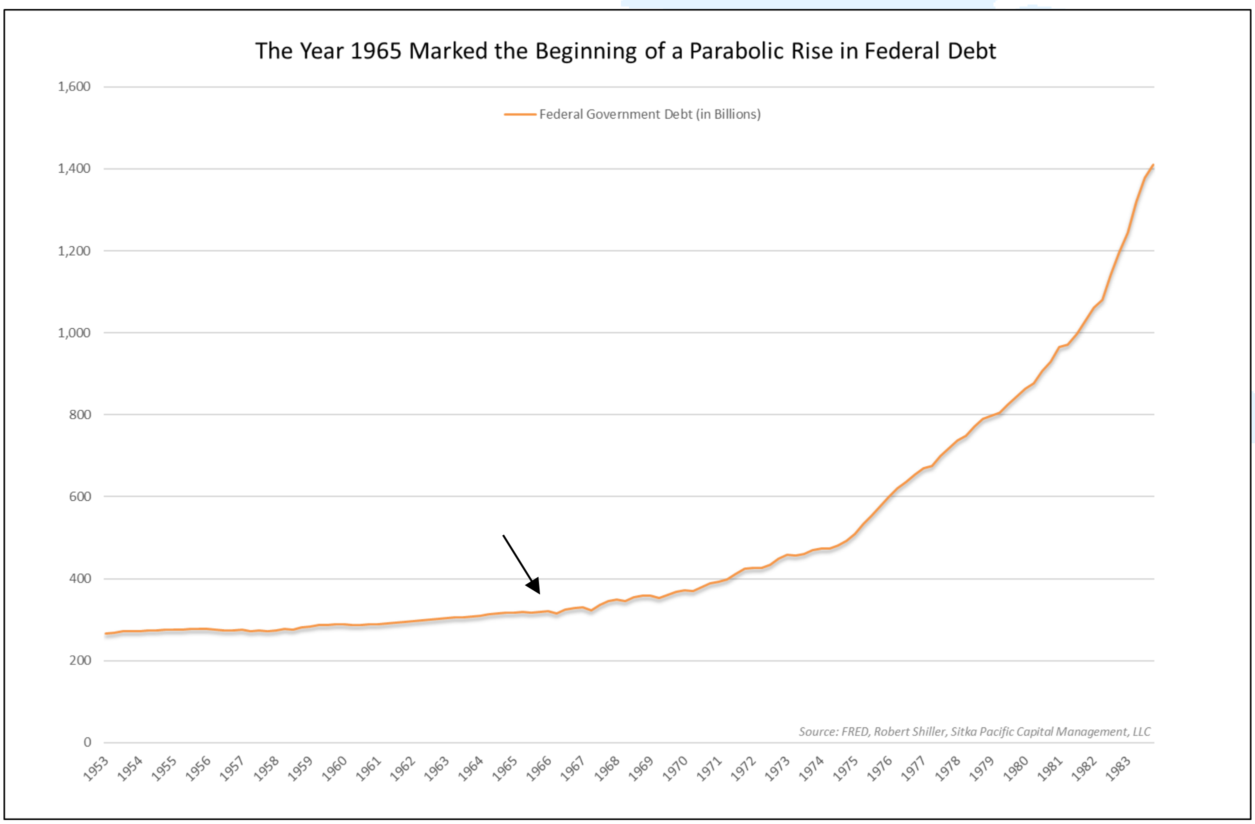
From the late 1930s and through the 1940s, this inherent tension between the Treasury's desire to sell debt at terms as favorable as possible to the government and the Federal Reserve's desire to maintain price stability did not end well for the Fed – it resulted in the takeover of monetary policy by the Treasury. This allowed the Treasury to sell all the debt it needed to finance the war at the terms it chose, and in the end this takeover had the predictably inflationary result: between 1939 and 1951, the Consumer Price Index rose at an average annual rate of 5.3%, and interest rates were far below the inflation rate. All told, during this short takeover of monetary policy by the federal government, consumer prices almost doubled, and cash lost almost half its purchasing power.

Following the war, the 1950s ushered in a new era of balanced government budgets. As a matter of principle, presidents Truman and Eisenhower both detested budget deficits, and although the Federal Budget fluctuated with the growth of the economy, the federal government's debt barely changed between 1950 and 1960. This budgetary discipline throughout the 1950s more or less continued into the early 1960s, and it was no coincidence inflation rates during this period were low and steady. In the years between the time Martin became chairman of the Fed in 1951 through mid-1965, the Consumer Price Index rose only 20% – an average annual change of only 1.3%.

Yet shortly after Lyndon Johnson became president, the budgetary discipline which had reigned up to that point in Martin's tenure as chairman of the Fed began to give way. While Truman, Eisenhower and Kennedy had all committed themselves to the goal of keeping the Federal budget reasonably balanced (as an example, Truman had insisted on raising taxes to finance the Korean war), Johnson and many of those in his administration wanted to increase Federal spending without risking an economic slowdown caused by raising taxes – a logic that sounds all too familiar to us today.

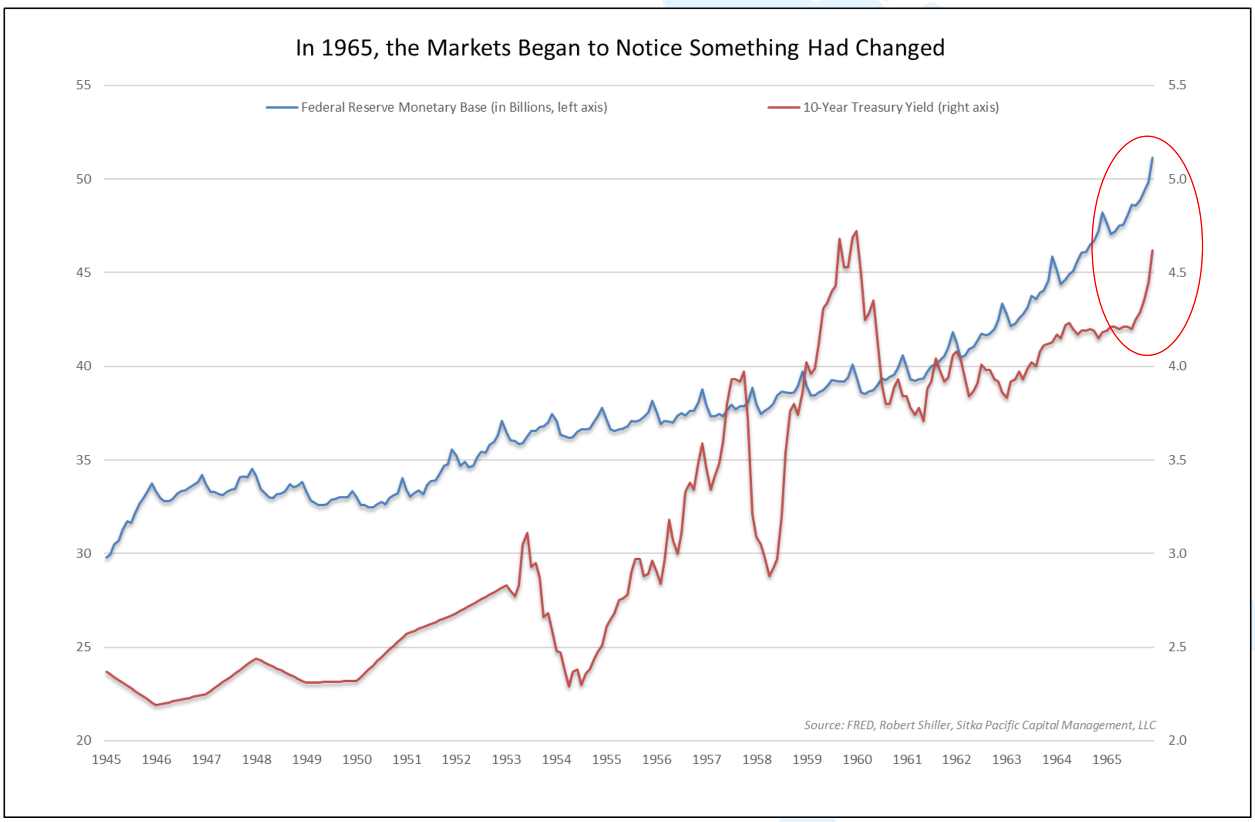
This shift in budgetary discipline did not appear out of nowhere – it came about from a new kind of philosophy within the economics community. By the mid-1960s, many economists had come to accept the idea that the economy performed best when it was at "full employment," and it could be kept closer to full employment if the government stepped in and played a role in maintaining adequate economic demand throughout the business cycle. In order to estimate the economy's employment potential and the economy's capacity for production and consumption, economists had developed models which not only tracked the economy's current capacities for employment, production and consumption, but offered *predictions* of the economy's future capacities. Thus, whenever employment was seen to be below the economy's potential full employment, it was thought the government could boost the economy by increasing its spending, thereby creating enough economic demand to increase production and employment – and taxes. According to these models, the government could increase its spending when employment was below potential, and the additional spending would, almost like magic, "pay for itself" with the increased tax revenue that would come in from the spare economic capacity which had been put in motion.

Fed chairman Martin never did give much weight to economic models – his outlook was rooted in the empirical data coming in from financial markets and the banking system. However, as the 1960s progressed, he found himself increasingly surrounded by other appointed members of the Fed who did. In addition, the Johnson administration was full of officials who firmly believed in these new models, which offered a politically convenient theoretical justification for increasing government spending while not increasing taxes. In meetings within the Fed and with the president and various administration working groups, Martin found his views on the importance of non-inflationary growth increasingly outnumbered by those who viewed higher government spending and the resulting inflation as a way to get the economy to run closer to peak efficiency.



The year 1965 proved to be the year the growing conflict between Martin's more conservative views and the views of the "new economists" of the 1960s came to a head. The year before, the president had signed a tax cut bill passed by Congress, and in 1965 spending for Johnson's Great Society programs and the growing war in Vietnam began to increase dramatically. As a result, the government's debt began to increase in a way it hadn't done since the war: although the Federal debt had remained just below $300 billion from the end of World War II through 1962, it had climbed above that threshold to $320 billion by the end of 1965. Inflation had begun to increase as well. The Consumer Price Index had risen at a 1.2% annual rate in the first half of the decade, but by the end of 1965 the index had risen 1.9% from its level a year earlier, and looked poised to increase further. As it happens, this was the last time consumer prices would rise at less than a 2% annual rate for more than two decades.

As they tend to do, financial markets quickly noticed something had changed, and began reacting: by the end of 1965, the yield on the 10-Year Treasury bond was rising quickly. It ended the year at 4.62%, up from 4.21% the year before, a rise that can be seen in the red line highlighted by the red circle below. Except for a brief moment at the dawn of the 1960s, this was the highest yield on the 10-Year Treasury since 1921.



At the same time as bond yields were rising, gold began to flow out of the U.S. at an alarming rate, as foreign central banks increasingly converted their accumulated dollars into gold. In all of 1965, $1.664 billion in gold left the U.S., which was about 10 times the amount that had left the year before. This was a strong signal that those outside the U.S. had also noticed U.S. fiscal and monetary policy had shifted in ways which would eventually put pressure on the value of the dollar, and they were taking action by exchanging more of their dollars for gold.

Martin and the other members of the Fed were aware something had changed, but they were conflicted about how the Fed should respond. Although the inflation rate of consumer prices remained benign prior to 1965, the growth rate of the base money supply had risen to a 5% annual rate in 1964, and by 1965 it was clear prices would probably begin to rise at a faster rate unless the Fed acted to slow money growth. Yet with the Fed Funds rate already at the high end of its historic range, a range that went back decades, raising the Fed Funds rate further seemed to most members of the Fed to be an extreme act that would invite a recession.

What Martin did not yet know was that the Johnson administration had begun hiding the official budget numbers from him and other members of the Fed, so they were not aware government spending was increasing much faster than they thought. Part of the reason for the intentional hiding of this budget information was because Johnson apparently feared publicly telegraphing how much the U.S. was increasing its spending on the war in Vietnam, both for domestic political reasons and for fear the north Vietnamese would increase their war spending in response, if they knew about it. But it was also an effort to keep interest rates low. In a memo in October 1965, Johnson's budget director, Charles Schultz, wrote to the president: "I have instructed my staff *not* to discuss the budgetary outlook with the Fed. Quite apart from security considerations I am afraid that the budgetary outlook would be used as an excuse to tighten up monetary policy."

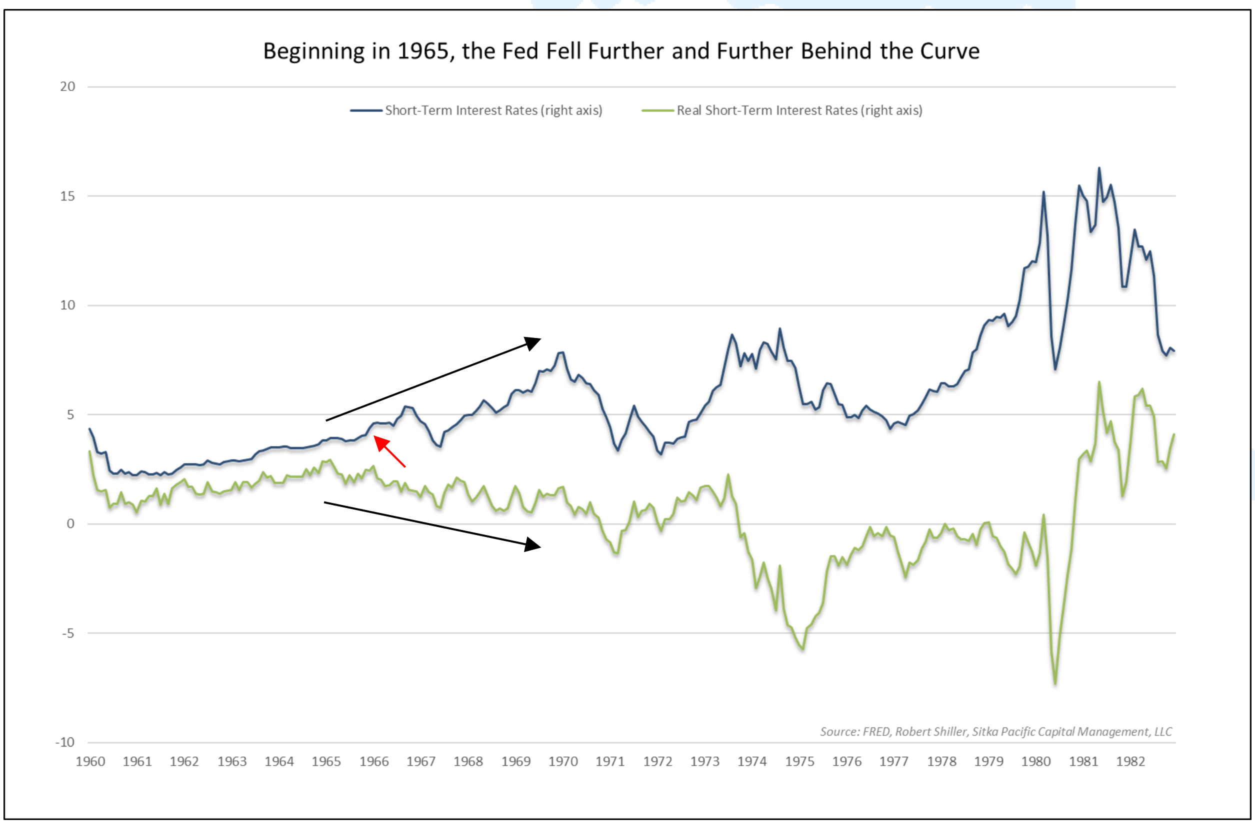
While governors of the Fed debated policy options in 1965, and while the Johnson administration withheld budget numbers and lobbied Martin in various inter-agency meetings to keep interest rates low, as the year wore on it became increasingly clear to Martin himself that the Fed needed to raise rates. As the Fed maintained bank reserves at levels it viewed appropriate, the base money supply was growing at the highest rate since the Korean war, and other measures of credit were expanding rapidly. For Martin, this mattered far more than the administration's model-based projections for the federal budget, which showed the projected deficit in a more benign light (and which, unbeknownst to him, were partly based on intentionally misrepresented data). Then, in November, a government sale of short-term Treasury notes nearly failed. This was a clear indication that the market thought the interest rate offered on the notes was too low, and these were all signs to Martin that the Fed was quickly falling behind the curve.

Martin was also increasingly concerned the Fed had already sacrificed too much of its independence to the Johnson administration, and he was ready to increase rates, in part, to send a signal that the Fed was not going to be so swayed by political pressure, and was going to act according to its mandate for price stability. So, when Johnson, who was recovering from surgery at the time at his Texas ranch, and had heard the Fed was about to raise interest rates, invited Martin and other officials to Texas in early December to discuss policy, Martin decided the Fed should increase interest rates before meeting the president. The Fed did so after meeting on December 3rd.

Martin then flew down to meet with Johnson on December 6th, which resulted in one of the most famous confrontations in Fed history. As Johnson physically pressed Martin up against the wall, he lambasted Martin for raising interest rates against his wishes; part of this castigation is quoted above, at the beginning of this section. In the brief press conference that followed, Johnson emphasized that he and Martin had merely had a few differences of opinion on monetary policy, which would be worked out in due course, but the look on Martin's face betrayed the intensity of the meeting, which he detailed years later.

Despite the intense pressure from Johnson and others in his administration, the Fed kept the December 1965 interest rate increase in place, and increased rates further in 1966. Among Fed historians, these acts are considered among the Fed's proudest moments – Martin's steadfast refusal to undo the December 1965 interest increase, despite being physically intimated by the president, stands as a symbolic act of the Fed's independence.

Yet while Martin's refusal to back down in the face of Johnson's intimidation was certainly an honorable action, the fact was that pressure from the administration, on all fronts – through personal meetings with the president, and through working groups of Fed and administration officials – had already restrained monetary policy from where it probably would have been otherwise. In other words, the Fed was acting less independently than Martin's refusal to back down would have it seem. The Fed was already behind the curve, and a big reason it was behind the curve had been due to pressure from the Johnson administration.



The infamous December 1965 rate hike is pointed at by the red arrow in the chart above. The blue line shows nominal short-term interest rates, and the Fed rate hike that December increased the 13-Week Treasury yield to 4.38% from 4.09% in November. With the exception of a brief spike to 4.49% in December 1959, this was the highest 13-Week Treasury yield in more than 35 years. This indicated to many officials at the Fed that monetary policy was relatively tight.

Yet as you can see by the green line in the chart above, while the nominal 13-Week Treasury yield was rising to new highs, the real, inflation-adjusted 13-Week Treasury yield was lower than it had been earlier in the year. This was because the inflation rate was rising faster than interest rates.

One source of many of the mistakes made during the Great Depression was that the Fed never looked at *real*, inflation-adjusted interest rates – it only considered nominal interest rates. So, when in 1931 interest rates fell to their lowest levels in decades, those within the Fed thought that monetary policy was the easiest it had been in decades. But at the time prices were falling at a 10% annual rate, and this meant that a 1% nominal interest rate was, in fact, an 11% real interest rate – which was very high. The Fed did not make the distinction between nominal and real interest rates in 1931, and as a result, the deflationary downward spiral that ensued came as a complete surprise. Three decades later, in 1965, the Fed was still not looking at real interest rates, and as a result, the inflationary spiral that ensued also came as a complete surprise.

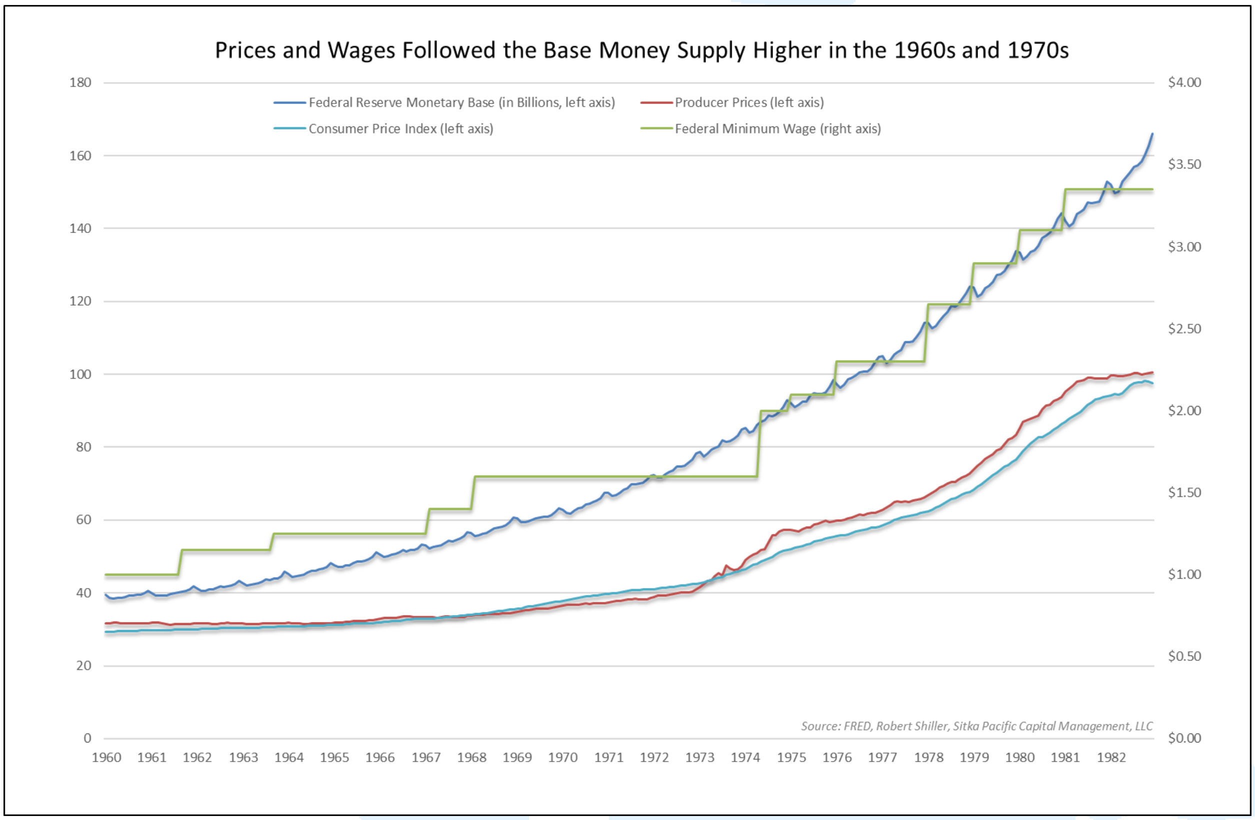
The diverging black arrows on the chart above highlight the pivot which occurred in 1965: although the Fed raised interest rates in December 1965, and brought them to higher and higher nominal levels with each subsequent economic expansion in the years that followed, *real* interest rates fell to lower and lower levels after 1965, as the Fed fell further and further behind the curve. As real interest rates fell toward and then below zero, and the Fed's monetary base continued to accelerate higher, the Great Inflation began.

The events in the years that followed the pivot in 1965 are some of the most significant moments in U.S. history, from a monetary perspective at least. The gold flow out of the U.S., which had dramatically increased in 1965, continued as foreign central banks increasingly converted their dollar reserves into gold in the face of the Fed's increasingly expansionary policies. By 1970, the governments of all the major continental European economies had increased their gold holdings, particularly France. By 1971, the U.S. gold reserve had fallen to just over 8 metric tons, which was less than half of its size a decade earlier.

The gold redemptions continued until President Nixon decided to end dollar convertibility into gold in August 1971, effectively bringing the post-war Bretton Woods era to a close. This act also ended the idea that the U.S. dollar would be backed by a fixed amount of gold, or any other hard assets, redeemable at a specific price. This had been the foundation of currency in the U.S. since the aftermath of the Civil War.

In the early 1970s, both the new Fed chairman Arthur Burns and the Nixon administration traveled further down the inflationary road. They both favored monetary expansion over policies that would have slowed inflation, because they both had concluded that slowing inflation would require unacceptable rises in unemployment. Of course, "unacceptable" was meant in a purely political sense. Nixon had lost the presidential election in 1960, he firmly believed, because unemployment had risen prior to voting time – so he relentlessly pushed policies that would counter any potential rise in unemployment. Nixon also had a simpler and more pragmatic view of Federal Reserve independence than his predecessors. When Nixon installed Burns as chairman of the Fed in 1970, he said: *I respect his independence. However, I hope that independently he will conclude that my views are the ones he should follow.*

During this era, an unacceptable unemployment rate was considered anything over 4% – what the economic models of the time said was the full employment rate. In the relentless drive to keep the economy near full employment, the Fed ended monetary tightening campaigns and reverted to expansionary policies whenever unemployment rose above this rate, and this approach accelerated the inflation of prices through the 1970s (shown below).



At the same time, throughout the decade Chairman Burns blamed every conceivable cause for inflation *except* monetary growth, and in fact repeatedly made the claim in front of Congress that monetary policy could not slow inflation. It was only late in the 1970s, with inflation rates above 10% per year, that the goal of a 4% full employment rate was questioned, and the focus finally turned to slowing the growth of the money supply as the way to slow the rise in prices. In 1979, a year after having left the Fed, and with consumer prices having doubled over the previous decade, Burns finally conceded the following:

> Viewed in the abstract, the Federal Reserve System had the power to abort the inflation at its incipient stage fifteen years ago [in 1964] or at any other point, and it has the power to end it today [in 1979]. At any time in that period, it could have restricted the money supply and created sufficient strains in financial and industrial markets to terminate inflation with little delay. **It did not do so because the Federal Reserve was itself caught up in the philosophical and political currents that were transforming American life and culture.**

In other words, had the Federal Reserve not been so swayed by the political interests of the then current presidents, and not so willing to follow the incredible idea that monetary expansion and higher inflation was a cost-free way to keep the economy running near peak efficiency, the Great Inflation would not have happened. By the time it was stopped, consumer prices had tripled, the federal government's debt had climbed past the $1 trillion mark, and financial markets had suffered the largest loss of real value since the Great Depression.

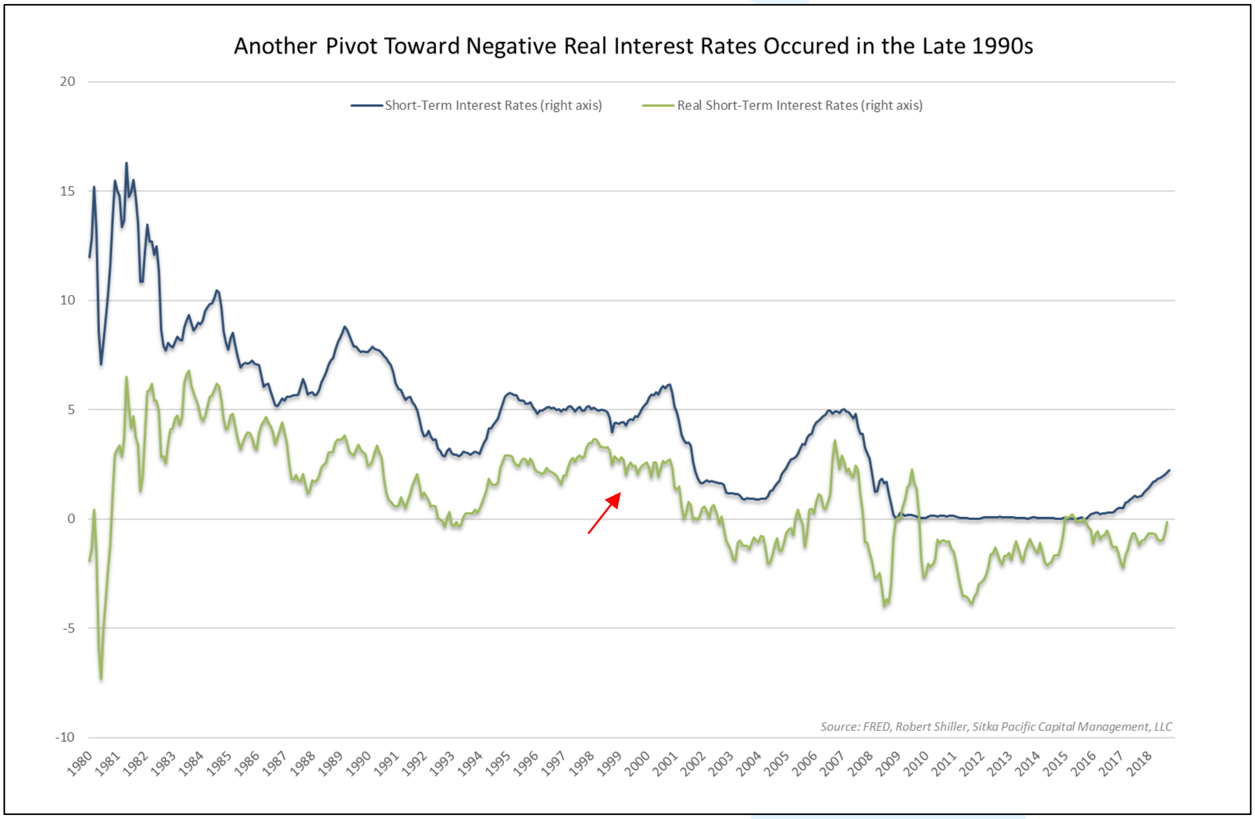
*   *   *

With such a large-scale and dramatic event such as the Great Inflation, there is no one person or one cause that explains everything that happened. In addition, there were many other factors which had a direct and significant impact on the rising trend in prices. For example, if the same people in leadership positions at the Fed and the federal government had made the exact same decisions within the context of a stable or shrinking working population, instead of during the era which saw the emergence of the baby boom generation into the workforce, then prices would certainly have not risen as much as they did in the 1970s. Context always matters, and the demographics of the 1970s certainly favored an inflationary response to the increasing money supply.

Yet Arthur Burns was correct in 1979 that the Fed could have prevented inflation in the 1960s and 1970s, had it chosen to do so. It didn't because the short-term costs – economic, social and political – seemed too much to bear. It was only when the short-term costs of *not* acting to slow inflation became unbearable that the Fed, under chairman Paul Volker, ended the Great Inflation by allowing real interest rates to rise back into positive territory.

The main reason we have spent time in this letter discussing the Great Inflation is because the Federal Reserve is currently trapped in a monetary catch-22 very similar to where it was in the 1960s and 1970s, and while the implications of this have already had a profound effect on trends in the financial markets over the last 15 years, most of the impact of this trap is probably still ahead of us. Although some circumstances are clearly different today, and these differences have already had, and will continue to have, a great impact on how this period unfolds, the fundamental nature of this monetary trap is the same: the Fed is unable to maintain interest rates where they should be in order to maintain the value of the dollar over time, because the short-term costs – economic, social and political – seem too much to bear.

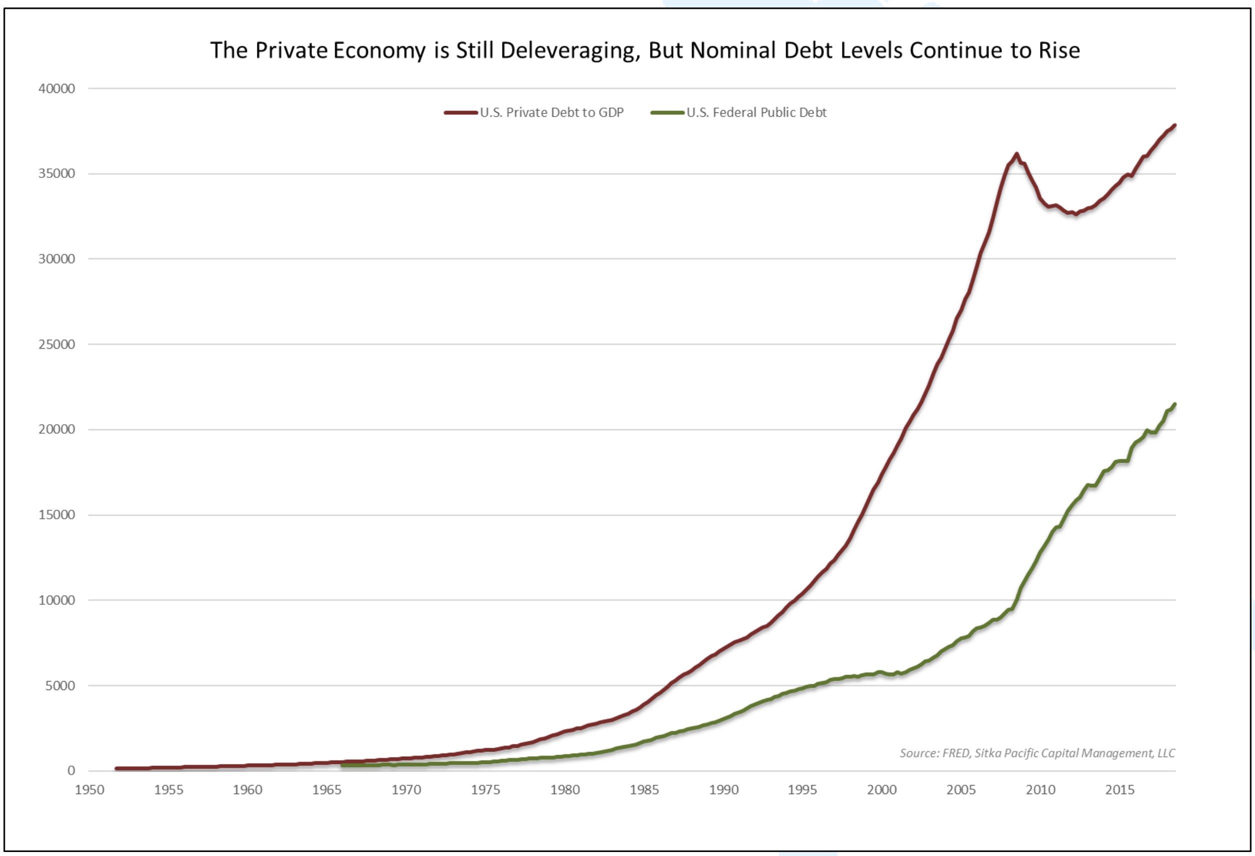
Since the late 1990s, the effects of economy-wide over-indebtedness have worked to keep short-term interest rates below where they would be otherwise, and real interest rates have been near zero or negative most of the time since 2001. The red arrow on the chart below highlights a pivot similar to the 1965 pivot – it was another point when nominal interest rates and real interest rates diverged, as monetary policy began falling behind the inflationary curve. It is also widely recognized that this was the moment when debt levels, both in the U.S. and globally, had risen high enough to begin negatively impacting economic growth. Every time the Fed has attempted to tighten monetary policy since this pivot, it has been forced to subsequently ease policy to ever greater degrees to coax the economy into recovery. In fact, except for the brief rise into positive territory in 2006 and 2007, which caused the housing bubble to burst in dramatic fashion, the Fed has been unable to bring short-term inflation-adjusted interest rates above zero in almost 20 years. As of the end of 2018, real short-term interest rates remained near zero.



How is the current period different from the 1960s and 1970s? There are several critical differences. First, trends in demographics today and over the next decade are not as inherently inflationary as they were in the 1970s. While baby boomers entering the workforce en masse in the 1970s added fuel to the inflationary trend, the retirement of the baby boom generation is an opposing drag on the current inflationary trend. A second critical difference is debt. When the federal government began deficit spending in 1965 and 1966, the private economy was still deleveraged from the Great Depression, and this left room for increasing leverage within the economy to drive prices higher. In 1965, the sum total of private economy debt equaled about 66% of GDP. This was up from its ultra-low level in 1950, at the very end of the deleveraging from the 1930s and 1940s, but it pales in comparison to the leverage which subsequently built up over the following 40 years. In 2009, private debt in the U.S. economy reached a high-water mark of 247% of GDP.

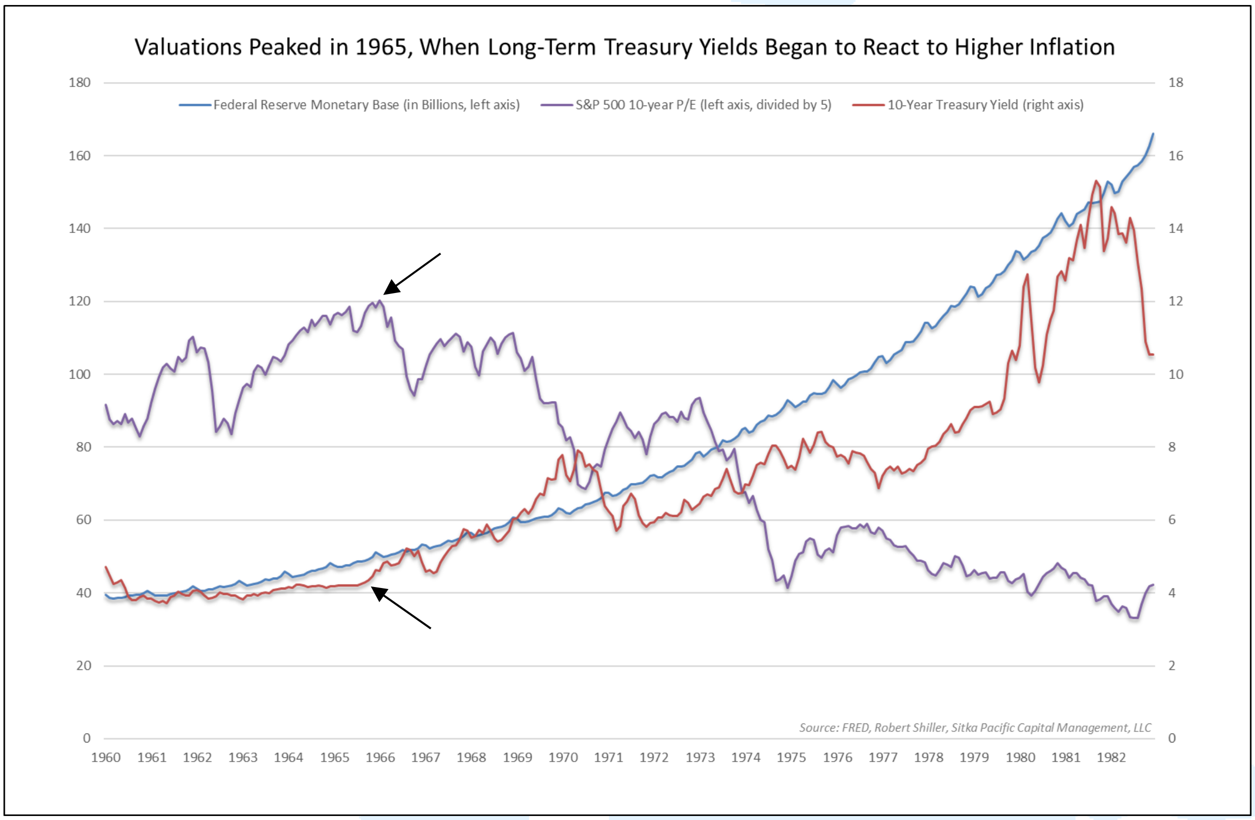
Yet, in an era where our currency unit is untethered to any firm store of value, comparing levels of debt to GDP can paint a somewhat distorted picture of what is happening. As compared to GDP, it would appear debt levels today are about 3–4 times as high as in the 1960s, and in some sense that is true. But it is also true that, as measured by the Consumer Price Index, the dollar has lost 87% of its purchasing power since the pivot in 1965. Such a dramatic loss of value distorts all measures which are denominated in dollars, including wages, asset values and nearly every other price we can consider. It also severely distorts trends in debt and indebtedness.

In the past decade since the credit crisis, the level of private debt in the U.S. economy has fallen relative to GDP, and we have called this trend of falling indebtedness "deleveraging." However, such deleveraging relative to GDP should not be mistaken for an actual decline, or reduction in debt. With only a few exceptions, the amount of debt throughout the economy is *far* higher today than a decade ago, even in those sectors which have technically been "deleveraging." As an example, although indebtedness in the private economy hovered near 183% of GDP in 2018, which is down from the high-water mark of 247% in 2009, the actual amount of debt in the private economy increased from $35.6 trillion to $37.8 trillion in that time. It has been deleveraging strictly by the standard of measuring against GDP.



The total amount of debt in the U.S. economy has grown from $49.7 trillion to $62.4 trillion over the past decade, a 26% increase. As you can see by the green line above, the debt of the federal government has been on an entirely different trajectory than debt in the private economy over the past decade. Although the economy remained healthy in 2018, the federal government added another $1.27 trillion in debt to its balance sheet between the third quarter of 2017 and the third quarter of 2018, bringing the grand total to $21.5 trillion. This one-year increase in debt is equivalent to the entire federal government debt in 1983, the year the Great Inflation came to an end.

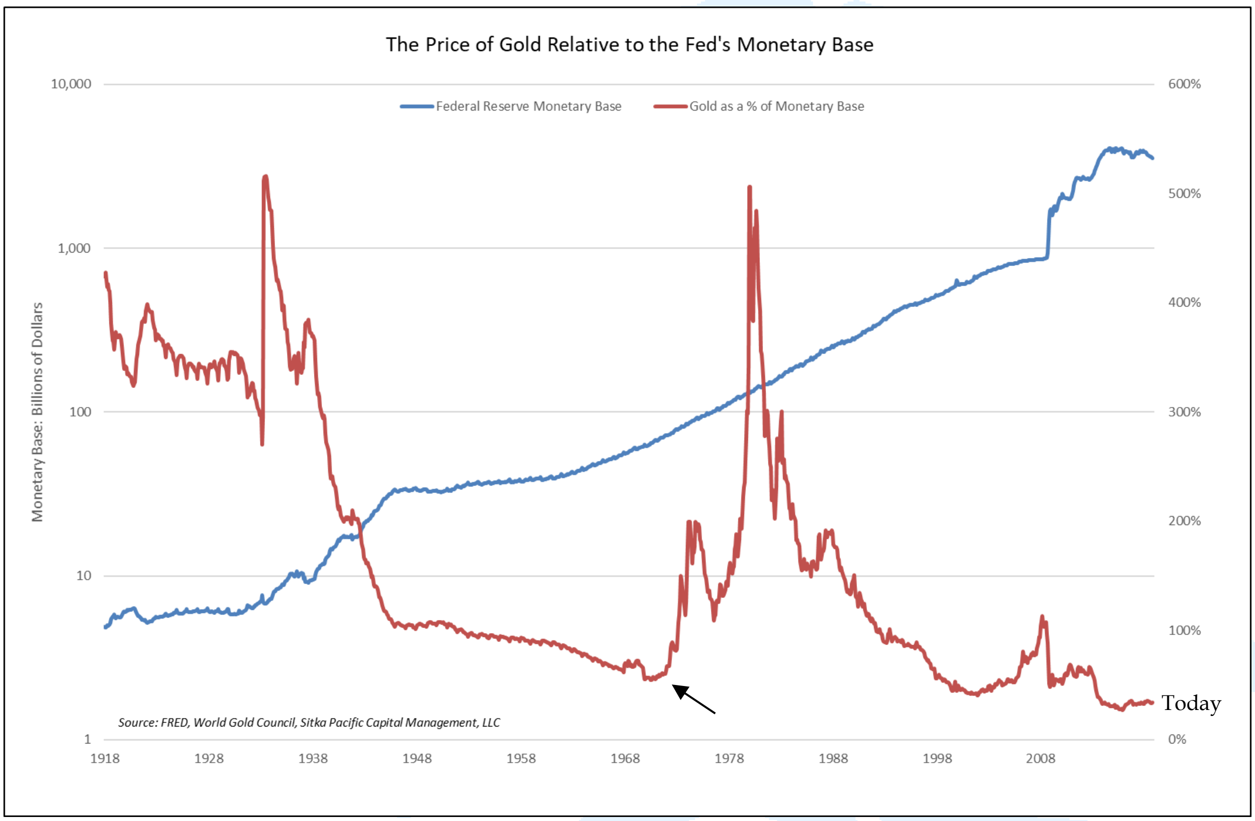
With more debt today than either a decade ago, during the credit crisis, or two decades ago, when monetary policy again pivoted toward negative real interest rates, the trap the Fed is in today is similar to the trap in the 1960s and 1970s: there is no painless way to bring monetary policy back onto a path which would be supportive of the dollar's value. In fact, over the past year, the short-term costs of unwinding a small portion of the Fed's post-credit-crisis balance sheet expansion and increasing real interest rates back to near zero have seemed almost too much to bear: home prices began to fall, stock prices began to fall, and the president began publicly blaming the Fed for raising interest rates too high. In some ways, it was like 1965 all over again.



Which brings us to the final two points we would like to make with this journey back to the Great Inflation. The 1960s began in recession, and ended in recession, but in between those two downturns was a decade-long period of uninterrupted economic growth. It was also in between those two downturns that the seeds were silently sown for the end of the Bretton Woods era, the most significant seismic event in U.S. monetary history. The pivot in 1965 represented the point at which the Fed's monetary policy began falling behind the curve, as prices began to rise at higher and higher rates, but the Fed found it more and more costly to try and catch up. At the same time, it also represented the point at which investors began falling behind as well.

The increase in yields late in 1965 was the beginning of a brutal long-term bear market in bonds, which ended with the yield on the 10-Year Treasury note rising to all the way to 15% – an unimaginable outcome in 1965. Only a few months later, in January 1966, the valuation of the stock market peaked as well, which marked the beginning of a 17-year long-term bear market in stocks. These points are marked in the chart above, and they represent when the markets pivoted from delivering positive real returns, to dishing out negative returns. Returns in stocks and other risk assets had been high since the late 1940s, but the era which began in 1965 saw the real price of the S&P 500 fall 62% from beginning to end.

It's very difficult to guess the moment when financial markets will begin reacting to an inherently unsustainable trend, but once they do, overvalued markets can rapidly begin to devalue, and undervalued markets can suddenly wake before there is much time for investors to react. The growing tension between monetary policy, fiscal policy and international commitments on the dollar suddenly began hitting the financial markets in 1965, and there is a very similar growing tension underlying the markets today. That tension will eventually be resolved in the years ahead, in ways which will probably rhyme with the experience during the Great Inflation.



Today, gold's price represents only 33% of the Fed's monetary base, below the level which precipitated the collapse of the Bretton Woods System of fixed exchange rates in 1971. The U.S. gold reserve, in metric tons, is today slightly below its level in 1971.

We May Already Have Entered a Post-Bubble Market Environment

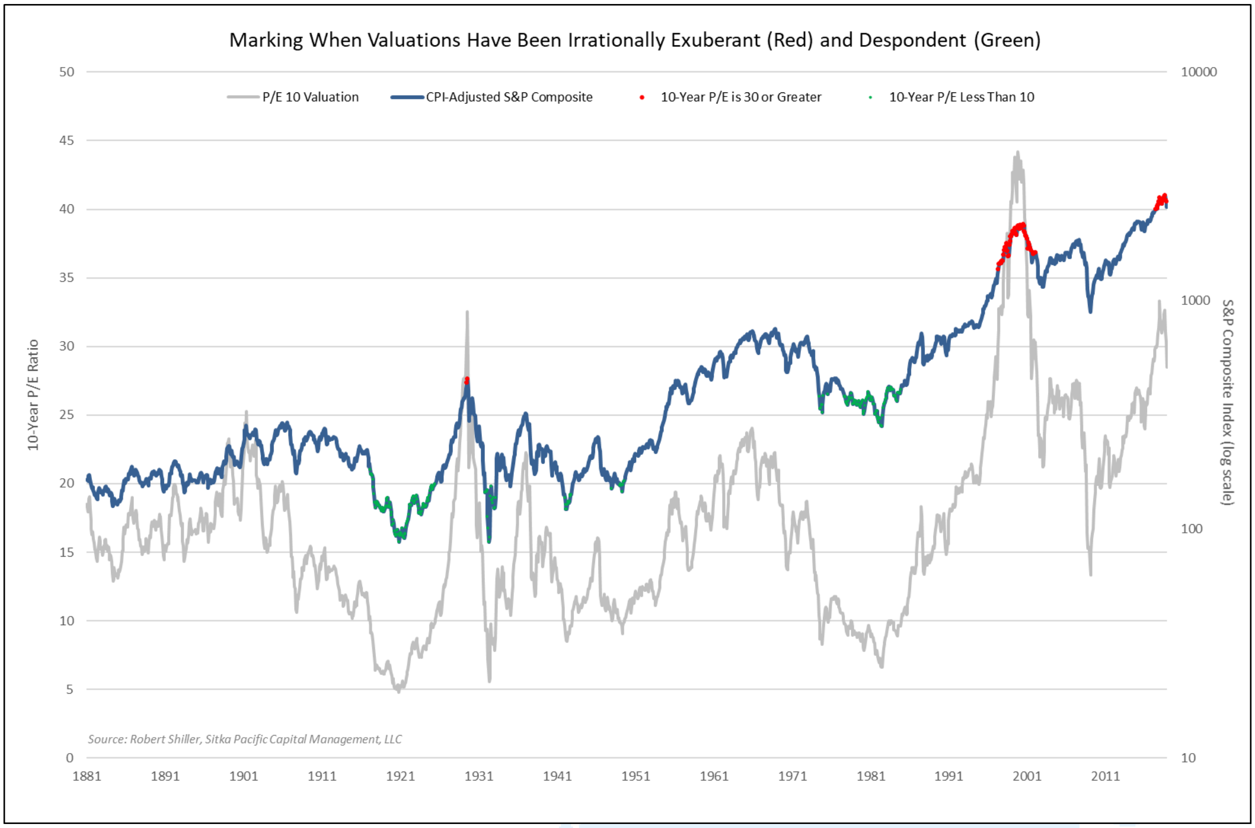
> *Our advice when a bubble is inflating is to avoid the siren song of buying in rising prices, thus avoiding the bubble altogether. While career risk can make this course of action difficult (hence giving further life to the bubble, of course), we believe the challenge of successfully timing the exit is such that bearing the career risk is the wiser and more prudent course for those with a sufficiently long time horizon.*
>
> *Currently, we are faced with a volatile market that, through the end of 2018 at least, is down double digits from the September, 2018 peak. The volatility is consistent with a bubble bursting, though we caution that the fourth quarter move in the mean reversion speed could be a head fake. While the dramatic nature of the move…to such strong mean reversion speed suggests that the odds are tilted toward this being the end of the bubble of 2017-18, we cannot rule out a reflation of the bubble, analogous to the event of late 1998-2000. Given that valuation is still high, our advice…is to continue to own as little U.S. equity as career risk allows.*
>
> \- Martin Tarlie, from Grantham, Mayo, Van Otterloo & Co., January 2019

In our last annual letter, one theme we emphasized was the possibility that both stocks and bonds could be poised for negative returns going forward – an outcome which would have far-reaching implications, given the baby boom generation is just starting retirement. That potential outcome was not so much a short-term prediction as it was an observation, based on conditions at the time, about the market's long-term prospects. It was also an observation made in light of the long-term macro context we find ourselves in, some aspects of which were highlighted in the first part of this letter. With the all-time lows in bond yields in 2016, and the extremely high valuations in stocks and other risk assets, it seemed to be a risky market environment to take into an era of trillion-dollar deficits. If inflation expectations and/or bond yields began to rise from their extremely low levels, the effects could quickly undercut overvalued financial markets.

It just so happens that 2018 did see the value of both stocks and bonds decline, something which generally *isn't supposed to happen*, according to experience over the past few decades. According to Morgan Stanley, all 17 of the major asset classes it tracks, including everything from short-term Treasuries to REITS to foreign stocks, had a return that trailed inflation in 2018. This concerted negative real performance was a first going back to 2004. Going back further, 93% of financial assets (by value) had a negative return in 2018 according to Deutsche Bank, which was the highest such reading since the beginning of the 20th century.

For a standard portfolio of stocks and bonds, 2018 was a year in which the entire universe of available investments lost value. Even the value of the safest bonds, Treasuries, fell as interest rates rose. In the grand scheme of things, the losses were modest, but if the 2018 experience were repeated over the next 10 years, with the panic declines, the large recoveries, the volatility spikes, and the year-end net loss, in the end the markets will have devalued just as they did in prior eras of monetary and government debt expansion – the 1940s and the 1960s/70s.

Our bear market experience over the past 20 years has been of two rapidly deflating bubbles, in which the S&P 500 lost more than 50% of its value within just a few years (with much greater losses in certain sectors). These busts were then followed by vigorous recoveries lasting many years, which took stock prices to new highs. These large cyclical swings in prices have been broad-based and durable while they lasted, but, and this is a point we would like to drive home in this letter, there is no guarantee we will see a market environment nearly as tradable over the next decade.

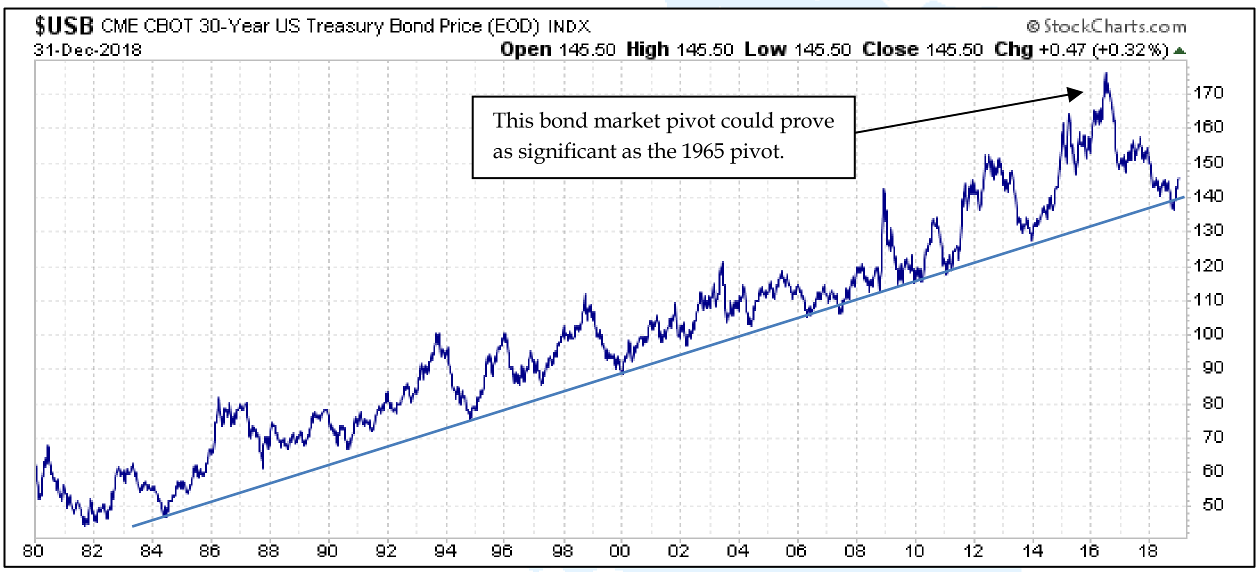


In the ten years after the 1965 pivot, the S&P 500 went from trading at 91 in October 1965 to 89 in October 1975, but in between those two points the market did not remain calm and subdued – it was extremely volatile. There were three downtrends and three recoveries over that decade, and the end result was almost no change in the S&P 500's nominal price, but a 44% loss in its real, inflation-adjusted price. For investors who tried to trade their way through that environment, it was a harrowing journey with many opportunities to make one too many critical mistakes along the way. For investors who remained with a buy-and-hold approach, it was a way to watch the purchasing power of their portfolio slowly be eroded, as stock prices failed to keep up with inflation. In other words, it was a chaotic market environment with many ways to lose, and few (if any) ways to win.

In 2017 and 2018, the S&P 500's cyclically adjusted P/E (10-year P/E) rose above 30 for only the third time in its history; the other two instances were for just two months at the peak of the bubble in 1929, and for a few years during the peak of the tech bubble. The fallout following these two previous periods of extreme valuation was both immediate and severe – in 1929, the entire market lost 85% of its value within three years, while the Nasdaq had a similar result following the peak in 2000. Yet these quick, steep losses weren't the end of the story – they were just the beginning.

After both the peaks in 1929 and 2000, it was longer than a decade until the market rose to recover all its losses, and it took even longer to recover its real value. The same occurred following the pivot in 1965: it would not be until 1995, 30 years later, that the S&P 500 would trade at the same real price as it did when President Johnson scolded Fed Chairman Martin at his ranch. When there is a risk of a long period where stocks begin to fall behind inflation, it is literally a decades-long process to recover.

Following the high-water mark of the current bubble, there will likely be two major forces that put the U.S. market on a similar path as after 1929, 1965 and 2000. First, the market's valuation during this cycle would, by itself, be enough to expect a long-term bear market following the market's final peak. There is no precedent for stocks to have a positive return after reaching the heights we have seen in this cycle, and we seriously doubt there ever will be. Second, 2019 will be the second year in a row in which the federal government will borrow more than $1 trillion to finance its current spending, and the government's borrowing over the next decade will inevitably bring with it market conditions which result in much lower equity valuations. Whether those market conditions include higher interest rates, faster monetary expansion, or higher rates of price inflation, or some combination of all three, the pressure from the government's borrowing will spill into the markets in some form. Which brings us to the chart below of the 30-Year Treasury bond price.



The long trend higher in bond prices shown above is a trend which, more than any other, allowed the rise in equity valuations over the same period to happen. The yield on the 30-Year Treasury bond fell from a high of 14.6% in 1981, all the way down to 2.1% in 2016. That low point in yield is shown by the high point in the chart above, and the 2016 high was in a very technical sense a speculative peak befitting the end of a very long trend. Yields on Treasuries throughout the yield curve have risen significantly since 2016 as the Fed has increased short-term interest rates, but while short-term rates could head lower again if the Fed is forced to respond to a recession in the coming years, we observed signs throughout 2018 that long-term interest rates may be starting to factor in a more inflationary future.

Another market event which occurred within months of the peak in the bond market, and which also may prove intimately related to the issue of rising deficits, was the low in the price of gold in 2015. Just as in the mid-1960s, as much as equity market valuations and the real value of Treasury bonds have to lose in the coming era of trillion-dollar deficits, gold and other real assets have that much (or more) to gain.

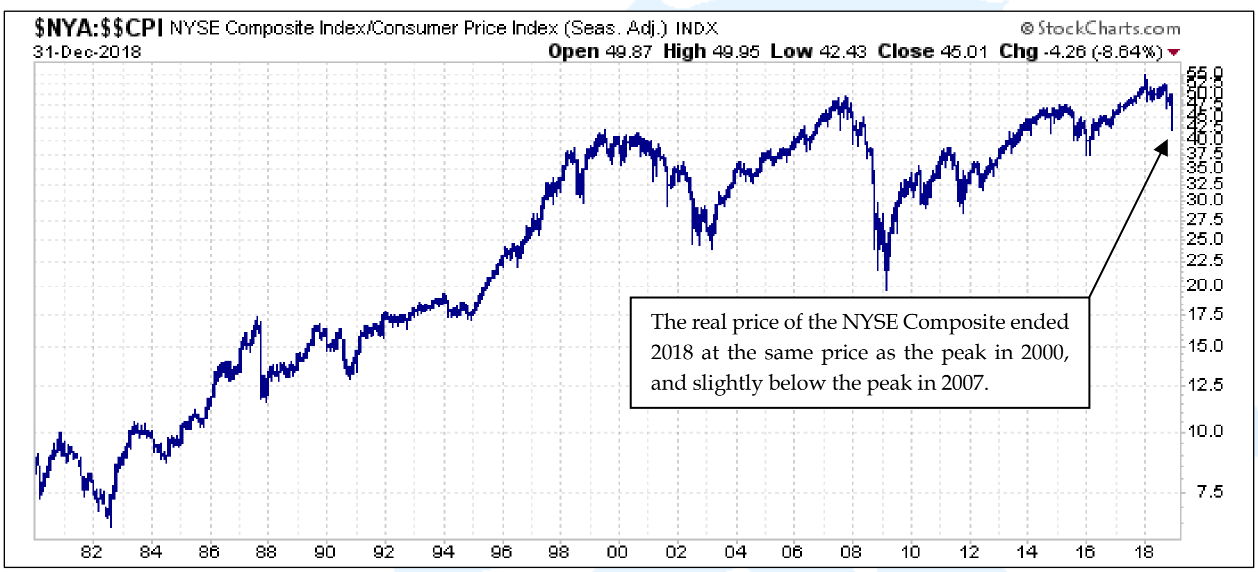
As we begin 2019, gold really could not be in a more ideal position to launch another long-term bull market. Gold and gold mining stocks fell in 2018, but both of these short-term declines occurred within the context of what is likely a long-term bottoming process. After first falling to $1200 in 2013, gold drifted down to a low of $1045 in December 2015 (black arrow). Although it has remained range-bound underneath resistance near $1400 since then, the base it has now built over the past five years is similar to the base which set the stage for gold's long advance following the peak of the tech bubble. That this has all unfolded while the S&P 500 climbed to a bubble valuation is no coincidence.

Gold and other precious metals are the primary beneficiaries during the deflation of a market bubble because of the expansive monetary response that is inevitably unleashed. At the beginning of gold's long run from 2000 to 2011, the Fed Funds rate was at 6.5%, real interest rates were positive, and there seemed to be no limit to how high corporate profits could continue to climb. Yet by the end, the Fed Funds rate was at zero percent, real interest rates were negative, and the Fed was engaged in a massive QE program, ostensibly to prevent a second Great Depression. This evolution in monetary policy would have been unimaginable to most investors at the peak of the tech bubble, and it was what powered gold's rise from $250 to $1920 over the following decade.

It was not possible to know all that would happen in the decade after the tech bubble that would propel gold higher, but it is no real mystery that gold has gained in value in the decade following every period of significant overvaluation in the stock market. We were among those investors who recognized gold's potential in the very earliest stages of the 2000–2011 advance, and it was for many of the same reasons we cite about today's market environment. What was most difficult in those early days of 2001 and 2002 was the volatility from month to month, with each setback bringing up fears of a much larger fall, perhaps to another new low. The skittishness of precious metals investors at the time was extremely high, and the temptation to focus on every short-term up and down was overwhelming. Yet for all the high emotion, it was the best long-term *investment* opportunity in precious metals since the 1970s.

There are times to trade, and then there are times to invest, and we believe the current market environment represents another long-term *investment* opportunity in precious metals similar to the early 2000s. If the fourth quarter decline in the stock market marked the onset of the post-bubble market environment, gold is probably in a position similar to where it was at in 2001, during the earlier stages of the tech bust. The early years of that new bull market in gold were not characterized by rapid, dramatic gains – the early stages of a bull market in nearly any asset class are usually subdued. But those years were characterized by steady progress, and precious metals have been making steady progress over the past few years. The vast majority of the price gains in this next cycle remain ahead of us.

Today, gold is over three times the inflation-adjusted price it was at the peak of the tech bubble, while the NYSE Composite ended 2018 at the same inflation-adjusted price as it was in 2000. This is part of the legacy of a market bubble: real assets gain, while risk assets stagnate. As much as gold is in a position today of being worthy of long-term investment, U.S. stocks are in the opposite position. The market prices which were seen in 2018 may prove to be an inflation-adjusted high-water mark that endures for decades.



A Summary of Our Market Outlook

- The bubble in the stock market may have crested in 2018, with the market peak later in the year effectively serving as a double top along with the peak in January. The decline in the fourth quarter had all the hallmarks of a new post-bubble market environment. Valuations strongly suggest the peak of this bubble, when it happens, will be a real, inflation-adjusted high-water mark which lasts for 15–25 years. In the decade after the peak, a portfolio of large-cap stocks will likely lose real value at an average rate of 3%–4% per year, with a maximum loss of 50%–67% at cyclical lows.

- The U.S. dollar is likely in the early stages of a new long-term downtrend, but 2018 saw what is likely the first counter-trend rally within that downtrend. As it has in previous cycles, the bearish trend in the dollar will likely continue until U.S. financial assets represent a relative value versus global markets.

- U.S. equities remain extremely high versus global equities, and the trend of U.S. outperformance will likely come to an end with the end of the bubble in the U.S. market, after which global equity markets will outperform for an extended period. Equity market valuations outside the U.S. are relatively benign, consistent with these markets being near the beginning of a new phase of outperformance.

- Although equity markets outside the U.S. represent relative value, and are likely in an attractive cyclical position with positive prospective returns for dollar-based investors, the end of the U.S. equity market bubble will likely be a global event, which will drag down equity prices inside and outside the U.S. Global stocks fell 17% in 2018, and the end of the bubble in the U.S. market will likely create better buying opportunities globally than existed at the end of the year.

- The Fed continued to increase short-term interest rates in 2018, but expectations have been rapidly shifting since the Fed's latest rate hike in December sparked a sell-off. Long-term Treasury rates remain low, with parts of the Treasury yield curve being inverted at the end of 2018, which indicates that Fed's campaign to tighten monetary policy is likely near an end.

- Although long-term Treasury rates remain low, the peak in long-term Treasury bond prices in 2016 suggests prices could stagnate or decline in the years ahead. With rates on long-term Treasury notes and bonds between 2% and 3%, the likelihood of even a modest price decline takes the expected total return below zero for investors. This means long-term Treasuries may not provide the safe-haven returns investors have become accustomed to.

- Credit spreads beyond Treasuries have been the lowest on record in recent years, and it is possible that the bust of the stock market bubble will be fueled, in part, by the rapid rise of corporate indebtedness during this cycle. Corporate debt reached 31% of U.S. GDP in 2018, a record high, before falling to 30% by the end of the year.

- Commodities and other real assets are trading near their lowest inflation-adjusted prices in a decade. Commodities will eventually benefit from the dollar's trend change and the ongoing monetary response to deleveraging, but the end of the current asset bubble will likely have a negative impact on prices — though this negative impact will likely generate long-term buying opportunities.

- Gold and other precious metals are likely in the early stages of a new bull market, and market conditions turned more supportive in 2018: the dollar no longer represents a headwind, the Fed's campaign to tighten monetary policy may be near an end, and the post-equity-bubble market environment will likely provide a strong tailwind for gold in the decade following the bubble's peak.

- Cash has been second only to gold in terms of its unpopularity over the past few years. Numerous surveys show cash levels in professionally managed funds and retail brokerage accounts are near record lows. Yet no other asset class will benefit more directly from the end of the U.S. asset bubble than cash. Cash outperformed nearly all other asset classes in 2018, and it could repeat that performance in the year ahead.

A Few Final Thoughts

One of the more underappreciated dynamics of the market cycle is the multiplier effect of leverage and collateral value. When asset prices are rising, it creates a virtuous cycle of increasing collateral, the leveraged use of which can power asset prices still higher. However, when asset prices fall, especially in an over-leveraged environment, the virtuous cycle can quickly morph into a vicious cycle of liquidation.

Since the end of the Great Inflation, the bond market has provided a tremendous counterbalance to each major bear market in stocks, and this see-saw market dynamic was inherently stabilizing for the financial system during each downturn. Each time stocks entered a bear market, short-term interest rates and yields on the safest bonds in the marketplace – Treasuries – inevitably declined, leading to gains in bond prices. This has been the market dynamic since the early 1980s, but before, during the Great Inflation, bond prices and stock prices did not move counter-cyclically – they moved in tandem. This is the hallmark difference between an inflationary and a disinflationary market environment: the alternating correlation of stocks and bonds.

The counter-cyclical dynamic between stocks and bonds over the 35 years since the end of the Great Inflation not only cushioned collateral values throughout the financial system during cyclical downturns, it was extremely conducive to increases in debt and leverage – and increase they did. In 2018, corporate debt reached 31% of GDP, which is a record. In addition, the level of margin debt and other forms of investor credit which hide behind stock prices hit a record of over $300 billion –

an amount well beyond that seen in previous market cycles. Alongside these record levels of corporate and margin debt, another reading which likely hit its highest in history in 2018 was the amount of trading generated by non-humans. One estimate had the portion of computer-sourced trading – algorithmic, program trading, and other automatically entered buy and sell orders – as high as 85% of trading volume on a typical trading day in 2018.

This mix of overvalued markets, record debt levels and a marketplace dominated by computer-based trading is a recipe for sudden volatility if the market regime were to shift toward an inflationary dynamic, and the volatility seen in the fourth quarter of 2018 may just be a first taste of what the market environment may be like in the wake of the current bubble. The Fed and other central banks tried over the past year to begin weaning the financial markets off the extraordinary policies in place since the financial crisis, but just as in the 1960s and 1970s, so far there seems to be a very weak tolerance for market turbulence. In the wake of the market declines over the past few months, the Fed is already sending signals it is reconsidering its planned rate hikes for the coming year.

The lesson of the 1965 pivot and the years that followed is that it takes very little economic or market pain before the Fed will abandon supporting the value of the dollar in favor of supporting the markets. This lesson has been learned repeatedly in the decades since then, and the growth of the national debt over the next decade will put Fed policy and the value of the dollar on another collision course. Along with the bubble in risk assets, the result of this collision course will almost certainly benefit gold and other real assets.

We think valuations and the market environment at the start of 2019 paint a clear picture of which asset classes should be favored in 2019, which should be completely avoided, and which should be on watch for accumulation. This is reflected in our portfolio allocations at the beginning of 2019, and as market conditions change and other opportunities are created, our allocations will evolve as well.

We appreciate your taking the time to read this letter, and for being a client of Sitka Pacific. As always, if you would like to discuss investments in your account, or topics discussed in this letter, feel free to contact us — we would be happy to talk with you.

Sincerely,

Brian McAuley
Chief Investment Officer
Sitka Pacific Capital Management, LLC