VISUAL ACUITY: 2020 VISION

The visibility is clearing but still remains cloudy. As we enter the 3rd decade of the 21st century, there has been a temporary truce in the Trade War and Brexit is moving forward. Some of the uncertainty has been priced out of this Market. But uncertainty still remains, particularly geopolitically. 2020 has long had a bullseye on it, namely in the form of the Presidential election. It's no doubt going to be a bumpy ride in 2020.

2019 was a banner year for investors with the US Stock Market reaching all-time highs. Despite the myriad issues and risks, stocks charged higher all year, and accelerated the pace to end the eventful decade. There was a parabolic move since October, with reckless abandon. Before that though, the Stock Market had been in a very defined range and had not made any forward progress since the highs reached in January of 2018. And who could forget the Market crash that ended that year? What a difference a year makes. The one similarity is the extremes.

2018 & 2019



2019 happened because 2018 did too. 2018 brought an extreme sell-off. 2019 had an extreme rally. It was like a do-over. 2019 saw virtually every asset class finish positive. This was the complete opposite from 2018, which saw every asset class end in the red and cash led. This Bull Market basically ran over anything and everything in its way in 2019, defying an inverted yield curve, impeachment, Brexit, European recessions, oil shocks and geopolitical threats. Impressive is an understatement.

We begin the new decade with the longest economic expansion in recorded American history in place. There have been plenty of Market corrections throughout this 11-year secular Bull. There has not been an economic recession. Even though growth continues to slow, we don't think there will be a recession in 2020 either.

FED PIVOT

Stocks enter 2020 as expensive as they've been in the last 20 years. Costs are on the rise, but companies have had trouble passing them on to the consumer. The Trade War put a dent on profits too. Earnings were basically flat in 2019. Stocks rallied from lower interest rates and increased liquidity more than earnings. The Fed cut interest rates three times and began injecting liquidity back into the system, despite the unemployment rate sitting at 5-decade lows and the Stock Market at all-time highs. The Stock Market performance came almost exclusively from multiple expansion. Price outpaced fundamentals. Earnings are now expected to grow again, but that remains to be seen. A continuation of the rally in 2020 will require an earnings acceleration. Until confirmation, we expect a bumpy ride and a very accommodative Fed.

ROARING 2020s?

The next decade will most likely not yield the same returns as the previous one. After a 250% gain for the S&P 500 in the bag, we expect Stock Market returns to be much lower in the coming decade, with more volatility. Both inflation and interest rates remain historically low. This backdrop still makes stocks the most attractive asset class for the decade in our minds, but expected returns are more muted. Shorter-term, we find value in the Bond Market for stability and predictability as we navigate 2020. But over the longer period, we expect stocks to outperform bonds.

US ECONOMY: CONSUMERS AND CORPORATIONS

The American Consumer continues to carry the weight and remains in solid shape. Consumer spending accounts for 70% of the US Economy. Americans keep spending and the holiday season proved it. It's going to be a challenge to keep up this pace, but Americans have proved time and again, they love to shop.

As a whole, debt levels to income are at 4-decade lows for Americans. However, the average American still lives paycheck to paycheck, which causes stress in the system when things turn. Mortgage refinancing hit levels not seen since before the Financial Crisis. Cash out refi's led the charge. The strong Housing Market has built up substantial equity for homeowners to tap. Interest rates are still low, and many Americans rely on

debt to fund their lifestyles. That puts tremendous pressure on home values, which the loans are tied to. It's not an issue now. But we've seen this picture before.

Corporate America was cautious in 2019, much of it related to the unknowns around trade. Business spending actually declined last year for the first time since the mid-cycle earnings recession in 2016. Companies have cut back in hiring as well as longer-term investment projects. Investment requires confidence. Confidence has been shaken. The big question is whether business confidence returns in 2020. With the election ahead and the results very much unknown, business leaders are likely to stay cautious.

THEMES: 2020 AND BEYOND

DIGITAL AGE

The world has never before had a platform like social media and the world wide web to communicate and transact. It's always on and can bring out the best and worst of humankind. The world is definitely connected. It's also created an environment of dominance with a small group of Tech Titans that yield power and know darn near everything people do online. The terms "monopolies" and "anti-trust" are being circulated with increasing frequency, as Big Tech reigns supreme. Tech stocks reflect that strength. This issue is not going away anytime soon.



ARTIFICIAL INTELLIGENCE AND 5G



It's coming. In fact, it's already here.

2020 is the year that 5G becomes mainstream. There is quite the buzz around the launch. It is the 5th generation of wireless data protocol. Faster speeds, instant communication and the proliferation of connected devices comprising the "internet of things" is the expectation. It has massive potential and has received substantial capital investment. 5G networks are only available in a small selection of countries at the moment. Australia, China, Korea, the US, and parts of Europe all launched networks in 2019.

ARTIFICIAL INTELLIGENCE AND 5G CONT.

With coverage remaining spotty even in 5G designated metropolitan areas, many consumers won't likely be in a rush to grab a new phone just for faster data. AT&T and Verizon have been rolling out their 5G networks in the US, and plan to expand it in 2020. Apple is expected to launch its 5G iPhone later in the year. For consumers, the focus will be on faster speeds, especially for video streaming and downloading movies. Expanding the outlook, 5G is expected to ignite virtual reality and augmented reality as well as artificial intelligence. One issue that still requires attention is the fact that 5G won't penetrate walls and sometimes even people, which complicates network usage indoors or in groups. This will be a theme for 2020 and beyond.

SMART CITIES



Cities are getting smarter in this Digital Age. More and more devices are connected to the internet, which connects the globe. Cities are being digitally transformed with goals of improving the environmental, financial, and social aspects of urban life. Smart cities are expected to utilize "Internet of Things" (IoT) sensors, actuators, and technology to connect the various components. There continues to be a mass migration to the city life, not too dissimilar to the Industrial Revolution two centuries ago.

Innovation is digitizing urban life. By 2050, 60% of the world population is expected to live in cities. It is bringing autonomous vehicles, connected traffic lights, coordinated public transportation, improved waste management, early warning emergency and disaster response and smart grids, among other things. There's going to be an app for pretty much everything. Silicon Valley is focused here. You better believe, China is too.

ROBOTICS



There are an estimated 60 Million robots in circulation today. That number could reach nearly 10 Billion by 2050, outnumbering the human population. They come in so many shapes and sizes. Artificial intelligence is driving the trend. What might the future look like? Ovens and microwaves might communicate directly with food packaging to get cooking instructions, as well as displaying augmented reality cooking guides for people to follow. Drones might do the vacuuming and dusting. Central heating might become a thing of the past, with "smart heating", in the form of directed infrared beams to heat the people, not the room.

Robots are rising within the workforce. It's happening in order taking, deliveries, military and construction. Autonomous cars are robots. Anything repeatable or automatable will be replaced, particularly in difficult and dangerous industries. Robots don't get sick, take vacations or require retirement plans. High paying jobs will be an increasingly important issue in the decades ahead.

FURTHER OUT IN THE FUTURE

There are some wild predictions out there suggesting people will be eating food from 3D printers, which could put an end to grocery stores. Some futurists predict that before long, humans will no longer need to read or watch to learn. In this case, people will hook their brains up to external machines to boost intelligence, improve memory and sensory capacity. Right now, its augmented and virtual reality. Decades from now, it just might become reality.

It is so significant to maintain the cutting edge of innovation. Failing to keep up could be the difference between leading versus falling to irrelevance. 2010 ushered in the decade of

FURTHER OUT IN THE FUTURE CONT.

disruption. 2020 will likely see this trend take a giant leap. Space travel is definitely on the horizon. Silicon Valley is expanding its relationships with academia to maintain cutting edge research and innovation.



CHINA

The second-largest economy experienced its slowest growth in 3 decades. Still, China is growing faster than any other nation around the globe. Sub 6% growth is likely in 2020. The trade war took its toll. Sluggishness in Europe hurt too. Also, the Chinese property market continues to cool. At the same time, inflation is picking up, particularly with spiking pork prices in response to the African flu. Food remains the biggest cost for Chinese consumers. Slowing growth matched with rising inflation leads to stagflation. That is a combo that can be challenging to combat. We will be watching this closely in 2020.



TRADE WAR



The US and China finally struck a deal. It's called "Phase 1." It still remains unclear what's in it. That's sort of been how this whole trade war has gone since tariffs began September of 2018. The process has been so bumpy, and Market reaction has too. The stakes are high. Neither country wants to make significant concessions.

This initial trade deal left out China's subsidies to businesses and state-owned firms. It is a big issue for America and Silicon Valley. China won this battle for now. Subsidies are a principal tool for China and the management of its economy, allowing it to direct resources to its state-owned firms and strategic private businesses to give them an edge over foreign competitors.

Resolving the matter in the next round of trade talks seems highly unlikely given potential complications from the 2020 US presidential election and hardline views among the Communist Party leaders. President Xi Jinping has seemingly little incentive to move on this issue. The Trade War and China are guaranteed to be a hot topic for political debates leading to the Presidential election. A new Cold War has emerged.

COLD WAR ON TRADE IS REALLY ABOUT TECH

The big fight is for intellectual property (IP). Both China and the US want to dominate the Digital Age, which will drive the 2020s and decades to come. The world just might be forced to choose between two internet protocols: China vs. the US. Entering the 21st century, the plan or hope was that China would emerge as an economic growth engine and embrace western ways. That clearly has not happened. Free and fair-trade tactics by China were cast aside with free speech. The question now, will China

COLD WAR ON TRADE IS REALLY ABOUT TECH CONT.

export authoritarian methods to the West. Trump was right to call China on their manipulative ways. It has bipartisan support. Unfortunately, Phase 1 did nothing to counter it.

If China wants to lead, they're going to have to respect IP. China has made massive investments to build out global infrastructure. Its Belt & Road initiative already covers over 60 countries which represents 1/3 of global GDP. It's come in the shape of ports, pipes and trains. It is physical and digital. It's why Huawei is such a big deal. In a sign of the times, it's not clear that Europe sticks with the US... As was the Cold War with the Soviets, containment will likely be a theme between China and the US.



GOLD: THE GLOBAL CURRENCY AGAIN

Gold had its best year in nearly a decade. The precious metal historically does well with elevated geopolitical risks, Stock Market sell-offs and a weakening Dollar. Inflation is also a driver. The largest buyers of Gold are China and India. Inflation has been benign in recent years, and most expect that to continue. Rising inflation could be the biggest surprise in 2020. That would be good for Gold prices. The all-time highs of \$1900 reached in 2011 could be in play again in 2020, and we see new highs ahead for Gold.



In a world where globalization is losing support, America first policies are being pushed, and the rise of a new world order led by China, the value of the Dollar could slide lower. 88% of global transactions were done in Dollars last year. Just 4% were transacted in the Chinese Yuan. Those extremes will likely reverse. It could make it more challenging for the United States government to borrow just when we need to ramp up spending to cover the costs of obligations like social security and Medicare while their funds are stressed.

RENEWABLE ENERGY

It is clearly the future. But it hasn't been a great place for investors yet. Consumers have benefitted from more competitive pricing in solar and wind. But some habits are hard to shake. Since 2010, SUV's went from 17% of total car sales in the US to 38%. They more than doubled! Lower oil and gas prices certainly influenced it. Despite the rallying cry for cleaner fuels and electric vehicles, Americans keep buying the gas guzzlers. We think that trend slows. We anticipate that electric vehicles will account for nearly 1/3 of cars purchased by the end of the decade.



Ten years ago, it was all about peak oil supplies. The massive production in North American shale has resulted in the US taking the role of the largest global oil producer and American energy independence. The lack of dependence on foreign oil has reduced national security issues and weakened many of our adversaries. The significance here cannot be overstated. Peak oil demand will not happen without ultra-high prices. Alternative energy sources to fossil fuels are required. But they won't do it completely in the near future. Do the PG&E shutdowns impact California thinking of buying electric? It's certainly an issue, and perhaps a new normal. To move beyond oil, it's either going to be driven by the government or by price.

GROWTH OVERSEAS - MARKETS ARE EMERGING



The 250% gain for the US Stock Market last decade far surpassed the rest of the world. Europe was up merely 63% the last ten years. The Emerging Market index was only up 45%. International markets are cheap, by pretty much every measure. But there are definitely structural issues, particularly in Europe and Japan that need resolution. In many ways, their stock markets already reflect it. That said, we find Emerging Markets more appealing, demographically as well as in terms of growth.

1.5 Billion people are expected to enter the middle class this coming decade. 90% of them will come from Asia. Just 10 Million will come from the US. That's less than 1%. India has over 1.3 Billion people and 65% of the nation is under 35 years of age. India is now the 5th largest economy in the world, recently overtaking the United Kingdom.



Demand for higher protein foods and consumer goods should steadily increase in Asia. Need for financial services and health care will too. Tech and telecom have a big runway for growth. Emerging Markets will account for 2/3 of energy consumption by 2040. Over 95% of Americans have access to smartphones and the web. In Asia, it's barely over half the population.

India is an emerging market, and emergence always comes with risk. The nation is facing political and social issues as it evolves. Its Prime Minister, Narendra Modi, secured a second term in a landslide. Modi is projecting strength to the rest of the world. We see India emerging as a global economic power this decade and believe its growth is very investable.

GEOPOLITICS

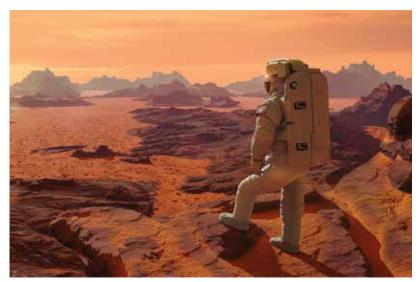
Always an ever-present risk, geopolitics are likely to play a big role in 2020. It is the new normal for the world in which we live. Tensions are spiking real-time as we write between the US and Iran. They have not been this high between the two nations in four decades. The risk of war has risen. It is occurring in different forms, like terror attacks as well as cyberwarfare. Certainty on the subject remains very low. These rising tensions in the Middle East are occurring at a time when western alliances have frayed. Our adversaries know this and enjoy this. Russia is exploiting it. North Korea is too. China understands it and is using it to its advantage as well. The Market has largely ignored this issue up until now. The role of American leadership around the world is changing. The Post World War II order has shifted away from the West. Alliances still matter. They matter a lot right now. We need our allies. I am reminded of what former Secretary of State, and then National Security Advisor, Condoleezza Rice said after the September 11th attacks: "It's nice to have friends." Indeed, it is.

The decade of 2020 begins with record stock prices and near-record valuations. Assets are pricey. Valuations matter most when the majority believe they don't matter anymore. That was the prevailing attitude when we entered the 2000s. That seems to be the case heading into the Roaring 2020s. As long-term investors, we still see a lot to like on the horizon. Innovation reigns supreme. But price matters.

Our society has become obsessed with free. Free delivery, free trades, free Wi-Fi, free tuition. If you buy one, you get one free. There's no such thing as free. Investors should focus on profits. Cash burning startups are losing investor patience and struggling to secure business and customer loyalty without giving things away. Value stocks should lead for the first time in years. Mature blue-chip type stocks have become attractive again. The end of free shipping is near. An important reality check is coming. Our eyes are wide open in 2020. There is no such thing as free.









10 PREDICTIONS FOR THE DECADE

- America elects its first Woman President.
- International markets outperform the US.
- China does not surpass the US as the top global economy.
- Humans land on Mars.
- 1/3 of cars sold in the US will be electric.
- 50% decline in number of driver's licenses in the US.
- Social Security Full benefit age gets pushed out from 66 to 70.
- Amazon acquires FedEx.
- Netflix acquires CBS.
- 49ers win 2 more Super Bowls.