ALHAMBRA
INVESTMENTS

Alhambra's Follow The Money Series

Dawn of A New Era

Investing In The New Inflationary Regime

Part I: COVID Ushers In A New Era

Executive Summary

COVID was the catalyst for the acceleration of trends that were already underway. Changing demographics were already impacting our economy but COVID highlighted the shortcomings of supply chains built only for efficiency. Shortages of critical goods, ones that were now essential to our very survival, revealed our (over)-reliance on China.

The policies enacted to soften the blow of COVID shutdowns, coupled with shortages due to supply chain issues, created an environment very much like the 70s inflationary period. While the economy will eventually get past the supply chain issues, the desire to diversify supply chains, to re-shore some operations, coupled with demographic changes, seems likely to sustain a more inflationary and higher interest rate environment.

Higher inflation and higher interest rates will usher in a new era for investors that will emphasize value, prudence and diversification beyond just stocks and bonds.

Key Points

- COVID Pandemic accelerated macro-economic trends already underway
- Expansionary fiscal policy, accommodative monetary policy and supply shocks have been inflationary like in the 70s
- Demographic and de-globalization trends today are increasingly inflationary
- Rising inflation creates a challenging investment environment for stocks and bonds
- New investing era to emphasize value, prudence, diversification

COVID changed everything. That's certainly the way it seems anyway, but did it really? COVID did reveal some uncomfortable truths about the US – and global – economy but mostly it accelerated trends that were already in place. The result today is a period that feels way too much like the great inflation of the 1970s for those of us who remember such times.

The 1970s are remembered by economists today as a period of monetary mistakes that could have been avoided. The inflation those mistakes produced is seen as a calamity nearly as dire as the Great Depression. That's why Jerome Powell and the FOMC are pushing so hard to bring inflation down. He has cited, multiple times, the mistakes of the 1970s and his determination not to repeat them. In short, he doesn't want to be the next Arthur Burns, the Fed Chairman who last let the inflation genie out of the bottle.

Parallels to Inflationary 70s

Fiscal policy, starting in the 1960s, was "guns and butter"; fighting the Vietnam War and implementing the Great Society were expensive undertakings. The fiscal response to COVID has also been explosively expensive, although we would argue that more was spent – by a wide margin – than what was required to protect the economy. In addition, both periods featured monetary policy that accommodated the fiscal spending.

The 1970s are also remembered for the wars in the Middle East and the resulting oil embargoes. There are some obvious similarities to Russia today and the outcome is also similar. Oil prices spiked in the immediate aftermath of Russia's invasion of Ukraine much as they did in the 70s in the wake of the embargo.

Another similarity is on the supply side of the economy. We didn't have actual supply disruptions back then but we did have price controls under the Nixon administration that had a similar impact. The disruptions today, from COVID and the war, are much greater and, coupled with fiscal spending that has been more directly targeted at individuals, have created most of the inflation we are living with today. Despite the easy comparisons to the 60s and 70s, there are also big differences. The most obvious is that the devaluation of the dollar that spurred much of the 1970s inflation is not being repeated today. Indeed, the dollar is at 20-year highs, a deflationary impulse that has been overwhelmed, so far, by other, inflationary, factors. Assuming the dollar remains strong, a sustained inflation at the high levels of the 70s seems unlikely.

Paul Volcker gets the credit for killing the inflation of the 1970s and there is a lot of truth to that. Certainly Mr. Volcker deserves credit for recognizing the mistakes of his predecessors and having the guts – and political backing – to take the necessary actions to finally reduce inflation to tolerable levels. But globalization and demographics played a very underappreciated role in the disinflationary trend that held for 40 years until COVID.

A New Inflationary Era

Demographics, globalization and other factors at work today are the polar opposite of the earlier period. In the 1970s, the dependency ratio – the ratio of the young and old to the working age population – was falling. The labor pool was expanding relative to the number of dependents - a disinflationary trend, but one that wasn't strong enough to offset the other factors pushing inflation higher.

Today, the dependency ratio – globally – is rising, a tailwind for the other inflationary factors. Fewer people working relative to the number of pure consumers is a simple supply/demand story. The rising dependency ratio will tend to push inflation higher for years, maybe decades to come.

Another consequence of COVID – and the evolving geopolitical situation – is the push for autarky, self-sufficiency. The pushback against globalization did not start with COVID, but the pandemic did lay bare the shortcomings of supply chains built for efficiency rather than ones more diversified and resilient. The impulse of governments to secure supplies of critical materials, to move toward self-sufficiency, is a global phenomenon with global implications.

The shutdown of large swaths of the global economy highlighted the interdependence of national economies. It also brought to light the dependence of the US and other developed countries on the developing world – and specifically China – for supplies of critical materials.

The Trump administration was already working to restrict China's access to technology seen as a potential national security threat prior to COVID and those efforts have continued under the Biden administration. COVID revealed our reliance on China for more mundane products such as pharmaceuticals and personal protection gear (face masks, etc.), access to which could be – and were - restricted by China when most needed. More and more products are being seen as ones that should, for national security and self-sufficiency reasons, be produced in the US. Other countries are likely to respond similarly.

The push toward autarky – deglobalization – would likely be inflationary by itself as costs for manufacturers, due to higher wages and greater regulation in the US, will push end prices higher as long as companies have pricing power, as they do today. Absent pricing power the extra costs would come from operating margins. The final result seems likely to be some of both.

Investment Impact of Inflation

We've had long periods of low inflation in the US before, such as from the early 1950s until the late 1960s. The 1960s, in many ways, resembled today with meme stocks, highly valued tech stocks built on hype and hot fund managers like George Tsai, the Cathie Wood of his day. The Shiller P/E hit a peak of 24 (the highest since 1929 at the time) in 1966. The Go-Go 60s were interrupted by the Fed induced 1969/70 recession and bear market which reduced inflation temporarily. But when the inflation came roaring back in the early 70s, rates spiked and the '73/'74 bear market crushed the Nifty Fifty, pulling the S&P 500 down by 50%.

Stocks and bonds don't perform well, especially on a real basis, during periods of high inflation. As inflation rose out of the 1960s, the 10-year Treasury note yield rose from 4.5% to 15.8% at the peak in 1981. The total return for the S&P 500 during that period was just 5.5%/year (assuming reinvested dividends). Real returns, after inflation were negative.

As inflation receded and interest rates fell, the Shiller P/E rose from 7.5 in 1981 to a high of 43 in 2000 and stocks returned 15.75%/year during that 20-year period. During the higher inflation period from 2002 to 2008, stocks lost a little over 2%/year. The post financial crisis period was another one of falling inflation – indeed, fear of deflation – and low interest rates that produced stock market returns of nearly 16%/year. The Shiller P/E peaked again in January of this year at 37.

It is obvious that interest rates – driven by inflation – have a large impact on stock valuations and therefore stock returns. Periods of disinflation expand valuations and produce high stock market returns while periods of rising inflation compress multiples and produce poor returns.

An Inflationary Future

If this secular trend of low inflation and falling interest rates is over - and we think it is – the period ahead will require investors to invest differently than they have for the last 40 years.
We believe this current bout of high prices may be the first in a series of inflationary waves that will play out over a multi-decade period. The Fed is tightening monetary policy now and we believe they will be successful in taming inflation in the short term. The reversal of the long disinflationary trend does not necessarily mean we are immediately entering a high inflation period like the 1970s but we do believe the Fed will be working from a new higher level of interest rates to control inflation.

The Fed has spent the last 10 years trying to get inflation up to its 2% target; they may spend the next 10 years repeatedly trying to push it down to its target. Interest rates will be higher, nearer long-term averages (average long term interest rate since 1900 is 4.6%; average since 1950 is 5.5%) as long as economic policy maintains vigilance to keep inflation expectations anchored.

If inflation proves persistent, it will likely mean a shorter, more volatile business cycle. If the Fed is vigilant about inflation, it will be quicker to tighten policy during bursts of inflation which will push economic growth back down to quash the inflation. As they ease, the inflation will come back and the cycle will repeat. Stocks and bonds will likely mirror the volatility of the economy.

The post-2008 financial crisis period was one that rewarded risky – reckless - behavior in markets driven by low interest rates and quantitative easing. Prudent portfolio management was devalued by economic policies that emphasized economic growth through the appreciation of financial assets. QE explicitly encouraged financial risk taking as a means of maintaining economic growth. Speculation was repeatedly rewarded, bad behavior reinforced by monetary expansion at the slightest sign of economic weakness.

We think this period of recklessness is ending, that the post-2008 financial crisis period was the final throes of the disinflationary trend that first took root 4 decades ago. Investors will need to expand their horizons beyond stocks and bonds, beyond the S&P 500, beyond US markets, to include assets such as real estate and commodities that perform well in inflationary environments.

The disinflationary environment of the last four decades was very generous to stock and bond investors. Mistakes in valuing securities were not generally punished as the disinflationary trend provided a valuation tailwind to all risky assets. If the disinflationary period is over, so are the easy returns of expanding valuations.

We are at the end of an era. Value, diversification and prudence will matter again. It’s about time.

Part II: How Globalization & Demographics Drove Disinflation

Executive Summary

The traditional view of the economic consequences of an aging society is shaped by the experience of Japan since 1990. Japan experienced deflation or near deflation in the aftermath of the popping of their bubble economy in the early 90s. But that experience may not be a good guide to the consequences for the rest of the world.

The disinflationary trend that took hold in the early 80s was driven by two main factors – demographics and globalization. Dependency ratios were falling and globalization added nearly a billion people to the global working age population. The result was stagnating wages and falling goods prices – disinflation.
Now these trends have reversed (demographics) or are reversing (globalization). Dependency ratios are rising, globalization is reversing due to COVID and geo-politics. The reversal of these trends will favor labor over capital and start to reverse the extreme inequality that has arisen over the last two decades.

Key Points

- Consensus view that aging population is disinflationary is wrong
- Rising dependency ratio with fewer workers will drive inflation
- Growing labor pool drove disinflation, but pool now shrinking
- Inequality trends will reverse as labor gains power relative to capital

"The US is going to turn into Japan"

How many times have you heard that over the last decade? So often that economists even coined a term for it - "Japanification" - as the world ages we are doomed to repeat Japan's lost, deflationary decades. But what if Japan's experience was the exception, rather than the rule? What if Japan's deflation was a result of factors that were unique to Japan or a result of global factors that won't be repeated? What if Japan's deflation had nothing at all to do with demographics?

The basics of the deflation case rest on the view that consumption is highest when we're young and falls to its lowest as we age. As consumption falls, so does aggregate demand which leads to lower growth and lower inflation (deflation). The problem with that view is that it appears to be wrong.

The composition of consumption certainly changes as we age but new research shows that the total rises rather than falls. In developed economies, consumption remains high even at advanced ages, as healthcare expenditures rise, often dramatically, at end of life. If consumption doesn't fall as we age, the deflation case is much less persuasive.

Dependency Ratio Key to Inflation

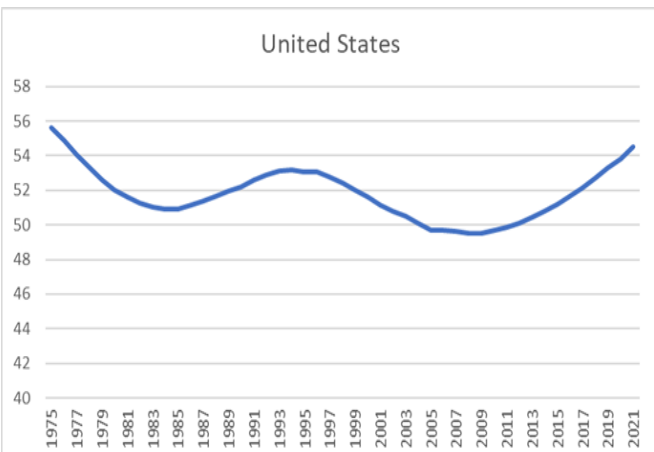
Japan's disinflationary period was actually part of a larger, global trend driven by two main factors – demographics and globalization.

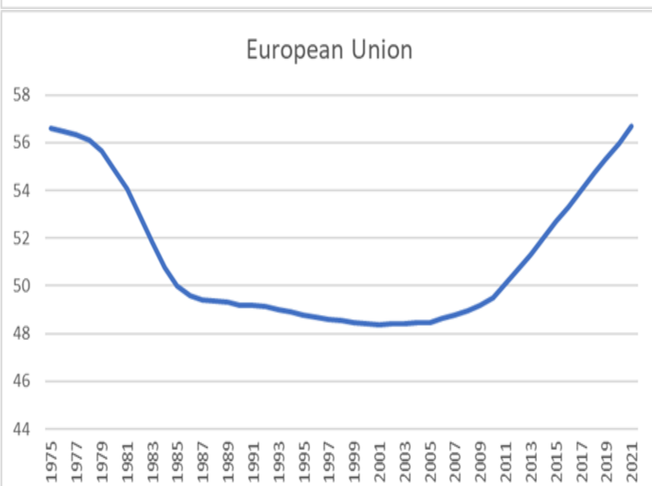
The old and the young are pure consumers, dependent on the working age population for production of goods and services. The working age population produces, consumes, and provides the bulk of private savings. The ratio of pure consumers to working age producers is called the dependency ratio.

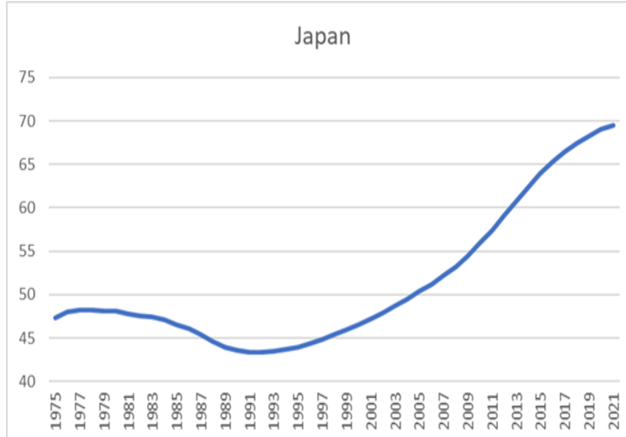
From the 1960s through the 1990s, the number of pure consumers, old and young, shrank relative to the number of producers, the working age population; the dependency ratio fell. The rate and magnitude of the decline varied by country and region but overall dependency ratios fell considerably and consistently until the turn of the century.

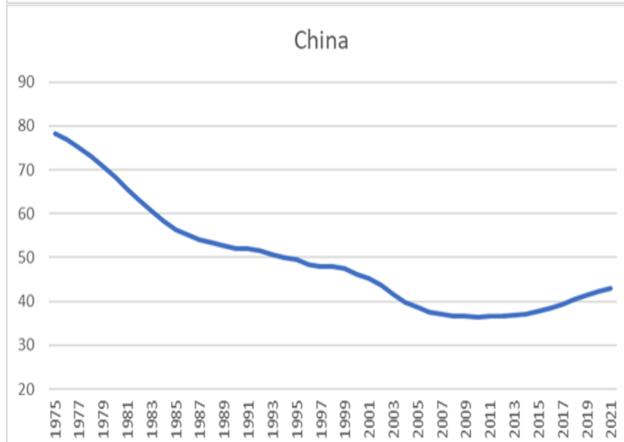
Since then – and especially since 2010 – dependency ratios have been rising. We are only now starting to understand what this change means for our economy and maybe more importantly, our society.

Dependency Ratios: Ratio of young and old to working age population



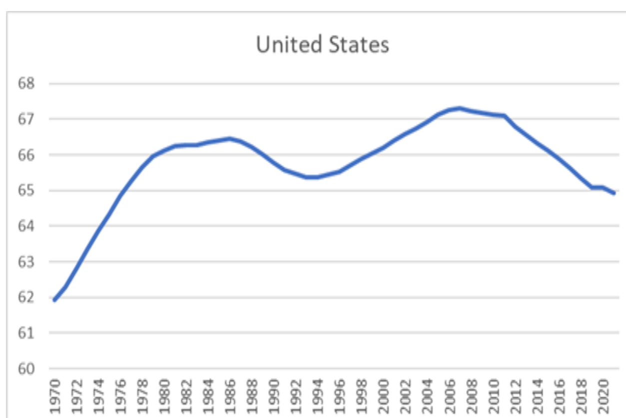


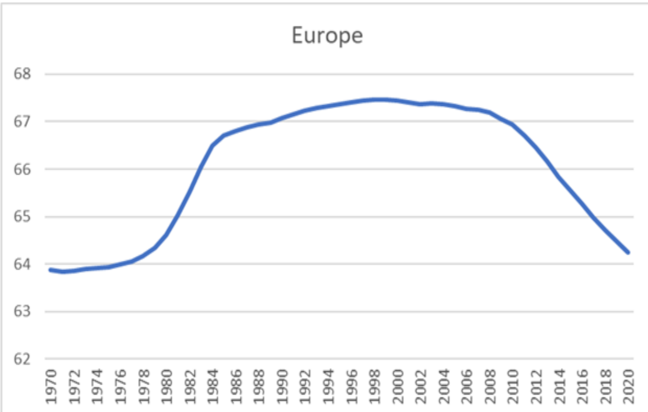


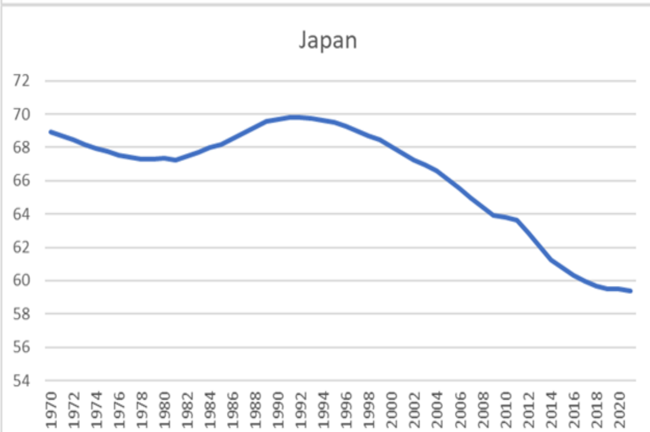


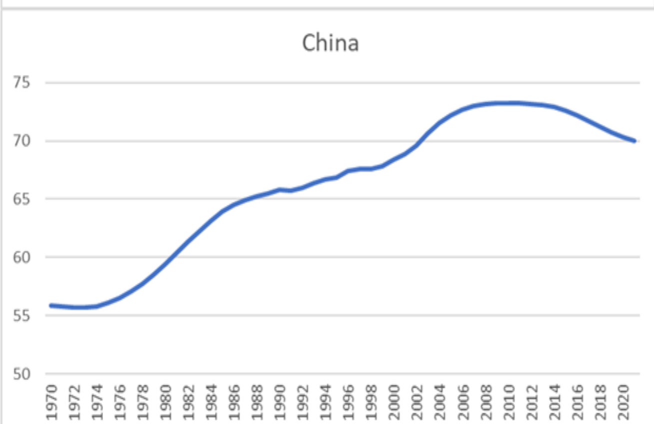
During the period of declining dependency ratios, working age populations rose, until about 2010.

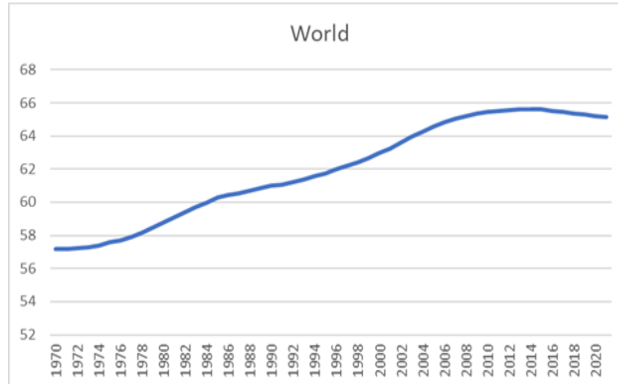
Working age (15-64) as a % of total population





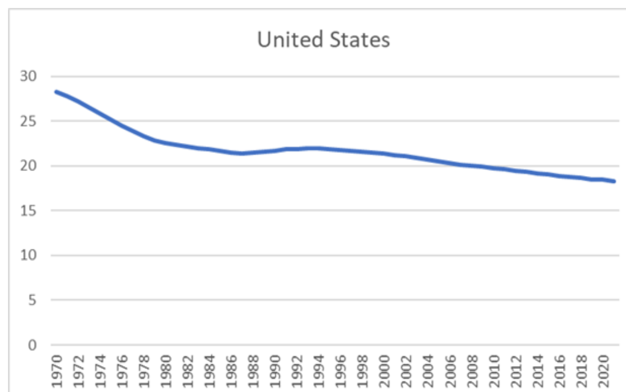


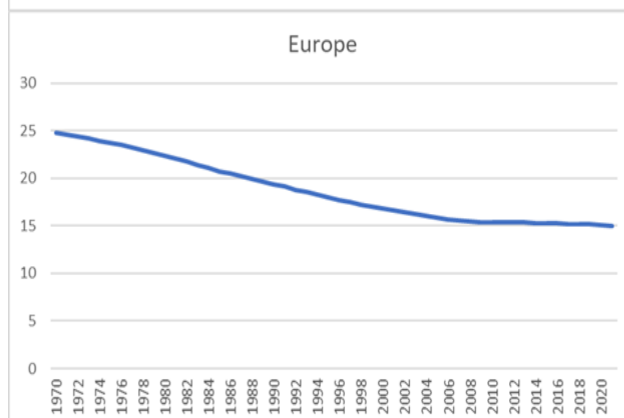


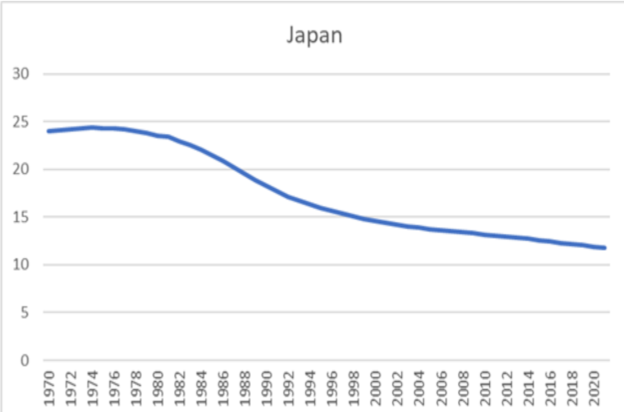


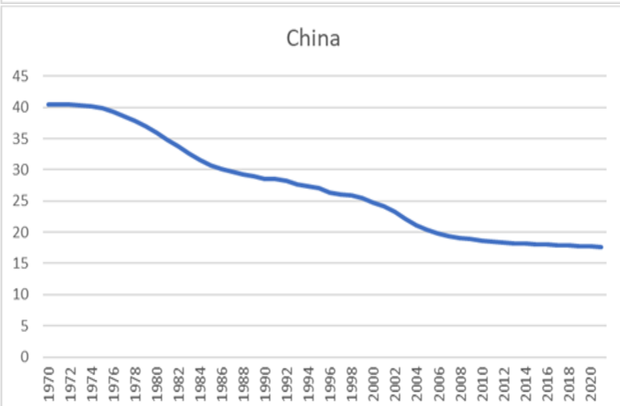
The young population as a percentage of total population has been falling for decades:

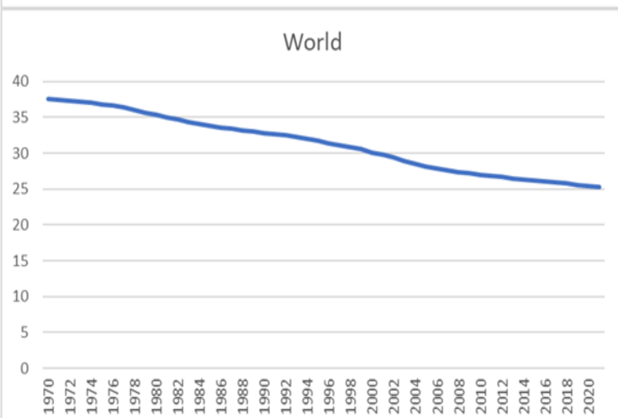
Young population (<15 years) as a % of total population



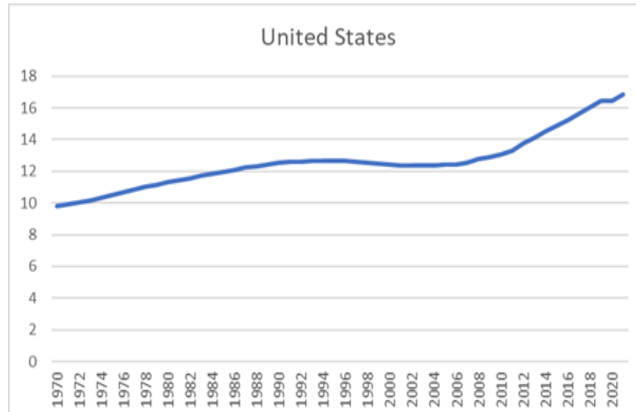


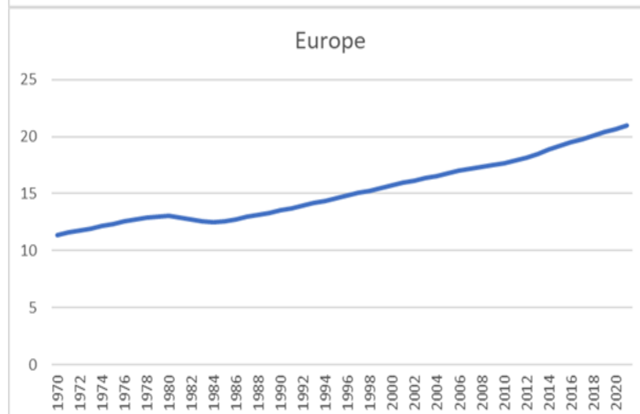


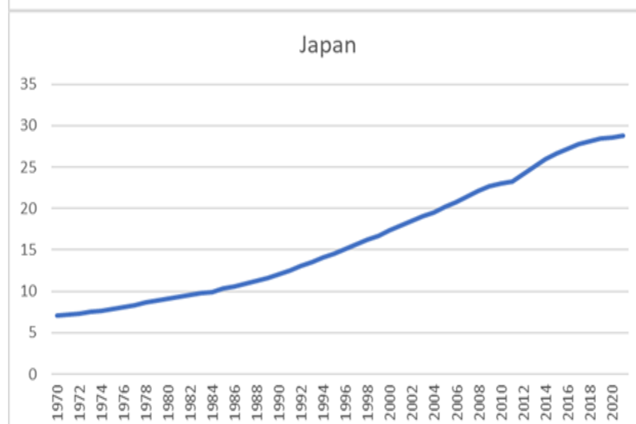


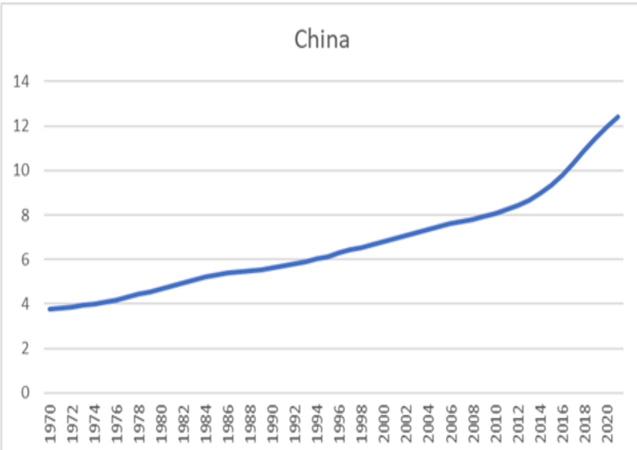


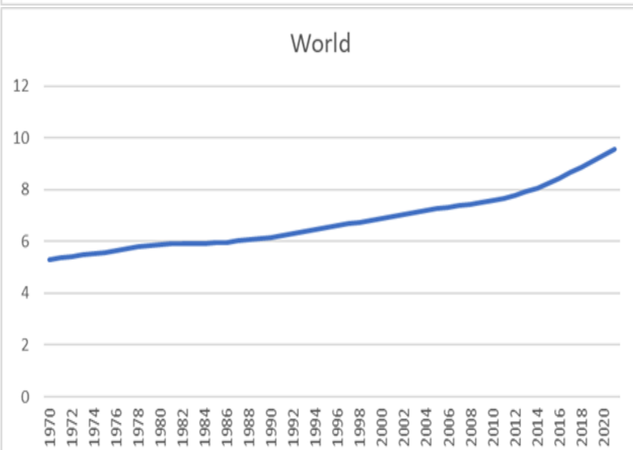
But in recent years the rise of the older population has more than made up for the decline in the young:



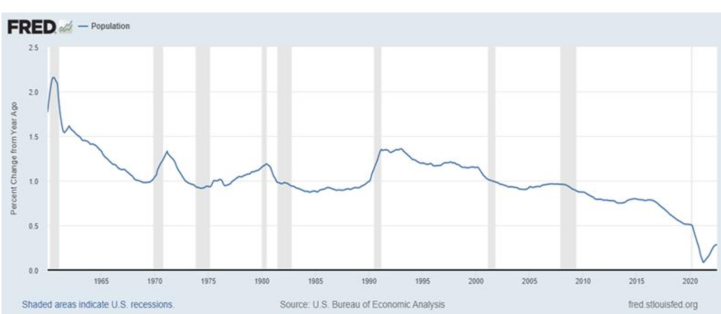




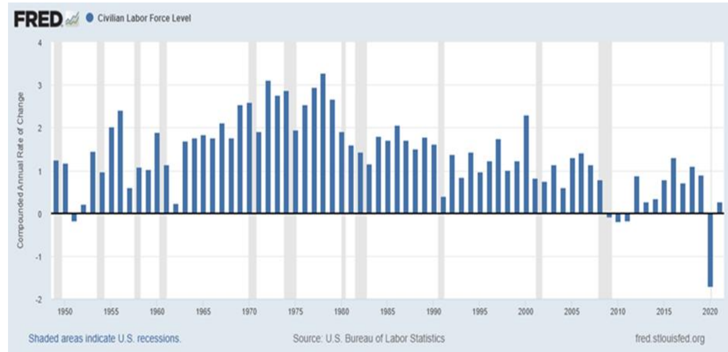




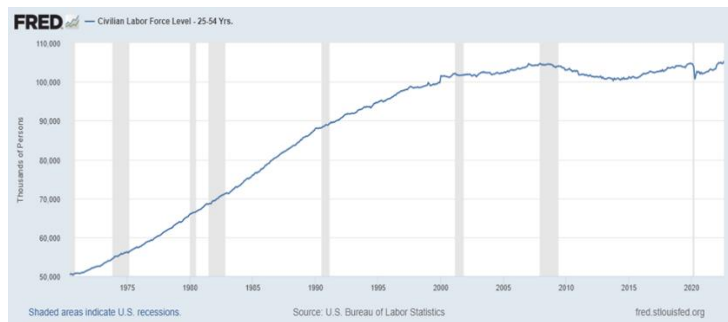
In the US, population growth has been falling since 1990 but COVID pushed it down to near zero:



The growth of the civilian labor force has been falling:



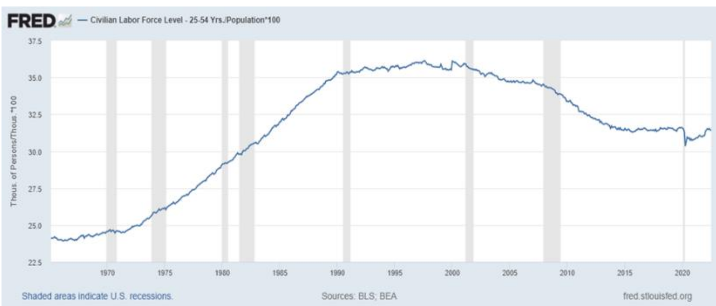
The level of the prime age labor force has stagnated:



Older workers' participation in the economy plateaued in 2008 and has fallen since COVID:

The employment/population ratio has been falling since 2000:

The prime working age labor force as a percentage of the total population plateaued in the 90s and started to fall around the turn of the century:



Past Disinflationary Drivers

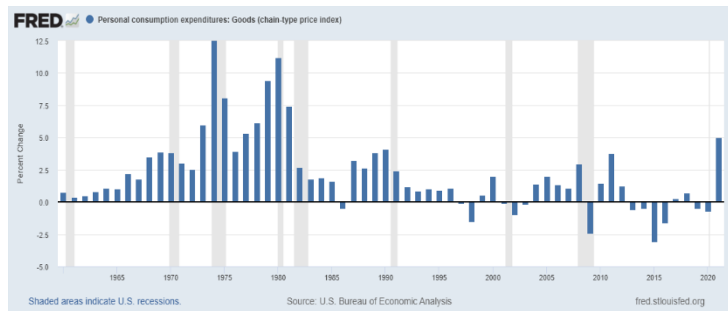
Three developments pushed the disinflationary demographic changes into overdrive:

1. The fall of communism and the Iron Curtain in the late 80s
2. The economic emergence of China, especially after its ascension to the WTO in the early 2000s.
3. The shift to freer trade starting with NAFTA in the early 90s.

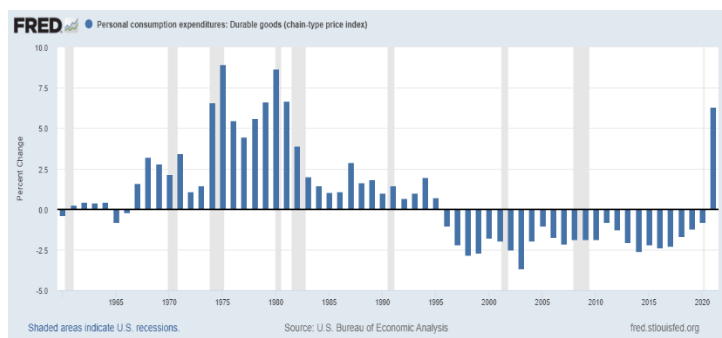
All of these events acted to expand the effective size of the global labor pool and reduced the bargaining power of developed world workers who now found themselves competing with workers willing to accept much lower wages. The result in the US and other developed economies was the "hollowing out" of the economy and stagnation of wages, especially by the less educated/trained.

China's share of world trade grew from roughly 2% in 1990 to about 15% today. The impact of this dramatic change in the global economy is complex but one result is clear – a decline in goods prices around the world. That pushed inflation and real interest rates lower as global investment was re-directed to China.

Goods prices, annual % change

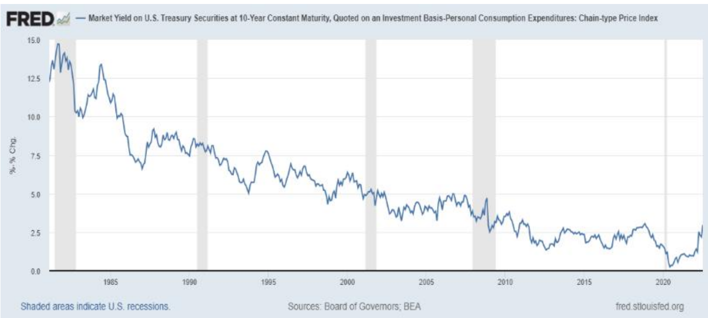


Durable Goods prices, annual % change



Pegging their currency at an artificially low exchange rate expanded China's trade and capital account surpluses that were then recycled into US Treasuries (and other global sovereign bonds). Real rates in the US and Europe dropped as developed economy investment ebbed relative to the now larger available pool of global savings.

Real Interest rate (10-year Treasury yield minus PCE price index)



Eastern Europe also entered the global labor pool after the fall of the Iron Curtain, with a relatively well-educated workforce but a lack of capital and expertise. The West provided the latter while the East provided the former and the global labor pool expanded.

The size of these two labor shocks was enormous. The working age population of China and eastern Europe was roughly 800 million in 1990 and is well over 1 billion today. That compares to roughly 700 million in the industrialized world prior to their entry meaning the available pool of labor roughly doubled in a very short period of time.

Trends Drove Rising Inequality

Wages stagnated in developed economies despite robust productivity growth. From 1981 to 2021, average real hourly wages of non-supervisory workers in the US rose by just 0.75%/year. The average was slightly better after 1990 as productivity rose (internet) but was still just 1% per annum.

As the real cost of labor fell due to China and other developing countries entry to the global economy, companies in developed economies invested less domestically as unit labor costs were reduced through offshoring. Less productive industries were the first to succumb to the cheap labor competition from China and eastern Europe, leaving more productive firms to dominate domestic economies.
In the US in particular, these companies were largely in a technology industry that quickly converted to a platform model, retaining hardware design, software, and marketing in the US while outsourcing the more capital- and labor-intensive manufacturing process to China and other emerging markets. The fall in labor cost and the reduced need for capital investment lowered the return to labor, raised the return to capital, reduced inflation and lowered real interest rates.

This labor and capital arbitrage, along with easy monetary policy, increased inequality in the developed world over the last few decades. The holders of capital were rewarded while labor struggled to compete with cheap labor in the developing world.

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Part III: Trends of Deglobalization

Executive Summary

The current populist movement in politics – on the left and right – was driven, at least to some degree, by the inequality produced by the demographic and globalization trends of the last 40 years. The backlash against foreigners, expressed by politicians like Donald Trump and Bernie Sanders, is now limiting immigration and pushing companies to disentangle themselves from China.

The result may reduce inequality but it will carry a cost in the form of higher inflation and higher interest rates. Rising dependency ratios will tend to raise wages but some of the gains will be offset by higher prices. Higher wages, absent a significant rise in productivity, will either create higher prices or lower margins and more likely a little of both.

The Russian invasion of Ukraine accelerated the urgency of the deglobalization movement. Deglobalization is, in many ways, being driven by the balkanization of the world along geo-political axes. US and European companies will bring some production back home but they will also relocate to nearby, cheaper countries like Mexico and Eastern Europe.

Trade seems likely to break into trading blocs, one China/Russia centric and one US/Europe centric. There are exceptions such as Korea and Japan but in general we should expect the global economy to shift away from Asia and back to more regional arrangements. Countries will start to stockpile commodities and other critical materials within these trading blocs.

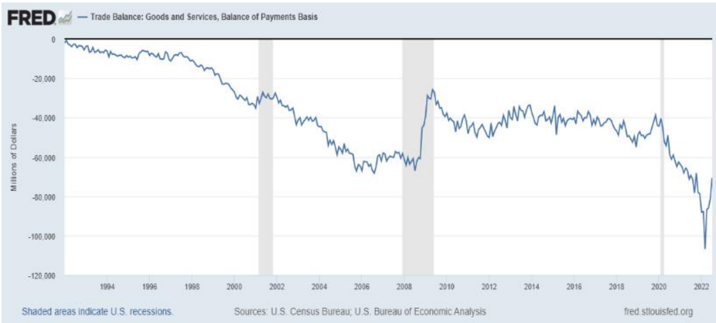
Key Points

- Rising inequality fueled populism and push for deglobalization
- Delinking supply chains from China will continue and be inflationary
- COVID exposed weaknesses in global supply chains
- War in Ukraine accelerating move to regional trading blocks

The election of Donald Trump in 2016 can be at least partially attributed to the disinflationary trend that started in the early 80s. The introduction of nearly 1 billion workers to the global labor pool was beneficial to US corporations as they were able to reduce their labor costs. Profit margins are today still near all-time highs. For the US and other developed market workers pressured by foreign labor competition however, the cheap goods delivered by globalization were a poor consolation prize.

The steady fall in interest rates and the rise of asset prices fueled the rise in inequality. Those least affected by globalization – generally the better educated and those employed in knowledge or financial industries - saw their earnings continue to rise even as their assets appreciated too. The anger at this unequal division of the rewards of free trade created the populist movements on the left and the right. Donald Trump got elected, primarily, by promising to protect American workers from what is seen by many as unfair foreign competition.

The Trump administration took a more direct approach to the plight of American workers through trade policy. While these policies were initially directed specifically at China, they were inevitably expanded to almost all imports. The imposition of tariffs did not, however, have the intended effect. The trade deficit, which had been growing steadily since the 1980s, continued to worsen:



Tariffs will not reduce the trade deficit for the simple reason that it isn't "caused" by trade. We won't get into a prolonged discussion of trade theory here but suffice it to say that the culprit is the US budget deficit. Nevertheless, the Trump administration's tariffs have been largely continued by the Biden administration with the result felt primarily through higher prices and product shortages (baby formula a great example recently). Tariffs and other means of restricting trade have moved from the economic sphere to the political.

COVID Fuels Deglobalization

COVID did reveal some flaws in globalization that had – and will likely continue to have - a large impact on the global economy. The shutdown of large swaths of the global economy highlighted the interdependence of national economies. It also brought to light the dependence of the US and other developed countries on the developing world – and specifically China – for supplies of critical materials. The US fiscal and monetary response to COVID exacerbated the supply chain issues by raising the consumption of goods to artificially high levels. This artificial demand placed enormous pressure on supply chains at a time of reduced production (supply) due to COVID restrictions. Fearing shortages, companies made the problem even worse by over ordering goods to make sure they had product on their shelves. Prices naturally rose, delivery times lengthened and shipping costs soared.

China's zero COVID policy, which has resulted in multiple citywide shutdowns across the country this year, has further reinforced the desire of companies to diversify their supply chains. In the immediate aftermath of COVID, many companies shifted production to other Asian countries but that is not a panacea. Countries such as Vietnam only have so much excess capacity and cannot completely replace Chinese producers. There is also still the issue of shipping costs and times. Asian nations also face the same demographic issues as the US; Korea has its own labor shortage.

The desire to diversify supply chains and to avoid tariffs is driving companies to relocate production closer to the US and other end consumer markets. That very much includes foreign companies by the way, including Chinese ones. While that is likely to mean some production moves to Mexico and other Latin American countries, it appears that a significant part of production will be moved back to the US. This impulse is being reinforced by industrial policy such as the CHIPS and Science Act, which will provide subsidies to semiconductor companies to build plants in the US.

The shift in supply chains is just getting started but it has accelerated in 2022. A research paper from the consulting firm Kearney found that while the US is still relying on Asia for manufacturing:

- 92% of executives have a positive view of reshoring
- 79% who have manufacturing operations in China have either already moved part of their operation to the US or plan to do so in the next three years. Another 15% are considering such a move.
- While the US still relies on Asia for manufacturing, US companies continue to shift away from China. China's share of US

manufacturing outsourced to Asia has dropped from 66% in 2018 to 55% in 2021.

Bloomberg reported that uses of the words onshoring, reshoring and nearshoring in earnings conference calls and presentations are up even when compared with the first 6 months of COVID and up over 1,000% compared to pre-COVID periods.

We have seen talk of this type in the past but today we are seeing concrete action. According to Dodge Construction Network, the construction of manufacturing facilities in the US is up 116% over the past year. There are at least 3 semiconductor plants being constructed in Arizona, aluminum and steel plants are going up across the south led by US Steel in Arkansas and Nucor in Kentucky. The new construction of these plants produces knock on effects such as Ingersoll Rand resurrecting an air compressor plant in Buffalo, NY due to increased demand from the construction of the semiconductor and steel plants.

Security Issues Further Drive Deglobalization

While COVID brought the supply chain issues to light, the Russian invasion of Ukraine raised the issue to a higher level. Now the potential for interruption of goods from China and raw materials from Russia and Ukraine moved from an allegedly random health event to a geopolitical tactic. Is China's zero COVID policy intended to defeat the virus or to damage the US economy? With no way to determine the answer – which may not matter – US companies ramped up reshoring in 2022.

The Russian invasion of Ukraine in February of this year further revealed the weaknesses of maximizing efficiency through globalization. Europe, and especially Germany, has used cheap Russian natural gas to drive growth for the last two decades but the invasion revealed the folly of depending on Russia for energy supplies. Now Europe is scrambling to find alternatives, leaning heavily on LNG produced and shipped from the US and other countries.

The war also revealed, again, that critical supplies can be cut off unexpectedly with impact on critical industries. We have all learned in the last 8 months that Ukraine is not only a large supplier of grains to the rest of the world but also provides nearly half of the world's neon supply. While that might seem inconsequential – neon signs aren't critical infrastructure – it turns out the gas is critical to the production of semiconductors.

In addition to heightening the potential use of supply chains as weapons, the invasion also created urgency, especially in Europe, to increase defense spending. The US and Europe have both expended large amounts of weapons and ammunition in Ukraine which will have to be replaced but that is only the tip of the iceberg. 29 European countries have pledged to raise annual defense spending by $200 billion. Germany has also pledged separately a one-time spend of $100 billion to upgrade and expand their defense sector.

We are not geopolitical experts and cannot predict the outcome of the conflict in Ukraine but a quick resolution seems unlikely despite recent Ukrainian gains. China and Russia have joined in a "special relationship" and neither Xi nor Putin seems likely to be replaced anytime soon. While Xi seems reluctant to directly assist Putin's Ukraine foray, he is surely doing so behind the scenes. The US and Europe are even today discussing sanctions against China to warn them against invading Taiwan. In short, the conflict between China/Russia on one side and US/Europe on the other does not seem likely to end soon.

A World of Trading Blocks

Although globalization may not completely reverse, it does seem destined to fracture into trading blocs. The US has long pursued more open trade with Latin America with free trade agreements with Mexico, Chile, Colombia, Peru, and a host of Central American countries. Now we are also seeing the EU pursue improved trade with countries rich in natural resources, recently signing trade agreements (yet to be ratified) with Chile, Mexico, and Mercosur.

The US also has free trade agreements with Australia, Canada, and Oman in addition to having large natural resources itself. However, some of the most important materials such as those used in batteries and EVs, will have to come from our trading partners, assuming the US continues to limit mining and refining of materials such as lithium due to environmental concerns.

The China/Russia anchored trading bloc will also include India and some countries in the Middle East through OPEC+. There will also be a group of countries, call them non-aligned, who will do business with both blocs.

We also believe countries will start to stockpile what they see as critical raw materials – commodities. The President of the EU just this month introduced what she calls the Critical Raw Materials Act. In her State of the EU speech, she pointed out that it wasn't just the extraction but also the processing of raw materials which the EU needed to secure. Commission President Ursula von der Leyen, noted that 90% of global rare earth metals and 60% of lithium are now processed by China. As part of the act:

"We will identify strategic projects all along the supply chain, from extraction to refining, from processing to recycling. And we will build up strategic reserves where supply is at risk," von der Leyen stated.

In addition to increasing strategic reserves of raw materials at the national level, we expect companies to be more precautionary with inventories of raw materials, parts and finished products. This will entail more capital commitment, further limiting the pool of capital available for other types of investment, maintaining upward pressure on interest rates.

Part IV: Implications Of A Growing Labor Shortage

Executive Summary

Dependency ratios started to shift around the turn of the century and the trend accelerated in the post 2008 financial crisis period. QE and the recovery from the financial crisis kept a lid on inflation in the 2010s but labor shortages started to show up even before COVID. The number of job openings first exceeded the number of available workers in 2017. The pandemic has merely accelerated the trend.

We are seeing the consequences of the labor shortage now with wages rising rapidly, especially for the lowest end workers where the shortage is most acute. For most workers though, inflation has eaten away at the wage gains. The exception is, again, where the shortage is most acute, in low skill service jobs.

US companies are reshoring some production and while that seems like good news, the labor shortage makes it a mixed picture. Companies will have to address some of the labor shortage through automation and robotics but the longer-term answer is likely to be found in immigration policy.

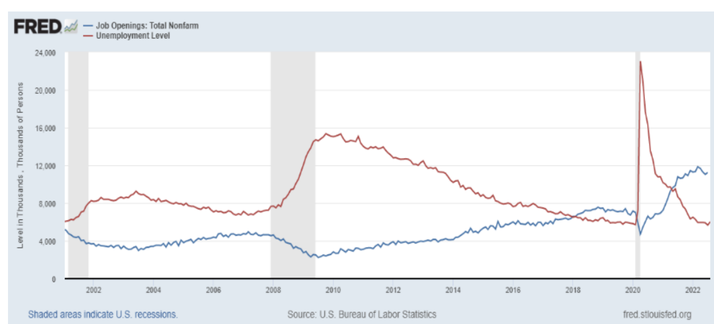
The global pool of savings is also set to shrink in the years ahead. The working age population will be stressed with higher inflation and, because of the labor shortage, may also be forced to act as care givers to the elderly, further reducing the labor pool. In China, the elderly population will have to start using their accumulated savings to support themselves in old age. The one-child policy has taken away the more traditional family-based elder care.

A smaller pool of savings coupled with demand for capital for reshoring will cause real interest rates to rise. The rise in rates will have an impact across multiple asset classes.

Key Points

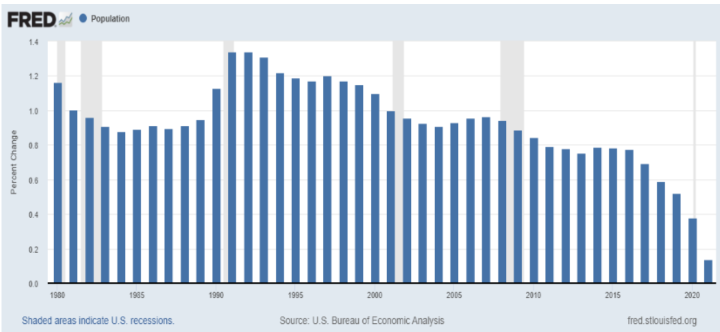
- Shift favoring labor and rise in dependency ratio underway since 2009
- Labor shortages will increase and also be inflationary
- Shortage in labor will drive more automation and robotics
- Savings rates likely to fall over time and drive higher interest rates

It is ironic that the rise in the dependency ratio was already underway by the time Donald Trump was elected President. In the US, employers were already starting to complain about a labor shortage. The number of job openings had been rising and the number of unemployed had been falling steadily since 2009. By 2018, the number of job openings surpassed the number of unemployed.



Conditions for workers were already improving when COVID hit in early 2020. COVID pushed US population growth close to zero via further reductions in immigration and a lower birth rate during the virus period. The reduction in immigration accelerated the rise in the dependency ratio as immigrants are generally of working age.

COVID did not start new trends but merely accelerated existing ones.



Labor Shortages Worsening

One is tempted to portray reshoring initiatives as good news for the US economy and it could be, but the obvious question is who will build and operate all these new production facilities? By one estimate, reshoring could add as many as 350,000 jobs in the US in 2022/23 alone and we already have a labor shortage. Specifically, we have a critical shortage of construction workers that has persisted since the immediate aftermath of the financial crisis of 2008. That shortage has only become more acute since the onset and recovery from COVID.

There are now a record number of homes under construction that have yet to be completed due to labor and materials shortages. And construction of manufacturing facilities requires workers with more diverse skills than needed for the construction of residential buildings. Welders, in particular, are in very short supply.

The labor shortage will only get worse as the working age population declines and the demand for labor from the elderly increases. Demand for medical services will obviously rise but age-related medical conditions (dementia, Alzheimer's, etc.) are also labor intensive; we will need more caregivers. The implications for labor markets – and wages - are significant.

Part of the answer to the labor shortage will be automation. In a survey conducted by Automation World, 83% of respondents said they intend to add robots in the next two years. This is especially striking because 29% said they did not currently use robots at all and only 12% reported that more than half their operations involved the use of robots. The increase in robot density per 10,000 workers in North America rose by 28% in Q1 2022 from the previous year, the highest rate of growth ever recorded.

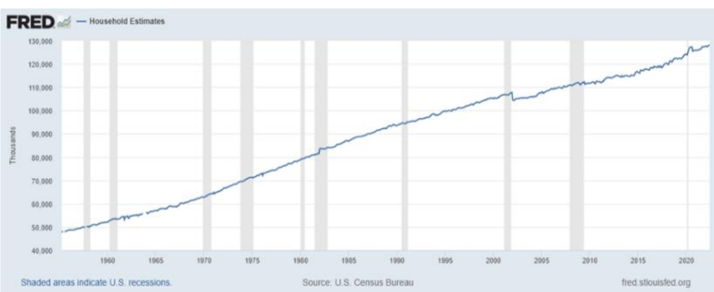
There are limits to automation, however, and with demographics pointing to a continuation of the labor shortage – absent a large change in immigration policy – it does seem that wages will continue to rise. That, again, may be good news for workers but the lack of labor also means a reduced supply of goods and services and as mentioned earlier, demand is not likely to have a matching reduction. The combination of demographics, deglobalization (exacerbated by COVID) and geopolitics (Russia/China axis) will drive a supply/demand mismatch that makes inflation higher and more persistent in the coming years.

Interest Rates Rising as Savings Decline

The rise in the dependency ratio will also impact real interest rates. Real interest rates are the intersection of savings and investment. When the supply of savings outstrips the demand for investment – as we've seen over the last 3 decades – real interest rates fall. As the supply of savings falls relative to the demand for investment, real interest rates rise.

As the population ages and the dependency ratio rises, the desire, need and ability to save will diminish. Slower population growth means less need for houses, equipment, etc. but several factors are converging to raise the demand for investment and capital, at least in the relative short term.

In housing, for instance, the hangover from the financial crisis of 2008 limited investment in new housing for years and the US now has a shortage. With the elderly staying in their homes longer, new households continue to form, driving the demand for more housing.



The excess savings of China, that has been recycled to the rest of the world over the last couple of decades, is also likely to diminish. The savings rate in China over the years has risen because there is, essentially, no social safety net. But it also rose due to the one-child policy as fewer births means fewer care givers later. The Chinese had to plan for a future where they couldn't depend on the traditional arrangement of relying on extended family late in life.

As China's population ages, that pool of savings will now be needed to take care of the nation's elderly. This reduction of savings will – or at least should – reduce China's current account surplus and consequently the amount of savings recycled into US Treasuries and other developed economy debt.
All of these trends will tend to reduce the pool of global savings at the same time the demand for investment is set to rise, especially in the west, in response to the supply chain weaknesses revealed by COVID and the Ukraine war.

Macro Trends Driving Inflation

Demographic changes seem likely to have a large impact on the global economy in coming decades. Most of the research points to a deflationary outcome similar to what has been seen in Japan since the early 90s. But Japan's experience may have been unique. Their dependency ratio started to increase in the early 90s just as the global pool of available labor was expanding in China and eastern Europe. Furthermore, they faced increased competition from other Asian countries pursuing export-oriented growth.

Lastly, Japan had to deal with the fallout from the deflation of their bubble economy in the early 90s. Asset prices in Japan in the late 80s reached levels that make our dot com and housing bubbles look paltry by comparison. Corporations used those inflated asset prices to increase leverage. As asset prices fell after the bubble popped, debt burdens became onerous, corporate spending fell for at least a decade and corporate behavior turned very conservative. The term "zombie company" was originally coined to describe Japanese companies that were being kept afloat by their bankers (see here) in the 90s.

Even today, well after the bursting of Japan's bubble, years after their debts have been paid down, Japanese corporations continue to hold more cash on their balance sheets than the rest of the world. Returns on equity in Japan have been rising in recent years but still lag the US by a considerable margin.

The demographic changes we've highlighted are not the only forces in the global economy affecting consumption, inflation, and interest rates. Japan's experience proves that other factors can overcome demographics. But these changes are real and we see no reason to expect them to reverse in the next decade and maybe quite a bit longer. Over the last 40 years, demographics have acted to reduce inflation and therefore interest rates. The combination of demographics, deglobalization (exacerbated by COVID), and geopolitics (Russia/China axis) will drive a supply/demand mismatch that makes inflation more persistent and interest rates higher in the coming years.

Part V: Investing In A New Era

Executive Summary

Investing in this new, higher inflation era, will necessarily be quite a bit different than what investors have become accustomed to over the last four decades. Inflation will be on a secular rise but will also respond cyclically. The economy and markets seem likely to exhibit more volatility.

There will be opportunities for investors from these changes. The reorientation of supply chains will drive investment, particularly in the US. Companies will further embrace automation. Some companies will benefit from the building of factories and infrastructure to support the new domestic production.

While the period of disinflation generally benefitted growth companies as interest rates fell, that trend also seems set to reverse (and maybe already has) with value stocks now taking the lead. These companies will have lower valuations and tend more toward the industrial.

Global defense spending is also set to rise and absent a sudden collapse of the China/Russia axis will likely continue to do so for some time. The US and Europe have already committed to raising spending – and would have to just to replenish what has been expended in Ukraine – and Asia (Japan, Korea, Australia) will likely follow suit. US defense contractors are the obvious beneficiaries but investors should look beyond the well-known names.

Key Points

- Periods of inflation will impact new era of investing
- Deglobalization will increase investment in U.S.
- Higher interest rates to favor stocks with lower valuations
- Labor shortages to drive trend towards automation
- Green industrial policies will drive some capital flows
- Increase in military spending will favor U.S. defense industry

We see these changes as a regime change, a reversal of the trends that have dominated markets and the global economy for decades. To summarize our view of what these changes mean:

- While the consensus is that our aging world will usher in a period of deflation, a la Japan, new research points to a different outcome. An aging population will tend to raise inflation.
- Rising dependency ratios will result in labor shortages in developed countries, a phenomenon already observed in the US.
- As excess labor becomes scarce, real wages will rise.
- Rising real wages will also tend to push inflation higher.
- The supply chain issues revealed by COVID will spur companies to stockpile more raw materials. Inventory management will become more precautionary.
- The reorientation of supply chains will increase demand for capital in the US and other developed countries to build more local capacity.
- Demographic trends will reduce the pool of savings relative to investment pushing real interest rates higher.
- Supply chains will be more diverse and redundant. Returns to capital will be lower.

* Industrial policy will be more prevalent regardless of the political party in power.
* Global defense spending will rise.
* Leverage (debt) will be reduced as interest rates rise.

These changes will not happen suddenly but will unfold over years, maybe decades. There will be cyclical movements within the longer term, secular trends just as there were in the previous regime. Interest rates fell consistently for 40 years but there were periods of rising rates. Now, that will reverse; the trend for rates will be up but there will be periods of falling rates. The same will be true of inflation which will drive the interest rate trend.

New Investment Trends

The initial period of deglobalization seems likely to increase investment in the US and other developed countries but US labor shortages will also raise investment in nearby countries like Mexico and Canada (near shoring or friend shoring). Latin America more generally (South America) seems poised to benefit as the provider of critical raw materials to the developed Western world.

The reorientation of supply chains will drive demand for capital at the same time global demographic changes reduce the accumulation of savings. This will push real interest rates higher. Higher rates should spur companies, individuals and governments to reduce debt.

Higher interest rates should also mean lower stock valuations. In the 1973/74 recession earnings rose in both years but stock prices fell steeply (-48%) and the S&P 500 Shiller P/E was reduced by half from 18 to 9. We are skeptical that the adjustment this time will happen so rapidly because with higher debt levels today's economy is more sensitive to changes in interest rates. Rates won't be able to rise as much before economic weakness sets in. Valuations seem more likely to ratchet down in each business cycle.

Overvaluation is concentrated in large cap US issues and while we think the S&P 500 (2.8 times sales) and Russell 1000 (2 times sales) valuations will continue to contract (over time hopefully). Mid-cap and small-cap stocks are already cheap at 1 and 0.7 times sales respectively. Both the S&P 400 (midcap) and S&P 600 (small cap) have higher sales and earnings growth than large cap, although margins are lower. Their earnings multiples are less than their expected growth rates (PEG less than 1). Small and mid-size company stocks appear poised for a period of outperformance.

Non-US stocks are also much cheaper than their US counterparts. European stocks trade for less than 1 times sales while the broader, global EAFE index trades for a bit more at 1.15. Emerging market stocks and the subset of Latin American stocks trade for about the same multiple of sales. We would note, however, that historically non-US stocks do not perform well in a strong dollar environment such as exists today. Patience will be required until the dollar strength moderates.

Growing Demand for Automation

Labor shortages also seem likely to raise the demand for automation across a host of industries, including services. Some of that will be accomplished by software (QR codes for menus in restaurants for example but many more) in service industries. But a larger investment seems likely in robotics and other types of automation in newly reshored production facilities. And it isn't just the US and the developed world investing in automation. Shipments of industrial robots to China in 2021 rose 45% and China accounted for just less than half of all installations of industrial robots last year. They installed nearly double the number of robots as the US and EU.

China will not just sit by and let the US and other countries take the manufacturing business it has built over the last 30 years but stopping it will take more than robots. The US and other countries can utilize automation as well as – maybe better – than China. That being the case, the question becomes why outsource to Asia if you can produce as cheaply – or nearly so – here – or nearby - and avoid the shipping costs and, more importantly, the political blowback for doing business with China?

The pushback from China means that the inflationary case is not open and shut. China, through widespread automation, could continue to put downward pressure on manufactured goods prices. Their alliance with Russia certainly makes more sense when seen in this light. By allying themselves with Russia, they are doing nothing more than the US and EU in securing supplies of critical commodities, primarily energy in the case of Russia. And with Russia now a global pariah, they are able to buy more cheaply from Russia than they could on the world market. China and Russia's "special relationship" is a marriage of convenience.

It also makes a Chinese invasion of Taiwan or direct support for Russia's efforts in Ukraine less likely. China needs the rest of the world as a customer to keep their people employed and happy. Put another way, it appears to us that China needs the rest of the world a lot more than the rest of the world needs China.

Adoption of Industrial Policies

Governments will be much more involved in the economy as national security and economic resilience takes precedence over efficiency. The reorientation of supply chains is but one area where we expect to see industrial policy become more prevalent in the private sector.

Energy policy is an area that has always seen more intervention than most other sectors of the economy but the addition of climate and geopolitical goals has meant and will continue to mean even greater direction from DC. The government's desire to move away from fossil fuels may be misguided and at the root of the global energy crisis but don't expect politicians to suddenly own up to their errors.
They will, however, make some course corrections while publicly maintaining their determination to achieve their climate goals. Nuclear power, using new modular reactors, may be revived on a limited basis but it is not seen as a long-term solution (although this former Navy nuclear program operator certainly thinks it should).

Natural gas could and should be the bridge fuel of choice but continued opposition from the green lobby may mean higher prices are needed to produce a popular swell of support for increased production and infrastructure (pipelines and LNG facilities). We do believe that natural gas offers the greatest opportunity for investors though as it is a relatively clean alternative that will keep the lights on. The rise of the LNG industry in the US is positive overall, but will keep prices higher in the US than they would be otherwise.

A last area of industrial policy that deserves attention is the shift to EVs which is well underway. We do not expect the push for electrification to wane as the investments made by the auto companies are so large the transition will be forced, if necessary. The production of electricity and EVs will provide opportunities for investors. The metals and other commodities required for the electric economy will ensure a high level of demand for years. It seems obvious too that we will need more generating capacity and more investment in the transmission infrastructure.

Rising Defense Spending

The emergence of war as a more imminent threat, especially in Europe, is producing a sense of urgency among governments. As noted above, Europe is already ramping up defense spending and we expect this to be a worldwide trend. Japan is emerging as a military leader in Asia and the US is again negotiating to provide Taiwan with military equipment. The US defense budget seems likely to rise as well.

The largest beneficiary of a global military buildup will be, obviously, US defense contractors. Some European defense contractors will also benefit but the industry there has shrunk as defense spending waned over the last few decades. Another less obvious consequence is that an increase in military manpower will also mean further pressure on the labor force. We would also expect companies that provide ancillary services and logistics to benefit.

Capital Flows & Investments

With higher interest rates we expect deleveraging at the corporate and individual levels. Governments may also trim deficits but the urgency of the security situation will dictate the pace. There has been a lot written in recent years about large corporate cash hoards but, as we've pointed out before, the list of companies with large cash balances is shockingly short. There are many large companies – and this is mostly a large company phenomenon – that have taken advantage of cheap debt to increase returns to investors in the absence of revenue growth. At some interest rate those companies will be forced to deleverage; we expect share issuance to rise.

We also expect asset valuations to fall as interest rates rise, reversing the trend of the last 40 years. How fast such a revaluation occurs is hard to say but we would note that valuations were not overly cheap in the mid-90s, when interest rates were above the long-term average.

Much of the overvaluation of US assets is concentrated in large company US stocks but there are other areas where price has disconnected from value. The prices of collectibles such as vintage automobiles and art seem likely to fall, maybe precipitously.
Real estate also may fall but residential seems more likely to weather the storm than commercial, such as retail. Office is a unique opportunity as the market is still trying to adjust to new work patterns as a result of COVID. It seems unlikely that employees will accept a complete return to the office; company footprints seem likely to shrink. There will, however, be regional differences and we expect small and mid-sized cities to outperform larger metropolises. Those near industrial businesses, defense contractors, and military bases may prove especially resilient.

In response to valuation compression in stocks, we believe investors will gravitate to stocks with lower initial valuations to limit downside volatility. This should benefit not only value stocks but also small and mid-sized companies over large. Foreign stocks have underperformed their US counterparts for over a decade and are also very cheap, not only relative to the US, but outright. We generally don't make large allocations to foreign stocks in a strong dollar environment so patience may be required.

Resource-based economies should perform well as countries and companies look to stockpile raw materials. Latin America, Canada, and Australia are obvious examples but Africa may become a more important investment destination as well.

Looking Forward

In our view, much of commonly accepted market wisdom will be proved wrong in the years ahead.

Investment strategies that have worked well in the past will no longer do so. We are entering an investing world fundamentally different than the one to which we have become accustomed.

Well-diversified investment strategies that include real assets will become critical. Proper analysis of risks and valuations of stocks will also be important to success. In an environment of rising interest rates, bonds will still serve an important role, but not in the manner previously implemented. On that note, annuity products will also be increasingly problematic.

Popular passive investing strategies and index products will likely disappoint. The value of active management in individual security selection will increase markedly. This world will not be one of any simple answers. Although inflation can drive periods of strong performance for assets like real estate, general commodities and gold, such an era also sees periods of significant declines in those markets. Inflation destroys the value of cash, puts downward pressure on bonds over time, and threatens margin compression on stocks.

Potential Investment Areas

- **Industrial Construction**
- **Tech/Contract Manufacturing**
- **Robotics/Automation**
- **Defense Contractors**
- **Electrification: EVs, Raw Materials, Infrastructure**
- **Staffing**
- **Materials Stockpiling: Agriculture, Energy, Industrial Metals**
- **Industrial Policy: Hospitals, Health Care Facilities, Infrastructure Construction, Semiconductor Suppliers**
- **Inflation Sensitive**
- **Small-Cap Equity**
- **Value Equity**
- **International Equity**

Joseph Calhoun is the President and CEO of [Alhambra Investments](). The ***Follow the Money*** *series is an in-depth look at a single economic or market topic. It is what we think you need to know and why. If you like this one, sign up for Alhambra's [mailing list]() so you'll always know when a new column has been posted.*

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