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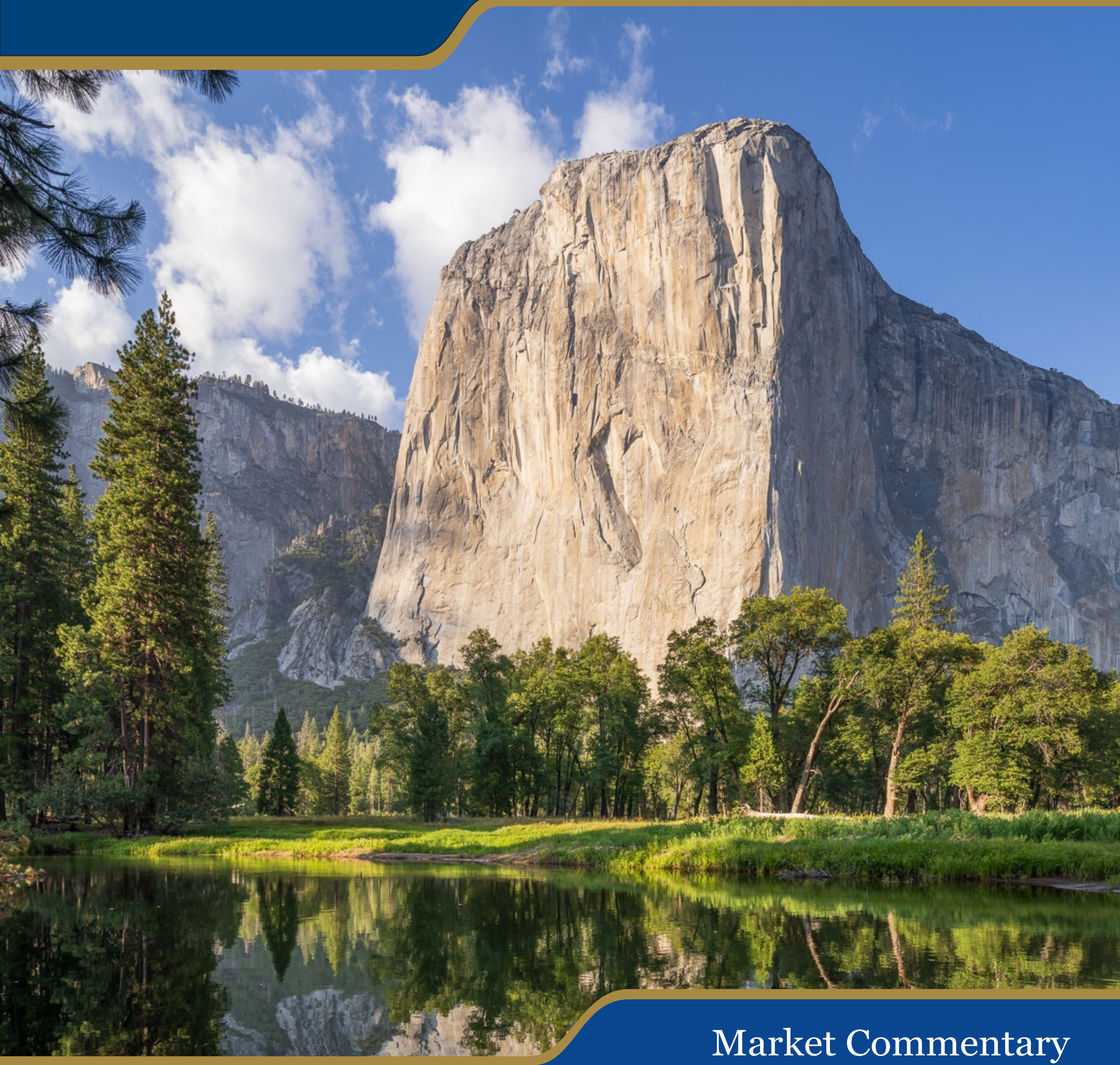

Market Commentary
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Executive Summary

Trump's imminent return to power is generating widespread anticipations of changes and adjustment of plans. The ultimate winners and losers are subject to much speculation. But Trump's erratic decision making leaves friends uncertain and foes suspended between dread and uncertainty. Ultimately the world may simple agree that its better off ignoring the US and getting on with things.

Geopolitics
Russia-Ukraine

Conquering the portion of Donetz province still held by Ukraine was Russia's major goal in 2024. So far they have succeeded in taking 2/11ths of the provincial territory held by Ukraine. They are incurring casualties at the rate of about 40,000 per month which exceeds their force marshaling capacity by 10,000 per month. They are filling the gap with North Koreans, with an expected build to a force of 100,000 North Koreans deployed. The Russians are also incurring unsustainable equipment losses. In short, Russia is losing the war of attrition. Ukraine's success is built on integrating front line infantry, mobile artillery and a drone airforce that holds battlefield air superiority. Both sides are investing heavily in electronic warfare to counter the other side's drone force and so neither side currently has superiority in that contest. However, Ukraine's morale took a huge hit from Trump's electoral victory and Ukraine is facing manpower strains of its own. As Russia grinds forward in the east Ukraine's lines supplying the front are gradually coming under threat and at some point Ukraine may need to fall back to the next line of defense. So Russia is currently winning battles even if it may be losing the war.

President Biden has a long last permitted to Ukraine to strike into Russia with the ATACMS system. This is a rocket artillery piece with a reach of 190 miles. It typically is deployed against high value force concentrations and fixed bases. Ukraine was previously outfitted with the weapon but constrained to target sites only in its occupied territories and not in Russia proper. Ukraine has long sought permission to use it against the logistical and air support bases which Russia has located close to the battlefield but across the historic border. It seems that Biden finally granted that permission as a way to to respond to Russia's decision to employ North Korean mercenaries. Russia responded by hitting the provincial capital of Dnipro with an intermediate range nuclear capable missile armed with multiple warheads (MIRVs.) Such missiles have existed since the 1970s, but this appears to be the first use of a MIRVed missile in combat. Putin promised more such attacks, but it is an expensive missile to use and not many targets justify that expense. We take this more as a growl of displeasure than as a strategic change.

Various reports from the front lines testify to the Russian army's continuing deficits in good order and discipline. A three star general was recently cashiered for filing false battlefield reports and his two star subordinate was arrested. Approximately 10% of the Russian forces have been redeployed to counter the Ukranian salient into Russia's Kursk province. Captured assault troops state they were threatened with their own artillery if they did not attack. The Ukraine has opened approximately 80 criminal investigations of Ukrainian POWs murdered by the Russians. The Russian command appears to be indifferent these violations of the laws of war.

Mass protests in Georgia challenge the ruling party's attempt to shelve EU membership and proceed with integration into the Russian bloc instead. The president is calling for a re-do on the recent elections which seem to have been significantly manipulated. The ruling Dream Party is moving to replace the president. Russia has signed a number of agreements with Belarus and with Kazakhstan. Caught between a populace which would probably swing to the EU at the first safe opportunity and ever more exigent demands from Russia, Belarus's dictator is gradually and probably reluctantly signing away the country's independence. The arrangements with Kazakhstan appear more opportunistic as both sides seek to profit from the sanctions evasion opportunities created by the war. Russia continues to dabble in North African and Middle Eastern politics as a way to bolster its image of being a great power. Actually it is currently dependent on North Korean support to maintain even its regional power pretensions.

We think the Biden administration's goal has been for Russia to lose the Ukrainian war in a long drawn out struggle which would leave it comprehensively exhausted and unlikely to engage in further adventurism for a decade or two. Trump's declared policy is to bring the war to a swift conclusion. He has appointed retired general Keith Kellogg as his special envoy. Kellogg had a distinguished career, being decorated for gallantry as an infantryman in the Vietnam War, reaching three star rank and most recently serving as National Security Adviser to Vice President Pence. But he is currently 80 years old and has been out of office for several years. He published a paper (with Fred Fleitz) 8 months ago in a publication of the America First Policy Institute. His proposal basically looks to freeze the conflict along current lines. Each side would hold their current territory; legal claims would be left unsettled; Ukraine would receive continuing Western security support but not formally join NATO; a ceasefire would be declared. It is roughly the same formula as was applied in Korea. That formula allowed South Korea to develop economically but the unresolved conflict continues to fester, is an ever present threat to South Korea's progress and a continuing security risk for the United States. In 2024, US military support for Ukraine amounted to about $1 per citizen per day. This effort is far from “fatiguing” the US or proving unsustainable over any time horizon. The US can actually continue bleeding Russia as long as the Ukrainians are willing to bleed themselves. All the evidence is that the Ukrainians should have demanded more fulsome western support in exchange for the sacrifice they were bearing. Not the other way around.

Russia's declared ambition is the restoration of the Soviet empire and the conquest of Ukraine is its current program. To this commentator it appears that the overriding US interest is to prevent Russia from rebuilding even a shadow of the Soviet empire. In the US Trump is perceived as a strong man and even as a potential dictator. But the adversaries of the US are led by actual dictators – the sort of men who have lifetime associates shot before breakfast and decree the deaths of tens of thousands of anonymous subjects before lunch without a tremor of indigestion to disturb their day. Trump's negotiations with the Taliban have pegged him as a surrender monkey in their minds and they are confident they will get the best of him in any diplomacy which he tries to engage in. General Kellogg's stated purpose is a humanitarian one – to save a generation of young men from being lost to a grinding war of attrition.

Mideast

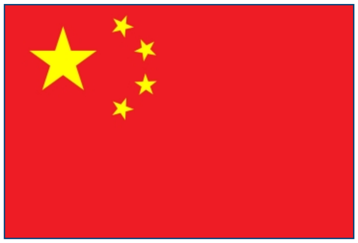
With Israeli forces having reached the lower banks of the Litani river, Israel and Lebanon have reached a ceasefire agreement in which it is understood that Lebanon is also a proxy for Hezbollah. The agreement restates UN resolution 1701 which sets up the border region south of the Litani as a buffer zone between Lebanon and Israel from which Hezbollah forces are to be excluded. The buffer zone is to be patrolled by a combined Lebanese/UN force and the US and France have a role as guarantors. Hezbollah is to cease attacks on Israel and there are limitations on its rearming itself. The ceasefire is a pragmatic decision on all sides. Israel achieves its primary aim of securing its northern border. While Hezbollah is deeply wounded rather than eliminated, Israel avoids a long drawn out and likely inconclusive war. Hezbollah, seriously defeated on the battlefield, gains space in which to recover itself and puts a stop to its bleeding before it is weakened to the point of being a soft target for Lebanon's other armed factions. Iran is believed to have urged Hezbollah to accept the proffered terms rather than risk conflict with Israel in a weakened state.

Without the protection derived from the Hezbollah threat to northern Israel, Hamas now senses that it faces an existential threat from Israel. It is reopening talks on a ceasefire-for-hostage deal through the good offices of Egypt. Previously Hamas's demands were unacceptable to Israel, but it now sees the need to moderate them to some extent. While we do not regard these talks as doomed to fail, we think Israel will press its claims harder than Hamas is ready to accept. The most likely future course is the conflict continuing until Israel has taken full control of Gaza.

Faced with the failure of their aerial assaults and the defeat of their friendly militias, some of Iran's parliamentarians are urging explicit adoption of a nuclear weapon program to redress the military balance between Israel and Iran. This step will require Ayatollah Khamenei to withdraw his fatwa against such weapons. Iran is believed to have enough enriched uranium to construct four atomic bombs. The International Atomic Energy Commission has found the Iranians in breach of their nonproliferation obligations. This finding should lead to reimposition of tight economic sanctions on Iran. Iran responded by turning on additional centrifuges to generate enriched uranium.

The US reports the Houthi's to have a respectable capacity to manufacture the missiles which they have been lobbing at international shipping. Shutting this nuisance down may take some time.

Israel is winning and Iran is losing their proxy war. Ultimately this is a good thing for the US. Trump will likely continue Biden's strong support of Israel. Whereas Biden maintained some space between the US and Israel, Trump is likely to forego that precaution.



China

There is not much apparent difference between Trump and Biden's position on China. Trump will perhaps be more explicit in supporting Taiwan and is likely to seek tariffs which could shut many Chinese goods out of the US market. However, China has probably already arranged to ship parts to third countries for final assembly to evade these tariff barriers.

They likely regard Trump's hostility as just another US nuisance.

In fact, a Trump presidency may prove a bonanza for China if they intelligently exploit the opportunities it could present. If the US is perceived as having sold out Ukraine the consequence will be a world wide drop in the value of US security guarantees. This effect will be felt most strongly in the small ASEAN countries which directly border China's sphere of influence. They are already reluctant to follow the US lead into a confrontation with China as China is their natural lead trading partner. If that confrontation raises credible security threats as well, some countries may reverse their alliances. The China containment belt which Biden put together could be dissolved by Trump with no action needed from China. Further, Goldman Sachs estimates that a moderate version of Trump's tariff policy will diminish growth in the offshore economy by 0.4% per year. If so the result will be widespread hostility towards the US. The perception of a rich guy robbing the poor of their livelihood will erode US influence far more effectively than any Chinese propaganda could. Finally, Trump is almost sure to abandon the climate policies on which the rest of the world has painstakingly built a consensus. Again the picture is one of a callous bully harming everyone – even himself. Finally tariffs on both China and Europe will push those two trading blocks closer together. The Europeans never shared the US desire to confront China. They have gone along with it merely as a necessary price to pay for US assistance with containing Russia. If Trump abandons Ukraine the Europeans are likely to revert to a warm friendship with China. The outside world will likely assess that the US has abandoned leadership of a rules based order in favor of a crass pursuit of national self interest. Indeed what other interpretation could be placed on self declared "America First" policies? But a rules based order is extremely popular with the world's non-superpowers. With the leadership role empty, China might be able to assume the vacant role of leading a rules based order. The upshot could be a reversal of alliances in the economic sphere which leaves the US isolated. Although military alliances would not change immediately, they would ultimately shift to reflect the economic alliances. At the very least any anti-China bias to those arrangements would fade quickly. Perhaps best of all China does not have to do anything. They simply need to avoid ruffling feathers or acting impulsively towards Taiwan. With a bit of luck the entire US "empire" could fall in China's lap as it is abandoned by its negligent owner. In short, Trump is highly likely to overestimate US strength, damage US interests and thereby gift opportunities to China.

Domestic Politics

Trump's cabinet nominations are strikingly different from Biden's (see tables 1 and 2.) Biden favored persons who had built distinguished careers in the relevant field. He made few appointments to cabinet rank of persons distinguished solely by political accomplishment. Trump's picks are the reverse. His primary criteria appears to be loyalty and that limits him to a pool of outsiders with generally only limited experience in field. The result is to nominally turn the Federal government over to persons incapable of leading their departments. To give a few examples, the Department of Defense, an entity with a budget three times larger than the state of California is to be entrusted to a TV journalist. The Department of Health and Human Services, with a budget three times larger than DoD, is to be entrusted to a political agitator for eccentric health views. The Department of Justice was to have been entrusted to a Congressman whose primary claim to fame is that the prior Trump administration investigated him for sex trafficking, and while the Biden administration closed that investigation without charges the Republican House of Representatives chose to continue the investigation. That candidate is now withdrawn in favor of a former state Attorney General who also served as a personal attorney for Trump. Yet Trump comes in with a declared purpose of massively reorienting many of these departments. How cam persons unversed in administration take effective charge of a bureaucracy long practiced in stonewalling its political masters? There is a contradiction here which invites speculation. The answer we think lies in the 25th Amendment to the US Constitution. That article gives the cabinet secretaries the power to remove the President. Trump nearly fell victim to this process after the January 6 violence. We think he is determined to protect himself by packing the Cabinet with loyalists who lack any independent power base. Vis-a-vie their departments many of them will simply be political figureheads with the actual decision making power located in deputy secretaries. Many of these may turn out to be acting appointments to evade the requirement for Senate approval. Finessing the constitutional structure is not a good look with which to start a new administration, but it is unsurprising that Trump prioritizes self-protection over constitutional niceties. We will be following the Deputy Secretary nominations to see if our speculation holds water. Perhaps the most insightful point is which appointments Trump considered had to be placed in experienced hands: State, National Security Adviser, Treasury, Commerce, Energy, Border Czar and White House Chief of Staff. This group of seven probably constitutes Trump's actual leadership group.

Table 1: The Biden Cabinet

Department	Official	Years in Field	Prior Post
State	Antony Blinken	30	Deputy National Security Adviser
Treasury	Janet Yellen	54	Chairwoman Federal Reserve
Defense	Lloyd Austin	49	4 star general
Justice	Merrick Garland	50	chief judge DC Circuit
Interior	Deb Haaland	12	Congresswoman
Agriculture	Tom Vilsack	15	CEO US Dairy Export Council
Commerce	Gina Raimondo	23	Governor Rhode Island
Labor	Marty Walsh	22	Mayor of Boston
	Julie Su	29	California Labor Secretary
Health and Human Services	Xavier Becerra	38	California Attorney General
Housing and Urban Development	Marcia Fudge	24	Congresswoman
	Adrianne Todman	24	CEO National Association of Housing and Redevelopment Officials
Transportation	Pete Buttigieg	0	Mayor South Bend
Energy	Jennifer Granholm	0	Governor of Michigan
Education	Miguel Cardona	21	Commissioner, Connecticut Department of Education
Veterans Affairs	Denis McDonough	15	White House Chief of Staff
Homeland Security	Alejandro Mayorkas	15	Deputy Sec Homeland Security
Environmental Protection Agency	Michael S Regan	26	Sec North Carolina Dept Environmental Quality
Office of Management and Budget	Shalanda Young	23	Deputy Dir Office management and Budget
Director National Intelligence	Avril Haines	23	Deputy National Security Adviser
Central Intelligence Agency	William Burns	42	Deputy Sec State
Trade Representative	Katherine Tai	17	Congressional staffer
Ambassador UN	Linda Thomas-Greenfield	42	Asst Sec State (African Affairs)
Council of Economic Advisers	Ceciia Rouse	31	President Brookings Institution
	Jared Bernstein	32	Member Council Economic Advisers
Office of Science & Technology	Eris Lander	44	Science Adviser to the President
	Arati Prabhakar	40	Science Adviser to the President
White House Chief of Staff	Ron Klein	41	Ebola Response Coordinator
	Jeff Zients	23	Counselor to the President
Total		805	

Table 2: The Trump Cabinet

Department	Official	Years in Field	Prior Post
State	Marco Rubio	11	Senator
Treasury	Scott Bessent	40	Hedge Fund Manager
Defense	Pete Hegseth	0	TV journalist
Justice	Pam Bondi	8	Florida Attorney General
Interior	Doug Burgum	8	Governor North Dakota
Agriculture	Brook Rollins	0	CEO AmericaFirst Policy Institute
Commerce	Howard Lutnick	40	CEO Cantor Fitzgerald
Labor	Lori Chavez-DeRemer	0	Congresswoman
Health and Human Services	Robert Kennedy Jr	0	Anti-vaccine lobbyist
Housing and Urban Development	Scott Turner	1	Professional Athlete/motivational speaker
Transportation	Sean Duffy	0	TV journalist
Energy	Chris Wright	32	CEO Liberty Energy
Education	Linda McMahon	0	Sports executive, head of SBA
Veterans Affairs	Doug Collins	0	Congressman
Homeland Security	Kristi Noem	0	Governor South Dakota
Environmental Protection Agency	Lee Zeldin	9	Congressman
Office of Management and Budget	Russ Vought	3	Deputy/Acting/Confirmed Director OMB
Director National Intelligence	Tulsi Gabbard	0	advisor to the candidate
Central Intelligence Agency	John Ratcliffe	1	Director National Intelligence
Ambassador UN	Elise Stefanik	0	Congresswoman
Advisers on Government Efficiency	Elon Musk	0	CEO entrepreneurial companies
	Viveck Ramaswamy	0	CEO entrepreneurial company
White House Chief of Staff	Susie Wiles	34	Campaign Director
Border Czar	Tom Homan	40	acting Director ICE
National Security Adviser	Michael Waltz	31	Col Green Berets, Congressman
Total		258	

Trump continues to emphasize that mass deportations will begin day one of his administration. Approximately 5% of the US work force is made up of persons who either entered the country without a visa, who entered on a visa which they overstayed or who entered under a temporary arrangement while their plea of political refugee status is adjudicated. Trump's declared purpose is to deport this workforce. If carried out, this program would constitute the largest government interference in the economy in many decades. Its economic consequences would be profound. The industries heavily dependent on migrant labor would be strongly disrupted. These industries include agriculture, food processing, food service, hospitality and construction. Many of the jobs in this sector are essential and non-exportable. The jobs cannot stop just because the current employees were removed by the government. As a result these industries will need to raise their pay scales to suck workers out of other industries. Eventually the disruption will spread across the entire economy. With labor costs rising, product prices will need to rise as well – especially for food. As a result a wage-price spiral will be ignited. Controlling this inflationary pressure will require short term interest rates to rise. Another problem is Social Security. The exported workers are younger than the resident workers. Transferring their salaries to residents might have little impact on income taxes, but it will worsen the funding status of Social Security. It will also transfer cash from a population in peak spending years to an older population that is in part past peak spending. The result, at a minimum, will be a shift in consumption patterns. In short, an abrupt comprehensive deportation program will administer a deep shock to the economy with widespread negative ramifications.

It is probably impossible to sustain such a policy given the storm it will create. We think what Trump can actually implement is a highly publicized but limited deportation program. That might frighten the largely remaining undocumented labor force into accepting lower wages in return for employer provided protection against deportation. The policy will end up as a government provided subsidy to agribusiness, hoteliers and construction contractors. Important constituencies for Trump to be sure, but not obvious candidates for government assistance.

Trump's second major proposed economic intervention is in the area of tariffs. He is proposing to raise tariffs across the board by ten percentage points and to place punitive tariffs of 60% on China. In particular he would renounce the North American free trade agreement signed in his prior administration and impose 25% tariffs on Mexico and Canada. Economists have been urging for decades that the US shift its tax structure partially away from income taxes and towards consumption taxes. The tariff proposal would do that. But economists have always favored a VAT (misleadingly termed a national sales tax) over tariffs. A VAT is a political dead end in the US. With a consumer led economy the business community is strongly against it. In addition, the states regard the sales tax as a key part of their revenue base and they also are strongly opposed to Federal tapping of this resource. Tariffs look like an attractive way to implement consumption taxes without directly facing the issues that arise with a VAT. They also look like a way to protect local manufacturers from international competition and to punish China for gaming the international trade regime. Unfortunately there are well known problems with tariffs. Raising tariffs by one country invite response moves by other countries. Protected from competition by tariffs, domestic manufacturers get lazy and lose their competitive edge. The combined result is for local manufacturers to lose their export markets. As laziness embeds itself domestically, manufacturers get in the habit of offering overpriced poor performing product. Ultimately consumers rebel and reduce tariff barriers. At that point domestic manufacturers risk being swept away by foreign competition. Thus putting up tariff barriers may bring temporary relief, but long term it puts a country at risk of losing the very economic sectors which are being protected. It is a classic example of an economically unsound political interference in the marketplace.

Another widely publicized Trump economic policy is relaxing anti-trust enforcement against big tech. Doing so will make it easier for giant technology firms to acquire recent tech start ups – particularly in the area of AI. That will help liquify VC portfolios and release funds for new investment – generally positive outcomes. However, it will make it harder for medium and big technology firms to bid for such acquisitions. As such it will tend to keep this industry more concentrated – which is not obviously a good thing.

Trump in addition plans to keep cryptocurrencies unregulated. Again this is a mixed outcome decision. Less regulation means this technology can continue its search for a purpose. Unfortunately, the main purpose it has found to date is facilitating scams and dark money transactions. That reputational burden has high costs which intelligent regulation could reduce.

Finally Trump is proposing rollback of Biden policy on infrastructure, green economy and strategic industries. Instead Trump would stimulate the oil industry. We think Trump will have about as much luck as most presidents in prising subsidy out of private hands (i. e. not much.) The US oil industry is currently doing very well – outproducing both Russia and Saudi Arabia. It would appreciate fewer restrictions on fracking and no fines on methane leaks. But it hardly requires the opening of high cost arctic acreage to exploration. Fundamentally the future for domestic oil looks to be static demand at best and ultimately significant decline. What the industry needs to do is lift resources now while there is still a market demanding them and to redeploy capital out of the sector. In short, the US needs policies for a graceful industry liquidation and not for industrial stimulation.

Currently sections of the business community are cock-a-hoop with happiness over Trump's election. We think as the business community comes to realize that Trump's willingness to intervene in the economy greatly exceeds Biden's there will be a cooling of that enthusiasm. We think the economy does best with light weight stable intelligent regulation and a minimum of government interventions. We are concerned that significant disruptions in the name of ideological policy goals can be an effective cover for significant politically directed wealth transfers.

Global Economy

The world economy has largely normalized from its Covid shock. Inflation is under control pretty much everywhere. No where, not even Japan, is facing deflation. Central bank policy is biased towards easing everywhere except Japan. However the pace and depth of easing differs around the world. Growth is positive in most countries. In the EU growth expectations are below the US as they deal with an aging demographic structure, an overly regulated economy, green economy transition costs and trade uncertainty with the US. Despite those substantial headwinds, Europe is still expected to grow 1.5% per year and as they work through those headwinds the long term view is for a modest increase in the long term growth rate. In China, the government is continuing to grapple with an internal economic/financial crisis resulting from previous overstimulation of the construction industry. But China's export engine remains world beating, its electric cars have a huge global opportunity built on superior technology and China is best positioned of the major economies to profit from the green energy transition. China's growth rate is currently reduced to the 4.5% range due to internal issues, but it too could improve in the long term if the US fumbles. The emerging economies are a mixed bag, which creates opportunities for selection and genuine diversification. Overall the growth expectations are below China but ahead of the the developed economies. India remains the best positioned of the economies transitioning from emerging to developed. Mexico is particularly ill positioned, being as the saying has it “so far from God, so close to the United States.” That closeness burdens Mexico with powerful criminal cartels drawing outsize revenues from their US market while attracting US hostility which blames Mexico for supplying the US with what the US demands – cheap labor and Chinese opiates.

Capital Markets

After initial excitement at the Trump victory, the capital markets paused for reflection. In the equity group the Mid/Small Cap group rose strongly (+9.8%) on perceptions Trump is good for such businesses which are primarily domestically focused. Large cap stocks are more exposed to the international economy and although they also rose, they rose less (+6%.) International stocks were down slightly: developed (-0.5%) and emerging (-2.6%) as Trump's tariff policy creates concern. Fixed incomes advanced very modestly. The exception was REITs (+5%) where Trump is assumed to be good for real estate. The Euro fell (-2.9%) as trouble with trade and Ukraine looms. Gold and Oil both reversed recent trends and have probably entered a holding pattern as investors continue to sort through implications of a Trump presidency.

Table 3: Recent Market Performance

Asset Group	Asset Class	6-month trend	3-month return	1-month return
Equity	US Large Cap	rising	6.89%	6.05%
	...Large Cap Growth	rising	8.12%	6.01%
	...Large Cap Value	rising	6.12%	6.08%
	...Growth – Value	outperform	2.00%	-0.06%
	US Mid/Small Cap	rising	10.34%	9.80%
	Intl Developed	rising	-4.99%	-0.48%
	Intl Emerging	rising	-0.21%	-2.63%
Fixed Income	Treasury 3-7 year	rising	-1.36%	0.30%
	Treasury 7-10 year	rising	-2.01%	0.63%
	TIPS	rising	-0.24%	0.28%
	Municipal	flat	0.81%	1.41%
	Investment Grade	rising	-0.70%	1.32%
	Medium Grade	rising	0.84%	1.10%
	Preferred	rising	1.61%	0.12%
	REIT	rising	3.20%	4.83%
Commodity	Euro	rising	-4.56%	-2.86%
	Gold	rising	7.69%	-1.94%
	Crude Oil	falling	-8.12%	4.19%

Advice

In general we recommend basing investment decisions off one's long term strategic objectives and not trading in response to news. We reaffirm that basic stance this month and supplement it with a particular caution against reacting to Trump's election. We think the country's swing to the right will bring significant policy changes and will shift some of the opportunity in the economy between sectors. We also expect that policy changes could be stimulative in the short term but lead to overheating in the long term. However, it is still very early days. Which policies actually get enacted, how quickly and how intensely very much remains to be seen. We would adopt a wait-and-see attitude for the present.

The exception to this advice would be persons at risk of deportation or at risk of losing residency visas. They should be taking steps to protect their assets, particularly real property, in case of a cessation of residency. For instance, property ownership can be moved into trusts which allow still resident trustees to take over management in the owner's absence. Persons at risk of being caught up in immigration raids cannot expect to access safe deposits or other physical assets. They need to set up nominees who can act in their behalf. Finally, if at risk individuals have meaningful business assets they may need to identify a liquidation plan. When the Federal government removed residents of Japanese ancestry from the West Coast in World War II the removed population took a massive economic hit from being forced to liquidate assets in a hurry and with only fire sale realizations available. Unfortunately local profiteering is always a feature of government removal programs and the profiteers become strident advocates for harsher removal policies. At risk individuals should assess the situation negatively and take proper precautions. Denial and procrastination followed by panic are common but dangerous human responses to massive negative change.

Last month we urged readers to formulate their year end tax plans. Now those plans should be executed. Those who have not yet done any planning should refer to November's advice section for guidance.

About the Cover

Our cover is graced by a photograph of El Capitan – a famously tall rock wall at the entrance of Yosemite National Park. The mountain provides a challenge of rock climbing ability which separates the elite climbers from the very good. It also gives its name to the world's latest champion supercomputer – located 150 miles away at the Livermore National Laboratory. The machine is built from 43,808 AMD CPUs each with 24 cores running at 1.8 GHz and paired to an equal number of AMD GPUs each with 228 cores supporting 912 threads running at 2.1 GHz. In total this delivers 1 million CPU cores and 10 million GPU cores. Peak throughput has been measured at 1.7 exaflops (1.7 x 10^18 floating point operations per second.) The machine design is expected to reach 2.8 exaflops after improvements. The operating system is a Linux variant. The computer's power draw is about 40 MW and it requires 28,000 tons of cooling power. The total power draw of the facility is 85 MW.

The primary use of the machine is for national security – simulated testing of nuclear weapons. However there is also an unclassified research program. Projects here include simulating inertial confinement fusion power generation, simulation of contagious disease outbreaks, and climate modeling. The laboratory plans on making a smaller machine (rated at 10% of the power of El Capitan) available to commercial users.

The machine cost $600 million and was built by the Cray subsidiary of Hewlett Packard Enterprise. HPE does about $30B in annual sales, mostly in commercial servers, storage and support services. High performance computing generates only 11% of revenue. The firm's overall net margin is 6.8%. Once a keystone Silicon Valley company, HPE is now headquartered in Houston, Texas. The company is led by Antonio Neri. Neri was born in Argentina to Italian parents. He gained his education through the Argentinian navy and entered the technology industry through a job in Italy. He joined Hewlett Packard in 1995 working in client support in Amsterdam. He became CEO 23 years latter. All of this story is rather typical of this industry.

Supercomputers typically hold the title of “world's fastest” for only a few years. Indeed Japan has announced design work on the first zeta class machine, which should deliver 1000x the compute power of El Capitan when it goes online in the early 2030s.

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Lloyd Tevis Investments LLC is a registered investment adviser offering its services over the internet to US individual investors and their families. Our Precision investing service provides clients with highly personalized investment solutions tuned to the client's specific circumstances and objectives. We believe the strategic asset allocation decision is the key decision faced by our investors. Accordingly, our monthly commentary focuses on matters which can shape the longer term performance of asset classes. We do not time market swings or pick individual stocks. Discussion at this level of detail is made for the light which it throws on relative valuations and such discussion should not be read as an investment recommendation. Indeed, our investment focus is on maximizing diversification, careful risk budgeting and maximizing implementation efficiency. These are the proven builders of long term investment success. In evaluating political and social developments our perspective is that of long term investors. We believe the investor's interest is best served by a stable environment in which change occurs incrementally as broadly supported policies rather than by an environment of abrupt changes and frequent U-turns driven by transient partisan advantages. Finally, our assessments should always be read as what we consider likely to occur and not as expressions of what we would like to see come about.

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