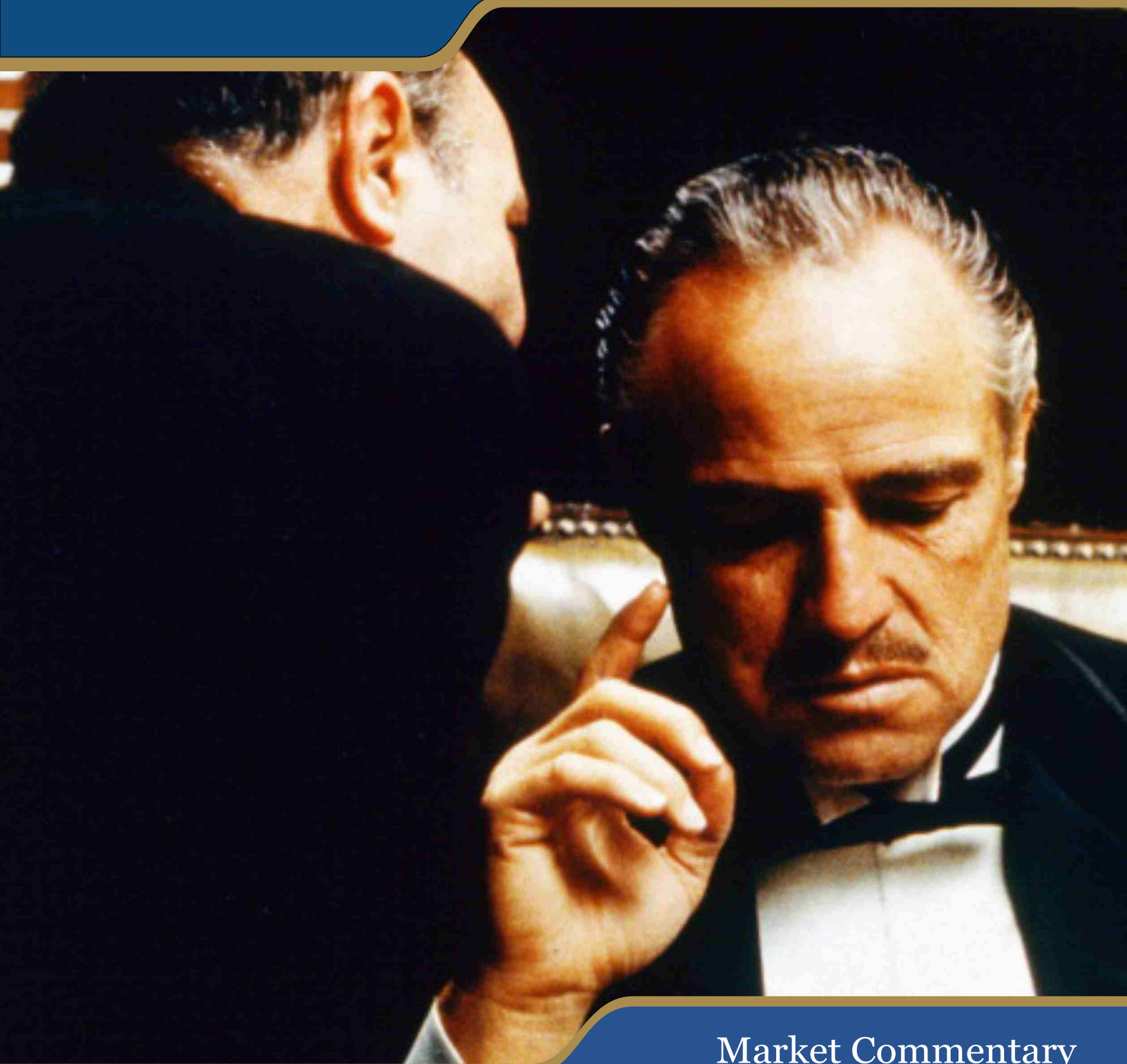




LLOYD TEVIS
INVESTMENTS, LLC

Securing your future through Precision Investing™



Market Commentary
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Artificial Intelligence Enters the Commercial Sphere

We are happy to be making news this month rather than just analyzing it. We have commenced our online investment advisory service available at our website www.lloydtevis.com. The service is the first digital advisory service which offers highly personalized investment advice based on a deep analysis of the client's life goals and total financial situation. The service is offered with sufficient analytic power to meet the exacting demands of business executives and professionals who lead complex lives and hold expectations of top class advice. At the same time the terms of service make it accessible to young investors just starting out on life's journey for whom long range investment planning can pay the largest dividends. The service is thus uniquely positioned within the current constellation of advice offers.

What makes this investment service possible is a piece of artificial intelligence which replaces the costly intuition of a human advisor with the rigorous analysis of a computer. Specifically the service is built on an expert system which reproduces the idealized thought process of a human expert. Actual human experts, by contrast, often telescope the process in the interest of profitability by substituting heuristics and conventional solutions for de novo analysis and thought. This telescoping allows human brains to remain roughly competitive with the expert system at the cost of varying degrees of lower reliability. Expert systems are not an especially new technology. Computers have been playing chess, making medical diagnoses, managing inventories and making markets in stocks for some time. These are, however, fairly narrow technical domains. Offering financial advice and managing portfolios is arguably a wider domain. Also

most expert systems to date have been at work deep within the operations of large organizations. This is one of the first expert systems to address itself to the general public. As such, we expect it to be an early member of an emerging class of such services.

Attracting considerably more publicity this month is Open AI's release of its ChatGPT technology. ChatGPT represents a different class of artificial intelligence. Rather than embodying the human thought process, it models the neural circuitry of the human brain. So called neural net softwares are capable of learning practically arbitrary patterns and reproducing trained behaviors in response to learned signals. Like humans, these softwares are trained rather than programmed and their productions may sometimes be as unsound as the thoughts of poorly trained humans. The ChatGPT technology has attained an impressive fluency with natural language and has learned a wide body of general knowledge. However, it also exhibits a tendency to confabulate and is not inherently discriminating in its knowledge learnings. Currently it has some of the characteristics of an eager, loquacious idiot savant. Open AI is making the technology broadly available to developers and we have no doubt that it will be swiftly refined into a more disciplined conversationalist.

These technological developments raise a host of interesting questions. Here we shall address just a few of them. The first question we should ask is how significant are these developments. But before we can begin to measure progress we must first understand what we are trying to measure. To do so, we need to think about what we mean by intelligence. Now armed with a slide rule I can perform engineering calculations more quickly than I could with paper and pen. But one would never consider a slide rule to be exhibiting intelligence. By contrast, my summer assistant armed with a pocket calculator can also perform engineering calculations, and while not quite as fast as me with a slide rule, we will not hesitate to recognize him as possessing at least some intelligence. Thus throughput, the basic measure of computational power, is not the relevant metric for intelligence. Intelligence resides rather in some more elusive

measure of mental flexibility, an ability to move towards a goal specified at a high level while working out the steps at a low level and an ability to make connections that are not self evident. It may be useful to broaden our examination to animal intelligences. Here we see astonishing expertises from the brains of the bird species. Birds, for instance, conduct feats of song making, navigation and weaving that would challenge the best human experts in these fields. Bee hives also exhibit a strange form of distributed intelligence quite different in kind from any human intelligence. Notably the neural apparatus involved in these activities may be substantially smaller than the human brain. Over an adequately narrow domain of application intelligent behavior can be reached on less powerful processing equipment. This observation is consistent with the early emergence of chess playing computers. Conversely reaching high achievement over a wide range of activity probably requires processing power equivalent to the human brain. The insulting terms “bird brain” and “idiot savant” both point to breadth and cognitive depth rather than narrow achievement as being the defining qualities of human intelligence.

Examining the Lloyd Tevis Investment service we see a high level of achievement over a defined domain of activity. This performance is rather typical of what we expect from expert systems. Examining ChatGPT we see a broader less defined domain, but also a less towering level of accomplishment. If intelligence is some product of breadth times cognitive depth then the likelihood is both systems are delivering the performance of which current hardware is capable. Accordingly, our expectation is that the technologies will march forward at the overall pace of growth in processing power.

A second question is how the two technologies will work together. Here we see them as inherently complementary. Expert systems are fundamentally about analytic power. Natural language processing is by contrast a user interaction technology. Successfully combining the two capabilities should result in a system substantially more impressive than either in isolation. Building expert systems will likely remain an expensive time consuming technology which one applies

when high reliability is valued. Training pattern recognition systems is by contrast a cheap, quick way to make progress when high levels of accuracy and reliability are not required. Both situations are of common occurrence.

A third question is where such systems will make their mark in the economy. Clearly the answer to that question rests in part in the answers we have already given as to how to assess what has been achieved to date and where it is likely to progress. Most software to date has been oriented towards putting tools in the hands of human users. The drive has been to create tools which are either more powerful or easier to use and thus accessible to a wider audience. AI software, by contrast, aims to create somewhat autonomous systems. Human users still define the high level goals these systems are to pursue, but taking the human out of the driver's seat is the whole point of the exercise. Reasons for removing the human revolve around the high cost and lower reliability of humans. Computer systems also find it intrinsically easier to deal with other computers than to deal with humans. They will prefer to confine humans to a supervisory role on the periphery of an activity than to weave them in throughout a complex process. This preference suggests a gradual displacement of tool software by autonomous software. The drivers of these developments are fundamentally economic and so technical progress is more likely to effect the pace rather than the direction of change. Economics is influential but not necessarily decisive – user preferences will remain important. It is likely that humans will be accepting of computer intelligence in certain activities but not others, even if the computers deliver some reasonable competence at the activity.

These reflections point to human users of software as being the economic actors most immediately effected. For instance, investment managers are expensive employees who intensely drive software at present in an application domain where high reliability is sought. They are natural candidates for replacement by computers. However, humans will not be eliminated from involvement with investments. Rather they will migrate to new forms of engagement. A specialized minority will be engaged in supervising autonomous systems, while the broader group will gradually become more

client centric, in the process refashioning themselves into some sort of life coach. Similarly, it is probably possible to train ChatGPT to tell jokes, but I doubt it will displace stand up comedians from their job. People probably have an innate preference for being amused by other humans rather than by machines. Whether intelligent machines ever develop a preference for computer comedians I can not say. Perhaps it will turn out that comedy has an intrinsic value in maintaining high functioning neural networks by purging the clutter of false associations.



The Russo-Ukraine War

Russia appears to have concentrated two-thirds of its available force on its offensive in the central sector of the front. Three months of effort have succeeded in creating two modest pockets from which the Ukrainians are making a fighting withdrawal – around Avdiivka and in the town of Bakhmut. At this moment Bakhmut is largely overrun and likely mostly destroyed by the Russians whose style of fighting is to pulverize a town with artillery fire before occupying the rubble. The Ukrainians are said to be exacting a steep blood price from the Russians. To western strategists the conflict has all the purpose and finesse of a bloody bar brawl.

Meanwhile the Ukrainians continue to stand up their western outfitted assault division. This army is said to consist of between 9 and 12 armored brigades, perhaps a 1000 mechanized infantry vehicles, a helicopter equipped tactical air wing about which there is very little disclosure and between 35,000 and 50,000 troops. The occupied territory of Ukraine consists mostly of open fields and the ground is rapidly drying out to the point of supporting mechanized operations. The Russians are visibly nervous about where this mailed fist might be unleashed. They appear to have committed their whole force to holding the front line with

very little strategic reserve available to contain a break through. In the northern and central sector they have constructed a single trench line about one days withdrawal (20km) behind the current front. In the southern sector they have a triple trench line to support an elastic defense in depth. However, it is manned by their lowest quality least well organized troops. Whether this force can make effective use of the laboriously prepared fortifications is an open question. To discourage partisan attack, the Russians are either interning or deporting substantial portions of the civilian population. While Russian political rhetoric is couched in terms of restoring severed parts of Russia to the homeland, the ground reality is a brutal occupation and ethnic cleansing. The country hangs in unquiet expectation of the coming storm.

This summer's campaign may prove decisive for the outcome of the war. After the successes of Ukraine's 2022 autumn campaign, expectations for the summer campaign are somewhat elevated.

The Ukrainian hope is based on superior equipment and morale combined with the shock value of attack being able to breach and roll up a substantial part of the Russian line. However the enemy they face today is more entrenched and perhaps more wisely disposed than the enemy they unhinged in the autumn campaign. A real but hard to assess factor is the human component of the Russian forces. The generals are likely furious with their political masters, the officer corp has been thinned of experienced men by bloody conflict and the ranks are made up of a random mix of dispirited, poorly equipped and weakly led conscripts and career soldiers. On the other side of the ledger, the Ukrainian assault force is not large enough to sustain its momentum in the face of high casualties and if they fail to liberate substantial portions of their occupied territory this year, by next year the Russians may have progressed so far with their annexation operations as to render a future liberation deeply problematic.

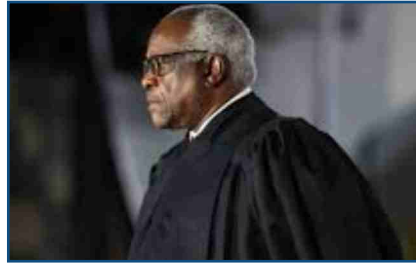
A Washington think tank – the Institute For the Study of War – has recently opined that the greatest weakness on the Ukrainian side is the half hearted and unstrategic nature of the support which it receives from NATO. In fact we called

attention to this point in our February 2023 commentary. There appears to be a steady braking influence through out the NATO camp from those reluctant to see the Russians decisively defeated. We think this reluctant camp is made up of three separate groups:

1. Russian fellow travelers and agents of influence
2. career foreign policy experts reluctant to adapt to a world in which the Russia is only tenuously a Great Power let alone a Superpower and
3. forward thinkers concerned about a defeated Russia coupling too closely to China. Whatever the motivation, we think this reluctant thinking misdirected. This war is an elemental conflict that does not admit of the over thinking typical of foreign policy greenhouses.

This month has seen an exceptional number of diplomatic missteps. President Macron of France went to China with 50 businessmen in tow looking for contracts. He pleased his host by disavowing support for the American line on Taiwan and was rewarded with the title of Strategic Partner by President Xi. On his return home, his EU colleagues greeted him with the title, in diplomatic speak, equivalent to whore and he was forced to placate them by walking back his prior remarks. Then it was China's turn. Their ambassador to France expressed the view on national television that the successor states of the USSR were insufficiently materialized in international law. The three Baltic states were vocally outraged and the five Central Asian states no doubt seriously perturbed by this view. In fact all fifteen successor states of the USSR are members of the UN and one even is a permanent member of the Security Council, so one is left wondering which law school this ambassador studied at. After the spokesman of the Chinese Foreign Ministry bungled a clarification, President Xi had to give a personal assurance that he recognized at least the Ukraine's sovereignty. Next up was President Lula of Brazil. He is only recently released from jail so perhaps we should be understanding of his not being entirely au courant. A lifetime leftist used to seeing the USSR as a friendly power, he disburdened himself of remarks about how the US should stop provoking conflict in Ukraine. On his subsequent trip to Portugal he was met by a noisy street protest which should have told him the European public does not accept this

characterization of the situation. What is happening in the Ukraine is a genuine earthquake in the foreign policy world and many players are struggling to wrap their minds around it. That is why this publication continues to dwell on it at length.



Domestic Politics

Justice Clarence Thomas, the most long tenured justice on the Supreme Court has drawn unfavorable scrutiny for lacunae in his reporting of outside financial connections. Specifically he has accepted luxurious travel arrangements from Harlan Crow – said to be a long time personal friend and admirer. In addition he has sold certain real estate to Crow as a result of which his mother has become Crow's tenant. Reportedly Crow plans to create a museum dedicated to Thomas on this family property at a future point. Standards for financial disclosures by Supreme Court Justices are largely on the honor system and it is likely that these gaps in reporting do not constitute breaches of law or regulation. However, they also do not rise to the highest standard of ethical conduct. We note that investment managers who committed such failures to disclose would likely lose their regulatory license and industry credentials, or at least face a period of suspension or enhanced supervision. While there is probably truth to the contention that Thomas finds himself under scrutiny for political reasons (namely his unbending adoption of a radical judicial philosophy), there is also truth to the contention that the matters discussed should have been disclosed preemptively rather than being left for investigative journalists to trumpet.

A Federal District Judge in Texas has issued a preliminary injunction against the abortion drug mifepristone. The drug was issued a sales license by the FDA approximately twenty years ago. A group of doctors has brought suit alleging that the drug was approved through an improper process, that it

may be unsafe and as a consequence they may be required to treat patients who have complications from using the drug and that they (the doctors) are damaged by facing potential emotional trauma. To issue the injunction the judge had to reach the conclusion that the petitioners were likely to prevail at trial. For the petitioners to prevail it would be necessary to conclude that they had standing, that their complaints were factually correct, that their damages were real, that the proposed remedy was within the powers of the court, and that the remedy was proportionate and appropriate to the damage. That is rather a lot to conclude and the judge's summary method of proceeding has created widespread consternation in the pharmaceutical industry. The prospect that a random Federal judge anywhere in the country could suspend long established sales licenses based on untested allegations of parties with marginal claims to standing and damage is concerning for the pharmaceutical industry to say the least. Indeed the precedent potentially being set could ultimately impact any industry, such as aviation, transportation or finance, where economic activity is carried out under a Federally issued regulatory license. The matter rapidly reached the Supreme Court and it promptly ordered the judges concerned to hear the case before issuing orders. The vote to do so was 7-2, which is being interpreted as the Chief Justice reasserting control over the court. However, concern in regulated industries about judicial policy making is likely not soothed by this step. No one likes to be regulated of course, but at the end of the day being regulated by one party is better than being regulated by a crowd. The brewing power struggle between the conservative judiciary and the established regulatory agencies promises to be an expensive head ache for the regulated industries even as it enriches their lobbyists and litigators.

Florida governor Ron De Santis has hit a check in his effort to position himself as the front runner for the Republican presidential nomination. By positioning himself as the non-Trump Trump he made himself anathema to those who dislike Trump and the second choice of those who do like Trump. Finding this corner of the world chill, he tried to stir up support by attacking the Disney corporation. But few entities have as good a claim to be guardians of family values

as Disney so the governor is not the naturally sympathetic party – even to conservatives. Compounding his woes he threatened to build a rival amusement park next door to Disney World and generated the sort of guffaws that normally sweep politicians from the national stage. Well election day is still far away and De Santis can hope for Trump's judicial removal from the scene to come in time to rescue his candidacy.

The Republicans in the House of Representative pulled themselves together well enough to pass a show boat bill trading an increase in the Federal governments debt ceiling against deep cuts to Democratic spending priorities. This sort of show boating bought them no mileage the last two times they tried it and we expect no greater success for them this time. However, they are engaging in political posturing against the back drop of an uneasy financial system and cooling economy. The possibility of the situation blowing up in their faces seems to be an unconsidered risk taken.



Banking Troubles

First Republic Bank, a sizeable California regional bank, was taken over by the FDIC and sold the same day to JP Morgan Chase in a smoothly executed resolution of a failing bank. Jamie Dimon, head of JP Morgan Chase, warned that interest rates would continue to rise and that the economy would fall into recession. Actually after inflation pay has been falling for over a year so recession in that sense is already upon us. We note that Dimon prudently got the FDIC to agree to take on some of the losses which may emerge in First Republic's commercial property loan portfolio.

Russia, China, Brazil and South Africa announced their intention to float a new currency to unseat the dollar from its role as the world's primary reserve currency. Anyone can create a currency of course. But to create a reserve currency one must create a willingness among foreigners to borrow in

your currency and to bank deposits in it. We wonder who will borrow from the Chinese or leave funds on deposit with the Russians and Brazilians.

The US monetary system is not perfect. But those who run it have mastered the basics. Even the best efforts of feckless domestic politicians seem unlikely to end the dollar's role as a reserve currency.



War Warnings

Noted hedge fund manager and long time China investor Ray Dalio has issued a warning that the US and China are on the brink of war over Taiwan. His concern stem from three considerations:

1. The US and China seem incapable of meaningful diplomatic dialog. Indeed their premises are so incompatible that exchanges of view seem impossible. Indeed Dalio views their last few exchanges as so unhelpful that it may be better for them to not try to deal with important matters.
2. Election cycles in the US and Taiwan are likely to move politics in a direction obnoxious to China and to provoke it into outright coercion of Taiwan if not military invasion.
3. Internally China faces deep seated problems. It has responded with an authoritarian crackdown. In our view (not necessarily Dalio's) the predictable outcome will be slower economic growth, increased internal tension and a greater propensity to seek relief in foreign adventures.

To Dalio's list we would add a fourth factor. It is evident that China is learning to live with its own version of the military-industrial complex. When the only decision maker that matters is the President and he has made no secret of his desire to grab a certain offshore island it is easy for admirals and shipyards to sell the idea that with just one more carrier/missile battery/air wing/tidal reef converted to

airfield the balance of power will tip decisively in China's favor allowing a certain troublesome island and its protecting power to be brought to heel. On the Taiwan side of the strait it is likely that a portion of the business community can be tempted with business opportunity on the mainland into serving as a front for China's reunification campaign. Of course the difficulty with slippery businessman is they may collect the mainland business revenues first and slip out of the Quisling role at the last minute, or else just decamp to Singapore.

Probably only Xi knows how eager he is to acquire Taiwan and how much risk he is willing to take in that effort. Certainly we do not. The list of authoritarian leaders who have misjudged Anglo-Saxon democracies is a long and varied one. To name only recent examples we would mention Leopoldo Galtieri, Mohammed Omar, Saddam Hussein, and Vladimir Putin.

What is clear to us, however, is what the United States will do. To our mind the fundamental policy of the US State Department has remained unchanged for a hundred years and can be summarized in four simple ideas:

1. We have the best territories. If we wanted your territory we already would have taken it, so - if you still have it - you can believe us when we say we do not want it.
2. If you threaten us we will block you.
3. If you attack us we will destroy you.
4. We really wish you would settle down and focus on building business which would be good for both of us.

It is a set of principles Don Vito Corleone would understand perfectly. Now to be sure some members of the real politick school of American diplomacy sometimes fret that their colleagues in the Wilsonian school of diplomacy are not "true Sicilians." They should remember that President Wilson ruthlessly dismembered the Austro-Hungarian empire with which the US was only nominally at war.

China's diplomacy over Taiwan has moved the US from being a friendly power into being a blocking power. If Xi chooses to

escalate I have little doubt that the results will be expensive for him and for the continued rule of the Chinese Communist Party. However, I also suspect the Chinese reading of the situation is that the US is trying to provoke them into conflict now before they – the Chinese - are fully prepared and that therefore the wise step is for them to not fall into the trap the US is setting. That line of thought will lead to building further military assets and confining actual activity to diplomatic grumblings and half hearted attempts at subversion. The forecast is for war scares without actual war.

Stock markets do not like war scares. Dalio's warnings show, at least, that the financial community is taking notice and beginning to get nervous about the situation.



The Markets

Markets generally continued their recent trends, albeit at a more moderate pace. US large cap and international developed equities rose while oil fell. Gold and the Euro both were strong. The fixed income sectors mostly marked time.

Table 1: Recent Market Performance

Category	Asset Class	6 month trend	3 month return	1 month return
Equity	US Large Cap	rising	2.03%	1.34%
	US Large Cap Growth	rising	4.81%	1.35%
	US Large Cap Value	rising	-0.51%	1.73%
	Growth – Value	falling	5.32%	-0.39%
	US Mid/Small Cap	flat	-6.17%	-1.11%
	Intl Developed	rising	2.88%	2.92%
	Intl Emerging	rising	-5.51%	-0.96%
	Fixed Income	3-7 Year Treasury	rising	0.64%
7-10 Year Treasury		rising	0.50%	0.60%
TIPS		rising	1.43%	-0.05%
Muni		rising	-0.80%	-0.45%
Investment Grade		rising	-0.37%	0.21%
Medium Grade		rising	-1.28%	-0.26%
Preferred		range trading	-7.05%	0.03%
Commodity	REIT	range trading	-7.85%	-0.23%
	Euro	rising	1.07%	1.48%
	Gold	rising	5.05%	1.98%
	Oil	falling	-9.66%	-5.39%



Advice

We expect markets to continue climbing the wall of worry. Sharp setbacks will occur when worries reassert themselves, but these corrections will not gather momentum into substantial declines and bullish tendencies will gradually reassert themselves. Our advice is to hold the portfolio that corresponds to ones long term goals and priorities.



About Us

Lloyd Tevis Investments LLC is a registered investment advisor offering its services over the internet to US individual investors and their families. 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, we strongly recommend a highly personalized approach to investment decision making which would make a general publication an inappropriate setting for an investment recommendation. 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. To learn more about our firm visit us at <https://www.lloydtevis.com>.

Cover Photo

Don Vito Corleone as realized by Marlon Brando in the classic mafia film “The Godfather.” Working from the sketch in Mario Puzzo's novel of the same name, Brando masterfully realized a character who is a unique fusion of a Sicilian feudal lord and an American entrepreneur. For a contrasting study of a true Sicilian feudal lord, we can recommend the portrait of the Prince of Salina in Giuseppe Di Lampedusa's novel “The Leopard.”

