(MAR.23)

TPDEARR

Trans-Pacific Dynamic Equity Allocation Research Report

This research report has been privately produced by Evan Moseley (MyIndividuation) and published by **tkscm**, **limited** for exclusive distribution to Subscribers from the **tkscm**, **limited** website.

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I. Introduction

Welcome to MAR.23 Issue of the TPDEARR, a limited-edition quarterly issuance of investment analysis and information pertaining to the economies that circle the Pacific Ocean. The TPDEARR is produced in-house by **tkscm**, **limited**.

We hope that the analysis and information contained in this report help to improve your financial wellbeing and accelerate your investment progress.

How to Use the TPDEARR

The TPDEARR is a collection of analyses, observations, calculations, charts, graphs and critical breakdowns that seek to illuminate the most dynamic aspects of the Trans-Pacific investment environment, herein considered as the countries, companies, commodities and economic regions spanning the rim of the Pacific Ocean.

Analysis within the TPDEARR is organized to accommodate an intermediate-term (>12 months) investment horizon and it can be helpful to all investors. In particular, the TPDEARR caters to an investment strategy which takes positions in a micro-portfolio ("squad") of equity assets each quarter, with approximately 4-8 equity assets in each squad. After **4 or more quarters**, positions in that squad can be closed and the capital reallocated to a new squad portfolio, realizing long-term capital gains. See attached chart: "TPDEARR Squad Portfolio Strategy Timeline".

IMPORTANT As a general note, we at **tkscm, limited** understand that, despite what economic textbooks sometimes claim, investors and markets do not behave rationally, but rather exhibit discontinuous, dependent, and nonlinear dynamics. Metrics which coincide with efficient market behavior (such as variance/standard deviation, the normal bell curve, and the CAPM/beta, to name a few) may be included in the TPDEARR, but only as a reference, rather than as a logical foundation for fundamental analysis or forecasting. TPDEARR analysis strives to provide insight through comprehensive interpretation of all aspects of the investment environment, not simply aspects which cleanly fit within a set of agreed-upon statistical models that work optimally under laboratory-like conditions. Due to the impact of non-operational market forces (ie: delaying a business move to coordinate with an earnings report in consideration of market sentiment), TPDEARR issues prioritize fundamental aspects of economic activity above statistical performance measures.

II. Risks, Disclosures, Terms of Service

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Investing in equities, the primary focus of the TPDEARR, is inherently risky. Only invest money that you can afford to lose if the market moves beyond your control.

Remember to be thorough in your research and exercise clarity and rationality in your investment decisions.

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III. "MAR Squad" Micro-Portfolio

The following equity assets make up the MAR Squad for the MAR.23 TPDEARR issue:

MAR.23 Squad

L	Stock Symbol	Equity Asset	Company Headquarters (listed)
•			
-	(FLMX)	Franklin FTSE Mexico ET	Γ F Mexico
-	(HOSE: FPT)	FPT Corporation	Vietnam
-	(INTC)	Intel Corporation	US
-	(SET: SCC/SCVPF)	Siam Cement PCL	Thailand
-	(ALBHF)	Alibaba Health Informati	ion Tech. Ltd PRC (Hong Kong)

Using the analysis in this research report, we find that this collection of equity assets in the MAR.23 Squad represents a potential micro-portfolio of *highly enticing investments* with independently substantiated geopolitical and macroeconomic evidence.

Taking positions allocating USD\$100,000 across these assets in proportion to individual measures of risk tolerance puts an investor in a strong position to realize returns over the intermediate-term horizon of 12-18 months.

The research and analysis in this issue are provided to you, the Subscriber, to help you make sense of the investment potential in taking up positions in these MAR Squad assets, and to provide a more comprehensive understanding of the myriad economic, geographic, and environmental factors to help inform your investments in the trans-Pacific economy. Each asset is further detailed below:

Mexico

The Mexican economy is currently in its next phase of industrial revolution and many individual companies are riding unprecedented market successes. First of all, **Mexico** has the relatively-unique feature of touching the **US**, giving it unparalleled access to goods and labor markets that are fueling its growth far beyond what would otherwise be possible. Sharing a long land border, history and economic relationship with the largest and most invasive economy of the last century has constructed a complex web of relationships between the two nations and their peoples. Mexican ancestry far precedes that of Europeans on the North American continent and Mexico has been present and jostling for position for the entire history of the United States. Just as the interconnectedness of the indigenous populations of the two nations predates the existence of the modern nations themselves, their futures will be realized in tandem.

As the economies of both countries grow, US direct investment in Mexico is reaching unprecedented highs^(BEA) at over USD\$100 Billion per year and growing regularly. These funds are largely directed into corporate expansions of manufacturing and infrastructure, with nearly 50% of total incoming FDI dedicated to the manufacturing sector^(DBM). These industrial improvements have a much further reaching economic impact than does, say, recognition of excess disposable tourist income in the hospitality sector.

Additional FDI interest in the financial services sector, mining, communication services and technology, wholesale and transportation also indicate a particular focus on advancing up the value chain, giving the greatest boost to the most established corporate players and increasing operational fundamentals for Mexico's future economy.

Being able to navigate the Mexican political terrain becomes more important as a company reaches greater heights. Large economic growth attracts more eyes and more political attention, but also greater access to FDI, giving large- and mid-(cap) companies an economic advantage. The **Franklin FTSE Mexico ETF** tracks larger and mid-size companies that are better capable of leading the march of economic strengthening as the Mexican economy increases its bilateral and multilateral trade deals around the trans-Pacific space. In general, Mexican President AMLO's strong portrayal of nationalism is a positive force for corporate returns in combination with the current thrust of Mexican economic growth.

FPT Corporation, headquartered in Hanoi, **Vietnam**, is the largest and most significant private ICT company in Vietnam as well as the surrounding region (apart from the state-owned Viettel), and operates in the three primary divisions of Technology, Telecommunications and Education & Investing. With 10 different subsidiary and associate companies offering digital products and services to Vietnamese and regional customers, FPT even caters its own "Made-by-FPT" technology ecosystem to its customers, complete with "AI, blockchain, cloud, IoT, and LowCode" platforms to help "businesses and organizations accelerate the digital transformation," a key feature of the trans-Pacific industry evolution (see: Geopolitical Shifts, for more).

Rapid digitization of Vietnam (and Southeast Asia more broadly) is providing an incredibly fertile commercial terrain for FPT to expand through. While the largest tech player in the space, state-owned Viettel, hefts its political authority and capital might through many doors first, it paves the way for FPT to quickly come through on its heels and accommodate market share from the enormous and rapidly growing commercial demand.

Regionally, FPT Software Korea, a subsidiary of FPT Software, grew over 70% YoY in 2022, with similarly spectacular growth prospects in Korea over the next few years as well. (FPT) The variety of different technological and digital services FPT offers its customers gives the parent company strong operational diversity and access to many opportunities on rapidly emerging industrial frontiers around the trans-Pacific.

FPT is currently trading around its all-time highs, though its trading volume is significantly lower than what is historical, indicating a broad consensus that the recent years' growth has been sufficiently "baked into" the corporate pie, leaving it primed for its next phase of market maturity. Regular 1.15:1 splits around early summer of each year maintain a recurring consolidation of investor scrutiny, a net positive for valuation metrics. Additionally, per FTP reports, nearly half of all FPT equity is owned by foreign investors indicating a breadth of regional geopolitical perspective on the company's future outlook.

Considering the desired minimum 12-18 months holding time for TPDEARR investing, FPT Corporation makes a very attractive equity opportunity for capitalizing on Southeast Asian digital growth.

Intel is a semiconductor company that is not currently experiencing its greatest possible heights. It is in a valley, in-between great periods of significance to the technology industry and global economy more broadly. Multiple times since its inception has **Intel** ridden to major market share dominance in a particular area, such as microprocessors in personal computers (= the reason why Intel is a household name) followed by a decline and subsequent consolidation of efforts; this time appears no different, and the signals are strong (read: <u>funded</u>).

Intel, the perennial revenue leader in the semiconductor industry, was recently surpassed in the category by **Samsung**, one of its primary competitors moving forward. This is a highly motivating turn of events for **Intel**. Competition between these (and a few other) trans-Pacific tech giants is fierce, and fiercely beneficial to technological progress. To clearly communicate its intent to jockey for top position in a technological arena of tomorrow, **Intel** has already allocated more than USD\$43 Billion for new and expansion fabrication plants of advanced semiconductors in Arizona, Ohio and New Mexico in the **US**, with at least USD\$100 Billion in possible capital expenditures on the table over the next ten years, whether or not assistance from the US CHIPS and Science Act of 2022 comes in to play. (SIA)

At its historical peaks, when **Intel** has held dominant market share in a particular technological area, its share price has been two and three times larger than it currently stands. This coordinates with increases in major capital expenditures for innovation. In the next generation of semiconductor fabrication, capacity = control. Because semiconductor technology has become so geopolitically sensitive due to security concerns inherent in technology, being required to outsource production, especially to a potentially adversarial economy, can be crippling for any tech conglomerate trying to compete. According to the recent data on outlays for next generation production capacity in the **US**, **Intel** will be competing with **Taiwan's** (globally leading) **TSMC**, **South Korea's Samsung**, and the **US** companies **Texas Instruments** and **Micron** for market dominance. It is good and healthy to see more than a single legacy corporation in the competition, and there are literally dozens more smaller competitors opening up new semiconductor productions in the US and seeking CHIPS Act capital assistance. (SIA)

Very familiar with navigating tech industry product rollouts and cooperative implementation contracts with other major legacy companies intrinsically involved in the modern world, **Intel** is looking at very strong growth prospects in the mid-term to long-term range as its fabrication facilities come online and begin

contributing to the next generation. At this early stage of the game, merely the tip of the iceberg of possible applications for its advanced chips has been explored. Capacity and position in an expanding field is nearly priceless.

Recent declines in Net Revenue and Net Income may result in even further consolidation of the share price as traders and investors with shorter term time horizons jostle their holdings, but the longer term outlook for **Intel** is much less uncertain. **Intel** *will* be a major player in the semiconductor game "tomorrow", and its share price will elevate to compensate for the commensurate re-evaluation of market dominance among the majority of market participants as foundry construction matures; picking up a position in the company now is in good accordance with TPDEARR investment horizon goals.

- (SCVPF) Siam City Cement Public Company Limited / INSEE Thailand

What's the main ingredient in urbanization? Cement. At more than $\frac{2}{3}$ of the total volume of material our species digs out of the ground every year, there is no alternative substitute on Earth that humans could use in the same abundance to accomplish the same task as cement. (B.TWS)

As Southeast Asia (SEA) continues to rapidly urbanize, cement must be poured to found the physical process. Though China, Vietnam and Indonesia host three of the largest cement producing industries in the world, Thailand-based **Siam City Cement** has a strong track record of growth, the pole position in the national cement economy, an impressive and growing collection of environmental accolades, access for international investors in public markets, and an expanding trans-Pacific regional footprint.

Thailand has been urbanizing at breakneck speed over the past few decades with over half of the total population now living in cities (now ~53.6%, an increase of nearly 20% in just a decade and a half) and an ongoing urbanization rate above 1.4%. (CIA) Notwithstanding the continuing expansion of Bangkok, which accounts for some 80% of all of urban Thailand, cement-forward infrastructural projects in the north provinces are also finding unprecedented levels of progress. Over 100 projects are in development in the "Smart City Development Programme", including the first urban light rail system outside of Bangkok. (TNT) Readers should be aware that progress on these fronts is groundbreaking—a biq deal for Thailand, whose highly-centralized governing structure typically concentrates capital and resources on Bangkok. The new light rail system is also planned to link up with the high-speed railway connecting Thailand to China through Laos, finally approaching planned operations in segments over the coming year. These large scale urban transit projects will augment the overall rate of urbanization as localities move to produce economic infrastructure on the advantages borne by cheaper and more convenient travel.

All of this non-Bangkok urban excitement bodes well for the concrete industry, particularly the leading player **Siam City**, as capital and development efforts from the central government expand to other urban areas, new foundations and expansions must be laid. Pre-existing relationships with the logistics infrastructure will make navigating new concrete projects around Thailand easier for **Siam City** than for other smaller and new entrants.

Regionally, Siam City also operates cement plants in Bangladesh, Sri Lanka and

Vietnam, the last of which also hosts additional benefits to regional market access. Vietnam is the largest exporter of cement in the world; its estimated 2023 production capacity of ~120Mt is almost double its domestic needs, so the rest is exported as a major source of revenue. And with the PRC's December 2022 reopening of trade throughout the region, concrete is already returning its steady stream into Chinese real estate and commercial development markets. Mainland China does not have a shortage of cement, but logistics considerations in transporting cement from the inner provinces to their coastal urban destinations frequently make simply purchasing it from Vietnam cheaper and more convenient.

Siam City operates five integrated and grinding plants in Vietnam, all of them either around Ho Chi Minh City or further South. Balancing national production so a greater capacity is installed in the Southern provinces has also recently been announced as an important goal for the industry, so **Siam City** isn't likely to find resistance as it continues to expand its regional footprint in the area.

Siam City continues to push hard to present itself as an eco-friendly operation, stressing water conservation, CO_2 emissions, sustainability and zero-waste goals in operations. Though progress on these metrics are difficult or impossible to verify in practice in many cases, the invitation of environmental scrutiny is positive for the industry as a whole, further incorporating environmental oversight into the concrete production process. Taking leadership in the green transition will allow **Siam City** to pioneer best practices in the region moving forward, gaining confidence both with investors as well as governments who approve and oversee most major infrastructural projects.

Siam City is **Thailand**'s largest and oldest industrial conglomerate; it is ½ -owned by King Maha Vajiralongkorn ("Rama X"), who also happens to be the world's richest monarch (net worth >USD\$60 Billion). It is a fundamental component of Thailand's modern emergence.

Over the next 12-18 months, most analysts agree that the effects of China's reopening will continue to pan out and pad revenue in the region, not just through tourism spending, but also for major regional players like **Siam City** who participate in a return to perhaps above pre-pandemic GDP growth levels for most developing economies (3.8% in Thailand through 2023). (BOT) Currently, **Siam City** is playing the cement game very, very well.

- (ALBHF) Alibaba Health Information Technology Limited PRC (HK)

East Asia is aging. **Taiwan**, **South Korea**, **Hong Kong** and **Japan** all have a median population age over forty (42.3, 43.2, 45.6, and 48.6, respectively) with the **PRC** hot on their tails with a median age of 38.4 and rising quickly. (CIA) As a larger percentage of the population enters into the older age brackets, healthcare use and costs rise at a commensurate rate. Particularly, in this day and age, pharmaceutical access is of the utmost importance for consumers, and the digitization of the medical industry, within their larger host economies more broadly, is rapidly facilitating expansions in digital pharmaceutical access. Enter: tech giant Alibaba.

The tech sector landscape in the **PRC** has undergone some dramatic evolution lately with the renewal of Xi's power structure and a refocusing of CCP-involved market efforts and national policy away from the software frontiers of the past decade, and towards advanced hardware frontiers (ie: semiconductors) with more pressing contemporary geopolitical and national security concerns. Enough big-named wings were clipped in Xi's recent tech giant crackdowns (Jack Ma, anyone? Or how about Pony Ma?) to remind the capitalist class who is in charge, so heads are likely to remain low for the next couple of years while major tech companies seek to increase the profits and efficiencies in businesses unthreatening to the CCP's policy directions, rather than trying to innovate their way into a new world order in China. Within that context, a number of giants like **Baidu**, **Alibaba** and **Tencent** have already thoroughly diversified their operations into seemingly countless business subsidiaries, and their centralized integration through mobile application access gives them incredible flexibility and leverage as the tech landscape endlessly evolves.

Alibaba serves over 120 million customers through **Ali Health Pharmacy**, (ALH) and its Tmall ecommerce platform, which also offers a wide variety of health and medical goods and services, reaches over 500 million customers worldwide, mostly throughout aging East Asia and Greater China. Customers can access tens of thousands of physicians through the platform network, renew their pharmaceutical prescriptions and have them delivered, find access to other medical and health equipment and services, schedule appointments at local clinics, and verify and pay for everything seamlessly with the fully integrated AliPay system.

In competition with this position of economic might is JD Health, of the mighty ecommerce giant JD.com. Though similar business dynamics underlie both competitors, the sheer existence of their commercial opposition in the pharmaceutical ecommerce space bodes well for consumer prices and the striving

towards earning consumers' trust. When comparing the two companies' financials it can be found that, though JD boasts a larger in-network physician count and higher recent revenues, its operating expenses have swelled recently, whereas Ali Health has dropped its OpEx below 21% and holding for the past 2 years, indicating good fundamental financial controls. (ALH) Moreover, **Ali Health** is strongly leaning into its technology-forward "Three Clouds" strategy, consisting of separate multi-pronged operations in pharmaceuticals, hospital services, and medical infrastructure. Each aspect of Ali Health's strategy leans into digitalization of the medical industry, particularly its "Medical Knowledge Graph" technology which underlies its efforts in medical AI, providing a knowledge base for AI diagnosis and treatment. (ALH) The future possibilities that internal technological innovation will provide for Ali Health, wholly apart from its incredibly popular pharmaceutical ecommerce services, which itself will be greatly boosted by the swelling median age in the **PRC**, are basically limitless, making it a likely superior competitor in the provision of mobile and remote healthcare to the enormous population of predominantly Chinese customers proliferating around Asia for at least the next couple of years.

A. Strategy and Future Disposition of MAR Squad

The MAR Squad is a collection of equity assets suggested as a micro-portfolio for investors for an intermediate-term investing horizon of **4-6 quarters**.

Investors who take up positions in the MAR Squad by purchasing equity shares on the open market can look to hold their positions until around **Q2 2024 - Q3 2025**, before realizing their gains and recognizing a lower, long-term capital gains taxation.

Refer closely to the attached chart: **TPDEARR Squad Deployment Timeline** for a strategy overview of how overlapping Squads are deployed and wound down to maximize returns and minimize taxation.

Strategizing how to deposition each Squad is an important aspect of realizing gains and calculating the proper taxation and profit. Assets in a Squad ought to be sold with the proper timing to maximize returns and minimize unnecessary taxation.

Ex: Investors who are taxed in the United States as "Married, filing Jointly" may sell assets that they have taken positions in from previous TPDEARR Squads (if positions were taken >12 months prior) and realize up to ~\$20,000 USD *in profit each quarter* while still remaining below the **\$83,350** IRS threshold for 2022. All profits below this threshold from the sale of such "long-term" securities will be taxed at 0%. In other words, If a married couple can live on ~\$7,000USD/month, this strategy affords a legally tax-free lifestyle.

IV. The Trans-Pacific Rim "Big Picture"

Great power games across the Pacific Ocean continue between the world's two largest economies: the United States (US) and the People's Republic of China (PRC). Technology, having thoroughly blurred and muddled the traditionally separative lines between sectors and industries, now serves up the great global race into the Green Energy Future as a highly complex affair with intractably interwoven competing interests among nation-states, major corporations, citizens, shareholders and the world financial system writ large. Energy to power national interests is center stage, and the sources of that energy, which are irreversibly shifting from fuels to critical minerals, are globally dispersed in much different ways than fossil fuels, resulting in a widespread reorganization of global supply chains from the prevailing world order. This process is underway, and will continue, with the US and PRC, again, the largest producers and consumers of the new energy order.

As geopolitical relationships adjust to compensate for changing consumer and commodity demands (see: Natural Elements), shifting population dynamics (see: Demographics), and the emergence of new relationships of comparative advantage, currency valuations will flux and respond accordingly (see: Charts), providing novel opportunities to trans-Pacific economies newly emerging into higher stages of development and wealth, such as **Vietnam** and **Thailand**.

Competition remains a major force of power in the newly emerging order. Though neither the **US** nor **PRC** need worry about losing their top-two spots, geopolitical relationships are adjusting and responding to competitive evolutionary forces in every corner of the trans-Pacific environment, shoring up competitive pressures and pooling resources and interests regionally. Even within domestic economies, constantly shifting technological environments create endlessly emerging opportunities for new entrants and disruptors in diverse marketplaces, with global access to capital providing funding to ideas from more people in more places than was previously available each and every day. The unbelievably rapid spread of digital technologies, particularly in some Southeast Asian economies with much lower levels of nationwide economic "production", is profoundly reshaping whole sectors while simultaneously allowing for a great deal of "leapfrogging" over historical benchmarks. No longer exclusively a thing of the West, it is now in the Wild East that the most exciting technological cowboys are pioneering the great technological frontier.

The primary material constituents involved in this rapid infrastructural upgrading

(along with cement, the irreplaceable and quintessential "legacy" player in the city-building game) are an ever-evolving mix of "critical" minerals and Rare Earth Oxides (REOs) whose particular chemical properties allow them to be uniquely incorporated into ultra-sophisticated manufacturing and industrial processes, consumer and advanced electronics and defense equipment, and a rapidly evolving universe of "green" technologies being pioneered to provide energy at little or no environmental cost. None of these end uses are diminishing; all of them are expanding. Most of the metals and minerals in this eclectic mix, due to particular application demands of efficiency, tolerance, consistency, cost, accuracy, durability or other factors, have no immediately available substitutes or replacements. Their use is more-or-less intrinsic and integral to the *modern* part of modern society, and on the same token, preventing or slowing the increased uptake of their use is directly supportive of the current (and much more-harmful) fossil fuel energy regime.

According to a recent report by BloombergNEF, a research specialist in the low-carbon economy, global investment in renewable/sustainable/low-carbon clean energy totaled USD\$1.1 Trillion in 2022, propelled by massive increases in investment in electrified transportation. This is the first time low-carbon investments have been as high as fossil fuel investments in a given year (\$1.1T), and this is *despite* capital increases in the fossil fuel industry brought on by global demand shifts for energy from the War in Ukraine. The quest for energy, the perennial nation-building project, is the contemporary quest to shift to an eco-friendly mineral-intensive energy regime *first*. Even though the **US** and the **PRC** are the biggest players, and can outlay the most capital, a smaller city-state like **Singapore** is likely to become carbon-neutral and then carbon-positive first. There will be lots of action in the trans-Pacific markets over the next 12 months.

On the current state of "Greater China":

As analyzed in previous TPDEARR issues, "Greater China" encompasses the **PRC** mainland, the Special Administrative Regions of **Hong Kong** and **Macau**, as well as **Chinese Taipei/Taiwan**. All four primary areas of Greater China share history and many aspects of race, family, language and culture; they have a common past and, due to geography, a common future, one way or another.

Xi Jinping, newly reinstated with an unprecedented third term as the president of the **PRC**, the general secretary of the Chinese Communist Party (CCP), and the chairman of the Central Military Commission (CMC), is on the front end of his new five-year tenure and he has quite effectively loaded the Central Committee and Politburo with supporters. Opposition to his motives is politically scarce and quickly stifled, an actual calm after the storm of his decade-long campaign to purge the CCP of "tigers and flies". Since he took power in 2012, Xi's anti-corruption efforts have ensnared over one million CCP members in scrutiny, from high-ranking officials and generals with contradictory views, to petty and corrupt civil servants, dramatically consolidating power as his 70th birthday draws near this summer. China's developments over the next half decade will be largely guided by Xi's own vision for China's future.

As has been recently laid out in the annual "Two Sessions" meeting that began March 3 and brings together the National People's Congress (NPC) and the Chinese People's Political Consultative Conference (CPPCC), the two primary governmental and non-governmental bodies in China, to determine and announce yearly budgeting, goals, planning, and party restructuring, the **PRC**'s ambitions are stable and legitimate for such an enormous economy. China, via Xi, desires to be seen and respected internationally as a formidable *first tier* global superpower, a feat already achieved in many aspects of the economic domain. The 2023 target of ~5% GDP growth, with specific emphasis on Environmental, Social and Governance (ESG) standards and technology, is a very reasonable and worthwhile ambition, and any nation would be proud to achieve these markers in a given year. There is nothing fundamentally wrong or misguided about **PRC** efforts to be a powerful equal in competition with the might of the **US**, for the good of its own citizens.

The Republic of Taiwan (**Taiwan**) and its reception of simmering tensions from the **PRC** across the Taiwan Strait remain, though all hope is not lost. Both parties clearly want a peaceful resolution to the issue of Taiwanese sovereignty, and this impetus bodes well for the global community more generally considering how the Taiwanese economy contributes uniquely to broadly desired and very important technologies,

though their ideas of that resolution are starkly opposed. In the end, **Taiwan** cannot effectively defend itself from Chinese aggression without international (read: US) support, so it remains a trans-Pacific international issue, further contributing to regional armament build-ups (and their associated economic effects) as well as immediacy and inclusion in any potential or current geopolitical affair. Progress towards mutually beneficial goals will help alleviate tensions and carve out a peaceful path forwards.

The Purchasing Managers' Index (PMI) in the **PRC**, which roughly measures whether a manufacturing sector is expanding or contracting, has shot up above 52 (baseline 50) for each of the past two months, indicating a strong resurgence of production after COVID curbs were lifted last quarter. China is "making" again, and this time, they are doing it under the imminent threat of a rapidly aging population that has ceased its great swelling and is now beginning to contract (see: Demographics, below). An aging and contracting society also indicates how important it is to mature the manufacturing and production capabilities of the economy to be able to climb up different value chains so as to be able to produce and trade more expensive goods and services in the global market, as richer nations do. This process of advancing capabilities is usually facilitated by price advantages attained through trading along international supply chains, being able to access resources where it is most efficient to purchase them. Geopolitical conflict will continue to make this manufacturing maturation process in the **PRC** slower, more disrupted, and more difficult for CCP leadership.

All these pressures notwithstanding, the PRC will march onwards, as their manufacturing sector is currently doing, (CNA) and their efforts will nonetheless have an impact on global economics. As China demands more energy for increased production, the costs for that energy will fluctuate on the open market in response to fluxes in demand, just as the inflationary impact of major spending increases will fluctuate in indirect offset to the additional goods the increases in production bring to market. Even though ecommerce giant JD.com has recently (March '23) warned that consumer confidence and spending might take time to rebuild, (CNA) this sentiment is separate and detached from the critical impulses of economic growth and expansion that the CCP (and all nations!) are pressing for at this very moment. Production will not simply wait until people feel like spending again, especially not when they can offload their unwanted domestic products onto international markets. Furthermore, these supposedly-cooled spending habits are also removed from the more necessary health and medical expenses that underlie growth in Ali Health. As it seems, China is running the engine, and the global economy will continue to feel it.

Inflation Expectations

Always preternaturally concerned with whether or not an economy is growing or dying, macroeconomic commentators insist on being able to determine whether or not a given society is experiencing, or about to experience, inflation or recession. Central banks around the trans-Pacific are in unanimous agreement that a "stable" level of ongoing inflation in an economy is healthy, indicating a widely shared belief that economic growth is intrinsically implied in the idea of economic health, and also that indication of that health can be monitored in a single parameter. We strongly encourage readers to decompose new inflation information when they come across it; 3% core inflation in an economy whose population is growing by 5% percent a year has very different effects than in an economy whose population is contracting by 1% percent (see: Demographic Trends).

Every economy is always either expanding or contracting in many different and overlapping ways, simultaneously, and ever-changing, with constantly recalculating relationships based partially on uncontrollable and international variables. Whether or not inflation is "good" is a nonsensical question, and the real impacts on an individual's economic profile are relative to the individual investor, spender, or saver, what country they live in, and how they use their money over time.

National governments look fondly on growth in general, and virtually all central banks target a varying-but-moderate level of growth (usually ~2-3%; see Charts) in virtually all economic environments. Even when overly-optimistic, managing inflation expectations is preferable to abstaining from the process, resulting in less-severe financial shocks and greater benefit from recovery and strengthening efforts. (FED)

Property Ownership

Property ownership is intrinsically bound up in discussions of a given economy's strength due both to large capital flows and supply chain impacts as well as common misconceptions about economic and financial behavior from individuals.

On the production and provision side, at least half of the raw material humanity extracts from the earth every year is sand, gravel and limestone, mostly for **cement** and/or concrete for buildings, cities, and the roads that connect them. (B.TWS) Between a third and a half of all the materials extracted in a given year are used to produce housing, so capital flows related to property development are an enormous factor in global economic dynamics.

Furthermore, notwithstanding the constant expansion of current metropolitan areas and the grounds-breaking of new developments around the world, older cities and homes also have a recurring need for updating and renovations. Most of the buildings constructed during the early-to-mid 20th century were done so with, by today's standards, low-grade and low-tech concrete, only capable of holding a few stories of weight and rated to last a handful of decades. Homes and infrastructure alike must be rebuilt over time with new materials and technologies; nothing lasts forever.

So we find ourselves with a global construction industry whose supply chains have been globalized, whose materials pricing regimes are now fairly rutted in their cost-effective international sourcing efforts, and whose primary components (ie: **cement**) have no existing alternatives. And on top of all that, most national governments smile brightly on greater levels of individual homeownership as a universal signal of greater economic development and international prestige, constantly encouraging progress in the sector and greater access to financial resources for new and first-time homebuyers.

Over the decades, these factors have created a home construction feedback loop that has become increasingly disconnected from the evolving mindset of potential home occupants. A growing percentage of people no longer desire stand-alone homeownership, with the long mortgage obligations at exorbitant rates, the large material and environmental footprints of being in a single-family home, less flexibility to move because of major housing cycle swings, and with less convenient access to the more abundant set of *urban* resources that a growing portion of the global population is getting more accustomed to. Many people don't want a world full of spread-out neighborhoods of single-family homes, but rather more-eco-conscious urban environments; greener, higher density, more walkable, less wasteful, etc. That many governments know this, and hold data on the trends, yet still push single-family homeownership and construction as the answer to economic woes is an ever-growing befuddlement.

It's great if the housing construction sector is doing economically well, but obviously not so great if the result of all that extra construction is a bunch of houses nobody can afford to live in (housing overhang) and that aren't contributing to the health of the nation. Property construction is always ahead of property occupancy, but if the actual economic growth conditions required to boost up new homeowners don't exist, those properties will go under- or unutilized, "ghost towns" are likely to pop up. By way of comparison, many of the ghost towns that have sprung up in the **PRC** since the year 2000 have started to attract and retain a core population. The construction of large multi-family buildings in these cities has made it easier for individual units to be bought and purchased by investors who are more willing to sit on an empty property until life starts seeping into the area, when the property can be turned over to a newly-eager and capable buyer.

How has this different approach translated to the total homeownership rate? In the **PRC**, homeownership is around 90% (ERPH), with indications that >80% of homes are owned outright with no mortgage obligations; in the **US** in Q4 of 2022, the homeownership rate was 65.9% (FED). Which population is better off with their approach? Since the economy of the **PRC** has passed the **US** in terms of purchasing power parity (CIA), Chinese yuan now go further for Chinese purchasers than do US dollars for US consumers. Perspective is important.

As another example of property ownership misconceptions and malfeasance enacting ruin on financial system mechanics in the US, many first-time American home buyers have been finagled into mortgage situations that are unsustainable due to income volatility, job loss, economic shocks, or any number of shady banking tactics to squeeze extra capital of financially illiterate consumers. These were the bulk of the unfortunate who lost their homes in the Great Recession in the US from 2007-09, and for many of them, part of the downfall was the fact that they shouldn't have been living in that home that they couldn't afford to make future payments on in the first place, and the bankers who pushed through their mortgage applications for the associated fees and earnings are to blame.

It doesn't matter if homes are built "faster than usual" as much as it matters whether or not the domestic economic environment and the potential new homeowner's economic inflows and wealth have expanded sufficiently enough to support a greater expense profile. GDP/capita figures, particularly

for the **US** (~USD\$75,000 in '21-'22), are not helpful in evaluating the general ability of the average American to afford homeownership because they collapse the upper wealth echelon into the much larger lower class, distorting the spread of incomes that actually exists towards the lower bound. It is also well above the *average* US per capita income (in '21 equalling USD\$37,638, half of the GDP/capita)(USCB), a figure that *itself* still contains the top earners. Putting people temporarily into homes that they cannot afford and will soon be evicted from does not really count as increasing homeownership. Unable to broadly reign in home prices, the **US** has a long way to go to improve this situation and reconnect homeownership to macroeconomic wellbeing.

In terms of equities in the trans-Pacific sphere of influence, housing production, sales and overhang volume impact current equity markets in very indirect and temporally-lagged ways. TPDEARR readers can monitor current housing market dynamics for indications of good exit points on their currently-held equities. For example, determining whether or not a drop in current sales volume corresponds to diminishing domestic consumer wealth, decreasing foreign demand, interest rate changes, or some other factor, will indicate whether and how the appetite for risk has shifted among the human participants and how that may affect equities holdings. Panic often spreads even quicker than greed (see: Other Events and Black Swans.)

Competition

Competition is the beating heart of the commercial world. Expansion of access to the competitive commercial environment and increases in the number of competitive participants results in increases in innovation, lower prices for consumers, inter-sector collaboration, and an international advantage by becoming a relatively more attractive magnet for intellect. In so many words, "the competition" is never finished, never paused, and ever-changing; there always remains an opportunity for a commercial advantage for the competitors most determined to acquire it. As such, (and because it is social human beings that we are specifically discussing,) the notion of competition is ubiquitous across industries, nations, companies and individuals.

Creativity thrives in competition, so more-competitive environments,

despite their shortcomings, produce a greater volume of more-competitive, more-creative solutions and ideas to all manner of human problems. Thus, market environments with fewer barriers to entry, greater competitive pressures, and more flexibility will produce a greater number and variety of novel innovations and be more adaptable to forward progress. Economically, central authorities are very interested in managing the competitive dynamics, but opinions vary widely about best practice therein, frequently presenting opposites as equally viable options.

A federal government can effectively stifle competition in an industry or sector by tipping the scales in favor of a major player in the space. Subsidies, exclusive contracts, barriers for competitors, biased policies or executive actions, and state intervention of corporate ownership and process are all ways in which the competitive environment is manipulated by central authorities. Since different international economies vary widely in their governmental organization, an endless variety of competitive environments potentially exist. Competition is a fundamental feature of human society, and the effects of the feature on the lives and wellbeing of those humans (and the surrounding environment) is directly influenced by the host nation's ability to manage market participation.

B. Geopolitical Shifts

Great powers ebb and swell, recoloring relationships; the great spending game to keep the world turning goes on. Commercial globalization has "liberalized" trans-Pacific economies' supply chains and international trading relationships by reinforcing systems of commercial intercourse founded on common and shared standards, like currencies, measurements and contracts. No longer is it possible for a nation to have an effective domestic economy without having an effective network of international relationships with which to acquire the resource inputs they need (via supply chains) and sell the goods and services they produce. *All economies* are interconnected.

The **US** and the **PRC** both have economies worth roughly USD\$25 Trillion annually, and they are the major trading partners for every single trans-Pacific economy. Political evolution and upheaval from both major superpowers are widely scrutinized; policy implications produced by said administrations have far-reaching and significant international ramifications, with the power to make or break small nations in one fell swoop. Both global poles (**PRC** and **US**) are aware of the weight of their impact; both seek to expand their own sphere of influence while simultaneously diminishing that of the other. Never before has China been able to counter US maneuvers on this international scale. Never before have domestic market supply chains been so thoroughly de-localized through regional and international players.

In reality, the **US**, in an act of leadership for all "Western" powers, must learn to share. It must share the spotlight in the Asia-Pacific region, and atop the global economic influence boards. It must share responsibility for policing seas, shipping lanes and waterways throughout Asia. It must share in managing and taking accountability for environmental efforts around the Pacific and the world at large. It must share in determining what is most desirable for the quality of life, security, and economic prosperity of Asians, in Asia, where the US is not. Sharing between the **US** and the **PRC** right now is not easy, but it is possible. Cooperation can succeed. Acknowledging China's legitimacy on the world stage and seeking to move forward from common ground can produce desirable results: progress. Though holding the CCP accountable for human rights concerns is imperative, China's influence throughout the region and world cannot be ignored in the meantime, and it is not dissipating anytime soon. As China's economy, already USD\$ Trillions larger than the US's at PPP, (IMF) continues to grow in size and influence, cooperative competition towards universally positive goals, such as the

Green Energy Transition, will help stabilize progress much more than defensive posturing and economic retaliation.

In the greater global scheme, very few leadership changes are expected to take place this year (see: Charts - Leadership Timeline). Economies will largely be able to focus on economic and domestic issues without spending money, time and effort on disruptive national elections. The runway is quite clear as so many leadership positions have either just begun, or are early enough in their terms not to warrant concern from major administration turnovers on the near horizon.

Supply Chains

After having been thoroughly globalized over the past few decades, supply chains are currently reshuffling into a more *regionally diverse* network of nodes and suppliers in an attempt to reduce exposure to chokepoints, bottlenecks and the risk of being locked out of business due to failures or disruptions from a sole supplier of a critical operating input. As companies seek to build resilience to system shocks through supply chain diversification, the world is discovering that being "globalized" does not mean that any economy can source whatever it wants from anywhere else, and that "stuff" is broadly dispersed around the world. In fact, most of the raw materials we really care about (from a technological development standpoint) have an easily countable number of financially viable sources, with many of those in the single digits. Supply chain diversification is a great idea; it also has its limits.

Take polysilicon as an example. Polysilicon is a critical ingredient in the current generation of solar photovoltaic (PV) panels, and there is broad consensus that solar energy's contribution to humanity's energy needs is strongly needed and greatly appreciated. To account, more than half of the global annual supply of polysilicon comes out of Xinjiang province in northwestern China, where human rights violations against ethnic Uiyghers are ongoing and include large-scale re-education camps. The Biden administration's imposition of sanctions on Xinjiang companies and products is certainly ethical and moral in spirit, but they are extremely difficult to enforce, and will not be effective without an alternative source of polysilicon (see: Selected Sector Analysis - Basic Materials, below).

Thousands of companies around the world participate in the solar PV economy: mining, refining, processing and distributing polysilicon; manufacturing, delivering, installing, maintaining and updating PV grid equipment in utility, commercial and residential arenas; and marketing, retailing, financing and administering each level of the industry from the chemical oxide carved out of the earth, all the way down to the end customer. Each of these companies is fighting for the expansion of this entire industry, which is also in humanity's best interest. Unless *somebody* invests USD\$ billions in capital and years in time to open up new polysilicon processing facilities in more geopolitically appropriate environments, and all the associated supply chain adaptations that would require, how could anything actually change? Many people's livelihoods depend on the persistence of their PV businesses, even if that means buying products from Xinjiang; business will go on as usual.

However, growth in this case is limited by geography. You can't mine minerals if they are not in the ground where you are mining (see: Natural Resources). Attempts to diversify critical mineral supply chains will proceed, but are severely limited by this geographical principle. Smart investors understand that, as the demand and ubiquity of certain technologies (based on certain critical minerals) grows, and the prices of particular raw inputs rise accordingly, new extraction opportunities will become newly financially viable with the higher price demand. Smaller "artisan" mines can be quickly acquired by much larger corporate players who can exploit the extraction opportunities with much greater efficiency, opening up new local nodes for regional supply chains. In such an environment, supply chain diversification for many different critical minerals can only occur once substantial price increases have opened, or re-opened, extraction opportunities, and only in geopolitically suitable conditions.

Geopolitical cooperation is vital for mineral extraction and effective supply chain management, and also equally as vital for restricting access to supply chains, such as in the multilateral arrangement currently hindering the **PRC**'s access to certain elements of the semiconductor market. At the most advanced end of the industry, at the "bleeding edge" of supercomputers and AI and defense technology, ultra-high-end semiconductors are required to enable the fundamental processing. For everything "behind" that bleeding edge, including most vehicles and consumer electronics, broadly available semiconductor components, technology and manufacturing equipment proliferate the market. Even if the **PRC** is effectively shut out from the very

front of the industry, more than ample opportunities exist for Chinese companies to gobble up market share and dominate an enormous swath of the "trailing edge" economy which accesses everyday consumers around the world.

Furthermore, because of persistently competitive forces with the **US**, continued innovation within the trailing edge environment will abound with even greater fervor and manpower than being applied in the same space from the Western economies. While busy trying to control the most advanced focal points of high technology, Western companies and innovators will pass up many novel technologies that will surely be discovered and found useful in the Chinese domestic economy, localizing **PRC** supply chains in the process.

Functionally, re-shoring and localizing of supply chains usually entails modification, implementation or expansion of infrastructural capacities in new locations, which itself is a process entirely tied up with the pouring of cement. **Siam Cement PCL** is in prime position to continue to capitalize on supply chain reorganization throughout the SEA region.

Modern Information Liquidity

The modern era is comprehensively marked by digital technology and the myriad ways in which they are reshaping traditional industry conventions. Remote access to services, remote request of goods, remote control over equipment and operators, remote monitoring of sensors and mechanics, remote access to a global marketplace, all of these dynamics and more are changing the ways in which customers make purchases and companies rise to meet and provide for those demands. The digitization of information makes that information more liquid by making it remotely accessible, more freely sharable than ever before, enabling new entrants into virtually all fields both new and evolving.

At an industrial-revolutionary scale, liquid digital information has reshaped urban Asia, now making a non-digital participation in those urban economies essentially impossible (or, only reserved for the lowest, discarded economic classes). Furthermore, liquid digital info empowers ruralites to an even greater extent, allowing them to leapfrog many of the time-consuming conventional steps of economic development that require massive outlays of

government capital and years of infrastructural upgrading. The Southeast Asian economies of **Thailand**, **Vietnam** and **Indonesia** are particularly taking advantage of the digital revolution and modern liquid info, function which is propelling some companies to new heights of commercial influence and success. **FPT Corporation** in Vietnam is capitalizing on the nation's increasing digitization by offering many different technology and communication based services all up and down the consumer and business demand chains. When a particular one of its subsidiaries or services strikes a vein of popularity, it already operates many other tech-related businesses from which it can leverage industry support to boost access and supply as quickly as possible. This gives it a particular competitive advantage in the rapidly evolving tech space.

Liquid digital information makes the commercial economy run faster and opens up the playing field, but it also makes political and authoritarian control more challenging. Since every economy operates by its own rules, the advantages of liquid info play out differently in every country, but digitization cannot be avoided in the long run. Widespread adopters of new technologies, like **South Korea**, **Japan**, and the urban sections of **Greater China** all make headlines with jaw-dropping advancements implemented into urban life, while the less-wealthy Asian economies of **Thailand** and **Vietnam** are incorporating digital services into their much-less-developed infrastructure with astounding efficiency and early results. Being able to access new technologies from other international commercial economies that can actually be applied to their own domestic uses has never before been realized in countries so far in the wake of the most developed nations. Smart cars haven't done much good where there aren't paved roads, but cell phones, digital information and the internet certainly have.

Rapid digitization of economies in the trans-Pacific has provided its citizens with mobile and relatively unprecedented access to largely liquid social and political information, a shift in the knowledge distribution spectrum within nations that is profoundly reshaping the way federal governments must engage with their citizenry. As autocracies grapple with how to control political dissent by controlling digital information, their citizens are all the while gaining more and more access to increasingly-liquid historical information, and international similarities and dissimilarities, all of which are re-shaping political perspectives on the fly. Exposure to democratic ideals (suffrage, representation, individual agency, political participation, etc.) can provide citizenries with new knowledge tools to topple or reshape harmful

autocracies, as well as hold elected officials accountable.

Some nations, like **South Korea**, routinely hold their heads of state responsible for breaches of trust and duty, a dynamic which reinforces the efficacy and importance of participation in the body politic by its citizens, who themselves are increasingly informed by liquid digital information.

In **Malaysia**, former PM Muhyiddin has recently been charged with multiple counts related to graft, corruption, fraud and money laundering, all supported by digital information. And this development is just months after another former Malaysian PM, Najib Razak, began his 12-year prison sentence for graft and corruption related to the looting of the 1MDB Malaysian state development fund during his term in office. Malaysians are holding their leaders accountable, and liquid digital information is fueling the machine.

Elected officials in governments all across the trans-Pacific can learn from these examples that they must accept that they cannot prevent the utilization of digital information. Democratic economies are heavily influenced by what is referred to as the Median Voter Theorem (MVT) which stipulates that the political will of the populace (once empowered democratically) can be measured by the political will of the median voter, who resides between the two political spectrums. As an example, if the total population of right-wing voters decreases, the median voter has shifted to the left. Politicians and leaders who recognize and apply the raw logic of MVT are more clearly able to discern the will of their constituents, and thereby become a more effective leader.

In the current age, liquid digital information has the power to abruptly persuade voters "in the middle", which can rapidly shift the median voter and subsequent MVT dynamics. Readers can look to present-day Mexico (see: Countries/Regions, below), to see how liquid digital information is feeding and informing the hotly-contested on-the-docket electoral reforms. In the end, the only way to stay in office is to gain approval from the largest body of constituents there is, indicated by the median voter/MVT.

In democratic economies, such as **South Korea**, **Japan**, the **Philippines** and **Australia**, those elected officials (and commercial enterprises!) who are engaging in the cooperative process of helping to guide the evolution of the digital industry and the healthy adoption of digital technologies through applied policy and clear direction of resources will find the greatest benefits

and the least popular resistance from their constituencies as their economies further digitize in the modern era. In single-party systems, like the **PRC**, and **Vietnam**, no MVT dynamics play out as democratic voting systems either do not exist or do not exist independently enough from central influence to function like actual democracies. National governments in single-party systems have a unilateral capacity to influence political and commercial markets as they see fit; if they so desire, they can easily reshape the visible narrative through coercion of dominant tech companies, undercutting the advantages otherwise bestowed by liquid digital information.

In all cases it can be clearly seen that modern information liquidity is present, ubiquitous, and relevant. Control over digital information gives the competitive advantage in the information age.

Competition

In the trans-Pacific space, the two primary planets of the **US** and the **PRC** have very different approaches to competition, each of which is uniquely empowered by the existential constitution of each nation. In the **US**, what are colloquially referred to as "states' rights" effectively empower each individual state to manage its own jurisdiction's market environments, including its commercial participants. The federal government of the United States does not directly manage or oversee private business ventures, but has only a limited regulatory capacity.

In the **PRC**, by contrast, the state has immense access to commercial markets and its participants, including state-owned enterprises (SOE), co-ownership or co/management of business operations, and unchallenged political authority. The **PRC** is governed by a one-party system; no opposition to the CCP's political domestic agenda exists or is tolerated. People who don't feel like this is the case, or who don't understand how *inflexible* this truth is, can ask residents of Hong Kong, or Xinjiang, or Tibet how they feel about their current state of democratic free speech.

The CCP's authoritarian ability to directly implement policy into many market behaviors is effective in its speed, but fails to effectively plan for risks because it suffers from a lack of scrutiny due to the absence of competitive domestic political forces. Economically, investors can expect this policy direction authority to be direct and generally forcefully implemented. The

ability to back rhetoric with capital outlay makes the CCP capable of actually steering sectors. In some cases, this makes them more competitive, particularly in international markets where other economies can't respond with the same degree of legislative policy latitude as in the CCP's single-party domestic environment.

As geopolitical strategies play out, the **US** is pursuing greater numbers of overlapping multilateral agreements with other Asia-Pacific and Indo-Pacific economies (ie: AUKUS, the Quad) to enmesh basically the entire Eastern Hemisphere of planet Earth in agreements that contain **PRC** growth from every conceivable angle, while still holding it as central and integrated into the global market economy. This is an impossible tightwire act and it will definitely not go according to plan, at least some of the time.

Nonetheless, the competitive ramifications of geopolitical developments are real. For example, most of the world's internet traffic runs through underseas cables. A new super-fast fibre cable connecting Southeast Asia to the Middle East (Western Asia) to Western Europe, called the SeaMeWe-6. Long desired, the cable is finally being pushed through by the major countries who all stand to benefit. (CNA) But who is to build it? Who is the fastest-growing manufacturer and layer of underseas cables? A firm called HMN Tech, according to data from TeleGeography. Who is HMN Tech? Cutting its teeth doing undersea cable work in smaller Caribbean and Pacific island markets, HMN Tech is officially called Huawei Marine Networks Co. Ltd., a subsidiary of Huawei. In 2019, sanctions coming out of the US administration were slapped on Huawei and others, making doing business with them difficult or impossible for many outside of China.

Long story short, HMN Tech lost the bid to build the fibre cable of tomorrow due to pressures from other involved nations unwilling to risk being subject to US sanctions via Chinese intermediaries; an American company called SubCom LLC got the job. In the modern geopolitical environment, strategic circumstances must always be considered in order to determine competitive advantages.

C. Demographic Trends

In the current moment, the most pressing demographic shifts are those of growth and age. Though migration concerns remain high throughout the Western world (including in the **US**, where nobody can agree about how to deal with difficult-to-control illegal southern border crossings coming in from Mexico, which serves as a conduit for opportunistic migrants throughout lower Latin America), this is obviously less so the case these days throughout East and Southeast Asia, where migration activity from the War in Ukraine also can't easily spread. Internally, certain age demographics are swelling in different economies at different times, offering novel opportunities and challenges in each.

To determine how many potential customers are going to be living in a potential market, as well as what kind of impact that will have on the larger economy, it's quite simple: count the people. (B.U) National governments are well aware of the positive economic outcomes of population growth, which also explains why they are so petrified of population shrinkage.

Population Growth

Major economies promote and desire population growth largely due to its potential economic effects, such as expanding the workforce and labor talent pools, boosting overall national GDP and raising the standard of living by increasing the quality and variety of goods and services available to its citizens. Of course, population growth is a double-edged sword, and its negative effects are becoming more obvious in an age in which citizens and investors alike are ever-more increasingly aware of the environmental impacts of commercial existence (see: Natural Elements).

In the **PRC**, the widely reported population contraction of 2022 is not necessarily a death knell for Chinese population growth in general, but it does clearly indicate to CCP leadership the reality of a national economy no longer supported by unprecedented population expansion. Moving forward, China's "whole nation" approach (according to CCP Vice Premiere Liu He) towards restructuring into a "Digital China" is critical, and the recently concluded annual "Two Sessions" conference laid out a fairly unified plan forward focusing on *maturing* certain critical industries (ie: national security, industrial and infrastructural upgrading) and *nurturing* certain new

industries and opportunities (ie: semiconductor technology, green- and eco-development.) As the population growth-leveling sets in over time, the **PRC** appears aware that advancing and maturing available capabilities is their most opportunistic way forward now that the country's economy lacks the thrust of an expanding labor pool. This transition, for the **PRC**, is both natural and inevitable.

Other East Asian nations have already begun their natural population declines; **Japan** has been shrinking since 2010, and **South Korea** since 2020. Now, those two economies are top competitors in the most advanced industries in the world. Leveling out population growth and economic industry maturing is not bad, it's different.

The Kingdom of **Thailand** is also nearing its population growth apex and will likely begin to contract any year now. The median **Thai** age is over 40 years old, and the Thai population pyramid resembles those of **Japan** and **Canada** much more than any of the younger Asian nations^(CIA).

On the expansion side of the coin, **Vietnam** and **Indonesia** still have decades of growth forthcoming, with even larger relative increases likely in **Malaysia**, and the **Philippines**. The **Philippines** alone is likely to add 1-2 million people to the Asian market every year for the next fifty years^(MT). Companies positioned to tap into the growing *regional* population will continue to hold first-mover advantages.

Population Aging

Apart from population density and growth dynamics, understanding the breakdown of age demographics within an economy is fundamental to interpreting that economy's ability to thrive in the current environment dynamics. As a country's people ages (such as in Japan, with a median age in 2020 of 48.4 years, ~4 years older than any other East Asian nation and ~18 years older than the average across Southeast Asia) (UN) the national priorities must shift to accommodate for a larger capacity for elderly care and a shrinking workforce due to aging out of the ability to perform many different disciplines. Opportunities abound for capitalists who can coordinate across federal policy outlays to take advantage of aging-related market expansions

where attention is being called.

Studying the different age groups of Asian nations reveals that **Indonesia**, **Vietnam** and the **Philippines** all have large relative populations of youth on the cusp of entering into working age and contributing economically to the nation and their own livelihood. In particular, **Vietnam**, a country that already has about a hundred million residents, boasts an enormous consumer population and strong economic fundamentals for its current growth pattern, so it has supportive conditions for continued consumer demands on new goods and services. This economic backdrop (further bolstered in **Vietnam** by a relatively large young adult consumer spending cohort) is inherently friendly to competition where it's not prohibited by policy, and the modern era of increasingly digitized goods and services provision faces far fewer policy barriers than older and more entrenched industries.

Younger generations are increasingly participating online, through their own devices, and with expanding economic independence due to digital currency economics, so countries (via companies like **Alibaba**, via its AliPay system) that manage to cater to them as a growing generation of spenders will find the most future success.

On the older end of the spectrum, as countries age, studies have found that individuals tend to participate in the workforce for longer, shifting wage and employment dynamics in new ways. In a March 2023 working paper released by D. Park and K. Shin of the Asia Development Bank, a "silver dividend" is discussed in terms of possible benefits to economic growth in an aging workforce dynamic. (ADB) The silver dividend basically suggests that increased longevity and a longer working life provide additional contribution to economic growth. Though the paper seems to find that the contribution from the silver dividend is ultimately too-little-too-late for an aging economy's overall economic rate of growth, the silver dividend does exist, and it is impossible to account for how increases to the digitization of medical care and adjustments in the quality of life for the elderly will reshape their ability to contribute to the future workforce, just as past experiences did so inefficiently for the current time. Optimistically, the silver dividend is actually a well of possibilities, and the contributions that the future elderly will be capable of making to the workforce have always been of an entirely different type than the young.

In **South Korea**, recent data from Statistics Korea (the official statistical

division of the Korean central government, operated by the Ministry of Economy and Finance) shows that elderly workers (over 60) have increased their participation in the workforce and brought down the most recent level of overall unemployment in the country by at least 0.3%; (SK) this is the silver dividend shining through clearly. Debate is ongoing about the quality-of-life impact on the elderly class from this increased participation.

Since all nations are aging at different rates, and treat their elderly differently, regional commercial success will likely only be found by those companies which can provide the right mix of products and services to cater to the specific needs of each market. In markets such as **Vietnam**, where roughly two thirds of the population is still living in rural areas, the elderly are traditionally cared for by their younger family members, and age projections estimate that the total population of elderly people over 60 is expected to double over the next twenty years, (ADB) providing the necessary health and medical services will be a much more remote-oriented challenge than it is in **Taiwan**, where nearly 80% of the population is urbanized and medical care is much more centralized and rapidly advancing.

TPDEARR readers will be wise to remember that investing opportunities may exist in the older, middle, and/or younger age brackets, depending on a given nation's other demographic factors and macroeconomic conditions. Seek out rising local capitalists who can manage new operations from personal experience in the target market.

Competition

As the aging trans-Pacific economies shift and adjust to compensate, many will seek to exploit and expand the silver dividend, re-enfolding older members of society into the economic network in more integrated ways. Multigenerational workforces will see different types of competition for positions and seniority. Younger workers will face more barriers to entry into legitimate industries as older workers fail to retire, also motivated by increasing levels of licensing requirements for many trades and professions, squeezing out an ever larger portion of the total potential employee base.

Competition in this new age is not immune to the finicky vicissitudes of age and the right to work, and the individual companies which most equally empower the largest diversity of employees will be able to tap into the

multiplicative power of intergenerational innovation. This ought to be a going concern and close point of scrutiny for all investors concerned with corporate governance standards and the quality of environment produced for a company's workers.



D. Natural Elements: Resources and the Environment

[<u>Disclaimer</u> - We at **tkscm**, **limited** understand that all humans currently live on a single, shared planet with finite limits to all natural resources cycled from a constantly evolving and diverse ecological makeup. Our species' ability to survive on the surface of our planet depends upon the sustainability of the resource systems and atmosphere we require. We engage in this process *commercially*.

Humans are not currently expressing a sustainable form of existence.]

REO = Rare Earth Oxide - a chemical from a collection of minerals whose particular properties can be exploited for certain technologies integral to the green energy transition, defense technology, artificial intelligence, supercomputing and ultra-advanced semiconductor production. REOs are unevenly distributed throughout the Earth's crust, with some only known to exist in financially viable amounts in one or two areas worldwide.

Eco-Urban Carrying Capacity

Cities, massive agglomerations of individuals cooperatively living together in concentration, are widely extant around the kingdom of the living, and they are not a human invention. Nonetheless, it is human cities and the growth of their environmental impact that are now the center stage of the living kingdom, and their environmental impacts are paramount. Because cities offer greater economies of scale and allow humans to live with generally less resource-use-per capita than rural inhabitants, we cannot neglect continuous improvements in eco-urban development in the ongoing design of our species' future.

Since all cities have a dramatic impact on the local environment, determining a population carrying capacity for an urban area that sustainably manages its ecological impact is perhaps the most important metric in all future urban planning. As most of the world will wind up living in cities over the coming decades, each locality needs to begin collecting and analyzing metrics on overall resource usages, waste production levels (including carbon!), and how much food can be produced and sourced locally versus imported in from nearby regions. Nearly all cities fail to produce even close to enough food to be nutrition-sustainable; there are great strides yet to be made in this

respect. Investors should look to **Singapore** for modeling of best-use practices in land and water management, urban infrastructure, green architecture, and self-sustainability.

Resource Extraction

A critical lynchpin in the current global resource extraction concern is what can be thought of as the human civilization energy requirement. This is not an exact figure, but rather a metric of how much total energy humanity utilizes/consumes to power its global society. Energy use is growing dramatically across Asia, particularly in the **PRC** and throughout **Southeast Asia** (OWID), and the major energy/fuel providers are the primary beneficiaries of this growth. As the green energy transition continues (which is, of course, a non-negotiable eventuality, if we agree that we intend to survive) it is the same legacy energy providers that are best positioned and best capitalized who will facilitate the operations. The resource transition will be from fuel-intensive (ie:, oil, coal, natural gas, etc.) to mineral-intensive (REO-based batteries, wind turbines, advanced rocketry and satellites, nuclear reactors, photovoltaics, etc.) and will be funded and performed primarily by the largest and usual players, those most likely to survive the enormous capital and logistic requirements.

As much as it may pain many environmentalists to admit, the largest fossil fuel companies are also many of the most likely leaders in the future clean energy game. Resource extraction is a complicated endeavor, requiring businesses to navigate swamps of land use and zoning rules, environmental harm, environmental activist blowback, massive upfront investments, possibly years of lead time before a profit can be turned, fluctuating extraction site viability due to volatile resources prices on the open market, opportunistic local officials who make ethics and information transparency more difficult, and countless other regulatory, financial and unforeseeable circumstances related to resource exploitation. New and undercapitalized companies trying to open up new (or newly-viable) mines or processing plants and carve out market share in the ever-expanding green energy game will continue to have a hard time not being trampled or acquired as the larger players deploy their larger resources and pre-existing resource extraction relationships with international governments, gobbling up an ever-greater market share themselves all the while.

Who will be the winners of the resource extraction game? Whichever among the big players deploys capital and efforts the fastest and most broadly will have first position and primary name recognition, with the leader spot already being challenged by **Saudi Aramco**, the mammoth **Saudi Arabian** natural gas and petroleum SOE with over USD\$160B in profits in 2022. Going green is a key (marketable) focus for Aramco, and large capital outlays in that direction (like the USD\$1.5B sustainability fund unveiled last October) will force competitors to follow suit—a good thing for everyone.

As the bulk of investments swings over to low-carbon technologies, the REO and mineral-based resources that enable those technologies will be folded into the greater energy-acquisition supply chain infrastructure, continuing to bring new entrants with specific mineral-rich deposits domestically into the game in new ways. The **Philippines** has the only two **chromium** mines in East or Southeast Asia, and some of the only extraction sources outside of Africa. (USGS) Similar is true for four **titanium-zirconium** extraction operations in **Vietnam**, which only have one other titanium mine regionally, in China, to compete with. (USGS)

As always, countless new and yet-to-be-discovered technologies use these and other REOs to facilitate novel advanced functions; it is impossible to know for sure which new markets will open up in the future, but it it's not impossible to determine, with a fair degree of support, who will be able to take advantage of new developments the quickest and most efficiently.

Carbon Trading

Putting a market price on carbon is an eventual certainty in the global economy. It has already begun in some local areas and the widespread economic effects are profound. Across the trans-Pacific, "cap-and-trade" programs (which regulate the given carbon markets) exist in **Japan**, **South Korea**, **China**, **New Zealand** and **Canada**, with many more in consideration or early stages. In the US, no national program exists, though (now twelve) states on the East coast have formed the Regional Greenhouse Gas Initiative cap-and-trade conglomerate, and **California** operates a tightly regulated program (largely boosted by the popular Zero-Emission Vehicle (ZEV) credit) with Tesla being one particularly notable success story. **Tesla** famously raked in hundreds of millions in \$USD each quarter from regulatory credits in California until it finally accounted for profitable revenue in 2020.

Implementing a pricing of carbon and allowing the mostly-free market to determine value and demand is a proven effective way to not only accelerate the innovation and adoption of eco-friendly and green energy technologies, but also support new entrants into concentrated industries, improve environmental data collection and analysis efforts, and constructively network a growing general public interest and awareness in the interconnectedness of human society with the natural world.

In 1997, in perhaps the largest and/or best known prior example, the Kyoto Protocol established billions of clean development mechanism (CDM) carbon offset credits and passed them out to 111 member nations over the ensuing years. In 2013, uncertainties about future prices in the international market caused the price to crash below about 1 euro/tonne, where it still remains. (RT) This does not prove that carbon trading programs are inherently flawed or unsuccessful, only that international concerns can make internationally-based markets less stable; local markets, as previously mentioned, have fared far better.

Japan's J-Credit Scheme, which has a purely national focus, has only been open for 10 years and already has nearly a thousand (944) projects in development. (IC)

Canada's GHG Offset Credit System, just launched in 2022, is another strong federal effort to encourage market-based incentives for the use and development of green technologies in businesses to reduce their environmental impact.

As these programs find continuing local success, the capitalist impulse will motivate their further spread throughout other nearby regional markets, a net positive for awareness about environmental impact. Investors would be wise not to overlook the impact of a carbon credit market applied onto the companies and industries they are targeting because, as was proven the case with Tesla, deftly navigating carbon credit regulatory terrain can be *very* worth the effort, allowing new competitors to gain leverage in industries being reshaped by environmental concerns.

From a stepped-back view, carbon trading is one approach to humanity's reconciliation with its energy use, particularly as it pertains to atmospheric emissions. Each year, more and more cities, counties, provinces, states, regions and nations are facing up to the ecosystemic realities of human existence and putting policy action into place where the environmental consciousness has risen to such heights that elected officials can't hope to

succeed without addressing it. As the proportion of humanity adjusts upwards towards environmental consciousness, so will the most clever capitalists (many of them employed at major energy companies, others at young "green" and tech startups with remarkable, yet-to-be-widespread technologies) find opportunities to negotiate their enterprises through public and market sentiments into eco-conscious profitability.



E. Other Events and Responses to Black Swans

Bank Failures

Competition. The name of the game continues to be competition. Just as there isn't anything fundamentally negative about **PRC** economic growth and a higher standard of living for Chinese residents, there isn't anything fundamentally negative about a competitive environment that permits its participants to fail. Failure comes in infinite forms and is an important cornerstone of the reality of economic survival. Competition, to prosper, profit and avert failure, helps all industries innovate, evolve and improve. Bulldozing those natural obstacles out of the way is to the detriment of the industry.

In banking, failures frequently have more consequential rippling effects than the collapse of other types of businesses as their interconnections throughout the entire commercial industry are much more variegated and complex. In some cases, the rippling consequences can be so severe as to necessitate intervention in order to, quite literally, make sure the global economy "turns on" again tomorrow. The crash of Silicon Valley Bank was not an event with this level of rippling significance. The downfall of Credit Suisse, however, is far more opaquely connected to major financial machinations. Its primary customers are not Silicon Valley tech startups, but global investment banks, institutions, and sovereign wealth funds. Opacity in the Swiss banking sector is perhaps the most attractive feature of the whole economy for many Swiss banking customers and clients, and the collapse of such a major player surely has some people nervous about what sort of information might come to light in the fallout. It's possible that a few sacrificial victims might yet surface.

In 2010, in the fallout of the Great Recession, banks were failing in the **US** once about every two days. (FDIC) Banking practices and economic situations can get much worse than this. Since 2000, only 562 banks have failed in the **US**. More than 650 banks failed in 1929 alone; more than twice that in 1930. Intervention in free-market banking by a central, federal authority (like the FED) is not the enemy here, it is the sole reason why our banking sector is so phenomenally stable today relative to history. In this case, libertarian impulses that pressure legislators in a given economy experiencing macroeconomic distress can be very dangerous.

The frequently-abused alchemy of financialization has made an incredible amount of capital available to global markets than has otherwise been printed by central banks around the world. It is with all that extra capital flow, managed and facilitated by banks, that countless new enterprises have been able to access otherwise-unavailable or inaccessible capital resources to get off the ground. Yes, obviously, financialization and leverage have inherent risks, and entrepreneurs should understand them. Business owners should, and many do, understand that access to capital is not a right; capitalism is a classist and privileged system; it is beset with flaws on all sides and has many foul actors; and there is always a risk of losing all your "money", which isn't even "real", no matter who may try to convince you otherwise.

The US FDIC insures all approved accounts up to USD\$250,000. That's much more protection than is available in most other global economies; it's also enough capital to make good use of TPDEARR investment research for a quarterly-funded lifestyle;-)

Don't be scared of banks. They help you, and you want them. Stay financially nimble and use them wisely.

V. Emergent Dynamic Elements

A. <u>Selected Sector Analysis</u>

Technology

- Semiconductors are the nerves of the economic body, processing information and transmitting it everywhere else. They are the fundamental lynchpin underlying computing, electronics and modern finance, growing in significance to the modern economy everyday. Humanity will not sacrifice the processing advantages provided by semiconductors; they are a fundamental "complex commodity".
 - New semiconductor manufacturing fabrication facilities (fabs) are sprouting up all over the US, with USD\$Billions in additional financial incentive provided by the 2022 US CHIPS Act. Over three dozen individual companies are planning new or expanded operations, with five major players (TSMC, Samsung, Intel, Micron, Texas Instruments) alone accounting for 17 new fabs and >USD\$180B in capital investments. (SIA)

Energy

Legacy fossil fuel companies are proving to be the players most capable of navigating the complex and multifaceted energy domain as it shifts from fuel-intensive to **mineral-intensive**. Deep pools of capital resources and long histories (however unethical or disastrous) of negotiating extraction and land-use rights with widely varying localities has given the most massive energy companies (including, around the trans-Pacific, **China National Petroleum** (state-owned), **Sinopec/China Petrochemical** (state-owned), **ExxonMobile**, and **Chevron**) some serious advantages in the new mineral resource extraction, refinement, and production regime.

For better and for worse, the very same fossil fuel companies that

continue to exacerbate the current climate conditions are more and more frequently becoming the ones who are actually allocating the largest amounts of capital and effort towards the mineral-intensive energy transition, and in many cases they are starting to prove profitable and scalable. Whether or not you approve, it is likely that some of these legacy corporations will also own large parts of the Green Energy Future, powering the businesses and people that make modern life possible.

➤ Many of the green energy companies of tomorrow are being pioneered by former employees of major fossil fuel companies who have spent time exploring alternative energy projects with the resources of their former employers.

❖ Basic Materials

> Polysilicon, solar photovoltaics (PV) and Xinjiang

The total installed capacity of solar panels, increasingly thinner and more bendable, is increasing every year, in virtually every country. Nobody thinks this is an inherently negative thing. And though, downstream, PV supply chains are expanding to reach more and new end users, their upstream materials footholds can not diversify so readily, or at all, in many cases. As an example, the material polysilicon is critical for producing the photovoltaic effect under the right conditions and efficiency, so it is an intrinsic component in modern solar panels.

Roughly half of all PV-grade polysilicon in any given year is produced in the **PRC** and comes out of the Xinjiang region of China, where terrible human rights abuses are believed to be occurring among contentions with the ethnically Muslim Uyghers, who are being forced into camps of the labor, reeducation and concentration varieties. An abundance of cheap local coal in the area has made power availability cheap and plentiful enough to power four of the world's five largest

polysilicon manufacturing operations. (The region also outputs about a fifth of the world's cotton, most of China's tomatoes, and a slew of other prominent exports and domestic goods, but these are not the focus of this point.) From there, refined polysilicon moves through the supply chain transforming into ingots and wafers before being sliced thin, fabricated into PV cells and combined into module assemblies for installation. One can't make the cells without the wafers, without the raw polysilicon, and the polysilicon itself is coming out of Xinjiang in every direction, where it's then reprocessed and advanced, destroying any trace of its origins.

Do solar modules coming out of Vietnam have Xinjiang-sourced polysilicon in them? Maybe, but there is no legitimate way for the customer to review or verify this.

Were polysilicon ingots that were manufactured in Malaysia produced from raw polysilicon sourced from Xinjiang? Unclear.

Is that portable solar panel that you just bought online actually an American product, or does it just have an English brand name and US customer service line, but its entire production and assembly process occurred opaquely in the **PRC**? In many cases, it's impossible to know for sure, especially for the consumer.

Unfortunately for human rights, the relatively low costs of production in Xinjiang, China have provided the world with abundant and highly-sought access to the raw materials powering the solar energy revolution, a profitable commercial mechanism which no doubt reinforces the oppressive conditions in Xinjiang, particularly for the minority Uyghers. We are all likely ignorantly complicit in this process.

The costs of the green revolution are not all equally palatable, so investors need to take careful consideration when "speaking with their capital" and taking positions in trans-Pacific materials companies whose entire business model depends on resource exploitation. Making challenges into a materials market dominated by a concentration of players who are

unduly benefitting from a privileged set of domestic conditions, such as polysilicon manufacturers in Xinjiang, investors need to be able to anticipate how *future* developments in the composition of material demands may or may not shift the dominance of players. If a new non-polysilicon material emerges as the most efficient and versatile, is the current generation of polysilicon manufacturing capacity adaptable? Or does new production capacity need to be built from the ground up? Will the largest and best capitalized players still have the advantage, even if they aren't the first ones to draw the conclusions? The low-cost conditions in Xinjiang are not specific to polysilicon per say, but rather manufacturing in general.

New technologies stemming from shifts in energy generation (from fuel-intensive machinery and infrastructure, to a mineral-intensive "green" infrastructure) will cause new dependencies to arise down the basic material supply chain. Staying in the loop *informationally* concerning how promising new technologies (ie: an alternative battery chemistry) might disrupt a particular industry will help the investor render major adaptations in the industry profitably and unsurprisingly. It's easy to invest confidently when it is understood why a broad market or economic change is occurring.

Utilities

What's the difference between an Electricity company, an Oil & Gas company, and a Utility company? Less every day.

Major players like **Xcel Company**, **Duke Energy**, and **Pacific Gas & Electric**, have each been providing energy to Americans for a century, and they each harbor both fossil fuel as well as electric operations. Notwithstanding that fact, they have all slipped in prominence to **NextEra Energy**, a much newer player and the self-proclaimed new leader in the decarbonisation game.

Though modern households require electricity (as a utility provision), the price of electricity is volatile and swings more than gas does in installed utility systems. One of the motivations for these swings is the complex set of consumer electric demand forces which account for individual as well as group behaviors, such as broad local usage increases when the sun sets every day. Another reason for price swings is the continual updating of the network of renewable electricity provision sources, such as when new solar or wind facilities come online in a locality or region, or when a wave of EVs and charging stations reallocates usage concentrations. Technological progress is allowing smart and expanding tech-forward utility/electric companies to address such volatilities and disrupt the traditional energy provision game, forcing legacy players to adopt and implement new technologies as well. As newer and more advanced electrical infrastructure is laid into new residential and commercial construction around the trans-Pacific, electricity access and use will become more universal while electricity generation (often through burning fossil fuels) scales up and becomes more diverse.

Some energy companies, like those listed in "Energy" above, will leverage their enormous piles of cash to initiate new renewable projects and participate in the green transition (a phenomenon already underway) by becoming suppliers of whatever new energy sources humanity cares to purchase and use. The mechanisms of capitalism-as-usual clearly indicate that energy companies, like most all companies, are competing not for the right to do business with a particular energy source, but for the mighty dollar, nothing else.

Many businesses and economies, particularly throughout the developing world, will continue to require fossil fuels to power their infrastructure, and some traditional energy companies will still be able to prosper within their more conventional fossil fuels production operations, but they will need to acclimate to shifts in the regulatory environment, particularly as it pertains to emissions associated with their procedures.

Consumer Staples

Living up to the name, the consumer staples sector had the least quarterly volatility over the past twelve months, never down more than 7% (see: Charts). America remains a market of avid and mindless

consumers with the label of "staple" in each consumer's mind constantly shifting.

Consumer Discretionary

The consumer discretionary sector had, by far, the most volatile trailing-twelve-month period, with quarterly performance fluctuating hard, swinging more than 39% across periods (see: Charts). Luxury retailers, as is the new usual, have shown much steadier growth than most other lower cost consumer goods.

B. Countries/Economic Regions

Extended notes for a few selected economies:

United States (US)

➤ As Bonny Lin, Director of the China Power Project, explained in her testimony to the US Senate Armed Services Committee in February 2023, the US/Biden Administration policy towards the **PRC** is laid out in three primary documents: the U.S. Indo-Pacific Strategy; the U.S. National Security Strategy; and the U.S. National Defense Strategy. Across each of these, three uniting priorities persist: Invest; Align; Compete.

The US CHIPS Act is one example of the Invest principle put into actual action, boldly allocating USD\$100s of Billions into "Three Families" of technologies; computing-related, bio-tech/biomedical, and clean energy. Beijing has responded in kind with USD\$50 Billion in initial capital contributed to a National Integrated Circuit Industry Investment Fund. The **PRC** should never surprise anyone in its willingness to compete with and against the **US** on the world stage, however it can find a way.

Moving forward, because the US government specifically mentions the PRC in policy measures as a threat to democracy, human rights, and international rules, this and future administrations are bound to recognize China as inherently aggressive in its actions. This is frequently not a truthful interpretation, and not helpful for future cooperation, but it is frequently utilized nonetheless because it is politically agreeable for the highly-fractious US electorate. Containing CCP influence and managing PRC breaches of international norms may be global security concerns, but so is the collapse of integrated US-Chinese trade. Perhaps the best way forward will be a position of "Strategic Frenemies".

People's Republic of China (PRC)

The annual *lianghui* ("Two Sessions") parliamentary meeting in March brought attention to a shift in apparent priorities for the CCP national agenda. Tech giant bigwigs of the last decade (such as Jack Ma, founder of **Alibaba**, and Pony Ma, founder and CEO of **Tencent**) were notably absent—an expected result from the recent tech industry crackdowns. Xi quite successfully reigned in any capitalist opposition to his (and the CCP's) future agenda over the previous few years, and the Two Sessions was emblematic of that accomplishment.

Nonetheless, the clear national and economic emphases for this year, as well as a testament for the next five years, are technological self-reliance and progress on environment, social and governance (ESG) fronts. (TD)

These are worthwhile goals in and of themselves, and the PRC is ultimately doing the responsible thing and advancing world progress by pursuing them. However, Western powers, along with weaker states within China's local sphere of influence, perceive national security concerns related to China's technological advancement to be so severe as to necessitate banding together in opposition to PRC progress on certain fronts, restricting global supply chains and access to key materials (such as REOs and advanced semiconductors). In this storm of opposition, world powers should rest assured that China will continue to press its competitive advantages, wherever it can find them, and seek progress, one way or another. This pursuit is China's right. Cooperation and competition are preferable to contention and conflict.

Vietnam

The continually contracting currency strength in Vietnam is fuelling its developmental ascent, making its exports cheaper and increasing its integration into the regional economy, particularly in its bilateral relations with the **PRC**, but also globally as well. Digital companies like **FPT Corporation** (see: MAR.23 Squad, above) have proven deftly capable of navigating the macroeconomic terrain in Vietnam to great market success. In 2022 balance sheet improvements alone, **FPT** added over VND\$1.5 Trillion (>21% total increase) to investment in its

subsidiaries, strengthening the breadth and depth of its reach and market penetration, as well as registering reductions in its overall liabilities and increases to capital and reserves, proving that tough economic straits can be profitably navigated through with good controls and direction. This is true for all economies!

Singapore

➤ World Bank data shows Singapore's <u>consumption expenditure</u> (generally speaking, consumption expenditure/consumer spending is the total value of goods and services purchased by households, including rent but excluding home purchases) at much lower levels as a percent of GDP than other highly developed OECD economies like Japan and the US. This difference holds big implications for the economies' differing levels of macroeconomic strength.

For reference, the IMF estimates that GDP per capita in Singapore in 2022 at purchasing power parity (PPP) is higher than USD\$130,000, nearly twice that of the United States. As we routinely discuss in TPDEARR issues, GDP is a blunt statistic that consolidates an incredible amount of diverse information into a single metric, but use in comparative analysis can still have its benefits. In comparison with Singapore, two such analyses follow:

Consumption expenditure as a % of GDP bluntly measures how much a current economy is swayed by consumer spending habits. While Singapore's consumption expenditure has dropped below 45% and GDP and is still falling, it's already significantly lower than in South Korea (mid 60%), Japan (mid 70%), and the US (low 80%)! Relatively, Singapore;s economy is much more connected to and dependent upon non-domestic and non-consumer expenditures than any other nation in Asia.

As a measure of GDP/capita, the average citizen in Singapore spends around USD\$22,000 annually at PPP. Compared to the US, at more than USD\$42,000 average annual spending per

capita, it is easy to see the difference in consumer habits. The average citizen in Singapore benefits from twice the national GDP per capita as does an American, and with only half as much consumption spending behavior.

Consumer spending habits are much less of a driver of overall economic behavior in **Singapore** than in any other trans-pacific economy. The economy of Singapore is, thus, much more internationally integrated and driven by public and government spending relative to other economies. Its macroeconomic globalization is *intrinsic*.

Malaysia

> Malaysian PM Anwar Ibrahim, who just recently assumed office in November 2022, is the fourth Prime Minister in Malaysia in only three years. A very messy and dramatic political upheaval has been roiling since the 1MDB wealth fund graft scandal that roped in politicians and celebrities the world over, and Anwar Ibrahim has finally emerged on top. However, his own past is extremely complicated as well. On the one hand, he was widely celebrated after leading Malaysia through unprecedented growth in the 1990s as Finance Minister, then held fast to free market principles during the 1997 Asian financial crisis when lots of people were calling for bailouts. His austerity and control were widely hailed. On the other hand, Anwar is an ethnic Malay Muslim who strongly opposes LGBTQ+ rights, yet he has also been booted from office, and convicted and imprisoned for illegal sodomy on two separate occasions in politically-motivated and internationally-debated events a decade apart, receiving a royal pardon and release from prison for the latter "offense" in May of 2018.

If Anwar can keep it together, cooperate with partner nations effectively, and ensure that Malaysians are benefitting from continual increases to their economy and quality of life while not being bogged down in the types of political vendettas he hopes to stomp out, the next 5 years of his term may be very

Philippines

The Philippines, the world's second largest island archipelago behind Indonesia, is a nation of nature. The geographical positioning of the Philippines along the Western edge of the Northern Pacific Ocean puts it right in the path of more typhoons than any other country on Earth, with an average of 20 reaching its territorial waters and 8 making landfall each year. On average, the Philippine economy and Filipino people are stressed about a typhoon making landfall and causing catastrophic damage once every 18 days. Additionally, the World Bank estimates that upwards of 74% of the entire population is vulnerable to numerous natural hazards, from coastal flooding and tsunamis to earthquakes and eruptions around any one of its 22 active volcanic sites (the Ring of Fire around the Pacific Ocean just keeps burning, though its geological-scale event agenda is easy to forget about within a tiny human lifespan). (WB)

Mother nature seems to have no intention of letting go of the Filipine archipelago anytime soon; the cost of her extreme events to the Philippine economy is estimated to be about 1.2% of GDP annually, (WB) more than the 1.1% of GDP that the nation annually spends on its entire military defense apparatus. (CIA) How to prepare for and manage slow-onset as well as rapid, extreme weather events needs to be continually addressed from a long-term policy perspective in the Philippines. Natural disaster damage and setbacks to ongoing development of critical infrastructure will slow the nation's growth relative to its SEA peers.

The most successful Philippine companies over the coming few years will be those whose assets are less susceptible to unpreventable decay from natural phenomena, whether from physical placement inland and away from volatile geographic terrain, or intelligent insurance and hedging practices against future losses facilitated by a financial system structured nimbly enough to manage devastating pauses in market activity from climate- and nature-related events.

Australia

The commonwealth of Australia is perpetually in play in the trans-Pacific. Thoroughly integrated into regional economics and supply chains, Australia is a member in multiple multilateral trade pacts, such as the ASEAN-Australia-New Zealand Free Trade Area and the Regional Comprehensive Economic Partnership, or RCEP, recently signed in November 2020 and connecting 15 Asian nations (including the **PRC**) and over 2.2 Billion people, the largest trade bloc in history. With a total annual GDP of about USD\$1.5 Trillion, the nation's economic contribution to the global economy is relatively small compared to other G20 nations, but the island/continent nation has perpetual geo-strategic relevance entirely independent of its economic heft.

The geographic position of **Australia** at the Southwest corner of the Pacific Ocean puts it directly South of Southeast Asia, even sharing some contentious island disputes with its nearest northerly neighbor, **Indonesia**, with whom it also shares membership in the MIKTA partnership (see: Mexico, below). Australia is a member of the Quadrilateral Security Dialogue (the "Quad", established 2007) with the **US**, **Japan**, and India; as well as AUKUS, an even newer trilateral security pact (announced September 2021) overseeing the region with the **US** and the UK, particularly to keep **PRC** spreading in check. This is all a slightly mixed message considering the trade relationship between Australia and China, and that Australia is also a member of the Asian Infrastructure Investment Bank, A **PRC**-led organization spearheading development across the Asia-Pacific markets.

The current tricky position is largely brought about by the maturing of the **PRC** nation and economy and its expansion throughout the region, destabilizing a system of liberal globalization and relative calm installed and maintained largely by the **US** and its globe-dominating naval and military presence since about the middle of the last century. **Australia**, a parliamentary democracy, a mostly-White liberal republic with elected representatives and Western-style institutions, puts the "West" in the Southwest Pacific. No, it is not the biggest economic player in "the game", but **PRC** growth and opportunism across the Asia-Pacific will not likely abate, and **Australia** has to continue to positively manage the dichotomy between promoting good relations

with **China**, its largest trading partner (see: Charts), while also countering the increasingly inflammatory rhetoric from **China**, the most significant ideological adversary in the eyes of the West, the party with which Australia agrees and is bound to oblige. Continual buildup of defense forces, such as through nuclear submarines via AUKUS deliberations, is likely.

South Korea

South Korea sits in the middle of a constant geopolitical firestorm. Whether it's threats and aggression from its North Korean neighbors, economic swells and contractions from trade and tariff retaliations between its largest trading partners (the **US** and the **PRC**), national security threats from naval repositioning into the Taiwan Strait (again, heavily influenced by posturing between the **US** and the **PRC**), or any other unforeseeable multilateral strife, **South Korea** is showing the world how to benefit in tumultuous waters from "strategic ambiguity". Not picking a definitive side on many issues has helped them thrive on multiple fronts.

- ➤ In reality, **South Korea** is slipping closer to the **US**-led pole and further from the **PRC**-led pole in most social and constitutional concerns, all the while continuing to integrate economically with the **PRC** in countless and sometimes intractable ways. (TD)
 - Seoul's Indo-Pacific Strategy is a system for dealing with economic ties to China and North Korean aggression while substantially pivoting towards the **US** and other democratic allies throughout the region, such as Canada and Australia.
- ➤ Relations with Japan, fraught after decades of postwar iciness, largely fuelled by Japanese war crimes and an unwillingness to accept responsibility, or even admit culpability, have a chance at thawing. South Korean President Yoon Suk Yeol met with Japanese PM Kishida in Tokyo on March 15 for the first time in 12 years, with largely positive results. However, those familiar with life among South Koreans will likely agree that such large-scale political machinations must correspond with actual accountability for the forced labor and sexual enslavement accusations at the root of the hostilities, otherwise actual

cooperation will continue to remain muted and only sputter along. It is unlikely that "sweeping it under the rug" will prove an effective solution.

- ➤ South Korea is also facing its own population growth problems. Along with Japan and China, these three high-profile aging and contracting population sets are also believed to be the three most expensive places to raise a child, which *must* be addressed by efforts at the national level if change is to be affected.
- > Chaebols, which are major, mostly-family-owned conglomerates spanning multiple sectors and industries, are the primary market movers in South Korea. For scale, roughly a dozen chaebols regularly control more than 80% of the entire Korean economy.

Chaebols arose after the Korean War ground to a halt in 1953. The devastated country rebuilt itself in a highly inflationary environment as the government printed money to pay for the war and reconstruction. In general, the entire industrial infrastructure had to be rebuilt, and the government passed out financial incentives to select family-owned businesses to spur and direct rapid development. In such a money-printing economy with rapidly doubling commodity prices, newly established chaebols could expand prolifically while the military-led federal government protected them from foreign entrants and provided a highly regulated market environment for growth. Growth occurred, but largely concentrated in the chaebols. Other businesses, and much of the public, still frowns on the torrid, obscure histories of political corruption and crony capitalism that plague all chaebols, but their contribution to the country's modern development, and their foundational incorporation into the nation's economic form, are undeniable.

Any given year, the top ten chaebols in South Korea account for more than half of the entire country's GDP, and each chaebol is structured as a patriarchal dynasty with a single chairman wielding essentially complete authority over the entire enterprise. The immense power that the privileged individuals atop these chaebol empires wields far surpasses that of any given elected official, whose days are always numbered and whose dealings are constrained by voter will. In this environment, modern South Korea has become a very market-led country with a very small class of corporate elites with permanent longevity and economic control influencing public and international policy. This might sound much worse to some than is actually the case, but it is nonetheless true. Conglomerate-friendly policy direction usually drives the boat.

> TPDEARR readers familiar with Japanese *keiretsu* business groups will notice some similarities to chaebols, but there are some differences, one which is particularly pronounced and worth touching upon: unlike their Japanese counterparts, chaebols are largely prohibited from delving into banking. Chaebol growth was historically largely government funded. A barrier between them and banking insulates many of the risks associated with systemic institutions having overly-easy access to monetary activity, a feature which now dots the Japanese economic landscape with "zombie banks" and companies that are essentially insolvent but still operating in order to continue to pay off interest payments on government-guaranteed debt, though the company has no net worth. Chaebols are more family-oriented and centralized than keiretsu.

Japan

The Republic of Japan is a nation with the unique global situation of being in constant, unrelenting need of fiscal prudence and monetary conservatism, endlessly dealing with the world's greatest debt load (~260% of GDP in 2022, the highest in the world). While the SEA nations of Indonesia and Vietnam have much more monetary flexibility with debt/GDP ratios under 30%, Japan must always keep a close guard on the purse strings, producing a much tighter environment for growth than is possible in other regional economies.

Nonetheless, Japan is a highly advanced economy and still boasts some of the largest, most technologically sophisticated, and most successful companies in the world. Continuing in this spirit of innovation will help the nation's economy remain relevant in the modern era despite its crushing debt load.

The population of Japan has declined for the twelfth year in a row from its peak around 128 million people, now sinking down near 125 million and falling. (IMIA) Prime Minister Fukio Kishida is acutely aware of the issue, and his administration is scrambling to incentivize raising birth rates by increasingly desperate means. Increases in federal budgeting for child-rearing services, cash incentives, paternal leave and who knows what other offers have and will continue to come out of the woodwork to try and alleviate Japan's aging crisis. One way or another, this will be an expensive problem to solve, either in upfront incentives and outlays now, or economic contraction in the future.

❖ Thailand

The Thai baht is on a strengthening streak, gaining more against all three major trans-Pacific reserve currencies than any other Asian nation except Singapore, with no immediate rate raises on the horizon coming out of the central Bank of Thailand. (BOT) As an export oriented economy (~65% of GDP export-based), a strong baht makes some Thai goods with few or no imported raw materials notably more expensive on the world market, such as rubber, gemstones and canned seafood, decreasing their cost attractiveness and potentially dampening revenues. However, increasing levels of industrial development in Thailand over the past 20 years have shifted the set of top export goods to more advanced products (including computers, electrical machinery and vehicles) which *do* benefit from cheaper import prices on raw materials and semifinished goods as well as cheaper energy and capital goods imports.

There is enough diversity in the Thai economy for capitalists in different industries to benefit from both a strengthening currency as well as major commercial export contributions to the rapid economic development throughout the Southeast Asian region. Cheaper energy input costs, potentially the most expensive part of cement production, bode well for **Siam Cement**'s future expenditures.

Mexico

Mexico is experiencing strong and prolonged economic strength over the past number of quarters. The market has a lot of opportunities for different sectors and industries, greatly powered by cheaper costs of production than in its Northern neighbors, while continuing to pay dividends from being connected by a long land border, and transportation infrastructure, with the enormous and insatiable **US** market. Geopolitical power games are "re-shoring" formerly Asia-centric supply chains (see: Geopolitics, above) onto North American shores, and Mexico is a much cheaper place to set up production than the US.

Mexico is one of the 5 member parties in the MIKTA middle-power multilateral partnership between Mexico, Indonesia, South Korea, Turkiye, and Australia. The informal partnership has been around for about a decade, but recently renewed interest has bubbled to the surface, particularly due to the tragic earthquake affecting Turkiye, geopolitical unrest in Asia and the South China Sea (directly impacting South Korea, Indonesia, and all global shipping), shared environmental problems, and the evolution of great power dynamics.

All 5 economies are G20 nations; all 5 economies have critical roles in the global economy; combined, the countries contain more than 550 Million inhabitants. As power dynamics adjust regionally, this coalition of rising powers has the potential for considerable sway in future regional affairs. We will be closely monitoring progress on this middle-power front moving forward, especially since all 4 of the trans-Pacific participants in the group have their own Sovereign Wealth Funds that could come into play when capital assistance is needed (see: Charts).

President Andrés Manuel López Obrador (AMLO) is widely seen internationally to be threatening some democratic institutions in Mexico, which are also being affected by legislators' new ability (since 2018) to be re-elected for a second 6-year term. Major electoral reform measures that will essentially dissolve the National Electoral Institute (INE) and defund and weaken

election processes nationally are currently being challenged in the Mexican Supreme Court. The strength of suffrage is always vulnerable.

> Mexico receives the most Foreign Direct Investment (FDI) in the first quarter of each year, sometimes totaling more than half of its annual FDI. Most of it traditionally comes from the US, but PRC FDI inflows are becoming more and more impactful in recent years, particularly as North American powers move to "nearshore" business operations and become less dependent on supply chain traffic through Asia. As this is occurring, Chinese companies are investing more and more capital in Mexico (USD\$100s of Millions annually)(OECD) to implement and expand factory operations to capitalize on regional cost advantages in renewed North American trade agreements. This may bring some international operations out of China, but it does not bring China out of international operations. The competition will remain strong in some of the more notably impacted industries, like auto parts manufacturing, as the boost to operations from these capital expansions (much of it from and in Chinese companies) plays out over the TPDEARR timeline of 12-18 months from now.

After the post-pandemic crash, the growth of Mexico's economy recently has been about 0.625% per quarter on average (2022 annual GDP = 2.5%), (OECD) though some think that growth may contract over the 2023 calendar year due to inflation. In our opinion, such inflation expectations (see: Inflation Expectations, above) are way too speculative to merit quantitative consideration. Rather, due to longer-term effects of how reshoring efforts play out, it's likely that FDI inflows will remain strong, as will their stretched-out effects, as Mexico remains the cheapest market within which to produce in North America.

In the **US**, by contrast, GDP growth in 2022 was 2.1%, or about 0.525% per quarter, (BEA) very similar to **Mexico**, but everything in America is much more expensive, including business operations costs. Moreover, the rapid rise in development in the **PRC** has elevated the cost of Chinese labor above that in

Mexico. So not only are infrastructural leases, electrical and energy costs, and access to the US market less expensive in Mexico than mainland China, now labor is also. The past couple of years since this wage-cost dynamic has shifted across the Pacific seem to be playing out with steady (pandemic-controlled) increases in economic investment and operational implementation in Mexico, with downstream market effects only beginning to be felt at scale. At least a few of the most competitive Mexican companies will rise to previously unknown international heights as they expand Westward across the Pacific into Asian markets, both as buyers and sellers, over the next couple of years.

❖ Brazil?

➤ Though the economy doesn't touch the Pacific Ocean directly, Brazil's newly elected President "Lula", an experienced politician with a working class claim to fame, is keenly interested in courting renewed relations between Xi and the PRC, reversing former President Bolsonaro's isolationism to help make Brazil a more-involved player in the trans-Pacific economy. Lula is governing on a platform to clean up the country's environmental record and preserve the Amazon rainforest as well as its ability to produce resources for the world. Increasing connectivity between the resource-rich Brazilian markets and the consumer-rich Chinese market certainly sounds like a budding bilateral relationship the likes of which could reshape trans-Pacific economic organization.

Future TPDEARR issues may consider addressing Brazil as a trans-Pacific market.

VI. Information Sources and Data Acquisition

All information and data used to construct the TPDEARR is sourced from publicly available sources, as detailed further in the attached "Sources" index at the end of the TPDEARR Issue.

The vast majority of all source information used is openly available via the companies, governments, institutions, regulators, watchdogs, and organizations that have collected and processed the data themselves.

Other factual information used in TPDEARR analysis and synthesis are drawn from published works in longer forms, such as nonfiction books (many of which are highlighted on the **tkscm**, **limited** Reading List), as well as various journals and essays. Furthermore, working papers and other works-in-progress from reputable and legitimate sources may be referenced as well, as they frequently provide valuable insight and information about many of the current frontiers of human thought exploration. Frequently, by the time information becomes formally published and is digested as headlines, the investment opportunity has long passed by. Information becomes relevant the instant that it becomes recognized as such, not whenever some arbitrary, interchangeable human officially recognizes it in an institutional publication.

Analysis in the TPDEARR uses data and information from many international sources around Asia and the Pacific, including some which also publish their original data in a non-English language. Where applicable, the appropriate translations of such data may include additional cultural context as needed to ensure a comprehensive understanding of the given data-producing environment.

Issues of the TPDEARR will always draw attention to interconnections among the widely varying units of information to synthesize a comprehensive "image of the whole". Understanding how the "organs" of the whole interrelate and affect each other can provide insight into how the "limbs" of the system operate, extend and contract, as well as details about the current, particular type of environment that makes up the "garden" from which future opportunities will *all* emerge. Whether aspects of an environment behave linearly, exponentially, fractally, chaotically or otherwise will always reveal itself when adjusted for scale. Even context *itself* must be taken within context, such is the global investment arena.

Thank you for purchasing the TPDEARR.

We hope that the TPDEARR provides you with helpful analysis and information to boost your wealth and improve your financial and investing literacy. Your investment situation is unique to you, so don't be afraid to draw your own conclusions and carve out your own path to success. Rely not on groupthink because, in the markets, the "wisdom of crowds" knows only a few behaviors, *greed*, *boredom* and *fear*, and they all lead to failure in the long run.

Good luck with the MAR Squad!

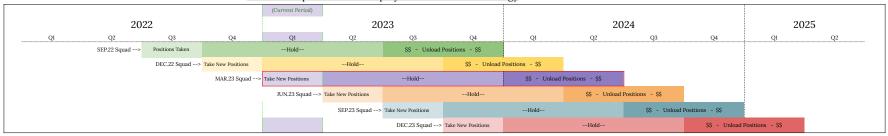
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VII. Charts, Graphs, and Data

The following pages contain a collection of charts and graphs assembled to provide visual relations among the major players in the Trans-Pacific economy.

This visual material section may rotate and/or expand each quarter depending on the relevant economic factors.

TPDEARR Squad Portfolio Deployment and Market Strategy



After realizing intermediate term growth performance, unload stock assets and re-deploy excess returns into a new Squad. Make sure to hold the assets in each Squad for a minimum of 12 months (if taxed in the U.S.) to receive long-term capital gains tax treatment.

Sector	Indicator	-12 > -9	-9 > -6	-6 > -3	-3 > 0		
Industrials	XLI	-16.49	4.27	9.97	0.18		
Materials	XLB	-12.46	-2.7	8.48	-3.01		
Real Estate	XLRE	-17.06	3.25	-7.06	-1.12		
Financials	XLF	-20.51	6.89	1.94	-5.01	<- collapse shock from SV	/B, Signature
Comm.	XLC	-20.06	-3.16	-7.84	15.59	Volatile, much? (>35%)	
Tech.	XLK	-17.99	3.28	-0.96	12.69	Volatile, much? (>30%)	
Cons. Disc.	XLY	-23.6	16.05	-15.21	6.92	Volatile, much? (>39%)	
Cons. Staples	XLP	-7.01	3.63	4.95	-2.97	qrtly ttm = most stable (V	olatility<12%)
Healthcare	XLV	-11.94	6.31	6.34	-5.92		
Energy	XLE	-0.62	6.74	7.55	-7.3		
Utilities	XLU	-9.67	14.8	-5.36	-4.06	hot summer = +AC use	
rounding is	rs are approxinused. The strends, not the	ngth of this pra	ctice lies in th	e prevalence,	absence and	[Summer] AC (electricity) me customers than [Winter] fos for warmth. (See: Utilities in Analysis)	ssil fuel burning

Economy	Indicator	-12 > -9	-9 > -6	-6 > -3	-3 > 0		
China	MCHI	0.27	-12.49	2.49	-0.32		
Japan	EWJ	-15.32	-0.83	5.66	2.77		
South Korea	EWY	-16.07	-8.9	3.51	4.87	<- consistent strengthening	
Taiwan	EWT	-16.52	-8.67	-14.41	6.97		
Hong Kong	EWH	-7.83	-4.96	5.02	-4.02		
Singapore	EWS	-13.92	3.82	2.14	1.45	<- low growth, but stable	
Vietnam	VNM	-20.41	-2.09	-13.78	-5.2		
Thailand	THD	-13.73	1.43	5.93	-3.16		
Malaysia	EWM	-14.96	-1.46	4.13	-5.39		
Indonesia	EIDO	-7.97	7.29	-6.18	-4.44		
Philippines	EPHE	-14.3	-2.25	0.23	1.59	<- consistent strengthening	
Australia	EWA	-17.97	2.07	4.57	-0.5		
New Zealand	ENZL	-22.38	6.04	6.02	-0.75		
United States	IVV	-17	5.83	-1.07	3.36		
Canada	EWC	-15.95	0.75	-3.4	0.86		
Mexico	EWW	-10.98	0.33	8.05	12.59	Strong economic improvement streak!	
Peru	EPU	-24.53	-8.8	9.72	1.97		
Chile	ECH	-7.66	4.5	-5.72	6.97		
The strength specificity of	of this practice l of particular data	luations of core mails in the prevalent points. This data to comic and geopolit	ce, absence and i	indication of tre ted in the conte	nds, not the kt of other		

Currency Profiles for Key Trans-Pacific Economies

			(FOREX performan	ce over trailing Major World Reserve Currencies	USD*	ding up to Ma	rch 17, 2023) JPY		
			National Economy	/ Currency					
Largest Glo	bal Reserve	> US	United States	USD	X	8.49	12.29		
			China	CNY	-7.82	X	3.57		
		JP	Japan	JPY	-10.93	-3.37	X		
	Western Pacific Region	SK	South Korea	KRW	-7.38	0.5	4.01		
	Reg	TW	Taiwan	TWD	-7.87	-0.1	3.73		
	cific	VT	Viet Nam	VND	-3.06	5.15	8.68		
	ı Pa	TH	Thailand	THB	-2.87	5.31	8.94		
	terr	SG	Singapore	SGD	0.57	9.31	13.11	<	most attractive Asian market for
	Wes	PH	Philippines	PHP	-4.72	3.35	6.92		cash, RE, inv. holdings
		MY	Malaysia	MYR RM	-6.43	1.02	4.49		
		ID	Indonesia	IDR Rp.	-6.74	1.03	4.63		
	ū	AU	Australia	AUD	-9.17	-1.43	2		
	egic	NZ	New Zealand	NZD	-9.36	-1.62	1.79		
	ic R	CA	Canada	CAD	-7.82	0	3.52		
	Eastern Pacific Region	MX	Mexico	MXN	9.88	19.31	23.46		strength is translating to market
	rn P	PA	Panama	PAB		(pegged to USD))	infrastructure	WW) as economy develops and advances
	ıste	CH	Chile	CLP	-3.19	4.51	8.64		
	閚	PE	Peru	PEN	-2.09	6.43	9.99		
					Yet again, the USD gains on all in Asia except Singapore, Mexico		The JPY falls again trans-Pacific Nichigin/BOJ h	currency;	
	Generally speaking, higher relative currency strength lowers the cost of Imports for an economy, while making Exports more expensive to the global market, and vice versa.					currently su predomin denomina	l economy is pported by a antly USD- ited global y regime.		



Updates to Geopolitical and Trading Context of Major Trans-Pacific Economies (largest TOTAL trading partner) (political decision Machine) Seoul Tokyo Beijing Taipei Hanoi Bankok Manila Kuala Lumpur Singapore Jakarta Canberra Wellington Ottawa Washington Mexico City South Korea Japan China Taiwan Viet Nam Thailand Philippines Malaysia Singapore Indonesia Australia New Zealand Canada US Mexico South Korea Japan X China Χ Taiwan X Viet Nam Thailand X Philippines X Malaysia Singapore X Indonesia X Australia New Zealand Χ Canada X US Χ Mexico Χ

Most of the Trans-Pacific world is getting along with each other, if not to cooperate economically, then to counter PRC aggression in the South China Sea area and around Taiwan.

(steady)

-> Boost to relationship
-> Contraction of relationship

CPTPP Trade Agreement incl. -> JP, VT, SG, MY, CA, CH, PE, MX, NZ, AU, Brunei
RCEP Trade Agreement incl. -> AU, CN, ID, JP, SK, MY, NZ, PH, SG, TH, VT (also, Brunei, Cambodia, Laos, Myanmar)

[Trend indication is determined according to economically impactful behavioral: increases/decreases in trade agreements; approvals of international funding/credit/lending; emergence of new multinational corporate agreements; major advancements/innovations in critical sections of the global supply chain; expansion of infrastructure and opportunities due to continued expansion of China's Belt and Road Initiatitive (BRI); shifts in the national security backdrop for major nations; etc.]

Sovereign Wealth Funds in Trans-Pacific Economies

(in USD\$Billions)

	Economy	Fund Name	Assets Under Management/AUM	Founded
	CN	China Investment Corporation	1,350.00	2007
	CN	National Council for Social Security Fund	473.00	2000
	CN	China-Africa Development Fund	10.00	2007
<u>u</u>	HK	CNIC Corp. Limited	33.00	-
Sigi	HK	HK Future Fund	29.00	2016
8	HK	HK Monetary Authority Investment Portfolio	514.00	1935
fic	HK	HK Investment Corp. Limited	4.00	-
aci	SG	GIC Private Capital	690.00	1981
n P	SG	Sentosa Development Corp.	1.50	1972
er.	SG	Temasek Holdings Limited	496.00	1974
Western Pacific Region	TW	Taiwan National Financial Stabilization Fund	53.00	1973
\geq	ID	Indonesia Investment Authority	5.50	-
	VT	State Capital Investment Corp.	2.40	2005
	SK	Korea Investment Corp.	169.00	2005
	JP	Japan Investment Corp.	3.60	2018
	AU	Future Fund Management Agency	133.00	2006
디	AU	NSW Generations Fund (Debt Retirement)	10.00	2018
	AU	Western Australia Future Fund	0.98	_
Re	NZ	New Zealand Superannuation Fund	35.00	2002
ijc	CA	Alberta Investment Management Corp.	123.00	2008
aci	CA	Northwest Territories Heritage Fund	<0.5	2012
A C	CA	Ontario First Nations Sovereign Wealth Fund	<0.5	2018
err	CA	Little Red River Cree Nation Sovereign Wealth Fund	<0.5	2019
Eastern Pacific Region	MX	FoMePe / Budgetary Income Stabilization Fund	1.50	2014
日 。	US	Separate funds in states: AB, AK, CO, ID, LA, HI, ND, NM, OK, TX x2, UT, WV, WE, WY	-	-

(this list is not exhaustive)

 $[\]mbox{*}$ data provided by specific fund financial reports where available, otherwise, the Soverign Wealth Fund Institute

MAR.23 Online Sources and Information Access

Source Country	Source Code	Source Name	Source Item	Source Type	
INT	IMF	International Monetary Fund	Website	Data/Information	
INT	WB	World Bank	Website	Data/Information	
INT	UN	United Nations	Website	Data/Information	
INT	APEC	Asia-Pacific Economic Cooperation	Website, Reports	Data/Information/News	
INT	AB	ASEAN Briefing	Website, Reports	News	
INT	WNA	World Nuclear Association	Website	Data/Information	
INT	SIA	Semiconductor Industry Association	Website, Reports	Data/Information	
INT	AS	ASEAN Stats Data Portal	Website	Data/Information	
INT	IEA	International Energy Agency	Website, Reports	Data/Information	
INT	WRI	World Resources Institutue	Website, Reports	Data/Information	
INT	ERPH	International Journal of Environmental Research and Public Health	Journal/Academic Reports	Journal Articles	
INT	MT	macrotrends.net	Website/Key Indicator Reports	Data/Information	
INT	CM	CemNet - International Cement Review	Website, Reports	Data/Information	
JP	ВОЈ	Bank of Japan	Website, Reports	Data/Information/News	
JP	JMIA	Japan Ministry of Internal Affairs	Website, Reports	Data/Information/News	
JP	JC	Japan J-Credit	Website, Reports	Gov/Data/Information	
SG	MAS	Monetary Authority of Singapore	Website, Reports	Gov/Data/Information	
SG	CNA	Channel News Asia	Website	News	
СН	ITC	International Trade Centre	Website, Reports	Data/Information/News	
SK	SKCI	Chosun Ilbo	Website	News	
SK	SK	Statistics Korea	Website/Key Indicator Reports	Gov/Data/Information	
SK	SKKH	Korea Herald	Website	News	
SK	SKKT	Korea Times	Website	News	
НК	HKFP	Hong Kong Free Press	Website	News	
PH	ADB	Asian Development Bank	Key Indicator Reports; Asian Economic Integration Report 2022	Information/Development	
CN	AIIB	Asian Infrastructure and Investment Bank	Website, Reports	Data/Information	
CN	CEIC	CEIC	Website	Data/Information	
CN	AB	ASEAN Briefing	Website	Data/Information/News	
CN	СВ	China Briefing	Website	Data/Information/News	
CN	SCMP	South China Morning Post	Website	News	
CN	ALH	Ali Health	Website, Reports	Data/Information/News	
UK	OUP	Oxford University Press (International Affairs)	Website	Journal Articles	
UK	RT	Reuters	Website, Reports	Data/Information/News	
UK	OWID	ourworldindata.org	Website/Key Indicator Reports	Data/Information	
VT	OGA	OpenGov Asia	Website	Data/Information/News	
VT	FPT	FPT Corporation site	Website, Reports	Data/Information/News	
VT	SBV	State Bank of Vietnam	Website	Government Portal	
AU	GA	Geoscience Australia	Website, Reports	Government Portal	
MX	BDM	Bank of Mexico	Website, Reports	Government Portal	
MX	DBM	Doing Business Mexico	Website, Reports	Data/Information/News	
TH	TNT	The Nation Thailand	Website, Reports	News	
TH	BOT	Bank of Thailand	Website, Reports	Data/Information/News	
US	FED	The Federal Reserve of the United States	Website, Reports	Gov/Data/Information	
US	USCB	US Census Bureau International Database	Website	Statistics (via each nation's respective national statistical	
US	USDA	US Department of Agriculture	Website, Reports	Gov/Data/Information	

US	USDC	US Department of Commerce	Website, Reports	Gov/Data/Information
US	BEA	US Beaureu of Economic Analysis	Website, Reports	Gov/Data/Information
US	USDS	US Department of State	Website, Reports	Gov/Data/Information
US	SEC	Securities and Exchange Commission	Company Filings	Gov/Data/Information
US	NASA	National Aeronautics and Space Administration	Website	Gov/Data/Information
US	USTR	US Treasury Department	Website, Reports	Gov/Data/Information
US	TD	The Diplomat - Asia-Pacific	Website	News
US	CIA	CIA - World Factbook	Website	Data/Information

Offline Sources

(establishment and evolution of background context and information)

Each of these sources was read in its entirety by a contributing Member of **tkscm, limited** within the 36 month period ending March 2023. Further readings can be found on the **tkscm, limited** Reading Lists at lopsiii.com.

Source Code	Source Type	Source Title	Source Author
	Book	21st Century Monetary Policy	Ben Bernanke
	Book	8 Billion and Counting	Jennifer D. Sciubba
	Book	A Brief History of Indonesia	Tim Hannigan
	Book	A Natural History of the Future	Rob Dunn
	Book	Adaptive Markets	Andrew Lo
	Book	Afterburn	Richard Heinberg
	Book	An Immense World	Ed Yong
	Book	Antifragile	Nassim Nicholas Taleb
	Book	Arriving Today	Christopher Mims
	Book	Bound By War	Christopher Capozzola
	Book	China in One Village	Liang Hong
	Book	China's Battle for Korea	Xiaobing Li
	Book	China's Super Consumers	S. Chan and M. Zakkour
	Book	Economics for a Fragile Planet	Edward Barbier
	Journal/Magazine	Foreign Affairs	Council on Foreign Relations (nonprofit, nonpartisan)
	Book	Hivemind	Sarah Rose Cavanagh
	Book	How to Hide an Empire	Daniel Immerwahr
	Book	Inefficient Markets	Andrei Schleifer
	Book	<u>Leap</u>	Howard Yu
	Book	Misbehaving	Richard Thaler
	Book	More From Less	Andrew McAfee
	Book	People, Power, and Profits	Joseph E. Stiglitz
	Book	Prisoners of Geography	Tim Marshall
	Book	Something for Nothing	Maureen O'Hara
	Book	Smart Cities of Today and Tomorrow	J. Pelton/I. Singh
	Book	Stress Test	Timothy Geithner
	Book	The Age of Sustainable Development	Jeffrey D. Sachs
	Book	The Authentic Confuscius	Annping Chin
	Book	The Black Swan	Nassim Nicholas Taleb
	Book	The Economics of Inequality	Thomas Piketty
	Book	The Elements We Live By	Anja Royne
	Book	The Fifth Risk	Michael Lewis
	Book	The Future is Asian	Parag Khanna
	Book	The Future is Faster Than You Think	P. Diamandis and S. Kotler
	Book	The Hidden Wealth of Nations	Gabriel Zucman

	Book	The Long Defeat	Akiko Hashimoto	
	Book	The (Mis)Behavior of Markets	Benoît B. Mandelbrot	
	Book	The Moment of Lift	Melinda Gates	
	Book	The People's Republic of Wal-mart	Leigh Phillips and Michal Rozworski	
	Book	The Quest	Daniel Yergin	
	Book	The Reality Bubble	Ziya Tong	
	Book	The Sun's Influence on Climate	Joanna D. Haigh and Peter Cargill	
B.TWS	Book	The World for Sale	Javier Blas/Jack Farchy	
	Book	<u>Unfree Speech</u>	Joshua Wong	
B.U	Book	Upside	Kenneth Gronback	