Financial Brigadoon
Ivey Conference 2023

Metamorphosis of the Old Economy & Restoration of Stock Pickers

Robotti & Company Advisors

April 2023

Critical Thinking

Bernard Baruch:

"Information cannot serve as an effective substitute for thinking"

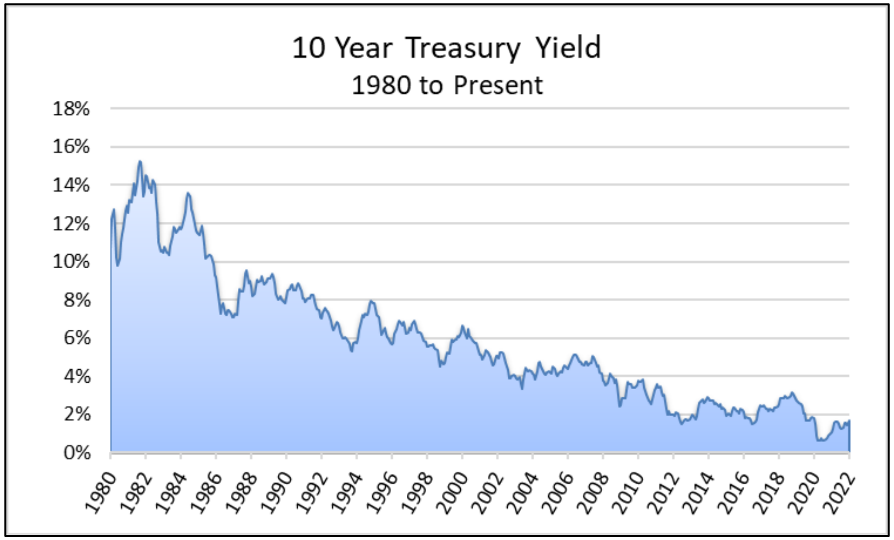
Howard Marks:

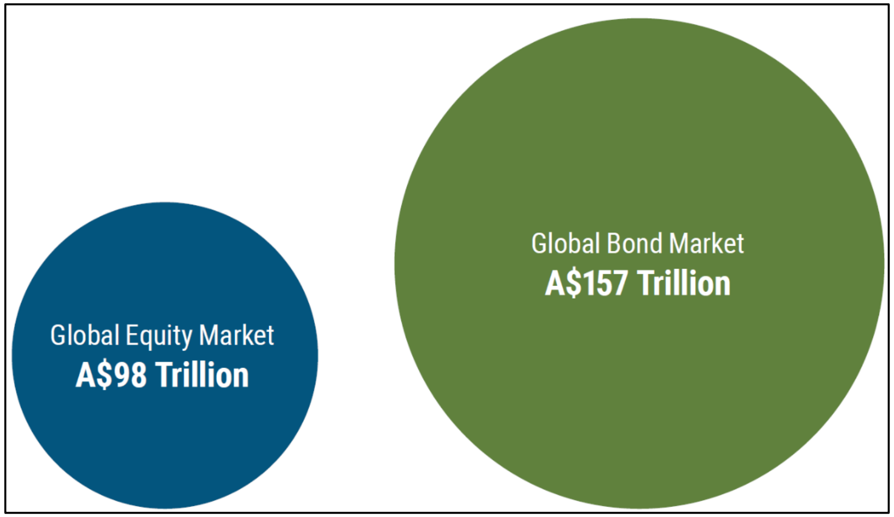
"Since quantitative information regarding the present is so readily available, success in the highly competitive field of investing is more likely to be the result of superior judgements about qualitative factors and future events"

Observations of 50 years of Investment Cycles

Beware of the "New Normal"

- It's really been a 40+ year cycle
  - Interest rates have consistently decreased since the early 80's
  - The investment community forgot the well-known truism that **past performance is not a predictor of future results**
- As a result, fixed income has had a 40-year bull run which is likely ending
  - Global fixed income markets are **nearly 2x the size of global equity markets**
  - We expect a seismic reallocation of capital from fixed income to equities in the coming decades





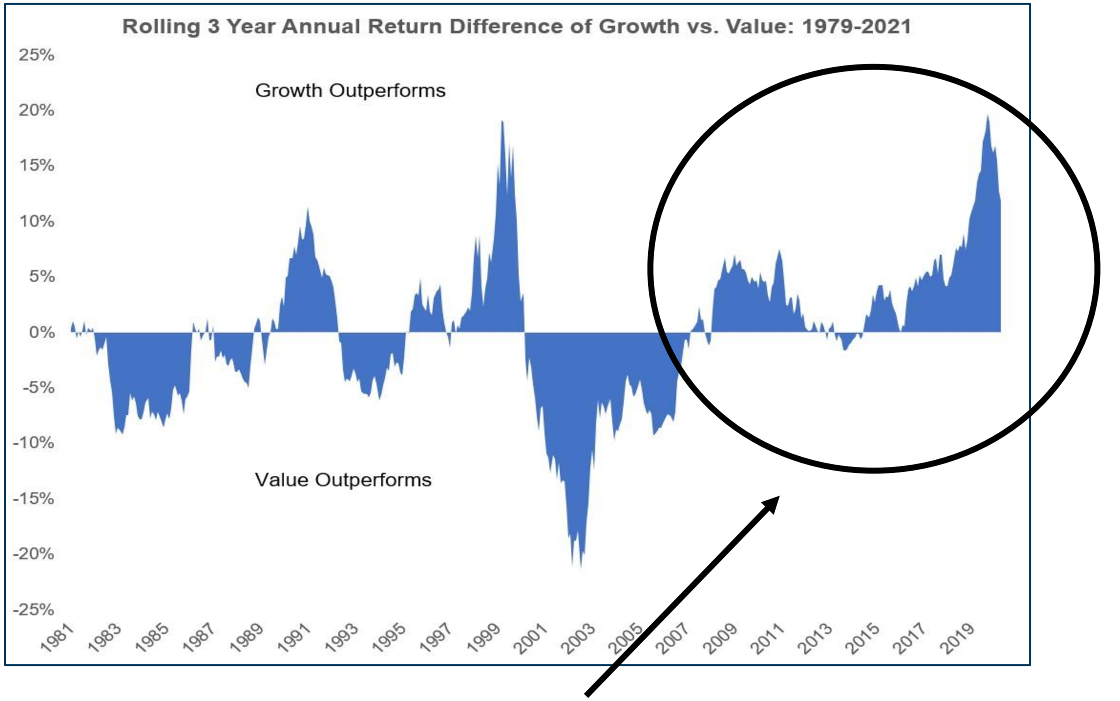
Myopia of Linear Thinking … Be Wary of Headlines

"It ain't what you don't know that gets you into trouble, it's what you know for sure that just ain't so."

– Mark Twain

The Post 2008 Period or “Free Money”

- Since 2008 there has been
  - Low economic growth
  - Decade setting low inflation rates
  - Low to negative interest rates
  - Quantitative easing and significant stimulus from central banks around the world



A nearly 14-year cycle of outperformance by “growth” with only a **handful of major companies like FAANGM driving most of the returns!**

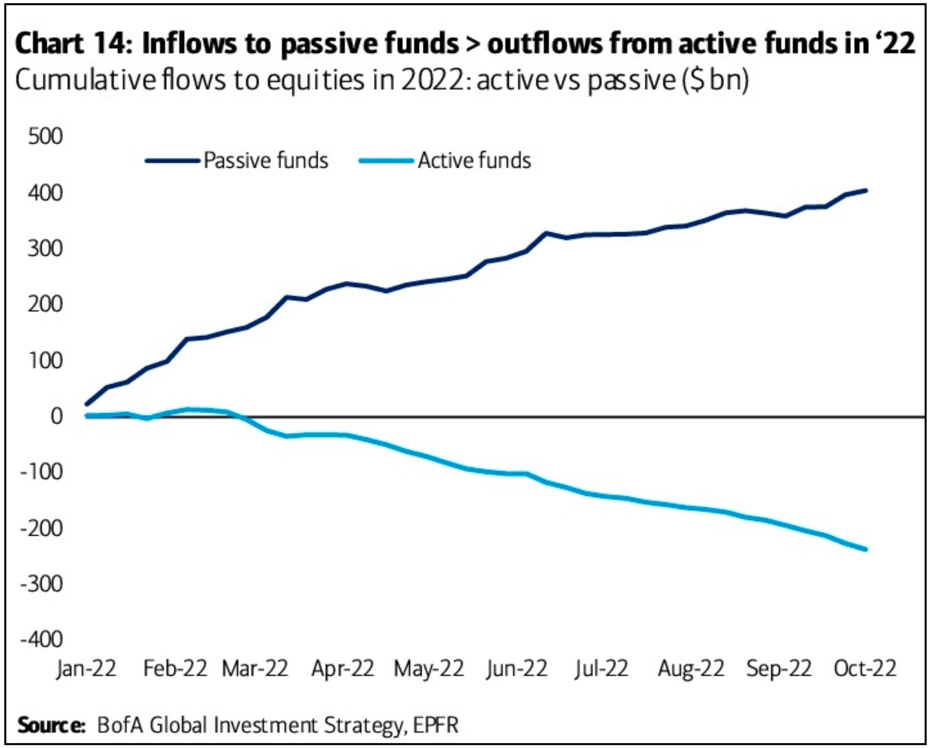
The Market is Cyclical in Nature

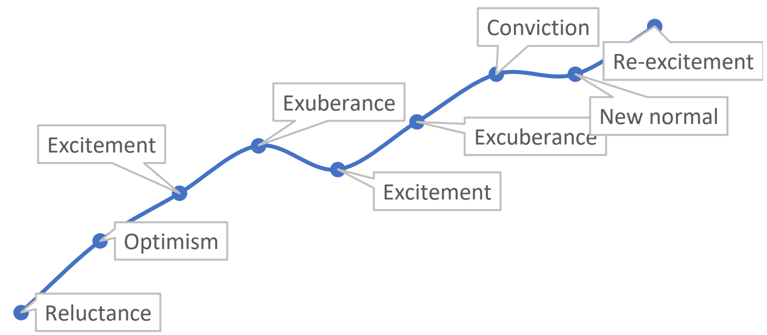
Top 10 Companies by Market-Value				
12/31/1979	12/31/1989	12/31/1999	12/31/2009	Today
IBM	NTT	Microsoft	Exxon	Microsoft
AT&T	Bank of Tokyo	GE	PetroChina	Apple
Exxon	Industrial Bank of Japan	NTT Docomo	Apple	Amazon
Standard Oil	Sumitomi Mitsui	Cisco	BHP Billiton	Alphabet
Schlumberger	Toyota	Walmart	Microsoft	Facebook
Shell Oil	Fuji Bank	Intel	ICBC	Alibaba
Mobil	Dai-Ichi Kangyo Bank	NTT	Petrobras	Tencent
Eastman Kodak	IBM	Exxon	China Construction Bank	JPMorgan
Atlantic Richfield	UFJ Bank	Lucent	Royal Dutch Shell	J&J
GE	Exxon	Deutsche Telecom	Nestle	Visa
ENERGY	JAPAN	TECH / TELECOM	CHINA / COMMODITY	INTERNET

Source: Empire Financial Daily

As seen in the graphic, the largest companies by market value often change. **In 2009, the big oil companies such as Exxon, BHP and Petrobras dominated the top ten.** Fast forward to today, and it's mainly tech, without a single "cyclical" stock in the group

Active vs. Passive Management

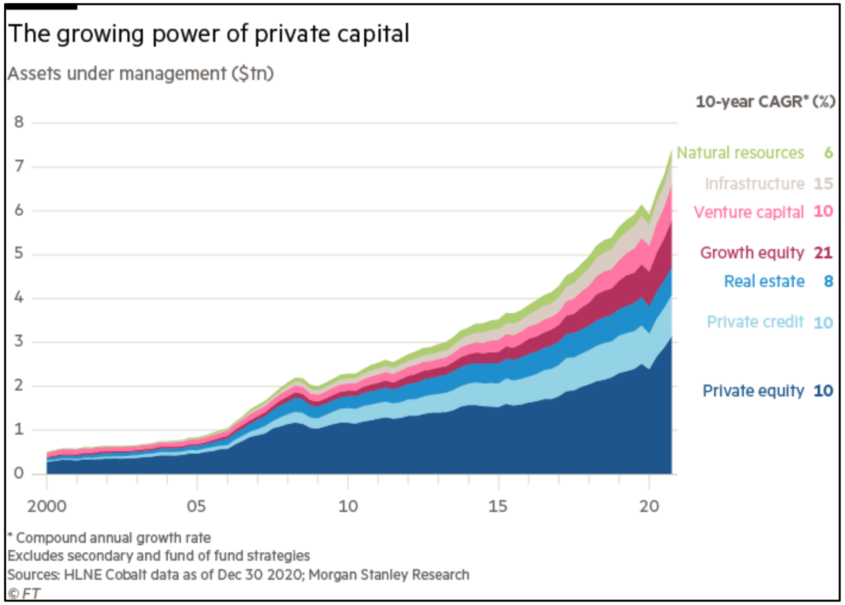




Investors are still piling into passive funds. **With artificially low interest rates and free Federal Reserve money ending**, the trend of passive outperformance will likely become trickier to maintain.

A Wakeup Call for Private Equity

- Private Equity returns will likely compress
- Persistent inflation will **drive questions on valuation adjustments and traditional PE marks**
    - Multiples will compress
- Certain fund complexes attract pressure from regulators and possible penalties
- In a zero-to-low interest rate world, Private equity was much **more appealing and easier to generate strong returns**
- **Funds to flow out of private equit**y into the public markets
- "We have seen a number of proposals from private equity funds where the returns are really not calculated in a manner that is honest" – Warren Buffett (2019 annual meeting)



The explosive growth in capital allocated towards Private Equity, Growth Equity and Venture Capital **has been enabled by 40 years of declining interest rates.** We expect this trend to reverse.

Pervasive Investment Themes of the 2020s

- Globalization 2.0 – Not just China!

- Climate Change & the world's muted response

- Russell Napier – Ivey Conference 2022 – The Capital Cycle

China

China Then & Now

- China is the not the same!
- It wasn’t Volcker who sucked inflation out of the world, it was China
- China will now be a massive inflationary force
  - The world is unprepared and has yet to come to terms with the implications of a new China

(1) Wikipedia

China has Changed

BBC Article (2021)

By Peter Hoskins

Business reporter, Singapore

China is struggling with a severe shortage of electricity which has left millions of homes and businesses hit by power cuts.

Blackouts are not that unusual in the country but this year a number of factors have contributed to a perfect storm for electricity suppliers.

The problem is particularly serious in China's north eastern industrial hubs as winter approaches - and is something that could have implications for the rest of the world.

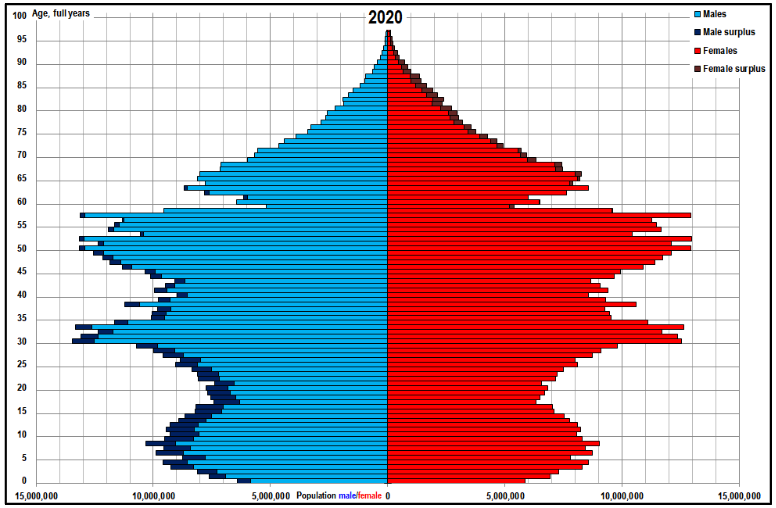
- China is the world's largest importer of energy, food and many other raw commodities
- In 2021 China experienced severe energy/electricity shortages and was forced to shut down production in many industries
  - Further emphasizing how the world is short energy!
- China's reopening will put significant pressure on global commodity prices
  - They will now be an inflation exporter instead of a deflation exporter!

(1) Wikipedia

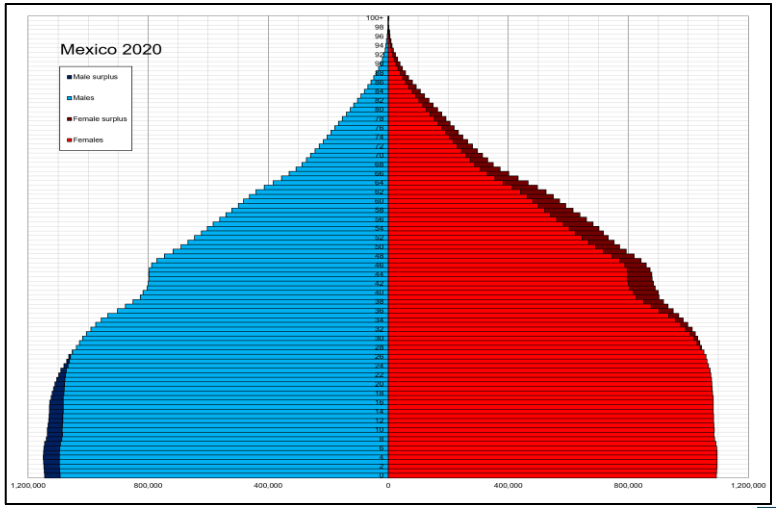
China Matures

- China has arguably **been the major driver for the multi-decade period of deflation** the world experienced, we believe this is ending
- China's economy is maturing, and wages have dramatically increased in recent years
  - The average wage in China is nearly **2x the average wage in Mexico**
- China has **a rapidly aging population and does not have an ample supply of young workers** as a replacement generation
  - We expect significant **reshoring to countries like Mexico, Vietnam and Indonesia**

China Demographic Pyramid[1]

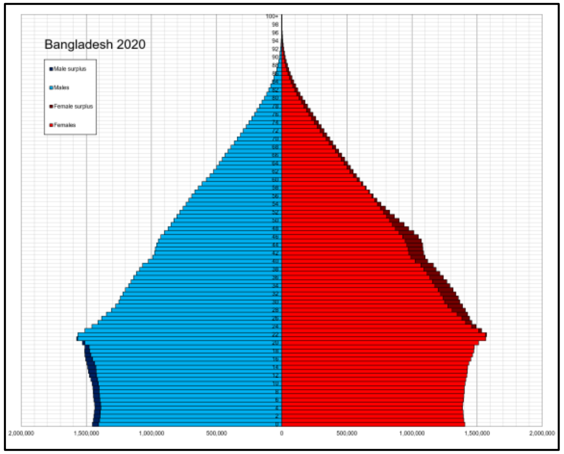


Mexico Demographic Pyramid[1]

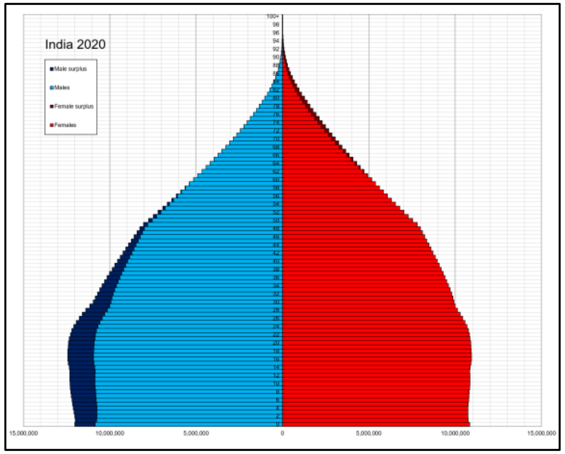


(1) Wikipedia

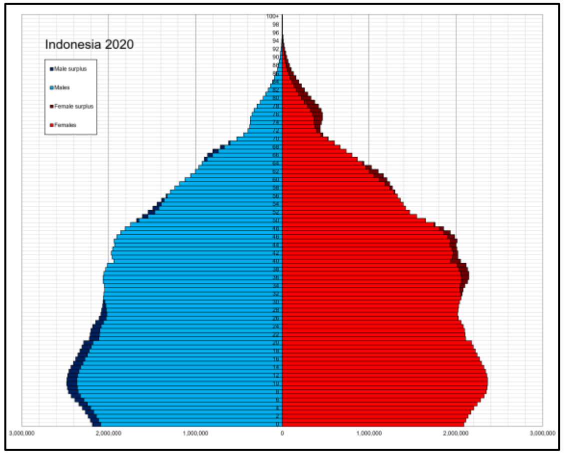
Southeast Asia & India …



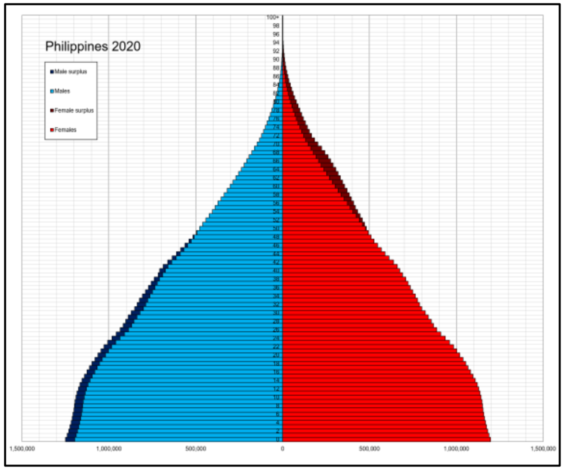
Bangladesh



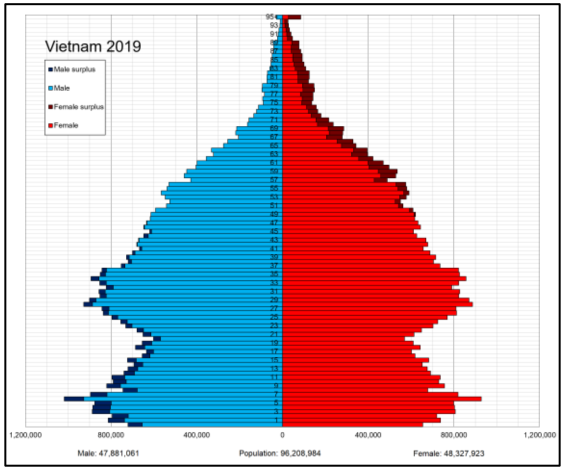
India



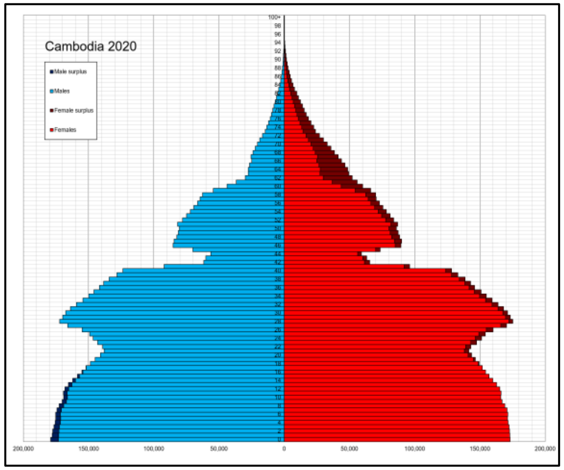
Indonesia



Philippines



Vietnam



Cambodia

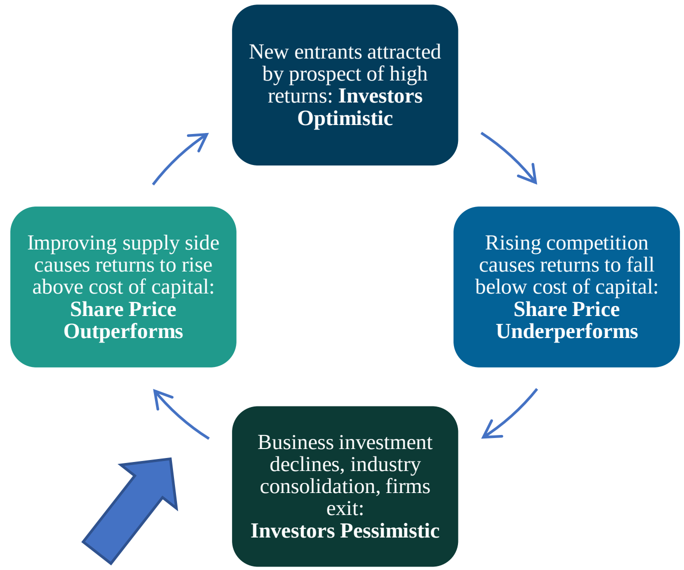
(1) Wikipedia

Revenge of the Old Economy & Grassroots Economic Research

Understanding Capital Cycles:

Schumpeter's Process

Taking advantage of the cyclical process to generate superior, long-term returns



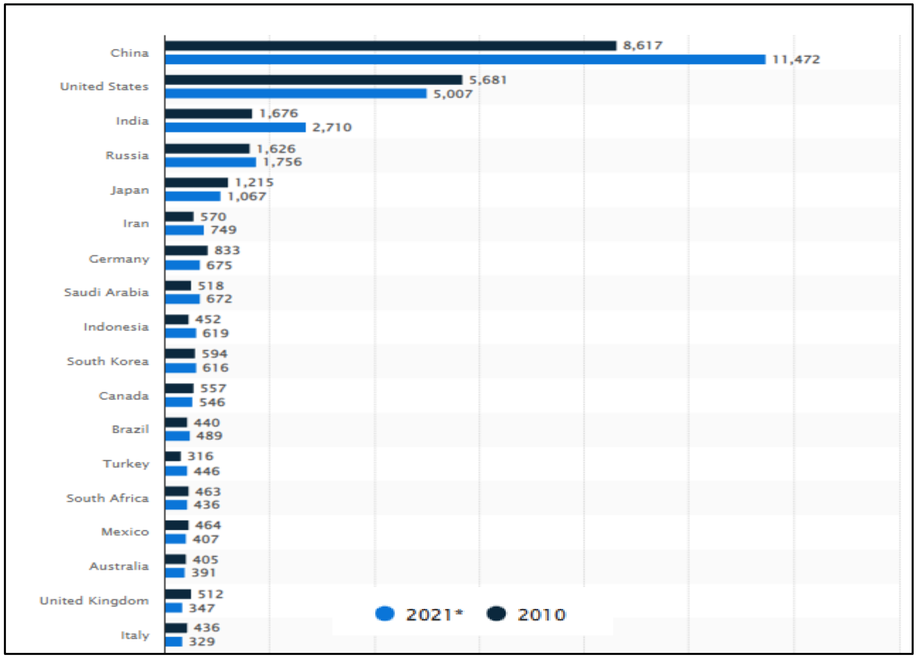
Transition Phase:
Where you want to invest and where we are now!

Rudiger Dornbusch: **"In economics, things take longer to happen than you think they will, and then they happen faster than you thought they could."**

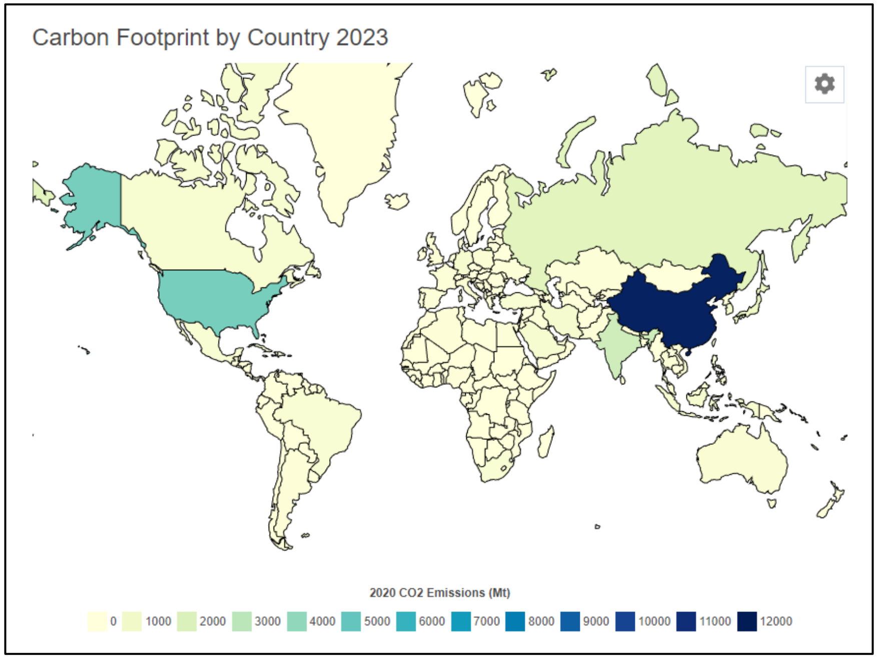
Bob Robotti: **"And the longer it takes to happen the greater the correction and the quicker it happens"**

Energy & Climate Change

CO_2 Emissions by Country



Source: Statista

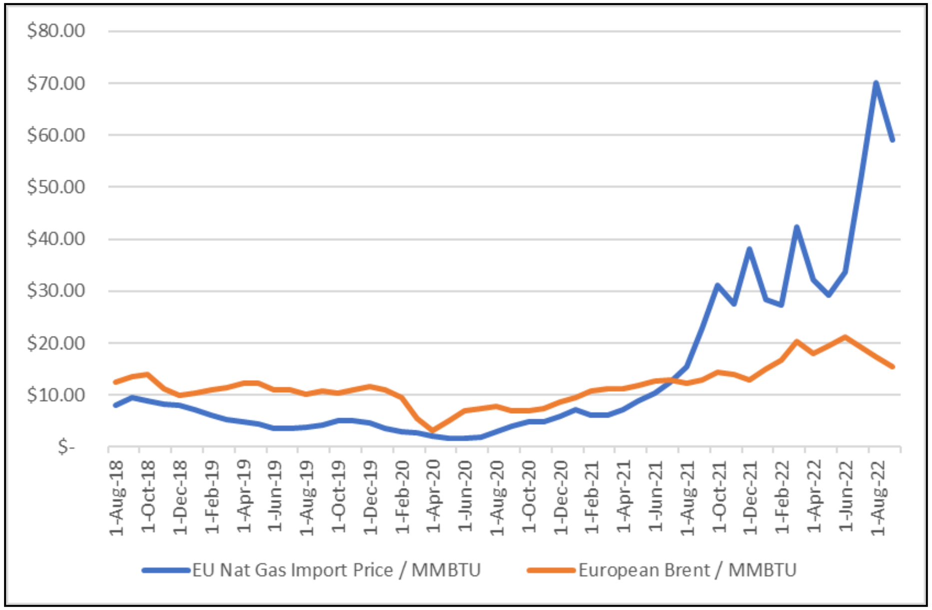


Source: World Population Review

Energy is Poised for Years of Strong Returns

- Demand for conventional energy – natural gas, oil, and even coal – are very strong, prices remain significantly elevated and supply continues to be constrained
    - In Europe and across Asia, natural gas and coal prices are at a significant premium to oil prices
- Not a transitory issue! The Russian Invasion revealed the energy instability caused by:
    - The Renewable energy transition
    - Conventional energy underinvestment in response to 7+ years of substantial write-offs and losses
- The need to transition to renewable sources of energy is clear and urgent. This presents significant investment opportunities
    - Additions to solar and wind capacity continue at a very rapid pace, accelerated further by high price of fossil fuels, yet are not fully reliable, affordable and secure
- Remember, today fossil fuels supply 80% of the world's energy needs
    - The required rate of growth for renewables like wind & solar to keep up with growing world energy demand is very high, especially if we are aggressively shutting nuclear and fossil fuel generation which the world has been doing for a decade

EU Nat Gas Import & European Brent Prices

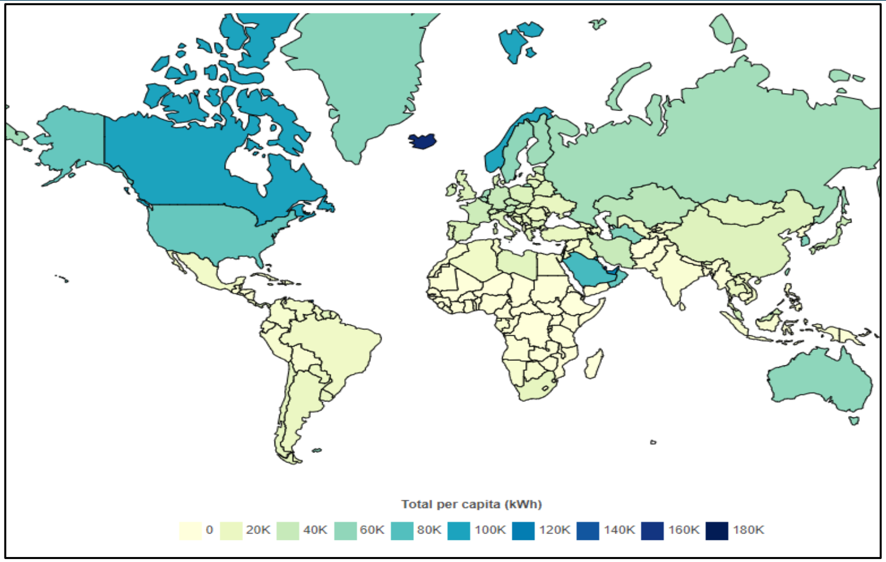


Source: FRED, Ycharts

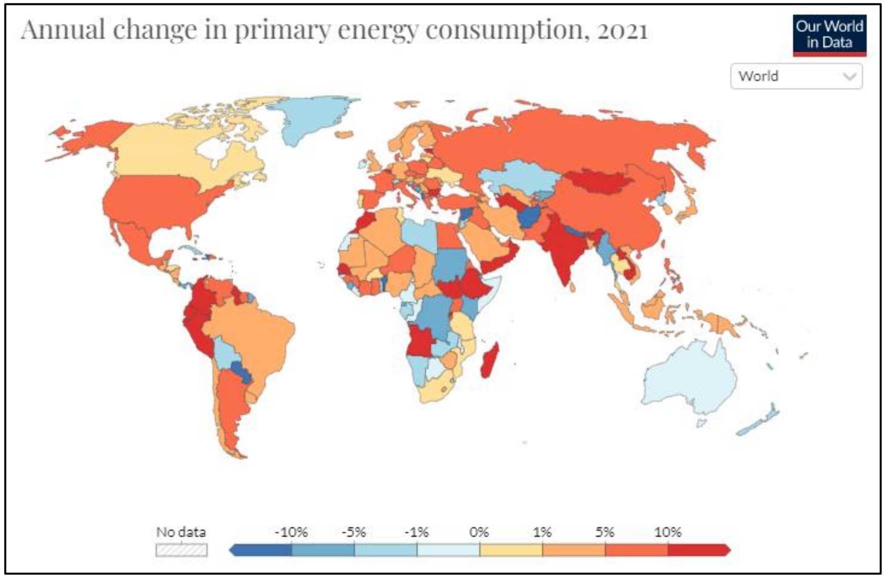
Significant spread between Brent and natural gas prices **highlighting the complex macro environment we are in today**

Energy Needs for Developing Economies

- As the developing world continues to grow, so will the demand for energy
- As seen in the chart to the right, Energy use per person is much higher in developed countries like the U.S., Canada and Japan, and much lower in developing economies like China, India, and countries in Africa
- As the rest of the world continues to modernize, countries like China, India, Brazil, Indonesia, Nigeria, Thailand and many more, the demand for energy in all forms will continue to skyrocket
- Given new reshoring trends to regions like Southeast Asia and Latin America, we expect subsequent industrialization to happen much faster, putting immense pressure on the demand for energy
- Renewables cannot be built fast enough to meet this rising demand
    - Many countries are also seemingly uninterested in building out renewables and are eager on using the lowest-cost energy possible to meet rising demand

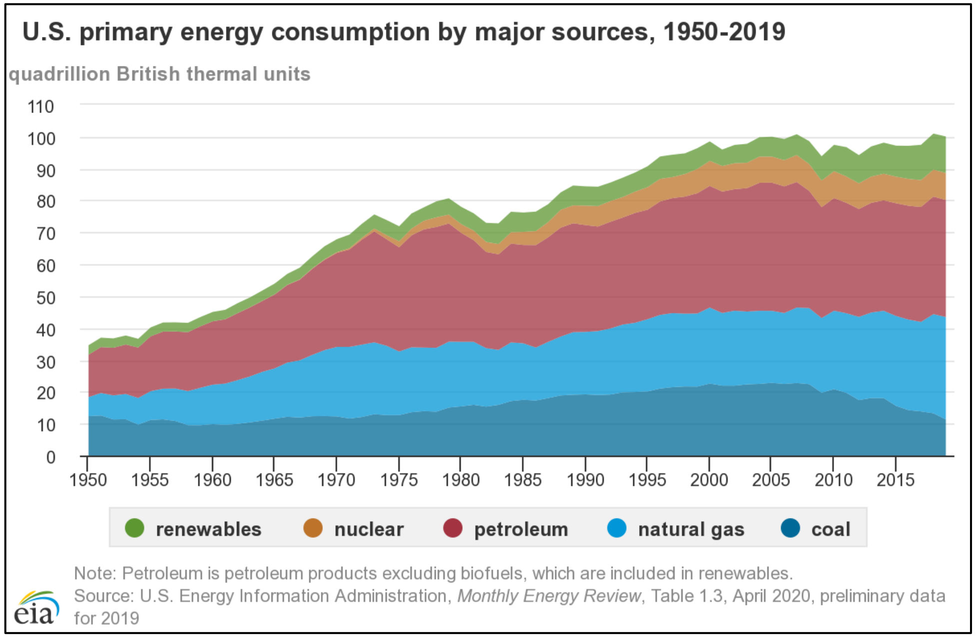


Source: World Population Review



The Buildout of Renewables

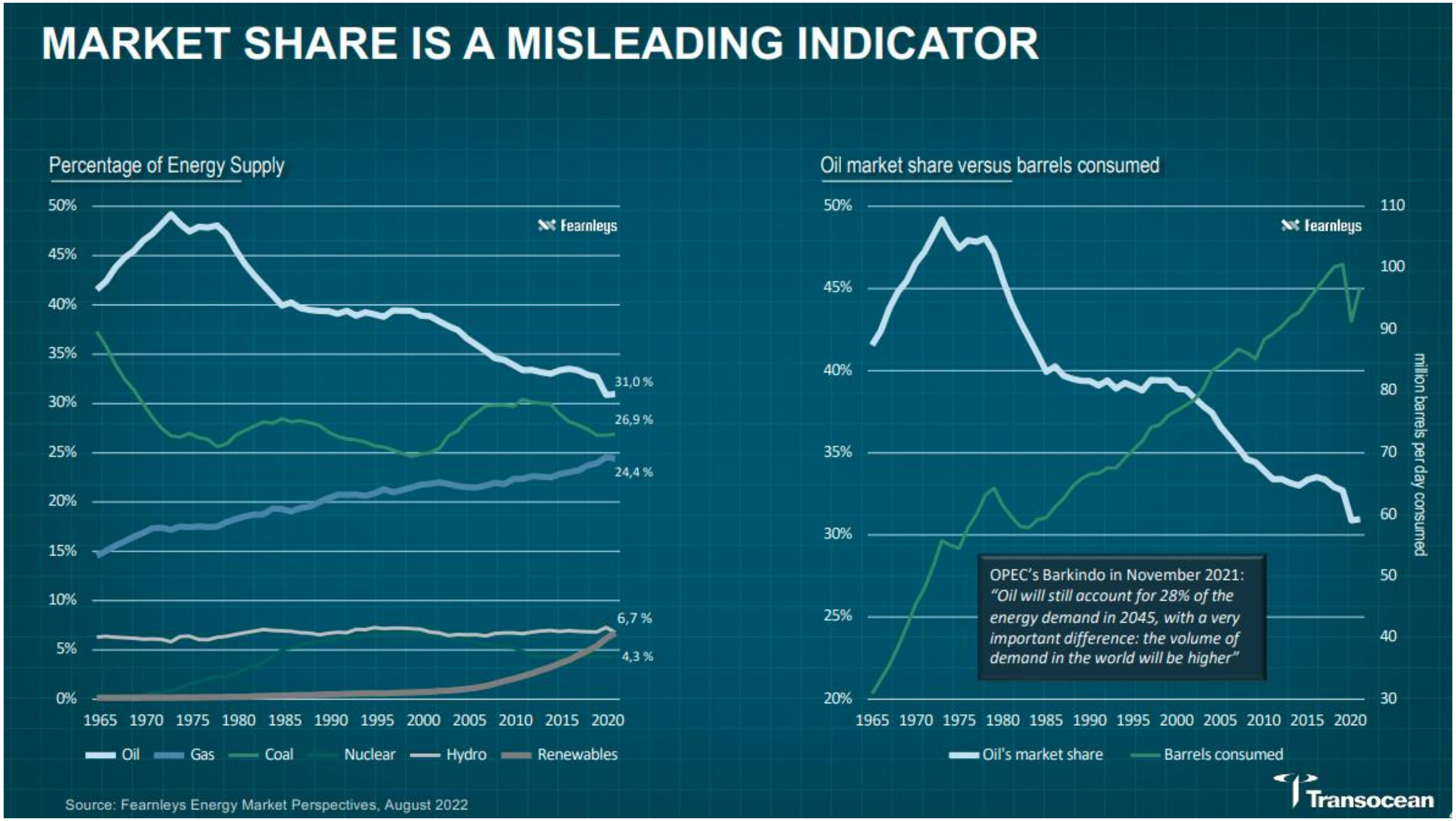
- Higher world energy prices will accelerate the build of renewables – straining supplies and availability of materials and resources
  - Vital input materials such as steel, lithium and electricity will face inflationary pressures
  - Ongoing supply chain issues and an inability to source materials from countries like China/Russia will only add to the increasing cost of building out renewables
- This will complicate and slowdown the build of out renewables, increasing costs and **extending the need and demand for fossil fuels**
- Given rising energy demand, especially from the developing world as it becomes developed, there is no scenario where the current pace of the renewable buildout will match end market demand
  - As a result, we expect fossil fuel demand to be very strong for decades to come



Even today, the lion's share of energy consumption in the U.S. is due to fossil fuels and will take a long time to revert

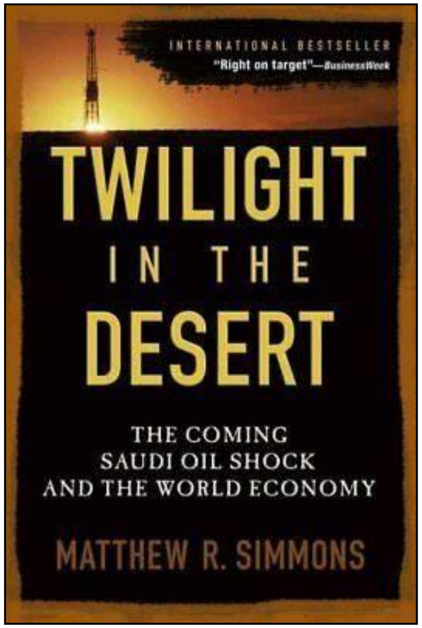
Developing economies are more reliant on fossil fuels and will take much longer to wean off

Sustained Demand Growth



Source: Transocean Investor Presentation

Twilight in the Desert



The book argues that Saudi Arabia is approaching – or already at – its peak oil output and **cannot substantially increase its oil production**

ENERGY

Saudi Arabia Reveals Oil Output Is Near Its Ceiling

Analysis by Javier Blas | Bloomberg
July 21, 2022 at 8:00 a.m. EDT

HOME > ENERGY

Saudi Arabia can't increase oil production further in the medium term, Crown Prince Mohammad bin Salman reportedly said

Ryan Hogg Jul 16, 2022, 8:54 AM

WORLD

Biden Interrupted by Macron at G7, Told Saudis Are Near Oil Capacity Limit

BY KHALEDA RAHMAN ON 6/28/22 AT 5:04 AM EDT

Crown prince of Saudi Arabia recently told Joe Biden on his visit to Saudi Arabia that **the country cannot meaningfully increase oil production in the medium-term**

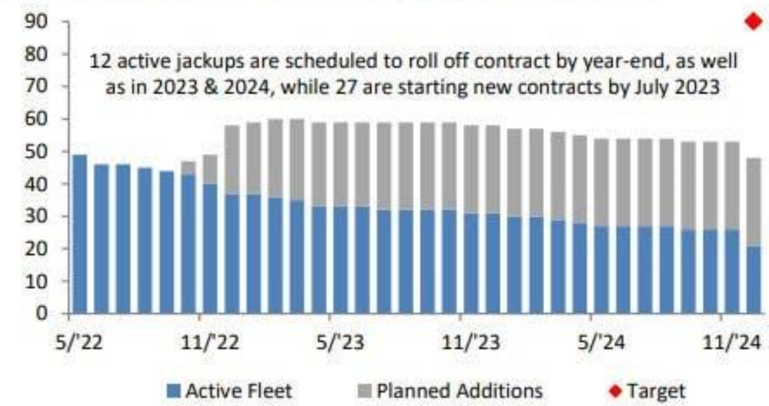
Vastly Increased Spend from Major Players like Aramco

- Aramco is significantly ramping up capex spend, and for this year**, is spending nearly $50bn from $31.9bn in 2021**

- They must go offshore to increase production. **Offshore rig count growing from 60 to 100 by 2024**

- Huge spend to essentially keep production flat. **Will go from 12m barrels/day today, to 13m barrels/day** in a few years

Figure 1: Saudi Aramco's Jackup Rig Count Outlook

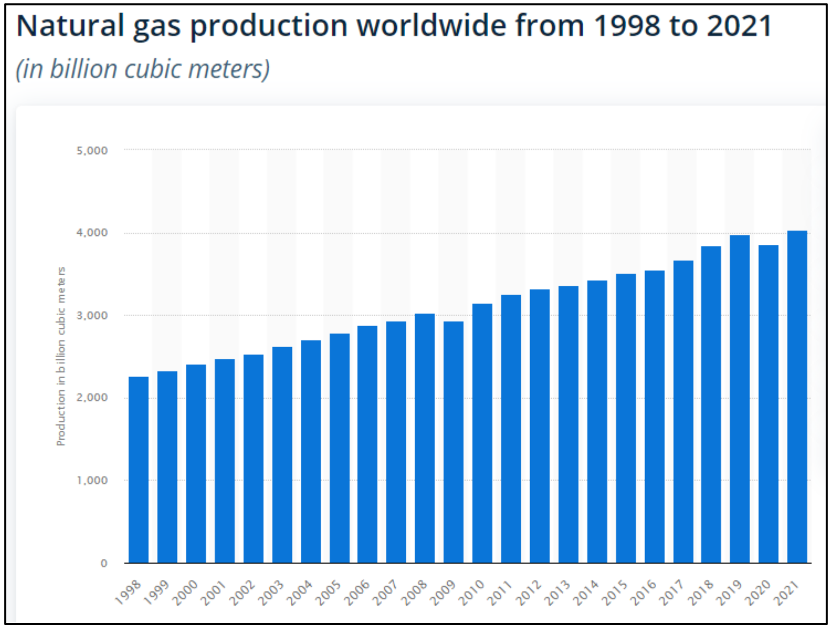


Source: Petrodata RIGBase, Evercore ISI Research

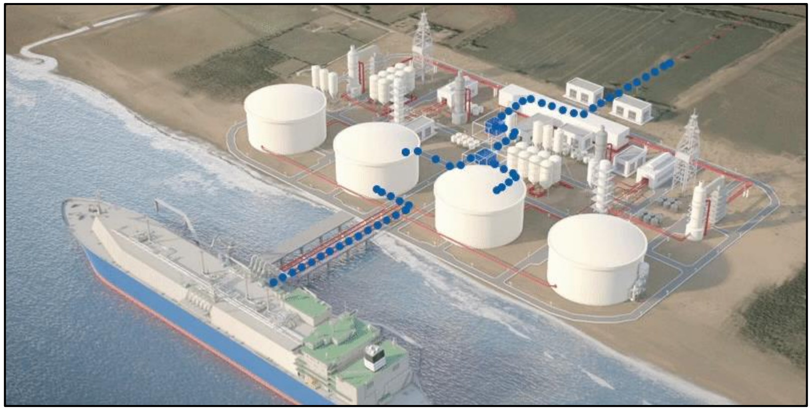
Original estimates on Saudi Jackup Rig Count outlook. The delta highlighting the decision to significantly ramp up capex & offshore spend in the coming years

A Dirty Little Secret

- Natural gas is the transitional fossil fuel
- No one wants to say it because it admits fossil fuels will be with us much longer than people hope
- The problem is complicated by the complex delivery of natural gas from extraction to burner tip
- The buildout of natural gas infrastructure is multiphase and expensive
    - Indicating how far away we are from a truly renewable future …
    - We have yet to build out sufficient infrastructure even for the transition fuel!



Source: Statista

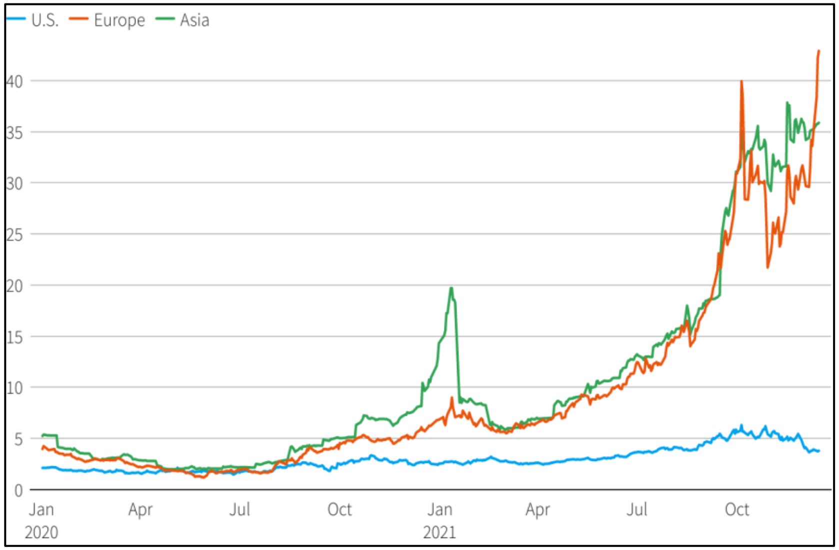


Source: Burckhardt

North America

North America (Geography is Important)

- North America will have a significant strategic advantage in the years to come
  - **Plentiful supply of cheap energy, mainly natural gas,** that is disconnected from global markets given the barriers for transportation
  - North American industrials will have a multi-decade strategic advantage and, **in many industries, will be the global, low-cost producers** for many years to come
    - Steel, Ammonia/Fertilizer, Chlor Alkali and many others
- Mexico
  - Mexico has a **plethora of low-cost, specialized workers** and a very promising demographic breakdown
  - Proximity to the United States means **significantly lower transportation costs and a very strong incentive for reshoring**
- **Largely separated from major global geopolitical issues and subsequent spillover effects** as seen with the war in Ukraine and tensions in the South China Sea and Middle East

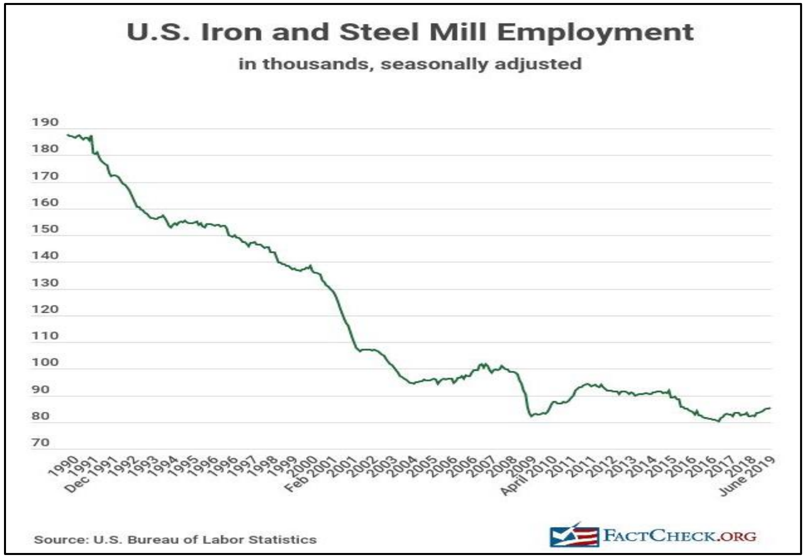


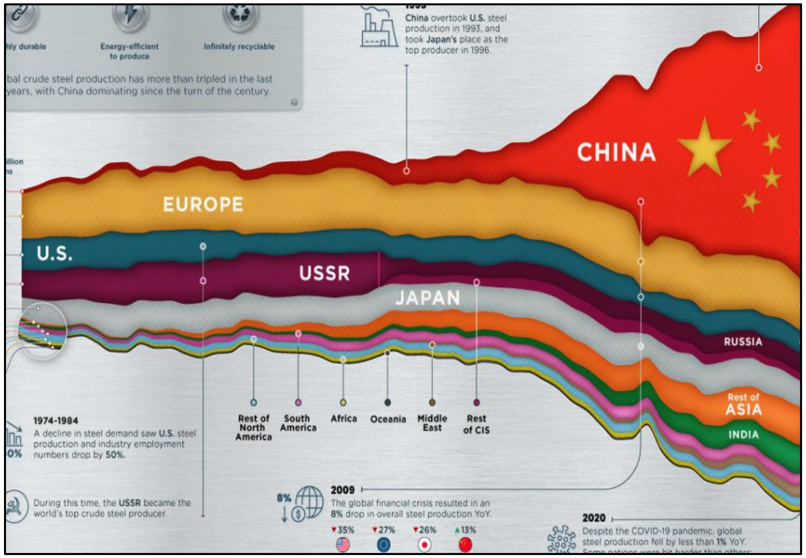
Natural gas prices in the U.S., Europe and Asia(1)

Source: Reuters

Inflation Reduction Act

- The Inflation Reduction Act is the icing on the cake for North American industry
  - It will **supercharge the buildout of American industry**, which is already facing a multitude of headwinds and competitive advantages
- The bill "includes targeted tax incentives aimed at manufacturing US-sourced materials like batteries, solar, wind parts, and technologies like carbon capture systems and electrolzyers to make hydrogen"
  - The bill also includes **key requirements around domestic sourcing such as the use of domestic steel** in wind projects
  - It also prohibits the sourcing of said materials from countries **without free-trade agreements like China and Russia**
- Doubling R&D tax credits for small businesses
- Requires the Department of the Interior to **offer 2 million acres of onshore and 60 million acres of offshore** annual oil and gas lease sales
- **It reinstates the lease sales in the Gulf of Mexico and Cook Inlet in Alaska** for new O&G exploration

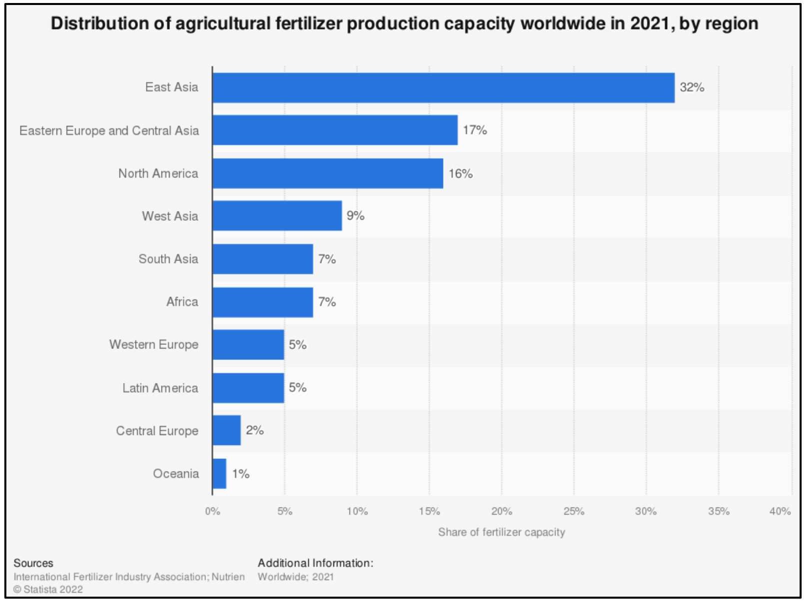


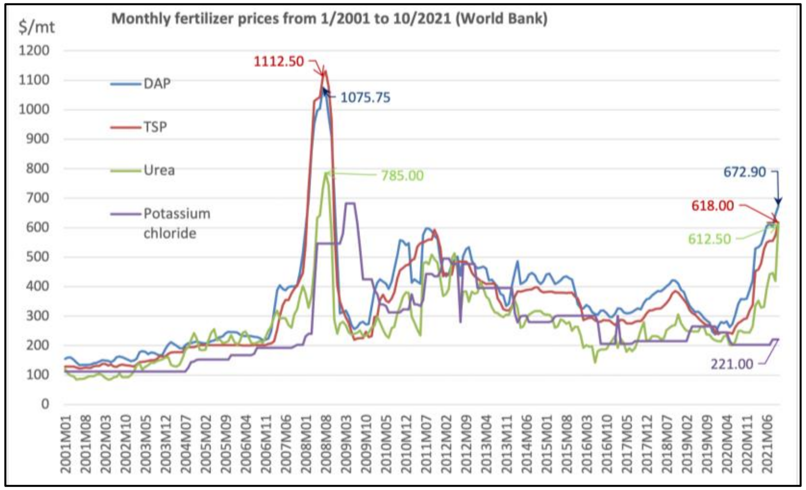


Source: Visual Capitalist

Take Fertilizer

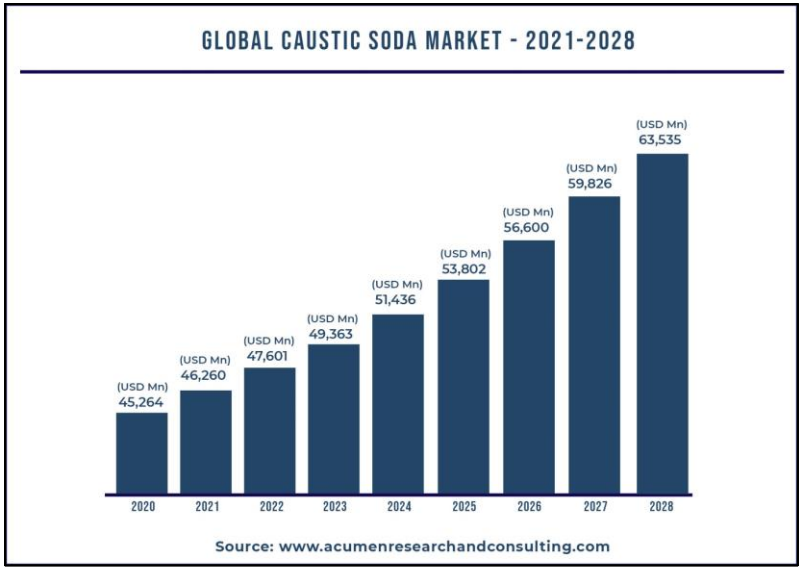
- Natural gas input costs can be **nearly 30% of total revenues**
    - European and Asian producer cannot compete with North American producers
        - NA producers have an **extended runway of lower input costs and will be the low-cost producers** for the next decade
- The largest fertilizer producing market, East Asia, **will struggle to compete given elevated natural gas prices** and an inability to access to cheap natural gas for the next several years
- The second largest producing region, Eastern Europe and Central Asia, is **losing capacity due to the Ukraine war, international sanctions and several other factors**
- The World Bank has noted on several occasions the **world is facing a structural shortage in fertilizer with no immediate solution**
    - Countries like Brazil are almost completely reliant on fertilizer to sustain their agricultural production
- You have a vital commodity with **persistent/rising demand, that is in short supply, with an inability to bring on sufficient capacity in the short-to-medium term**

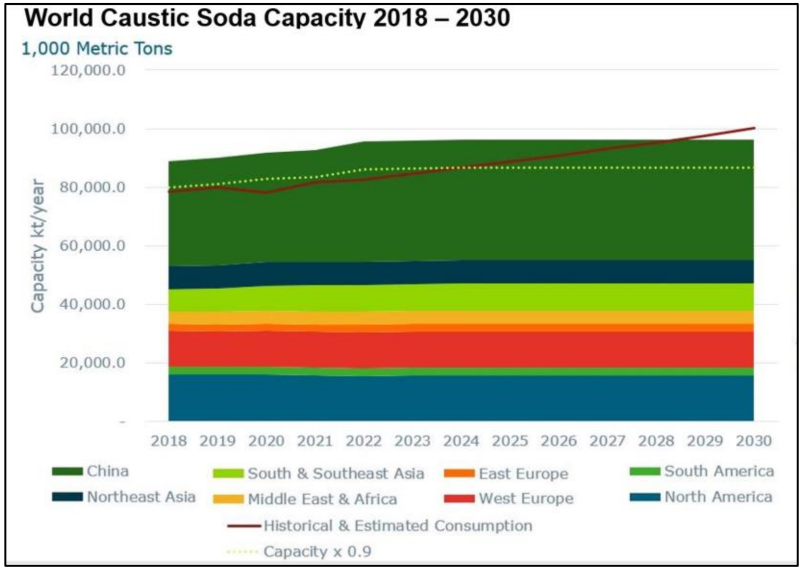




Or Chlor Alkali

- An industry where the main input cost is natural gas and electricity
  - International Chlor Akali players cannot compete with North American companies
- Like fertilizer, the market has **consolidated significantly, and supply has been rightsized to meet demand** in recent years
  - As a result, there is little-to-no excess capacity
- Given rising costs and an uncertain environment, **no one wants to go out and build a chlor alkali plant**
  - The remaining players, esp. since they've been rightsizing production and not overbuilding, have sustained pricing power
- China, the world's largest producer, **will struggle to meet end market demand given skyrocketing electricity prices** and a lack of cheap natural gas
  - In 2021, China saw widespread blackouts and many industrial plants were forced to shutdown or curtail production
- Again, you have a **globally vital commodity, facing a structural shortage in supply, with growing demand and a few remaining, disciplined players** with strong pricing power, especially in North America





Source: Orbichem

Canadian Energy

- Strong free cash flow even while keeping production flat
- Extremely strong balance sheets with low leverage
- Tremendous amount of resource in place – several decades of developable resource
- **Providing an extended runway of growth and low-cost energy in North America**
- Self-financed, politically secure
- Increased takeaway capacity
- Opening into new markets, especially Asia

ENTITY NAME	PEER SCORE	TEV/ EBITDA | LTM (X)	TEV/ TOTAL REVENUE | LTM (X)	TEV/ EBIT | LTM (X)	PRICE/ EPS | LTM (X)
ARC Resources Ltd. (TSX:ARX)	4.74	2.63	1.50	3.79	4.55
NuVista Energy Ltd. (TSX:NVA)	10.17	2.66	1.82	3.34	4.34
Birchcliff Energy Ltd. (TSX:BIR)	10.27	2.09	1.62	2.60	3.36
Advantage Energy Ltd. (TSX:AAV)	12.21	2.49	1.75	3.21	4.32
Whitecap Resources Inc. (TSX:WCP)	12.56	3.38	2.12	3.66	3.98
Paramount Resources Ltd. (TSX:POU)	13.32	3.90	2.10	5.91	6.69
Peyto Exploration & Development Corp. (TSX:PEY)	13.64	3.42	2.03	5.28	5.50
Spartan Delta Corp. (TSX:SDE)	13.74	2.69	1.90	3.46	3.65
Enerplus Corporation (TSX:ERF)	14.95	2.44	1.58	3.18	3.94
Tamarack Valley Energy Ltd. (TSX:TVE)	15.36	3.99	2.93	7.20	5.46
Tourmaline Oil Corp. (TSX:TOU)		**3.95**	**2.80**	**5.19**	**4.33**
Minimum		**2.09**	**1.50**	**2.60**	**3.36**
Median		**2.67**	**1.86**	**3.56**	**4.33**
Average		**2.97**	**1.94**	**4.16**	**4.58**
Maximum		**3.99**	**2.93**	**7.20**	**6.69**

Source: S&P Capital IQ

Going Forward

- 40-year bond market juggernaut in the past
- Period of plentiful free Fed money, Financial Brigadoon, is over!
- Silicon Valley & Schwab are the first examples of clever investors swimming naked – there’s likely more to come!
- Price discovery reasserting
- Active management – bottom-up stock picking will outperform
- Buy companies that produce goods the world needs, not wants

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