
Russia/Ukraine investor implications

March 2022

Michael Cembalest, Chairman of Market and Investment Strategy

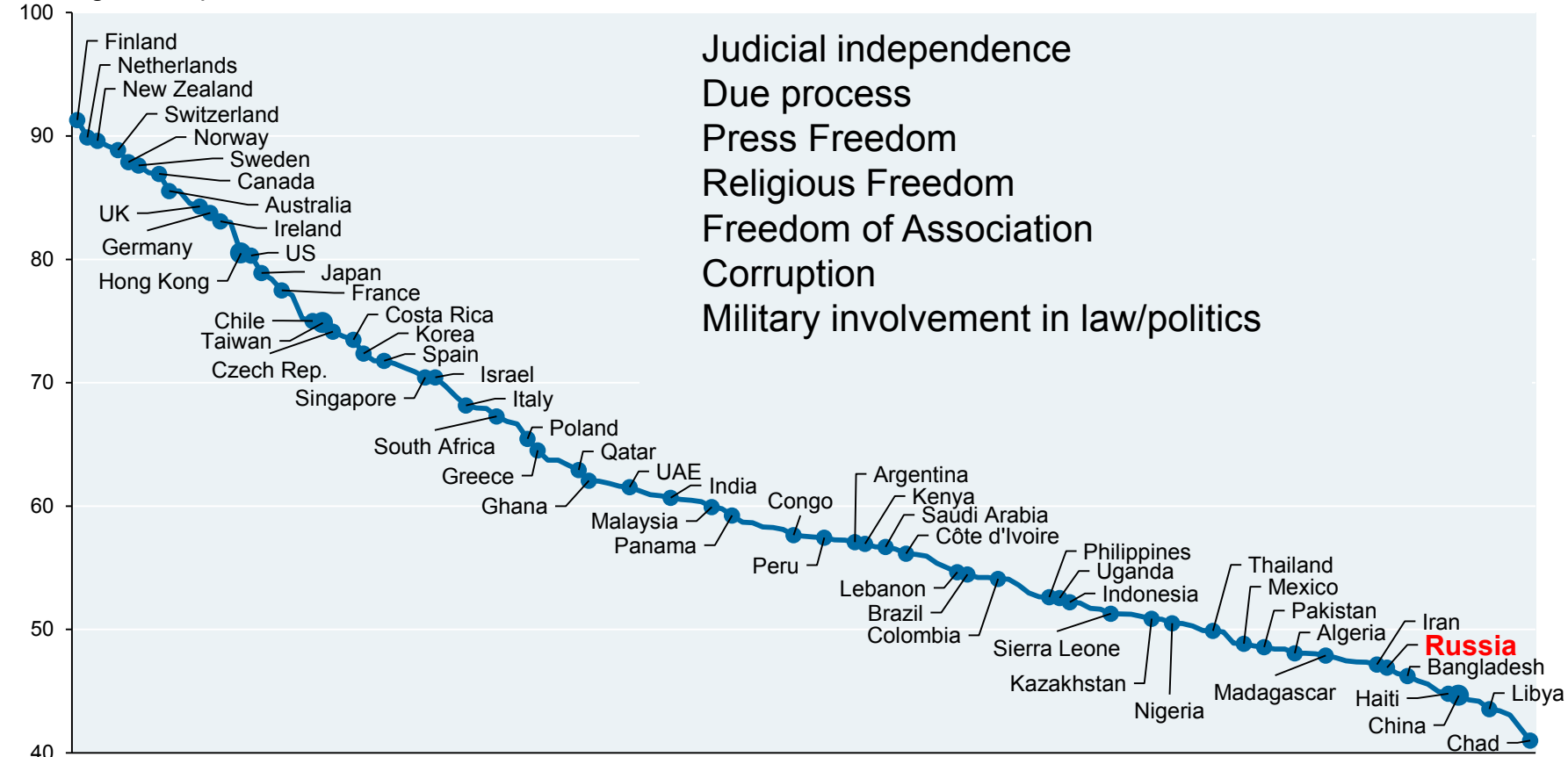
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Liberalism vs Realism in the postwar era

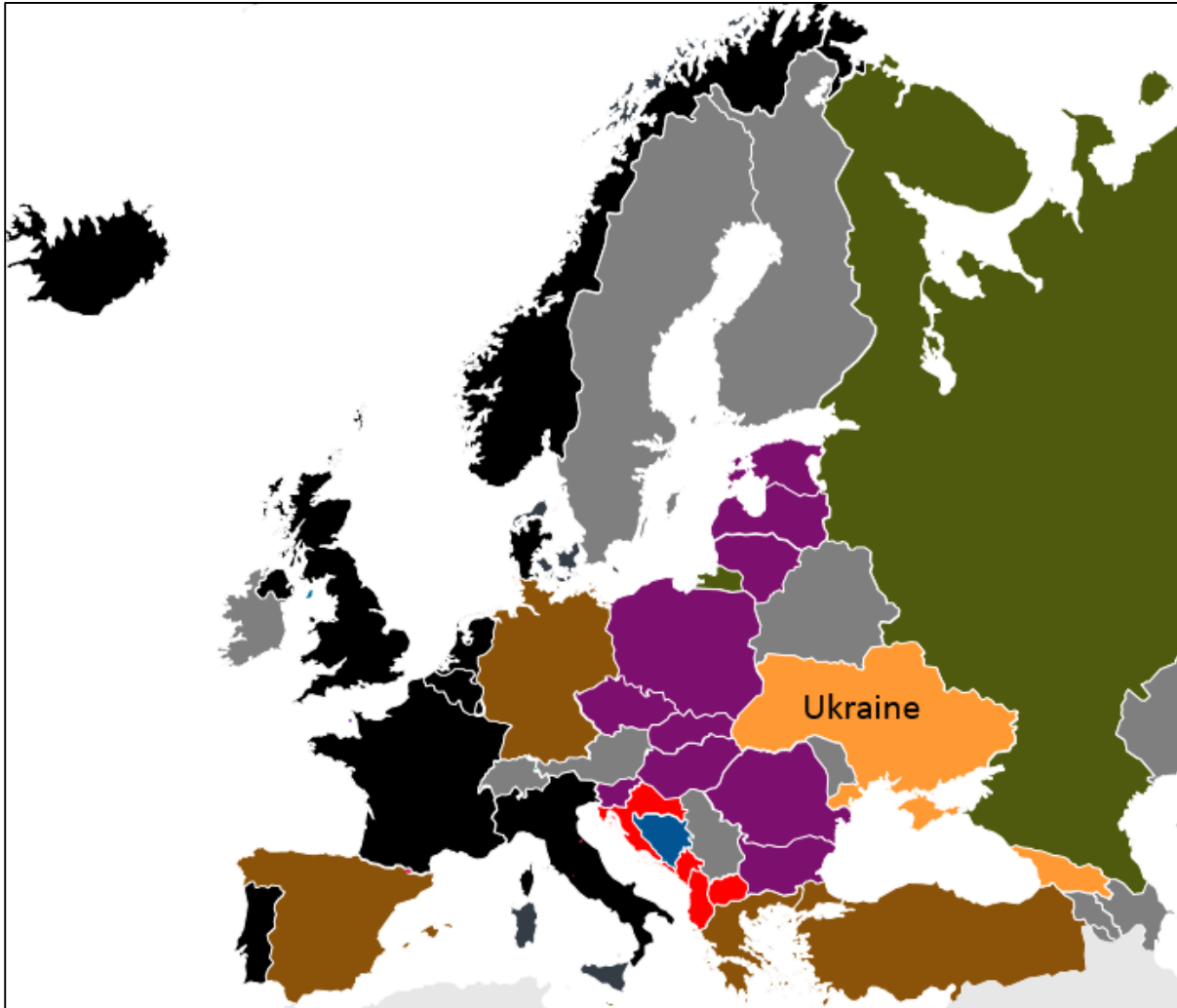
The Rights of the Individual versus the State

100 = greatest protections of the Individual



Source: World Economic Forum, CATO Institute, Fraser Institute, J.P. Morgan Asset Management. 2019.

Liberalism vs Realism in the postwar era



NATO enlargement

Black: Original members (1949)

Brown: 1950-1980

Purple: 1999-2004

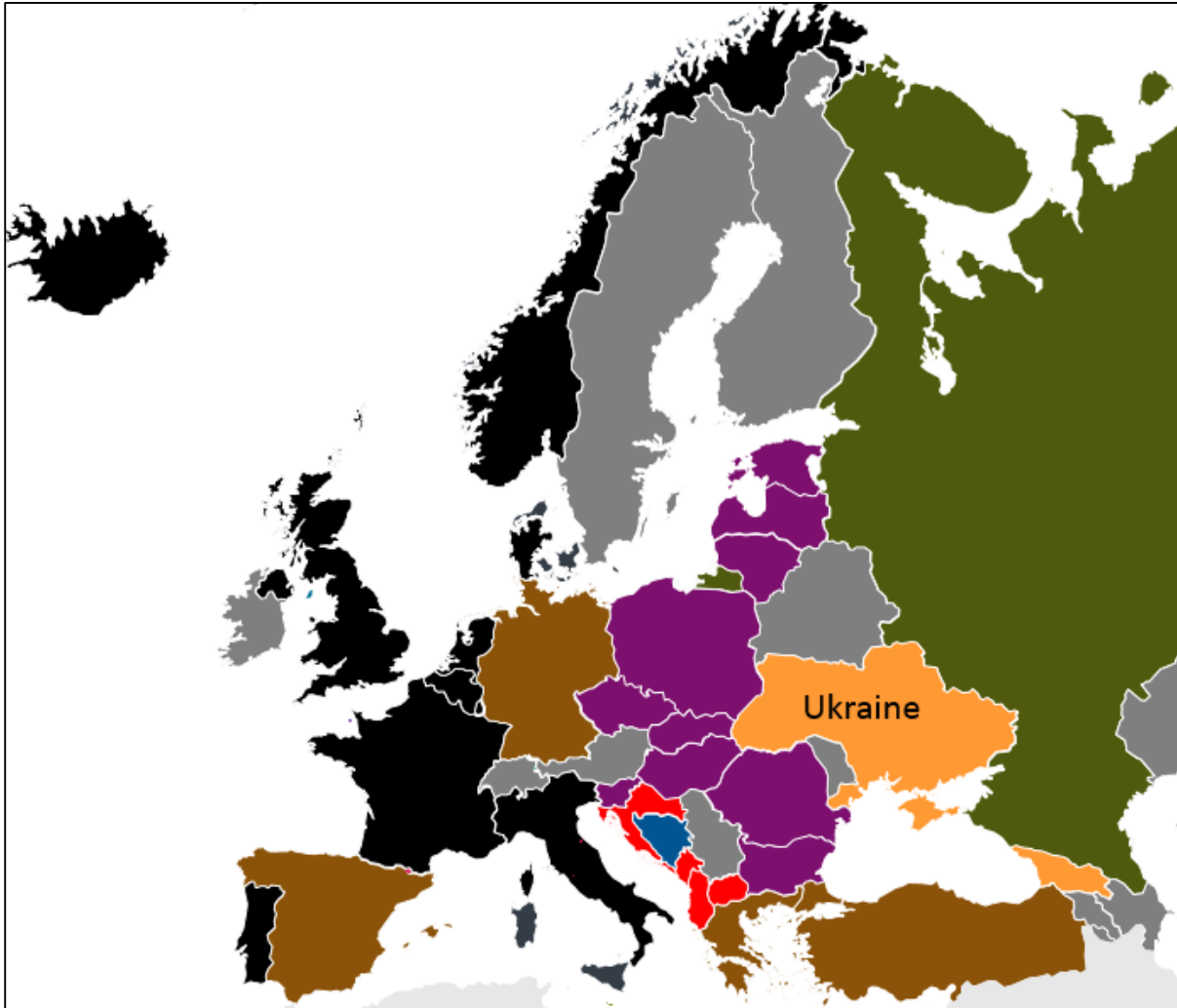
Red: 2009-2020

Blue: NATO Membership Action Plan

Orange: “Intensified NATO dialogue”

Gray: not in NATO

Liberalism vs Realism in the postwar era



1994: Budapest Memorandum offered Ukraine security assurances against future use of force by the US, UK and Russia in exchange for dismantling nuclear weapons

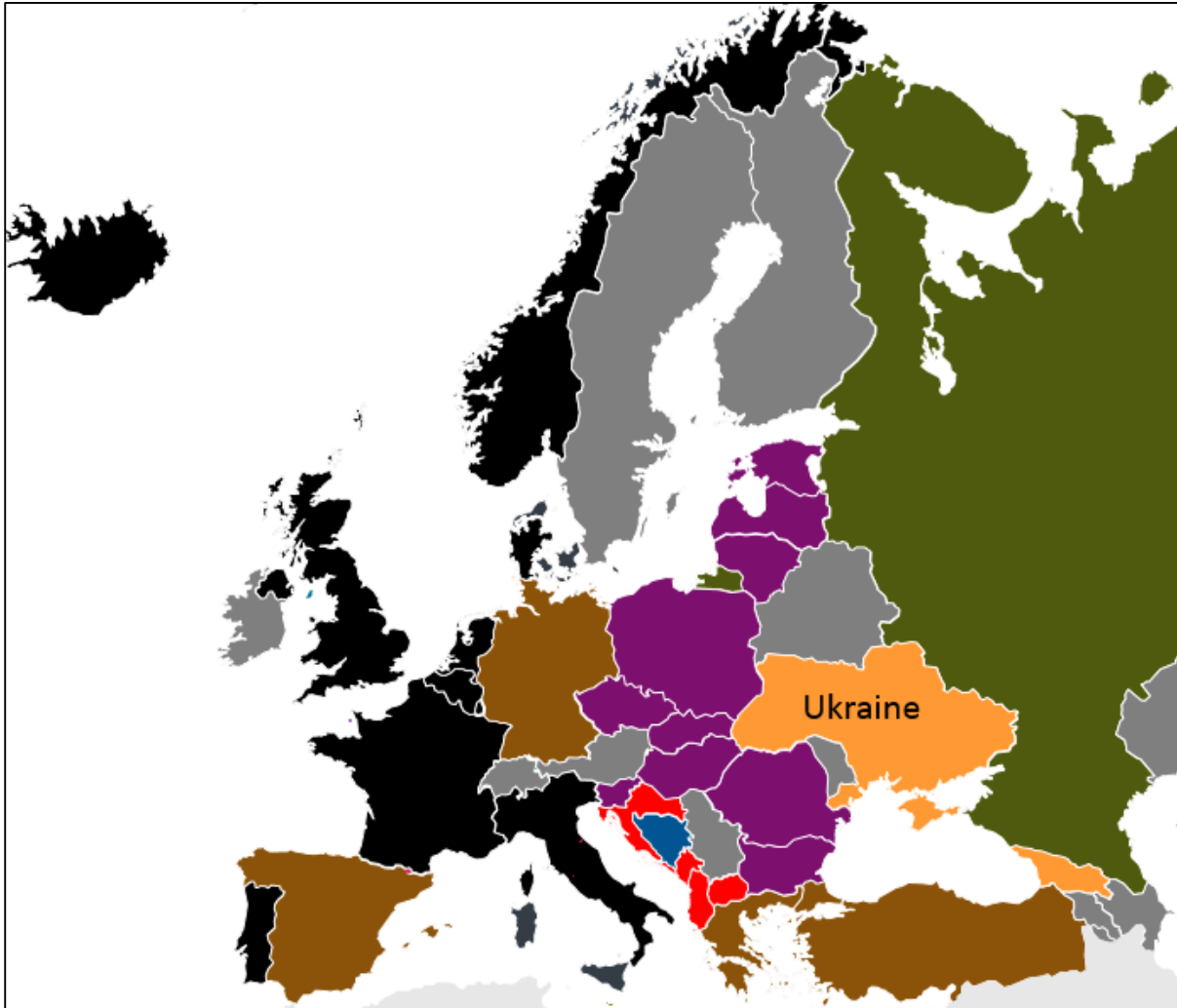
2008: NATO leaders: "Georgia and Ukraine will become members of NATO"

2008: Russia invades Georgia

2014: Pro-Russian president of Ukraine overthrown in Maidan Revolution, Ukraine pursues closer ties with the EU, Russia annexes Crimea, Russia backed separatists control Donetsk and Luhansk regions of Ukraine

2022: Biden Administration refuses to rule out Ukraine membership in NATO, or renegotiate NATO deployments in Eastern Europe

20/20 foresight department: Finlandization of the Ukraine might not have been the worst option



“Opposition to NATO Expansion”, by 50 foreign policy experts, politicians and military officers, June 1997

- Bill Bradley, Gary Hart, Sam Nunn
- Paul Nitze (Secretary of the Navy)
- Stansfield Turner (Navy Admiral, President of Naval War College, commander of Second Fleet, Supreme Allied Commander NATO Southern Europe and CIA Director of Central Intelligence)
- Robert McNamara (Secretary of Defense)

“I think the Russians will gradually react quite adversely and it will affect their policies. I think it’s a tragic mistake. There was no reason for this whatsoever. No one was threatening anyone else”

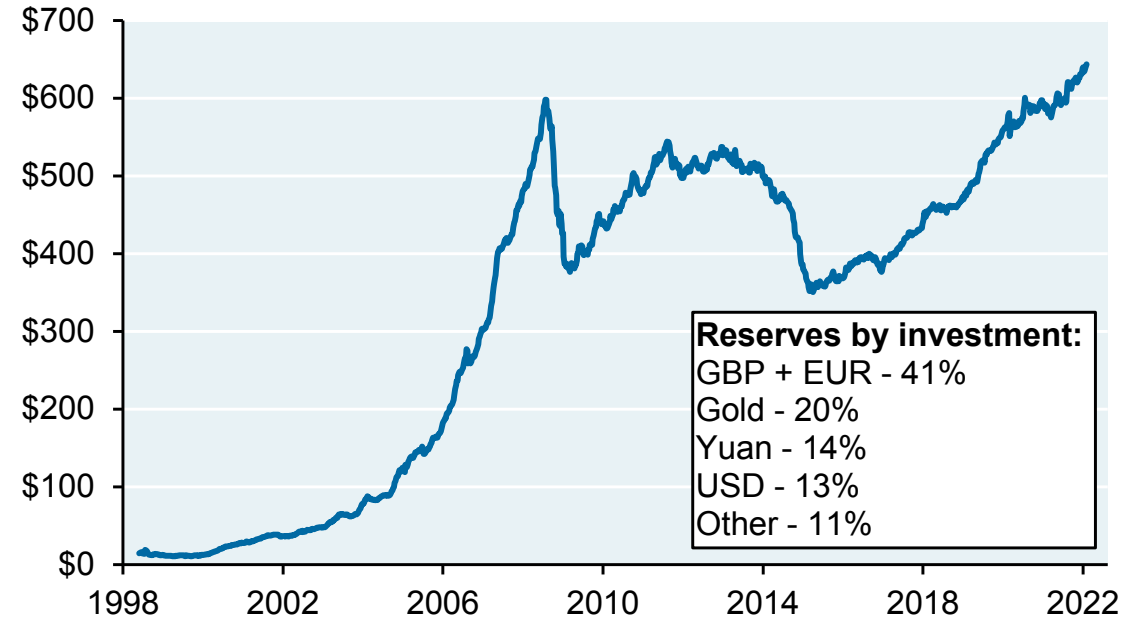
– George Kennan in 1998

“Why the Ukraine Crisis Is the West’s Fault: The Liberal Delusions That Provoked Putin”, John Mearsheimer, University of Chicago, 2014

A different Russia than in the late 1990's

Russia foreign exchange reserves

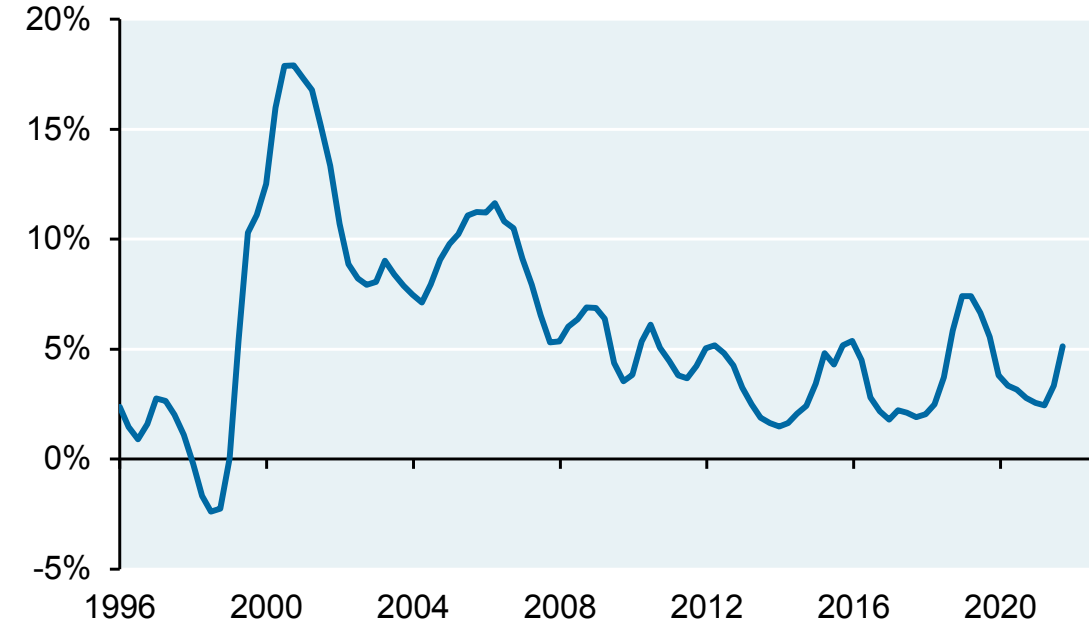
US\$, billions



Source: Bloomberg. February 18, 2022.

Russia current account balance

Percent of GDP



Source: Bloomberg, JPMAM. Q3 2021.

Sanctions checklist

- Sanctions on Russian banks including VEB, VTB and Sberbank (60% of all Russian deposits and 50%+ of Russian wage/pension payments)
 - Exempts transactions related to energy and agricultural exports
- Certain Russian banks blocked from SWIFT network
- Limits on Russian Central Bank FX activity
- Export restrictions on telecom and technology exports to Russia (49 firms added to Commerce Dep't entity list)
- Expanded list of Russian companies walled off from investment and lending
- US entities prohibited from transacting in secondary market for Russian sovereign debt (primary market and direct lending to gov't entities already prohibited)
- Germany freezes Nord Stream 2 gas pipeline project
- Sanctions on 5 families "close to Putin"

Not yet

- Explicit energy flow import or export restrictions
- Biden: we will try and shield US consumers from impact

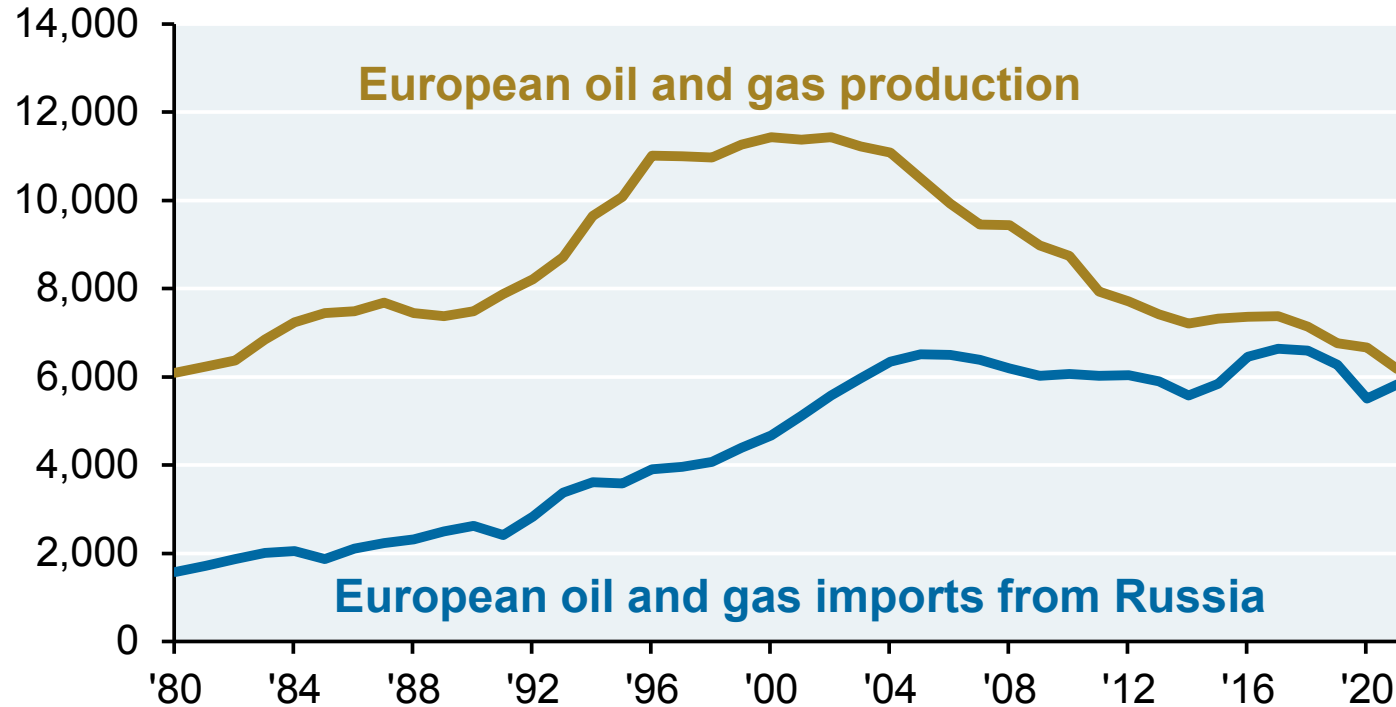
Russia galvanizes opposition in unusual places

- Germany to supply anti-aircraft and other weapons to Ukraine
- Additional small arms contributions from Netherlands and Belgium
- Germany to close airspace to Russian aircraft
- BP to exit Rosneft stake
 - 19.75% stake accounted for 1/3 of BP oil and gas production and more than half of its reserves
- What about the Daimler AG joint venture with Russian Kamaz which produces vehicles for the Russian military?
- Norway sovereign wealth fund to dump Russian assets
- Even the Swiss are considering greater sanctions participation

European thermal energy abdication has a price

European reliance on Russian energy

Thousand barrels per day of oil equivalent

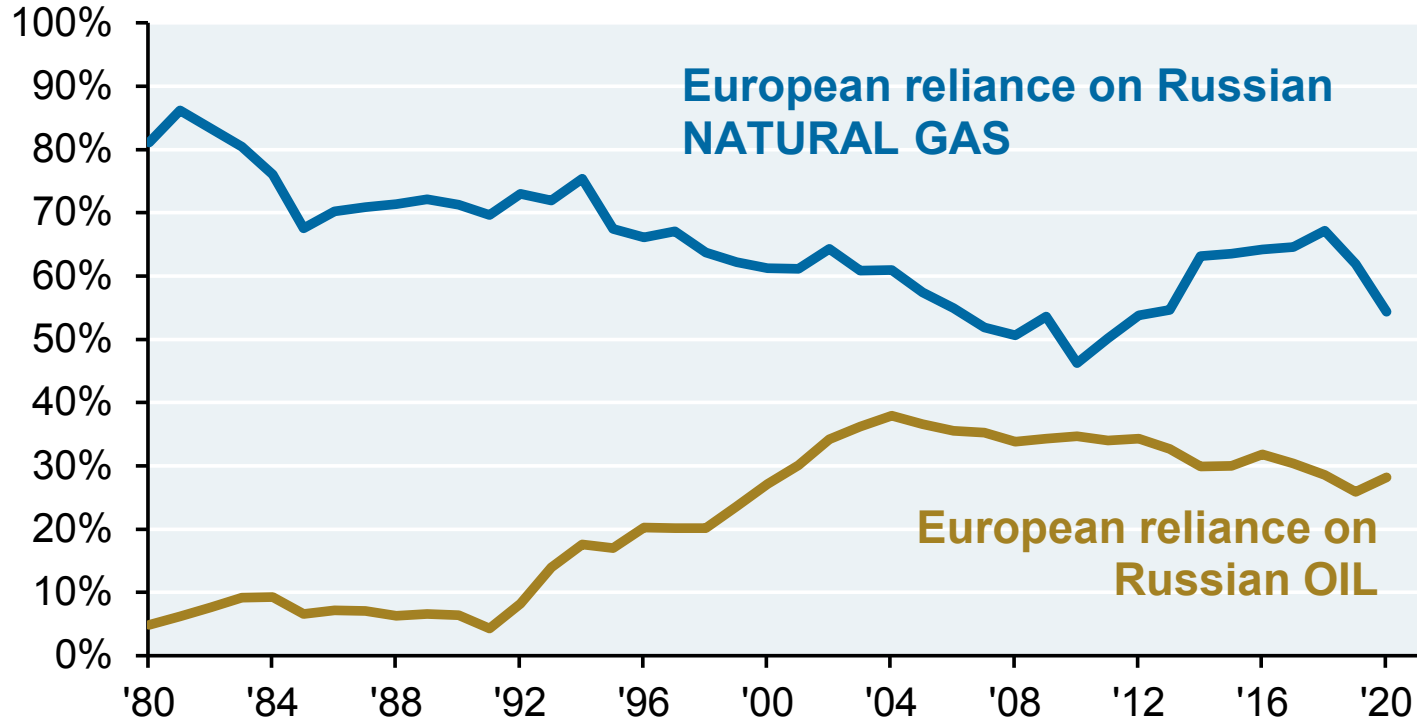


Most exposed: Germany, Italy and the Netherlands

Source: BP, Gazprom, Eurostat, Perovic et al, Russia Federal Customs Service, JPMAM calculations. 2021.

European thermal energy abdication has a price

Europe: greater counterparty reliance on Russia for natural gas, percent of total European imports



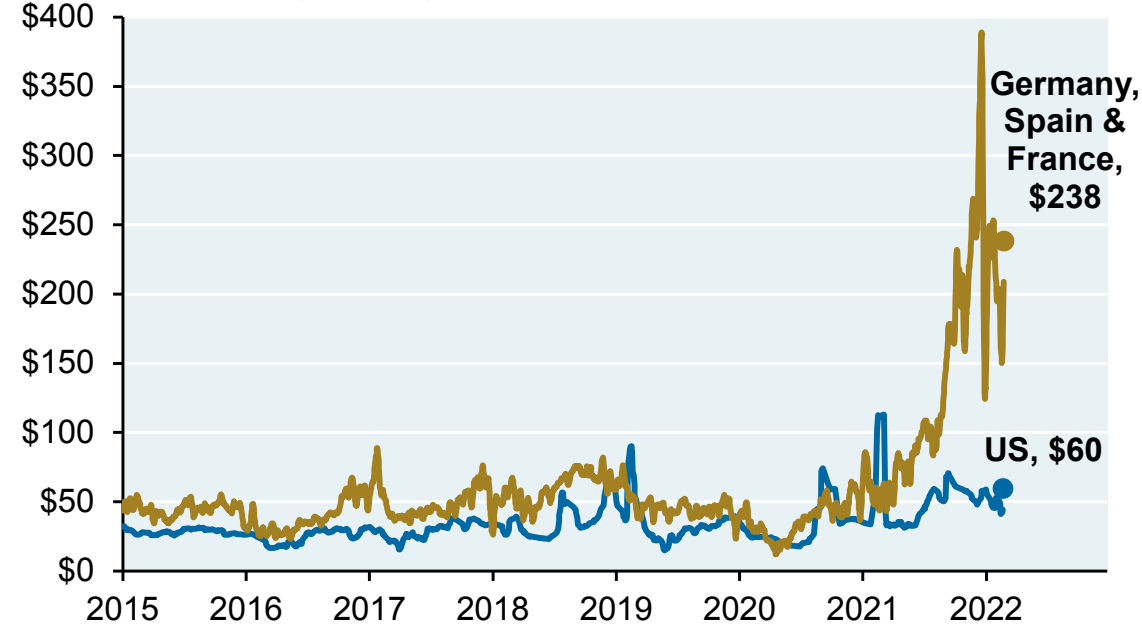
Most exposed: Germany, Italy and the Netherlands

Source: BP Statistical Review of World Energy, Gazprom, Eurostat, Perovic et al, JPMAM calculations. 2021.

And the price is high

US vs Europe: Wholesale electricity prices

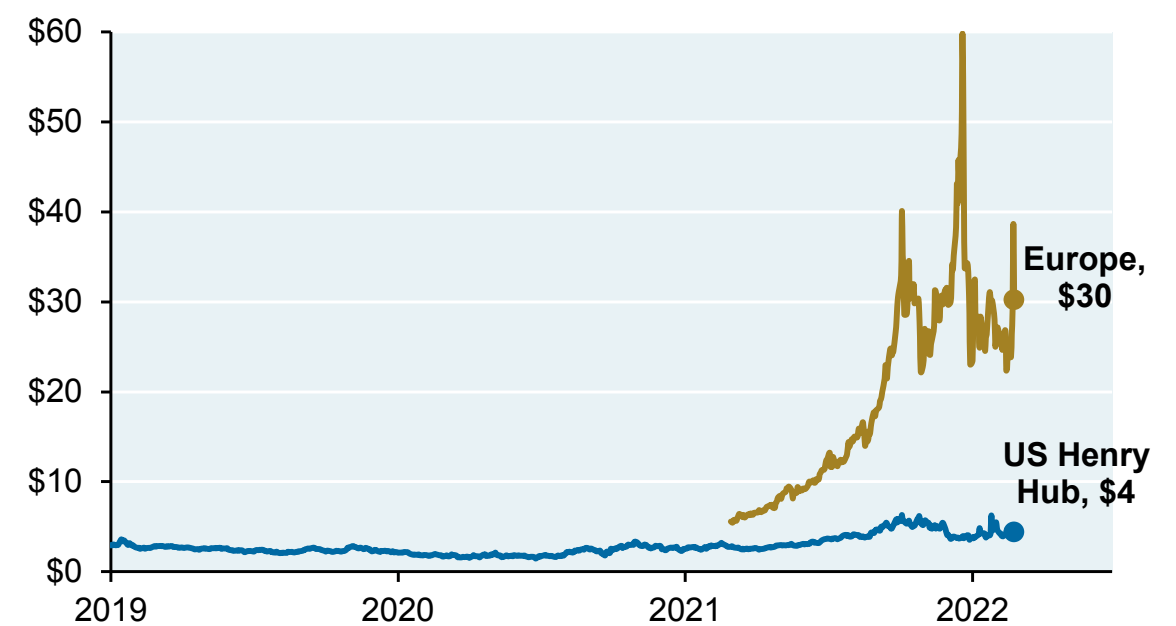
US\$ / MWh, 7 day average



Source: Bloomberg. February 26, 2022. Dots represent latest daily prices.

US vs Europe: Wholesale natural gas prices

\$/MMBTU

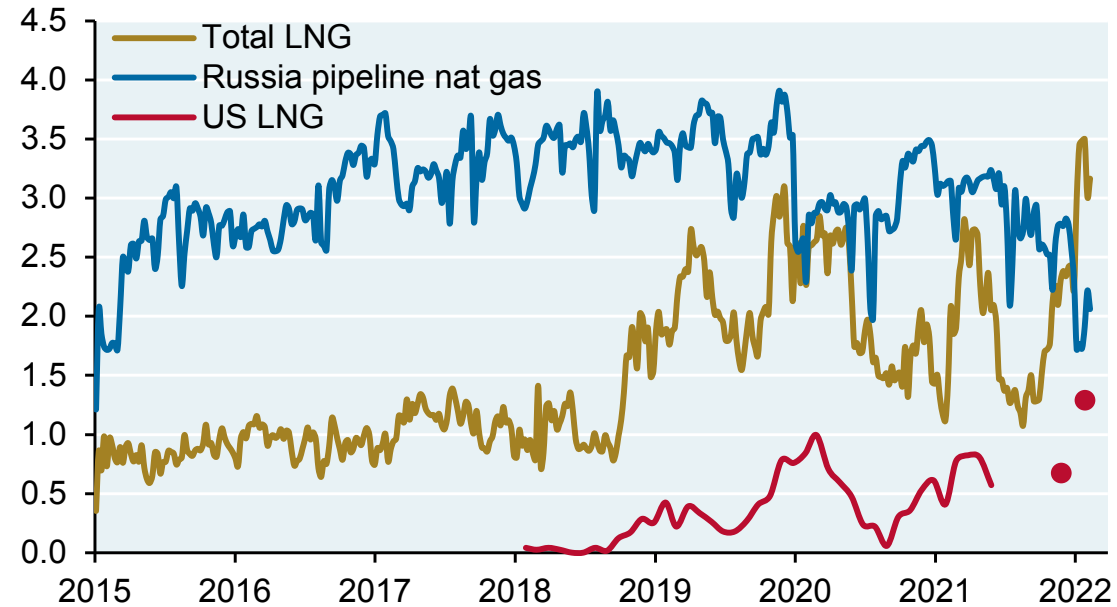


Source: Bloomberg. February 25, 2022. Dots represent latest daily prices.

US LNG to the rescue? In flow terms maybe, but not in cost terms

European natural gas imports: Russia vs LNG

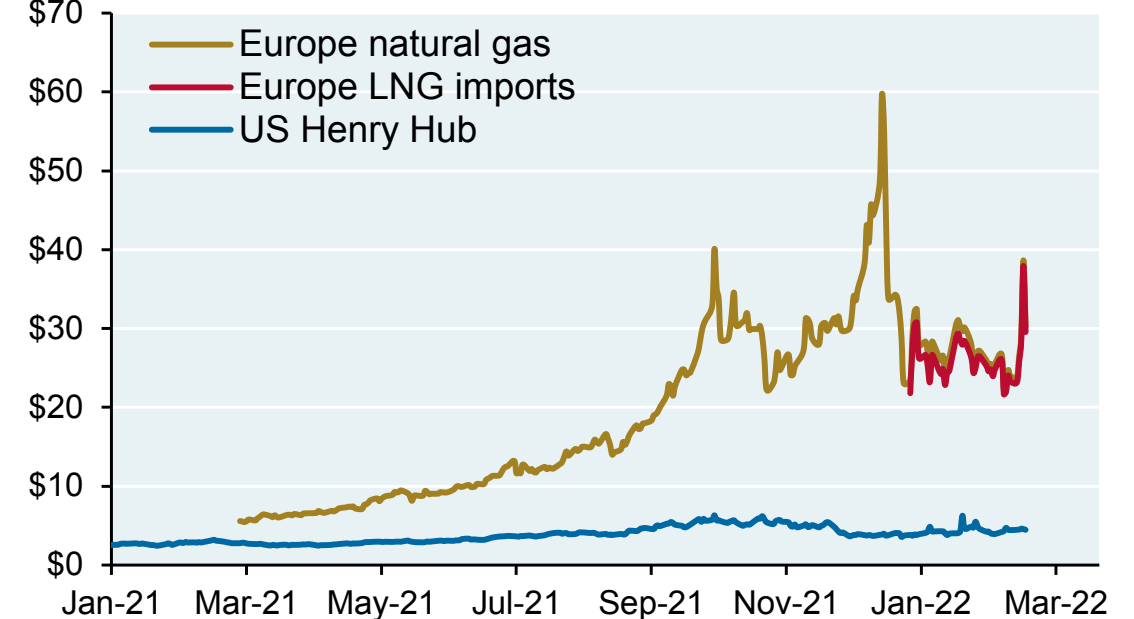
Billion cubic meters per week



Source: Bruegel, EIA, Diesel & Gas Turbine, JPMAM. February 11, 2022.

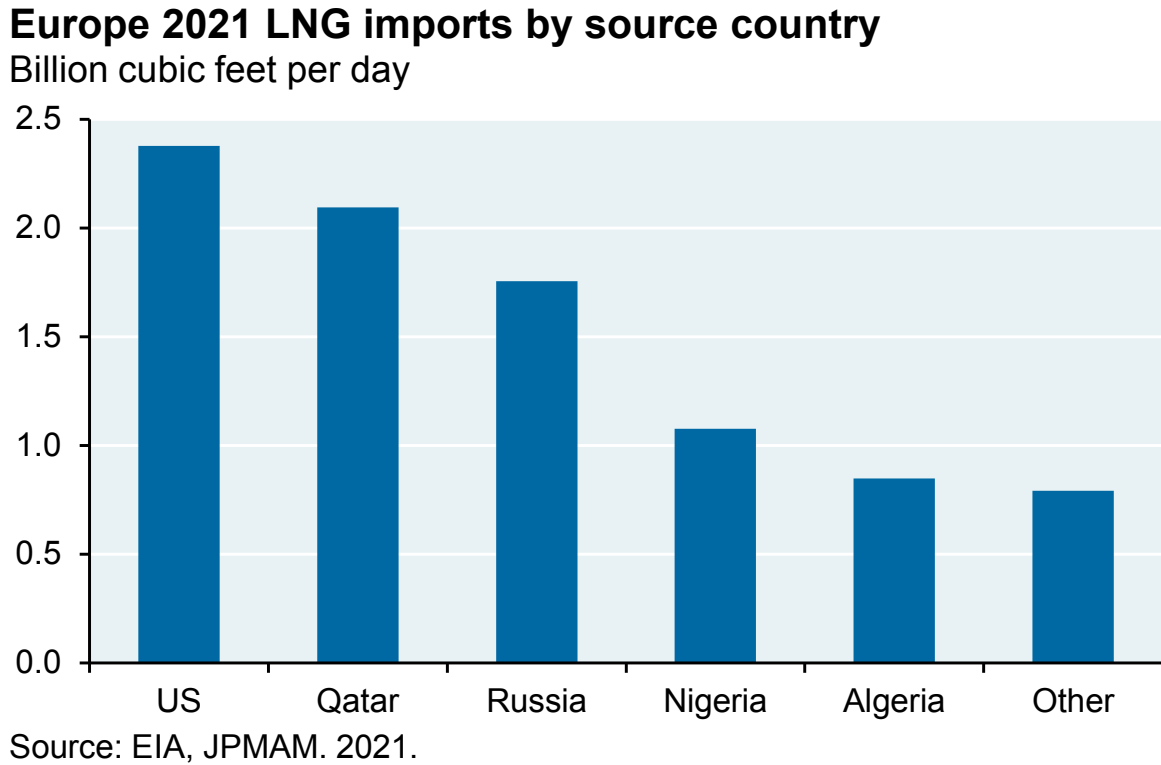
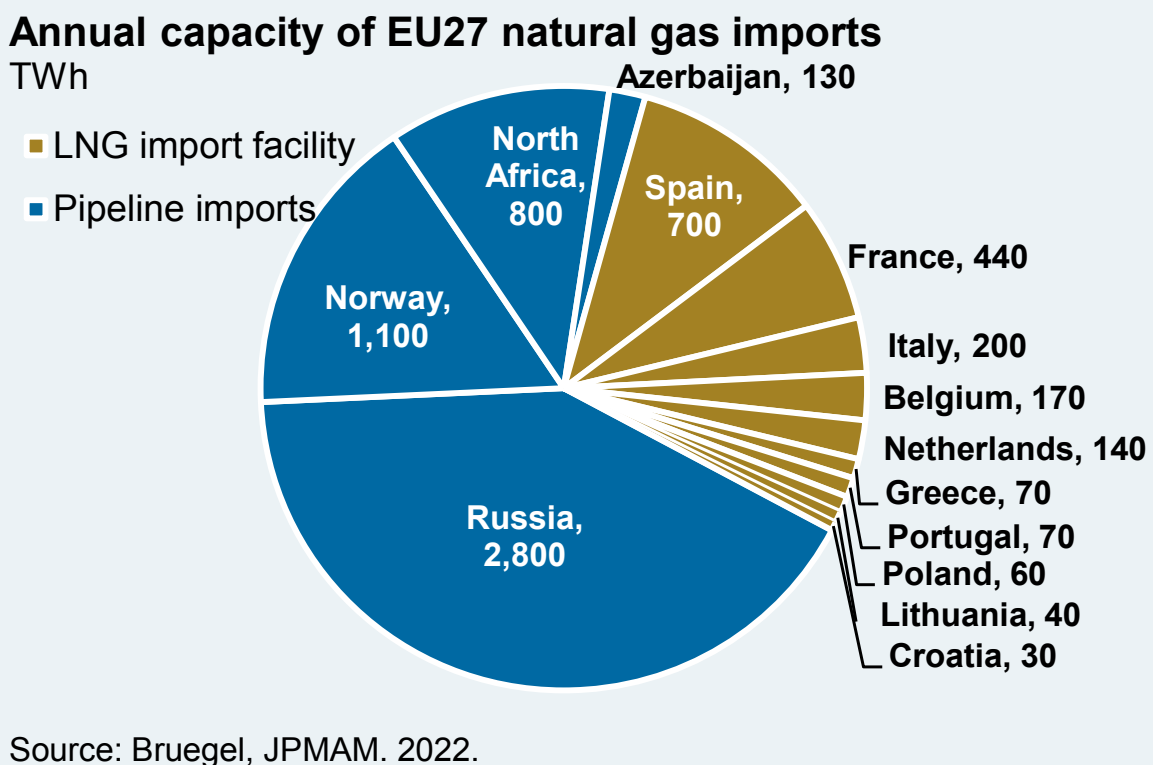
Wholesale natural gas prices

\$/MMBTU



Source: Bloomberg, S&P Global. February 25, 2022.

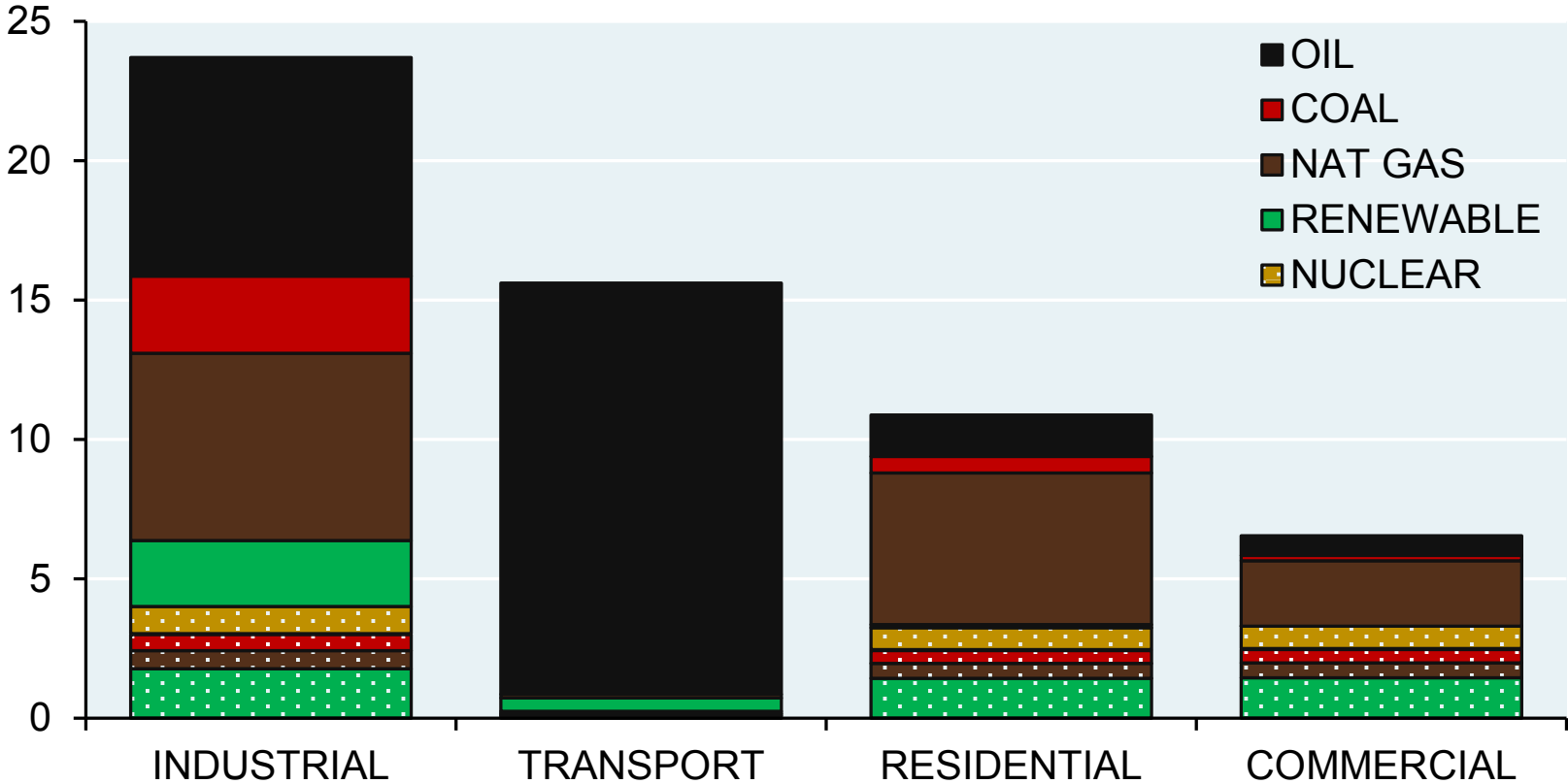
US LNG to the rescue? Not enough import capacity in Europe yet



Europe: Decarbonizing the grid is very different than decarbonizing energy use

OECD Europe energy consumed by end-use sector and fuel type

Quadrillion BTUs of final energy consumed; dotted segments = electricity consumed



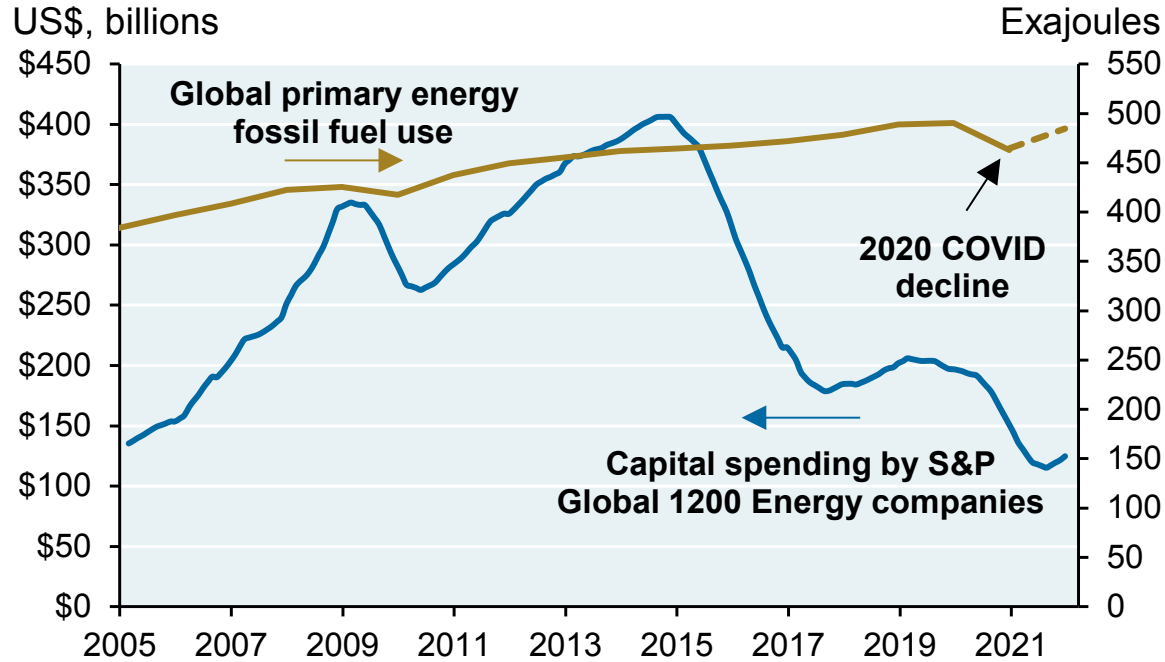
Source: EIA, JPMAM. 2021.

Oil maneuvers: next steps

- Russian oil: currently supplying 2 mm bpd to Western Europe, 0.75 mm bpd to Eastern Europe, 0.2 mm bpd to the US
- Russia could divert ~1 mm bpd to China
- US working on release of oil from Strategic Petroleum Reserve
- French, Russian and UK negotiators appear to be reviving nuclear agreement with Iran, potentially adding 1 mm bpd from Iranian floating storage, with Iran ramping up production from 2.5 to 3.3 mm bpd by December
- All things considered: ~\$100 oil for the next few months with interim spikes
- China may help Russia withstand G7 sanctions with loans, as they did in 2014; Russia is the biggest recipient of loans from Chinese official sector institutions

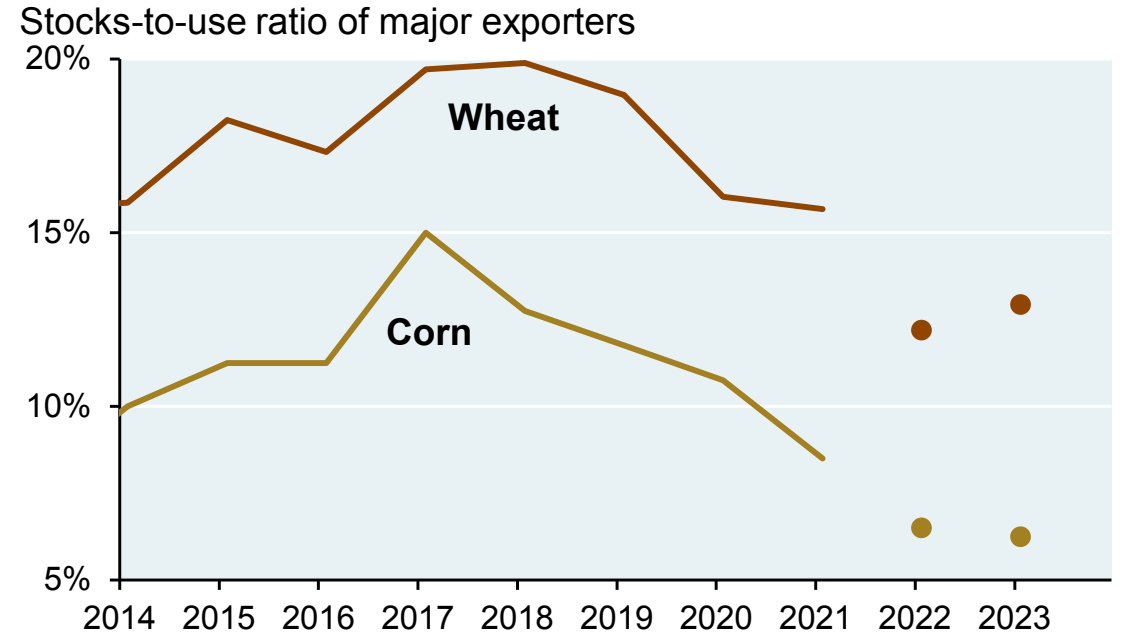
Russia/Ukraine war exacerbates existing tight conditions in energy and grain markets

Global fossil fuel use vs energy capital spending



Source: BP, Bloomberg, IEA, JPMAM. Dec 2021. Dotted lines = estimates.

Wheat and corn supply remains tight

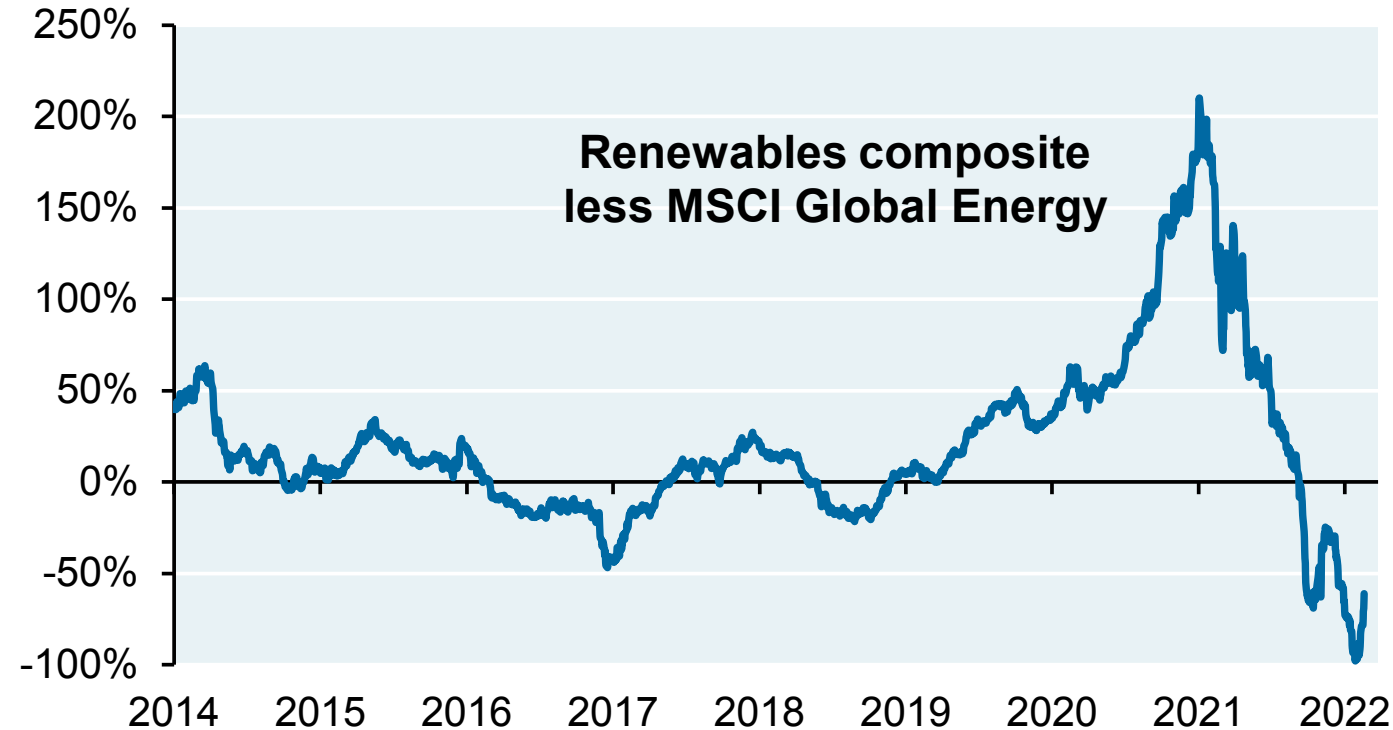


Source: USDA, JP Morgan Commodities Research. November 2021. Dots = JPM forecasts.

“Reports of my death are greatly exaggerated”

Excess return of renewables vs fossil fuels

%, rolling annual out (under) performance



Source: Bloomberg, JPMAM. February 24, 2022. Renewables composite is the average of 5 energy indices: CELS, ECO, EORE, SPGTCED, SUNIDX.

Agriculture and industrial metals

Agriculture price index

Index (100 = Jan 1990)



Source: Bloomberg, JPMAM. February 24, 2022.

Industrial metals price index

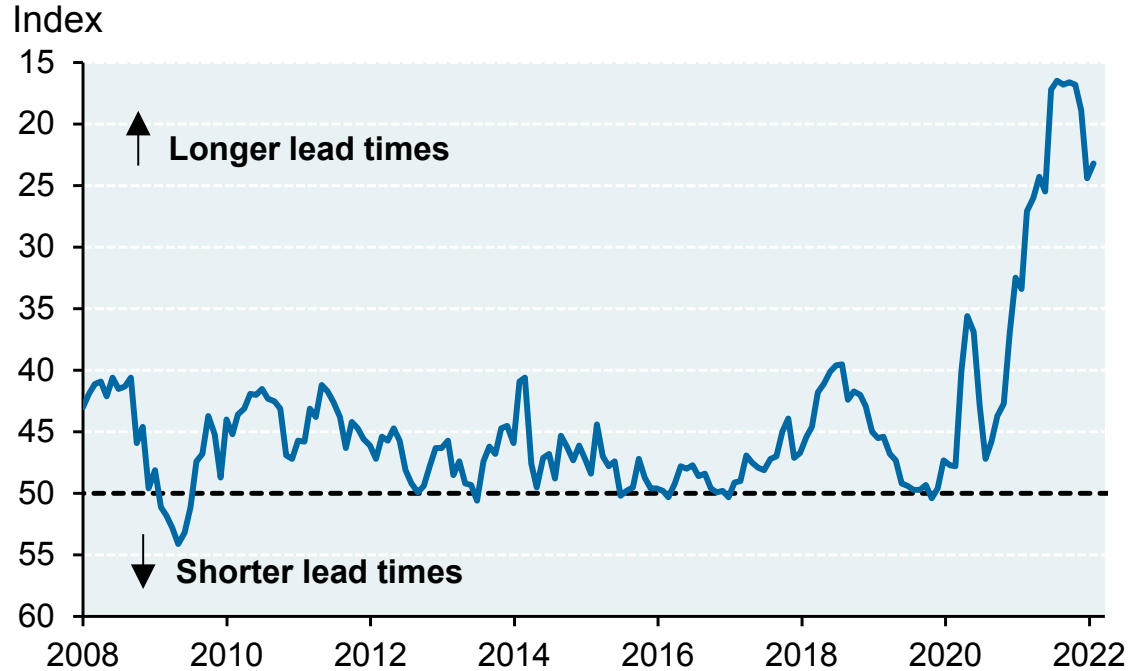
Index (100 = Jan 1990)



Source: Bloomberg, JPMAM. February 24, 2022.

Supply chain conditions not set up for war-related disruptions, which are usually inflationary

US manufacturing delivery times



Source: Bloomberg, JP Morgan Economic Research. January 2022.

Container freight rate and anchored containerships



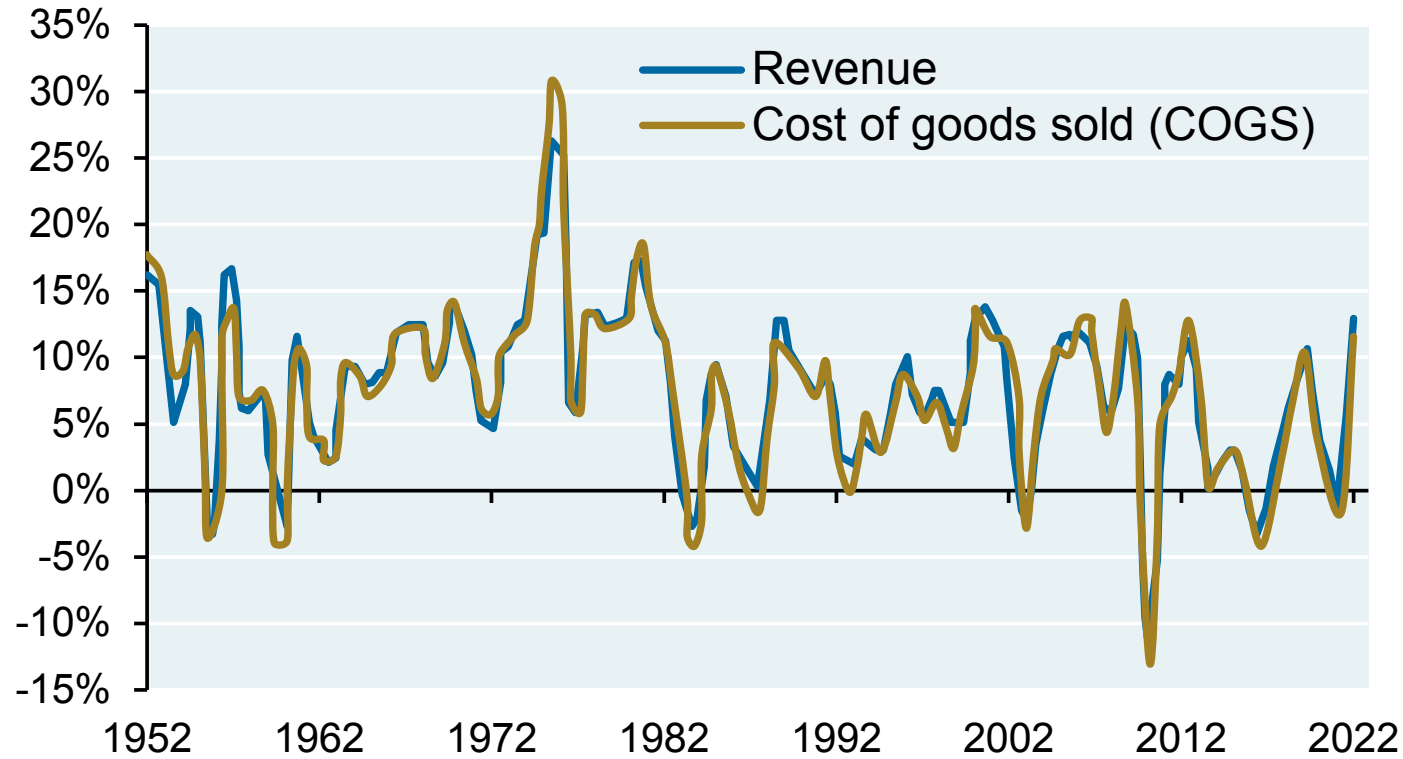
Source: Cornerstone Macro, Bloomberg. February 24, 2022.

Rising input costs almost always translate into rising revenues

The bigger question: will there be a recession

Annual change in S&P 500 revenue and COGS

y/y % change

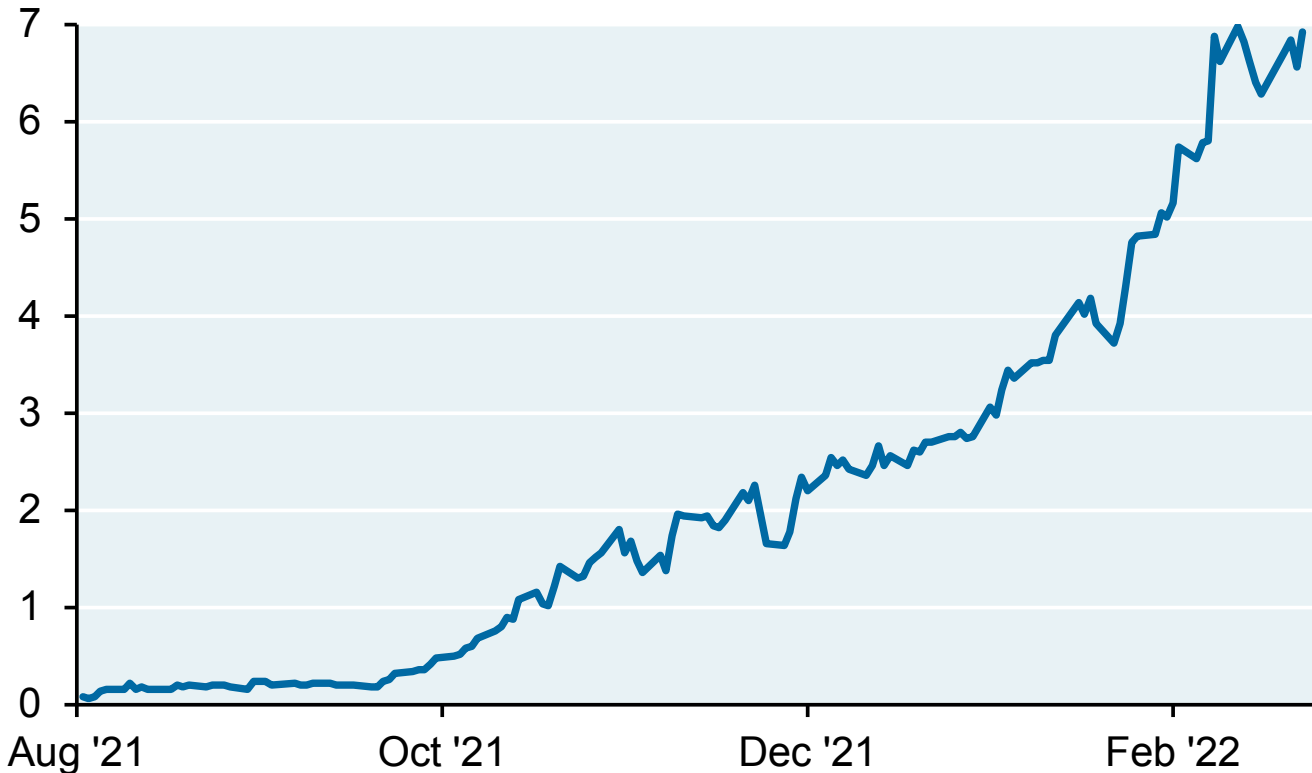


Source: Empirical Research. Feb 9, 2022. Ex. financials, real estate & utilities.

Let's start with the Fed

Market implied Fed hikes, derived from futures market

Number of expected 25 bp hikes over the next 12 months



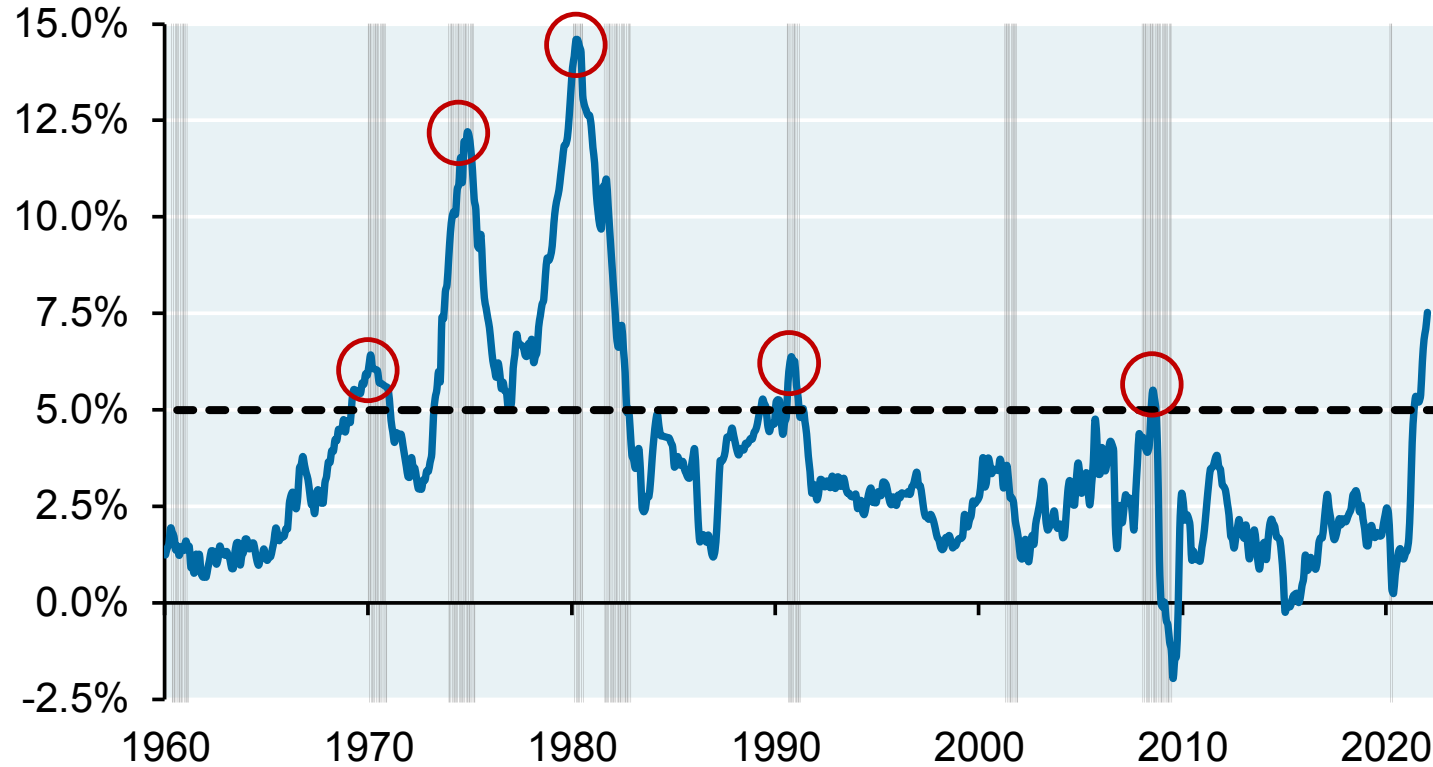
Source: Bloomberg. February 25, 2022.

- Russia and Ukraine account for less than 1% of US imports and exports
- \$10 increase in oil prices = minimal impact on core inflation, lowers real GDP growth by 0.1%
- Wage-price dynamic will drive the Fed to tighten as planned absent major escalation outside Ukraine

Fed needs to accomplish first non-recessionary landing on record now that headline inflation is > 5%

Headline CPI

y/y% change

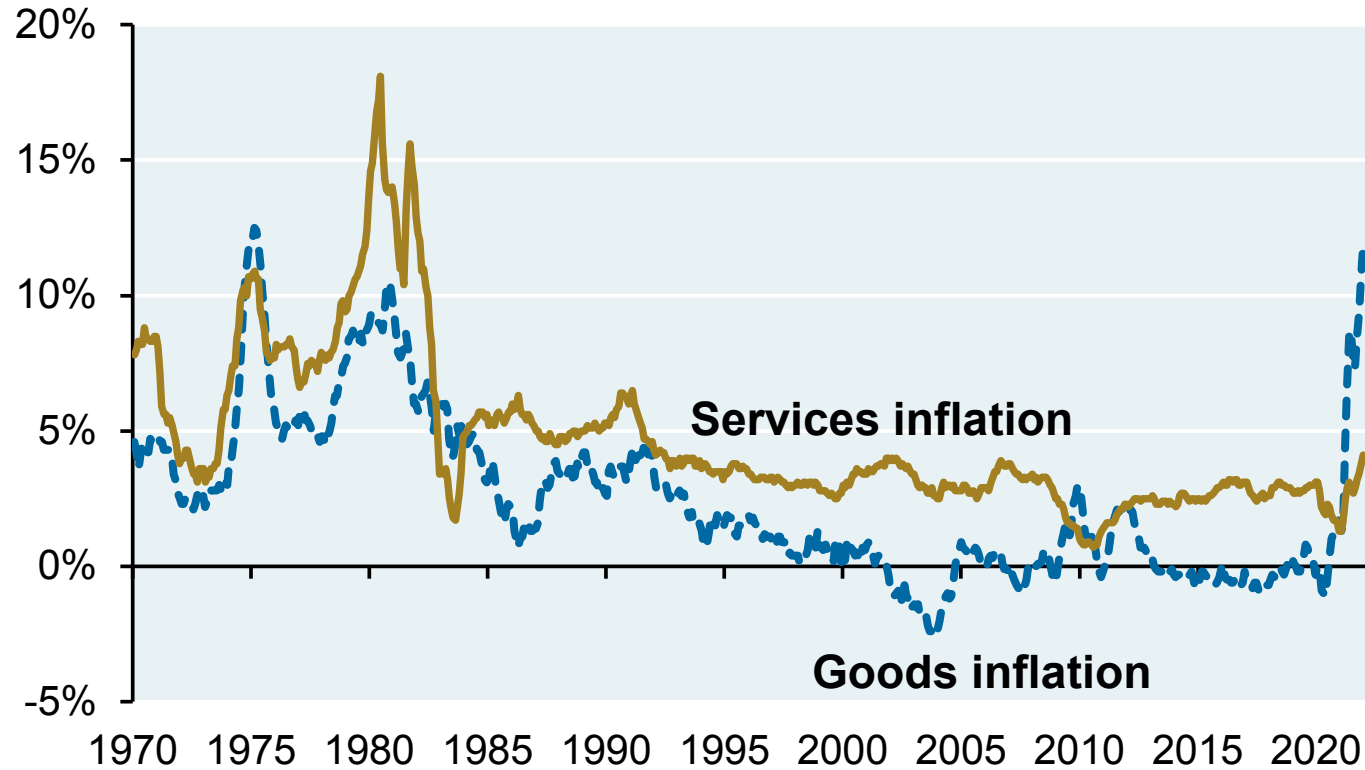


Source: BLS, NBER. January 2022. Shading represents recessions.

This might be the Fed's best chance: most of the inflationary spike still appears related to supply chain disruptions in goods markets

US goods vs services inflation

y/y % change in core CPI



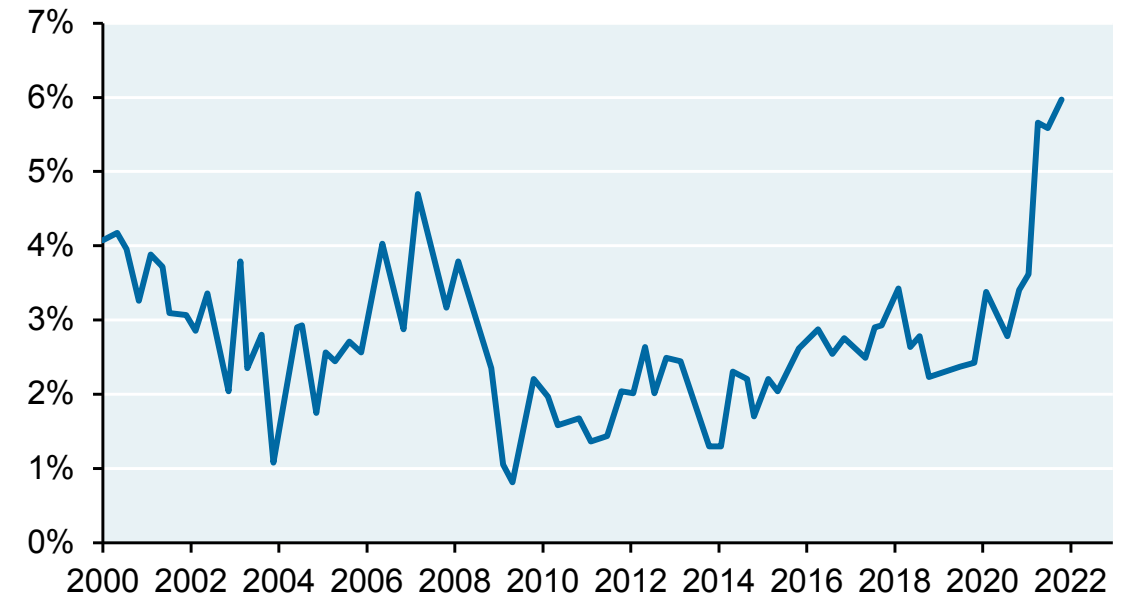
Source: BLS, JPMAM. January 2022.

But pressure on the Fed is increasing

- Inflation broadening to services
- Regional median CPI measures rising as well
- Wage-price spiral risks rising
- Tight real estate markets resulting in 8%-15% annual increase in new/existing leases

Wage tracker

%, composite of avg hourly earnings and employment cost index

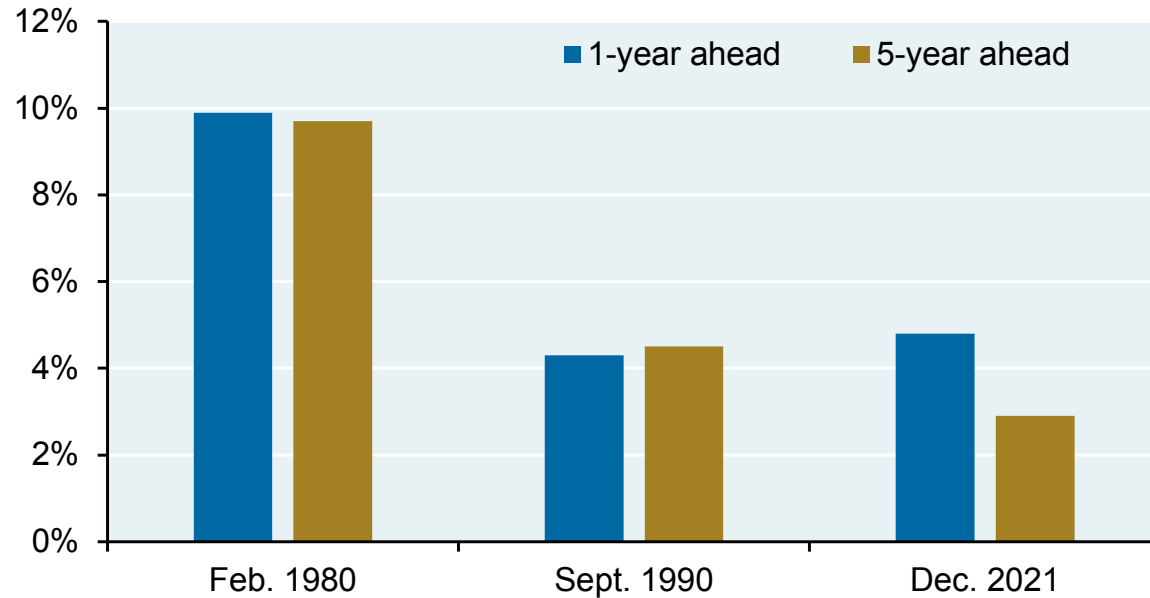


Source: GS US Economics Analyst. 2022

Silver lining for the Fed: Consumers are not expecting inflation spike to last more than one year

Inflation expectations

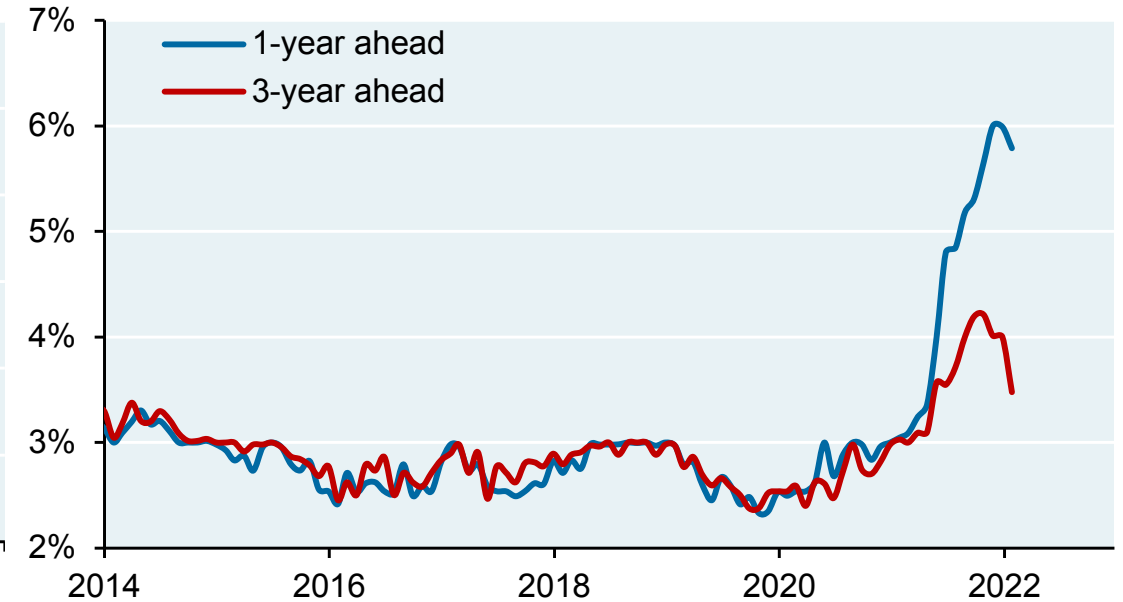
%, median expected inflation rate



Source: University of Michigan. December 2021.

Inflation expectations

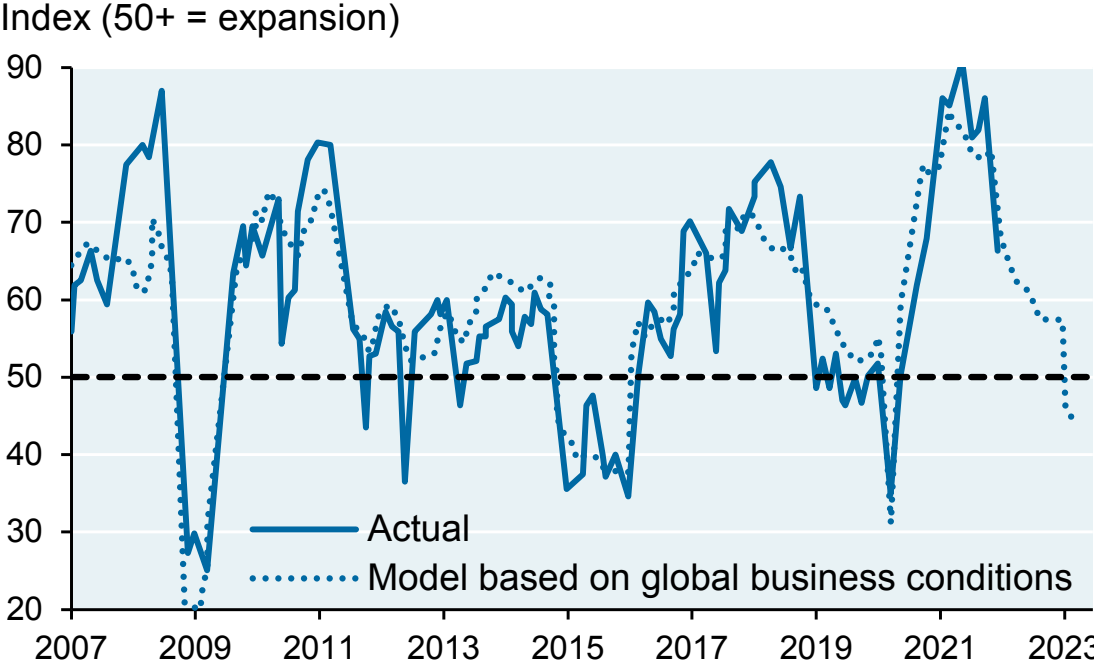
%, median expected inflation rate



Source: Fed. January 2022

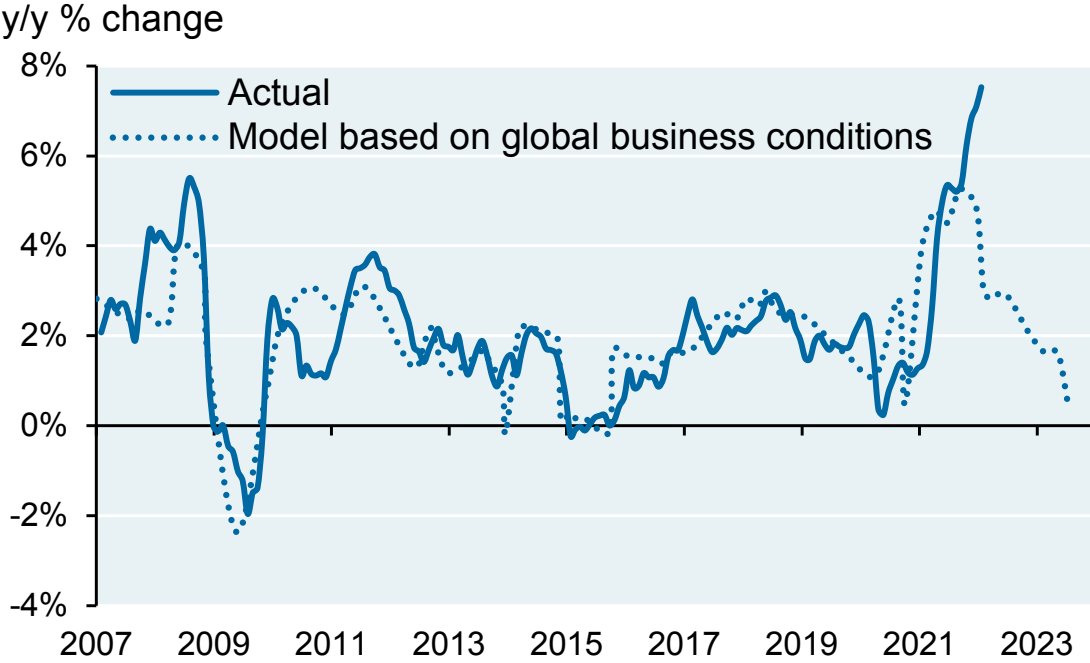
Some of the models we follow agree: producer and consumer prices should fall along with global business conditions

US manufacturing PMI prices paid



Source: Piper Sandler. February 27, 2022.

US headline CPI

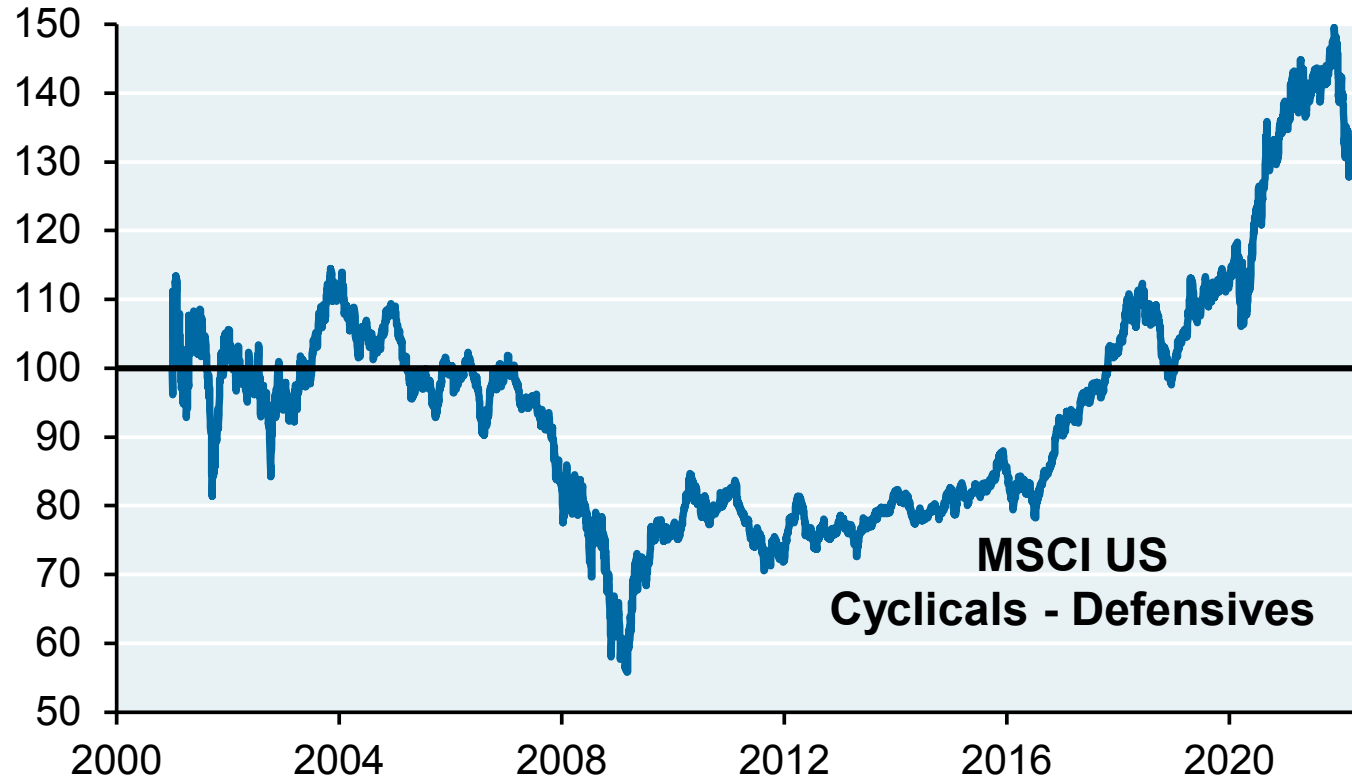


Source: BLS, Piper-Sandler. February 27, 2022.

Equity market reactions: a sharp reversal

Cyclicals vs defensives

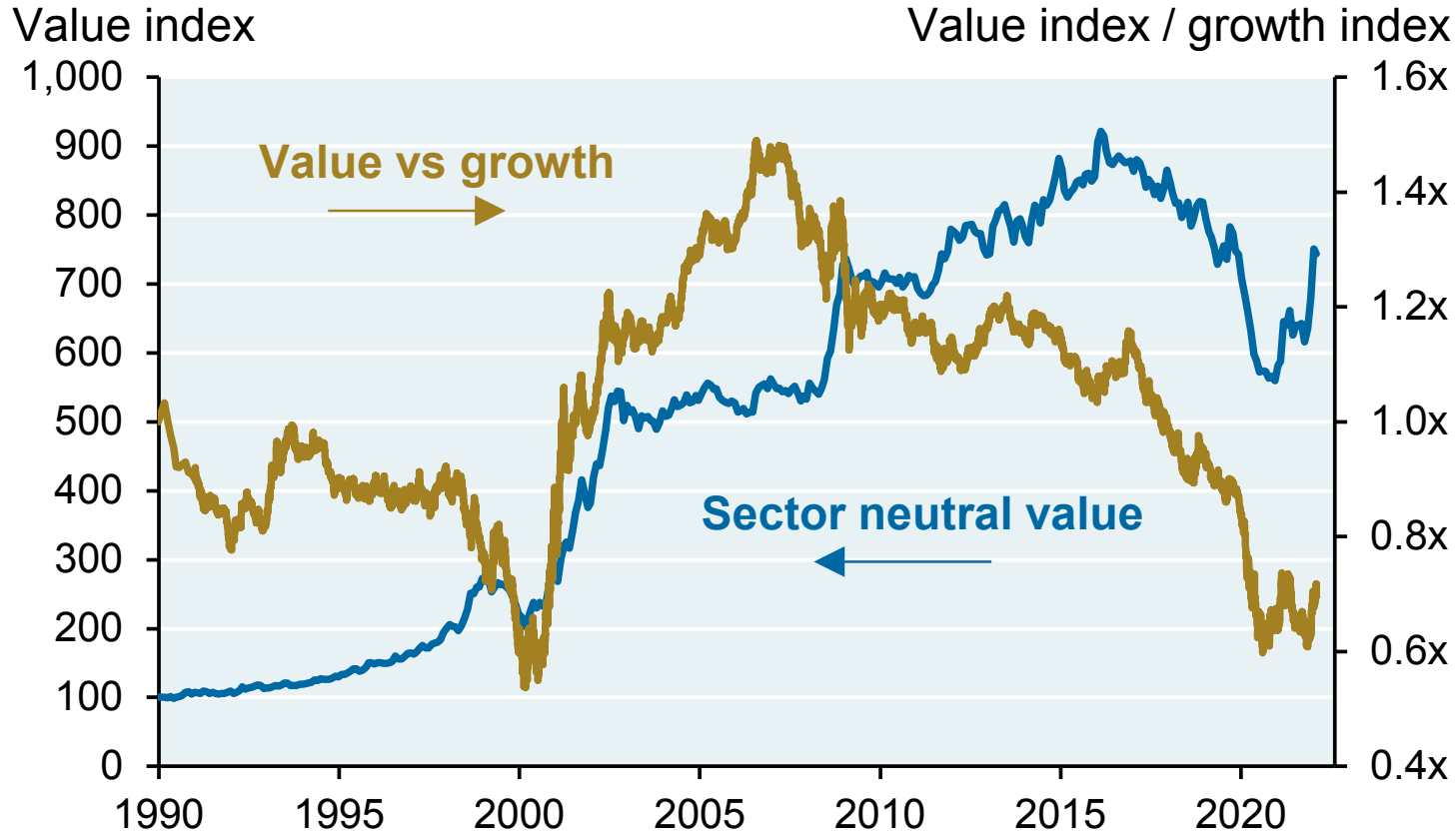
Index (100 = Jan 2001)



Source: Bloomberg, JPMAM. February 24, 2022.

Equity market reactions: value stocks have regained some ground, but growth stocks still way ahead

Russell 1000 value vs growth: performance

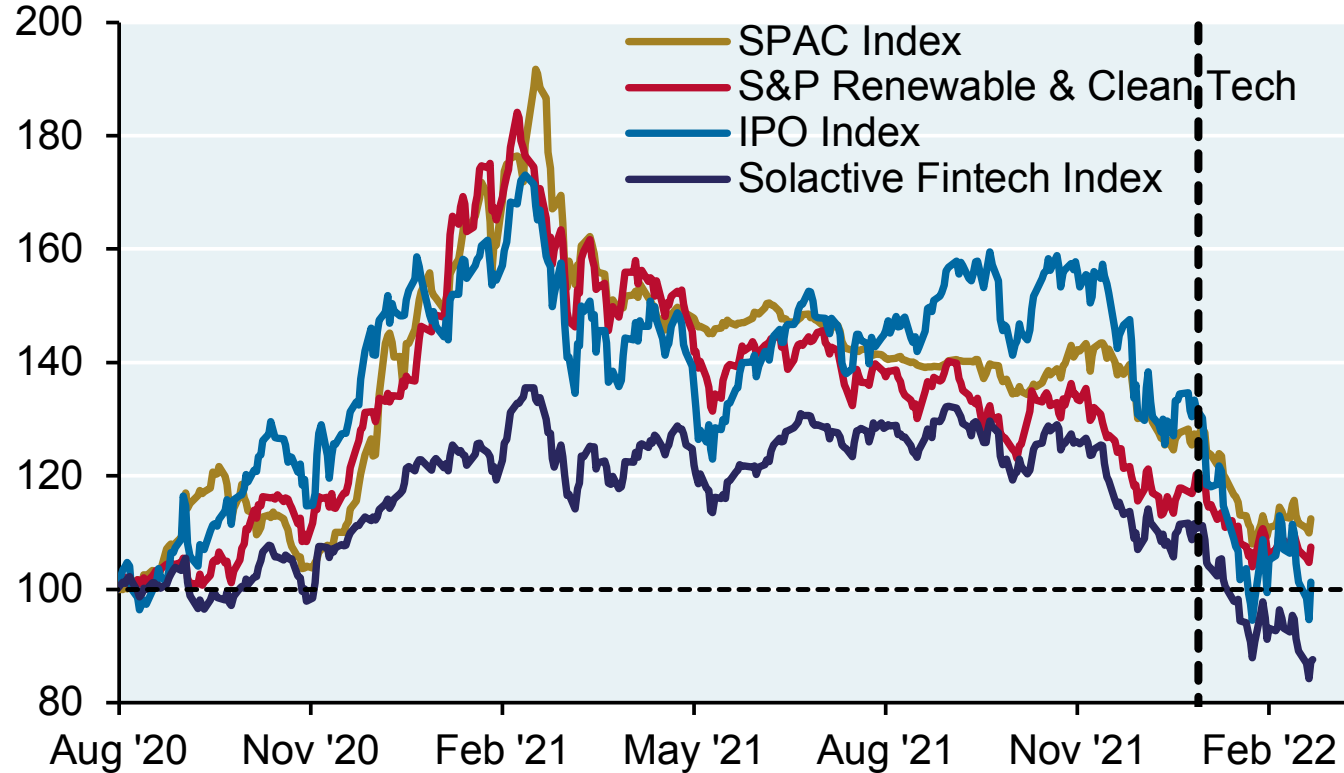


Source: Bloomberg, JPMAM. February 25, 2022.

Market repricing: some of the weakest links crumbling

Weak links crumbling

Total return index (Aug 2020 = 100)



Source: Bloomberg. February 25, 2022.

Market repricing: low margin stocks finally come back to earth

Relative return of low operating margin companies

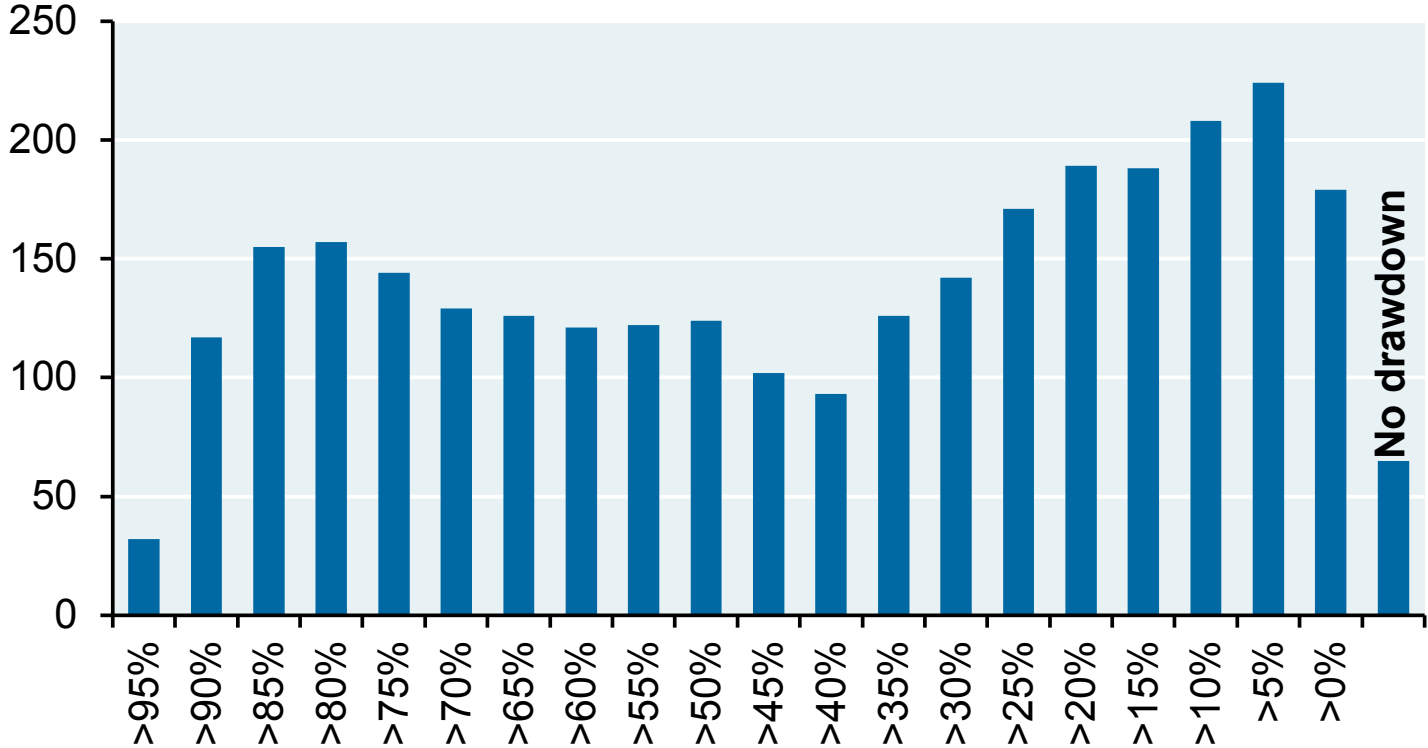
Percent, cumulative return



Source: MS. February 28, 2022.

Market repricing: average NASDAQ stock down ~40% from peak levels

Drawdowns of individual NASDAQ stocks from their respective peaks, Number of stocks

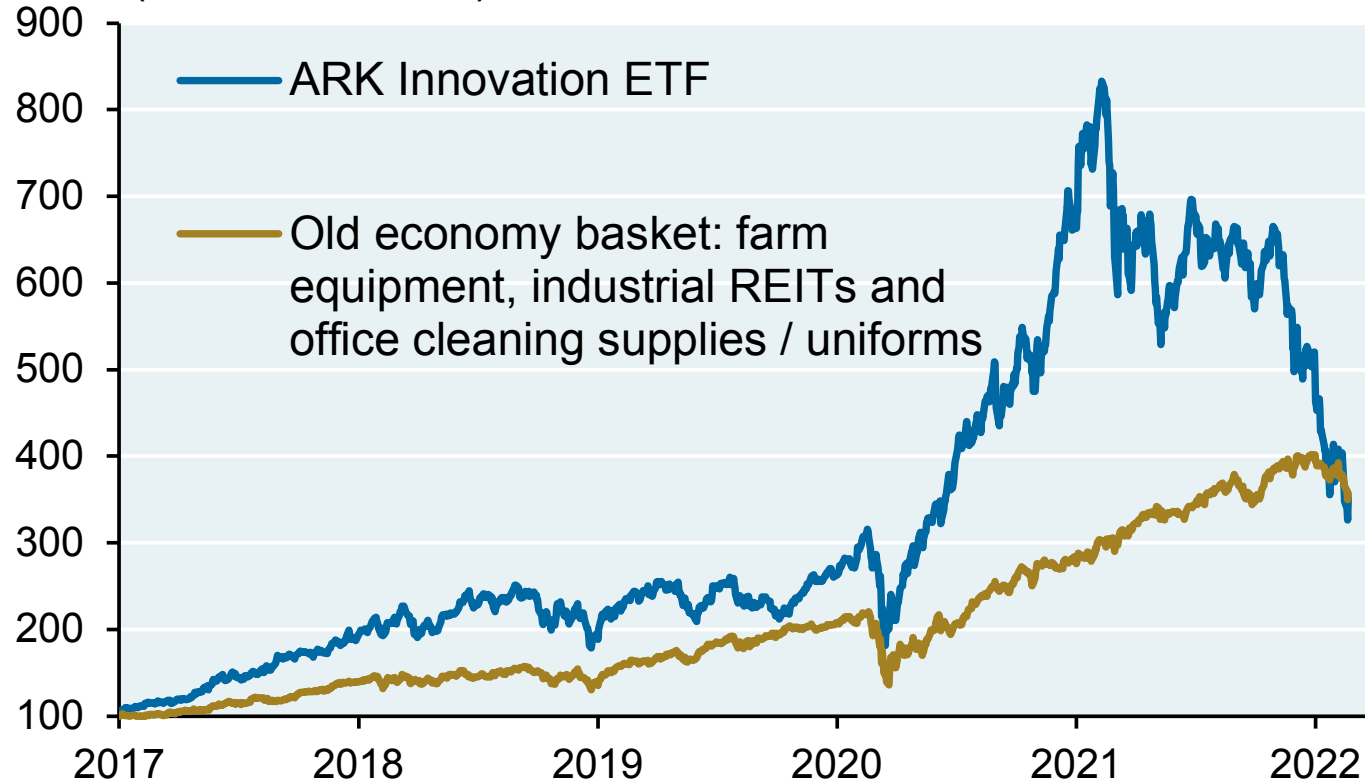


Source: Bloomberg, JPMAM. February 24, 2022. N = 2914.

Market repricing: the price for “innovation” is getting cheaper

The Tortoise and the Hare

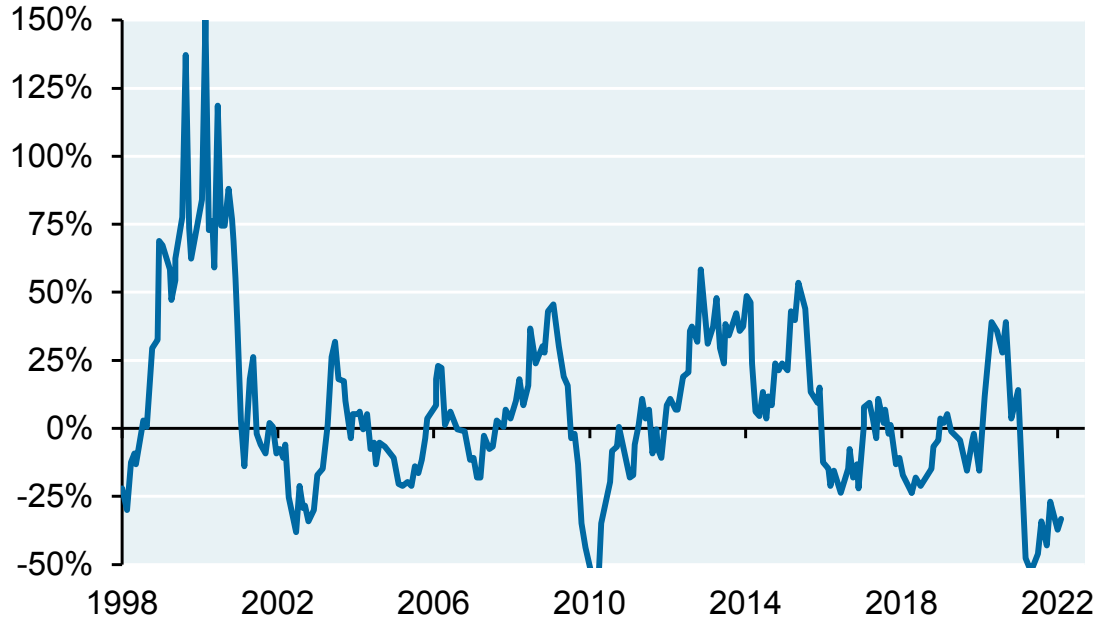
Index (100 = Dec 2016)



Source: Bloomberg, JPMAM. February 24, 2022.

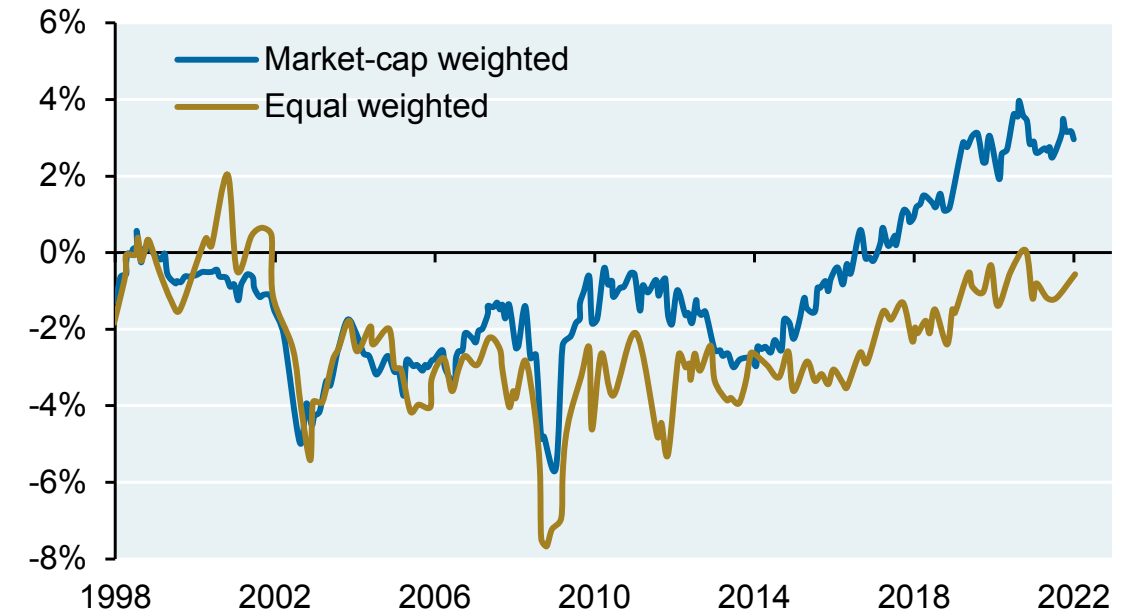
Market repricing: biotech is now in deep value territory

Large cap biotech relative return vs US large cap stocks
%, twelve-month relative returns



Source: Empirical Research. February 23, 2022. Equal weighted indexes.

Free cash flow yield of large cap biotech relative to tech & interactive media stocks



Source: Empirical Research. February 23, 2022. Biotech excludes Moderna.

Bright spots: capital spending and growth impulses were positive, pre-war

US Business Roundtable CEO capital spending survey

Index (50+ = expansionary)

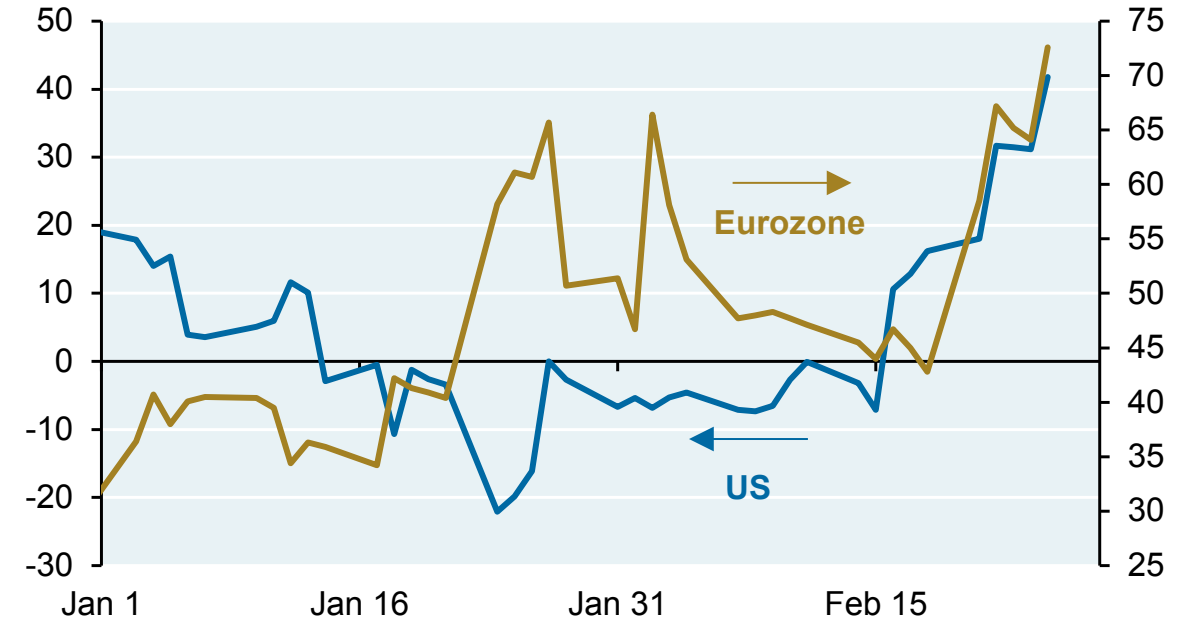


Source: Bloomberg. Q4 2021.

US and European economic surprises

Citi Economic Surprise Index

Citi Economic Surprise Index



Source: Bloomberg. February 25, 2022.

Geopolitics are usually not drivers of equity markets 3-6 months later (July 2014 *Eye on the Market*) But the exception is the 1973 Arab Israeli war and its energy consequences...

S&P 500 Index around military invasions and conflicts (1950 - 1968)

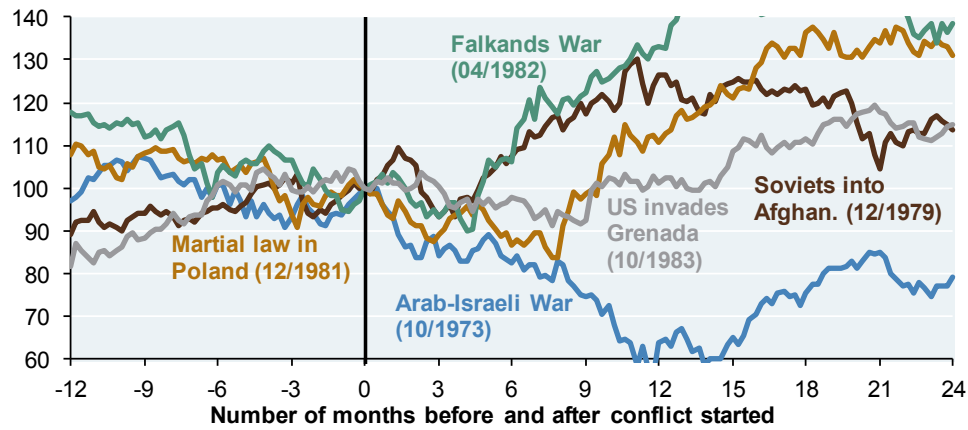
Index, month of invasion = 100



Source: Bloomberg. April 2014. Equity index represents price returns.

S&P 500 Index around military invasions and conflicts (1973 - 1983)

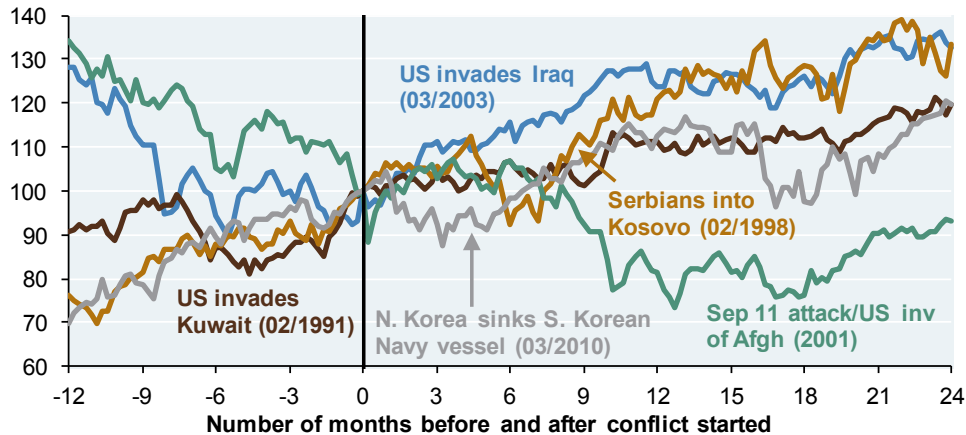
Index, month of invasion = 100



Source: Bloomberg. April 2014. Equity index represents price returns.

S&P 500 Index around military invasions and conflicts (1991 - today)

Index, month of invasion = 100



Source: Bloomberg. April 2014. Equity index represents price returns.

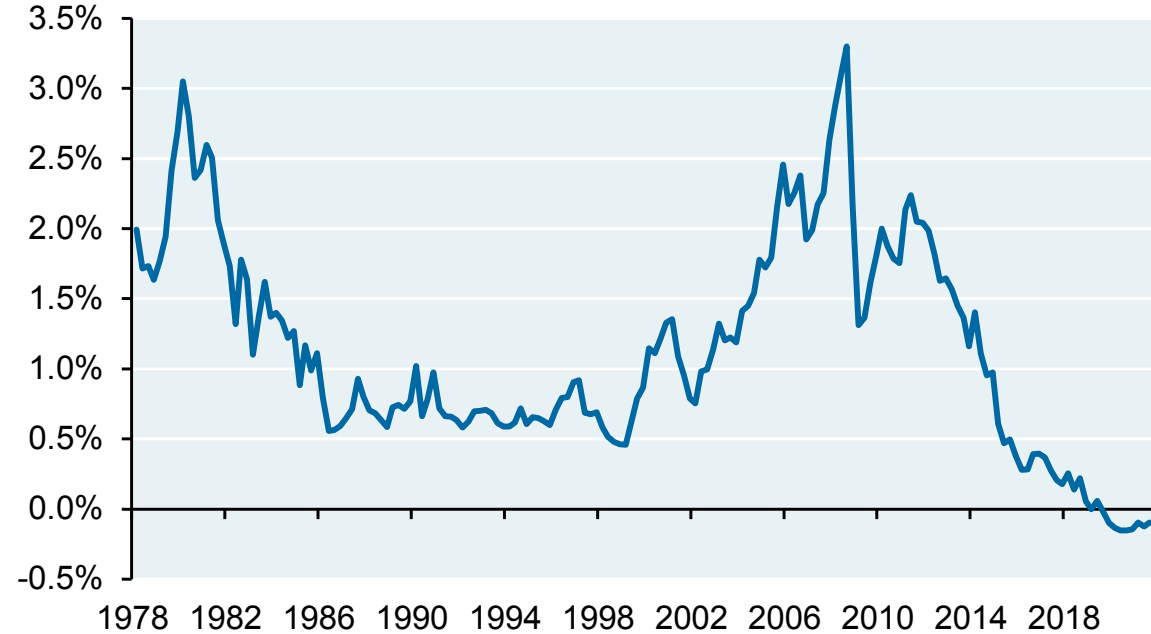
Pre-conflict market and economic trends are almost always what drives equity markets

The exception: Israeli-Arab War of 1973, which led to a Saudi oil embargo against the US and a quadrupling of oil prices

...which is yet another reminder of how important energy independence can be

US net energy deficit, in dollar terms

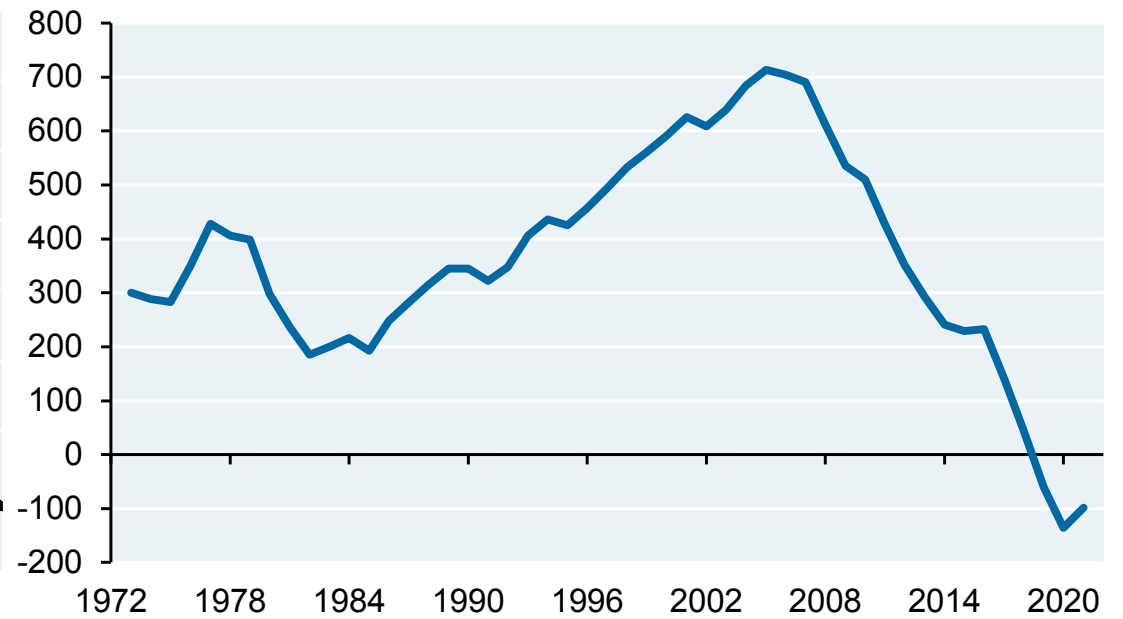
Energy imports - energy exports, % of GDP



Source: Bureau of Economic Analysis, Haver Analytics, JPMAM. Q3 2021.

US net energy deficit, in energy terms

Net imports of oil, natural gas and coal in million tonnes of oil equiv.



Source: EIA, JPMAM. November 2021.

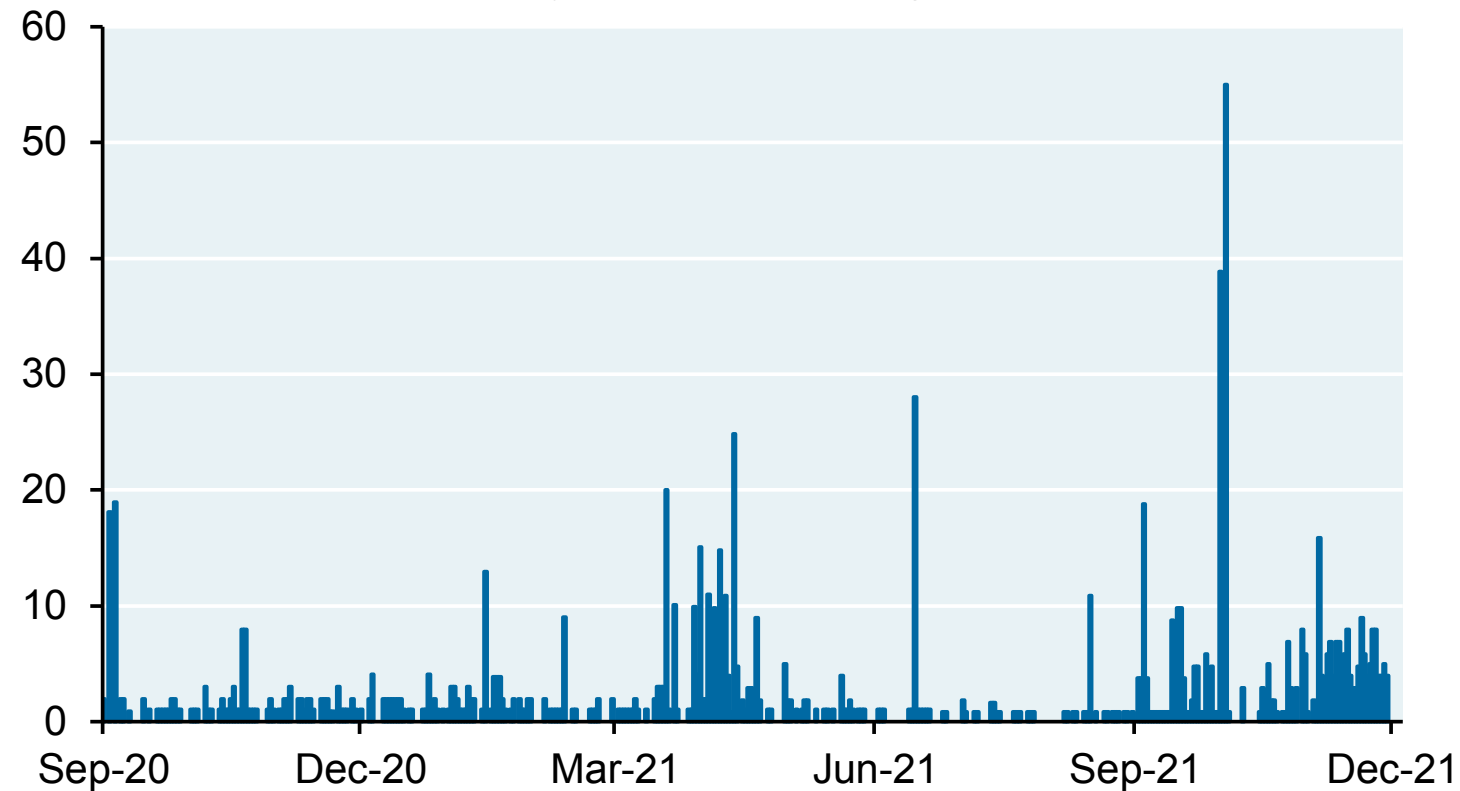
Wrapping up

- Near term equity market reaction may continue to be negative since most institutional and individual investors were not positioned for largest land war in Europe since WWII, and the largest jobs-workers gap as well
 - As usual, it will be difficult to time the bottom absent a global recession
 - A lot of the growth premium has now been eliminated, particularly for unprofitable YUC companies
- Energy consequences for Europe may result in eventual Western acceptance of the facts on the ground, even as tougher sanctions remain in place
- Fed to continue tightening and has difficult challenge ahead, but the unorthodox nature of the inflation spike due to the pandemic should help
 - Both policy rates and long rates still negative in real terms by end of 2022
- Still expecting 3.0% real US GDP growth in 2022, although year-end core inflation may still be over 3.5% and not decline to 2.5% until end of 2023

One day, we may discuss Taiwan and the decision by the West to accept China into the World Trade Organization in the early 2000's...but that is a topic for another time

Chinese military incursions to Taiwan

Number of Chinese military aircrafts entering Taiwan's defense zone



Source: Ministry of National Defense (Taiwan). 2021.

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