GLOBAL Insight



Wealth Management

Perspectives from the Global Portfolio Advisory Committee

A different kind of inflationary environment

RBC Global Asset Management chief economist Eric Lascelles discusses the factors behind surging inflation, and the economy's prospects from here.

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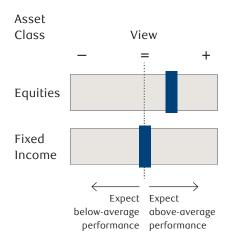
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All values in U.S. dollars and priced as of market close, April 30, 2022, unless otherwise stated.



rbc's investment Stance

Global asset class views



(+/=/-) represents the Global Portfolio Advisory Committee's (GPAC) view over a 12-month investment time horizon.

+ Overweight implies the potential for better-than-average performance for the asset class or for the region relative to other asset classes or regions.

= Market Weight implies the potential for average performance for the asset class or for the region relative to other asset classes or regions.

- Underweight implies the potential for below-average performance for the asset class or for the region relative to other asset classes or regions.

Source - RBC Wealth Management

EQUITIES

- Increasingly hawkish central banks, China imposing lockdowns to stem COVID-19 outbreaks, and the backdrop of the Russia-Ukraine war are augmenting investors' anxiety levels and stock market volatility. The current earnings season should give clues as to how the economy is adapting, such as to what extent corporates are investing and consumers spending, to these circumstances. Whether any positive trend can be maintained through the upcoming monetary tightening cycle may not be apparent for months.
- For now, we suggest maintaining a modest Overweight in global equities. Given the strong economic momentum so far this year, we continue to expect moderate corporate earnings growth in the U.S. for 2022, despite the above headwinds. This should drive modest equity gains given valuations are no longer stretched. In other regions, valuations are undemanding, and seem to discount many of the challenges economies are facing.

FIXED INCOME

- Government bond yields moved higher over the course of April as the benchmark 10-year Treasury note reached a nearly 3.0% yield, a level not seen since fall 2018. Despite ongoing market volatility, the Fed began an aggressive, front-loaded series of rate hikes at its May 3–4 meeting, with a 50 basis point rate increase to bring its policy rate to a 0.75%–1.00% range, with similar moves expected over the course of the summer. However, while Fed rate increases have only just begun, we think the rest of the market has already nearly fully priced in the rate hike cycle, with the fed funds rate seen peaking at 3.25% according to fed funds futures data, in line with where the bulk of the Treasury yield curve is trading.
- With long-term yields now at or near our target levels around 3.0%, we favor shifting duration positioning to Neutral. To compensate for greater sensitivity to changes in interest rates, we maintain an Underweight exposure to government bonds but have recently increased that exposure as Treasury yields have risen, and as market and economic risks have done the same.
- We maintain a Market Weight in global fixed income with a Market Weight allocation to corporate credit.

MONTHLY Focus



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Eric Lascelles is the chief economist for RBC Global Asset Management Inc., where he maintains the firm's global economic forecast and advises its portfolio managers on key themes and risks. Lascelles is also a member of the RBC Investment Strategy Committee, which is responsible for the firm's global asset mix recommendations.

A different kind of inflationary environment

Eric Lascelles, chief economist for RBC Global Asset Management Inc., recently sat down with Global Portfolio Advisory Committee co-chair Jim Allworth to discuss the economic and geopolitical factors driving today's surging inflation—as well as what investors should look for over the remainder of this year, and beyond.

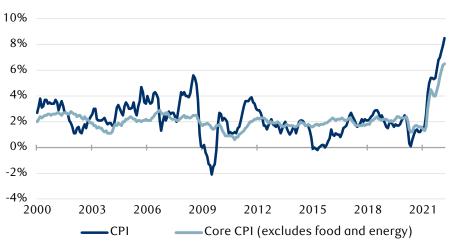
Jim Allworth – Eric, let's start with an update on the trajectory you see for inflation over the remainder of this year and beyond.

Eric Lascelles – The surge in inflation over the past several months was not a complete surprise to us. Last year, we had forecast a big run-up in the first half of 2022. That said, the levels reached have been above the 5%–7% peak we had initially expected. This is because the war in Ukraine now compounds the inflationary pressures that were already coming from pandemic-related distortions.

Both of these factors are hard to analyse through the lens of conventional economics. Normally you'd ask: "How overheated is the economy?" The answer would be that it has regained all the ground lost in the recession, and has used up most of its excess capacity. As such, it makes sense that inflation is higher than normal. But this degree of overheating should boost inflation by no more than 1%–1.5%, not four times that.

So, there are other explanations. One is the dramatic change in spending patterns on the part of consumers. With many services unavailable due to the pandemic and incomes supported by fiscal measures, consumer spending pivoted sharply toward spending on goods. For many categories

Consumer inflation reaches 40-year high



U.S. Consumer Price Indexes (CPI) in year-over-year percentage change

Source - RBC Wealth Management, Bloomberg; monthly data through 3/31/22

A different kind of inflationary environment

of goods, this quickly exhausted supplies on hand, producing shortages think of what the shortage of computer chips did to auto production. The attempt to boost production to meet the very high level of demand exacerbated production bottlenecks and overwhelmed shipping infrastructure already stressed by draconian lockdowns in China. Higher prices have been the result.

Another factor has been the big run-up in commodity prices, which has added a significant extra leg to inflation. Commodity shortages induced by Russian sanctions have only served to intensify this pressure.

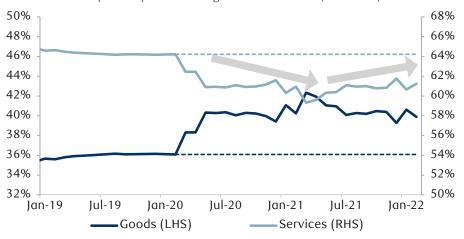
There is another factor that is less widely appreciated. As aggregate spending surged into the goods side of the economy, producing elevated price hikes, one might have expected the weak side of the economy—services—to deliver some offsetting deflation. But that didn't happen. Service businesses don't usually have unsold inventory on the shelf that needs to be discounted to be cleared. Their principal cost is wages, which tend to be resistant to downward pressures.

Jim – That gives us an idea of how we got here. One question would be, how long does inflation remain elevated?

Eric – A growing number of observers are saying that inflation has peaked. In our view, if it hasn't, we expect it will within a month or two. There are several reasons to expect the rate of inflation to ebb somewhat from here. There are tentative signs that spending is indeed shifting toward services and away from goods. The latest retail sales data, when the effect of higher gasoline prices is taken out, reveal a decline in real spending on other goods. At the same time, hotel traffic is up sharply, as are some other services markers.

Supply chain issues, while likely to be around for some time yet, have begun to ease. There are fewer ships waiting at major American ports, and shipping costs have come down somewhat. Manufacturers are reporting slightly less angst about these issues.

U.S. consumer spending on goods and services has begun to reverse



Personal consumption expenditure on goods and services (% of total)

Note: Dashed lines indicate February 2020 levels.

Source - RBC Global Asset Management, Macrobond; monthly data through February 2022

A different kind of inflationary environment

Commodity factors have added an additional leg upward to price pressures, exacerbated by the war in Ukraine, and it's hard to see those dislocations ending any time soon. But it is also unlikely that commodity prices will rise anywhere near as rapidly in the coming year as they have in the past 12 months. And that slowdown is all you need to expect a slower rate of year-over-year inflation from this source.

So, we expect inflation rates will recede somewhat over the second half of the year, but we will in all likelihood still finish the year well above a desirable level. Most of the improvement should come from the goods side of the economy as demand pivots elsewhere.

Some manufacturing indicators look to be corroborating this shift. The New Orders component of the ISM Manufacturing PMI data was very strong from the summer of 2020 through all of 2021. But recently it has weakened, dropping sharply below the elevated range that had contained it for more than 18 months. On the other side of the coin, the Inventories-on-hand sub-index has abruptly moved higher. So it's not unreasonable to expect some price weakness on the goods side over the remainder of the year, and perhaps longer.

But there are at least two reasons why the overall inflation rate is unlikely to come down to the same degree, in our view. One is that the prices of some services are going to go up. As demand for travel and dining out surges higher, so will the prices of airline tickets, hotel rooms, and restaurant meals. That's especially likely as those industries have been the most acutely affected by the much-discussed labour shortages. Several airlines have recently announced cutbacks to their summer flight schedules due to shortages of staff—notably, pilots. Fewer seats available likely means higher prices.

The other factor is rising wages as workers try to gain back ground lost to the big inflation increase already in place. The tight labour market makes such wage gains almost certain, and companies will try to pass those higher costs on to the consumer.



Wages are on the rise

Broad measures of U.S. wage inflation (year-over-year % change)

Source - RBC Wealth Management, Bloomberg; Atlanta Fed data range 3/31/00–3/31/22, ECI data range 3/31/01–12/31/21

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So, while the inflation rate should ease back from today's peak levels, it is likely to remain uncomfortably high at year's end. But we do expect further improvement through 2023 as the supply chain issues are resolved, the demand for services normalises, and the extreme labour market tightness eases somewhat.

If you were to look back at our inflation forecast of early last year, and compare it with what has already transpired and where we forecast things are headed, I think it would be fair to say that the shape of the inflation trajectory and its inflection points have not changed. But the peak rate turned out to be higher than we expected, and the road back to an acceptable long-term inflation rate will probably be more gradual and take longer to play out, largely because of things that have happened recently notably the Ukraine war and the renewed lockdowns in China.

Jim – Does this mean the Fed will have to tighten further, and for longer?

Eric – We think the answer is yes. Just a few months ago, the Fed was still indicating a willingness to act in a deliberate and measured way. That comparatively calm environment has been quickly left behind and replaced by one where "urgency" is the watchword. Markets are now pricing in several aggressive back-to-back rate increases followed by more moderate hikes into 2023.

For our part, we expect both the Fed's and the market's urgency will diminish somewhat in the second half. By year's end, in addition to an ebbing inflation rate, policymakers will likely be looking at much slower GDP growth, an entrenched slowdown in the goods-producing side of the economy, and rapidly diminishing tailwinds on the services side. The pace of any tightening beyond that point is likely to be commensurately slow.

Beyond 2023, we look for inflation to continue to move closer to the Fed's 2% target—though after a decade of running stubbornly below that level, it may well linger modestly above target for an extended stretch.

MONTHLY Focus



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Is energy security siphoning power from the green energy transition?

Russia's predatory move on Ukraine is pitting energy security against energy transition for many countries. Governments are shifting energy policies back in favor of fossil fuels in the short term, raising fears the energy transition may end up on the back burner.

But the new focus on energy security doesn't irrevocably threaten the climate change mitigation agenda, in our view. Rather, the green energy transition, while slowing in the near term in some aspects, is very likely to accelerate in others, particularly in Europe. We explore the investment opportunities arising from the friction between security and climate goals.

Perilous dependency

Russia's war on Ukraine has made energy security a pressing priority. It is not only the moral issue of replacing a rogue supplier that is using energy profits to finance an unprovoked war. Governments around the world also wish to shelter their citizens and economies from harmful spikes in global energy prices. The Russian invasion has exacerbated an existing uptrend in energy prices, with oil and gas prices leaping as much as 30 percent and 150 percent, respectively, before retreating.

Exposure to Russian energy

Europe is most exposed to Russian energy

	Percentage of all imports produced by Russia		
Country/region	Oil	Natural gas	
Еигоре	25%	40%	
UK ¹	17%	5%	
China ²	15%	3%	
Japan	4%	9%	
U.S. ³	3%	0%	
Canada⁴	0%	0%	

¹ 2020 data.

² 2019 data. Under a deal signed in February 2022, Russia aims to deliver 48 billion cubic meters (BCM) of liquefied natural gas to China by 2026. Gazprom estimates this will represent about one-third of China's total gas imports in that year.

³ 2021 total petroleum including oil.

⁴ Canada has not imported crude oil from Russia since 2019.

Source - International Energy Agency, U.S. Energy Information Administration, GOV.UK, Eurostat, Canada.ca

Is energy security siphoning power from the green energy transition?

Many countries are refocusing their energy policies, particularly—but not exclusively—those with a heavy reliance on Russian oil and gas.

- Shortly after the invasion, the EU issued its new energy plan, REPowerEU, a roadmap to reduce Russian natural gas imports by two-thirds by the end of 2022 and to cut off Russian fuels completely by the end of the decade. Much of the implementation of this plan is left to the bloc's member states. Most are looking for alternative suppliers of gas and to extend the life of coal-fired power plants to fill the gap in the short term. At the same time, the push for renewable energy is being jump-started.
- The UK, having banned Russian energy imports entirely, issued its new British Energy Security Strategy in April. The plan focuses on more drilling for oil and gas in the short term, but it also calls for offshore wind and nuclear power to make up the shortfall over the long term.

Even countries that don't rely much on Russian energy are reevaluating their energy strategies, looking for ways to boost energy output in an effort to alleviate elevated energy prices and to help countries scrambling to replace Russian energy.

- The U.S. has reshaped climate and energy discussions since the Russian invasion due to crippling energy prices. Fossil fuels are no longer seen in as bad a light, and recognized as having an important role to play in mitigating the energy crisis. President Joe Biden, who recently signed a deal for the U.S. to supply Europe with liquefied natural gas (LNG) until at least 2030, has called for more fracking, and has gone as far as considering imposing fines on companies that do not use their federal leases to drill for oil. Still, no long-term changes to the U.S.'s energy policies have been announced, though key climate provisions within Biden's Build Back Better legislation have stalled.
- Unrelated to the invasion, the Canadian government issued a 271-page document at the end of March calling for a 42 percent reduction in the country's oil and gas emissions from 2019 levels by the end of the decade as part of its 2030 emissions reduction goal. The document reiterates Canada's commitments to climate change mitigation and the energy transition.

Going against the grain?

With a sense of urgency and in an effort to find a short-term fix, several strategies to increase energy supplies are being touted, including more drilling, diversifying LNG suppliers, and expanding the life of existing coal power plants. All would slow progress toward achieving net-zero emissions in the short term and seem like a step back in the energy transition.

More drilling

The realization of the importance of energy security and the reaction to elevated energy prices have both led to calls to increase drilling in key oilproducing countries, such as the U.S.

In Europe, oil- and gas-rich Norway and the UK are also considering increasing domestic production. RBC Capital Markets sees potential

Is energy security siphoning power from the green energy transition?

for a significant jump in the UK's North Sea activity in 2022, following a steady decline in capital expenditure since 2013. Many projects previously deemed uneconomical are becoming attractive in today's elevated price environment. The emphasis is likely to be on gas developments given European gas prices are likely to stay firm over the coming years and Europe remains a significant importer.

Interestingly, if the additional drilling comes at the expense of LNG imports, it could actually lower carbon emissions. In its recent report "The European Energy Trilemma" RBC Capital Markets calculated that LNG imports are at least three times more carbon-intensive than domestic gas production. Moreover, supporting domestic energy supplies is typically a cheaper alternative to imports.

Furthermore, additional drilling does not necessarily mean unbridled drilling. The Canadian government's recent approval of a \$12 billion offshore oil project off the coast of Newfoundland sets out 137 legally binding conditions, including the requirement the project reaches net-zero emissions by 2050. Canada also released an energy plan in March 2022 that suggests rolling out a tax credit for carbon capture and storage, a process that can reduce 50 percent to 70 percent of carbon emissions from industrial processes. We would expect broad deployment of this tool to moderate carbon emissions.

While there are mitigating circumstances and additional drilling may not be as much a setback to climate goals as initially feared, the risk is that the world could remain locked into fuel dependence.

Diversifying the LNG supplier base

To replace Russian energy in the short term, many in Europe are focusing on diversifying natural gas supplies before the next winter. The secondround effect of this strategy may be to unintentionally increase carbon dioxide emissions.

For instance, the U.S. has upped its LNG shipments to the region and Canada has pledged to increase exports to Europe. Meanwhile, Germany has reached out to Qatar, the world's largest exporter of natural gas with 15 percent of global exports, about obtaining more supply to meet its gas needs. Italy is also ramping up gas imports via its recently completed deal with Algeria, its second-largest supplier after Russia, for alternative supplies.

Whether LNG is received from one supplier or another may not by itself increase carbon emissions. But the RBC Capital Markets report noted that a diversification of European LNG imports would likely mean that shipments are diverted away from Asian countries—perhaps leaving them with little alternative than to burn more coal to meet their energy needs. Coal is a cheap but much more polluting alternative to natural gas, producing 50 percent more emissions.

As such, merely tapping other sources of LNG supplies may have unwelcome knock-on effects for the energy transition.

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Expanding the life of coal-fired plants

A number of countries, including the UK and Germany, are considering expanding the life of coal-fired power plants previously designated for closure.

Bloomberg estimates that burning additional coal instead of Russian gas would increase the EU's carbon emissions by about eight percent. But it points out that as Europe isn't planning to construct new coal power plants as part of its response to the crisis, any pollution created by new coal and oil imports could be offset by the scaling up of green energy.

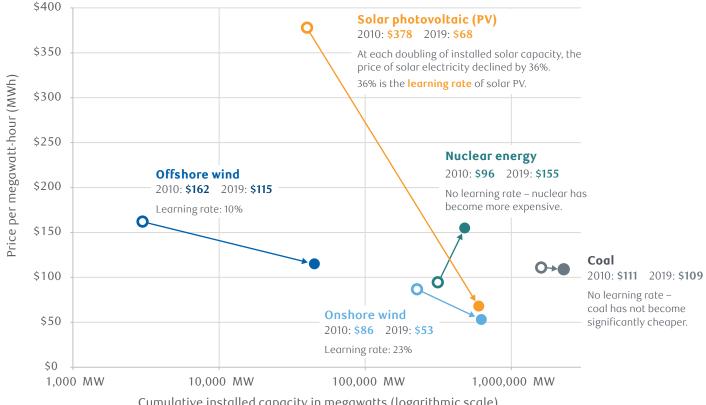
Nuclear: The comeback kid?

The fortunes of nuclear power may be about to improve as some governments are attracted by its emissions-free attributes.

In the 15 years to 2020, nuclear energy's share of global electricity production fell from 17.5 percent to just over 10 percent. Nuclear accidents and leaks are one reason. Nuclear energy is not only slow to build and more expensive to produce but costs have also been going up, unlike most other energy sources. Then there is the thorny issue of how to dispose of nuclear waste. Finally, the materials used, from the steel that

Cost of electricity by source

Electricity from renewables became cheaper as capacity increased; electricity from nuclear and coal did not



Cumulative installed capacity in megawatts (logarithmic scale)

Note: Price per megawatt-hour of electricity is the global weighted average of the cost of electricity generation for a generating plant over its lifetime, without subsidies; prices are adjusted for inflation. Cumulative installed capacity is shown on a logarithmic scale to make the analysis of the large range easier.

Source - Our World in Data, IRENA 2020 for all data on renewable sources; Lazard for the price of electricity from nuclear and coal; International Atomic Energy Agency for nuclear capacity and Global Energy Monitor for coal capacity; adaptation of work licensed under CC-BY by the author, Max Roser.

Is energy security siphoning power from the green energy transition?

is manufactured to construct the power plant to uranium ore, aren't renewable though nuclear energy itself is emissions-free.

As such, the EU's decision to label nuclear energy a "sustainable investment" earlier this year was controversial.

Despite nuclear energy's drawbacks, several governments and corporations are considering nuclear expansion. Recently, the UK, suffering from gas shortages and prone to a dearth of wind, announced it is looking at expanding the share of this energy source. France, which derives more than 70 percent of its electricity from nuclear power, more than any other country, announced the "renaissance" of the French nuclear industry, and plans to construct up to 14 new nuclear reactors by 2050. Both countries are also considering extending the life of existing nuclear plants.

Next-generation nuclear reactors known as small modular reactors may hold some promise as they are cheaper and quicker to build. Four Canadian provinces have announced plans for the new breed of small reactors.

In Poland, where 70 percent of electricity production burns coal, energyintensive companies are spearheading the drive for greater use of nuclear energy. They are eager to reduce carbon dioxide emissions, the <u>cost of</u> <u>which has increased relentlessly</u> over the past few years.

To the extent that energy security means a diversified portfolio of energy, nuclear does have a role to play in the energy transition, given that many renewable energy sources are intermittent. China is planning at least 150 new reactors in the next 15 years, or more than the world has built in the past three decades.

Redoubling green energy efforts

Beyond harnessing fossil fuel energy in the short term, and making difficult and at times controversial decisions to rethink their plans for nuclear energy, many governments are redoubling efforts toward energy efficiency at the same time. Developing a low-carbon economy could be a very effective energy security strategy. This is an opportunity in Europe, and it also may be so in the U.S.

Ramping up wind and solar energy

According to Ember, an energy think tank, 50 countries around the world, including the U.S., China, Japan, Germany, and the UK, generate at least 10 percent of their energy needs from wind and solar. Denmark remains the leader, generating more than 50 percent of its energy from these sources.

Renewables' contribution is likely to grow further. RBC Capital Markets points out that the pace of renewable energy development in Europe has become increasingly important in recent months as the urgency for a shift from natural gas picks up.

Under the REPowerEU plan, investments to reduce emissions by 55 percent by 2030 relative to 1990 levels will be frontloaded, increasing the average deployment rate by 20 percent. Another 80 gigawatts (GW) of renewable capacity has also been targeted by 2030 to enable the production of more

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renewable hydrogen. Germany has brought forward its target of reaching 100 percent clean energy by 2035, or 15 years earlier than initially planned. Many countries lacking large deposits of fossil fuels will look to do the same as wind and solar are, after all, omnipresent.

This should help to ensure that the European Commission's target of 40 percent renewable energy sources in the EU's overall energy mix by 2030, twice the 2020 level, is reached earlier.

In the UK, one of the main objectives of the new British Energy Security Strategy focuses on offshore wind. The government has increased its target for offshore wind generation to 50 GW by 2030, up from 40 GW, with a new target of 5 GW coming from floating turbines.

Removing hurdles such as streamlining the lengthy and stringent planning permission requirements for renewable projects could arguably prove even more important than the increase in the rollout targets. The EU is set to publish a recommendation on fast-tracking the permitting of renewable energy projects in May. The UK government has likewise promised to implement reforms to cut approval times in half.

Wind and solar technologies are not magic wands, of course, as these will also need more infrastructure, including transmission lines, batteries, and charging stations for electric vehicles. Much of this will require mining projects in metals critical to building a green economy, such as aluminum, cobalt, copper, lithium, nickel, silver, and zinc. Such mining will likely damage local environments and is often located in countries with high political risk.

Hydrogen revolution brought forward

High gas prices are also changing the cost equation for hydrogen. Previously, "green hydrogen," or hydrogen produced by electrolyser machines powered by solar and wind power, had long been considered too expensive to produce, costing up to four times as much as the cheaper, fossil fuel-derived "grey hydrogen." It was thought that "blue hydrogen," which uses carbon capture to remove the bulk of CO₂ emitted during production processes, would be the type of hydrogen most likely used in the short term to help achieve the green energy transition.

But given the increase in the price of natural gas, the premium cost of green hydrogen has markedly declined. BloombergNEF, an energy consultancy, recently calculated that green hydrogen could be costeffective *today*—cost parity had previously not been expected until the end of the decade.

The reduced cost differential is happening at an opportune time. In late 2021, the EU launched a ≤ 2 billion partnership with industry to accelerate research and development in green hydrogen, which involved scaling up green hydrogen electrolysers from a megawatt to gigawatt scale to bring down the cost of the technology even further. The reduced price premium on green hydrogen makes the EU's target for hydrogen to supply at least 10 percent of the bloc's energy needs by 2050 appear more achievable.

Is energy security siphoning power from the green energy transition? Sensing the opportunity, H2 Mobility Deutschland, a private German company, recently raised \$120 million to more than triple the number of its hydrogen refueling stations by the end of the decade to 300. The aim is for these facilities to meet the demand for heavy-duty and long-haul transportation in Europe. The goal is to expand the hydrogen network along several popular transportation corridors and in cooperation with public authorities and fleet operators to ensure offtake for the stations, according to Bloomberg.

In short, the hydrogen industry, which until recently was struggling much like the wind farm industry had a decade ago before costs dropped and installations proliferated, is likely to enjoy stronger growth going forward, in our view, just as its wind energy predecessor did when the cost equation tilted in its favor.

Energy efficiency in focus

With much effort being made toward increasing energy supply, the demand side should not be forgotten, and we expect energy efficiency will be increasingly in focus going forward. Measures such as switching to heat pumps and better-insulated houses also can reduce energy demand and hence the dependence on natural gas. While the British Energy Security Strategy disappointed many by omitting these measures, the recent budget announced by Chancellor of the Exchequer Rishi Sunak abolished the sales tax on energy efficiency measures such as home insulation and solar panels. Canada's new energy roadmap includes an additional CA\$500 million for the existing greener homes program, which helps cover the costs of similar energy-saving improvements.

Portfolio implications

The imperatives of energy transition and energy security need not compete with each other. Developing a low-carbon economy could be a very effective energy security strategy. The current crisis may ultimately reveal itself as an opportunity, much like the energy crisis of the 1970s did, to foster energy innovation in a variety of areas including low-carbon technologies such as green hydrogen, nuclear, as well as carbon capture and storage, and the promising but still expensive direct air capture. On the demand side, much more can be done to reduce demand via energy efficiency.

While the energy transition has become more complex and multifaceted, the energy security imperative has given it more impetus in certain areas. We continue to see many opportunities in the SusTech theme, particularly in <u>GreenTech</u> as many of the drivers of energy security are critical to fighting climate change.

Is energy security siphoning power from the green energy transition?

Industries likely to benefit from energy security

The pursuit of energy security could benefit a wide range of industries

	Energy security measure	Industry
Fossil fuels	More drilling	• Oil and gas companies
	Diversifying the LNG supplier base	• Oil and gas companies
	Extending the lifespans of coal-fired power plants	Carbon capture and storage
Grey area	More nuclear	 Manufacturers of power plants and power- generating components
0.0		 Mining companies
	Ramping up wind and solar	 Independent wind farm operators
	energy production	 Wind turbine manufacturers
		• Utility companies with expertise in renewable power
		 Solar panel equipment manufacturers
		 Semiconductor manufacturers
		• Software
		 Monitoring systems
		 Battery systems operators
ch		Battery manufacturers
GreenTech	Hydrogen revolution	 Electrolyser manufacturers
reel		 Industrial gas companies
Ū	Transforming transmission	 Transmission system managers
		 Electric cable manufacturers
		Power equipment manufacturers
		(e.g., substations, transformers)
		Electricity distribution companies
	Electric vehicles	 Manufacturers and operators of charging infrastructure
		Parts manufacturers
		. Induction conclusion and an
	Energy efficiency	 Industrial conglomerates

Source - RBC Wealth Management

^{GLOBAL} Equity



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Running the gauntlet

Most major markets declined from their year-end levels into early March, then rallied for several weeks before turning down again. U.S. markets fared the worst, recently undercutting the March lows. The S&P 500 has declined by 13 percent year to date while the tech-heavy Nasdaq is off by a much chunkier 26 percent.

Many of the mega-cap tech and tech-related stocks that have taken such a toll on the Nasdaq are also in the S&P 500. But when one looks at the S&P 500 Equal Weight Index, which counts each stock as just 0.2 percent of the index, the market decline from the beginning of the year is a less dramatic nine percent. To make the same point, most other major indexes, which have almost no exposure to the mega-cap tech group, are down by single digits, with war-exposed Europe the worst, down by 10 percent.

There are several factors one can point to that have contributed to this decline, including the potential for further deceleration in global economic growth due to China's renewed COVID-19 lockdowns and the Russia-Ukraine conflict, and the Fed's more accelerated rate hike plans in order to fight inflation.

Equity views

Region	Current
Global	+
United States	+
Canada	=
Continental Europe	=
United Kingdom	=
Asia (ex Japan)	=
Japan	=

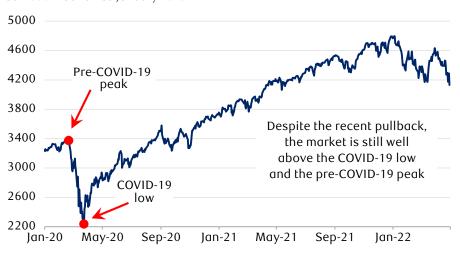
+ Overweight; = Market Weight; – Underweight Source - RBC Wealth Management

Dollar signs

One factor that is perhaps the least discussed, the strength of the U.S. dollar, shines some light on the comparatively poorer performance of the U.S. equity indexes. The dollar is up sharply versus the euro and the pound, less so but still up versus the yen and the Canadian dollar. This means that earnings of U.S. multinationals from these sources will be less than they otherwise would be after translation back into the U.S. currency for reporting purposes. Among the largest overseas earners are those same mega-cap tech stocks that have had an outsized

The recent pullback in perspective

S&P 500 Index since January 2020



Source - RBC Wealth Management, Bloomberg; data through 4/30/22

GLOBAL EQUITY

negative impact on U.S. equity index performance.

The greenback has been strong largely because of the rapid shift of Fed policy from one tolerant of higher inflation to one intent on reining in inflationary pressures. Capital has been flowing toward decidedly higher U.S. rates—the U.S. 3-year Treasury yields 2.9 percent versus 1.6 percent for UK Gilts and just 45 basis points on German Bunds. The resultant dollar strength probably won't weaken until the pace of Fed rate hikes slows, which is unlikely before the fall, in our view.

We believe the year-over-year inflation rate has already peaked or could soon. RBC Global Asset Management anticipates headline inflation will decelerate in the second half of this year but will still be "uncomfortably high" at year-end (for more, see "<u>A different kind of</u> <u>inflationary environment</u>" on page 4). A clearly marked off-ramp for the Fed's tightening efforts is unlikely to appear before 2023.

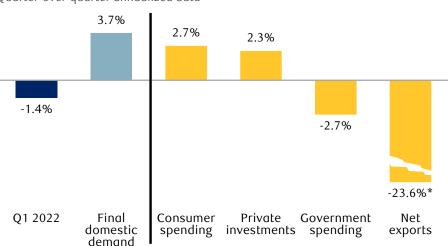
Cracks in the foundation?

All the foregoing and the surprising decline in U.S. GDP for Q1 have raised concerns that consensus estimates

for GDP and corporate earnings for this year and next are both too high.

We say the negative U.S. GDP print was "surprising" but maybe it shouldn't have been. Government spending fell as COVID-related support programs unwound, while the trade deficit widened dramatically due mostly to supply chain distortions and the strong dollar noted above. Yet the far larger parts of the U.S. economy—consumer spending (69 percent of GDP) and fixed asset investment (15 percent) remain healthy, with those two components up by 2.7 percent and 7.3 percent, respectively.

Moreover, with employment and wages growing, the participation rate advancing, and more than 10 million jobs on offer, we don't see either consumer spending or capital expenditure running out of steam anytime soon. True, the closely watched handoff from goods spending to services has not been smooth and elevated inventories of goods on hand portend further production slowdowns in coming quarters, but the much larger services spend should offset much if not all of that.



U.S. Real GDP: Q1 2022 breakdown of major components

Quarter-over-quarter annualized data

*Magnitude of the decline for net exports (exports minus imports) is truncated so as to not distort the other data in the chart.

Source - National research correspondent, Bureau of Economic Analysis, Bloomberg

GLOBAL EQUITY

While the economy looks to us like it can avoid a recession, the earnings outlook could be prone to a greater degree of downward revision.

There are cracks in the corporate earnings story. The aggregate Q1 results have been good thus far. S&P 500 earnings and revenue growth are pacing at 8.6 percent and 12.5 percent, respectively, with 56 percent of companies having reported results as of May 2. The proportion of companies exceeding earnings forecasts is in line with recent quarters, and the proportion beating revenue estimates is at the upward range of previous periods. The magnitude of beats for both categories are in the range of consensus expectations at the start of earnings season.

However, there have been some notable misses and/or cautious guidance by high-profile firms in a variety of sectors. Also, earnings growth results are bifurcated. The five largest technology-related stocks, which make up a significant part of the S&P 500 market capitalization, have seen earnings per share (EPS) decline 1.4 percent year over year, whereas EPS for the rest of the S&P 500 combined has risen 12.4 percent. But the latter figure is distorted by the Energy sector, which has delivered very strong earnings and margin growth on the back of ultrahigh energy prices. When Energy is stripped out of the picture, S&P 500 EPS growth drops back to 4.6 percent.

These factors—combined with the economic, monetary policy, and currency headwinds—raise questions about earnings growth prospects going forward. Currently, the S&P 500 consensus earnings forecast is for \$229 per share in 2022, which would represent 10 percent year-over-year growth. We think this estimate is at risk of coming down. Pulling that consensus back to, for example, \$220 per share would leave the S&P 500 trading at about 18.5 times forward 12-month earnings estimates—far from cheap, but only about one multiple above its 30-year average of 17.6x.

It could take time to work things out

Given the lingering supply chain, inflation, growth, and geopolitical risks, there is a wider range of potential outcomes for the global economy and corporate earnings for this year and next than there was just a few months ago. It could take time for the market to work through the uncertainties. Some further pullbacks can't be ruled out.

We believe the S&P 500 has the potential to be higher than current levels in the next 12 months primarily because U.S. recession risks are no worse than moderate, a number of important economic indicators remain solidly in positive territory, and earnings trends are still generally good. As long as the end result of all the foregoing is an economic "growth scare" instead of a full-blown recession, and Russia and NATO avoid direct clashes, we think any further market downside should be limited.

GLOBAL Fixed income



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The race back to neutral

A fresh round of central bank rate hike fears again rattled global markets over the course of April, sending sovereign yields in many developed market economies to new multiyear highs.

The Federal Reserve led the way as it looks set to supercharge its rate hike plans over the summer, with markets expecting a series of 50 basis point rate hikes in June, July, and September, following a 50 basis point move at the May meeting. Policymakers appear keen to get policy rates back to the "neutral" level for the economythe point at which policy is neither accommodative nor restrictive—as soon as possible in an effort to rightsize policy rates for an exceptionally strong labor market and inflationary backdrop.

The issue for markets is not just what the neutral rate is, or how fast the Fed gets there, but whether the Fed has to go beyond it in order to get inflation under control—risking a recession in the process.

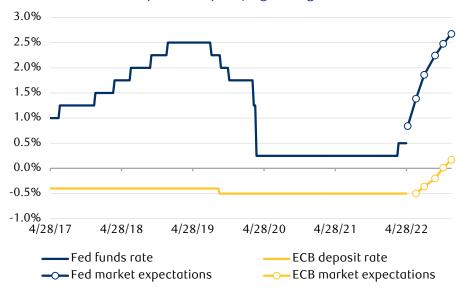
As of March, Fed policymakers estimated the neutral rate to be

Fixed income views

Region	Gov't bonds	Corp. credit	Duration
Global	=	=	5–7 yr
United States	-	=	7–10 yr
Canada	=	=	5–7 yr
Continental Europe	=	=	5–7 yr
United Kingdom	=	=	5–7 yr

+ Overweight; = Market Weight; – Underweight Source - RBC Wealth Management

2.40%. In its March Survey of Market Participants, the surveyed panel estimated that number at 2.20%. It was in December of 2018 when the Fed raised its policy rate to 2.50%, in line with what it then viewed the neutral rate to be, and which ultimately marked the end of the Fed's rate hike cycle as economic concerns over the course of 2019 actually led officials to deliver a series of rate cuts to boost the economy. Putting all of those things together, it seems reasonable to us



Markets continue to expect swift policy tightening

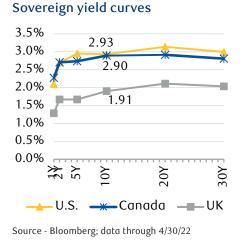
Source -RBC Wealth Management, Bloomberg; data as of 4/26/22

GLOBAL FIXED INCOME

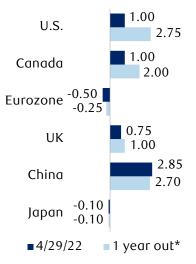
that the so-called neutral rate likely falls somewhere in that range of 2.20% to 2.50%. And if the market's expectations for rate hikes prove right, the Fed could reach that level by its September meeting. Whether the Fed then has to go beyond that will be considered, as Fed Chair Jerome Powell said, "... if that turns out to be appropriate."

Global central banks are also seen to be increasingly on the move following the Bank of Canada's 50 basis point rate hike in April. In Europe, markets foresee an earlier end of the negative rate era, with the European Central Bank potentially taking its policy rate from -0.50% into positive territory by its September meeting.

We do think we're closer to the end than the beginning in terms of markets repricing central bank expectations, but the question of just how far central banks ultimately need to take rates in order to tame inflation will likely remain for the balance of the year, keeping volatility in fixed income markets elevated.



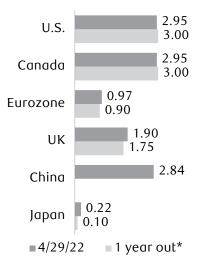
Central bank rate (%)



* Year ahead forecasts are under review

Source - RBC Investment Strategy Committee, RBC Capital Markets forecasts, Global Portfolio Advisory Committee, RBC Global Asset Management

10-year rate (%)



* Year ahead forecasts are under review

Note: Eurozone utilizes German Bunds. Source - RBC Investment Strategy Committee, Global Portfolio Advisory Committee, RBC Global Asset Management

KEY Forecasts

United States - Underlying Q1 not bad

Consumer outlays and capex grew at pre-pandemic levels, but unusually wide trade deficit, lower government spending, and softer inventory build combined to turn GDP growth negative. All weak components should normalize in Q2. New orders likely to weaken as spending shifts to services. Goods inflation should ease. Employment robust. Labor shortages and inflation remain issues. Expect Fed tightening to dampen growth later in the year.

Canada – Growing

A very strong February sets the stage for an outsized increase in Q1 GDP as "close contact" sectors re-open. Services spending and employment both strong. Back-to-office plans widespread among major employers including government. Capex aided by Energy sector recovery. BoC expected to deliver above-average hike in June. Inflation and rate hikes could weigh on consumer discretionary spending.

Eurozone – Under pressure

Q1 GDP growth for the zone slowed to 0.8% from 1.2% last quarter. Renewed COVID-19 restrictions dampened consumer spending. German trade impacted by supply chain dislocations in Asia and initial disruptions as the effects of the Ukraine war began to show. Country PMIs still in expansion territory, but German readings notably weaker. Consumer confidence sagging.

United Kingdom – BoE tightening

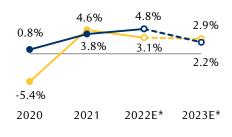
Consumer and business confidence have both weakened further, as have retail sales. Services PMI has receded somewhat but remains elevated. Manufacturing output slumping. Employment solid, construction and new orders steady. Inflation still advancing, now at 7%. BoE, leery of the weakening economy, is expected to put in one more rate hike before pausing.

China – Policy boost expected

GDP growth under pressure as deepening shutdowns hit major sectors. PMIs, new orders, and retail sales sagging, adding to property sector woes and supply chain disruptions. Government's expected growth rate of 5.5% implies major policy support is forthcoming. Easing has produced some revival in loan growth to the private sector, but we look for reserve/rate cuts in coming months.

Japan – Better tone emerging

Exports, industrial production, machine tool orders, and retail sales all perked up in recent months as infections fell. Supply chain/shipping disruptions have eased somewhat, but China lockdowns likely to take a toll. Inflation far milder than most other economies despite weak currency. BoJ sticking with low-rate policy. 5.7% 5.9% 1.3% 4.7% 3.1% 2.6% -3.5% 2020 2021 2022E* 2023E*











* 2022E and 2023E data is under review

Chart source - RBC Investment Strategy Committee, RBC Capital Markets, Global Portfolio Advisory Committee, RBC Global Asset Management, Bloomberg consensus estimates – Real GDP growth –

Inflation rate

MARKET Scorecard

Data as of April 30, 2022

Equities

Global equity markets sold off amid economic uncertainty, central bank rate hikes, and the ongoing Ukraine/ Russia conflict, now entering its third month.

Bond yields

Sovereign debt yields rose across the board with the largest jumps primarily in 2-year bonds.

Commodities

Oil and natural gas commodities continued dominating the commodity markets amid rising inflation concerns.

Currencies

The U.S. dollar posted strong gains against some of the world's major currencies amid continued global economic uncertainty.

Equity returns do not include dividends, except for the Brazilian Ibovespa. Equity performance and bond yields in local currencies. U.S. Dollar Index measures USD vs. six major currencies. Currency rates reflect market convention (CAD/ USD is the exception). Currency returns quoted in terms of the first currency in each pairing.

Examples of how to interpret currency data: CAD/USD 0.77 means 1 Canadian dollar will buy 0.77 U.S. dollar. CAD/USD -4.4% return means the Canadian dollar has fallen 4.4% vs. the U.S. dollar during the past 12 months. USD/JPY 129.70 means 1 U.S. dollar will buy 129.70 yen. USD/JPY 18.7% return means the U.S. dollar has risen 18.7% vs. the yen during the past 12 months.

Index (local currency)	Level	1 month	YTD	12 month
S&P 500	4,131.93	-8.8%	-13.3%	-1.2%
Dow Industrials (DJIA)	32,977.21	-4.9%	-9.2%	-2.6%
Nasdaq	12,334.64	-13.3%	-21.2%	-11.7%
Russell 2000	1,864.10	-10.0%	-17.0%	-17.8%
S&P/TSX Comp	20,762.00	-5.2%	-2.2%	8.7%
FTSE All-Share	4,185.12	-0.1%	-0.5%	5.1%
STOXX Europe 600	450.39	-1.2%	-7.7%	3.0%
EURO STOXX 50	3,802.86	-2.6%	-11.5%	-4.3%
Hang Seng	21,089.39	-4.1%	-9.9%	-26.6%
Shanghai Comp	3,047.06	-6.3%	-16.3%	-11.6%
Nikkei 225	26,847.90	-3.5%	-6.8%	-6.8%
India Sensex	57,060.87	-2.6%	-2.0%	17.0%
Singapore Straits Times	3,356.90	-1.5%	7.5%	4.3%
Brazil Ibovespa	107,876.16	-10.1%	2.9%	-9.3%
Mexican Bolsa IPC	51,417.97	-9.1%	-3.5%	7.1%
Bond yields	4/30/22	3/31/22	4/30/21	12 mo. chg
U.S. 2-Yr Tsy	2.715%	2.335%	0.158%	2.56%
U.S. 10-Yr Tsy	2.934%	2.338%	1.626%	1.31%
Canada 2-Yr	2.624%	2.290%	0.301%	2.32%
Canada 10-Yr	2.866%	2.405%	1.546%	1.32%
UK 2-Yr	1.591%	1.352%	0.080%	1.51%
UK 10-Yr	1.905%	1.610%	0.842%	1.06%
Germany 2-Yr	0.261%	-0.601%	-0.682%	0.94%
Germany 10-Yr	0.938%	-0.185%	-0.202%	1.14%
Commodities (USD)	Price	1 month	YTD	12 month
Gold (spot \$/oz)	1,896.93	-2.1%	3.7%	7.2%
Silver (spot \$/oz)	22.78	-8.1%	-2.3%	-12.1%
Copper (\$/metric ton)	9,770.50	-5.8%	0.3%	-0.6%
Oil (WTI spot/bbl)	104.69	4.4%	36.0%	64.7%
Oil (Brent spot/bbl)	109.34	1.3%	40.6%	62.6%
Natural Gas (\$/mmBtu)	7.24	28.4%	94.2%	147.2%
Agriculture Index	571.59	5.4%	28.4%	27.4%
Currencies	Rate	1 month	YTD	12 month
U.S. Dollar Index	102.9590	4.7%	7.6%	12.8%
CAD/USD	0.7775	-2.8%	-1.7%	-4.4%
USD/CAD	1.2848	2.7%	1.7%	4.6%
EUR/USD	1.0545	-4.7%	-7.3%	-12.3%
GBP/USD	1.2574	-4.3%	-7.1%	-9.0%
AUD/USD	0.7061	-5.6%	-2.8%	-8.5%
USD/JPY	129.7000	6.6%	12.7%	18.7%
EUR/JPY	136.9500	1.7%	4.6%	4.2%
EUR/GBP	0.8388	-0.4%	-0.3%	-3.6%
EUR/CHF	1.0262	0.5%	-1.1%	-6.5%
USD/SGD	1.3834	2.1%	2.6%	4.0%
USD/CNY	6.6085	4.2%	4.0%	2.1%
USD/MXN	20.4280	2.8%	-0.5%	0.9%
	4.9721			

Research resources

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Buy [Outperform]	841	57.68	330	39.24	
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