RBC Global Asset Management

The state of the Canadian and global economy

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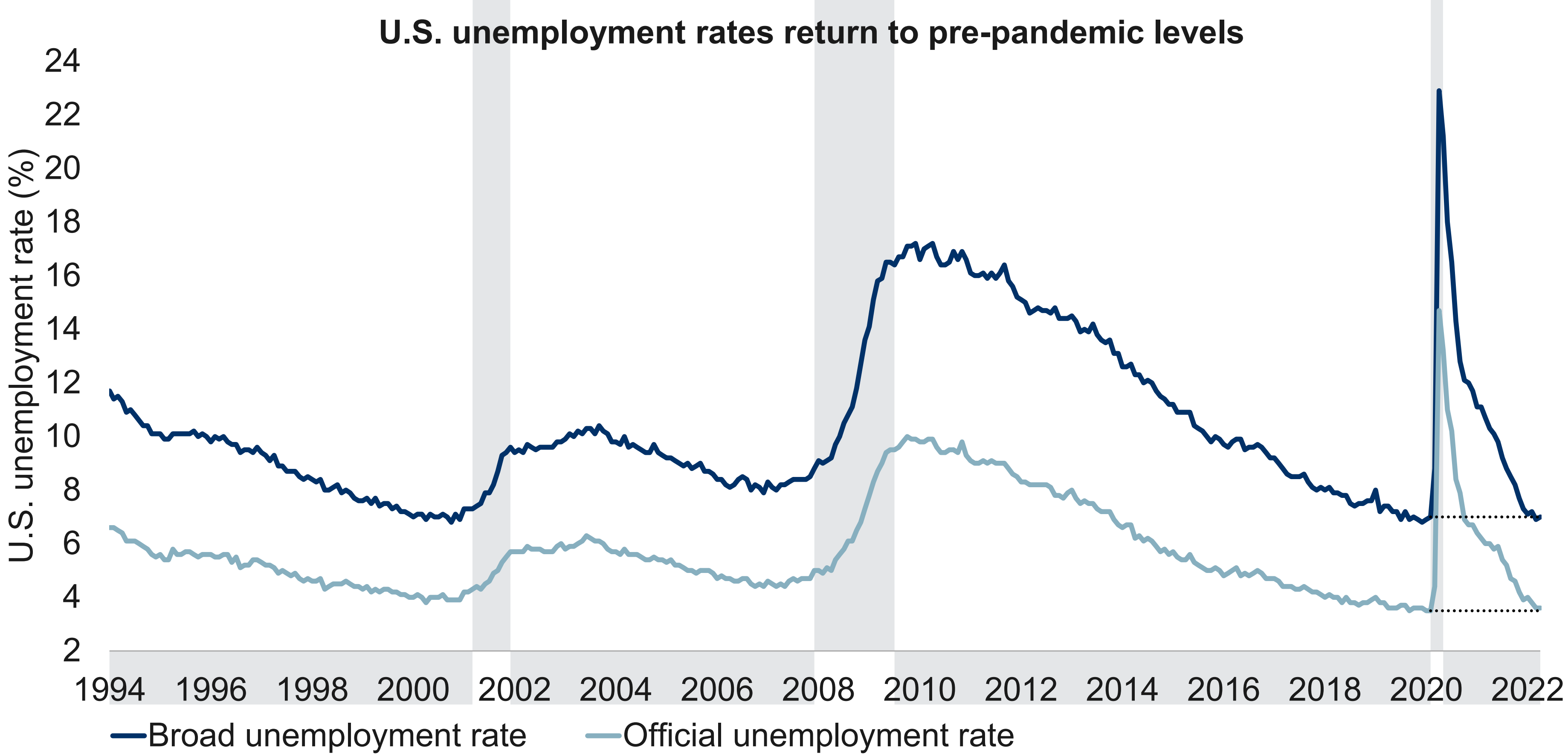
June 2022

Post-pandemic success:
Economic damage from pandemic just about gone



Note: As of Apr 2022. Broad unemployment rate defined as U-6 unemployment rate. Shaded area represents recession.
Source: BLS, Macrobond, RBC GAM

Key economic forces for 2022 & 2023: a few positives, but plenty of big negatives

Positive forces

- Fewer pandemic restrictions
- Cap ex and hiring plans
- Resilient household finances
- Supply chain problems to ease somewhat

Negative forces

- Future pandemic waves
- Central bank rate hikes
- Fiscal drag
- China drag
- Inflation drag
- Russia-Ukraine war
- Tighter financial conditions

We anticipate decelerating growth in 2022, and a challenging 2023

Source: RBC GAM as at 05/28/2022

Our forecasts continue to be revised lower, and remain below the consensus

Forecast year	2022					2023				
GDP forecast	RBC GAM				RBC GAM vs. CE	RBC GAM				RBC GAM vs. CE
Forecast date	Q1 2022			**Q2 2022**	CE forecast, May 2022	Q1 2022			**Q2 2022**	CE forecast, May 2022
U.S.	3.1	➔	-0.5 ➔	**2.6**	-0.2	2.6	➔	-1.2 ➔	**1.4**	-0.7
Canada	3.1	➔	+0.4 ➔	**3.5**	-0.6	2.9	➔	-1.8 ➔	**1.1**	-1.5
Eurozone	3.0	➔	-0.5 ➔	**2.5**	-0.2	2.4	➔	-1.5 ➔	**0.9**	-1.3
U.K.	3.9	➔	-0.3 ➔	**3.6**	-0.2	2.9	➔	-2.1 ➔	**0.8**	-0.2
Japan	2.2	➔	-1.4 ➔	**0.8**	-1.2	1.9	➔	-0.7 ➔	**1.2**	-0.7
Developed countries	3.0	➔	-0.6 ➔	**2.5**	-0.3	2.5	➔	-1.3 ➔	**1.2**	-0.9
World	3.6	➔	-0.7 ➔	**2.9**	-0.4	3.6	➔	-1.1 ➔	**2.5**	-0.8

Note: RBC GAM forecast as of 5/28/2022. RBC GAM vs. CE calculated as RBC GAM forecast minus Consensus Economics (CE) forecast. Developed countries include U.S., Canada, Eurozone, U.K. and Japan. World includes developed countries aforementioned, China, India, South Korea, Brazil, Mexico and Russia. Source: CE, RBC GAM

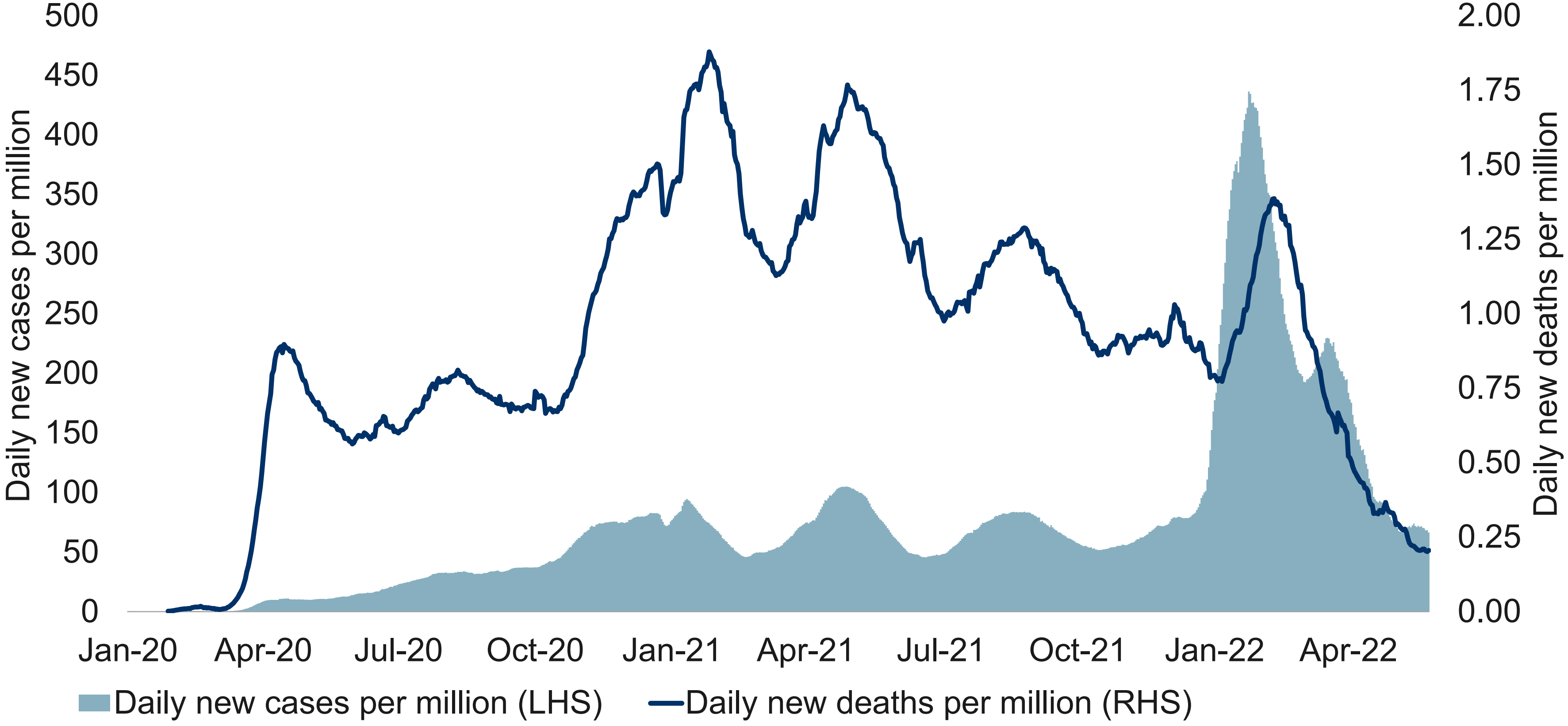
Economic scenarios for next two years

	Growth	Recession	
Normalizing inflation	• Fabled "soft landing" • Great outcome for markets • But requires a lot of things to start going right	• Recession, but inflation fixed • Arguably a decent outcome for markets • Depends on recession depth	**High probability that inflation becomes less high**
Persistently high inflation	• Growth persists but inflation problems not solved • Worse than top-right scenario • Rates have to rise further	• Recession, yet still inflation • Nightmare scenario • Need even higher rates	**Small chance that inflation remains structurally high**
	Sustaining growth will be hard	**Elevated chance of recession**	

Source: RBC GAM as at 05/28/2022

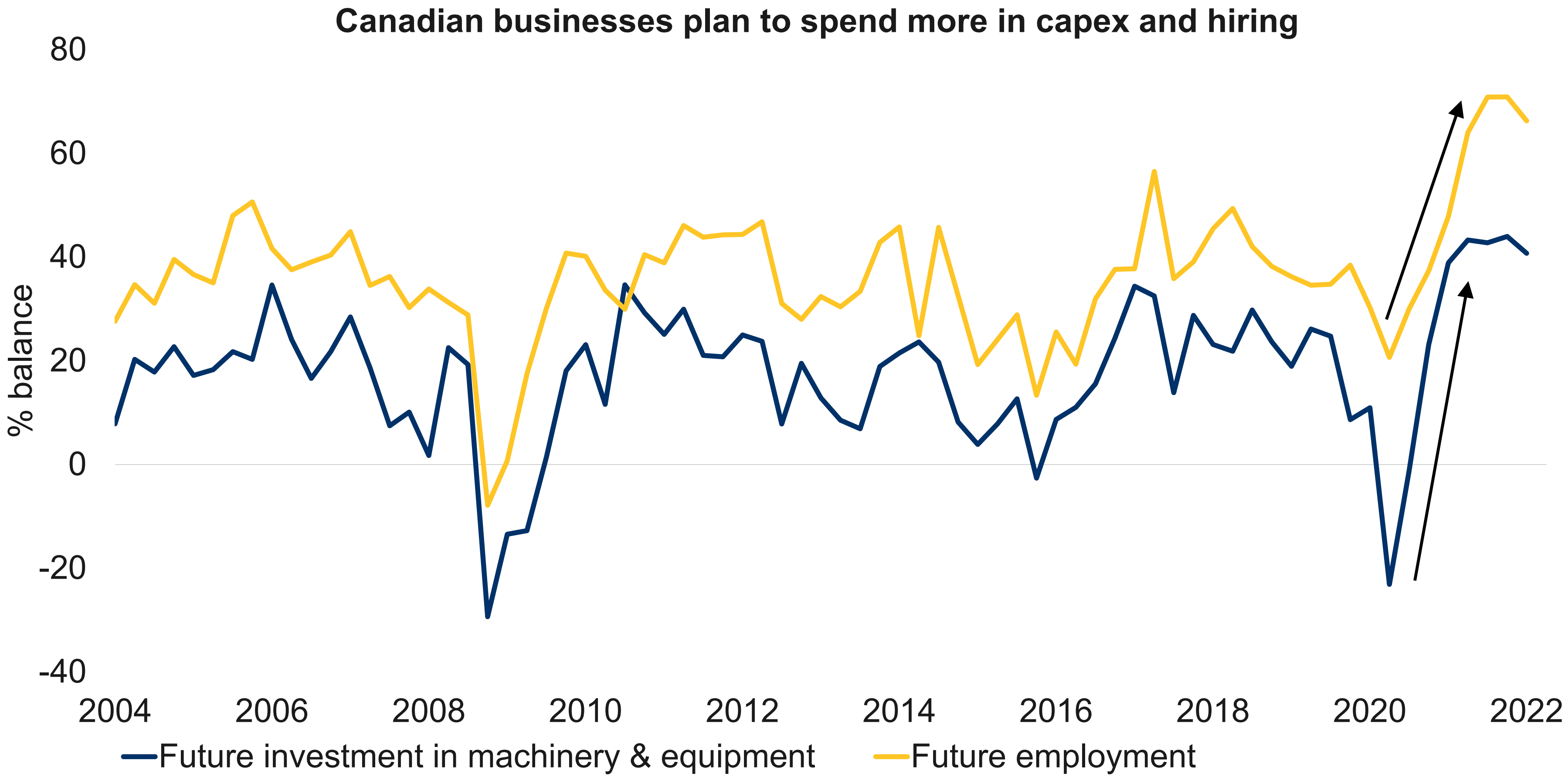
COVID-19 has faded globally and no longer restricting economy; there will be future waves, but likely of limited economic consequence

Global COVID-19 infections have declined



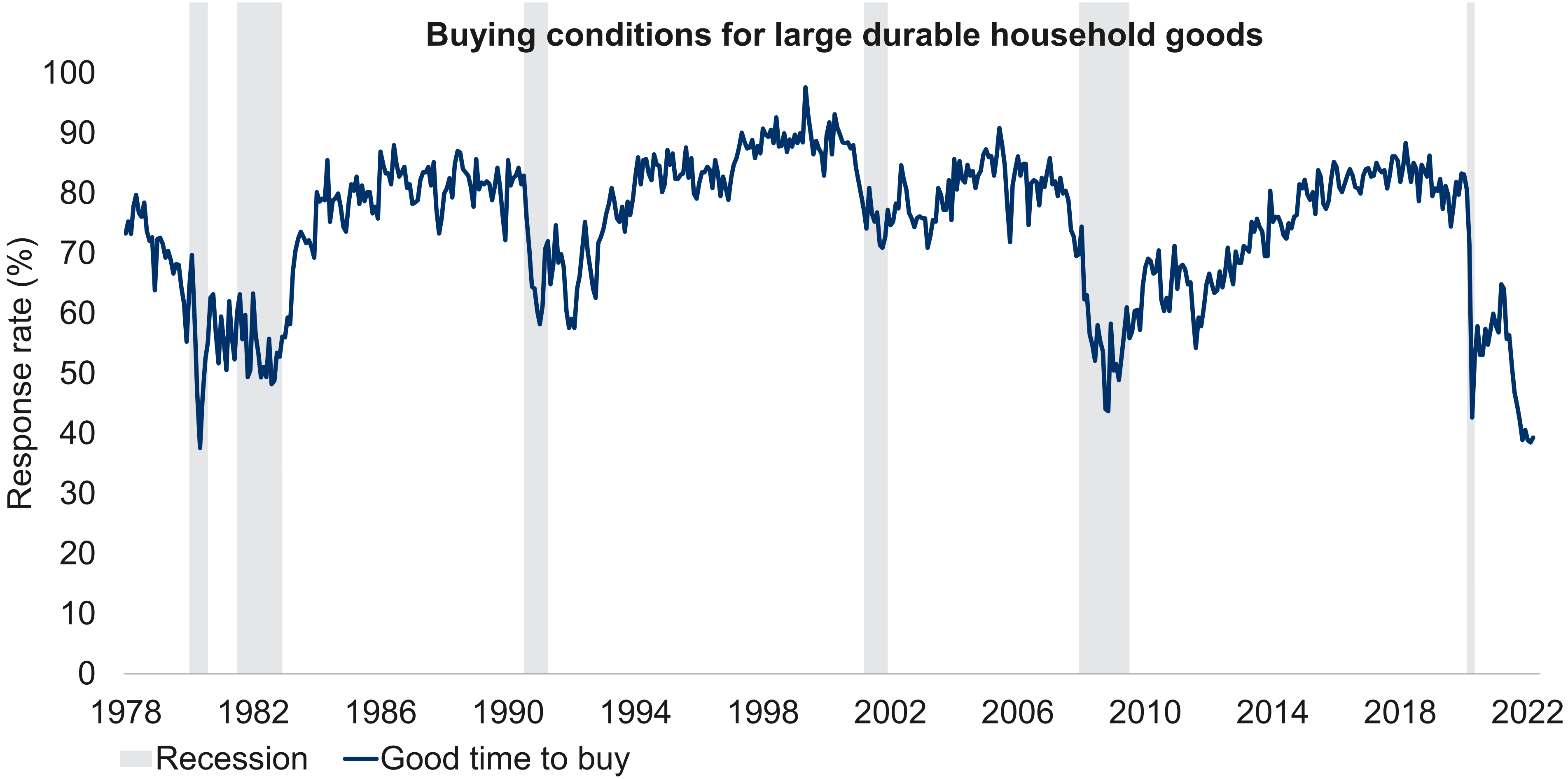
Note: As of 5/25/2022. 7-day moving average of daily new cases and new deaths. Source: Our World In Data, Macrobond, RBC GAM

Canadian businesses plan to invest and hire extensively – but this could be about to change



Note: As of Q1 2022. Source: Bank of Canada Business Outlook Survey, Haver Analytics, RBC GAM

Consumer appetite for big-ticket items has seemingly crashed - But is this because of buyer fatigue (bad), consumers pivoting to services (good) or unavailability of the big-ticket goods they want (status-quo)?



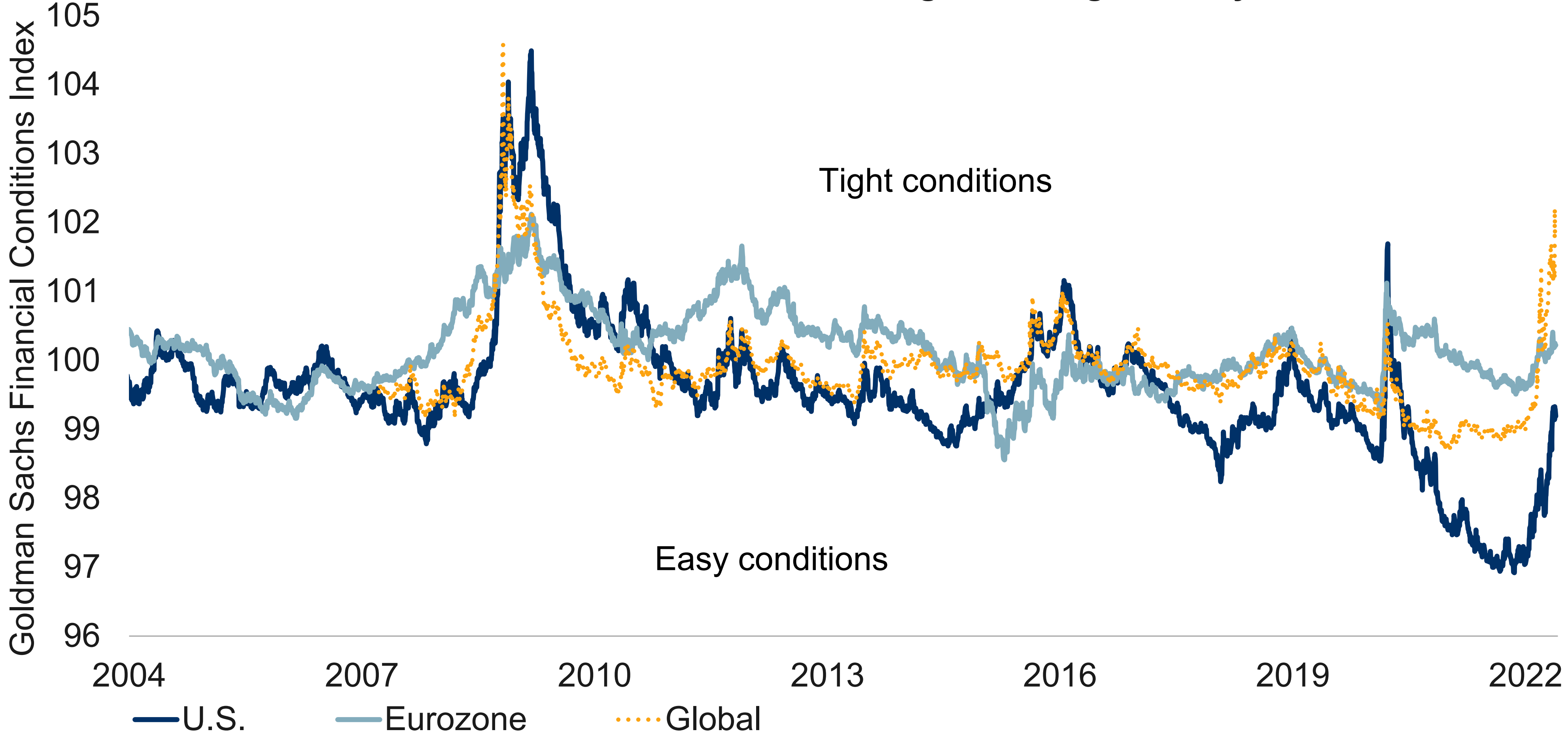
Note: As of Mar 2022. Source: University of Michigan, Macrobond, RBC GAM

Economic momentum has suddenly turned negative

Note: As of 5/25/2022. Source: Citigroup, Bloomberg, RBC GAM

Financial conditions tighten significantly – magnitude somewhere between mid-cycle slowdown and a recession

Global financial conditions tightened significantly



Note: As of 5/23/2022. Source: Goldman Sachs, Bloomberg, RBC GAM

Economic damage from Russia-Ukraine war is significant

Ukraine

- Economy 1/3 to 50% smaller than before war
- Serious damage to infrastructure
- Some cities under siege
- Men conscripted into war
- 7 million internally displaced people
- 5 million refugees have left Ukraine

Russia

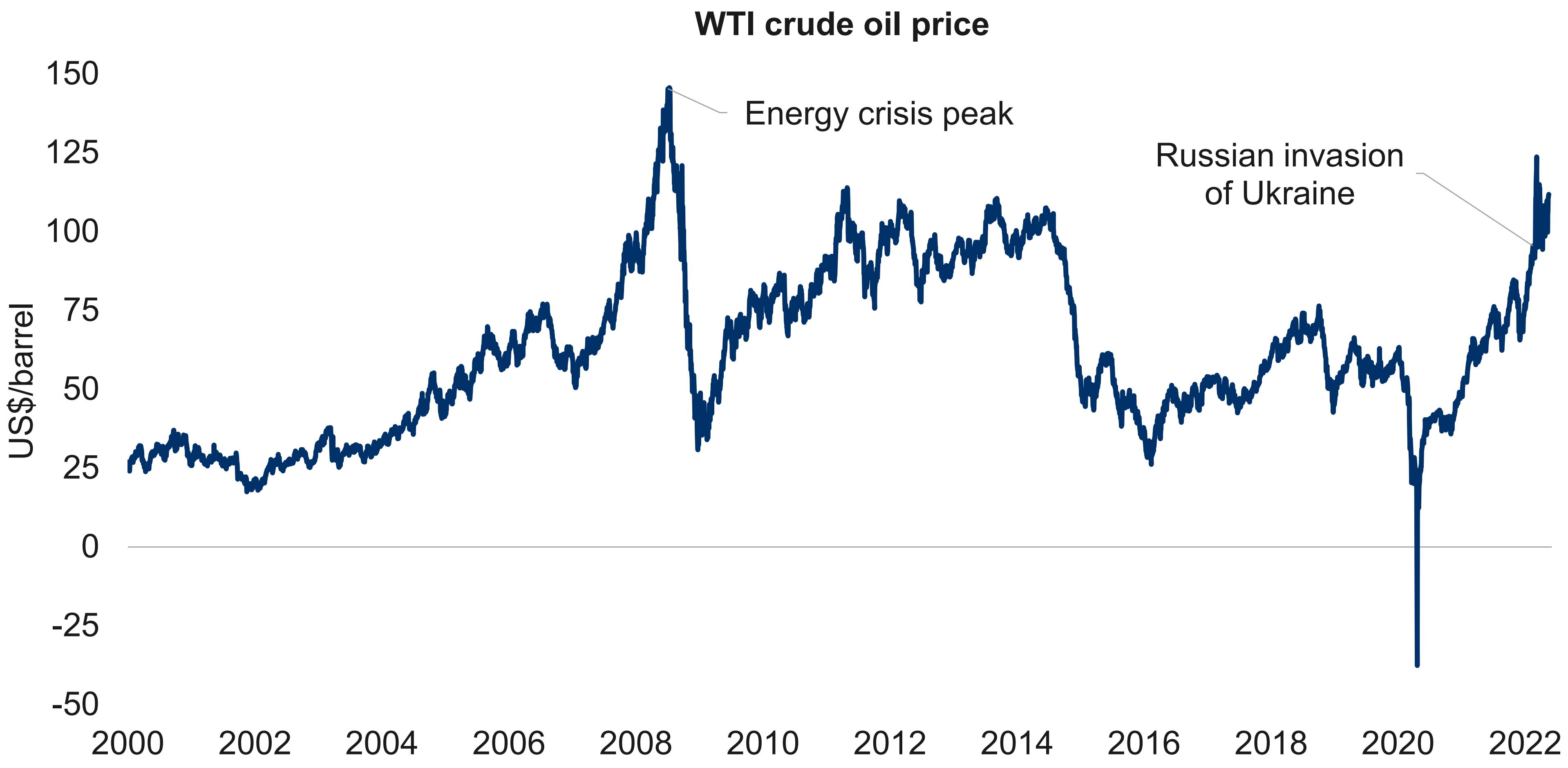
- Primary damage via sanctions that limit trade, companies, flows
- War unlikely to end soon, and sanctions to remain
- Partial offset via higher commodity prices
- Economy likely shrinks 10% in 2022
- Central bank raised rates aggressively
- Inflation to reach +20%

Rest of World

- Negative resource supply shock
- Risk that commodity flows are further impeded
- Russia/Ukraine export oil, gas, wheat, potash, nickel, neon, etc.
- Global economy 0.5% to 1.0% smaller than otherwise
- Euro GDP 1.5% to 3% smaller
- U.S. loses only moderately
- Canada loses very little
- Global inflation 2ppt higher

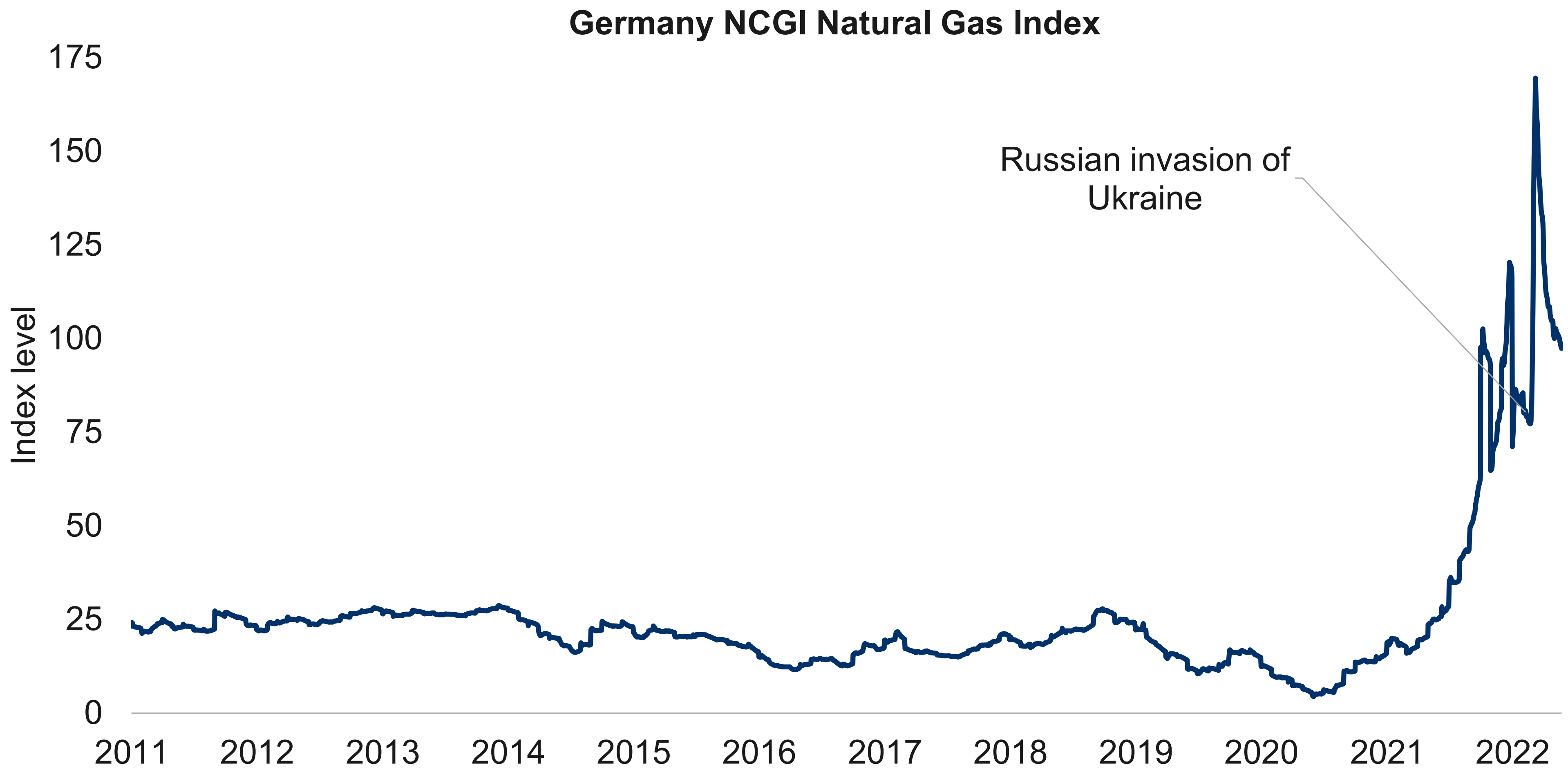
Source: RBC GAM as at 05/28/2022

Oil price increase has been smaller than expected – this constitutes an upside risk, especially if Europe blocks oil imports; A 2mb/d mismatch theoretically justifies oil closer to $140



Note: As of 05/16/2022. Source: Macrobond, RBC GAM

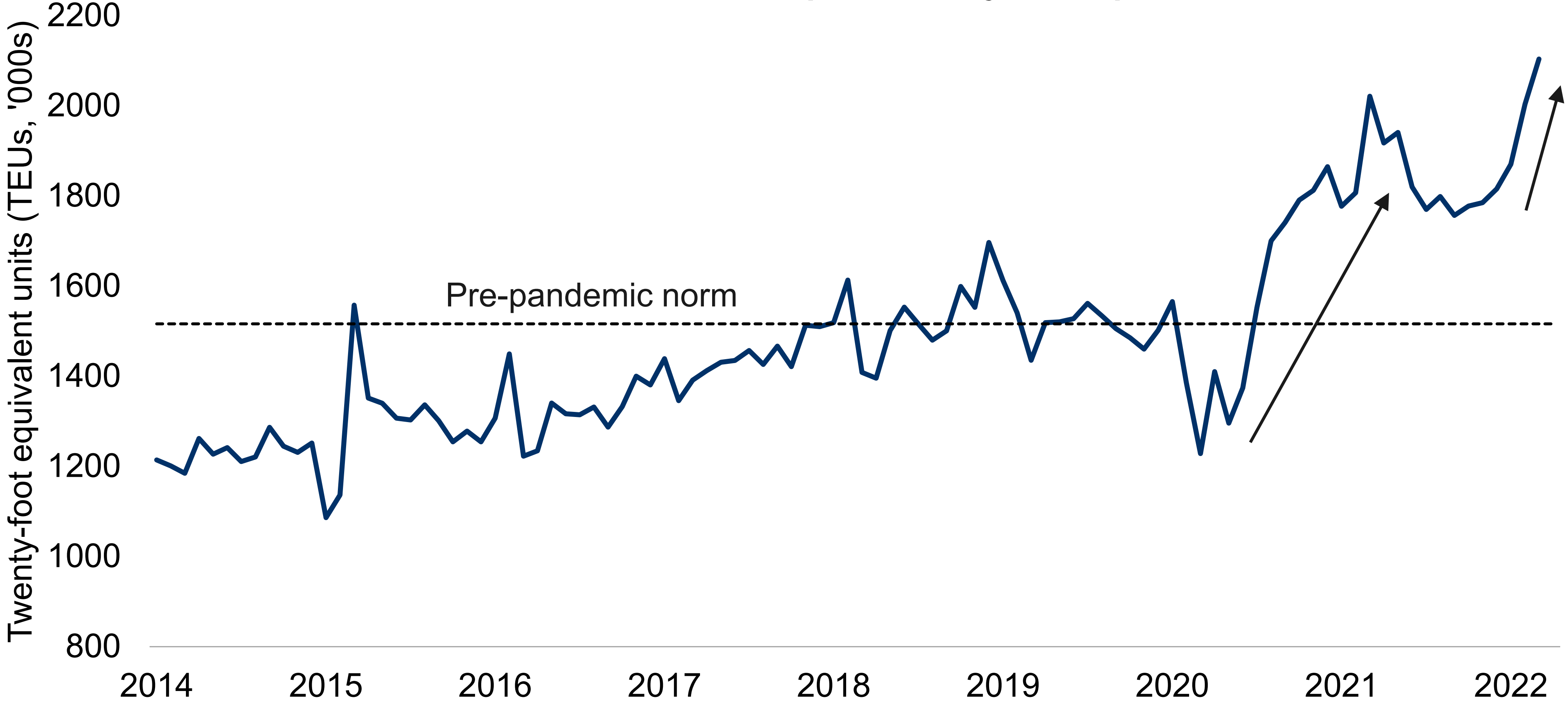
Natural gas prices have spiked particularly high in Europe; still some upside risk as pipelines may be blocked



Note: As of 05/23/2022. Source: Intercontinental Exchange, Macrobond, RBC GAM

Main supply chain issue: people are buying more goods than usual

Loaded container imports to major U.S. ports



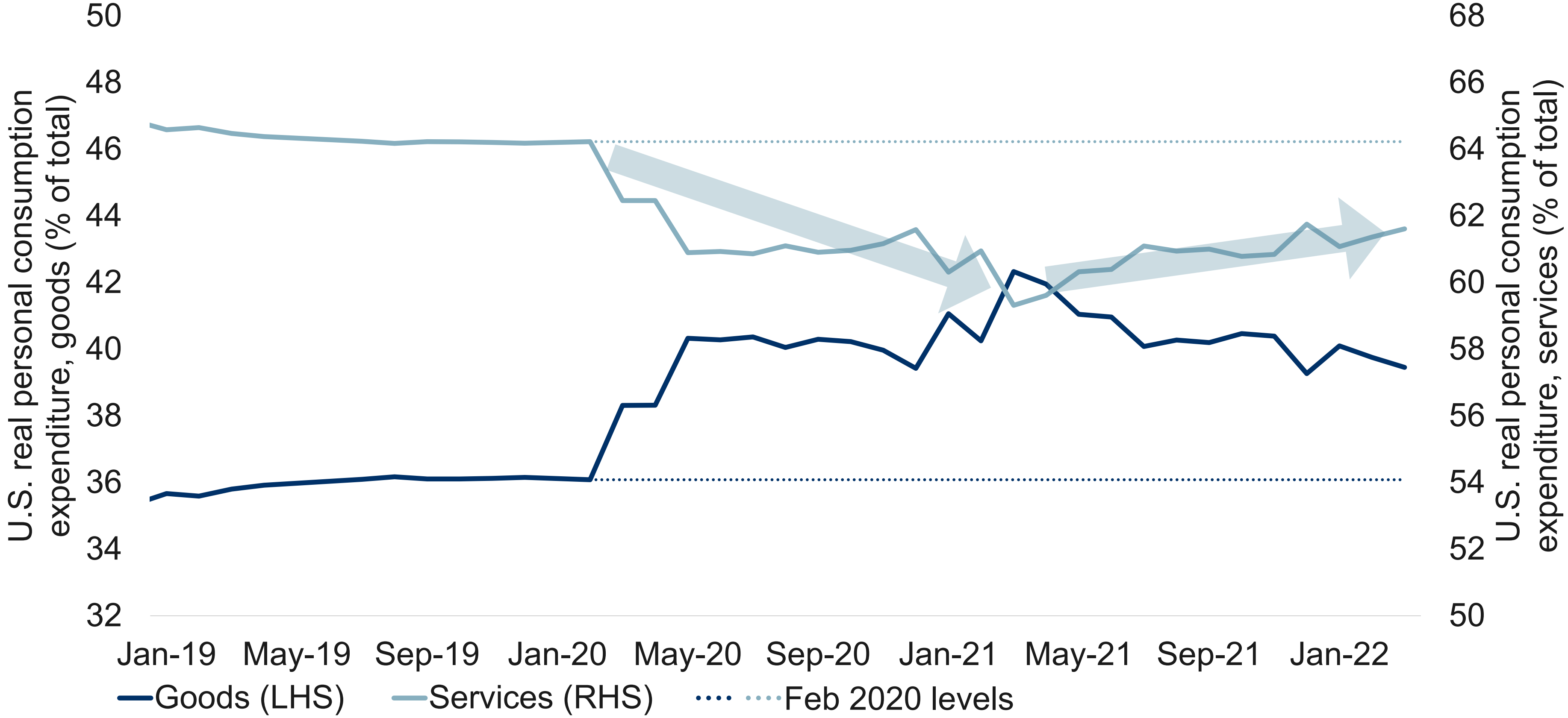
Note: As of Mar 2022. 2019 average shown as pre-pandemic norm. Major U.S. ports included are the ports of Los Angeles, Long Beach, New York & New Jersey, Savannah, Houston, Virginia, Oakland and Boston. Source: Macrobond, RBC GAM

Supply chain getting slightly better, but still bad; Russian sanctions and China lockdown delay further improvement

Note: As of Apr 2022. Shaded area represents U.S. recession. Source: Gianluca Benigno, Julian di Giovanni, Jan J. J. Groen, and Adam I. Noble, "A New Barometer of Global Supply Chain Pressures," Federal Reserve Bank of New York Liberty Street Economics; Macrobond, RBC GAM

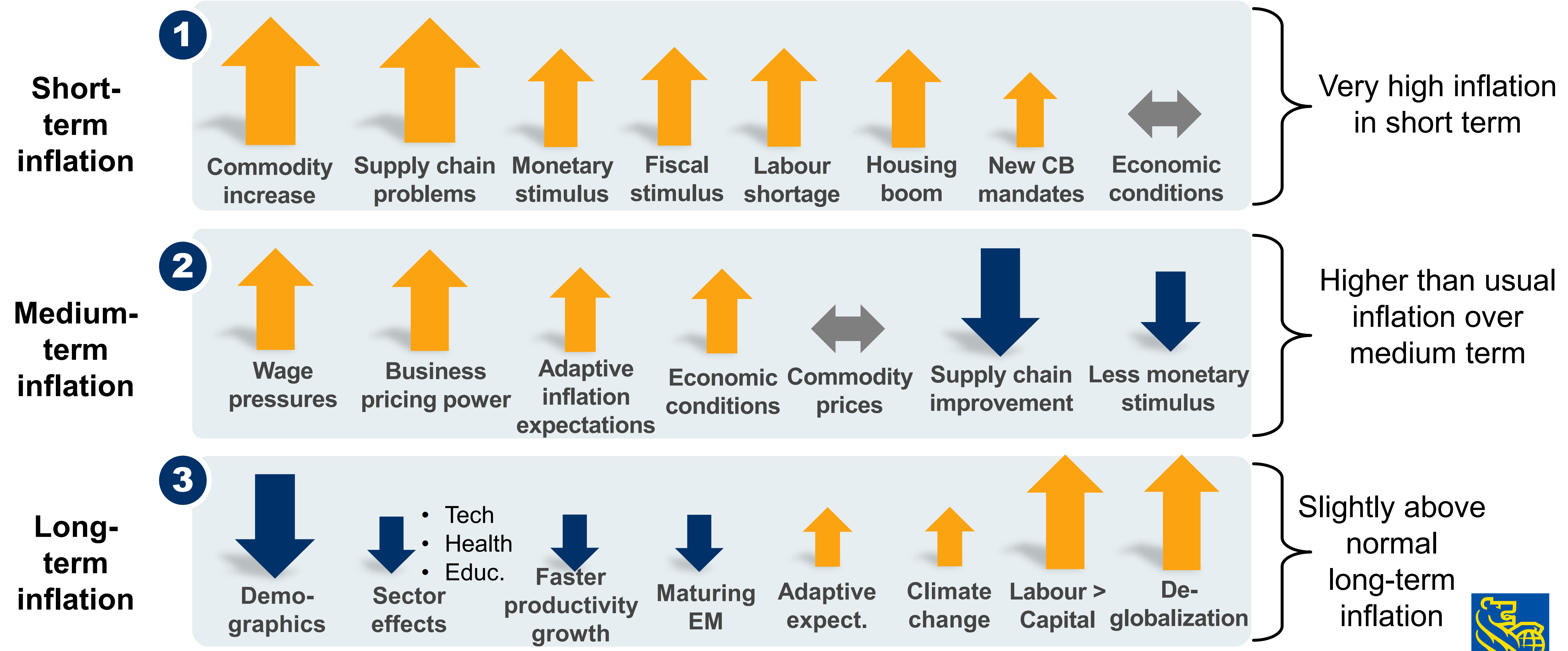
Potential headwind for goods sector and tailwind for services as consumers unwind pandemic and supply chain distortions

U.S. consumer spending shift to goods from services should reverse



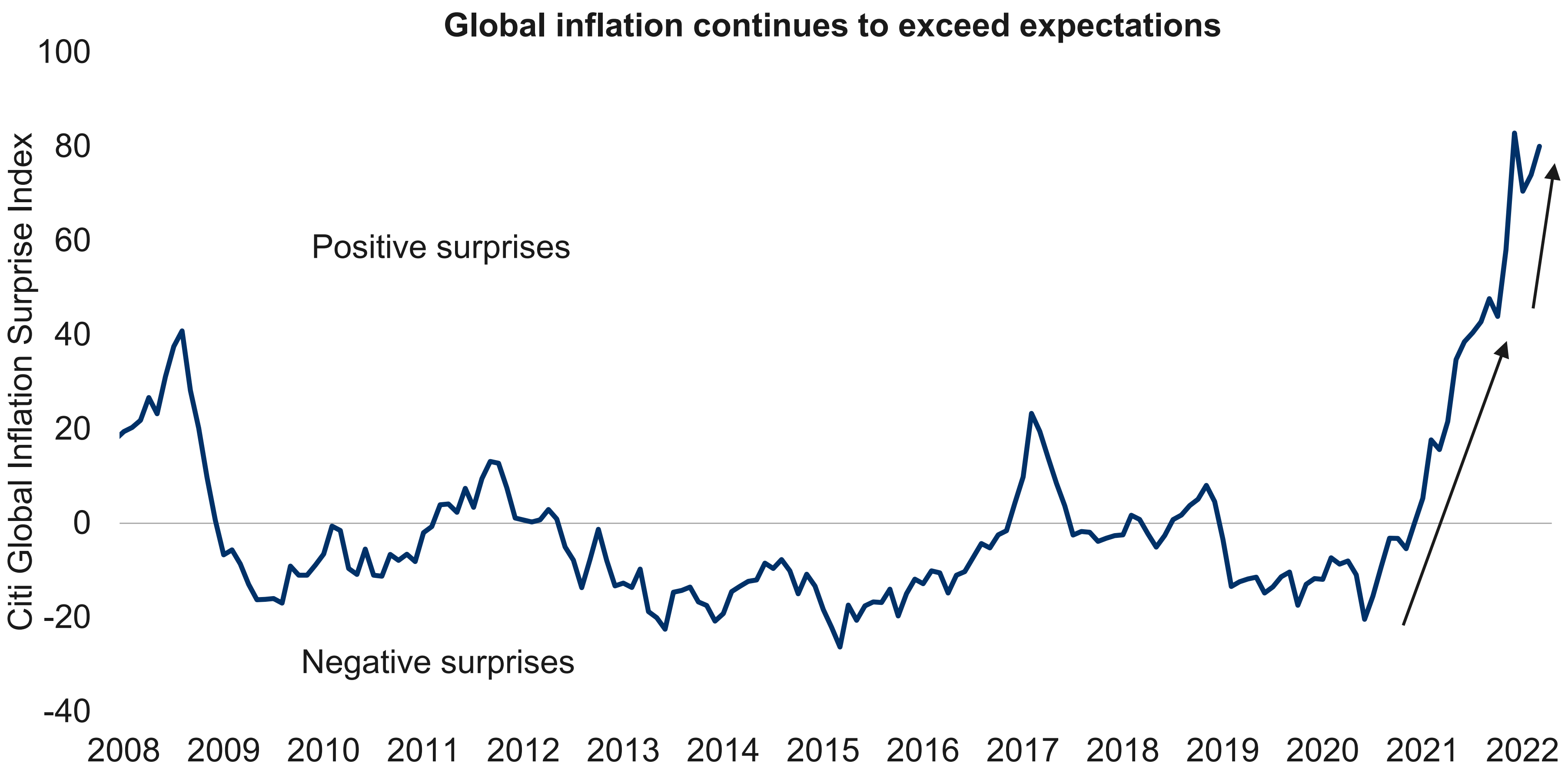
Note: As of Mar 2022. Source: Macrobond, RBC GAM

Inflation to be very high in ST, fairly high in MT, a bit high in LT



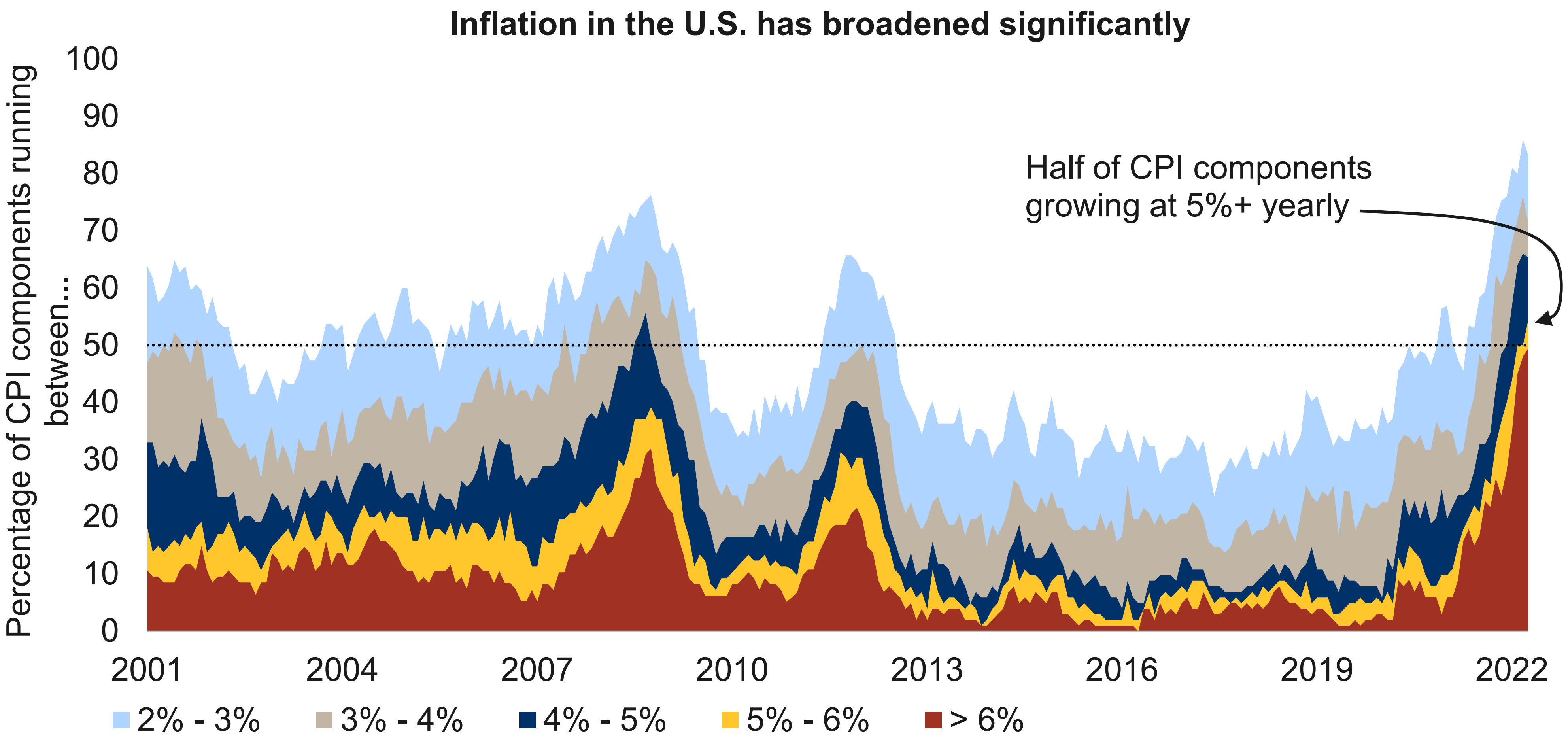
Note: As at 05/03/2022. Source: RBC GAM

Inflation continues to surprise massively to the upside: winning bet has been above-consensus inflation



Note: As of Mar 2022. Source: Citigroup, Bloomberg, RBC GAM

U.S. inflation breadth: most components now rising at 5%+ rate – such breadth makes it hard to tame inflation



Note: As of Apr 2022. Share of CPI components with year-over-year % change falling witjin the ranges specified. Source: Haver Analytics, RBC GAM

Happily, inflation expectations have started to come down as central banks have promised rate hikes

Note: As of 5/25/2022. Source: Bloomberg, RBC GAM

Inflation – 1970s versus today

Similarities

- Problematic monetary policy
  - Politicized in 1970s + bad policy (wage/price controls)
  - Too many objectives today
  - Major policy errors in both cases, allowing initial burst of high inflation
- Expansive fiscal policy
  - Large deficits in both eras
  - Focus on expanding social safety net
- Global economic boom
  - Initial inflation exacerbated by strong growth
- Bad luck
  - 1970s: crop failures, OPEC oil shocks
  - 2020s: pandemic, Ukraine war

Differences

- Central banks better positioned today
  - Explicitly target inflation, more transparent
  - Good credibility after three decades of success
  - Learned from 1970s
  - Aggressively countering high inflation after <1 year
- Different types of shocks
  - 1970s: skewed toward negative supply shocks
  - 2020s: skewed toward positive demand shocks
  - Positive demand shocks are less problematic
- Worse setup in the 1970s
  - Inflation was gradually rising for years beforehand
  - End of gold standard and FX depreciation
  - Higher unionization rate then
  - Greater energy and food intensity then
- Very different demographics
- Giant central bank balance sheets today

Conclusion: inflation is less likely to become structural this time, though it is possible

Source: RBC GAM, Arthur Burns 1979 speech “The Anguish of Central Banking”, as at 04/29/2022

High inflation winners and losers

Losers

- Overall economy
- Borrowers at variable rate
- Companies with weak pricing power
- Retirees on fixed income
- Investors in longer term bonds

Mixed

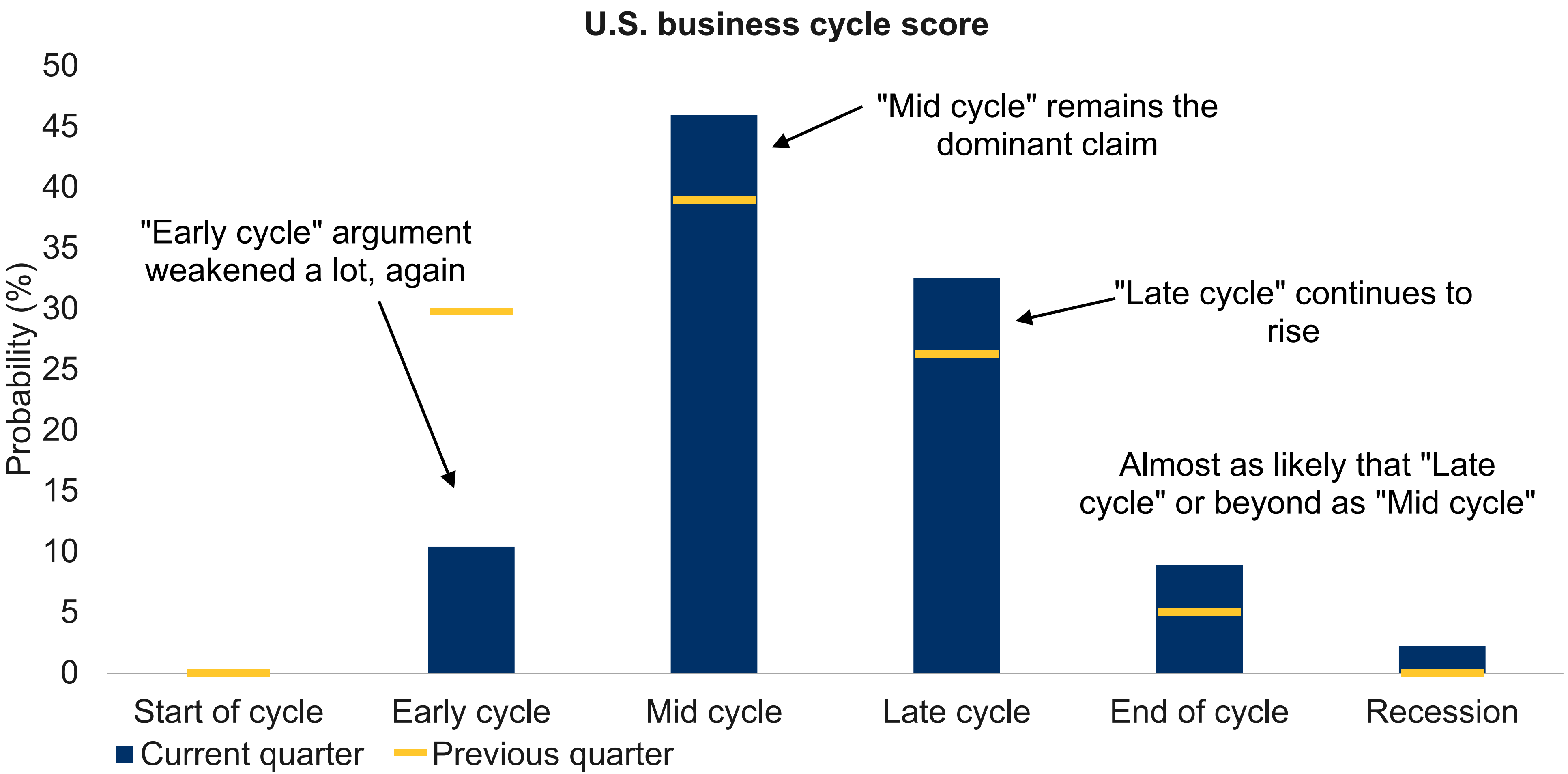
- Stock market
  - Likes rising earnings
  - Dislikes higher discount rate

Winners

- Real assets
  - Property
  - Precious metals
- Resource producers
- Companies with strong pricing power
- Retirees with indexed pensions
- Borrowers at fixed rate

Source: RBC GAM as at 05/11/2022

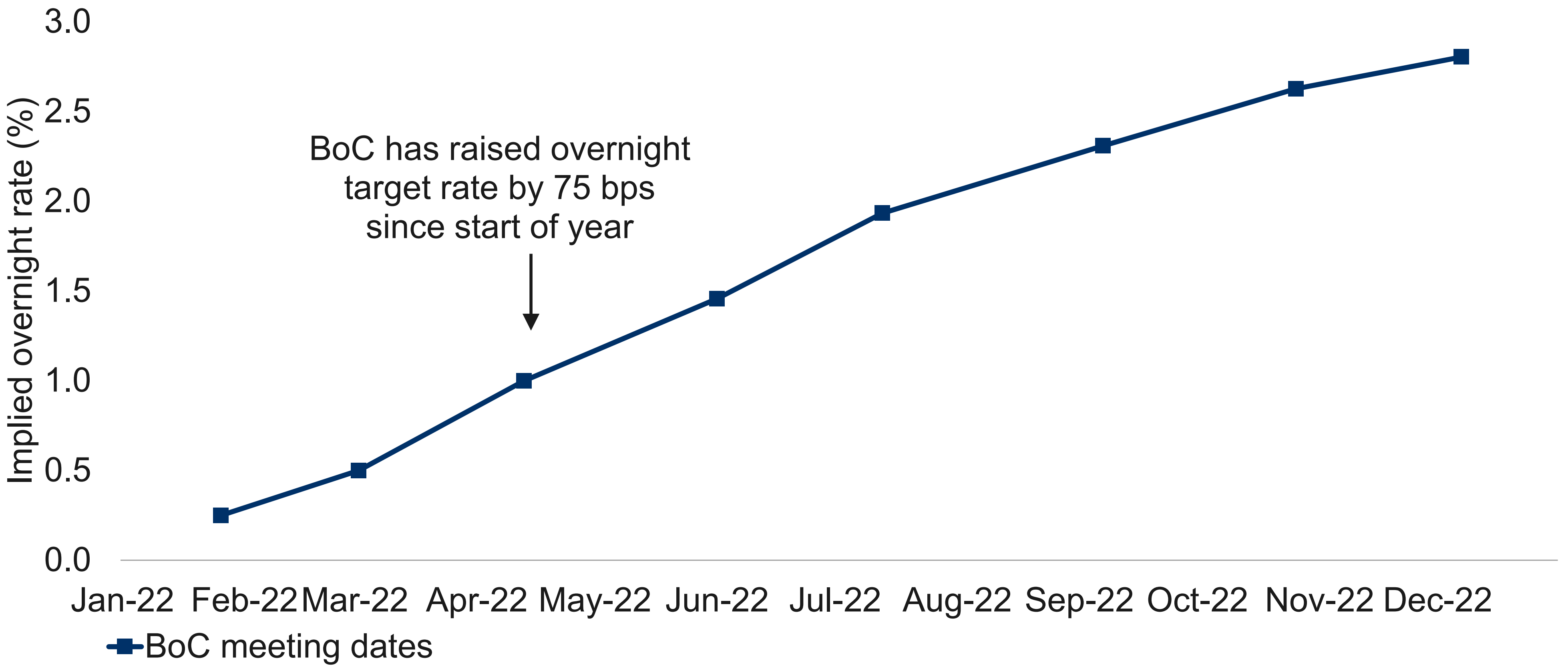
U.S. business cycle is still “mid cycle” but continues to move rapidly forward; significant “late cycle” and beyond claims now



Note: As at 04/29/2022. Calculated via scorecard technique by RBC GAM. Source: RBC GAM

Central banks now tightening with unusual haste to dampen inflation = higher borrowing costs and prospect of economic slowdown

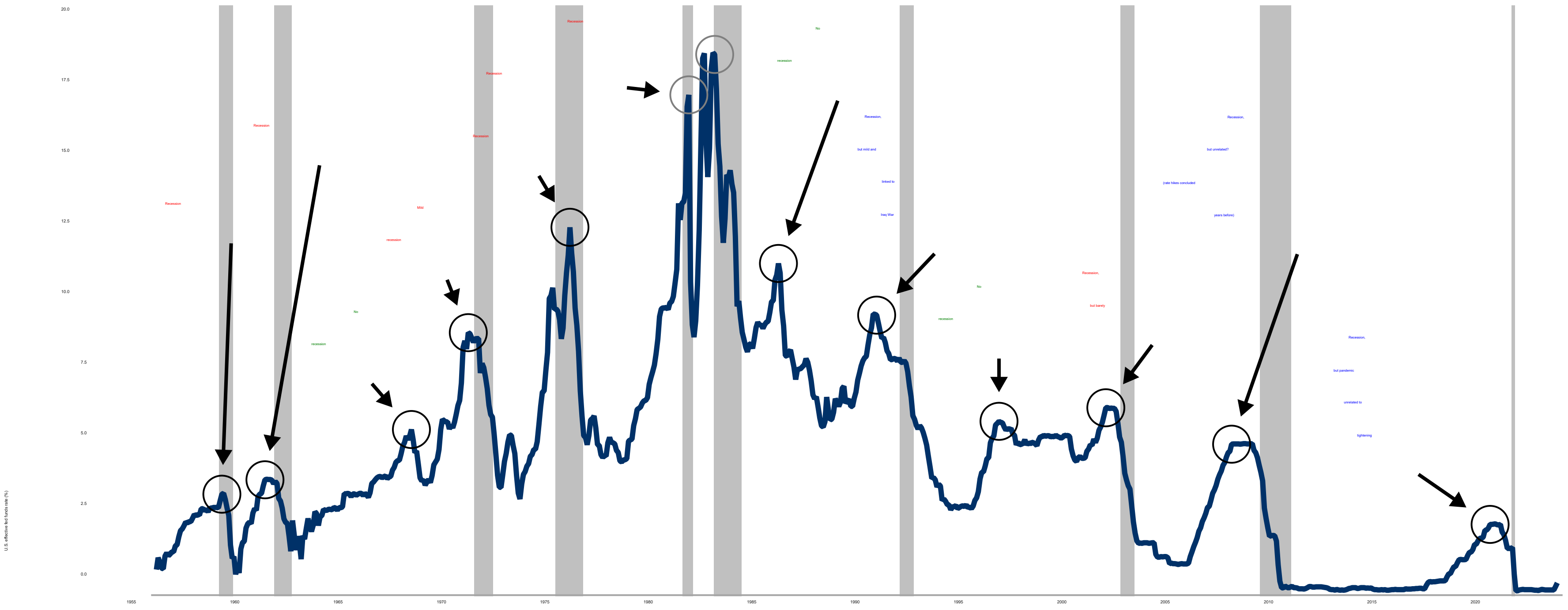
Bank of Canada expected to deliver further aggressive hikes



Note: As of 05/13/2022. Source: Bloomberg, RBC GAM

Historical tightening cycles frequently end in recession

U.S. monetary tightening cycles and recessions



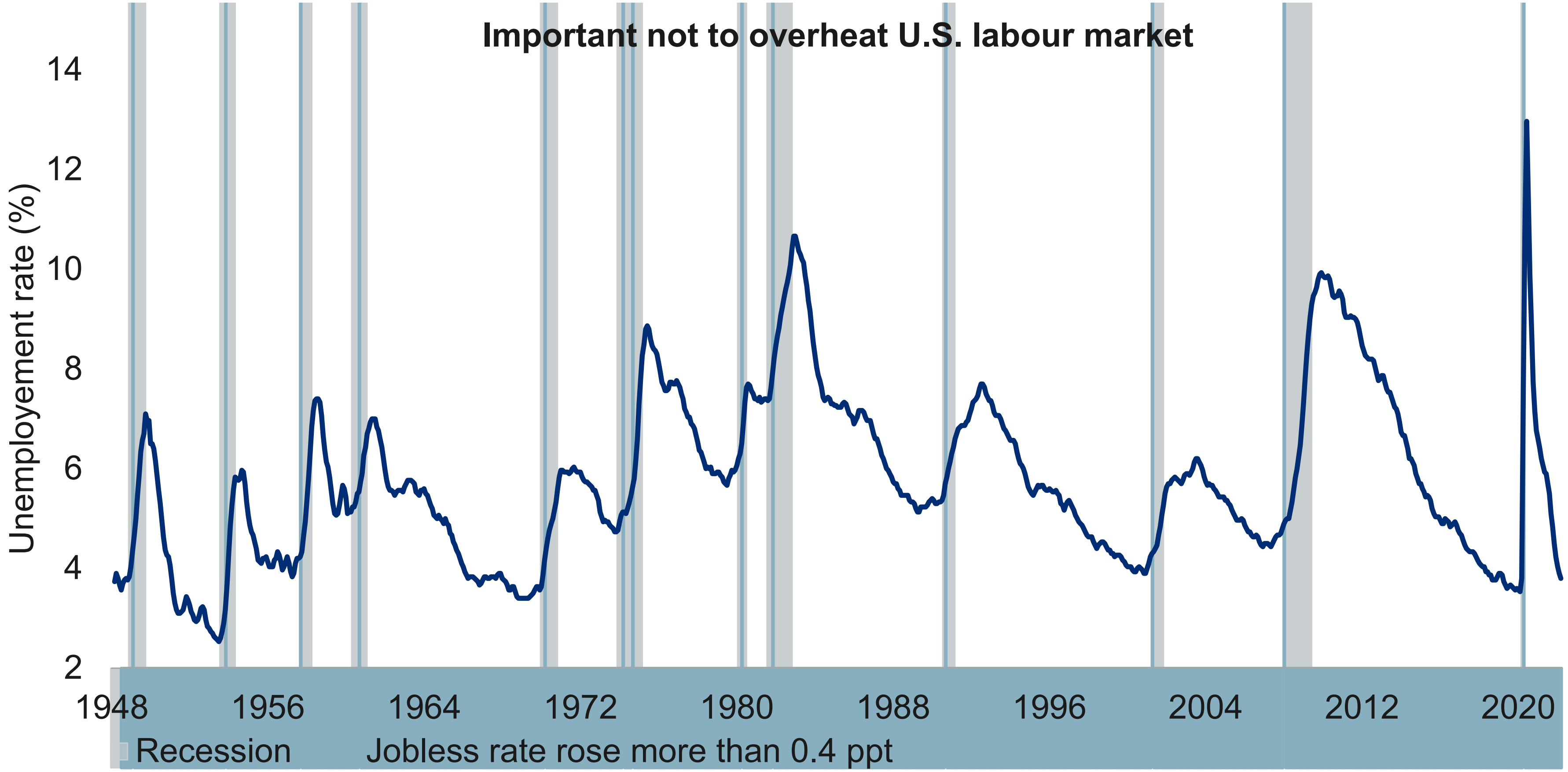
Note: As of 04/22.

Recession shading in grey. Red text=recession outcome, Green text=no recession, and Blue text=debata

ble causality.

Source: Federal Reserve, Macrobond, RBC GAM

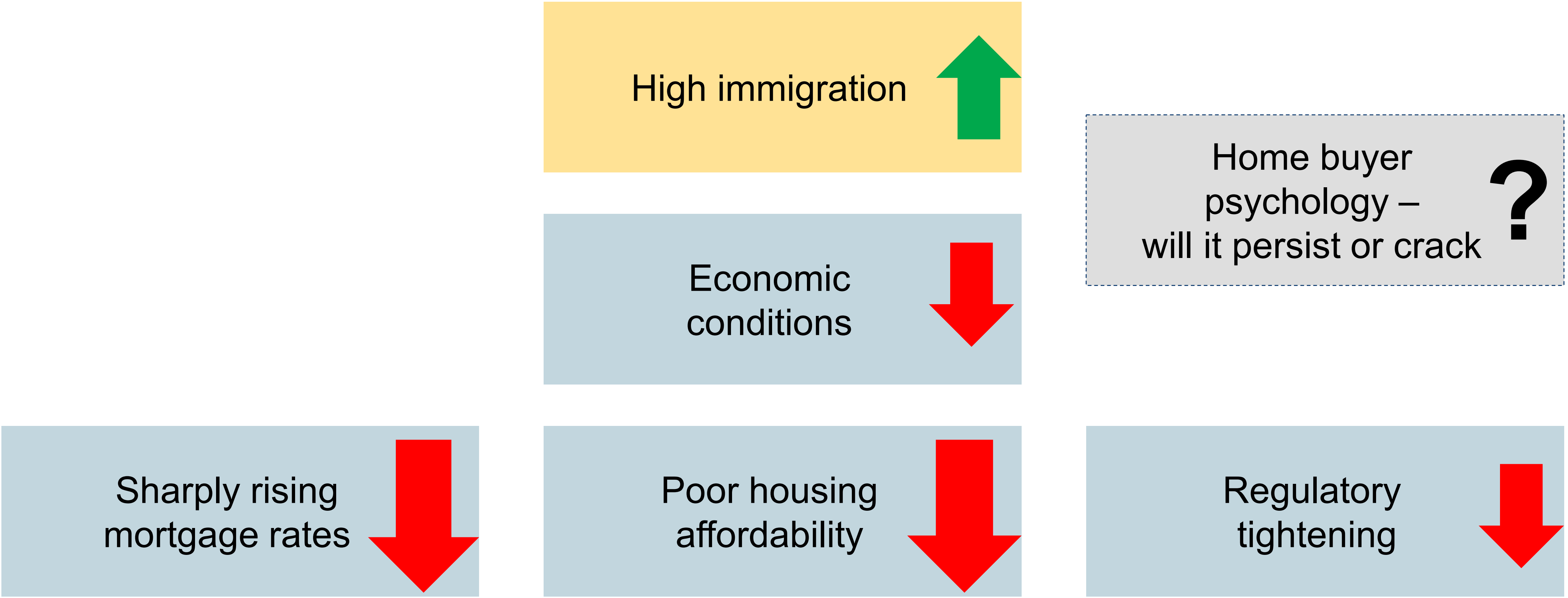
If economy starts to stall (unemployment edges even a hair higher), it is hard to avoid recession – so no path back to cooler economy



Note: As of Mar 2022. Unemployment rate is 3-month moving average. Source: Bureau of Labor Statistics, NBER, Haver Analytics, RBC GAM

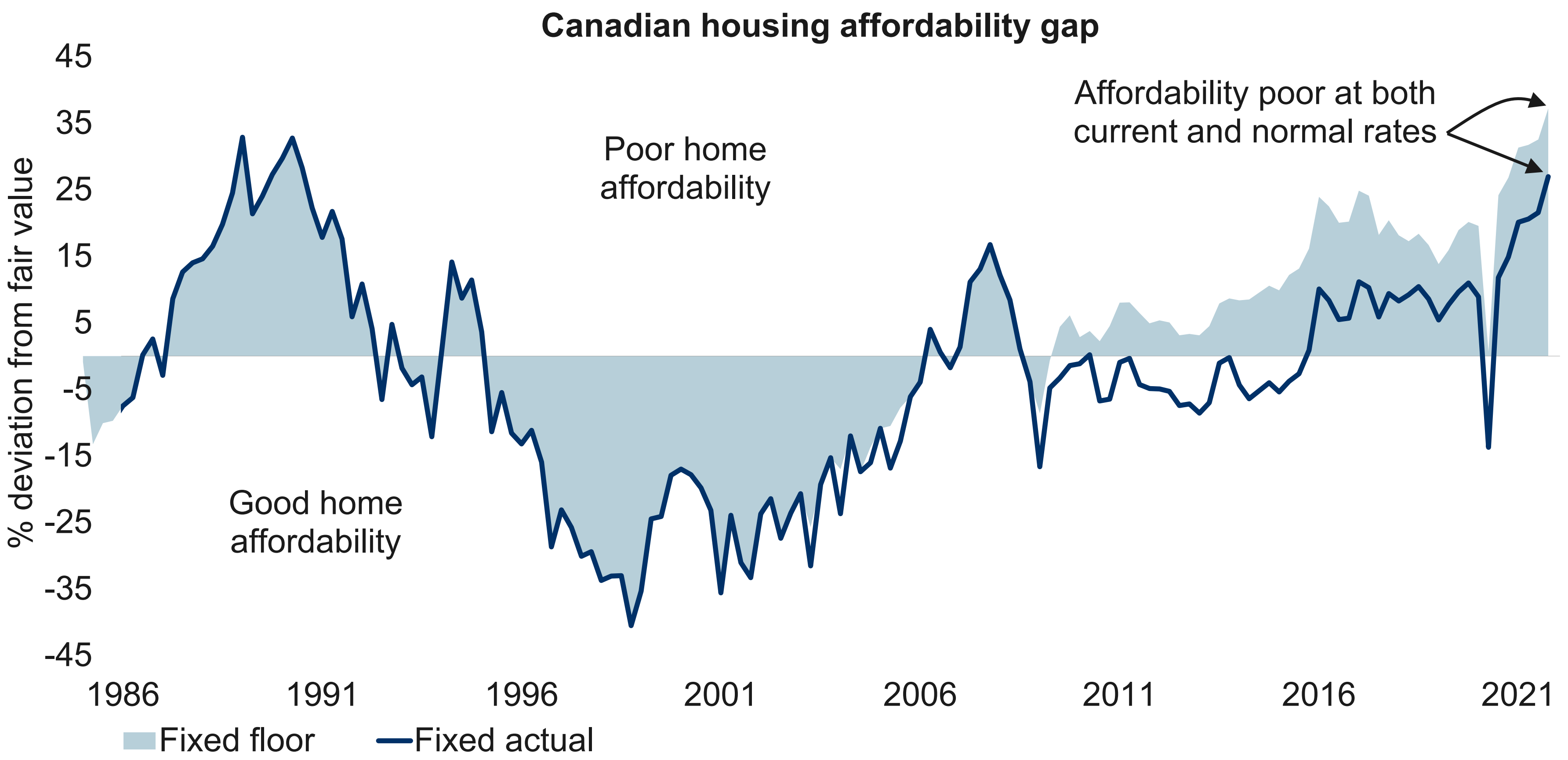
Housing is at risk in many countries as rates rise after a big price run up; Canadian housing is particularly vulnerable to correction

Canadian housing drivers



Note: As at 04/28/2022. Source: RBC GAM

Canadian housing affordability is now >25% offside, and that's before rates have finished rising



Note: As of Q4 2021. Fixed floor imposes a minimum 'normal' mortgage rate in the affordability calculations, and so reveals how affordability would look at "normal" mortgage rates. Source: CREA, Statistics Canada, Haver Analytics, RBC GAM

We anticipate weak Chinese growth this year

Near-term Chinese growth headwinds
• Severe COVID lockdowns due to zero tolerance policy
• Hit to exports as global demand for goods shifts to services
• Housing market excesses being unwound
• Corporate crackdown (disproportionately against big tech)
• China is a commodity importer
• Demographic challenges

…though the Chinese government targets +5.5% and is now pushing back with rate cuts and a new focus on "stability" for 2022

Note: As at 05/11/2022. Source: RBC GAM

For all of that, a soft landing remains possible

Several (though not all) of these problems must abate fairly briskly to reduce inflation and thus the amount of monetary tightening coming:

- Supply chain
- Financial conditions shock
- Commodity shock
- Pandemic / China slowdown

Simultaneously, the following variables must remain firm despite myriad headwinds:

- Business cap ex and hiring
- Consumer spending

Note: As at 05/28/2022. Source: RBC GAM

Long-term macro themes

Post-COVID changes	Downtowns / work from home / online / travel
High debt	Low rates, less fiscal flexibility
Government	Era of big government
Workers > Businesses	Higher wages, flat profit margins
Multipolar world	China ascends, Russia, de-globalization, militarization
Demographics	Aging + low fertility = Slow growth / lower inflation
Productivity	Faster innovation?
Climate	Growth neg. / inflation pos. / massive sector effects
Inflation	>=2% in the future versus <=2% over prior decade

Note: As at 05/28/2022. Source: RBC GAM

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