Asset Allocation Strategy

CIO Office | January 2022

Imbalances and Divergences: Our Top 10 Charts of 2021

Highlights

- Reflecting the genuine economic boom that occurred in 2021, Year 2 of the global pandemic produced significant divergence across asset classes with equity markets substantially outperforming traditional bonds, which ended the period in the red – a first since 2013.
- For this special January edition, we look back at the key events of 2021 through a Top 10 of the most important charts from this eventful period.
- You will find: (1) the unprecedented surge in incomes, spurred by generous fiscal measures; (2) the progress of the vaccination operation, although not the hoped-for silver bullet, as evidenced by (3) the ongoing rise in new COVID-19 cases; (4) supply chain problems that have contributed to the (5) multi-decade highs in inflation; (6) changing inflation expectations, which continue to project relatively elevated price growth for several more years, especially in the context of (7) labour shortages; (8) the Federal Reserve's historical pivot, although it has had little impact on (9) long-term Treasury yields for now, a sign that markets are far from convinced that the Fed will manage to go beyond its projected policy normalization over the next 2-3 years without ultimately triggering a recession; (10) the breakdown of the sources of equity returns, a mirror image of 2020; and one last (bonus) highlight that simply couldn't be ignored.
- Happy reading and best wishes for the New Year!

Table 1 Global Asset Allocation Views

	– ⟵ = ⟶ +	Δ
Asset Classes		
Cash		
Fixed Income		
Equities		
Alternatives		
Fixed Income		
Government		
Investment Grade		
High Yield		
Duration		
Equities		
Canada		
United States		
EAFE		
Emerging Markets		
Value (vs. Growth)		
Small (vs. Large)		
Cyclicals (vs. Defensives)		
Alternatives & FX		
Inflation Protection		
Gold		
Non-Traditional FI		
Uncorrelated Strategies		
Canadian Dollar		

This table is for illustration purposes only. Bars represent the degree of preference of an asset relative to the maximum deviation allowed from a reference index. The further to the right (left) they are, the more bullish (bearish) our outlook for the asset is. No bars indicate a neutral view. The column under the delta sign (**Δ**) displays when our outlook has improved (↑) or worsened (↓) from the previous month. Consult **Table 3** for details on the base-case economic scenario underpinning these views and **Table 4** to see how they translate into a model balanced portfolio.

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Market Review

Fixed Income

- Fear over the Omicron-fuelled wave of new COVID cases – and ensuing restrictions – sent Canadian yields lower in December, resulting in monthly gains for most bond holders.
- The year 2021, as a whole, was much more difficult for the Canadian bond universe; yields rising from the record lows of 2020 led to the sector's first negative yearly performance since 2013. Government bonds were hit the hardest, while corporates fared slightly better.
- In the U.S., high-yield bonds easily outperformed investment grade securities as part of the overall risk-on environment in 2021.

Equities

- It was a wild December for equities as markets were at the mercy of Omicron developments. After multiple choppy trading sessions, global stocks bottomed on December 20 before rallying through to the end of the year.
- Sector leadership reflected a shift in sentiment in December, with U.S. large caps in defensive sectors such as health care, utilities, and consumer staples significantly outperforming, while small caps lagged far behind.
- Developed markets' equities had a tremendous year in 2021, propelled by strong earnings growth. However, the environment was more challenging for emerging markets, dampened by China's deteriorating outlook.

FX & Commodities

- After dropping 21% in November, WTI prices rebounded in December as Omicron fears abated. For the year overall, the WTI is up 56% as the global economy recovered from the pandemic.
- Despite rising oil prices, the Canadian dollar ended the year nearly unchanged next to the Greenback.

Table 2 Market Total Returns

Asset Classes	December	Q4	2021
Cash (3-month T-bills)	0.0%	0.1%	0.2%
Bonds (FTSE CA Univ.)	**1.7%**	**1.5%**	**-2.5%**
FTSE CA Short term	0.4%	-0.5%	-0.9%
FTSE CA Mid term	1.1%	0.3%	-2.7%
FTSE CA Long term	3.6%	4.8%	-4.5%
FTSE CA Government	1.7%	1.6%	-3.0%
FTSE CA Corporate	1.5%	1.1%	-1.3%
BoAML Inv. Grade ($US)	-0.2%	0.2%	-1.0%
BoAML High-Yield ($US)	1.9%	0.7%	5.4%
Preferred Shares	1.3%	1.6%	19.3%
CA Equities (S&P/TSX)	**3.1%**	**6.5%**	**25.1%**
Energy	2.6%	5.7%	48.9%
Industrials	-0.2%	5.0%	16.5%
Financials	6.2%	9.4%	36.5%
Materials	3.4%	10.7%	4.0%
Utilities	5.9%	5.4%	11.6%
Cons. Disc	7.3%	7.8%	18.4%
Cons. Staples	9.2%	7.8%	22.4%
Healthcare	-5.6%	-18.3%	-19.6%
IT	-6.6%	-1.4%	18.5%
Comm. Svc.	3.8%	4.8%	24.7%
REITs	6.5%	9.2%	37.4%
S&P/TSX Small Cap	1.2%	3.0%	20.3%
US Equities (S&P500 USD)	**4.5%**	**11.0%**	**28.7%**
Energy	3.1%	8.0%	54.6%
Industrials	5.3%	8.6%	21.1%
Financials	3.3%	4.6%	35.0%
Materials	7.6%	15.2%	27.3%
Utilities	9.6%	12.9%	17.7%
Cons. Disc	-0.3%	12.8%	24.4%
Cons. Staples	10.3%	13.3%	18.6%
Healthcare	9.0%	11.2%	26.1%
IT	3.4%	16.7%	34.5%
Comm. Svc.	2.5%	0.0%	21.6%
REITs	10.2%	17.5%	46.2%
Russell 2000 (USD)	2.1%	1.9%	13.7%
World Eq. (MSCI ACWI)	**4.0%**	**6.8%**	**19.0%**
MSCI EAFE (USD)	5.1%	2.7%	11.8%
MSCI EM (USD)	1.9%	-1.2%	-2.2%
Commodities (CRB index)	**6.0%**	**1.5%**	**38.5%**
WTI Oil (US$/barrel)	13.6%	0.0%	55.8%
Gold (US$/ounce)	2.4%	3.5%	-4.0%
Copper (US$/tonne)	2.4%	8.9%	25.7%
Forex (DXY - USD index)	**0.0%**	**1.8%**	**6.7%**
USD per EUR	1.0%	-1.9%	-7.1%
CAD per USD	-1.1%	-0.3%	-0.8%

Data via Refinitiv 2021-12-31

NATIONAL BANK INVESTMENTS

Looking back on 2021…

Reflecting the genuine economic boom that occurred in 2021, Year 2 of the global pandemic produced significant divergence across and within major asset classes.

For instance, equity markets (+18.0% for the MSCI All Country World C$ in 2021) substantially outperformed traditional bonds (-2.5% for the FTSE Canada Universe), which ended the year in the red – a first since 2013. Within equities, more cyclical sectors such as energy, real estate, and financials were among the top performers – an outcome that benefitted Canadian stocks which posted their best annual total return (+25.1%) since 2009. Even so, U.S. equities (+28.7% in US$) managed to grab first place, supported by the spectacular resilience of its leading technology stocks, among other things. Meanwhile, conditions proved more difficult for emerging markets, which, after delivering the best performance of the major regions in 2020, ended 2021 in negative territory (-2.2% in US$), dampened by heightened regulatory and economic uncertainty in China (**Chart 1**).

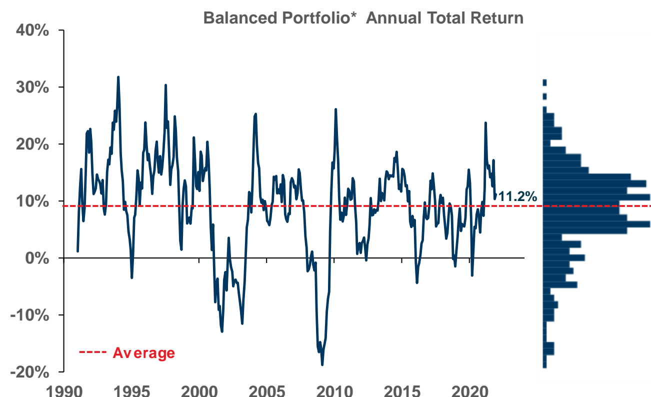
1 | 2021 at a glance

2021 Total Returns						
Cross Assets	Fixed Income	S&P/TSX Sectors	S&P500 Sectors	Equity Regions (in C$)	U.S. Factors	CA Factors
Commo.	Prefs (Can)	Energy	Energy	U.S.	Low Vol.	High Div.
40.4%	19.3%	48.9%	54.6%	27.6%	28.4%	36.1%
S&P 500	HY (US)	Real Estate	Real Estate	Canada	Quality	Value
28.7%	5.4%	37.4%	46.2%	25.1%	27.6%	33.2%
S&P/TSX	Real (Can)	Financials	Materials	World	Large	Large
25.1%	1.7%	36.5%	44.3%	18.0%	27.2%	28.0%
Can Pref.	Short (Can)	Comm. serv.	Financials	EMEA (EM)	Value	Low Vol.
19.3%	-0.9%	24.7%	35.0%	17.6%	27.2%	26.1%
EAFE	IG (US)	Staples	Techno	Europe	MSCI USA	S&P/TSX
11.8%	-1.0%	22.4%	34.5%	16.0%	27.0%	25.1%
Balanced*	Corp (Can)	Techno	Health Care	EAFE	Growth	Small
11.2%	-1.3%	18.5%	26.1%	10.8%	26.2%	20.4%
US HY	Overall (Can)	Disc.	Disc.	Japan	High Div.	Quality
5.4%	-2.5%	18.4%	24.4%	0.2%	21.9%	16.1%
C$ per USD	Fed. (Can)	Industrials	Comm. serv.	Emerg Mrkts	Small	Growth
-0.9%	-2.6%	16.5%	21.6%	-3.1%	19.6%	14.3%
EM	Muni. (Can)	Utilities	Industrials	Asia (EM)	Momentum	Momentum
-2.2%	-2.9%	11.6%	21.1%	-5.6%	12.9%	12.1%
Can Bonds	Prov. (Can)	Materials	Staples	LatAm (EM)		
-2.5%	-3.3%	4.0%	18.6%	-8.5%		
Gold	Long (Can)	Health Care	Utilities			
-4.3%	-4.5%	-19.6%	17.7%			

CIO Office (data via Refinitiv). *Balanced = 40% FTSE TMX Universe, 21% S&P/TSX, 21% S&P 500 (C$), 12% MSCI EAFE (C$), 6% MSCI EM (C$). Note that this performance represents a theoretical portfolio composed of passive indices and is for illustrative pu rposes only.

Where does that leave a traditional balanced portfolio of 60% stocks and 40% bonds? As surprising as it may seem, 2021 was nothing more than a slightly better than average year (as was 2020): such a portfolio generating a return of +11.2% (+9.8% in 2020) vs. an average of +9.0% over the last 30 years (**Chart 2**).

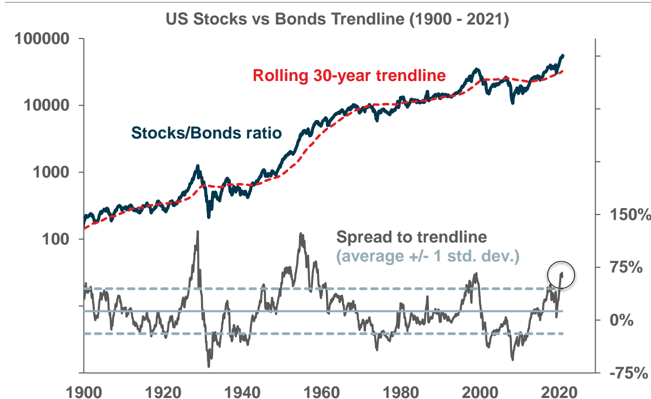
2 | A (slightly) better than average year…



CIO Office (data via Refinitiv). *Balanced = 40% FTSE TMX Universe, 21% S&P/TSX, 21% S&P 500 (C$), 12% MSCI EAFE (C$), 6% MSCI EM (C$). Note that this performance represents a theoretical portfolio composed of passive indices and is for illustrative pu rposes only.

Naturally, this is mostly a tribute to the sharp rise in equity markets that more than offset bonds' decline (unlike 2020, when bonds also performed well). We must emphasize that these moves have pushed the U.S. equity-to-bond ratio about 1.5 standard deviations above its secular trend[1] (**Chart 3**) – a reminder that investors should temper their return expectations as we begin the new year, although we remain relatively optimistic.

3 | … dominated by U.S. equities



CIO Office (data via Case Shiller, Refinitiv).

To find out more about our outlook, you can refer to our base case on Page 8 (Table 4) for an overview, or to our December report for more details. For this special January edition, we are instead taking the opportunity to look back at the key events of 2021

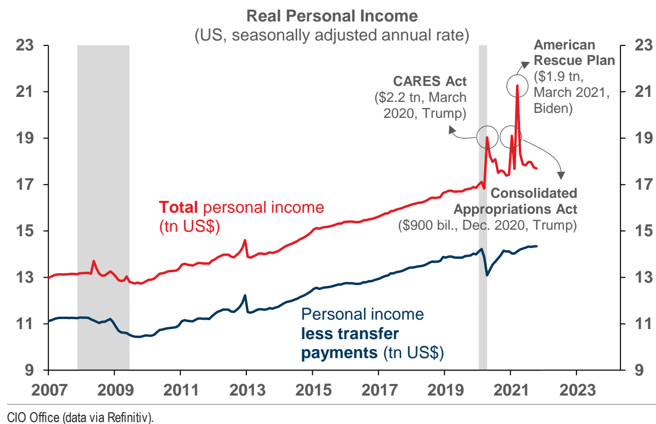
[1] To avoid any bias, we measure the secular trend using linear regression on a 30-year rolling window, representative of the total investment horizon of a majority of investors.

through a Top 10 of the most important charts from this eventful period. Happy reading and best wishes for the New Year!

… through our Top 10 charts of the year

It's easy to forget, given the pace at which things are moving, but a key event for the economy in 2021 actually occurred very early in the year. Just weeks after the January 5 runoff election gave the Democrats control of the Senate and barely recovered from the assault on the Capitol, Joe Biden's party passed a third economic stimulus package (American Rescue Plan) worth a hefty US$1.9 trillion. Much like the first two rounds of fiscal relief passed under Trump, this program included cheques of up to $1,400 per person received by about 85% of American households.[2] Yet, the major difference between Biden's plan and Trump's was that incomes (excluding transfer payments) had already largely recovered by the time cheques were sent out, such that total personal income quite literally exploded by March 2021 (**Chart 4**, 1/10).

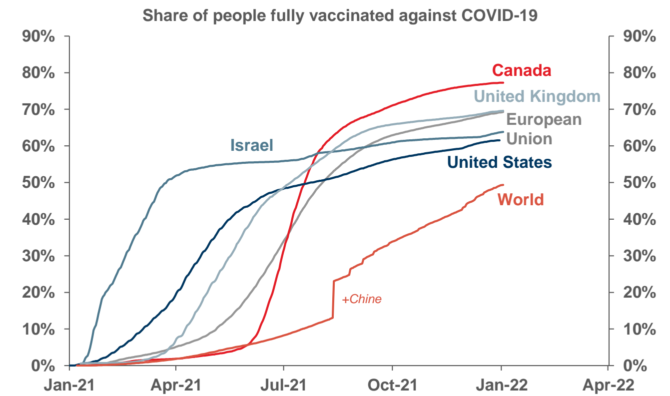
4 | Supersized combo of fiscal aid programs



CIO Office (data via Refinitiv).

Meanwhile, the vaccination operation was getting underway on a global scale. Recall that initial estimates of the time needed before vaccine distribution could begin ranged from August 2021 as the most optimistic to November 2023 for the most pessimistic.[3] As of July 2021, Canada and the United States had already double-vaccinated roughly half of their population, and we have nearly just reached this threshold worldwide (**Chart 5**, 2/10).

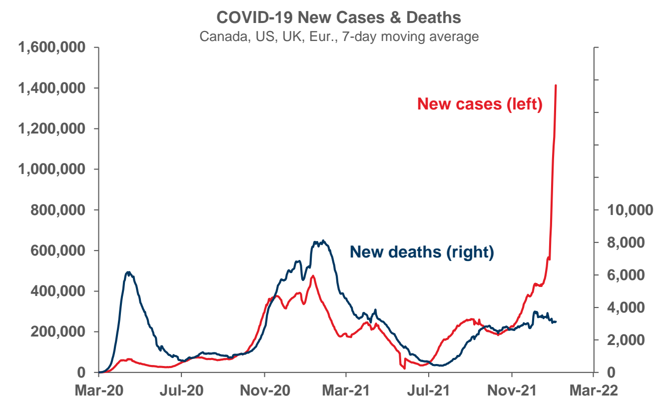
5 | The vaccine operation exceeded expectations…



CIO Office (data via Our World in Data). As fo January 4, 2021.

Unfortunately, it also became increasingly clear as the year progressed that vaccines were not the silver bullet for which we had all hoped. While places with higher vaccine coverage (such as Canada) weathered the Delta wave relatively well, the arrival of the Omicron variant in December brought new highs in cases yet, thankfully, only a marginal rise in fatalities (**Chart 6**, 3/10).

6 | … helping to curb mortality… but not infection



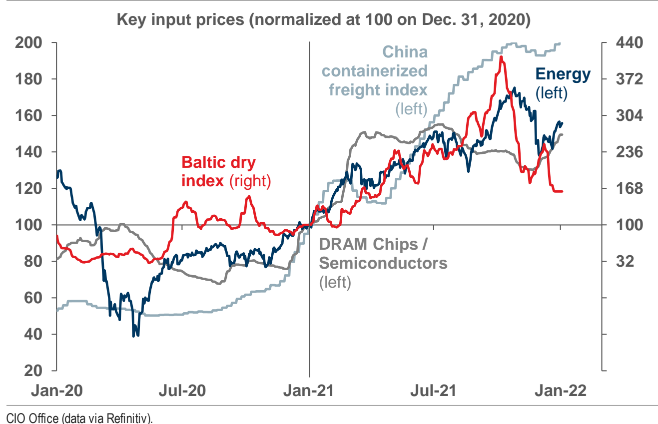
CIO Office (data via Johns Hopkins University).

Thus, with demand for consumer goods bolstered by generous fiscal measures on the one hand, and a pandemic that has continued to complicate the

[2] Source: CNN, White House
[3] How Long Will a Vaccine Really Take? New York Times, April 30, 2020.

day-to-day operations of many ports and factories on the other, supply chain issues have proliferated like never before in 2021. Microprocessor shortages, soaring shipping costs, rising energy prices (**Chart 7**, 4/10) are all trends that, although they have stabilized for the most part recently, are likely to linger for a few more months, especially if the pandemic keeps getting worse, notably in Asia.

7 | A host of supply chain issues...

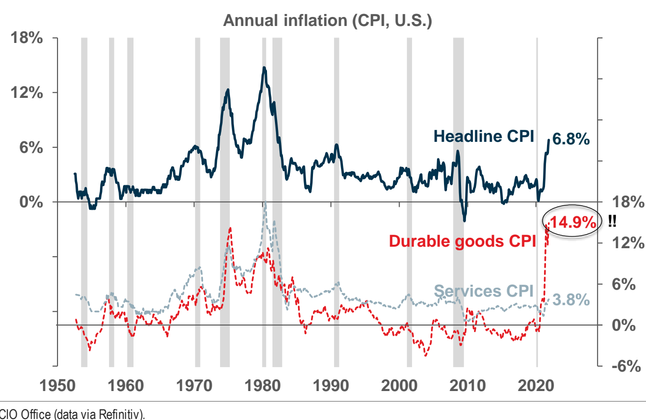


CIO Office (data via Refinitiv).

Ultimate consequence of these imbalances? Multi-decade highs for inflation in many countries such as Canada, but especially in the United States where the Consumer Price Index (CPI) is up 6.8% on a year-over-year basis – a 39-year record. Yet, this toll is driven largely by the rise in durable goods prices, which, after spending most of the past 20 years in deflation, have over the past 12 months surpassed even the highs set in the late 1970s (**Chart 8**, 5/10). It's hard, in light of such figures, to deny the circumstantial nature (at least in part) of the inflationary dynamics that have dominated the headlines in 2021.

Many, if not all, had expected inflationary pressures to develop, but certainly not by this magnitude. For example, at the beginning of the year, CPI swaps were discounting higher-than-median inflation in the near term, but relatively flat across the time horizon. As the months passed, expectations only increased to eventually reach a peak in mid-November, a few days after yet another higher-than-expected inflation report. As of December 31, the outlook for

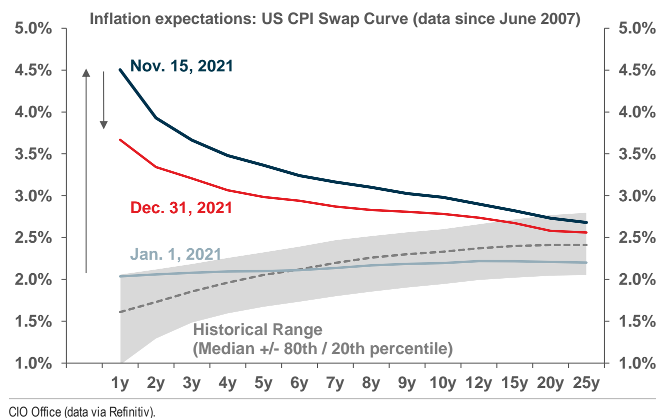
8 |... and an all-time high for durable goods inflation



CIO Office (data via Refinitiv).

inflation remained relatively high, although it had moderated and mostly concerned the next 5 years, with the longer-term expectations still anchored near historical norms (**Chart 9**, 6/10).

9 | Ongoing recalibration of inflation expectations...

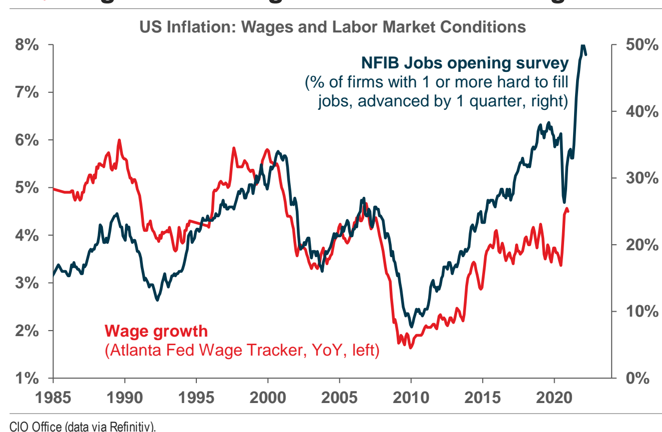


CIO Office (data via Refinitiv).

A key factor likely to contribute to higher inflation figures in the medium term is, unequivocally, the scarcity of labour. This challenge was in play before the pandemic, and demographic trends indicate that it will remain with us for many years to come. That being said, there is little doubt it has been exacerbated by the pandemic situation – never before have so many companies indicated difficulty in finding workers. This has already started to put upward pressure on wages – closely linked to services inflation – and is likely to continue in the coming months (**Chart 10**, 7/10, next page).

For the Federal Reserve, this backdrop has resulted in a historic pivot. Faced with stronger and more

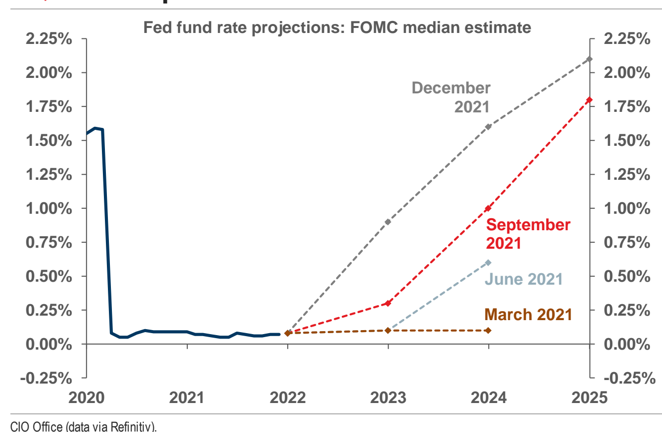
10 | ... against a background of labor shortages



CIO Office (data via Refinitiv).

persistent inflation than expected, the U.S. Central Bank, that had self-described its approach as "wait-and-see" at the beginning of the year, has gradually adjusted its rate-hike projections: starting from zero, as far as we can see, and ending up with 3 in 2022, 3 in 2023 and 2 in 2024 (**Chart 11**, 8/10).

11 | Historic pivot for the Federal Reserve...

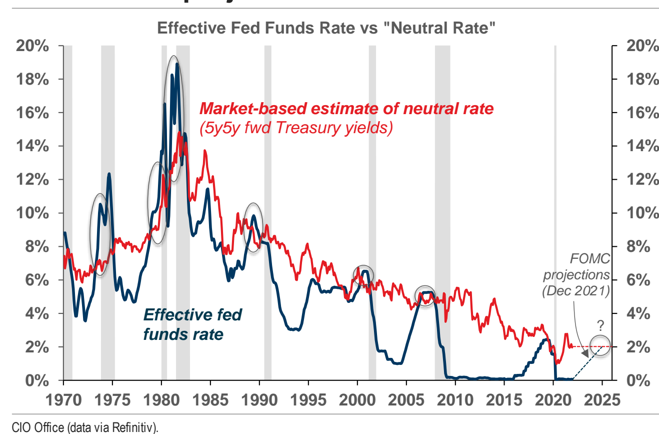


CIO Office (data via Refinitiv).

In the bond markets, this pivot was met by a flattening of the curve, with 2-year yields rising more sharply than 10-year yields, which actually fluctuated sideways between March and December. This 2021 highlight suggests that, despite the strong growth and inflation of the last few months, markets remain far from convinced the Federal Reserve will be able to raise interest rates beyond the normalization process it intends over the next 2 to 3 years without ultimately triggering a recession.

Despite some oscillations, the market estimate of the neutral rate[4] (which can be approximated by 5-year/5-year forward yields) remains essentially as low as before the pandemic, i.e. close to 2%. At the pace of hikes currently projected by the FOMC, the Fed is only expected to move close to this level in 2025. This leaves time for the market to re-evaluate its neutral rate estimates and for the Fed to reconsider its rate projections, notably in light of still-uncertain inflationary dynamics (**Chart 12**, 9/10).

12 | ... but the projected *final destination* remains low



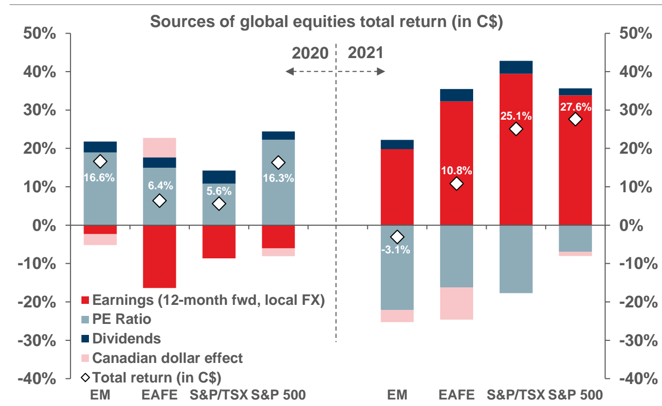
CIO Office (data via Refinitiv).

As for stock markets, there are many highlights, but one particularly interesting aspect is the source of returns. Recall that in 2020, nearly all equity gains were achieved on the back of multiple expansions, thereby raising the skepticism of many investors. In 2021, the exact opposite occurred, with the sharp recovery in earnings more than offsetting the decline in valuations everywhere except in emerging markets where heightened uncertainty, notably on the regulatory front, has justified significantly lower valuations (**Chart 13**, 10/10, next page). This serves as a reminder that a market can be either expensive or cheap for the right reasons.

To be clear, this does not mean that valuation measures should be completely ignored under any conditions. In this regard, our annual review would not be complete without mentioning the powerful horde-effect of a growing community of speculators

[4] The neutral rate is a theoretical concept that seeks to present an interest rate level that is neither accommodative nor restrictive, and consistent with an economy achieving its full potential with stable inflation, as targeted by the Federal Reserve.

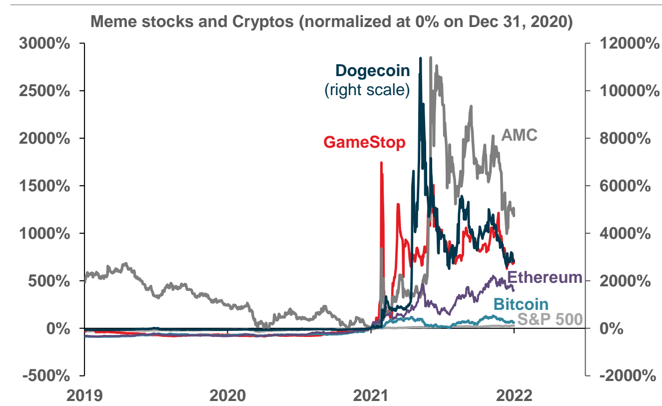
13 | 2021 *vs* 2020: mirror image for sources of return



CIO Office (data via Refinitiv).

who have snapped up stocks whose value generally lies in their ability to generate fun memes (e.g. Gamestop, AMC), their promise to transform the monetary system (e.g. Bitcoin, Etherum) and, occasionally, both (e.g. Dogecoin, which requires a scale of its own) (Bonus **Chart 14**)! It's hard not to see symptoms of a bubble for these market segments which have certainly benefitted from an environment of zero rates, abundant liquidity, and a mass of confined investors seeking entertainment. Time will tell how this growing phenomenon will evolve in what should be less fertile ground for such assets over the coming years, in principle. To be continued!

14 | Fun times for *meme stocks* and cryptos



CIO Office (data via Refinitiv).

Table 3 Base-Case Scenario

Scenario (prob.*)	Key elements and investment implications
Base case 70%	COVID-19 hospitalizations rise rapidly due to the Omicron variant, but they remain under control thanks to vaccines, which are still effective against severe cases of the disease. New public health restrictions are enacted across the developped world, but their economic impact is relatively mild.
	The economic recovery continues, but the pace of growth slows down. Strong underlying trends such as consumers' substantial accumulation of excess savings, the rebound in the services sector and accommodative financial conditions help growth rates remain above their long-term average.
	In most developed countries, policy makers pursue a gradual and cautious phase-out of emergency fiscal support. In the U.S., the Biden administration manages to pass new social spending measures that include some tax hikes, albeit of a much smaller magnitude than originally planned.
	Annual inflation declines moderately but remains volatile as several transitory forces exerting upward pressure on prices abate. Still, a strong economy and structural factors keep inflation above central bank targets. This backdrop allows the Bank of Canada and the Federal Reserve to proceed with the gradual normalization of their monetary policy with a first rate hike in March and June, respectively.
	→ **Bond yields rise gradually while global equities continue to climb along their long-term trend. Leadership remains volatile but edge in favour of cyclical and North American equities.**
Bullish 10%	New COVID-19 variants are associated with a decline in disease severity, which combined with an increase in global vaccination rates allows the world to enter the endemic stage of the virus. As economies reopen, employment continues to recover rapidly.
	After rising sharply, inflation settles near central bank targets as supply adjusts, helped by a rotation of consumer spending from goods to services. Chinese monetary authorities announce new measures to stimulate their economy while Western central banks continue to gradually and cautiously adjust their ultra-accommodative monetary policies.
	→ **Bond yields rise marginally while the U.S. dollar depreciates. Global equities surge above their long-term trend. Leadership remains volatile. Emerging markets equities outperform.**
Bearish 20%	Strong inflationary pressures lead to a de-anchoring of long-term inflation expectations above central banks' comfort zone, forcing policy makers to tighten monetary conditions earlier and more aggressively than expected. At the same time, uncertainty over U.S. fiscal policy, restrictive monetary and regulatory policies in China, deteriorating Sino-U.S. relations and rising risks of conflict in Russia's periphery force markets to recalibrate their expectations.
	The Omicron variant leads to a surge in new hospitalizations, forcing governments to enact new severe lockdowns. Restrictions put added pressures on already fragile supply chains. Global growth slows substantially.
	→ **Bond yields volatility increases and the U.S. dollar shoots higher. Equities venture in correction territory. Leadership is highly volatile but edges in favour of growth (value) stocks in the COVID revival (inflationary pressure) scenario.**

CIO Office. Last update: December 29, 2022 (updated quarterly unless an event demands a revision). *Subjective probabilities based on current market conditions and subject to change without notice.

Table 4 Global Asset Allocation - Model Portfolio Weights (in CAD)

	Benchmark		Model Portfolio				Comments
	Total	Asset Class	Total Allocation	Total Active Weight	Asset Class Allocation	Asset Class Active Weight	
Asset Classes							
Cash	0%	-	2.0%	2.0%	-	-	With above-trend global growth, the outlook for equities compares favourably to bond markets, which are showing real yields close to an all-time low. Alternatives allow for better control of the total risk of the portfolio and offers protection against sustained inflation. A modest cash position provides an extra level of prudence, given relatively weak risk-reward prospects across asset classes. Overall, this positioning is pro-risk.
Fixed Income	40%	-	31.0%	-9.0%	-	-	
Equities	60%	-	63.0%	3.0%	-	-	
Alternatives	0%	-	4.0%	4.0%	-	-	
Fixed Income							
Government	28%	73%	16.8%	-11.2%	54%	-18.8%	Accommodative monetary conditions and strong recovery in economic activity should lead corporate bonds to outperform government securities. For risk control purposes, we are sticking to investment grade credit. Treasury yields should rise modestly as central banks begin to normalize their policies, but we expect real yields to remain negative.
Investment Grade	12%	27%	14.2%	2.2%	46%	18.8%	
High Yield	0%	0%	0.0%	0.0%	0%	0.0%	
Duration	*8.1 yrs*	-	*7.4 yrs*	-0.7 yrs	-	-	
Equities							
Canada	21%	35%	23.0%	2.0%	37%	1.6%	Prevailing uncertainty argues for a diversified approach. Canada and the U.S. should outperform under a backdrop of slowing but strong global growth and slightly higher real yields.. In EM, we favour cyclical and value sectors (RAFI Fundamental). In the U.S, we favour the high-quality (MSCI Quality) dividend-paying (Div. Aristocrats) companies and the equal weight index for their diversified properties.
United States	21%	35%	23.0%	2.0%	37%	1.6%	
EAFE	12%	20%	11.6%	-0.4%	18%	-1.6%	
Emerging markets	6%	10%	5.3%	-0.7%	8%	-1.6%	
Alternatives							
Inflation Protection	0%	0%	0.0%	0.0%	0%	0.0%	A systematic quantitative strategy that takes advantage of market trends while aiming for maximum decorrelation with equities and tight control of volatility (NALT) play an important role as diversifier. Gold prices may underperform if real yields rise, but remain an inexpensive insurance against the possibility that inflation continues to surprise to the upside.
Gold	0%	0%	2.0%	2.0%	50%	50.0%	
Non-Traditional FI	0%	0%	0.0%	0.0%	0%	0.0%	
Uncorrelated Strategies	0%	0%	2.0%	2.0%	50%	50.0%	
Foreign Exchange							
Canadian Dollar	61%	-	58.0%	-3.0%	-	-	Our overall portfolio strategy places us overweight in U.S. dollars versus our benchmark. Although we don't expect the Canadian dollar to depreciate significantly, we maintain this positioning for risk management purposes as the U.S. dollar offers attractive historical properties from a portfolio construction standpoint, especially pared with gold.
U.S. Dollar	21%	-	25.0%	4.0%	-	-	
Euro	5%	-	4.4%	-0.2%	-	-	
Japanese Yen	3%	-	2.9%	-0.1%	-	-	
British Pound	2%	-	1.6%	-0.1%	-	-	
Others	9%	-	8.0%	-0.7%	-	-	

CIO Office. The fixed income benchmark is 100% FTSE Canada Universe. There are no alternative assets in the benchmark as their inclusion is conditional on improving the risk/return properties of traditional assets (60/40). The amplitude of the color bars under the "Active Weight" columns are proportional to the maximum deviations of the portfolio (+/- 10% for stocks and bonds, +10% in cash, +20% in alternative assets).

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General

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