J. Safra Sarasin

Cross-Asset Weekly

17 November 2023

Gold is back in favour

Geopolitical tensions spurred a major gold rebound in October, widening the gap between real yields and gold even further. In our view, the weakening of the decade-long correlation between real yield levels and gold is not only a reflection of the current higher inflation regime, but also reveals stronger structural demand. Emerging Markets central banks have substantially increased their gold holdings in an effort to gain more independence from the US dollar. And the ongoing shift in China's growth model has increased economic uncertainty and has led to higher physical demand for gold from local investors. Taken together, the confluence of these factors should support gold at a structurally higher price level, thus weakening the historic influence of real yields.

The surprisingly loose fiscal stance this year goes a long way towards explaining the US economy's resilience to higher interest rates. While Congress seems averse to spending cuts, some factors that led to the sharp widening of the budget deficit should reverse over the coming year. As a result, fiscal policy probably won't play a meaningful role in driving the economy in 2024. Rather, private sector dynamics and the lagged impact from past monetary tightening should be in the driving seat.

Staying with US politics, we review equity performance around presidential elections over the past 50 years. We find that the eventual election outcome has little impact on equity markets ahead of the election, while it does substantially alter performance after the vote. Typically, markets do best if the incumbent wins and the Fed cuts rates. This scenario appears feasible in 2024, but a recession could stand in the way. The governing party always lost the White House in the past 50 years when the election took place during a recession year.

Contacts

Dr. Karsten Junius, CFA
Chief Economist
karsten.junius@jsafrasarasin.com
+41 58 317 32 79

Raphael Olszyna-Marzys
International Economist
raphael.olszyna-marzys@jsafrasarasin.com
+41 58 317 32 69

Mali Chivakul
Emerging Markets Economist
mali.chivakul@jsafrasarasin.com
+41 58 317 33 01

Alex Rohner
Fixed Income Strategist
alex.rohner@jsafrasarasin.com
+41 58 317 32 24

Dr. Claudio Wewel
FX Strategist
claudio.wewel@jsafrasarasin.com
+41 58 317 32 26

Wolf von Rotberg
Equity Strategist
wolf.vonrotberg@jsafrasarasin.com
+41 58 317 30 20

This week's highlights

Precious metals

Higher structural demand for gold

Dr. Claudio Wewel
FX Strategist
claudio.wewel@jsafrasarasin.com
+41 58 317 32 26

Geopolitical tensions spurred a major gold rebound in October, widening the gap between real yields and gold even further. In our view, the weakening of the decade-long correlation between real yield levels and gold is not only a reflection of the current higher inflation regime, but also reveals stronger structural demand. EM central banks have ramped up their gold holdings in an effort to gain more independence from the US dollar. Moreover, the shift in China's growth model has increased economic uncertainty, boosting physical demand for gold from local investors. Taken together, the confluence of these factors should support gold at a structurally higher price level than prior to the pandemic, softening the historic influence of real yields.

A major recovery of the gold price has led to a further decoupling from real yield levels

Geopolitical tensions spurred a major rebound in the gold price in October, pushing the metal close to $2'000 per ounce. Notably, the surge followed a period of consolidation that gold had experienced on the back of rising real yields. As such, the precious metal's recent pickup has amplified its recent decoupling from US TIPS 10-year yields. This prompts us to take a closer look at the underlying factors.

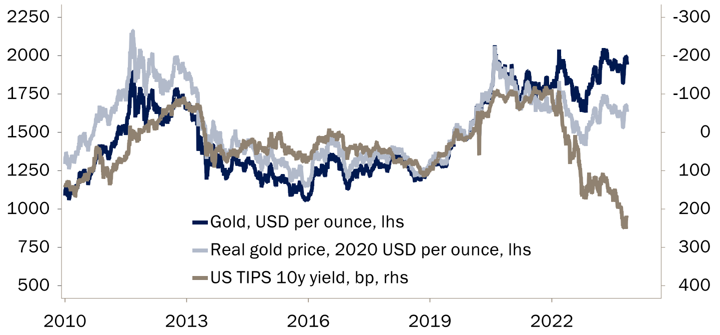
High inflation accounts for part of this gap

Some time ago, we established inflation as an important long-term driver of gold. The precious metal's post-pandemic price dynamics largely confirm this hypothesis. Clearly, the elevated inflation rates seen over the past two years imply a markedly lower gold price in real terms (that we obtain by deflating the dollar gold price with US headline inflation), which essentially reduces the gap between real yields and gold (Exhibit 1).

EM central banks have stepped up their purchases substantially...

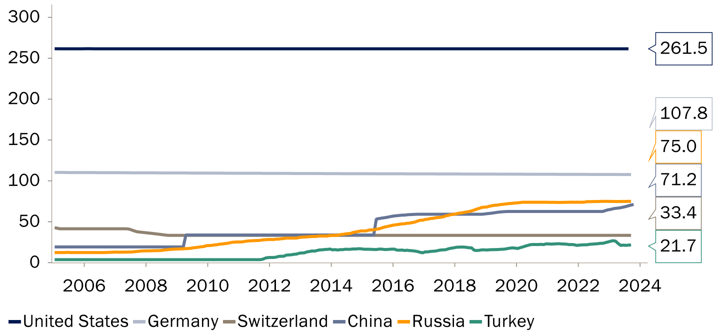
Yet a substantial part of the gap remains unexplained. In our view, the decoupling of the decade-long correlation between long-term US real yield levels and the gold price largely points towards structural shifts in demand. In an effort to gain more independence from the US dollar, EM central banks have stepped up their gold holdings substantially over the past two decades – in particular China and Russia (Exhibit 2). The pace of institutional gold buying saw another acceleration after the US and their allies froze Russian dollar reserves in response to the invasion of Ukraine in early 2022. With official gold purchases exceeding 100 tonnes in H1 2023 alone, China continues to be the most significant institutional buyer year to date. Given the ongoing geopolitical fragmentation, we expect institutional purchases to remain elevated.

Exhibit 1: Real gold price somewhat better aligned to real yield levels
Nominal and real gold price vs US real yield



Source: Macrobond, Bank J. Safra Sarasin, 16.11.2023

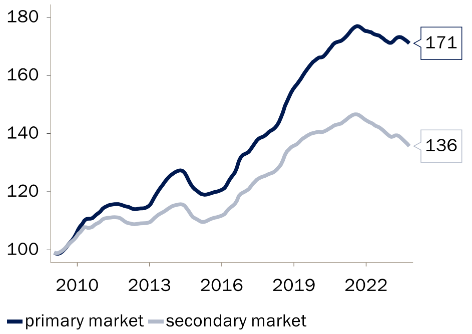
Exhibit 2: EMs have stepped up their gold reserves for some time
Official central bank gold reserves, in million ounces



Source: IMF, Bank J. Safra Sarasin, 16.11.2023

Exhibit 3: Chinese house prices in decline

China, residential real estate prices, index, 2008 = 100



Source: Macrobond, Bank J. Safra Sarasin, 16.11.2023

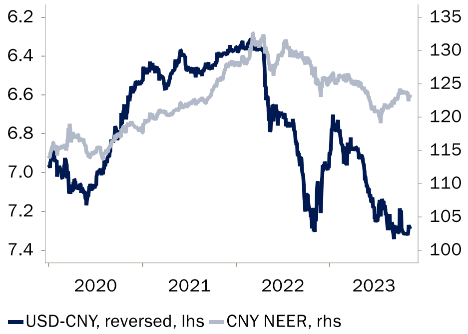
Exhibit 4: Subdued equity performance

MSCI China, A Onshore Index, Total Return, USD

Source: Macrobond, Bank J. Safra Sarasin, 16.11.2023

Exhibit 5: Weaker Chinese renminbi

Chinese renminbi



Source: Macrobond, Bank J. Safra Sarasin, 16.11.2023

...along with physical buyers in China

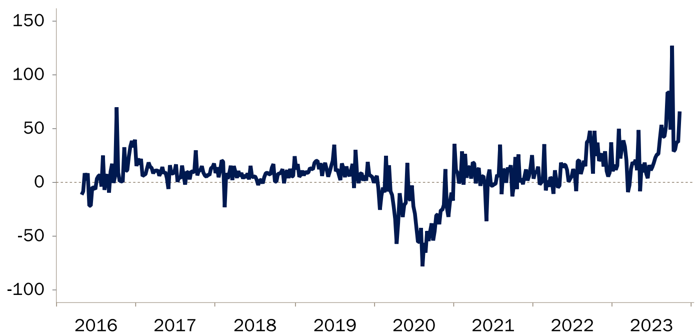
Gold has also become increasingly attractive for individual buyers. Again, China is a case in point. Once considered a safe asset, real estate has lost much of its appeal among local investors. The government's decision to deflate the housing market means that the sector is in a structural decline. New sales and housing starts have fallen to levels not seen in a decade, and house prices have moved markedly lower over the past quarters (Exhibit 3). Chinese equities have similarly underperformed over the past two years (Exhibit 4) and the renminbi has revisited its 2022 lows, erasing the gains it made after China's reopening (Exhibit 5). And with the government enforcing strict limits on capital outflows, it is hard for investors to turn to the outside world.

A confluence of structural factors support gold at fundamentally higher levels than prior to the pandemic

China's macro backdrop along with its lack of viable and attractive domestic investment alternatives make gold shine ever more. Beyond this, local investors see gold as a hedge against the weakness of the Chinese renminbi. The unusually high demand for gold is particularly visible in a recent spike of the China gold premium – the spread at which gold is traded in Shanghai compared to London. The spread typically hovered around $10 per ounce over the past ten years, yet it temporarily rose above $50 per ounce during Q3 2023 (Exhibit 6). Given that domestic financial asset returns are set to remain highly volatile, we expect physical gold demand to stay strong in China, large enough to matter for the world market (Exhibit 7). Taken together, we expect the confluence of these factors to support the gold price at a structurally higher level than prior to the pandemic, weakening the historic influence of real yields on gold to a considerable extent.

Exhibit 6: High China gold premium points to strong local demand

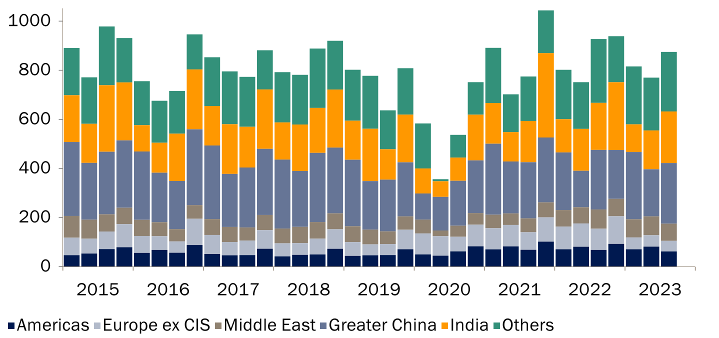
China gold premium, USD per ounce



Source: Macrobond, Bank J. Safra Sarasin, 16.11.2023

Exhibit 7: Chinese demand matters for the world market

Gold, world private consumption (jewellery, bars, coins), metric tonnes



Source: World Gold Council, Bank J. Safra Sarasin, 16.11.2023

J. Safra Sarasin Cross-Asset Weekly

17 November 2023

US macro

No more fiscal boost

Raphael Olszyna-Marzys
International Economist
raphael.olszyna-marzys@jsafrasarasin.com
+41 58 317 32 69

The surprisingly loose fiscal stance this year is an important factor, in our view, behind the economy's resilience to higher interest rates. While Congress seems averse to spending cuts, some factors that led to the sharp widening of the budget deficit should reverse over the coming year. As a result, fiscal policy probably won't play a meaningful role in driving the economy in 2024. Rather, private sector dynamics and the lagged impact from past monetary tightening should be in the driving seat.

The deficit has widened sharply this year, despite an economy at full employment

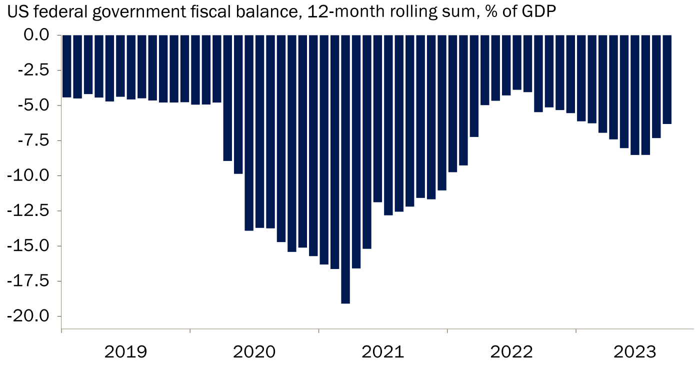
The sharp deterioration in the government budget deficit this year came as a big surprise. An economy operating at full employment, and arguably beyond, should be running a surplus. At this stage of the business cycle, spending on unemployment benefits, for example, is relatively low and tax intakes high. Instead, the government deficit widened by about 4.5 percentage points (pp) of GDP in the year to July 2023, when it peaked (Exhibit 1). As we wrote previously, this probably goes a long way towards explaining the economy's resilience to higher interest rates. Can this be repeated over the coming year? Probably not.

Higher interest spending, larger social benefits and a fall in personal income taxes explain most of the widening

Of course, not all government spending adds to growth. Net interest service has increased by about 1pp of GDP on the back of the sharp rise in bond yields. The Administration's decision to cancel the student debt in 2022 was overturned by the Supreme Court earlier this year. This has led to a large but offsetting impact on the fiscal balance in these two years, and explains to large extent the reduction in the headline budget deficit of the past few months. If we exclude interest payments and spending on education from the budget, the deficit has risen by 3pp in the past year and remains deeply negative at close to -4% of GDP. This deterioration largely reflects a drop in personal income taxes (2.5pp) and a rise in spending on social security and Medicare (0.35pp) (Exhibit 2).

Exhibit 1: A sharp widening of the fiscal deficit

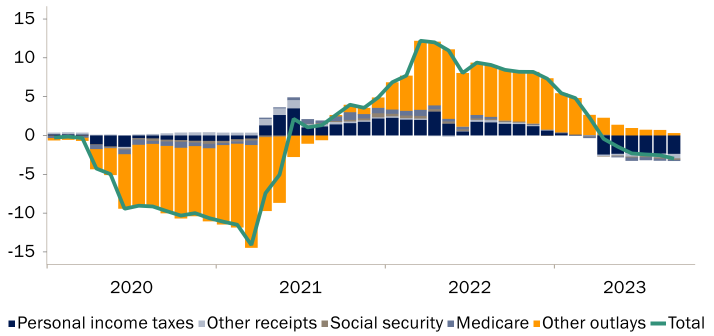
US federal government fiscal balance, 12-month rolling sum, % of GDP



Source: Macrobond, Bank J. Safra Sarasin, 16.11.2023

Exhibit 2: Change in balance excl. education and interest payments

Budget balance ex. education & interest rate payments, 12m rolling, 12m change, % GDP



Source: Macrobond, Bank J. Safra Sarasin, 16.11.2023

The fiscal stance has probably added 1.5-2% to GDP this year

About half of these transfers appear to have been spent and the other half saved by households. Indeed, personal savings rose by about 2pp of GDP between mid-2022 and mid-2023, and then dropped again in the third quarter. This suggests that the fiscal expansion directly added about 1.5% to GDP this year (Exhibit 3). The IMF estimates that the stance of fiscal policy is even a bit looser, with a fiscal impulse of 1.9% of GDP. Its measure is a more precise assessment of the true fiscal stance as it takes into account the role of automatic stabilisers in supporting the budget balance at this stage of the business cycle.

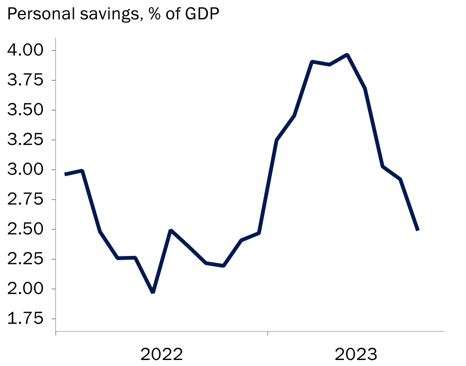
The fiscal impulse could turn negative next year

Looking into next year, we doubt that fiscal policy will play again such a supportive role. The fiscal expansion in 2023 largely reflects factors that are likely to reverse or be much smaller. Indeed, most of the 2.5pp decline in personal income taxes is due to lower capital gains in 2022. But with equity prices up strongly year to date, capital gains taxes should pick up again in 2024. The rise in social benefits reflects more spending on Medicare and social security, with the latter mostly owing to the cost-of-living adjustment. This adjustment is largely a function of the previous year's inflation rate. With inflation down considerably in 2023, the Social Security Administration already announced that its 2024 cost-of-living adjustment will be 3.2%, a much smaller bump than the 8.7% increase beneficiaries received this year. Looking ahead, we therefore expect an improvement in tax revenues and in the budget deficit, with some cap on expenditures. The IMF expects the fiscal impulse to turn negative in 2024, and hence to detract from growth (Exhibit 4).

But the White House has some leeway to prevent a tightening of fiscal policy

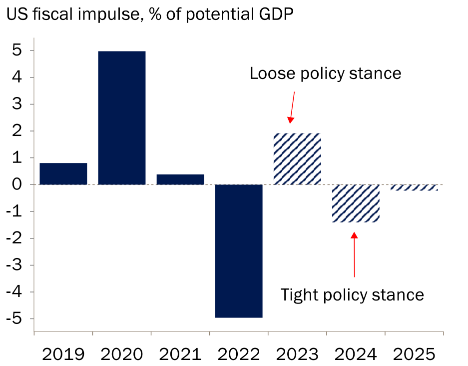
Can we realistically expect fiscal policy to act as a headwind to the economy in a presidential election year? True, the White House doesn't control the public purse – Congress does – but it nonetheless has some leeway. It can, for example, reallocate funds from past programs that have not been fully used up. And so far this year, the Internal Revenue Service (IRS) has distributed $165bn of tax refunds to businesses through rarely used old COVID programs (Exhibit 5). The IRS has stopped lately distributing these refunds to ensure there is no fraud. But once this issue is cleared, the IRS is likely to restart.

Exhibit 3: Part of the transfers were saved



Source: Macrobond, Bank J. Safra Sarasin, 16.11.2023

Exhibit 4: A negative fiscal impulse for 2024



Source: Macrobond, Bank J. Safra Sarasin, 16.11.2023

Exhibit 5: Large tax refunds

Source: Macrobond, Bank J. Safra Sarasin, 16.11.2023

And Congress appears to be unable to cut spending

In addition, Congress appears to be unable to cut spending. Earlier this week, it passed a Continuing Resolution in order to keep the government funded through early next year. But that bill contained no spending cuts in order to get the support from Democrats. This arrangement between the Speaker of the House and the opposition seems likely to be repeated again next year, and up until the elections. Finally, the Administration asked Congress for additional defence spending of around $100bn (0.5% of GDP) to support Ukraine, Israel and to fund border security, among other things. These issues will be dealt with in separate bills. None will be easy to clear out, but isolating these issues makes it easier for Congress to resolve each of them.

The fiscal impulse next year is probably going to be close to neutral. Private sector dynamics will drive the outlook

Our best guess therefore is that fiscal policy will probably be at best neutral next year. Private sector dynamics and the lagged impact from past monetary tightening will be key in driving the economy.

J. Safra Sarasin
Cross-Asset Weekly

17 November 2023

US equities

US elections mostly matter for markets after the vote

Wolf von Rotberg
Equity Strategist
wolf.vonrotberg@jsafrasarasin.com
+41 58 317 30 20

The US presidential elections take place in exactly 12 months. We take the opportunity to review equity market performance around elections over the past 50 years. We find that (i) there's little impact on US equity market performance ahead of the election, (ii) once the election date has passed, equity market moves diverge substantially, depending on the outcome. If the incumbent administration remains in power, equities tend to rise the most over the following year, while they are close to flat, on average, if the administration changes after two terms. A one-term presidency is typically followed by a ~10% rise in equities over the following year, which would be roughly in line with non-election years. (iii) In addition, Fed rate cuts tend to support market performance in election years. As a result, the most favourable outcome is one in which the incumbent president is re-elected and the central bank eases policy. Such an outcome is possible in 2024. Yet to achieve it, a recession would have to be avoided. In the past 50 years, the governing party has always lost the White House when a recession occurred during the election year.

Over the past 50 years, equity markets have underperformed slightly going into elections vs non-election years

With the next US presidential election exactly 12 months away, we take the opportunity to look at the equity market's performance during election years since 1976. On average, the performance during the 12 months preceding a presidential election (+7%) was slightly worse than it was during a typical non-election year (+10%). Looking at the median instead of the average, the impact of outliers like the election year 2008 becomes less pronounced and leads to a convergence of results (+10% in election years vs +12% in non-election years, Exhibit 3). Yet what remains is that the equity market going into an election slightly underperforms vs non-election years.

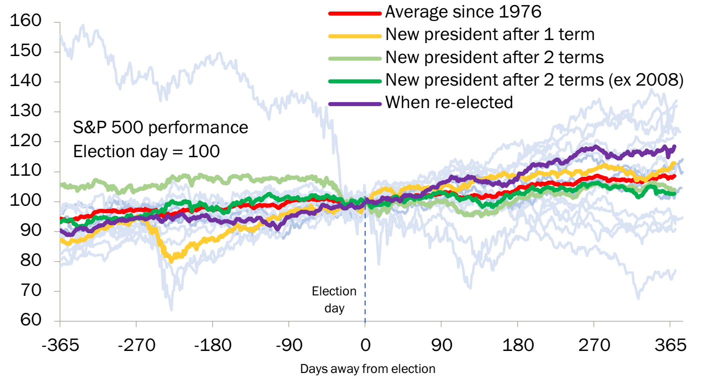
The election outcome has little impact on equity performance ahead of the election, but this changes after the election has passed

Interestingly, the nature of the presidential race appears to have little impact on the performance going into the election, while it tends to have a larger impact after the election is over. No matter whether it is an open race (between two new candidates) or the incumbent and another candidate, the S&P 500 typically gains between 7% and 16% in the preceding 12 months (ex 2008, Exhibit 1). Once the election date has passed, the performance gap between different outcomes widens significantly. The strongest equity market gains are typically observed after the incumbent has been re-elected (+19% over the following year), while a new president in an open race has only seen the market gain 3% on average during the first 12 months of his tenure.

Fed cuts typically support equity market performance after presidential elections

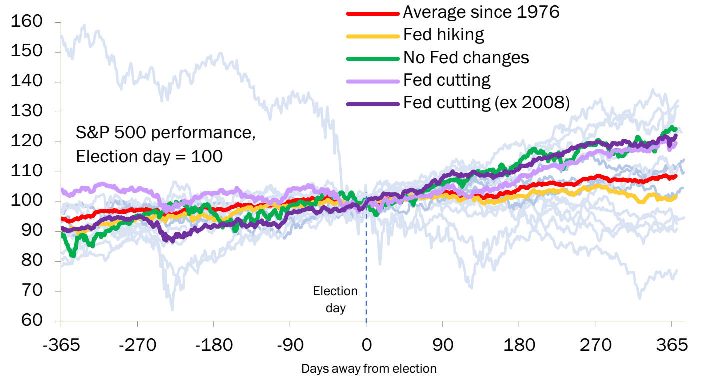
In addition to the nature of the presidential race, we considered the Fed's policy stance in presidential election years. The strongest performance going into an election and coming out of an election could be observed in election years with no Fed rate changes. Yet it should better be called year, not "years", as 2012 is the only year in our sample when this was the case. Apart from that, there's a striking difference between hike- and no-hike election years. While the 12-month performance going into the election once again has been fairly narrow, regardless of the Fed's monetary policy, following the election, the S&P 500 on average gained 22% over 12 months when the Fed cut rates (ex 2008, Exhibit 2) and was almost flat when it hiked rates.

Exhibit 1: S&P 500 around elections depending on outcome



Source: Refinitiv, Bank J. Safra Sarasin, 16.11.2023

Exhibit 2: S&P 500 around elections depending on Fed stance



Source: Refinitiv , Bank J. Safra Sarasin, 16.11.2023

Continuity in the White House and a dovish Fed typically lead to strongest S&P 500 gains after the election

This leaves us with a simple conclusion. Going into an election, performance differences are typically quite narrow, regardless of the expected outcome or respective monetary policy stance. The government and policy stance coming out of the election matter a lot more, with the strongest gains observed when the incumbent wins and the Fed cuts rates. This scenario is definitely feasible, but not a given.

History suggests that a re-election is difficult if the US economy is in recession in the election year

Yet the above conclusions come with a big caveat. The election outcome itself is not independent of the market and of the cycle. Over the past 50 years, no incumbent party has ever managed to win an election if the US economy was in recession during the election year. Hence, a re-election of the current administration may very much depend on the trajectory of the economy over the coming 12 months, which we expect to soften and enter a shallow recession by mid-2024. At that point, it may well be the right time to add risk regardless of the political considerations going into the November vote.

Exhibit 3: S&P 500 performance going into US presidential elections since 1976, as well as sector moves, rates changes and outcomes

Presidential election	S&P 500 12m before election	Best sector	Worst sector	Recession	US 10Y yield 12m before election (bps)	Fed action in election year	Incumbent party	New president?
1976	13%	Materials	Health Care	No	-50	hike	Lost	After 2 terms
1980	29%	Real Estate	Comm. Serv.	Yes	176	hike	Lost	After 1 term
1984	4%	Real Estate	Materials	No	-25	cut	Won	No, re-elected
1988	9%	Materials	Tech	No	13	hike	Won	After 2 terms
1992	8%	Insurance	Energy	No	-64	cut	Lost	After 1 term
1996	21%	Industrials	Comm. Serv.	No	35	cut	Won	No, re-elected
2000	4%	Utilities	Comm. Serv.	No	-8	hike	Lost	After 2 terms
2004	11%	Energy	Tech	No	-17	hike	Won	No, re-elected
2008	-37%	Staples	Materials	Yes	-62	cut	Lost	After 2 terms
2012	13%	Banks	Materials	No	-36	no change	Won	No, re-elected
2016	-1%	Materials	Health Care	No	-45	hike	Lost	After 2 terms
2020	14%	Tech	Energy	Yes	-109	cut	Lost	After 1 term
Average	7%				-16			
Median	10%				-30			

Source: Refinitiv, Bank J. Safra Sarasin, 16.11.2023

Economic Calendar

Week of 20/11 – 24/11/2023

Country	Time	Item	Date	Unit	Consensus Forecast	Prev.
Monday, 20.11.2023						
GE	08:00	PPI MoM	Oct	mom	--	-0.20%
	08:00	PPI YoY	Oct	yoy	--	-14.70%
US	16:00	CB Leading Index	Oct	mom	-0.60%	-0.70%
Tuesday, 21.11.2023						
US	14:30	Chicago Fed Nat. Activity Index	Oct	Index	--	0.02
	14:30	Philadelphia Non-Manuf. Activity	Oct	Index	--	-20.30
	16:00	Existing Home Sales	Oct	mn	3.91m	3.96m
	20:00	FOMC Meeting Minutes				
Wednesday, 22.11.2023						
UK	12:00	CBI Trends Total Orders	Nov	Index	--	-26.00
	12:00	CBI Trends Selling Prices	Nov	Index	--	7.00
US	13:00	MBA Mortgage Applications	Nov17	wow	--	2.80%
	14:30	Initial Jobless Claims	Nov18	1'000	--	--
	14:30	Durables Ex Transportation	Oct	mom	--	0.40%
	14:30	Cap Goods Orders Nondef Ex Air	Oct	mom	--	0.50%
Thursday, 23.11.2023						
GE	09:30	Germany Manufacturing PMI	Nov	Index	--	40.80
EU	10:00	Eurozone Manufacturing PMI	Nov	Index	--	43.10
UK	16:00	UK Manufacturing PMI	Nov	Index	--	44.80
Friday, 24.11.2023						
JN	00:30	Natl CPI Ex Food, Energy YoY	Oct	YoY	--	4.20%
	01:30	Jibun Bank Japan PMI Mfg	Nov P	Index	--	48.70
GE	10:00	IFO Expectations	Nov	Index	--	84.70
US	15:45	US Manufacturing PMI	Nov	Index	--	50.00

Source: Bloomberg, J. Safra Sarasin as of 16.11.2023

J. Safra Sarasin

Cross-Asset Weekly

17 November 2023

Market Performance

Global Markets in Local Currencies

Government Bonds	Current value	Δ 1W (bp)	Δ YTD (bp)	TR YTD in %
Swiss Eidgenosse 10 year (%)	1.02	-11	-60	5.6
German Bund 10 year (%)	2.59	-13	2	2.0
UK Gilt 10 year (%)	4.15	-9	48	0.8
US Treasury 10 year (%)	4.46	-19	59	-1.4
French OAT - Bund, spread (bp)	56	-2	2	
Italian BTP - Bund, spread (bp)	176	-9	-38	

Stock Markets	Level	P/E ratio	1W TR in %	TR YTD in %
SMI - Switzerland	10'643	16.7	0.0	2.3
DAX - Germany	15'787	11.6	2.8	13.4
MSCI Italy	928	7.7	1.5	23.2
IBEX - Spain	9'667	10.2	2.8	22.1
DJ Euro Stoxx 50 - Eurozone	4'302	12.2	1.8	17.1
MSCI UK	2'124	10.7	-0.5	2.8
S&P 500 - USA	4'508	20.8	3.8	19.1
Nasdaq 100 - USA	15'833	28.0	4.3	45.8
MSCI Emerging Markets	982	13.6	2.7	5.4

Forex - Crossrates	Level	3M implied volatility	1W in %	YTD in %
USD-CHF	0.89	6.2	-1.6	-3.9
EUR-CHF	0.96	4.8	0.0	-2.6
GBP-CHF	1.10	6.2	0.0	-1.4
EUR-USD	1.09	6.2	1.6	1.4
GBP-USD	1.24	7.2	1.5	2.8
USD-JPY	150.6	8.0	-0.6	14.9
EUR-GBP	0.87	4.7	0.0	-1.3
EUR-SEK	11.49	6.7	-1.3	3.0
EUR-NOK	11.87	8.9	-0.1	13.0

Commodities	Level	3M realised volatility	1W in %	YTD in %
Bloomberg Commodity Index	102	13.2	-0.6	-9.8
Brent crude oil - USD / barrel	78	34.9	-5.1	-3.5
Gold bullion - USD / Troy ounce	1'984	14.3	1.3	8.7

Source: J. Safra Sarasin, Bloomberg as of 16.11.2023

Important legal Information

This document has been prepared by Bank J. Safra Sarasin Ltd ("Bank") for information purposes only. It is not the result of financial research conducted. Therefore, the "Directives on the Independence of Financial Research" of the Swiss Bankers Association do not apply to this document.

This document is based on publicly available information and data ("the Information") believed to be correct, accurate and complete. The Bank has not verified and is unable to guarantee the accuracy and completeness of the Information contained herein. Possible errors or incompleteness of the Information do not constitute legal grounds (contractual or tacit) for liability, either with regard to direct, indirect or consequential damages. In particular, neither the Bank nor its shareholders and employees shall be liable for the views contained in this document. Third party data providers make no warranties or representations of any kind relating to the accuracy, completeness or timeliness of the data provided and shall have no liability for any damages of any kind relating to such data.

This document does not constitute a request or offer, solicitation or recommendation to buy or sell investment instruments or services. It should not be considered as a substitute for individual advice and risk disclosure by a qualified financial, legal or tax advisor. You are reminded to read all relevant documentation before making any investment, including risk warnings, and to seek any specialist financial or tax advice that you need. You are not permitted to pass this document on to others, apart from your professional advisers. If you have received it in error please return or destroy it.

Past performance is no indication of current or future performance. Investments in foreign currencies are subject to exchange rate fluctuations. Exchange rate risk will apply if the investor's reference currency is not the same as the investment currency. Information containing forecasts are intended for information purpose only and are neither projections nor guarantees for future results and could differ significantly for various reasons from actual performance. The views and opinions contained in this document, along with the quoted figures, data and forecasts, may be subject to change without notice. There is no obligation on the part of Bank or any other person to update the content of this document. The Bank does not accept any liability whatsoever for losses arising from the use of the Information (or parts thereof) contained in this document.

Neither this document nor any copy thereof may be sent to or taken into the United States or distributed in the United States or to a US person. This information is not directed to any person in any jurisdiction where (by reason of that person's nationality, residence or otherwise) such distribution is prohibited and may only be distributed in countries where its distribution is legally permitted.

This publication constitutes marketing material. If it refers to a financial instrument for which a prospectus and/or a key investor/information document exists, these are available free of charge from Bank J. Safra Sarasin Ltd, Elisabethenstrasse 62, P.O. Box, CH-4002 Basel, Switzerland.

Bloomberg

"Bloomberg®" and the referenced Bloomberg Index/Indices are service marks of Bloomberg Finance L.P. and its affiliates, including Bloomberg Index Services Limited ("BISL"), the administrator of the index (collectively, "Bloomberg") and have been licensed for use for certain purposes by Bank J. Safra Sarasin Ltd. Bloomberg is not affiliated with Bank J. Safra Sarasin Ltd, and Bloomberg does not approve, endorse, review, or recommend the financial instrument(s) mentioned in this publication. Bloomberg does not guarantee the timeliness, accurateness, or completeness of any data or information relating to the financial instrument(s) mentioned in this publication.

ICE Data Indices

Source ICE Data Indices, LLC ("ICE DATA"), is used with permission. ICE Data, its affiliates and their respective third party suppliers disclaim any and all warranties and representations, express and/or implied, including any warranties of merchantability or fitness for a particular purpose or use, including the indices, index data and any data included in, related to, or derived therefrom. Neither ICE Data, its affiliates or their respective third party providers shall not be subject to any damages or liability with respect to the adequacy, accuracy, timeliness or completeness of the indices or the index data or any component thereof, and the indices and index data and all components thereof are provided on an "as is" basis and your use is at your own risk. ICE Data, its affiliates and their respective third party suppliers do not sponsor, endorse, or recommend Bank J. Safra Sarasin Ltd, or any of its products or services.

J.P. Morgan

Information has been obtained from sources believed to be reliable but J.P. Morgan does not warrant its completeness or accuracy. The Index is used with permission. The Index may not be copied, used, or distributed without J.P. Morgan's prior written approval.

MSCI Indices

Source: MSCI. The MSCI information may only be used for your internal use, may not be reproduced or redisseminated in any form and may not be used as a basis for or a component of any financial instruments or products or indices. None of the MSCI information is intended to constitute investment advice or a recommendation to make (or refrain from making) any kind of investment decision and may not be relied on as such. Historical data and analysis should not be taken as an indication or guarantee of any future performance analysis, forecast or prediction. The MSCI information is provided on an "as is" basis and the user of this information assumes the entire risk of any use made of this information. MSCI, each of its affiliates and each other person involved in or related to compiling, computing or creating any MSCI information (collectively, the "MSCI Parties") expressly disclaims all warranties (including, without limitation, any warranties of originality, accuracy, completeness, timeliness, non-infringement, merchantability and fitness for a particular purpose) with respect to this information. Without limiting any of the foregoing, in no event shall any MSCI Party have any liability for any direct, indirect, special, incidental, punitive, consequential (including, without limitation, lost profits) or any other damages. (www.msci.com)

SMI

SIX Swiss Exchange AG ("SIX Swiss Exchange") is the source of SMI Indices® and the data comprised therein. SIX Swiss Exchange has not been involved in any way in the creation of any reported information and does not give any warranty and excludes any liability whatsoever (whether in negligence or otherwise) – including without limitation for the accuracy, adequateness, correctness, completeness, timeliness, and fitness for any purpose – with respect to any reported information or in relation to any errors, omissions or interruptions in the SMI Indices® or its data. Any dissemination or further distribution of any such information pertaining to SIX Swiss Exchange is prohibited.

Distribution Information

Unless stated otherwise this publication is distributed by Bank J. Safra Sarasin Ltd (Switzerland).

The Bahamas: This publication is circulated to private clients of Bank J. Safra Sarasin (Bahamas) Ltd, and is not intended for circulation to nationals or citizens of The Bahamas or a person deemed 'resident' in The Bahamas for the purposes of exchange control by the Central Bank of The Bahamas.

Dubai International Financial Centre (DIFC): This material is intended to be distributed by Bank J. Safra Sarasin Asset Management (Middle East) Ltd ["BJSSAM"] in DIFC to professional clients as defined by the Dubai Financial Services Authority (DFSA). BJSSAM is duly authorised and regulated by DFSA. If you do not understand the contents of this document, you should consult an authorised financial adviser. This material may also include Funds which are not subject to any form of regulation or approval by the Dubai Financial Services Authority ("DFSA"). The DFSA has no responsibility for reviewing or verifying any Issuing Document or other documents in connection with these Funds. Accordingly, the DFSA has not approved the Issuing Document or any other associated documents nor taken any steps to verify the information set out in the Issuing Document, and has no responsibility for it. The Units to which the Issuing Document relates may be illiquid and/or subject to restrictions on their resale. Prospective purchasers should conduct their own due diligence on the Units.

Germany: This marketing publication/information is being distributed in Germany by J. Safra Sarasin (Deutschland) GmbH, Kirchnerstraße 6-8, 60311 Frankfurt am Main, for information purposes only and does not lodge claim to completeness of product characteristics. Insofar as information on investment funds is contained in this publication, any product documents are available on request free of charge from J. Safra Sarasin (Deutschland) GmbH, Kirchnerstraße 6-8, 60311 Frankfurt am Main in English and German language. To the extent that indicative investment options or portfolio structures are included, the following applies: The indicative investment options or portfolio structures presented in these documents and the underlying model calculations are based on the information and data provided to us in the context of the asset advisory discussion, and we have not checked them for accuracy or completeness. The indicative investment option/portfolio structure described here is thus intended as a guide and does not make any claim to comprehensive suitability but aims to inform you about the general possibilities that an investment entails. In order to provide you with a final investment recommendation that is tailored to your specific situation, we need further information, in particular on your investment goals, risk tolerance, experience and knowledge of financial services and products and your financial situation. This publication is intended to be distributed by J. Safra Sarasin (Deutschland) GmbH, Kirchnerstraße 6-8, 60311 Frankfurt am Main to clients domiciled or having their registered office in Germany and is directed exclusively at institutional clients who intend to conclude investment business exclusively as entrepreneurs for commercial purposes. This clientele is limited to credit and financial services institutions, capital management companies and insurance companies, provided that they have the necessary permission for the business operation and are subject to supervision, as well as medium and large corporations within the meaning of the German Commercial Code (section 267 (2) and (3) HGB).

Gibraltar: This marketing document is distributed from Gibraltar by Bank J. Safra Sarasin (Gibraltar) Ltd, First Floor Neptune House, Marina Bay, Gibraltar to its clients and prospects. Bank J. Safra Sarasin (Gibraltar) Ltd whose Registered Office is 57/63 Line Wall Road, Gibraltar offers wealth and investment management products and services to its clients and prospects. Incorporated in Gibraltar with registration number 82334. Bank J. Safra Sarasin (Gibraltar) Ltd is authorised and regulated by the Gibraltar Financial Services Commission. Telephone calls may be recorded. Your personal data will be handled in accordance with our Data and Privacy Statement. Where this publication is provided to you by Bank J. Safra Sarasin (Gibraltar) Limited: This document is approved as a marketing communication for the purposes of the Financial Services Act 2019. Nothing in this document is intended to exclude or restrict any liability that we owe to you under the regulatory system that applies to us, and in the event of conflict, any contrary indication is overridden. You are reminded to read all relevant documentation before making any investment, including risk warnings, and to seek any specialist financial or tax advice that you need. You are not permitted to pass this document on to others, apart from your professional advisers. If you have received it in error please return or destroy it.

Hong Kong: This document is disseminated by Bank J. Safra Sarasin Ltd, Hong Kong Branch in Hong Kong. Bank J. Safra Sarasin Ltd, Hong Kong Branch is a licensed bank under the Hong Kong Banking Ordinance (Cap. 155 of the laws of Hong Kong) and a registered institution under the Securities and Futures Ordinance (cap. 571 of the laws of Hong Kong).

Luxemburg: This publication is distributed in Luxembourg by Banque J. Safra Sarasin (Luxembourg) SA (the "Luxembourg Bank"), having its registered office at 17-21, Boulevard Joseph II, L-1840 Luxembourg, and being subject to the supervision of the Commission de Surveillance