

# Monthly Gold Compass

February 2023

Ronald-Peter Stöferle Mark J. Valek

#### **In Our Partners We Trust**













































#### Subscribe to Our Newsletters and Download the In Gold We Trust Report 2022!









### Table of Contents:

- 1. Gold
- 2. Silver
- 3. Miner
- 4. Macro
- 5. Long Term Charts
- **6. Proprietary Models**





### 1. Gold

"I view gold as the primary global currency. It is the only currency, along with silver, that does not require a counterparty signature."

Alan Greenspan





#### Gold Performance in Major Currencies, 2000-2023 YTD

Year	USD	EUR	GBP	AUD	CAD	CNY	JPY	CHF	INR	Average
2000	-5.3%	1.2%	2.4%	11.2%	-1.9%	-5.4%	5.8%	-4.2%	1.4%	0.6%
2001	2.4%	8.4%	5.3%	12.0%	8.8%	2.4%	18.0%	5.5%	5.8%	7.6%
2002	24.4%	5.5%	12.3%	13.2%	22.9%	24.4%	12.2%	3.5%	23.7%	15.8%
2003	19.6%	-0.2%	8.0%	-10.7%	-1.3%	19.6%	8.1%	7.4%	13.9%	7.2%
2004	5.6%	-2.0%	-1.7%	1.5%	-2.0%	5.6%	0.8%	-3.1%	0.1%	0.5%
2005	18.1%	35.2%	31.6%	25.9%	14.1%	15.1%	35.9%	36.3%	22.8%	26.1%
2006	23.0%	10.4%	8.1%	14.3%	23.3%	19.0%	24.2%	14.1%	20.7%	17.5%
2007	30.9%	18.4%	29.2%	18.0%	12.0%	22.5%	22.5%	21.8%	16.9%	21.4%
2008	5.4%	10.0%	43.0%	30.5%	28.7%	-1.5%	-14.2%	-0.8%	30.0%	14.6%
2009	24.8%	21.8%	13.0%	-1.6%	7.9%	24.8%	27.9%	21.1%	19.2%	17.6%
2010	29.5%	38.6%	34.2%	13.9%	22.8%	25.1%	13.2%	16.8%	24.8%	24.3%
2011	10.2%	13.8%	10.6%	9.9%	12.7%	5.2%	4.5%	10.7%	30.7%	12.0%
2012	7.1%	5.0%	2.4%	5.3%	4.2%	6.0%	20.7%	4.5%	11.1%	7.4%
2013	-28.0%	-30.9%	-29.4%	-16.1%	-23.0%	-30.1%	-12.6%	-29.8%	-19.1%	-24.3%
2014	-1.8%	11.6%	4.4%	7.2%	7.5%	0.7%	11.6%	9.4%	0.2%	5.6%
2015	-10.4%	-0.2%	-5.3%	0.6%	6.8%	-6.2%	-9.9%	-9.7%	-5.9%	-4.4%
2016	8.5%	12.1%	29.7%	9.4%	5.3%	16.1%	5.4%	10.3%	11.4%	12.0%
2017	13.1%	-0.9%	3.3%	4.6%	5.9%	6.0%	9.0%	8.3%	6.3%	6.2%
2018	-1.5%	3.0%	4.3%	9.0%	6.8%	4.1%	-4.2%	-0.8%	7.3%	3.1%
2019	18.3%	21.0%	13.8%	18.7%	12.6%	19.7%	17.2%	16.6%	21.3%	17.7%
2020	25.0%	14.7%	21.2%	14.1%	22.6%	17.2%	18.8%	14.3%	28.0%	19.5%
2021	-3.6%	3.6%	-2.6%	2.2%	-4.3%	-6.1%	7.5%	-0.6%	-1.7%	-0.6%
2022	-0.2%	6.0%	11.6%	6.3%	7.0%	8.3%	13.7%	1.1%	10.8%	7.2%
2023 YTD	5.7%	4.1%	3.8%	2.1%	3.8%	3.5%	4.8%	4.7%	4.4%	4.1%
Average	9.2%	8.8%	10.5%	8.4%	8.5%	8.2%	10.0%	6.6%	11.8%	9.1%

Source: Reuters Eikon (as of January 31st, 2023), Incrementum AG



# Annualized Performance of Gold, in USD, if Bought on the Last Day of the Month and Held until 01/31/2023 (Holding Period Greater than 1 Year)



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2000	8.70%	8.59%	8.84%	8.97%	9.03%	8.75%	9.01%	9.03%	9.13%	9.33%	9.27%	9.27%
2001	9.43%	9.44%	9.66%	9.58%	9.58%	9.52%	9.64%	9.53%	9.24%	9.52%	9.65%	9.61%
2002	9.58%	9.36%	9.30%	9.24%	8.98%	9.21%	9.44%	9.32%	9.18%	9.32%	9.33%	8.92%
2003	8.63%	8.95%	9.19%	9.20%	8.84%	9.17%	9.07%	8.79%	8.69%	8.74%	8.59%	8.38%
2004	8.60%	8.73%	8.34%	8.94%	8.86%	8.92%	9.01%	8.78%	8.70%	8.59%	8.33%	8.54%
2005	8.80%	8.66%	8.80%	8.76%	9.05%	8.84%	8.95%	8.92%	8.50%	8.60%	8.26%	8.01%
2006	7.45%	7.57%	7.36%	6.67%	6.81%	7.16%	6.97%	7.09%	7.43%	7.38%	6.98%	7.14%
2007	7.00%	6.87%	6.97%	6.86%	7.08%	7.24%	7.13%	7.07%	6.41%	5.97%	6.13%	5.72%
2008	5.02%	4.70%	5.15%	5.54%	5.44%	5.17%	5.29%	6.02%	5.71%	7.12%	6.26%	5.74%
2009	5.37%	5.26%	5.52%	5.82%	5.08%	5.55%	5.35%	5.42%	4.99%	4.73%	3.81%	4.41%
2010	4.55%	4.32%	4.38%	3.94%	3.71%	3.56%	4.00%	3.58%	3.19%	2.90%	2.76%	2.57%
2011	3.13%	2.65%	2.56%	1.80%	1.98%	2.19%	1.49%	0.49%	1.53%	1.05%	0.90%	1.91%
2012	0.94%	1.19%	1.34%	1.38%	2.01%	1.79%	1.71%	1.27%	0.83%	1.12%	1.16%	1.41%
2013	1.49%	2.03%	1.94%	2.77%	3.47%	4.77%	4.05%	3.49%	4.08%	4.15%	4.82%	5.31%
2014	5.00%	4.29%	4.71%	4.69%	5.12%	4.45%	4.92%	4.92%	5.76%	6.20%	6.34%	6.22%
2015	5.22%	6.03%	6.43%	6.49%	6.50%	6.78%	7.83%	7.42%	7.76%	7.49%	8.65%	8.80%
2016	8.10%	6.62%	6.77%	6.09%	7.17%	5.90%	5.63%	6.23%	6.22%	6.81%	8.40%	8.84%
2017	8.07%	7.62%	7.73%	7.56%	7.67%	8.21%	7.90%	7.22%	8.00%	8.26%	8.34%	8.02%
2018	7.47%	8.05%	8.08%	8.39%	8.85%	9.87%	10.63%	11.32%	11.74%	11.49%	11.57%	10.49%
2019	9.92%	10.31%	11.01%	11.46%	11.22%	9.14%	9.27%	7.21%	8.43%	7.74%	9.08%	8.08%
2020	6.64%	6.95%	7.49%	5.13%	4.23%	3.12%	-0.96%	-0.89%	0.96%	1.17%	3.83%	0.79%
2021	2.19%	5.70%	6.86%	5.05%	0.68%	5.55%	4.16%	4.41%	7.22%	6.46%	7.40%	5.01%
2022	7.31%											





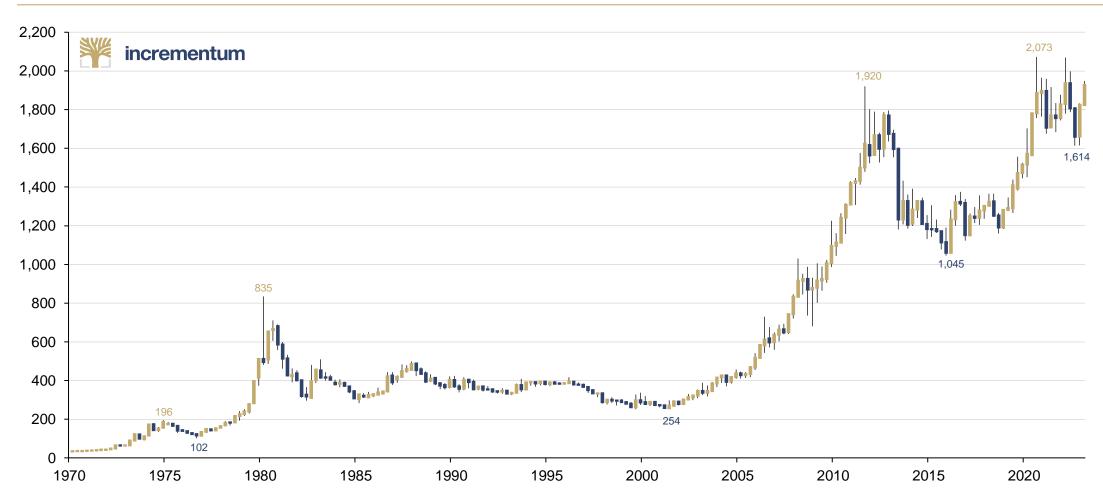
#### **Correlation Table for Gold, 01/31/2023**

		DXY	GDX	S&P 500	VIX	CRB TR	WTI	Copper	Bitcoin
	15D	-0.64	0.81	-0.11	0.26	0.13	0.26	0.01	0.28
S	30D	-0.61	0.77	0.27	-0.21	0.02	-0.06	0.09	0.16
Days	60D	-0.75	0.86	0.52	-0.29	0.36	0.24	0.62	0.28
ng	90D	-0.74	0.86	0.54	-0.38	0.45	0.32	0.61	0.31
Trading	120D	-0.71	0.86	0.54	-0.39	0.41	0.29	0.55	0.35
Ė	150D	-0.70	0.85	0.49	-0.33	0.40	0.28	0.53	0.28
	180D	-0.68	0.84	0.41	-0.32	0.40	0.26	0.51	0.27
	52 Week High	0.48	0.92	0.69	0.48	0.78	0.70	0.79	0.66
	Date	03/11/2022	09/29/2022	10/07/2022	03/25/2022	04/20/2022	04/14/2022	12/08/2022	11/07/2022
Day	52 Week Low	-0.84	0.56	-0.63	-0.69	-0.13	-0.15	-0.07	-0.53
30 [	Date	12/22/2022	05/05/2022	03/25/2022	10/17/2022	08/29/2022	08/29/2022	03/08/2022	04/12/2022
,,	% Time (+)	14%	100%	75%	19%	98%	90%	97%	77%
	% Time (-)	86%	0%	25%	81%	2%	10%	3%	23%
	52 Week High	0.08	0.89	0.60	0.18	0.66	0.58	0.63	0.37
	Date	03/14/2022	11/10/2022	11/30/2022	04/08/2022	07/05/2022	05/19/2022	12/28/2022	12/21/2022
Jay	52 Week Low	-0.74	0.68	-0.33	-0.50	0.13	-0.01	0.07	-0.20
90Бау	Date	12/20/2022	04/04/2022	04/20/2022	01/12/2023	02/10/2022	02/10/2022	02/23/2022	04/20/2022
	% Time (+)	13%	100%	56%	39%	100%	99%	100%	60%
	% Time (-)	87%	0%	44%	61%	0%	1%	0%	40%





#### Gold, in USD, 01/1970-01/2023







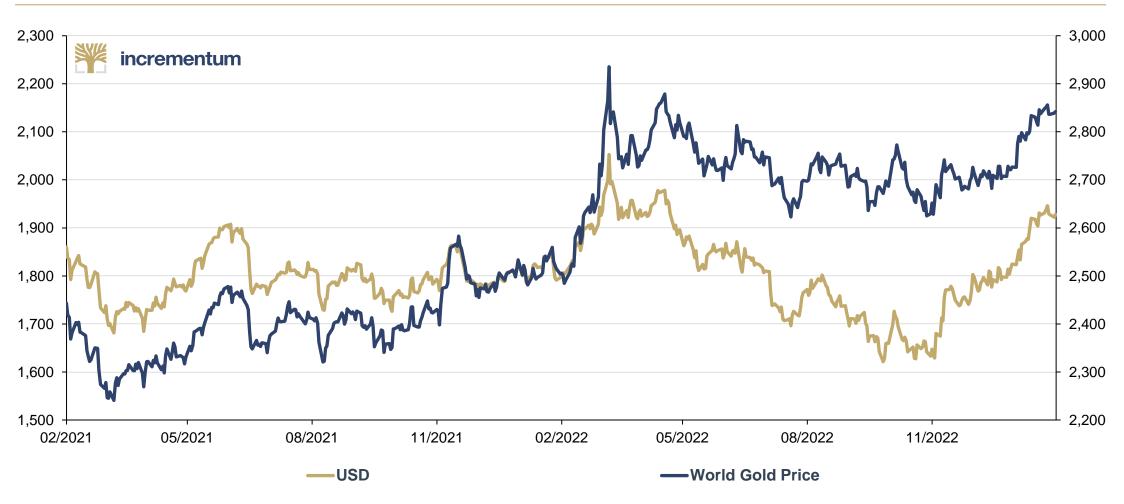
#### Gold in USD, and EUR, 02/2021-01/2023







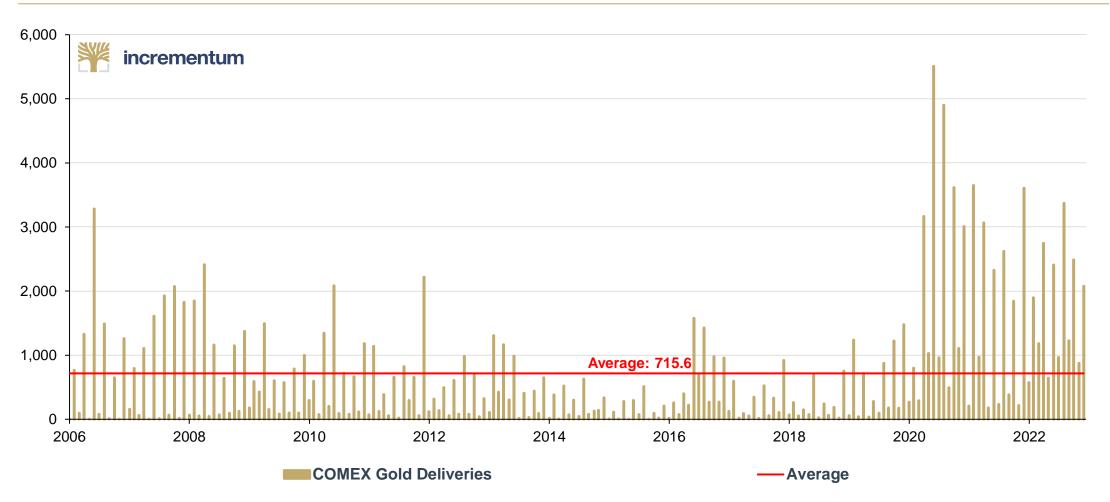
#### Gold in USD (lhs), and World Gold Price (rhs), 02/2021-01/2023







#### COMEX Gold Deliveries, in Thousands of Troy Ounces, 01/2006-01/2023



Source: Nick Laird, Reuters Eikon, Incrementum AG



# Gold (Nominal), and Gold (Inflation Adjusted - December 2022), in USD, 01/1970-12/2022

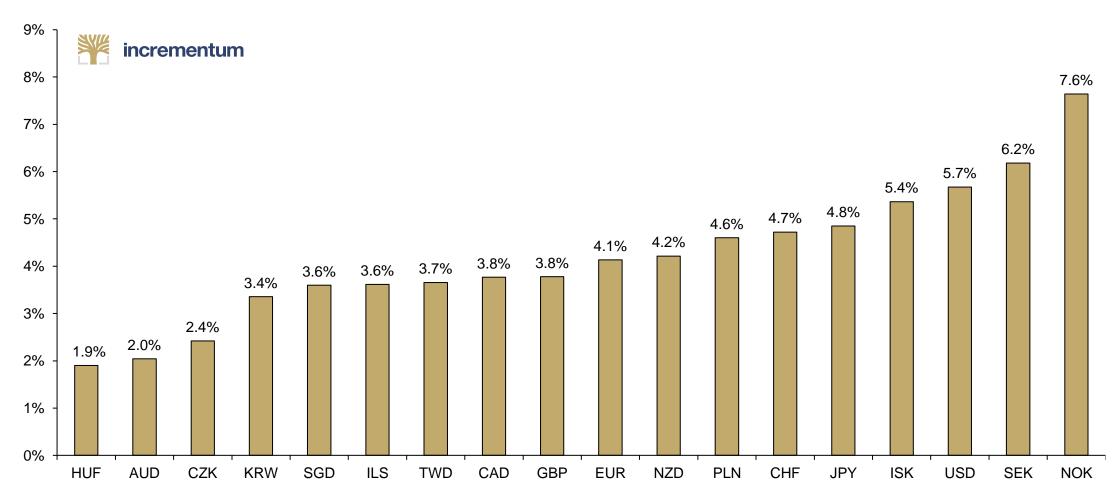








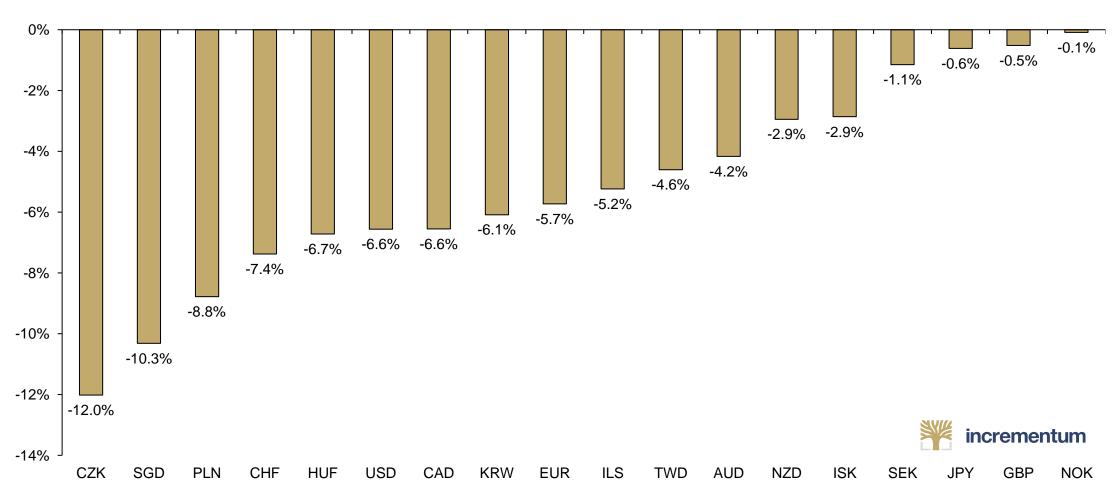
#### Gold in Various Developed Market Currencies, 2023 YTD







#### Gold in Various Developed Market Currencies below All-Time High

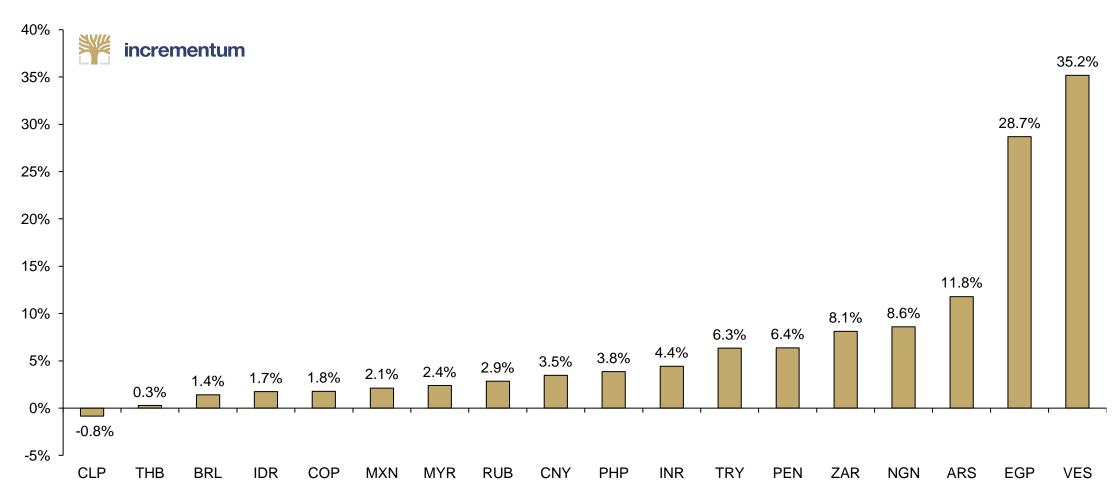








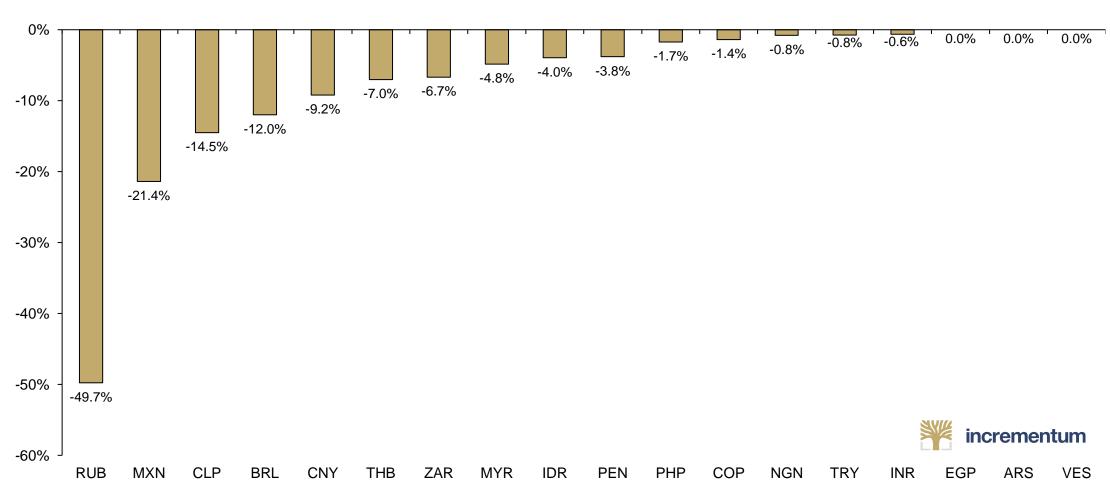
#### Gold in Various Emerging Market Currencies, 2023 YTD







#### Gold in Various Emerging Market Currencies below All-Time High

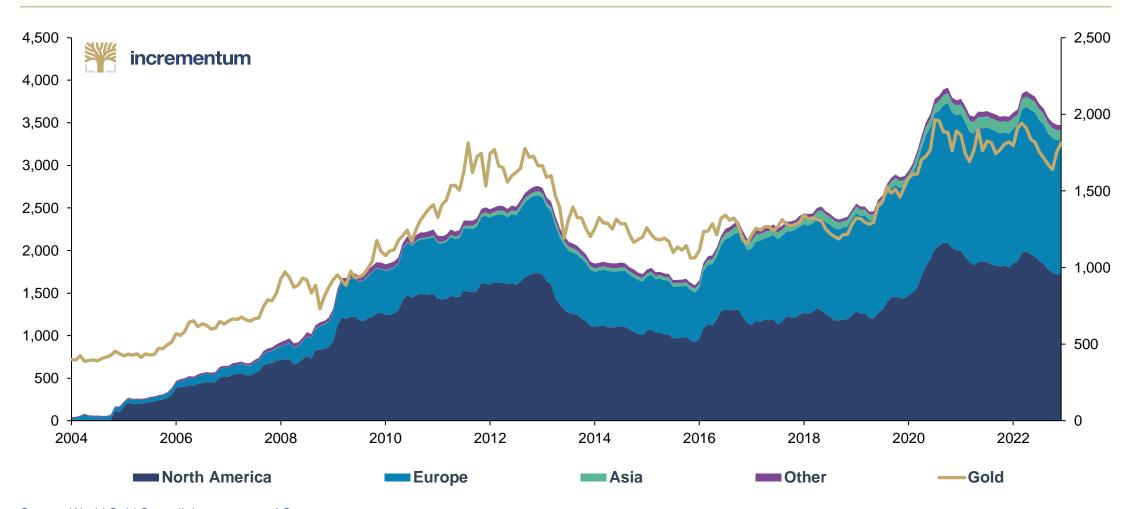






# Accumulated Gold ETF Holdings by Region (lhs), in Tonnes, and Gold (rhs), in USD, 01/2004-12/2022



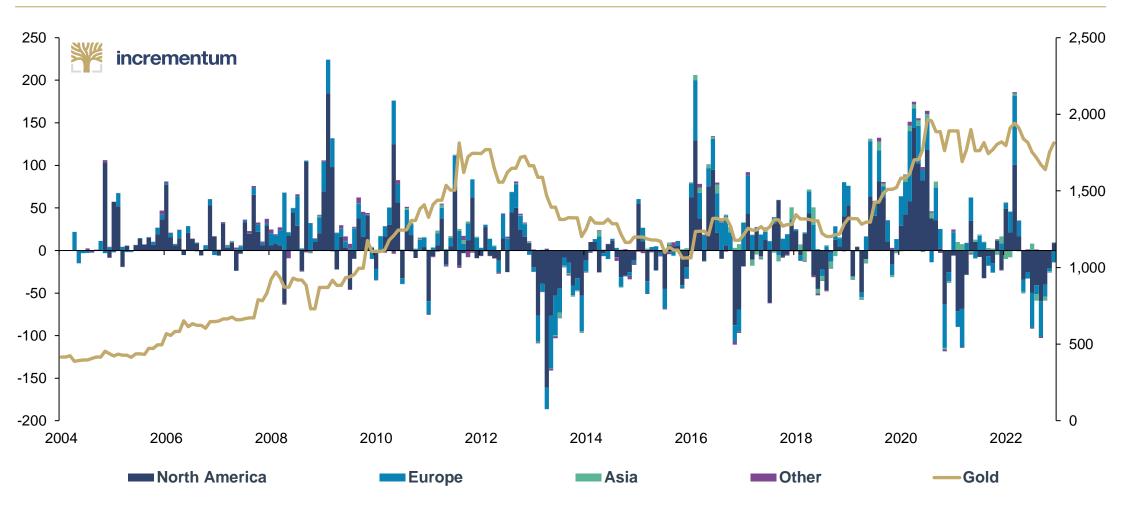


Source: World Gold Council, Incrementum AG



## Monthly Gold ETF Flows by Region (lhs), in Tonnes, and Gold (rhs), in USD, 01/2004-12/2022





Source: World Gold Council, Incrementum AG





#### Gold/Silver Ratio, 01/1970-01/2023







### 2. Silver

"Trading silver is a tough way to make an easy living."

**Rich Ross** 





#### Silver Performance in Major Currencies, 2000-2023 YTD

	LIOD	EUD	000	ALID	045	ONIV	IDV	OUE	INID	A
Year	USD	EUR	GBP	AUD	CAD	CNY	JPY	CHF	INR	Average
2000	-15.0%	-9.2%	-8.1%	-0.1%	-11.9%	-15.0%	-5.0%	-13.9%	-8.9%	-9.7%
2001	0.4%	6.3%	3.3%	9.9%	6.7%	0.4%	15.7%	3.5%	3.8%	5.6%
2002	3.3%	-12.4%	-6.8%	-6.0%	2.0%	3.3%	-6.9%	-14.1%	2.7%	-3.9%
2003	24.6%	3.9%	12.4%	-7.0%	2.7%	24.6%	12.6%	11.9%	18.6%	11.6%
2004	14.5%	6.3%	6.6%	10.1%	6.2%	14.5%	9.3%	5.1%	8.6%	9.0%
2005	29.7%	48.6%	44.6%	38.3%	25.4%	26.5%	49.3%	49.8%	35.0%	38.6%
2006	46.1%	31.1%	28.4%	35.8%	46.4%	41.3%	47.4%	35.5%	43.3%	39.5%
2007	14.8%	3.8%	13.3%	3.4%	-1.8%	7.4%	7.4%	6.8%	2.5%	6.4%
2008	-23.5%	-20.1%	3.8%	-5.3%	-6.6%	-28.5%	-37.7%	-28.0%	-5.6%	-16.8%
2009	48.9%	45.4%	34.9%	17.4%	28.8%	49.0%	52.7%	44.6%	42.3%	40.4%
2010	83.4%	96.2%	89.9%	61.2%	73.8%	77.0%	60.2%	65.3%	76.6%	76.0%
2011	-10.3%	-7.3%	-9.9%	-10.5%	-8.2%	-14.3%	-14.9%	-9.9%	6.4%	-8.8%
2012	9.5%	7.4%	4.6%	7.7%	6.5%	8.4%	23.4%	6.9%	13.6%	9.8%
2013	-36.0%	-38.5%	-37.1%	-25.3%	-31.4%	-37.8%	-22.3%	-37.5%	-28.0%	-32.7%
2014	-19.3%	-8.3%	-14.2%	-12.0%	-11.7%	-17.3%	-8.3%	-10.2%	-17.7%	-13.2%
2015	-11.7%	-1.6%	-6.7%	-0.8%	5.2%	-7.6%	-11.2%	-11.0%	-7.2%	-5.9%
2016	15.2%	19.0%	37.6%	16.2%	11.8%	23.2%	11.9%	17.1%	18.3%	18.9%
2017	6.4%	-6.8%	-2.9%	-1.6%	-0.4%	-0.3%	2.5%	1.8%	-0.1%	-0.2%
2018	-8.7%	-4.5%	-3.2%	1.1%	-1.0%	-3.5%	-11.2%	-8.0%	-0.5%	-4.4%
2019	15.2%	17.8%	10.8%	15.6%	9.7%	16.6%	14.2%	13.6%	18.1%	14.6%
2020	47.8%	35.7%	43.4%	34.9%	44.9%	38.6%	40.5%	35.2%	51.3%	41.4%
2021	-11.7%	-5.2%	-10.8%	-6.4%	-12.4%	-14.1%	-1.6%	-9.0%	-10.0%	-9.0%
2022	3.0%	9.4%	15.2%	9.8%	10.5%	11.8%	17.3%	4.4%	14.4%	10.6%
2023 YTD	-1.1%	-2.6%	-2.9%	-4.5%	-2.9%	-3.2%	-1.9%	-2.0%	-2.3%	-2.6%
Average	9.4%	8.9%	10.3%	7.6%	8.0%	8.4%	10.1%	6.6%	11.5%	9.0%

Source: Reuters Eikon (as of January 31st, 2023), Incrementum AG



# Annualized Performance of Silver, in USD, if Bought on the Last Day of the Month and Held until 01/31/2023 (Holding Period Greater than 1 Year)



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2000	6.78%	6.97%	7.05%	7.12%	7.19%	7.11%	7.18%	7.23%	7.35%	7.51%	7.59%	7.72%
2001	7.55%	7.91%	8.14%	8.13%	8.09%	8.23%	8.35%	8.44%	7.95%	8.47%	8.57%	8.07%
2002	8.55%	8.27%	8.15%	8.30%	7.82%	8.04%	8.34%	8.54%	8.49%	8.55%	8.67%	8.32%
2003	8.28%	8.59%	8.79%	8.61%	8.79%	8.79%	8.16%	8.24%	8.26%	8.37%	8.09%	7.53%
2004	7.29%	6.92%	6.01%	7.58%	7.49%	7.85%	7.23%	7.07%	6.98%	6.70%	6.40%	7.16%
2005	7.25%	6.79%	6.96%	7.21%	6.82%	7.15%	7.03%	7.41%	6.91%	6.88%	6.35%	5.96%
2006	5.33%	5.39%	4.39%	3.34%	3.92%	4.76%	4.60%	3.79%	4.58%	4.15%	3.34%	3.87%
2007	3.58%	3.30%	3.68%	3.70%	3.70%	4.25%	4.04%	4.49%	3.61%	3.29%	3.55%	3.18%
2008	2.29%	1.22%	2.18%	2.35%	2.36%	2.16%	2.04%	3.94%	4.85%	6.39%	6.10%	5.40%
2009	4.60%	4.36%	4.48%	4.86%	3.04%	4.19%	4.04%	3.52%	2.71%	2.88%	1.94%	2.65%
2010	2.99%	2.87%	2.41%	1.92%	1.96%	1.97%	2.24%	1.65%	0.72%	-0.34%	-1.38%	-2.16%
2011	-1.39%	-2.93%	-3.83%	-5.82%	-4.06%	-3.23%	-4.41%	-4.78%	-2.03%	-3.20%	-2.87%	-1.39%
2012	-3.00%	-3.40%	-2.80%	-2.45%	-1.44%	-1.38%	-1.55%	-2.75%	-3.56%	-2.95%	-3.32%	-2.41%
2013	-2.78%	-1.85%	-1.80%	-0.25%	0.67%	2.00%	1.91%	0.11%	0.98%	0.88%	1.90%	2.22%
2014	2.43%	1.26%	2.11%	2.49%	2.78%	1.44%	1.81%	2.39%	4.11%	4.77%	5.41%	5.26%
2015	4.07%	4.60%	4.63%	5.10%	4.68%	5.54%	6.51%	6.75%	6.92%	6.01%	7.53%	7.90%
2016	7.53%	6.96%	6.50%	4.31%	6.09%	3.67%	2.40%	3.84%	3.43%	4.62%	6.07%	6.74%
2017	5.15%	4.46%	4.61%	5.74%	5.73%	6.62%	6.47%	5.68%	6.90%	6.91%	7.36%	6.82%
2018	6.48%	7.77%	8.03%	8.19%	8.28%	8.83%	9.87%	11.77%	11.83%	12.77%	13.14%	10.99%
2019	10.21%	11.26%	12.41%	13.10%	14.19%	12.97%	11.37%	7.77%	10.49%	8.60%	11.02%	9.67%
2020	9.54%	12.84%	20.51%	18.04%	11.24%	10.93%	-1.11%	-6.97%	0.90%	0.13%	2.21%	-4.98%
2021	-6.31%	-5.88%	-1.55%	-4.95%	-9.62%	-5.92%	-4.66%	-0.55%	5.02%	-0.51%	3.38%	1.71%
2022	5.64%											





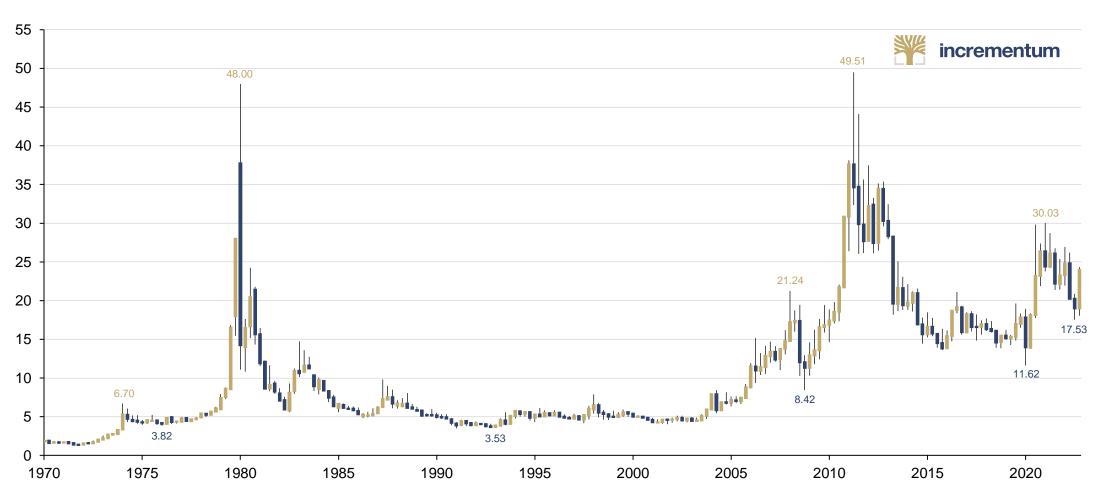
#### **Correlation Table for Silver, 01/31/2023**

		DXY	SIL	S&P 500	VIX	CRB TR	WTI	Copper	Bitcoin
	15D	-0.54	0.75	0.04	0.17	0.12	0.25	0.05	0.26
S	30D	-0.58	0.68	0.29	-0.15	0.18	0.15	0.18	0.18
Days	60D	-0.64	0.81	0.48	-0.29	0.40	0.28	0.44	0.28
ng	90D	-0.61	0.83	0.52	-0.38	0.45	0.36	0.50	0.29
Trading	120D	-0.59	0.81	0.52	-0.38	0.39	0.30	0.53	0.34
Ë	150D	-0.58	0.80	0.51	-0.37	0.39	0.29	0.51	0.32
	180D	-0.57	0.80	0.47	-0.37	0.41	0.30	0.49	0.30
	52 Week High	0.38	0.91	0.67	0.44	0.71	0.65	0.73	0.60
	Date	03/15/2022	11/23/2022	10/07/2022	03/25/2022	05/24/2022	05/24/2022	09/30/2022	08/30/2022
Day	52 Week Low	-0.81	0.64	-0.47	-0.63	-0.02	-0.04	-0.31	-0.46
30 [	Date	12/29/2022	03/11/2022	03/11/2022	11/03/2022	08/29/2022	08/29/2022	03/11/2022	04/12/2022
,,	% Time (+)	14%	100%	78%	18%	99%	99%	83%	83%
	% Time (-)	86%	0%	22%	82%	1%	1%	17%	17%
	52 Week High	0.03	0.84	0.57	0.13	0.64	0.52	0.60	0.42
	Date	03/14/2022	12/27/2022	12/19/2022	04/20/2022	07/06/2022	05/19/2022	12/16/2022	12/01/2022
Jay	52 Week Low	-0.62	0.71	-0.21	-0.48	0.31	0.16	-0.05	-0.07
90Бау	Date	12/20/2022	04/11/2022	04/20/2022	12/21/2022	02/10/2022	02/10/2022	04/11/2022	04/20/2022
	% Time (+)	2%	100%	74%	14%	100%	100%	89%	89%
	% Time (-)	98%	0%	26%	86%	0%	0%	11%	11%





#### Silver, in USD, 01/1970-01/2023







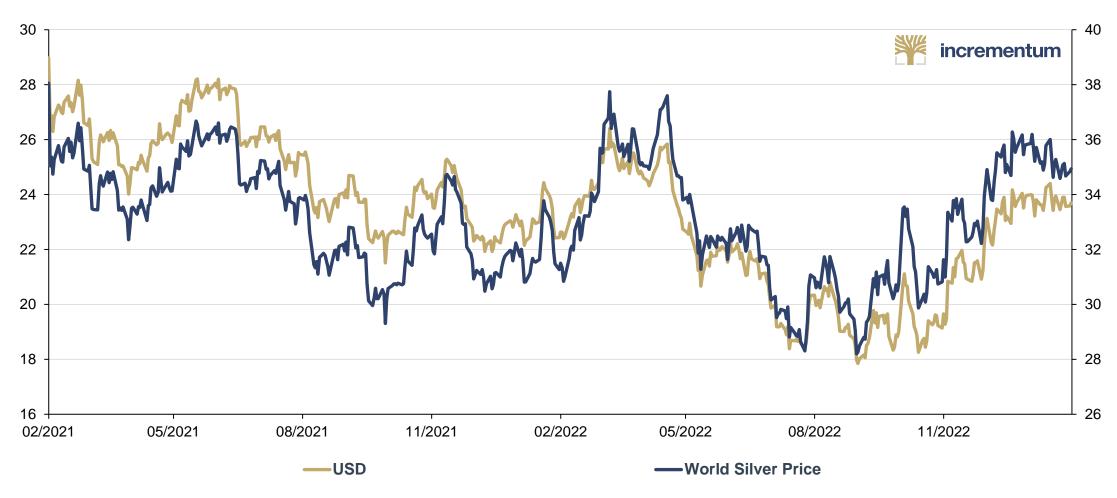
#### Silver in USD, and EUR, 02/2021-01/2023







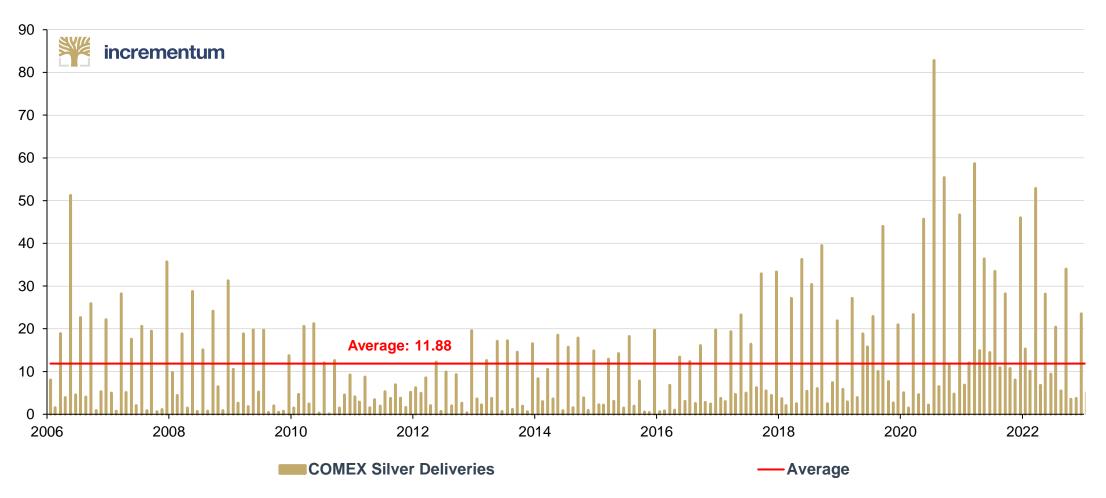
#### Silver in USD (lhs), and World Silver Price (rhs), 02/2021-01/2023







#### **COMEX Silver Deliveries, in Millions of Troy Ounces, 01/2006-01/2023**



Source: Nick Laird, Reuters Eikon, Incrementum AG



# Silver (Nominal), and Silver (Inflation Adjusted - December 2022), in USD, 01/1970-12/2022





Source: Nick Laird, Reuters Eikon, Incrementum AG





### 3. Miner

"You make most of your money in a bear market, you just don't realize it at the time."

**Shelby Cullom Davis** 





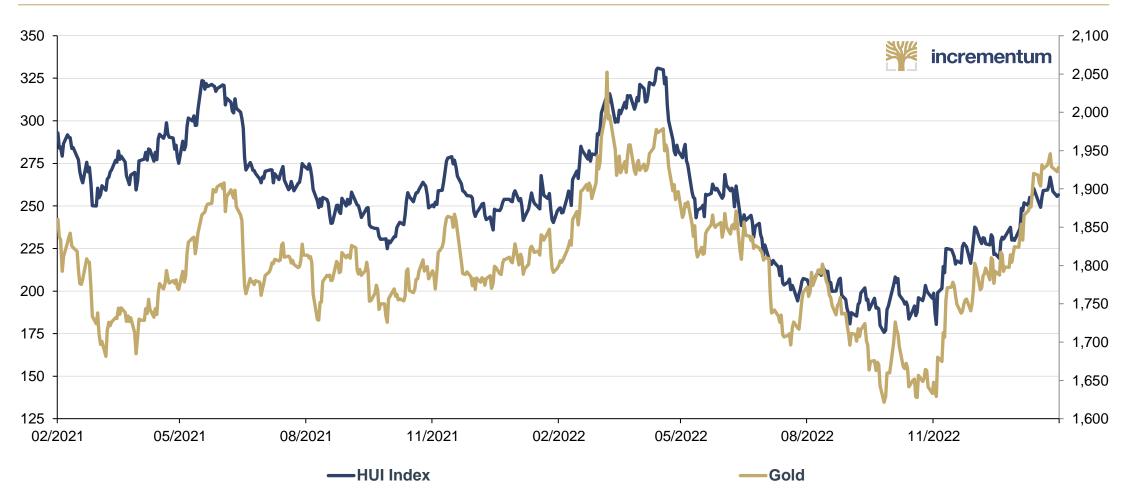
#### Monthly Performance of Bullion and Miners, 02/2021-01/2023

Gold  Feb-21 -6.10%  Mar-21 -1.53%  Apr-21 3.61%  May-21 7.79%  Jun-21 -7.16%  Jul-21 2.47%  Aug-21 -0.01%  Sep-21 -3.13%  Oct-21 1.49%  Nov-21 -0.51%  Dec-21 3.08%  Jan-22 -1.75%  Feb-22 6.20%  Mar-22 1.54%  Apr-22 -2.11%  May-22 -3.13%  Jun-22 -1.64%  Jul-22 -2.31%  Aug-22 -3.09%  Sep-22 -2.98%  Oct-22 -1.60%  Nov-22 8.29%  Dec-22 3.16%  Jan-23 5.67%	HUI -11.80% 5.86% 3.84% 15.94% -16.26% 2.52% -7.27% -9.60% 8.46%	GDM -9.72% 3.06% 6.23% 14.16% -13.74% 3.08% -6.93%	GDX -9.79% 4.40% 5.72% 14.73% -13.80% 2.77%	GDXJ -8.63% -1.64% 5.42% 15.30% -14.55%	GOEX -6.83% -1.79% 6.55% 14.93%	-1.41% -8.38% 6.19% 8.31%	-4.41% -4.66% 4.46% 16.84%	-0.77% -6.36% 4.23%
Mar-21 -1.53% Apr-21 3.61% May-21 7.79% Jun-21 -7.16% Jul-21 2.47% Aug-21 -0.01% Sep-21 -3.13% Oct-21 1.49% Nov-21 -0.51% Dec-21 3.08% Jan-22 -1.75% Feb-22 6.20% Mar-22 1.54% Apr-22 -2.11% May-22 -3.13% Jun-22 -1.64% Jul-22 -2.31% Aug-22 -3.09% Sep-22 -2.98% Oct-22 -1.60% Nov-22 8.29% Dec-22 3.16% Jan-23 5.67%	5.86% 3.84% 15.94% -16.26% 2.52% -7.27% -9.60%	3.06% 6.23% 14.16% -13.74% 3.08%	4.40% 5.72% 14.73% -13.80%	-1.64% 5.42% 15.30%	-1.79% 6.55% 14.93%	-8.38% 6.19%	-4.66% 4.46%	-6.36% 4.23%
Apr-21 3.61%  May-21 7.79%  Jun-21 -7.16%  Jul-21 2.47%  Aug-21 -0.01%  Sep-21 -3.13%  Oct-21 1.49%  Nov-21 -0.51%  Dec-21 3.08%  Jan-22 -1.75%  Feb-22 6.20%  Mar-22 1.54%  Apr-22 -2.11%  May-22 -3.13%  Jun-22 -1.64%  Jul-22 -2.31%  Aug-22 -3.09%  Sep-22 -2.98%  Oct-22 -1.60%  Nov-22 8.29%  Dec-22 3.16%  Jan-23 5.67%	3.84% 15.94% -16.26% 2.52% -7.27% -9.60%	6.23% 14.16% -13.74% 3.08%	5.72% 14.73% -13.80%	5.42% 15.30%	6.55% 14.93%	6.19%	4.46%	4.23%
May-21 7.79%  Jun-21 -7.16%  Jul-21 2.47%  Aug-21 -0.01%  Sep-21 -3.13%  Oct-21 1.49%  Nov-21 -0.51%  Dec-21 3.08%  Jan-22 -1.75%  Feb-22 6.20%  Mar-22 1.54%  Apr-22 -2.11%  May-22 -3.13%  Jun-22 -1.64%  Jul-22 -2.31%  Aug-22 -3.09%  Sep-22 -2.98%  Oct-22 -1.60%  Nov-22 8.29%  Dec-22 3.16%  Jan-23 5.67%	15.94% -16.26% 2.52% -7.27% -9.60%	14.16% -13.74% 3.08%	14.73% -13.80%	15.30%	14.93%			
Jun-21	-16.26% 2.52% -7.27% -9.60%	-13.74% 3.08%	-13.80%			8.31%	16.84%	
Jul-21 2.47% Aug-21 -0.01% Sep-21 -3.13% Oct-21 1.49% Nov-21 -0.51% Dec-21 3.08% Jan-22 -1.75% Feb-22 6.20% Mar-22 1.54% Apr-22 -2.11% May-22 -3.13% Jun-22 -1.64% Jul-22 -2.31% Aug-22 -2.31% Aug-22 -3.09% Sep-22 -2.98% Oct-22 -1.60% Nov-22 8.29% Dec-22 3.16% Jan-23 5.67%	2.52% -7.27% -9.60%	3.08%		-14.55%			10.0470	17.35%
Aug-21 -0.01%  Sep-21 -3.13%  Oct-21 1.49%  Nov-21 -0.51%  Dec-21 3.08%  Jan-22 -1.75%  Feb-22 6.20%  Mar-22 1.54%  Apr-22 -2.11%  May-22 -3.13%  Jun-22 -1.64%  Jul-22 -2.31%  Aug-22 -3.09%  Sep-22 -2.98%  Oct-22 -1.60%  Nov-22 8.29%  Dec-22 3.16%  Jan-23 5.67%	-7.27% -9.60%		2 77%		-13.40%	-6.94%	-12.32%	-13.88%
Sep-21 -3.13% Oct-21 1.49% Nov-21 -0.51% Dec-21 3.08% Jan-22 -1.75% Feb-22 6.20% Mar-22 1.54% Apr-22 -2.11% May-22 -3.13% Jun-22 -1.64% Jul-22 -2.31% Aug-22 -3.09% Sep-22 -2.98% Oct-22 -1.60% Nov-22 8.29% Dec-22 3.16% Jan-23 5.67%	-9.60%	-6.93%	2.11/0	-1.97%	-0.09%	-2.47%	-1.22%	-5.46%
Oct-21 1.49% Nov-21 -0.51% Dec-21 3.08% Jan-22 -1.75% Feb-22 6.20% Mar-22 1.54% Apr-22 -2.11% May-22 -3.13% Jun-22 -1.64% Jul-22 -2.31% Aug-22 -3.09% Sep-22 -2.98% Oct-22 -1.60% Nov-22 8.29% Dec-22 3.16% Jan-23 5.67%			-6.64%	-5.93%	-4.72%	-6.19%	-4.43%	-6.19%
Nov-21 -0.51% Dec-21 3.08% Jan-22 -1.75% Feb-22 6.20% Mar-22 1.54% Apr-22 -2.11% May-22 -3.13% Jun-22 -1.64% Jul-22 -2.31% Aug-22 -3.09% Sep-22 -2.98% Oct-22 -1.60% Nov-22 8.29% Dec-22 3.16% Jan-23 5.67%	8.46%	-10.05%	-9.60%	-11.06%	-9.64%	-7.05%	-12.95%	-12.39%
Dec-21 3.08%  Jan-22 -1.75%  Feb-22 6.20%  Mar-22 1.54%  Apr-22 -2.11%  May-22 -3.13%  Jun-22 -1.64%  Jul-22 -2.31%  Aug-22 -3.09%  Sep-22 -2.98%  Oct-22 -1.60%  Nov-22 8.29%  Dec-22 3.16%  Jan-23 5.67%		7.88%	7.60%	12.86%	13.07%	7.43%	10.66%	11.77%
Jan-22 -1.75% Feb-22 6.20% Mar-22 1.54% Apr-22 -2.11% May-22 -3.13% Jun-22 -1.64% Jul-22 -2.31% Aug-22 -3.09% Sep-22 -2.98% Oct-22 -1.60% Nov-22 8.29% Dec-22 3.16% Jan-23 5.67%	2.30%	0.26%	0.28%	-1.34%	-1.54%	-4.41%	-2.83%	-1.44%
Feb-22 6.20%  Mar-22 1.54%  Apr-22 -2.11%  May-22 -3.13%  Jun-22 -1.64%  Jul-22 -2.31%  Aug-22 -3.09%  Sep-22 -2.98%  Oct-22 -1.60%  Nov-22 8.29%  Dec-22 3.16%  Jan-23 5.67%	1.67%	2.02%	0.72%	-1.78%	-1.07%	2.06%	-2.78%	-4.07%
Mar-22 1.54% Apr-22 -2.11% May-22 -3.13% Jun-22 -1.64% Jul-22 -2.31% Aug-22 -3.09% Sep-22 -2.98% Oct-22 -1.60% Nov-22 8.29% Dec-22 3.16% Jan-23 5.67%	-4.54%	-5.67%	-5.62%	-8.59%	-7.89%	-3.59%	-10.11%	-9.05%
Apr-22 -2.11%  May-22 -3.13%  Jun-22 -1.64%  Jul-22 -2.31%  Aug-22 -3.09%  Sep-22 -2.98%  Oct-22 -1.60%  Nov-22 8.29%  Dec-22 3.16%  Jan-23 5.67%	13.31%	14.10%	13.73%	12.52%	11.56%	8.85%	3.34%	13.83%
May-22 -3.13% Jun-22 -1.64% Jul-22 -2.31% Aug-22 -3.09% Sep-22 -2.98% Oct-22 -1.60% Nov-22 8.29% Dec-22 3.16% Jan-23 5.67%	11.31%	11.06%	11.55%	8.67%	8.36%	1.44%	6.75%	8.98%
Jun-22 -1.64%  Jul-22 -2.31%  Aug-22 -3.09%  Sep-22 -2.98%  Oct-22 -1.60%  Nov-22 8.29%  Dec-22 3.16%  Jan-23 5.67%	-9.41%	-8.19%	-8.76%	-8.36%	-6.86%	-8.20%	-9.71%	-12.71%
Jul-22     -2.31%       Aug-22     -3.09%       Sep-22     -2.98%       Oct-22     -1.60%       Nov-22     8.29%       Dec-22     3.16%       Jan-23     5.67%	-9.89%	-9.52%	-9.32%	-8.71%	-8.34%	-5.30%	-7.49%	-10.01%
Aug-22 -3.09% Sep-22 -2.98% Oct-22 -1.60% Nov-22 8.29% Dec-22 3.16% Jan-23 5.67%	-13.23%	-13.94%	-13.71%	-18.39%	-19.71%	-5.98%	-14.75%	-14.01%
Sep-22     -2.98%       Oct-22     -1.60%       Nov-22     8.29%       Dec-22     3.16%       Jan-23     5.67%	-6.09%	-4.63%	-4.05%	5.06%	5.77%	0.36%	1.85%	3.68%
Oct-22     -1.60%       Nov-22     8.29%       Dec-22     3.16%       Jan-23     5.67%	-9.91%	-9.10%	-9.40%	-11.93%	-11.02%	-11.56%	-11.64%	-10.55%
Nov-22         8.29%           Dec-22         3.16%           Jan-23         5.67%	4.03%	0.04%	1.34%	-0.51%	-1.53%	5.73%	3.43%	3.40%
Dec-22         3.16%           Jan-23         5.67%	0.72%	0.90%	0.17%	0.14%	-1.81%	0.74%	3.77%	1.43%
Jan-23 5.67%	17.17%	18.84%	20.24%	21.08%	20.85%	15.96%	14.35%	16.86%
	0.18%	0.98%	-1.34%	-0.20%	0.65%	7.98%	-1.54%	-2.41%
	11.65%	11.38%	11.72%	9.26%	11.58%	-1.11%	7.53%	6.07%
Average 0.3%	0.0%	0.1%	0.1%	-0.6%	-0.1%	-0.3%	-1.2%	-0.9%
MAX 8.3%		18.8%	20.2%	21.1%	20.8%	16.0%	16.8%	17.4%
MIN -7.2%	17.2%	-13.9%	-13.8%	-18.4%	-19.7%	-11.6%	-14.7%	-14.0%
Current Price 1,928	17.2% -16.3%	897.2	32.02	38.95	27.65	23.70	30.29	11.19





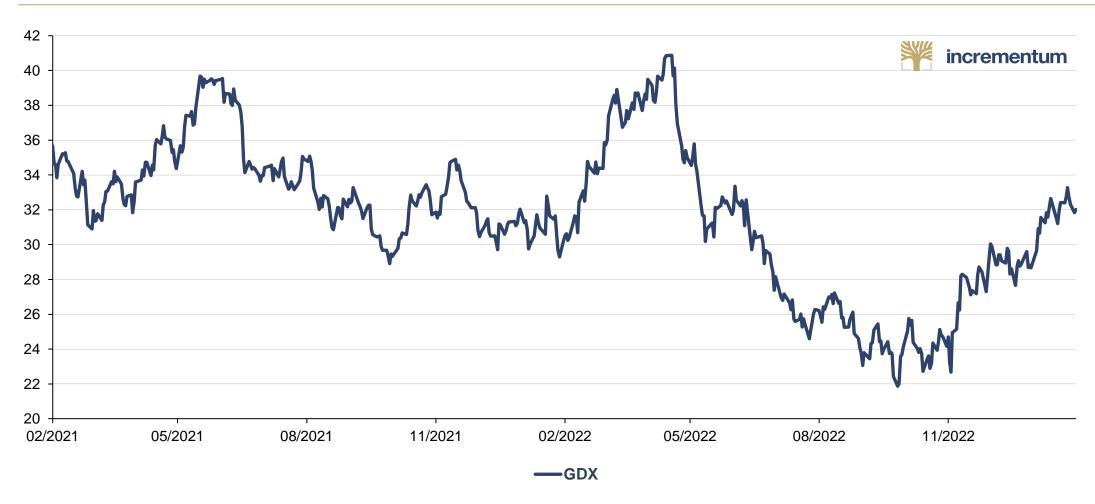
#### HUI Index (Ihs), and Gold (rhs), in USD, 02/2021-01/2023







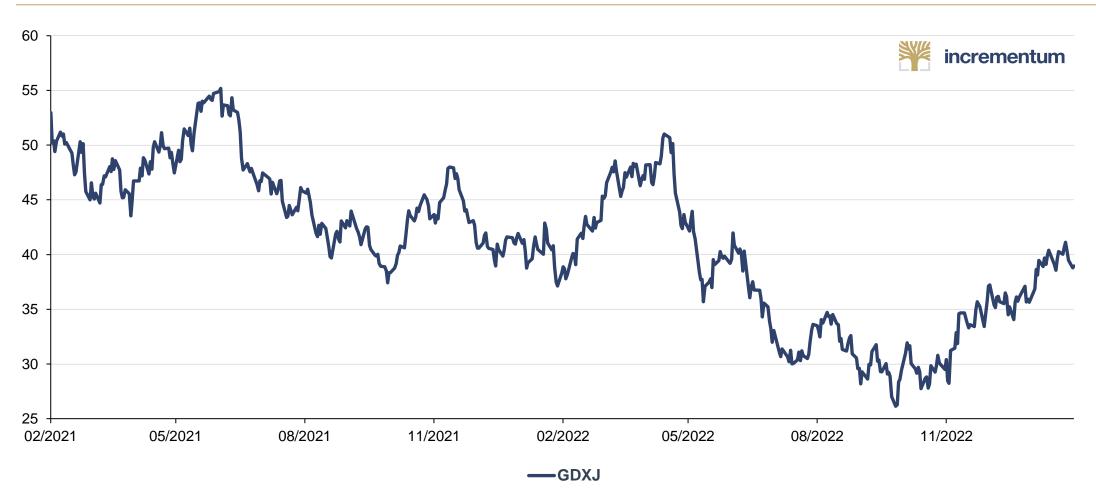
#### GDX, 02/2021-01/2023







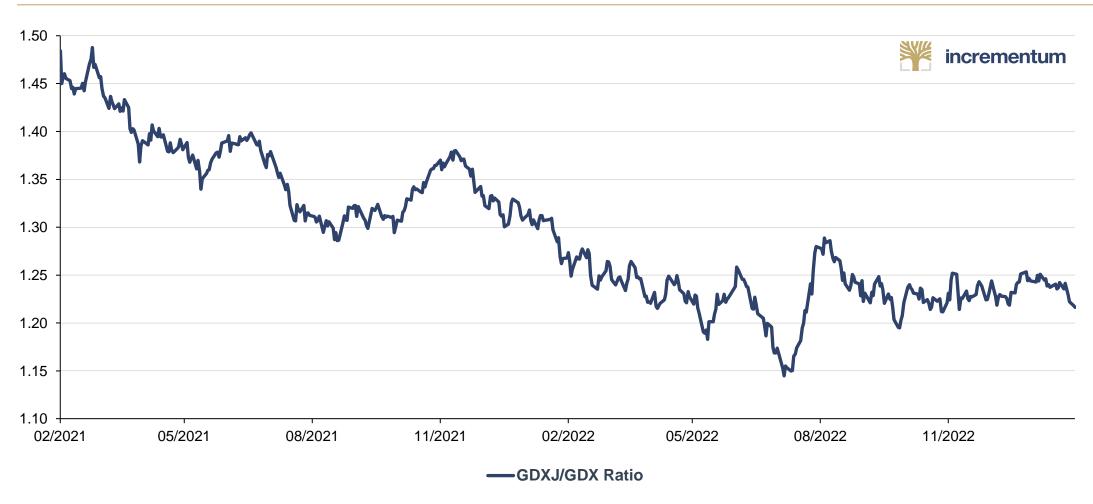
#### GDXJ, 02/2021-01/2023







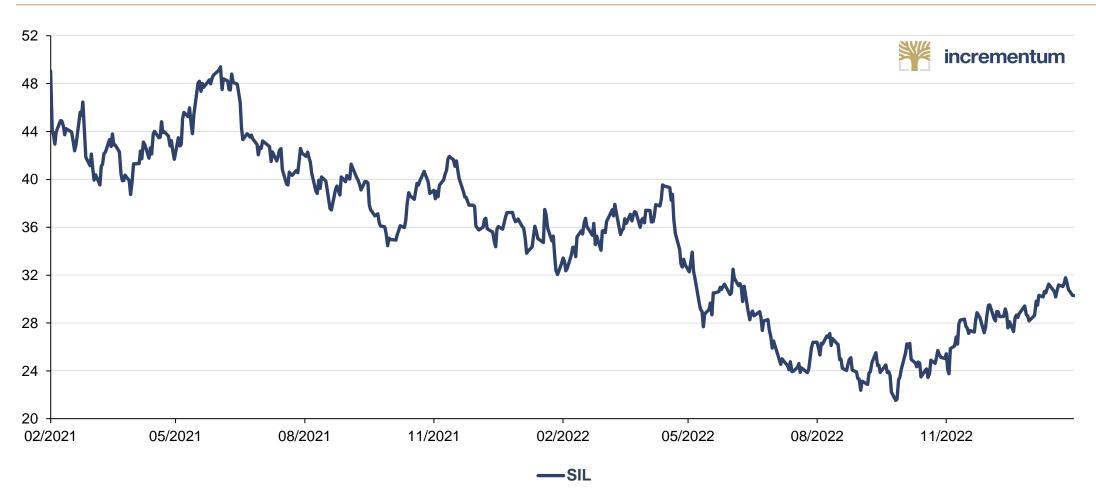
#### GDXJ/GDX Ratio, 02/2021-01/2023







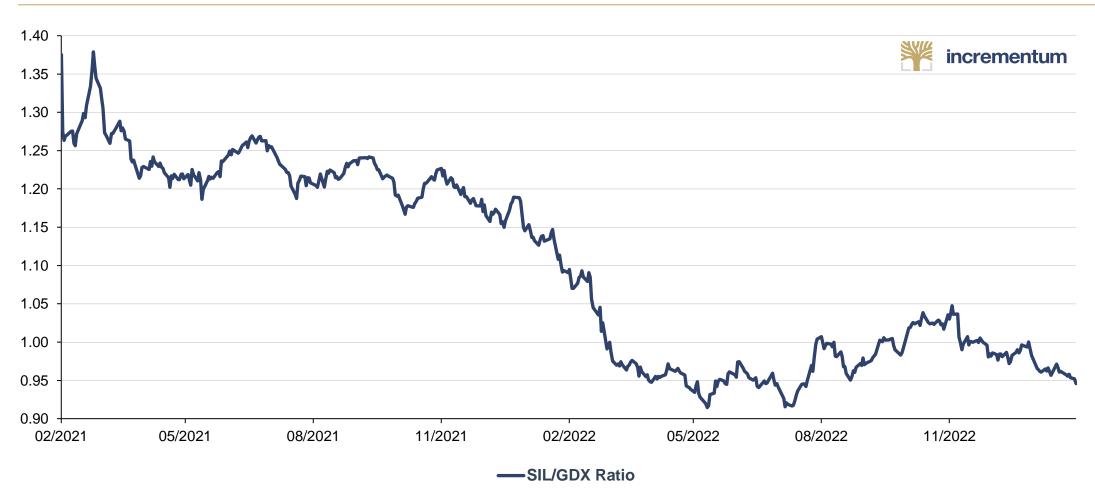
#### SIL, 02/2021-01/2023







#### SIL/GDX Ratio, 02/2021-01/2023







# 4. Macro (Inflation, Markets, Curves & Spreads)

"We now understand better how little we understand about inflation."

Jerome Powell





# Inflation Heat Map (Developed Markets), 01/2021-12/2022

	USA CPI	Canada CPI	Euro Area HICP	Germany HICP	France HICP	Italy HICP	Switzerland CPI	Great Britain CPI	Japan CPI	South Korea CPI	Australia CPI
Jan-21	1.40%	1.02%	0.91%	1.62%	0.75%	0.69%	-0.54%	0.70%	-0.70%	0.95%	0.95%
Feb-21	1.68%	1.09%	0.94%	1.61%	0.76%	0.99%	-0.50%	0.41%	-0.50%	1.42%	1.03%
Mar-21	2.62%	2.20%	1.33%	1.98%	1.39%	0.58%	-0.25%	0.71%	-0.40%	1.90%	1.11%
Apr-21	4.16%	3.39%	1.62%	2.07%	1.61%	0.96%	0.33%	1.53%	-1.10%	2.49%	2.01%
May-21	4.99%	3.60%	1.98%	2.35%	1.79%	1.16%	0.55%	2.11%	-0.70%	2.62%	2.92%
Jun-21	5.39%	3.06%	1.90%	2.06%	1.88%	1.35%	0.60%	2.51%	-0.40%	2.35%	3.85%
Jul-21	5.37%	3.72%	2.16%	3.10%	1.54%	0.97%	0.68%	2.04%	-0.30%	2.64%	3.57%
Aug-21	5.25%	4.09%	2.96%	3.39%	2.35%	2.46%	0.88%	3.20%	-0.40%	2.56%	3.29%
Sep-21	5.39%	4.38%	3.36%	4.06%	2.72%	2.92%	0.94%	3.08%	0.20%	2.41%	3.01%
Oct-21	6.22%	4.65%	4.05%	4.63%	3.20%	3.19%	1.24%	4.21%	0.10%	3.16%	3.18%
Nov-21	6.81%	4.72%	4.87%	6.02%	3.40%	3.87%	1.53%	5.13%	0.60%	3.78%	3.34%
Dec-21	7.04%	4.80%	4.96%	5.70%	3.39%	4.15%	1.53%	5.39%	0.81%	3.70%	3.50%
Jan-22	7.48%	5.14%	5.11%	5.15%	3.28%	5.07%	1.65%	5.46%	0.50%	3.61%	4.03%
Feb-22	7.87%	5.69%	5.87%	5.49%	4.17%	6.15%	2.15%	6.18%	0.90%	3.66%	4.56%
Mar-22	8.54%	6.66%	7.44%	7.60%	5.11%	6.81%	2.39%	7.02%	1.20%	4.14%	5.09%
Apr-22	8.26%	6.77%	7.44%	7.84%	5.38%	6.28%	2.55%	9.01%	2.42%	4.78%	5.44%
May-22	8.58%	7.73%	8.05%	8.74%	5.82%	7.33%	2.94%	9.08%	2.41%	5.40%	5.79%
Jun-22	9.06%	8.13%	8.64%	8.25%	6.54%	8.46%	3.38%	9.41%	2.31%	6.05%	6.14%
Jul-22	8.52%	7.59%	8.87%	8.48%	6.78%	8.36%	3.43%	10.10%	2.61%	6.34%	6.52%
Aug-22	8.26%	7.01%	9.14%	8.83%	6.56%	9.11%	3.45%	9.87%	3.01%	5.71%	6.90%
Sep-22	8.20%	6.86%	9.93%	10.90%	6.23%	9.37%	3.25%	10.10%	3.00%	5.58%	7.27%
Oct-22	7.75%	6.88%	10.62%	11.56%	7.07%	12.57%	3.00%	11.05%	3.80%	5.67%	7.46%
Nov-22	7.11%	6.80%	10.05%	11.26%	7.08%	12.58%	2.96%	10.67%	3.80%	5.04%	7.65%
Dec-22	6.45%	6.32%	9.20%	9.61%	6.73%	12.34%	2.84%	10.53%	4.00%	5.04%	





## Inflation Heat Map (Emerging Markets), 01/2021-12/2022

	Argentina CPI	Brazil CPI	Mexico CPI	South Africa CPI	Nigeria CPI	Turkey CPI	Russia CPI	China CPI	India CPI	Indonesia CPI	Thailand CPI
Jan-21	38.50%	4.56%	3.54%	3.16%	16.47%	14.97%	5.19%	-0.30%	4.06%	1.55%	-0.34%
Feb-21	40.70%	5.20%	3.76%	2.80%	17.33%	15.61%	5.67%	-0.20%	5.03%	1.38%	-1.17%
Mar-21	42.60%	6.10%	4.67%	3.22%	18.17%	16.19%	5.80%	0.40%	5.52%	1.37%	-0.08%
Apr-21	46.30%	6.76%	6.08%	4.43%	18.12%	17.14%	5.48%	0.90%	4.23%	1.42%	3.41%
May-21	48.80%	8.06%	5.89%	5.22%	17.93%	16.59%	6.00%	1.30%	6.30%	1.68%	2.44%
Jun-21	50.20%	8.35%	5.88%	4.86%	17.75%	17.53%	6.47%	1.10%	6.26%	1.33%	1.25%
Jul-21	51.80%	8.99%	5.81%	4.70%	17.38%	18.95%	6.50%	1.00%	5.59%	1.52%	0.45%
Aug-21	51.40%	9.68%	5.59%	4.90%	17.01%	19.25%	6.66%	0.80%	5.30%	1.59%	-0.02%
Sep-21	52.50%	10.25%	6.00%	5.00%	16.63%	19.58%	7.42%	0.70%	4.35%	1.60%	1.68%
Oct-21	52.10%	10.67%	6.24%	4.98%	15.99%	19.89%	8.13%	1.50%	4.48%	1.66%	2.38%
Nov-21	51.20%	10.74%	7.37%	5.41%	15.40%	21.31%	8.39%	2.30%	4.91%	1.75%	2.71%
Dec-21	50.90%	10.06%	7.36%	5.93%	15.63%	36.08%	8.42%	1.50%	5.66%	1.87%	2.17%
Jan-22	50.70%	10.38%	7.07%	5.70%	15.60%	48.69%	8.73%	0.90%	6.01%	2.18%	3.23%
Feb-22	52.30%	10.54%	7.28%	5.66%	15.70%	54.44%	9.18%	0.90%	6.07%	2.06%	5.28%
Mar-22	55.10%	11.30%	7.45%	5.93%	15.92%	61.14%	16.70%	1.50%	6.95%	2.64%	5.73%
Apr-22	58.00%	12.13%	7.68%	5.89%	16.82%	69.97%	17.88%	2.10%	7.79%	3.47%	4.65%
May-22	60.70%	11.73%	7.65%	6.51%	17.71%	73.50%	17.09%	2.10%	7.04%	3.55%	7.10%
Jun-22	64.00%	11.89%	7.99%	7.42%	18.60%	78.62%	15.92%	2.50%	7.01%	4.35%	7.66%
Jul-22	71.00%	10.07%	8.15%	7.85%	19.64%	79.60%	15.07%	2.70%	6.71%	4.94%	7.61%
Aug-22	78.50%	8.73%	8.70%	7.61%	20.52%	80.21%	14.29%	2.50%	7.00%	4.69%	7.86%
Sep-22	83.00%	7.17%	8.70%	7.50%	20.77%	83.45%	13.66%	2.80%	7.41%	5.95%	6.41%
Oct-22	88.00%	6.47%	8.41%	7.58%	21.09%	85.51%	12.68%	2.10%	6.77%	5.71%	5.98%
Nov-22	92.40%	5.90%	7.80%	7.44%	21.47%	84.39%	11.97%	1.60%	5.88%	5.42%	5.55%
Dec-22	94.80%	5.79%	7.82%	7.20%	21.34%	64.27%	11.92%	1.80%	5.72%	5.51%	5.89%





## Inflation Heat Map (United States), 01/2021-12/2022

	СРІ	Core CPI	PCE	Core PCE	PPI	Core PPI	US Import Prices	Case-Shiller US National HPI	Cleveland Fed 1Y Inflation Expectations	Uni. Michigan 1Y Inflation Expectations	Uni. Michigan 5Y Inflation Expectations
Jan-21	1.40%	1.41%	1.48%	1.57%	1.59%	1.94%	1.04%	11.33%	1.45%	3.00%	2.70%
Feb-21	1.68%	1.28%	1.70%	1.56%	2.95%	2.62%	2.98%	12.20%	1.68%	3.30%	2.70%
Mar-21	2.62%	1.65%	2.53%	2.05%	4.06%	3.04%	7.09%	13.49%	1.51%	3.10%	2.80%
Apr-21	4.16%	2.96%	3.63%	3.12%	6.43%	4.57%	10.91%	15.01%	1.75%	3.40%	2.70%
May-21	4.99%	3.80%	4.05%	3.52%	6.91%	5.34%	11.60%	16.92%	1.87%	4.60%	3.00%
Jun-21	5.39%	4.47%	4.25%	3.80%	7.49%	5.84%	11.28%	18.82%	2.06%	4.20%	2.80%
Jul-21	5.37%	4.27%	4.42%	3.87%	7.83%	6.39%	10.24%	19.84%	2.07%	4.70%	2.80%
Aug-21	5.25%	4.00%	4.52%	3.88%	8.58%	7.06%	9.01%	19.97%	2.46%	4.60%	2.90%
Sep-21	5.39%	4.03%	4.65%	3.92%	8.82%	7.02%	9.32%	19.68%	2.68%	4.60%	3.00%
Oct-21	6.22%	4.56%	5.22%	4.31%	8.90%	6.99%	11.03%	19.07%	1.85%	4.80%	2.90%
Nov-21	6.81%	4.93%	5.85%	4.82%	9.94%	8.01%	11.75%	18.81%	2.48%	4.90%	3.00%
Dec-21	7.04%	5.45%	5.97%	5.04%	10.18%	8.66%	10.27%	18.87%	2.62%	4.80%	2.90%
Jan-22	7.48%	6.02%	6.12%	5.21%	10.18%	8.61%	10.75%	19.25%	2.24%	4.90%	3.10%
Feb-22	7.87%	6.41%	6.39%	5.42%	10.53%	8.86%	11.41%	20.06%	2.63%	4.90%	3.00%
Mar-22	8.54%	6.47%	6.77%	5.36%	11.67%	9.71%	13.01%	20.82%	3.06%	5.40%	3.00%
Apr-22	8.26%	6.16%	6.41%	5.03%	11.16%	8.96%	12.51%	20.79%	3.39%	5.40%	3.00%
May-22	8.58%	6.02%	6.52%	4.88%	10.99%	8.62%	11.60%	20.00%	3.63%	5.30%	3.00%
Jun-22	9.06%	5.92%	6.98%	5.04%	11.13%	8.30%	10.66%	18.05%	4.23%	5.30%	3.10%
Jul-22	8.52%	5.91%	6.39%	4.70%	9.68%	7.60%	8.77%	15.68%	3.31%	5.20%	2.90%
Aug-22	8.26%	6.32%	6.26%	4.93%	8.68%	7.21%	7.67%	12.98%	3.38%	4.80%	2.90%
Sep-22	8.20%	6.63%	6.29%	5.20%	8.50%	7.19%	6.08%	10.72%	4.18%	4.70%	2.70%
Oct-22	7.75%	6.28%	6.08%	5.05%	8.19%	6.94%	4.16%	9.24%	2.88%	5.00%	2.90%
Nov-22	7.11%	5.96%	5.54%	4.68%	7.34%	6.17%	2.68%	7.69%	3.24%	4.90%	3.00%
Dec-22	6.45%	5.71%	5.02%	4.42%	6.22%	5.53%	3.49%		2.87%	4.40%	2.90%





### Monthly Performance of Various Commodities, 02/2021-01/2023

	Bloomberg Industrial Metals TR Subindex	Bloomberg Precious Metals TR Subindex	Bloomberg Agriculture TR Subindex	Bloomberg Energy TR Subindex	Bloomberg Livestock TR Subindex	Bloomberg Commodity TR Index	Gold	Silver	Platinum	Palladium	WTI	Natural Gas	Copper
Feb-21	10.14%	-5.48%	3.75%	15.40%	3.35%	6.47%	-6.10%	-1.41%	10.82%	4.09%	17.82%	8.07%	14.58%
Mar-21	-2.43%	-2.44%	-1.78%	-3.60%	5.35%	-2.15%	-1.53%	-8.38%	-0.12%	13.03%	-3.80%	-5.88%	-2.23%
Apr-21	8.82%	3.56%	14.05%	7.07%	-1.50%	8.29%	3.61%	6.19%	0.94%	12.04%	7.47%	12.38%	11.89%
May-21	3.84%	7.81%	-0.94%	3.28%	2.90%	2.73%	7.79%	8.31%	-0.99%	-3.59%	4.31%	1.88%	4.54%
Jun-21	-3.18%	-6.92%	-0.19%	11.44%	-2.78%	1.85%	-7.16%	-6.94%	-9.63%	-1.75%	10.78%	22.24%	-8.24%
Jul-21	3.96%	1.22%	-0.98%	3.84%	-0.27%	1.84%	2.47%	-2.47%	-2.18%	-4.29%	0.65%	7.23%	4.28%
Aug-21	0.33%	-1.37%	0.05%	-0.43%	0.15%	-0.30%	-0.01%	-6.19%	-3.48%	-7.27%	-7.37%	11.83%	-2.69%
Sep-21	-2.15%	-4.39%	-0.11%	17.02%	-1.90%	4.98%	-3.13%	-7.05%	-4.84%	-22.58%	9.53%	34.04%	-6.19%
Oct-21	4.51%	3.01%	2.94%	2.06%	-1.80%	2.58%	1.49%	7.43%	5.66%	4.84%	11.38%	-7.52%	6.98%
Nov-21	-2.33%	-1.49%	-0.37%	-17.13%	2.20%	-7.31%	-0.51%	-4.41%	-8.21%	-13.20%	-20.81%	-15.83%	-2.23%
Dec-21	6.40%	2.82%	3.60%	2.82%	1.48%	3.53%	3.08%	2.06%	3.02%	8.87%	13.64%	-18.33%	4.14%
Jan-22	2.96%	-2.37%	5.80%	21.99%	3.02%	8.78%	-1.75%	-3.59%	5.78%	24.18%	17.21%	30.67%	-3.08%
Feb-22	6.37%	6.51%	8.85%	4.47%	1.48%	6.23%	6.20%	8.85%	2.48%	5.90%	8.59%	-9.68%	2.93%
Mar-22	12.07%	2.78%	4.04%	16.06%	1.16%	8.65%	1.54%	1.44%	-5.76%	-9.11%	4.76%	28.17%	6.72%
Apr-22	-6.31%	-3.66%	5.64%	13.51%	-6.77%	4.14%	-2.11%	-8.20%	-5.32%	2.61%	4.40%	28.39%	-7.34%
May-22	-6.45%	-4.16%	-2.01%	10.40%	-1.73%	1.52%	-3.13%	-5.30%	3.62%	-13.83%	9.53%	12.44%	-2.28%
Jun-22	-15.97%	-3.11%	-9.16%	-14.60%	-0.33%	-10.77%	-1.64%	-5.98%	-7.35%	-3.12%	-7.77%	-33.41%	-13.52%
Jul-22	1.63%	-1.96%	-2.22%	12.42%	6.89%	4.26%	-2.31%	0.36%	0.35%	9.88%	-6.75%	51.71%	-3.51%
Aug-22	-2.65%	-4.92%	3.32%	0.98%	-1.70%	0.09%	-3.09%	-11.56%	-5.67%	-2.07%	-9.20%	10.91%	-1.83%
Sep-22	-6.27%	-0.87%	-1.88%	-16.63%	-2.40%	-8.11%	-2.98%	5.73%	1.52%	3.53%	-11.23%	-25.87%	-2.17%
Oct-22	-0.56%	-1.05%	0.77%	4.39%	6.31%	1.99%	-1.60%	0.74%	7.77%	-14.68%	8.86%	-6.07%	-0.83%
Nov-22	14.53%	8.31%	-0.65%	-0.74%	-0.17%	2.74%	8.29%	15.96%	11.56%	2.16%	-6.91%	9.05%	9.26%
Dec-22	2.24%	5.73%	1.26%	-12.25%	2.20%	-2.45%	3.16%	7.98%	3.57%	-4.64%	-0.36%	-35.43%	2.04%
Jan-23	8.11%	4.42%	1.88%	-9.68%	-2.79%	-0.49%	5.67%	-1.11%	-5.46%	-8.04%	-1.73%	-40.02%	11.12%
Average	1.6%	0.1%	1.5%	3.0%	0.5%	1.6%	0.3%	-0.3%	-0.1%	-0.7%	2.2%	3.0%	0.9%
MAX	14.5%	8.3%	14.0%	22.0%	6.9%	8.8%	8.3%	16.0%	11.6%	24.2%	17.8%	51.7%	14.6%
MIN	-16.0%	-6.9%	-9.2%	-17.1%	-6.8%	-10.8%	-7.2%	-11.6%	-9.6%	-22.6%	-20.8%	-40.0%	-13.5%
Current Price	389.7	489.1	70.12	81.2	50.01	244.7	1,928	23.70	1,011.1	1,649	78.87	2.68	4.23





## **CFTC Futures and Options Net Long Positioning, Non-Commercial Traders**

Asset	Gold	Silver	Platinum	Palladium	Crude Oil	Natural Gas	Copper
Last	183,861	27,519	20,304	-3,297	283,326	-174,343	20,902
W/W	7,068	-6,331	-3,148	-546	14,264	6,326	3,220
3M Avg.	136,894	23,509	23,969	-2,020	272,954	-163,716	4,693
6M Avg.	117,677	11,390	12,560	-1,708	278,990	-153,384	-8,066
1Y Avg.	165,479	18,288	9,900	-2,073	328,719	-139,905	-3,314
1Y High	321,225	54,034	30,865	-272	438,598	-110,210	37,022
1Y Low	45,973	-12,811	-8,246	-4,057	232,146	-180,669	-30,614
1Y Z-Score	0.26	0.52	0.91	-1.22	-0.80	-1.79	1.21
3Y Avg.	215,387	32,054	16,457	62	448,015	-90,652	17,719
3Y High	388,803	80,646	63,793	6,028	594,465	71,340	80,564
3Y Low	45,973	-12,811	-8,246	-4,057	232,146	-248,032	-44,421
3Y Z-Score	-0.48	-0.26	0.31	-1.37	-1.62	-1.12	0.10
5Y Avg.	192,181	28,057	17,993	4,487	478,033	-92,861	9,990
5Y High	388,803	80,646	69,306	19,527	777,453	71,340	80,564
5Y Low	-56,998	-30,158	-11,540	-4,057	232,146	-262,534	-60,135
5Y Z-Score	-0.09	-0.02	0.15	-1.28	-1.65	-1.10	0.34





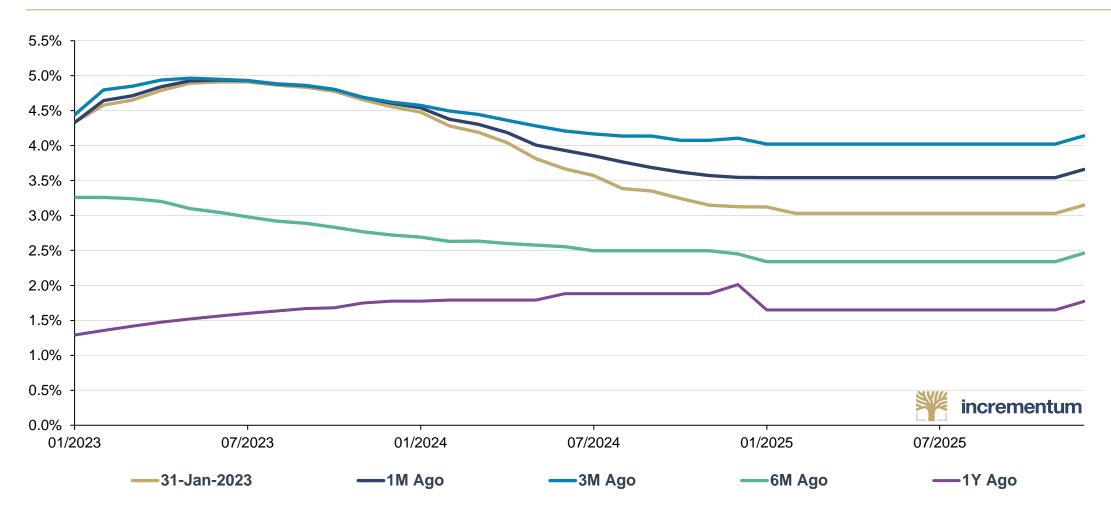
### Monthly Performance of Various Assets, 02/2021-01/2023

	S&P 500	VIX	Russell 2000	NASDAQ Comp.	Euro Stoxx 50	Nikkei 225	Shanghai Composite	MSCI World	DXY	UST 2Y (∆ in bps)	UST 10Y (∆ in bps)	DEU 10Y (∆ in bps)	JPN 10Y (∆ in bps)
Feb-21	2.61%	-17.42%	6.14%	0.93%	1.60%	4.71%	0.75%	2.45%	0.33%	2.80	36.20	25.70	11.40
Mar-21	4.24%	-22.47%	0.88%	0.41%	6.36%	0.73%	-1.91%	3.11%	2.59%	1.50	29.00	-3.80	-7.00
Apr-21	5.24%	-1.43%	2.07%	5.40%	1.79%	-1.25%	0.14%	4.52%	-2.09%	0.20	-11.50	9.80	-0.60
May-21	0.55%	-6.38%	0.11%	-1.53%	1.67%	0.16%	4.89%	1.26%	-1.37%	-1.70	-3.80	1.60	-1.00
Jun-21	2.22%	-6.43%	1.83%	5.49%	2.13%	-0.24%	-0.67%	1.40%	2.67%	10.40	-14.90	-2.00	-2.50
Jul-21	2.27%	13.24%	-3.65%	1.16%	1.23%	-5.24%	-5.40%	1.72%	-0.28%	-6.10	-20.50	-25.50	-3.50
Aug-21	2.90%	-8.15%	2.13%	4.00%	1.73%	2.95%	4.31%	2.35%	0.49%	2.10	6.30	7.80	0.50
Sep-21	-4.76%	22.81%	-3.05%	-5.31%	-3.26%	4.85%	0.68%	-4.29%	1.73%	8.00	22.50	18.50	4.10
Oct-21	6.91%	-17.88%	4.21%	7.27%	5.40%	-1.90%	-0.58%	5.59%	-0.11%	20.60	2.90	10.00	2.90
Nov-21	-0.83%	36.78%	-4.28%	0.25%	-2.57%	-3.71%	0.47%	-2.30%	1.99%	3.10	-11.50	-24.60	-3.50
Dec-21	4.36%	-23.41%	2.11%	0.69%	6.26%	3.49%	2.13%	4.19%	-0.03%	20.60	5.70	16.20	1.10
Jan-22	-5.26%	26.32%	-9.66%	-8.98%	-1.86%	-6.22%	-7.65%	-5.34%	0.60%	43.30	28.40	19.30	10.40
Feb-22	-3.14%	15.15%	0.97%	-3.43%	-2.80%	-1.76%	3.00%	-2.65%	0.17%	26.30	5.70	14.20	1.00
Mar-22	3.58%	-17.99%	1.08%	3.41%	1.88%	4.88%	-6.07%	2.52%	1.66%	85.60	48.60	39.80	3.00
Apr-22	-8.80%	34.85%	-9.95%	-13.26%	0.41%	-3.50%	-6.31%	-8.43%	4.73%	41.60	56.00	38.40	0.30
May-22	0.01%	-16.55%	0.00%	-2.05%	-1.45%	1.61%	4.57%	-0.16%	-1.17%	-16.00	-4.10	18.70	2.40
Jun-22	-8.39%	8.14%	-8.37%	-8.71%	-6.05%	-3.25%	6.66%	-8.77%	2.88%	38.70	13.00	24.20	-1.60
Jul-22	9.11%	-18.02%	10.38%	12.35%	6.16%	5.34%	-4.28%	7.86%	1.16%	-3.00	-33.20	-54.00	-5.00
Aug-22	-4.24%	10.16%	-2.18%	-4.64%	-4.39%	1.04%	-1.57%	-4.33%	2.64%	55.30	49.00	70.80	5.00
Sep-22	-9.34%	22.18%	-9.73%	-10.50%	-4.85%	-7.67%	-5.55%	-9.46%	3.14%	75.90	67.20	57.60	2.00
Oct-22	7.99%	-17.90%	10.94%	3.90%	6.35%	6.36%	-4.33%	7.11%	-0.53%	29.20	27.30	4.60	-0.50
Nov-22	5.38%	-14.51%	2.15%	4.37%	7.12%	1.38%	8.91%	6.80%	-5.00%	-12.90	-37.60	-21.10	1.10
Dec-22	-5.90%	4.41%	-6.64%	-8.73%	-3.80%	-6.70%	-1.97%	-4.34%	-2.29%	3.10	13.00	61.60	16.70
Jan-23	6.18%	-15.47%	9.69%	10.68%	5.52%	4.72%	5.39%	7.00%	-1.38%	-19.60	-30.20	-28.60	7.20
Average	0.5%	-0.4%	-0.1%	-0.3%	1.0%	0.0%	-0.2%	0.3%	0.5%	17.04	10.15	11.63	1.83
MAX	9.1%	36.8%	10.9%	12.3%	7.1%	6.4%	8.9%	7.9%	4.7%	85.60	67.20	70.80	16.70
MIN	-9.3%	-23.4%	-10.0%	-13.3%	-6.1%	-7.7%	-7.6%	-9.5%	-5.0%	-19.60	-37.60	-54.00	-7.00
Current Price	4,077	19.53	1,932	11,585	3,853	27,327	3,256	2,785	102.1	4.21%	3.53%	2.28%	0.49%





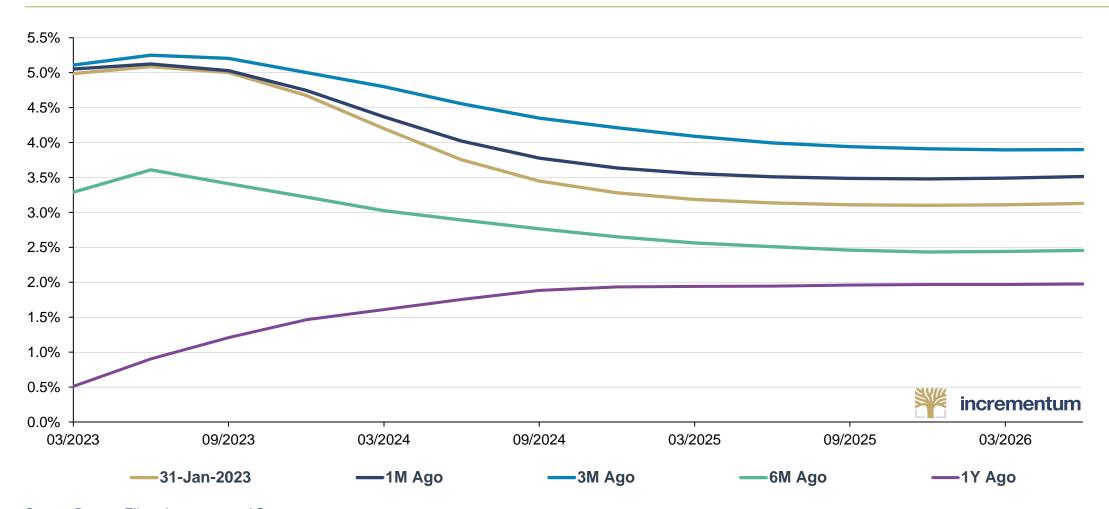
#### **Federal Funds Futures Curve (Implied Rate)**







#### **Eurodollar Futures Curve (Implied Rate)**

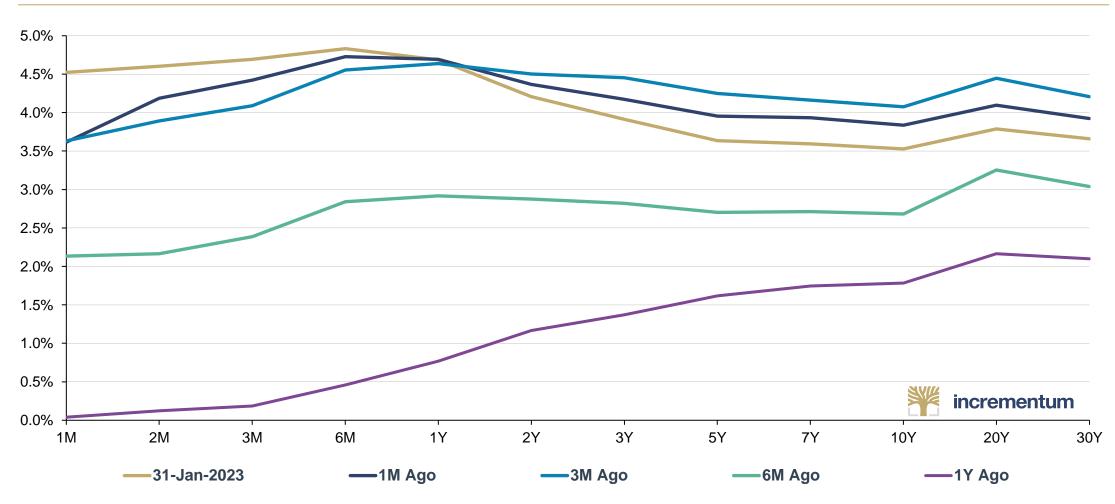








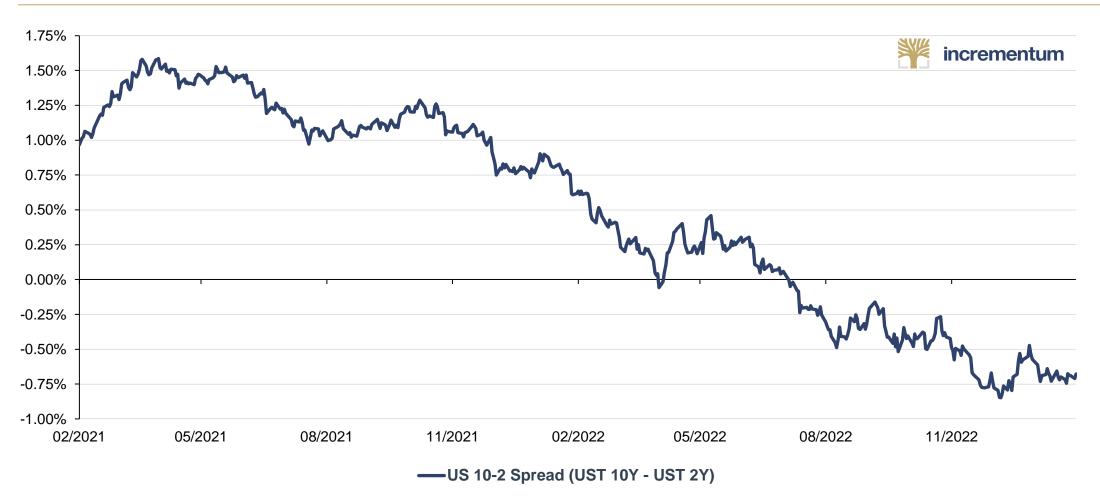
## **US Treasury Yield Curve**







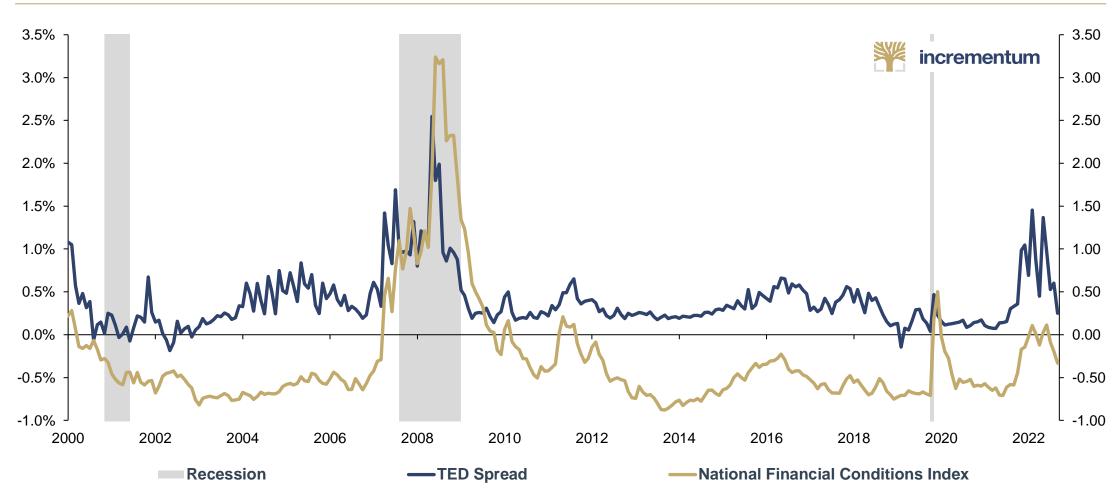
# US 10-2 Spread (UST 10Y - UST 2Y), 02/2021-01/2023





# TED Spread (lhs), and National Financial Conditions Index (Chicago Fed) (rhs), 01/2000-01/2023

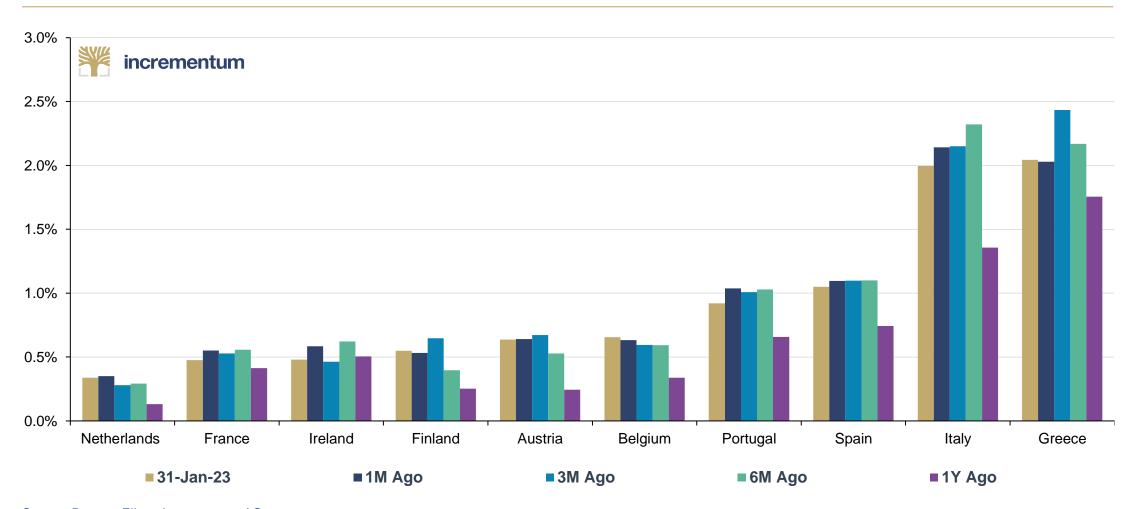








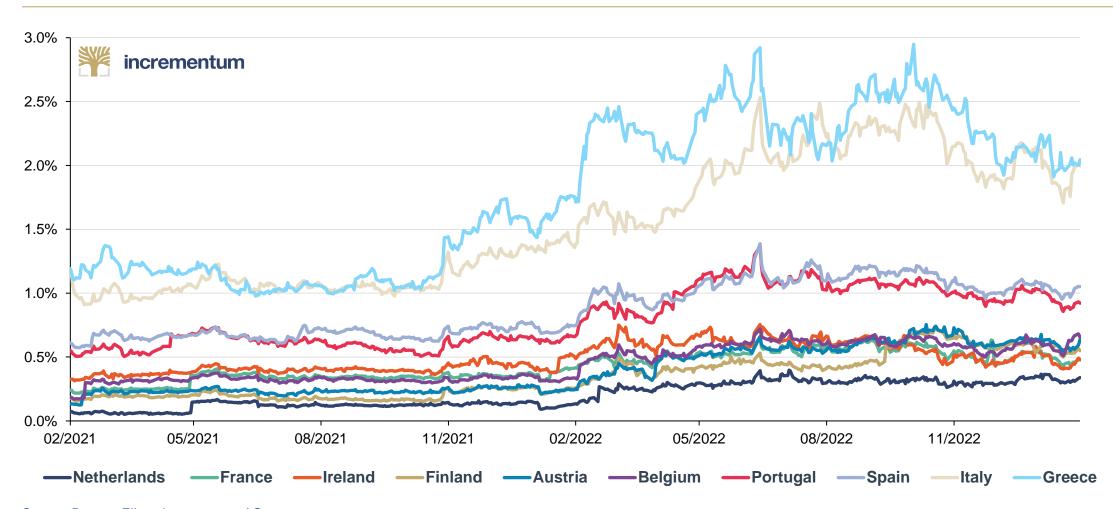
#### **Eurozone 10Y Government Bond Spreads vs. Germany**







#### Eurozone 10Y Government Bond Spreads vs. Germany, 02/2021-01/2023







# 5. Long Term Charts

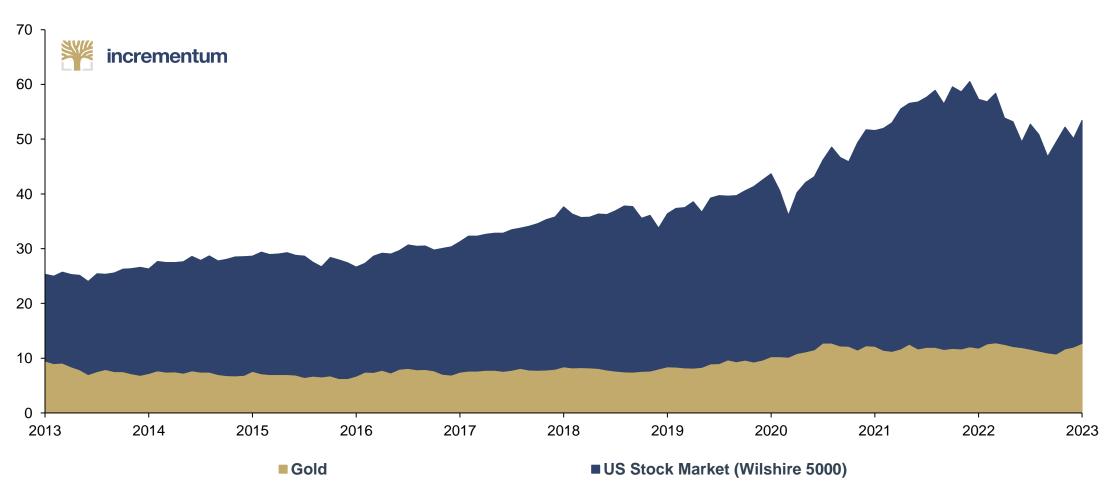
"If you decide you want to buy gold, you have the weight of history behind you."

**Herb Stein** 



# Market Capitalization of Gold, and US Stock Market (Wilshire 5000), in USD trn, 01/2013-01/2023



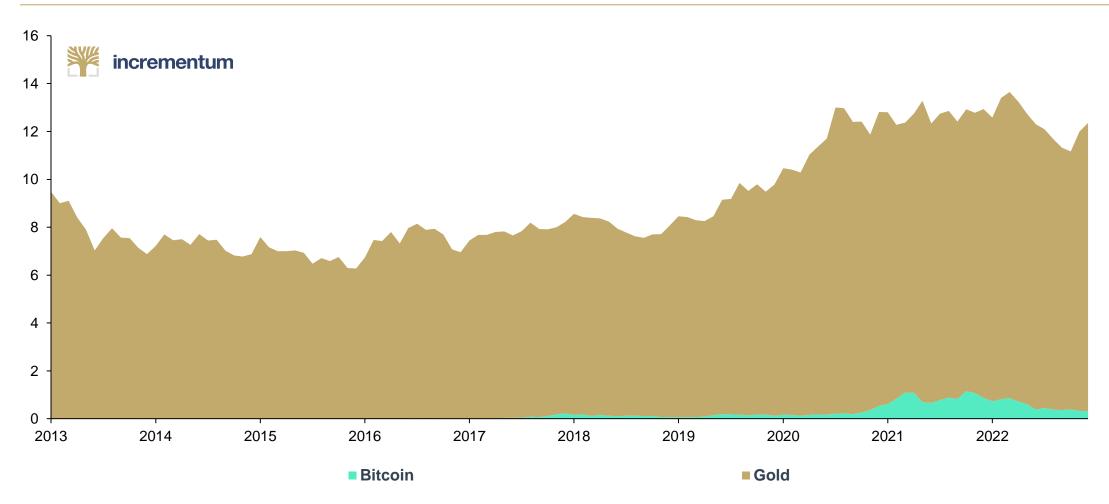


Source: World Gold Council, Reuters Eikon, Incrementum AG





#### Market Capitalization of Bitcoin, and Gold, in USD trn, 01/2013-01/2023

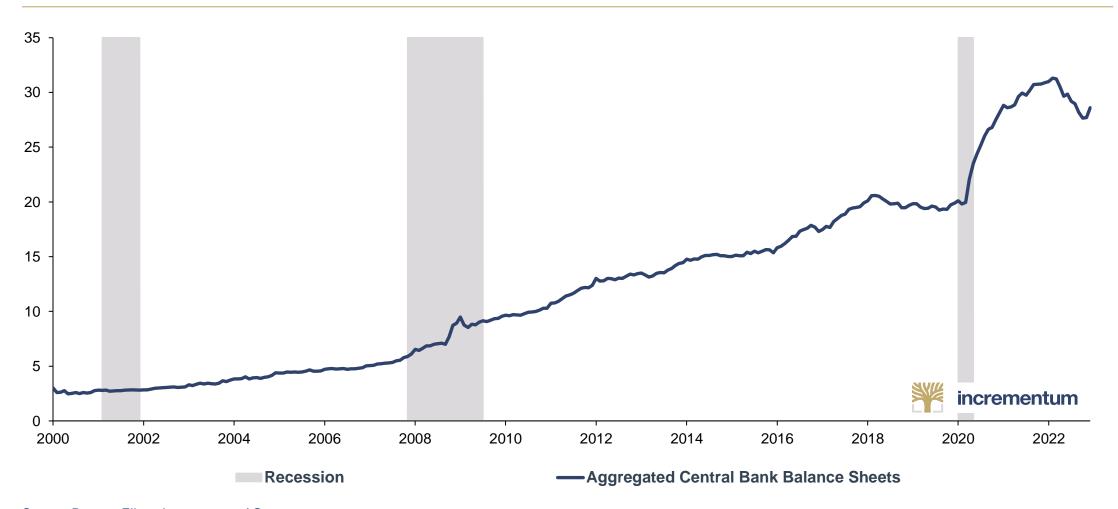


Source: coinmarketcap.com, World Gold Council, Reuters Eikon, Incrementum AG



# Aggregated Central Bank Balance Sheets (Fed, ECB, BoJ, PBoC), in USD trn, 01/2000-12/2022

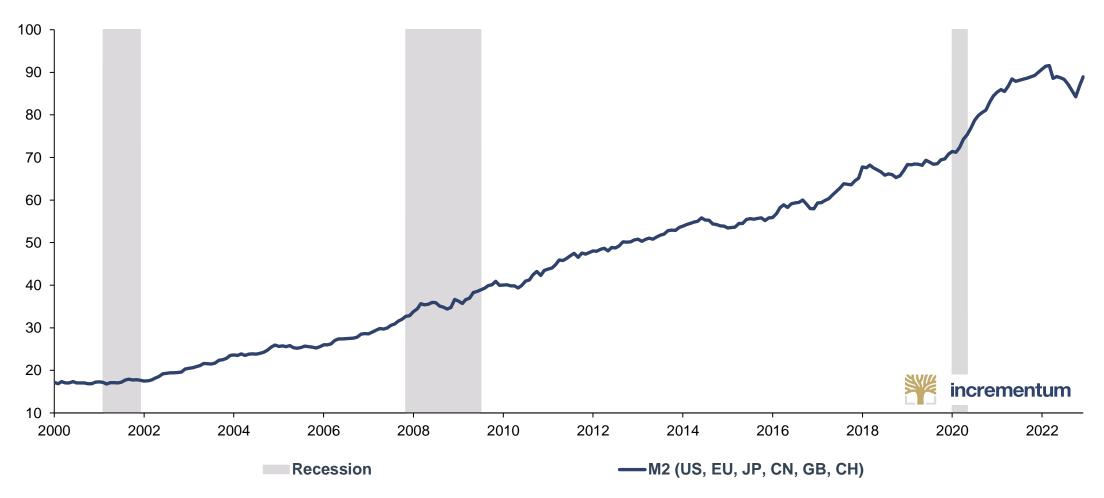








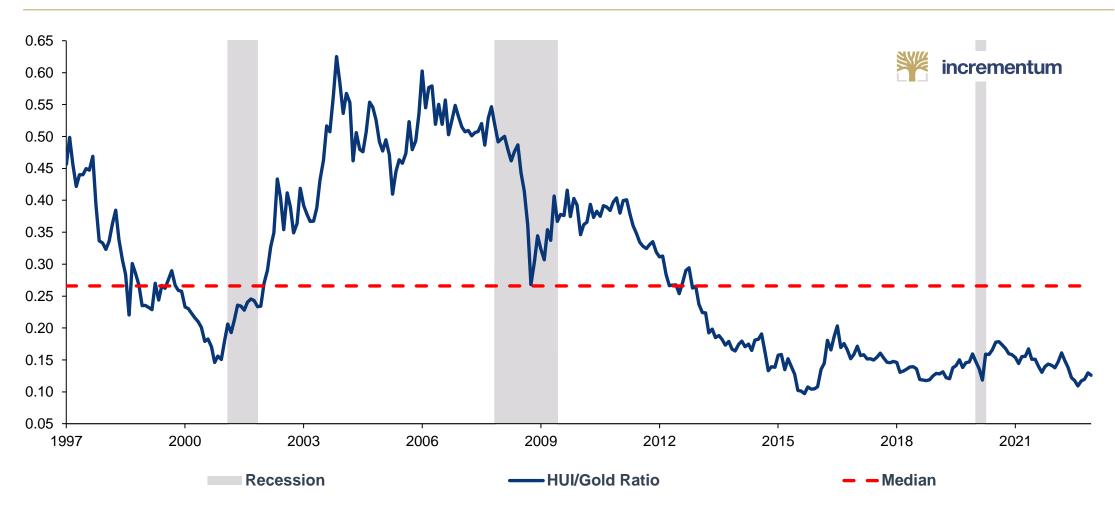
## M2 (US, EU, JP, CN, GB, CH), in USD trn, 01/2000-12/2022







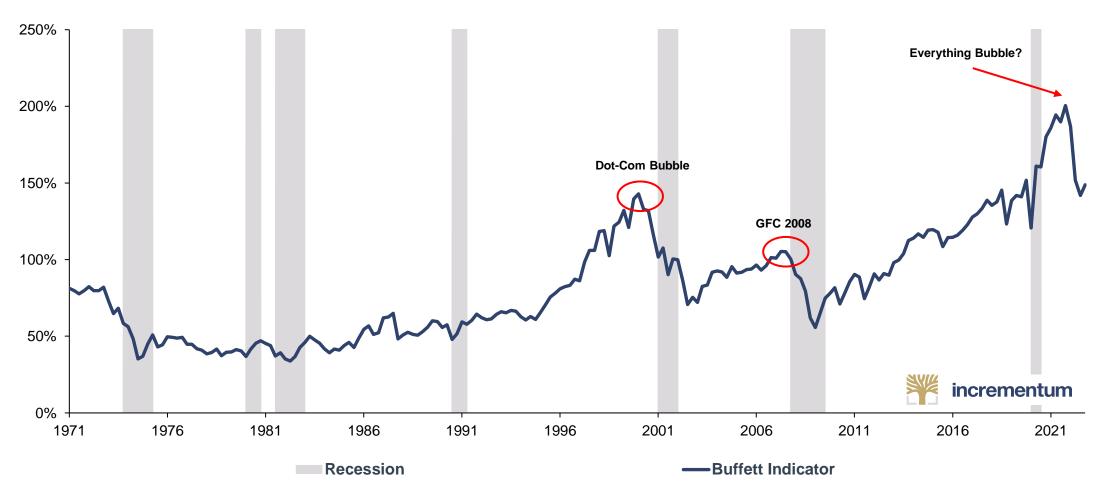
### **HUI/Gold Ratio, 01/1997-01/2023**







#### Buffett Indicator (Wilshire 5000 in % of US GDP), Q1/1971-Q4/2022







#### **S&P GSCI Total Return Index/S&P 500 Ratio**, 01/1971-01/2023

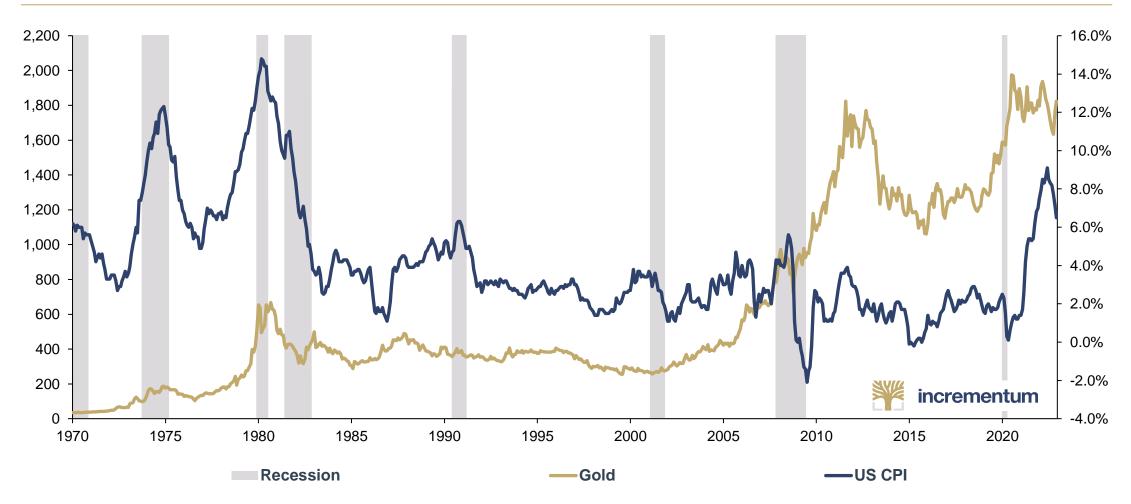


Source: Dr. Torsten Dennin, Reuters Eikon, Incrementum AG





#### Gold (lhs), in USD, and US CPI (rhs), yoy, 01/1970-12/2022





# Gold (lhs), in USD, and Real Federal Funds (Federal Funds - CPI) (rhs, inverted), 01/1970-01/2023

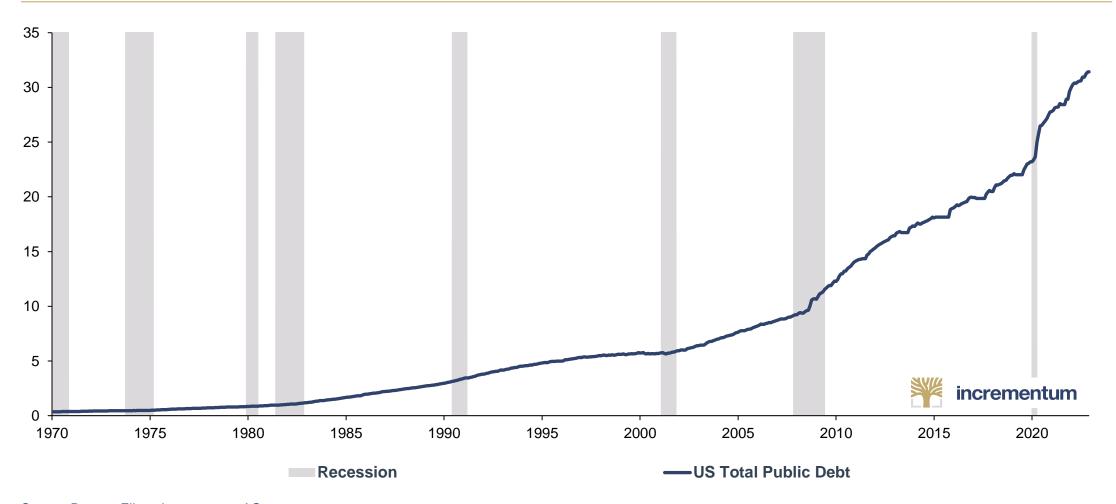








### **US Total Public Debt, in USD trn, 01/1970-12/2022**







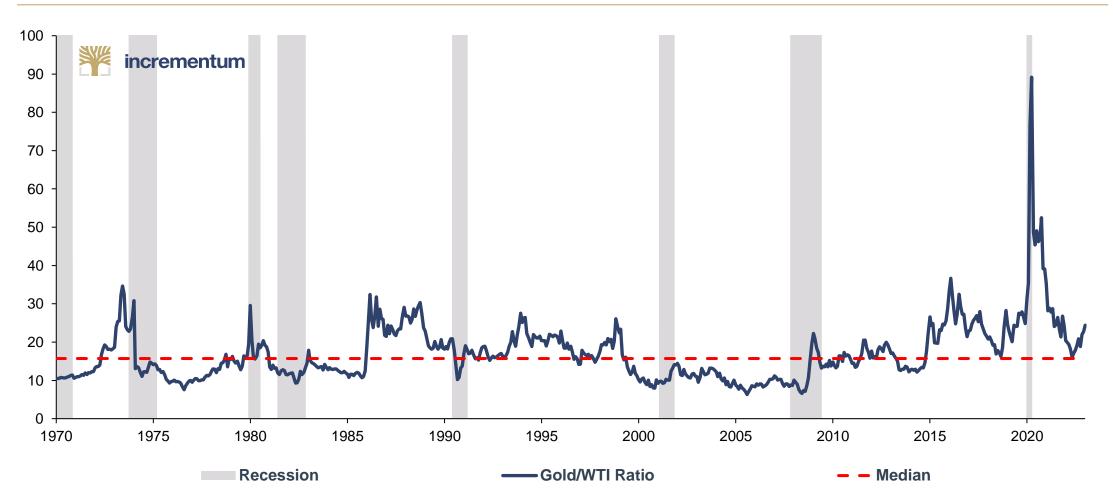
### S&P500/Gold Ratio, 01/1970-01/2023







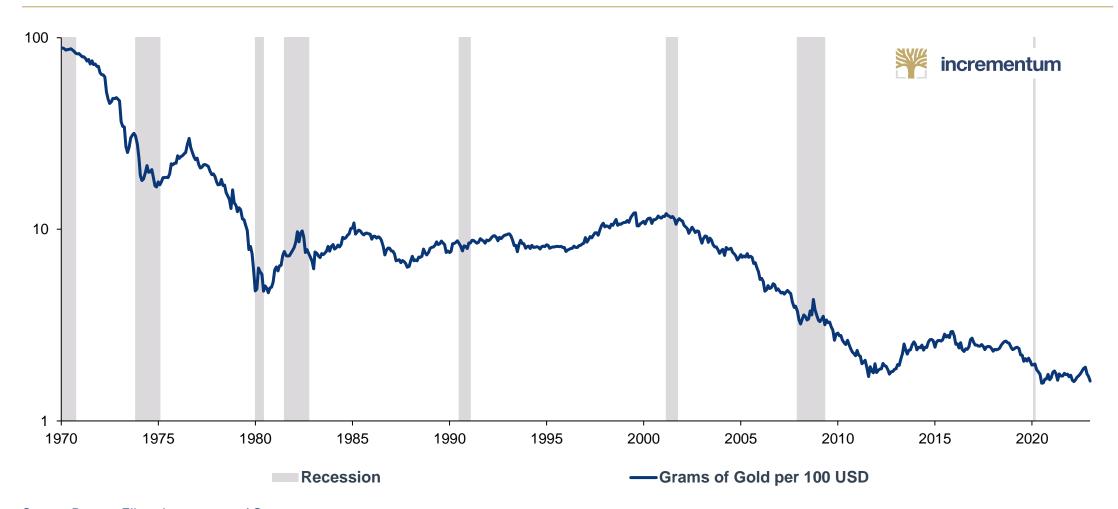
### Gold/WTI Ratio, 01/1970-01/2023







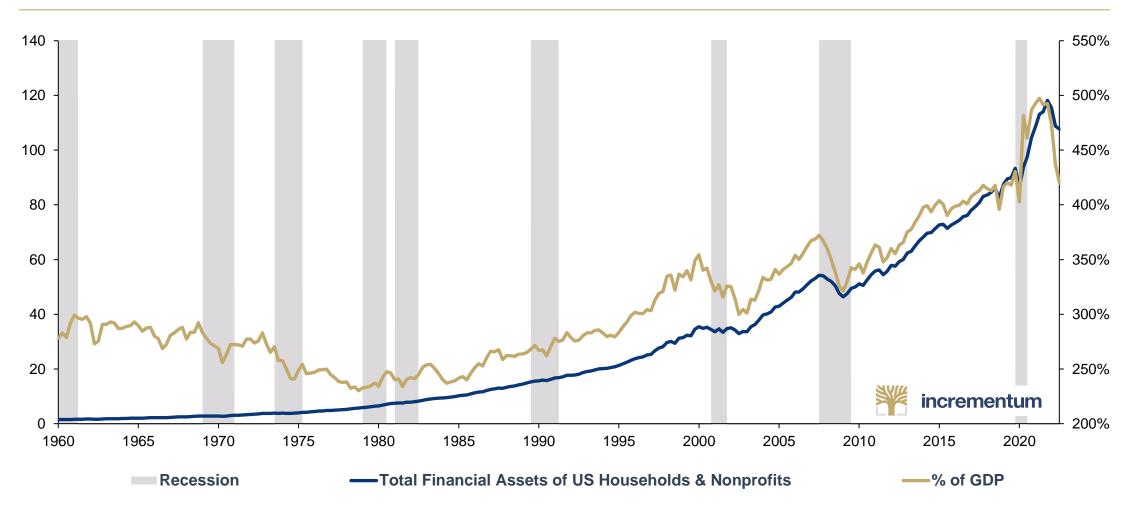
### Grams of Gold per 100 USD (log), 01/1970-01/2023





# Total Financial Assets of US Households & Nonprofits (lhs), in trn, and in % of GDP (rhs), Q1/1960-Q3/2022



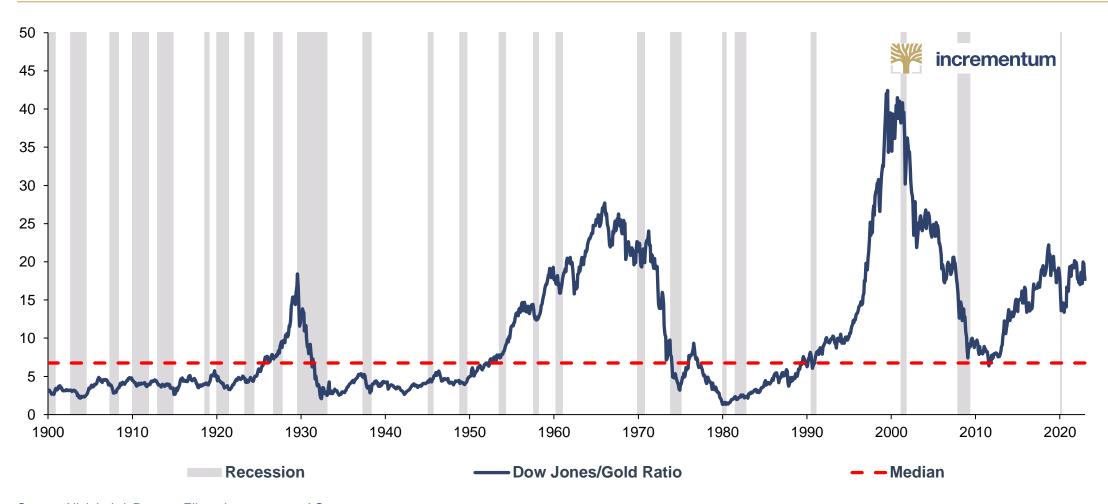


Source: Federal Reserve St. Louis, Incrementum AG





#### Dow Jones/Gold Ratio, 01/1900-01/2023

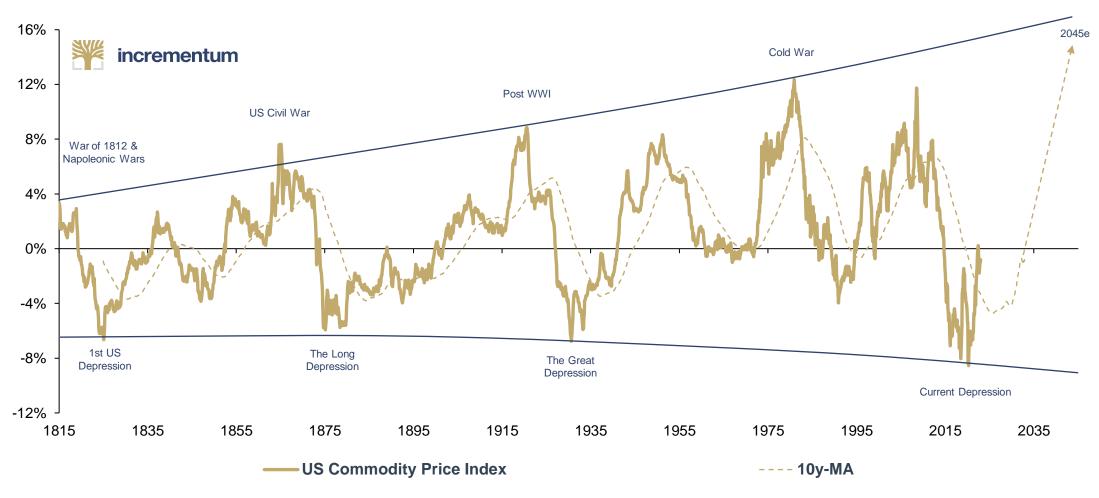


Source: Nick Laird, Reuters Eikon, Incrementum AG





### US Commodity Price Index, 10-year rolling CAGR, 1815-2023



Source: Reuters Eikon, Stifel Report, Incrementum AG





# 6. Proprietary Models

"I believe it would be both risk-reducing and returnenhancing to consider adding gold to one's portfolio."

Ray Dalio



# Inflation Sensitive Assets (lhs), 100 = 01/1997, and Incrementum Inflation Signal (rhs), 01/1997-01/2023

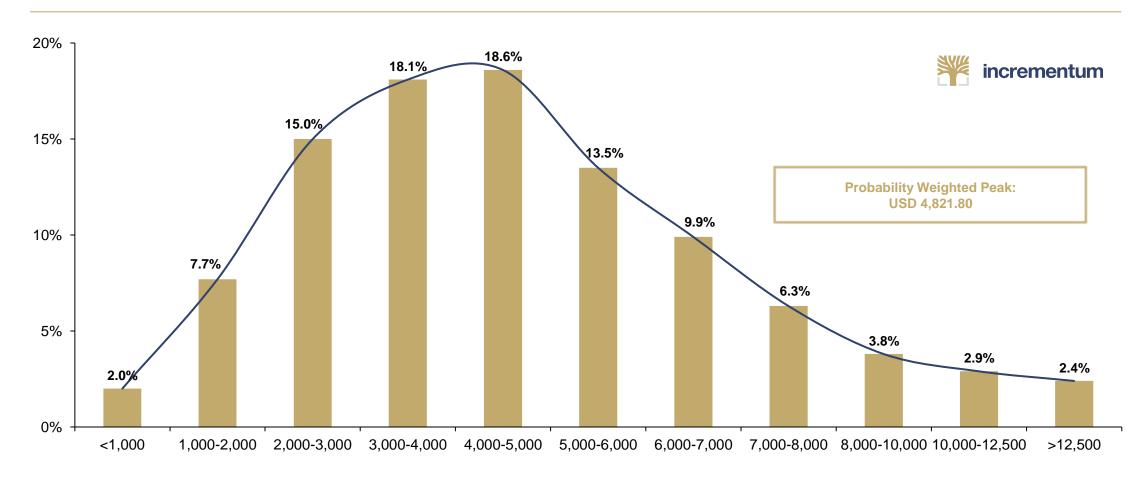








#### **Approximated Gold Price in 2030 by Distribution**



Source: Incrementum AG (For a detailed presentation of our proprietary gold price model, see *In Gold We Trust* Report 2020, p. 348)



# Intermediate Status of the Gold Price Projection until 2030: Gold, and Projected Gold Price, in USD, 01/1970-12/2030









# Addendum

Because we care...

About our Clients.
About Society.
About the Future.



# In Gold We Trust Report 2023



# The *In Gold We Trust* Report 2023 will be published on May 24th!

To subscribe to the *In Gold We Trust* Report, click <u>here</u>.

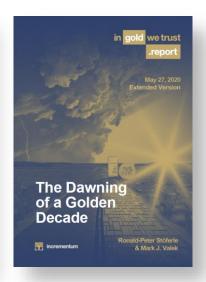


# About the *In Gold We Trust* Report















# **In Our Partners We Trust**















































#### **Agnico Eagle**

Agnico Eagle is a senior Canadian gold mining company with operating mines located in Canada, Australia, Finland and Mexico, and exploration and development activities in these countries as well as in the United States and Colombia.



#### **Asante Gold**

Asante Gold is an emerging gold producer in Ghana, West Africa. We target growth through organic exploration and focused acquisitions. We believe in responsible development and strive to be Ghana's foremost gold producer and employer of choice.



#### **Aurion Resources**

Aurion is a well-funded, Canadian exploration company operating in an emerging gold camp in Finland's Central Lapland Greenstone Belt. The Company's focus is on advancing its Flagship Risti and Launi projects, and JVs with B2Gold and Kinross.



#### **Caledonia Mining**

Caledonia Mining is a profitable, dividend-paying gold miner. It acquired an additional exploration project in late 2021 and continues to evaluate other opportunities with the aim to become a multi-asset, Zimbabwean gold producer.







#### **Dakota Gold**

Dakota Gold (NYSE American: DC) is a South Dakota-based responsible gold exploration and development company with a specific focus on revitalizing the Homestake District of South Dakota.



#### **EMX Royalty**

EMX has shined for nearly 20 years with a track record of smart deals. With more than 300 royalties and holdings, EMX is poised for a revaluation with its diversification into gold, copper, battery metals, strong partners such as Franco Nevada and new cash inflows.



#### **Endeavour Mining**

As a leading global gold producer and largest in West Africa, Endeavour is committed to the principles of responsible mining and delivering sustainable value to all stakeholders. Endeavour is listed on the LSE and TSE under the symbol EDV.



#### **Endeavour Silver**

Endeavour Silver is a mid-tier precious metals mining that owns two underground, silver-gold mines in Mexico, and has a compelling pipeline of exploration and development projects to facilitate its goal to become a senior silver producer.







#### **Hecla Mining**

Hecla Mining Company (NYSE: HL) is the largest primary silver producer in the United States and the fifth largest gold producer in Quebec. Hecla is also the third largest US producer of both zinc and lead.



#### **Gold Switzerland**

MAM is a global leader in the acquisition and storage of gold, providing investors direct personal access to the biggest and safest private gold vault in the world, located in the Swiss Alps. We offer unique and exceptional personal service and advice to our clients.



#### **Minera Alamos**

Minera Alamos is a new gold producer going through the ramp up of its first gold mine with commercial production expected in 2022. Specializing in low capex builds the Minera model remains insulated from inflationary pressures.



#### **Münze Österreich**

Internationally renowned for its precious metal processing, Münze Österreich AG produces Austria's circulation coins, Vienna Philharmonic bullion coins in gold, platinum and silver, and gold bars.







#### **New Zealand Bullion Depository**

Our mission is to provide the best in gold bullion storage, with unparalleled service and discretion. Your gold is allocated, segregated and secured in our purpose-built world class New Zealand facility, giving you secure peace of mind.



#### philoro Edelmetalle

philoro is one of the market leaders in Europe in the field of precious metals trading and your reliable partner for investments in gold and silver, platinum and palladium.



#### **Reyna Gold**

Reyna Gold is focused on district-scale exploration on the major gold belts in Mexico, with a property portfolio of over 57,000 hectares, a world class exploration team and proven management team.



#### **Solit Management**

As a leading precious metal trading company, the SOLIT Group offers precious metal savings plans, safe storage concepts and asset-based investment funds focusing on gold and silver.







#### **Sprott Asset Management**

Sprott Inc. is a global asset manager providing investors with access to highly-differentiated precious metals and real assets investment strategies.



#### **TUDOR GOLD**

TUDOR GOLD Corp. is an Exploration company in the Golden Triangle region in B.C., Canada, which is advancing the Treaty Creek project that hosts a resource of 19.4 MOz AuEq (M+I) plus 7.9 MOz AuEq (Inferred)



#### **Victoria Gold**

Victoria Gold (VGCX) is Leading Yukon's New Gold Rush. The Eagle Gold Mine in central Yukon, Canada is increasing production rate to 250K oz/Au in 2023. 2022 Exploration Program at nearby Raven target starts.



#### **Ximen Mining**

Ximen Mining (TSX.V XIM) is focused on responsible development, sustainable mining and exploration of its precious metals properties in southern BC, Canada, as it advances its Kenville Gold mine.





# Subscribe to Our Newsletters and Download the In Gold We Trust Report 2022!

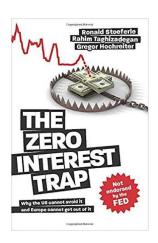






# **Discover Our Whole Universe of Publications**





# In Gold We Trust Nuggets

The individual chapters of the *In*Gold We Trust report – the socalled nuggets – are ideal

"snacks" for in between.

→ View Nuggets Overview

# Report

Since 2007, the annual *In Gold*We Trust report is THE

authoritative report on gold
investing, and is required
reading for anyone interested in
the precious metal market.

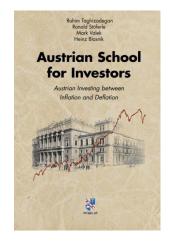
- **★** Extended Version
- ♣ Compact Version

Learn more

# In Gold We Trust Classics

We are proud to present a selection of the best articles published in *In Gold We Trust* reports since 2007.

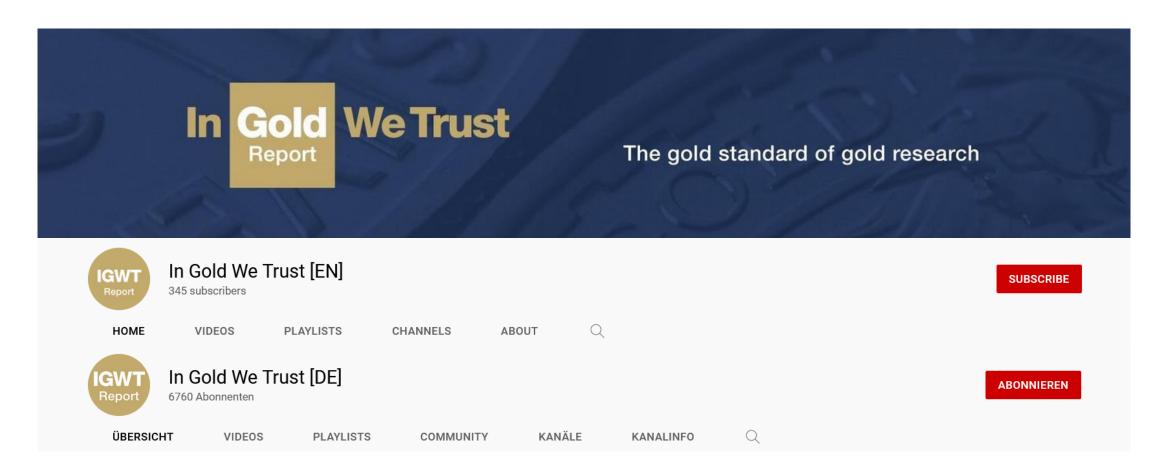
→ View Classics Overview





# **Subscribe to Our YouTube Channels**







# **Glossary**



- **bn**: billion
- **BoJ**: Bank of Japan
- **bps**: basis points
- CAGR: Compound Annual Growth Rate
- Case-Shiller US National HPI: Case-Shiller
   United States National Home Price Index
- CFTC: Commodity Futures Trading Commission
- COMEX: New York Commodities Exchange
- Core CPI: Core Consumer Price Index (Excluding Food and Energy)
- Core PCE: Personal Consumption
   Expenditures (Excluding Food and Energy)
- Core PPI: Core Producer Price Index (Excluding Food and Energy)
- **CPI**: Consumer Price Index
- CRB TR: Thomson Reuters/Corecommodity
   CRB Total Return Index
- DEU 10Y: German 10 Year Bond

- **DXY**: US Dollar Index
- **ECB**: European Central Bank
- Fed: Federal Reserve
- GDM: NYSE Arca Gold Miners Index
- GDX: VanEck Gold Miners ETF
- GDXJ: VanEck Junior Gold Miners ETF
- GOEX: Global X Gold Explorers ETF
- HICP: Harmonised Index of Consumer Prices
- HUI: NYSE Arca Gold BUGS Index
- JPN 10Y: Japanese 10 Year Bond
- M2: M2 Money Supply
- MA: Moving Average
- PBoC: People's Bank of China
- PCE: Personal Consumption Expenditures
- PPI: Producer Price Index
- S&P GSCI: Standard & Poor's Goldman Sachs Commodity Index
- SIL: Global X Silver Miners ETF

- SILJ: ETFMG Prime Junior Silver Miners ETF
- TED Spread: Treasury Bill Eurodollar
   Difference (USD London Interbank Offered
   Rate 3 Month United States 3 Month
   Bond)
- TR: Total Return
- **trn**: trillion
- UST 2Y: United States 2 Year Bond
- UST 10Y: United States 10 Year Bond
- VIX: CBOE Volatility Index
- WTI: West Texas Intermediate (Crude Oil)
- yoy: year on year
- YTD: Year to Date



# About the *In Gold We Trust* Report

IGWT Report

The annually published *In Gold We Trust* report has been authored by Ronald-Peter Stöferle **since 2007**, this year for the eighth time together with Mark Valek and under the umbrella of Incrementum AG.

It provides a **holistic assessment of the gold sector** and the most important influencing factors, such as real interest rate development, debt, inflation, etc.



Mark Valek & Ronald Peter Stöferle



# **About the Authors**

#### Ronald-Peter Stöferle, CMT

- Ronni is managing partner of Incrementum AG and responsible for research and portfolio management.
- In 2007 he published his first *In Gold We Trust* report. Over the years, the study has become one of the benchmark publications on gold, money, and inflation.
- Advisor for Tudor Gold Corp. (TUD), a significant explorer in British Columbia's Golden Triangle.
- Advisor for Gold Switzerland / Matterhorn Asset Management.





Ronald-Peter Stöferle, CMT



# **About the Authors**

#### Mark Valek

- Mark is a partner of Incrementum AG and responsible for portfolio management and research.
- Prior to Incrementum, he was with Merrill Lynch and then for 10 years with Raiffeisen Capital Management, most recently as fund manager in the area of inflation protection.
- He gained entrepreneurial experience as cofounder of philoro Edelmetalle GmbH.





Mark J. Valek, CAIA



# **About Incrementum**

IGWT Report

**Incrementum AG** is an owner-managed and fully licensed asset manager & wealth manager based in the Principality of Liechtenstein.

Independence is the cornerstone of our philosophy. The partners own 100% of the company.

Our goal is to offer solid and innovative investment solutions that do justice to the opportunities and risks of today's complex and fragile environment.





# Join Us on Our Golden Journey!





#### Research

In addition to the In *Gold We Trust*Report – the gold standard of gold reports

– we regularly publish relevant studies,

reports and chartbooks on the

investment topics of gold, crypto and
funds.



**SUBSCRIBE NOW** 













#### **Our Funds**

It is our goal to offer investment products for these times of excessive structural debt and negative real interest rates that meet the requirements of the new investment paradigm.



**DISCOVER FUNDS** 

**Recent Awards** 























## **Incrementum AG**

Im alten Riet 102 9494 – Schaan/Liechtenstein ingoldwetrust@incrementum.li

> www.incrementum.li ingoldwetrust.report



## Disclaimer



This publication is for information purposes only. It represents neither investment advice nor an investment analysis or an invitation to buy or sell financial instruments. Specifically, the document does not serve as a substitute for individual-investment or other advice. The statements contained in this publication are based on knowledge as of the time of preparation and are subject to change at any time without further notice.

The authors have exercised the greatest possible care in the selection of the information sources employed. However, they do not accept any responsibility (and neither does Incrementum AG) for the correctness, completeness, or timeliness of the information as well as any liabilities or damages, irrespective of their nature, that may result therefrom (including consequential or indirect damages, loss of prospective profits, or the accuracy of prepared forecasts).

Copyright: 2023 Incrementum AG. All rights reserved.

