

# Monthly Gold Compass

November 2023

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















































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### 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%	2.0%	11.3%	-1.9%	-5.4%	5.8%	-4.2%	1.4%	0.6%
2001	2.4%	8.3%	5.3%	11.4%	8.8%	2.4%	18.0%	5.5%	5.8%	7.6%
2002	24.4%	5.6%	12.2%	13.3%	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%	-1.9%	-1.7%	1.5%	-2.0%	5.6%	0.8%	-3.1%	0.1%	0.5%
2005	18.1%	35.1%	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%	18.5%	29.2%	18.0%	12.0%	22.5%	22.5%	21.8%	16.9%	21.4%
2008	5.4%	10.0%	43.1%	30.5%	28.7%	-1.5%	-14.2%	-0.8%	30.0%	14.6%
2009	24.8%	21.8%	12.9%	-1.6%	7.9%	24.8%	27.9%	21.1%	19.2%	17.6%
2010	29.5%	38.6%	34.2%	13.6%	22.8%	25.1%	13.2%	16.8%	24.8%	24.3%
2011	10.2%	13.9%	10.6%	10.3%	12.7%	5.2%	4.5%	10.7%	30.7%	12.1%
2012	7.1%	5.0%	2.5%	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%	7.3%	7.5%	0.7%	11.6%	9.4%	0.2%	5.6%
2015	-10.4%	-0.1%	-5.3%	0.6%	6.8%	-6.2%	-9.9%	-9.7%	-5.9%	-4.5%
2016	8.5%	12.1%	29.6%	9.6%	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%	8.9%	6.8%	4.1%	-4.2%	-0.8%	7.3%	3.1%
2019	18.3%	21.0%	13.7%	18.8%	12.6%	19.7%	17.2%	16.6%	21.3%	17.7%
2020	25.0%	14.8%	21.3%	14.1%	22.6%	17.2%	18.8%	14.3%	28.0%	19.6%
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	6.8%	6.8%	5.1%	13.6%	8.7%	12.8%	23.0%	3.9%	7.5%	9.8%
CAGR	8.4%	8.1%	9.6%	8.5%	8.1%	7.8%	10.1%	5.8%	11.4%	8.6%

Source: Reuters Eikon (as of 10/31/2023), Incrementum AG



# Annualized Performance of Gold, in USD, if Bought on the Last Day of the Month and Held until 10/31/2023 (Holding Period ≥ 1 Year)



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2000	8.54%	8.43%	8.68%	8.80%	8.85%	8.59%	8.83%	8.86%	8.95%	9.15%	9.09%	9.09%
2001	9.24%	9.25%	9.46%	9.38%	9.38%	9.33%	9.44%	9.34%	9.05%	9.32%	9.45%	9.40%
2002	9.38%	9.16%	9.10%	9.05%	8.79%	9.02%	9.24%	9.12%	8.98%	9.11%	9.13%	8.73%
2003	8.45%	8.76%	8.99%	8.99%	8.65%	8.96%	8.87%	8.61%	8.50%	8.55%	8.40%	8.21%
2004	8.41%	8.53%	8.17%	8.74%	8.66%	8.72%	8.80%	8.58%	8.50%	8.40%	8.15%	8.35%
2005	8.60%	8.46%	8.60%	8.55%	8.83%	8.63%	8.74%	8.71%	8.30%	8.39%	8.07%	7.83%
2006	7.29%	7.40%	7.21%	6.54%	6.68%	7.01%	6.83%	6.94%	7.27%	7.22%	6.84%	6.98%
2007	6.86%	6.73%	6.83%	6.72%	6.93%	7.08%	6.97%	6.92%	6.29%	5.87%	6.02%	5.63%
2008	4.96%	4.65%	5.09%	5.46%	5.36%	5.10%	5.22%	5.91%	5.61%	6.96%	6.14%	5.64%
2009	5.29%	5.19%	5.43%	5.72%	5.02%	5.46%	5.27%	5.33%	4.93%	4.69%	3.81%	4.38%
2010	4.51%	4.29%	4.34%	3.93%	3.71%	3.57%	3.99%	3.59%	3.23%	2.95%	2.82%	2.64%
2011	3.17%	2.72%	2.63%	1.92%	2.09%	2.29%	1.63%	0.69%	1.67%	1.22%	1.08%	2.03%
2012	1.12%	1.35%	1.50%	1.54%	2.13%	1.92%	1.85%	1.44%	1.03%	1.30%	1.34%	1.57%
2013	1.65%	2.15%	2.07%	2.85%	3.49%	4.70%	4.03%	3.51%	4.06%	4.13%	4.75%	5.20%
2014	4.90%	4.25%	4.64%	4.62%	5.01%	4.39%	4.83%	4.83%	5.60%	6.00%	6.12%	6.01%
2015	5.10%	5.84%	6.20%	6.25%	6.26%	6.51%	7.46%	7.08%	7.39%	7.14%	8.18%	8.31%
2016	7.68%	6.34%	6.48%	5.86%	6.83%	5.69%	5.44%	5.97%	5.96%	6.48%	7.89%	8.28%
2017	7.58%	7.18%	7.28%	7.12%	7.21%	7.68%	7.40%	6.80%	7.47%	7.69%	7.76%	7.47%
2018	6.99%	7.48%	7.50%	7.75%	8.14%	9.00%	9.63%	10.19%	10.53%	10.31%	10.35%	9.43%
2019	8.93%	9.24%	9.80%	10.15%	9.93%	8.20%	8.29%	6.59%	7.57%	6.99%	8.05%	7.23%
2020	6.07%	6.30%	6.71%	4.85%	4.14%	3.28%	0.12%	0.21%	1.64%	1.83%	3.83%	1.58%
2021	2.63%	5.17%	5.97%	4.68%	1.64%	4.99%	4.04%	4.20%	5.98%	5.46%	5.98%	4.52%
2022	5.80%	2.33%	1.48%	3.01%	5.53%	7.21%	9.74%	13.48%	17.84%	21.41%		





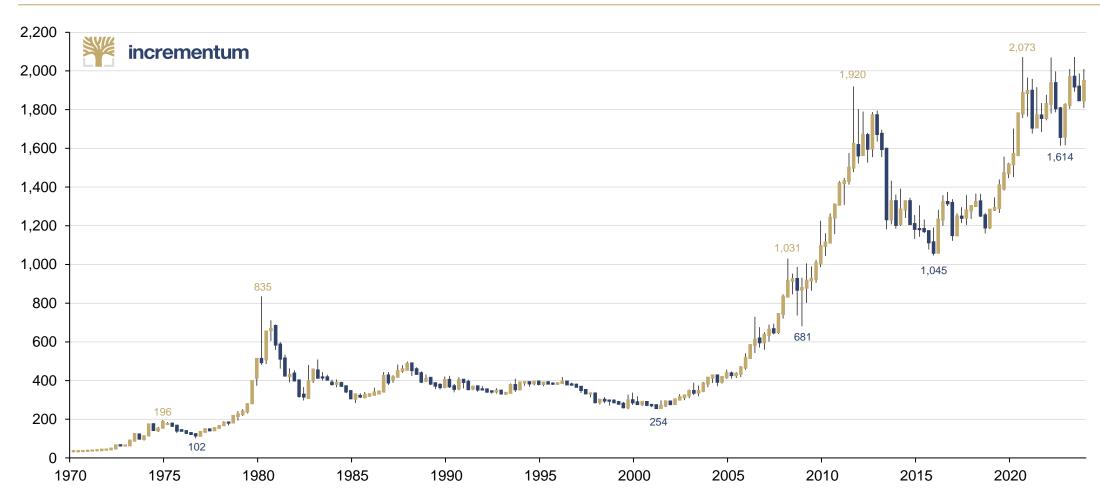
#### **Correlation Table for Gold, 10/31/2023**

		DXY	GDX	S&P 500	VIX	CRB TR	WTI	Copper	Bitcoin
	15D	-0.01	0.75	-0.46	0.82	0.78	0.82	-0.08	-0.36
ys	30D	-0.15	0.75	-0.14	0.32	0.62	0.56	0.16	-0.17
Day	60D	-0.23	0.73	0.01	0.22	0.49	0.42	0.21	-0.03
ng	90D	-0.37	0.75	0.11	0.05	0.48	0.38	0.32	0.00
Trading	120D	-0.44	0.75	0.07	-0.04	0.40	0.28	0.34	0.04
Ë	150D	-0.47	0.76	-0.04	0.06	0.24	0.16	0.22	0.06
	180D	-0.51	0.78	-0.12	0.19	0.16	0.08	0.22	0.17
	52 Week High	-0.11	0.91	0.64	0.62	0.68	0.56	0.79	0.66
	Date	10/30/2023	03/07/2023	12/15/2022	04/19/2023	11/04/2022	10/31/2023	12/08/2022	11/07/2022
Day	52 Week Low	-0.84	0.68	-0.54	-0.61	-0.27	-0.36	-0.20	-0.25
30 [	Date	12/22/2022	07/11/2023	04/19/2023	11/03/2022	05/05/2023	06/13/2023	05/09/2023	10/11/2023
•	% Time (+)	0%	100%	69%	33%	76%	65%	93%	85%
	% Time (-)	100%	0%	31%	67%	24%	35%	7%	15%
	52 Week High	-0.35	0.89	0.60	0.36	0.50	0.39	0.63	0.37
	Date	10/30/2023	11/10/2022	11/30/2022	05/17/2023	12/29/2022	10/23/2023	12/28/2022	12/21/2022
)ay	52 Week Low	-0.76	0.73	-0.36	-0.50	-0.05	-0.12	0.06	-0.04
90Бау	Date	03/14/2023	10/26/2023	07/17/2023	01/12/2023	05/09/2023	06/14/2023	05/09/2023	10/24/2023
	% Time (+)	0%	100%	68%	37%	84%	66%	100%	96%
	% Time (-)	100%	0%	32%	63%	16%	34%	0%	4%





#### Gold, in USD, 01/1970-10/2023







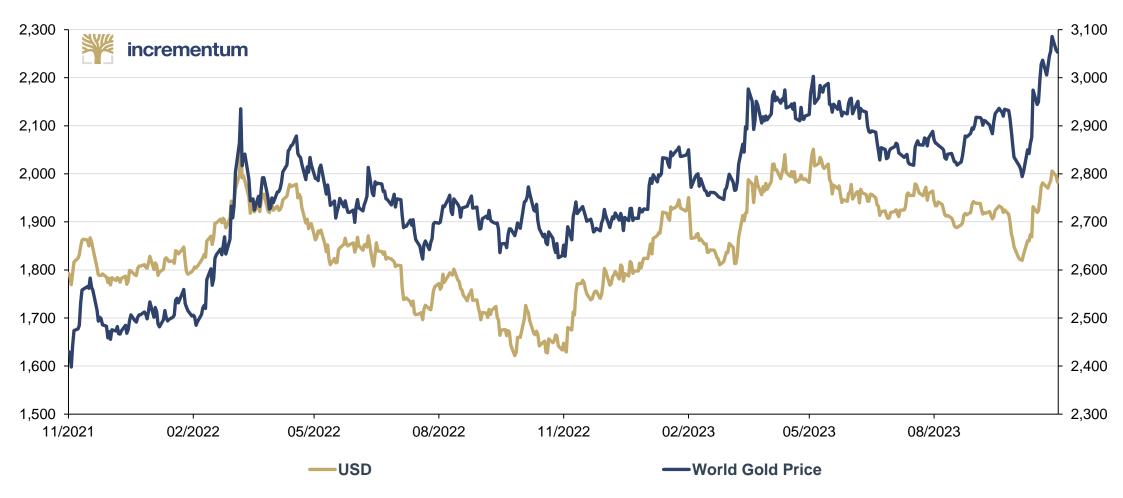
#### Gold in USD, and EUR, 11/2021-10/2023







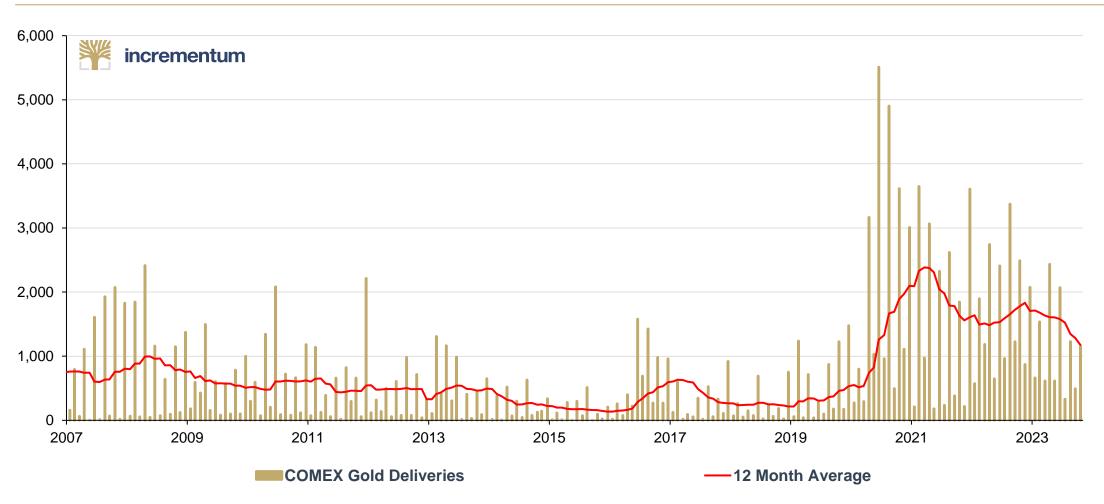
#### Gold in USD (lhs), and World Gold Price (rhs), 11/2021-10/2023







#### **COMEX Gold Deliveries, in Thousands of Troy Ounces, 01/2007-10/2023**



Source: Nick Laird, Reuters Eikon, Incrementum AG



# Gold (Nominal), and Gold (US CPI Adjusted – September 2023), in USD, 01/1970-09/2023

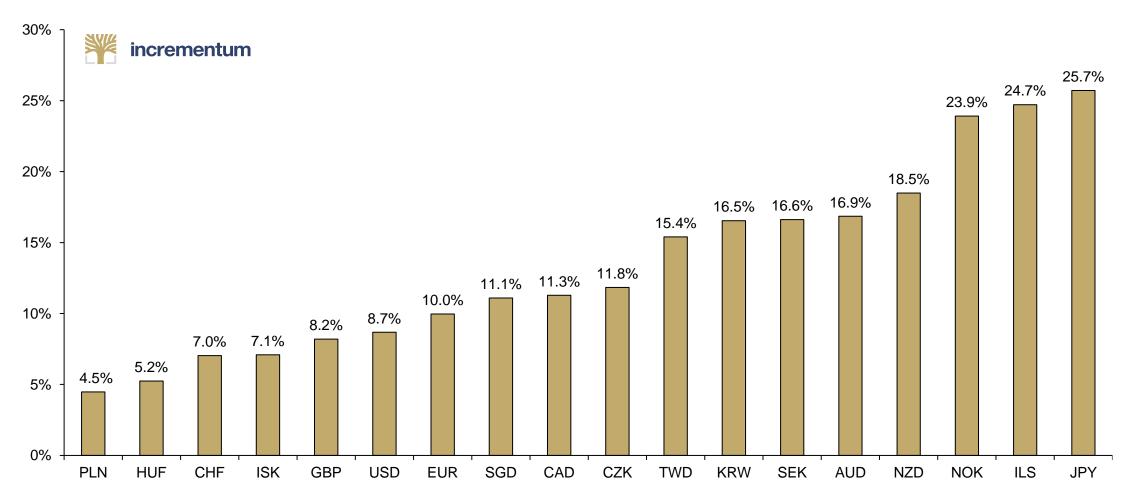








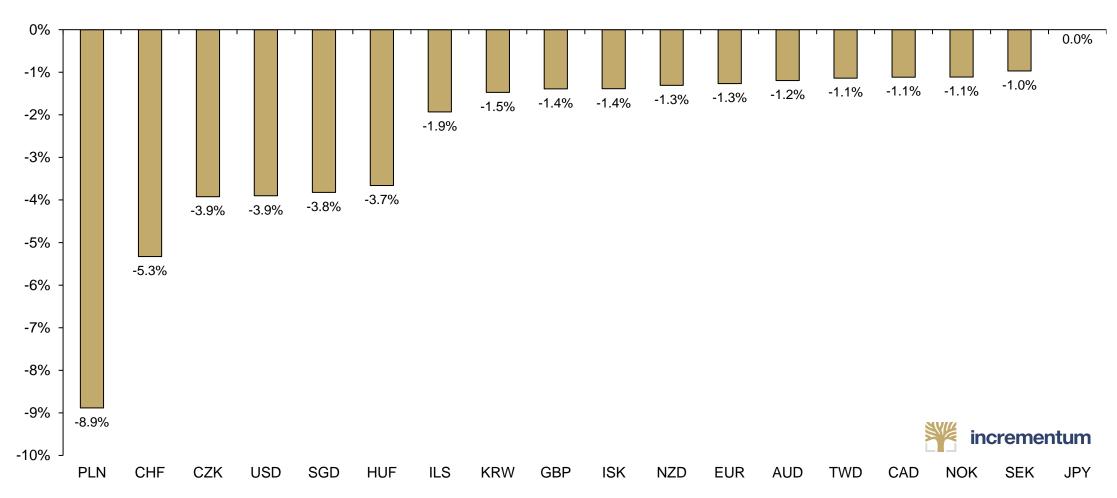
#### Gold in Various Developed Market Currencies, 2023 YTD







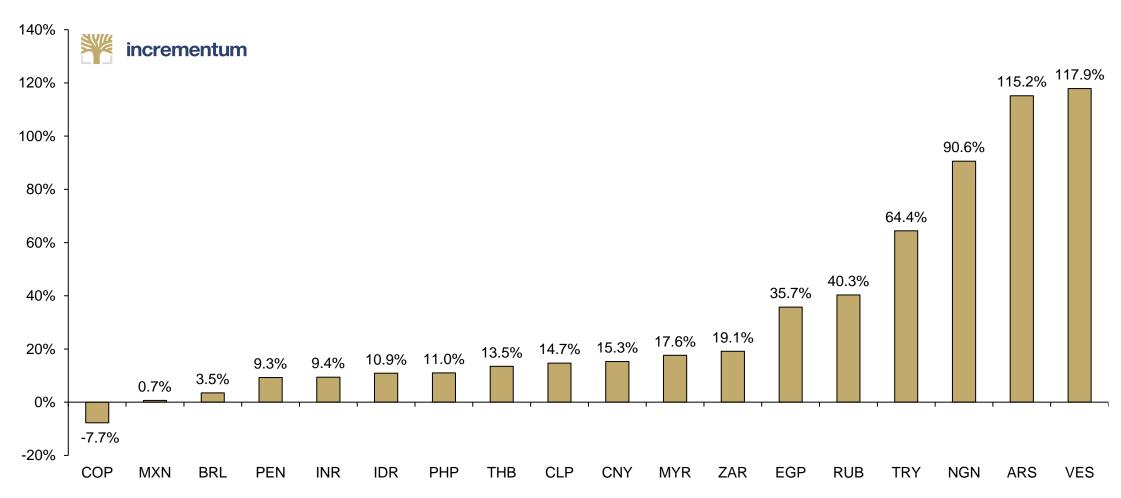
#### Gold in Various Developed Market Currencies below All-Time High







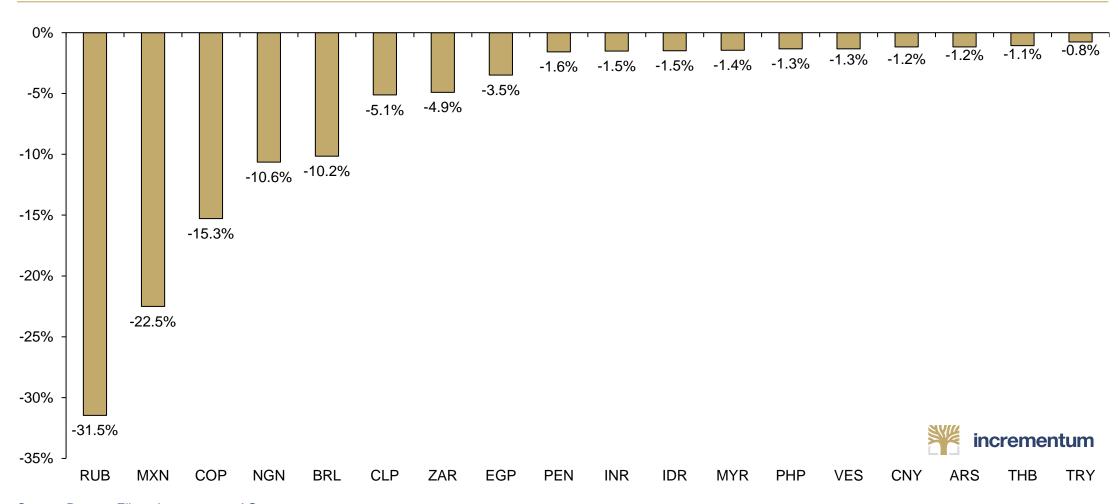
#### Gold in Various Emerging Market Currencies, 2023 YTD







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

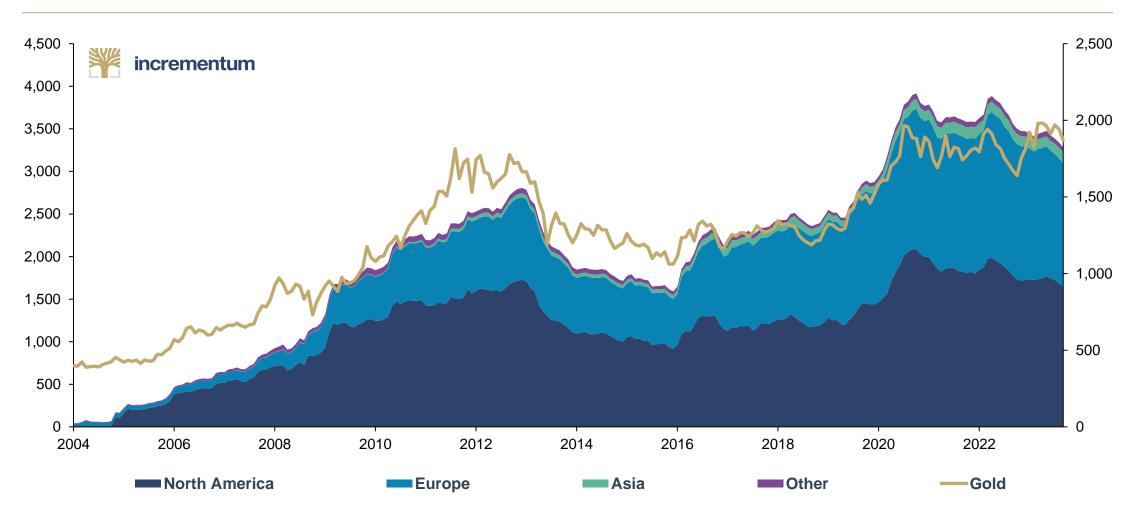






# Monthly Gold ETF Flows by Region (lhs), in Tonnes, and Gold (rhs), in USD, 01/2004-09/2023



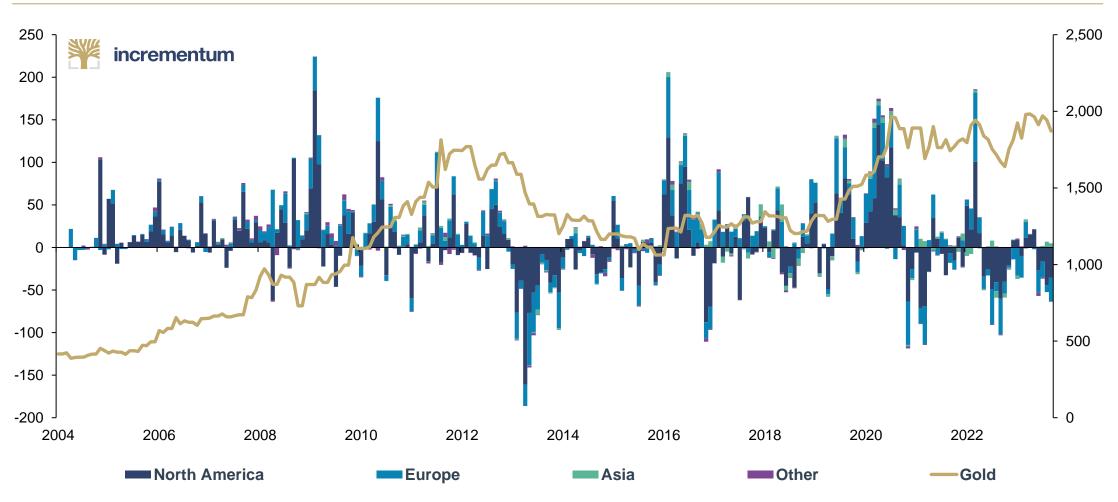


Source: World Gold Council, Incrementum AG



# Monthly Gold ETF Flows by Region (lhs), in Tonnes, and Gold (rhs), in USD, 01/2004-09/2023



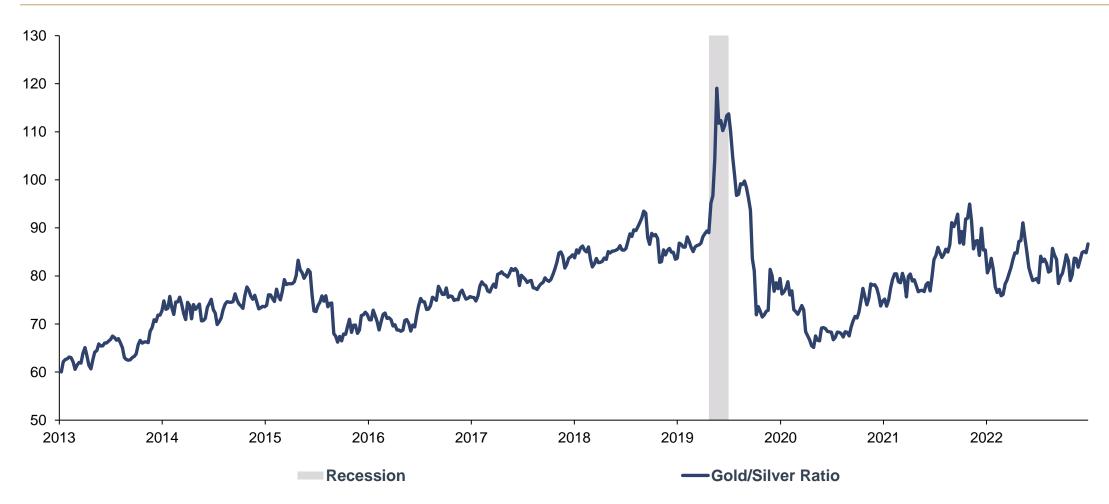


Source: World Gold Council, Incrementum AG





#### Gold/Silver Ratio, 11/2013-10/2023







### 2. Silver

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

**Rich Ross** 





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

	HIGD	EUR	GBP	ALID	CAD	CNY	JPY	CHF	INR	Averege
Year 2000	USD -15.0%	-9.1%		AUD			-5.0%		-8.9%	Average
			-8.4%	0.0%	-11.9%	-15.0%		-13.9%		-9.7%
2001	0.4%	6.2%	3.3%	9.2%	6.7%	0.4%	15.7%	3.5%	3.8%	5.5%
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%	12.5%	-7.0%	2.7%	24.6%	12.6%	11.9%	18.6%	11.6%
2004	14.5%	6.3%	6.6%	10.0%	6.2%	14.5%	9.3%	5.1%	8.6%	9.0%
2005	29.7%	48.5%	44.6%	38.4%	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%	-20.2%	3.9%	-5.3%	-6.6%	-28.5%	-37.7%	-28.0%	-5.6%	-16.8%
2009	48.9%	45.4%	34.7%	17.5%	28.8%	49.0%	52.7%	44.6%	42.3%	40.4%
2010	83.4%	96.2%	89.9%	60.8%	73.8%	77.0%	60.2%	65.3%	76.6%	75.9%
2011	-10.3%	-7.2%	-9.9%	-10.2%	-8.2%	-14.3%	-14.9%	-9.9%	6.4%	-8.7%
2012	9.5%	7.3%	4.8%	7.6%	6.5%	8.4%	23.4%	6.9%	13.6%	9.8%
2013	-36.0%	-38.5%	-37.2%	-25.4%	-31.4%	-37.8%	-22.3%	-37.5%	-28.0%	-32.7%
2014	-19.3%	-8.3%	-14.2%	-11.9%	-11.7%	-17.3%	-8.3%	-10.2%	-17.7%	-13.2%
2015	-11.7%	-1.6%	-6.7%	-0.9%	5.2%	-7.6%	-11.2%	-11.0%	-7.2%	-5.9%
2016	15.2%	19.0%	37.6%	16.3%	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%	-4.4%	-3.2%	1.0%	-1.0%	-3.5%	-11.2%	-8.0%	-0.5%	-4.4%
2019	15.2%	17.8%	10.8%	15.7%	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%	-6.5%	-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	-6.3%	-6.3%	-7.8%	-0.3%	-4.6%	-1.1%	7.9%	-8.8%	-5.7%	-3.7%
CAGR	6.2%	5.9%	7.4%	6.3%	6.0%	5.6%	7.9%	3.7%	9.1%	6.4%

Source: Reuters Eikon (as of 10/31/2023), Incrementum AG



# Annualized Performance of Silver, in USD, if Bought on the Last Day of the Month and Held until 10/31/2023 (Holding Period ≥ 1 Year)



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2000	6.41%	6.59%	6.67%	6.73%	6.80%	6.72%	6.78%	6.83%	6.95%	7.10%	7.17%	7.29%
2001	7.13%	7.47%	7.70%	7.68%	7.65%	7.78%	7.89%	7.97%	7.51%	8.00%	8.09%	7.62%
2002	8.07%	7.80%	7.69%	7.83%	7.36%	7.58%	7.86%	8.05%	8.00%	8.06%	8.17%	7.83%
2003	7.79%	8.09%	8.27%	8.10%	8.27%	8.27%	7.67%	7.74%	7.75%	7.86%	7.58%	7.05%
2004	6.82%	6.46%	5.58%	7.09%	7.01%	7.34%	6.74%	6.59%	6.50%	6.23%	5.95%	6.67%
2005	6.76%	6.31%	6.47%	6.71%	6.33%	6.65%	6.53%	6.89%	6.41%	6.38%	5.87%	5.50%
2006	4.89%	4.95%	4.00%	2.99%	3.54%	4.34%	4.19%	3.41%	4.17%	3.75%	2.98%	3.48%
2007	3.21%	2.94%	3.30%	3.31%	3.31%	3.83%	3.63%	4.06%	3.22%	2.91%	3.15%	2.81%
2008	1.96%	0.94%	1.85%	2.01%	2.02%	1.82%	1.71%	3.51%	4.37%	5.81%	5.54%	4.88%
2009	4.12%	3.89%	4.00%	4.36%	2.63%	3.72%	3.57%	3.09%	2.32%	2.47%	1.58%	2.25%
2010	2.57%	2.45%	2.02%	1.56%	1.59%	1.59%	1.85%	1.30%	0.41%	-0.58%	-1.56%	-2.30%
2011	-1.57%	-3.02%	-3.86%	-5.74%	-4.09%	-3.30%	-4.42%	-4.76%	-2.18%	-3.28%	-2.97%	-1.59%
2012	-3.09%	-3.47%	-2.90%	-2.59%	-1.64%	-1.58%	-1.74%	-2.87%	-3.62%	-3.05%	-3.40%	-2.55%
2013	-2.90%	-2.03%	-1.99%	-0.56%	0.29%	1.51%	1.43%	-0.24%	0.56%	0.47%	1.40%	1.70%
2014	1.88%	0.81%	1.58%	1.92%	2.19%	0.95%	1.28%	1.81%	3.37%	3.96%	4.54%	4.40%
2015	3.31%	3.78%	3.80%	4.22%	3.83%	4.60%	5.46%	5.67%	5.81%	4.98%	6.33%	6.65%
2016	6.30%	5.78%	5.36%	3.40%	4.97%	2.81%	1.67%	2.94%	2.56%	3.61%	4.87%	5.45%
2017	4.04%	3.42%	3.53%	4.51%	4.48%	5.24%	5.09%	4.39%	5.43%	5.41%	5.78%	5.30%
2018	4.99%	6.06%	6.26%	6.37%	6.42%	6.85%	7.70%	9.25%	9.26%	10.00%	10.25%	8.44%
2019	7.75%	8.57%	9.46%	9.96%	10.78%	9.74%	8.40%	5.46%	7.58%	6.02%	7.87%	6.75%
2020	6.58%	9.06%	14.79%	12.81%	7.58%	7.26%	-1.90%	-6.38%	-0.44%	-1.04%	0.45%	-4.84%
2021	-5.82%	-5.49%	-2.41%	-4.80%	-8.05%	-5.46%	-4.60%	-1.92%	1.50%	-2.01%	0.23%	-0.87%
2022	1.18%	-3.78%	-4.84%	0.47%	4.43%	9.68%	10.03%	23.10%	18.81%	19.64%		





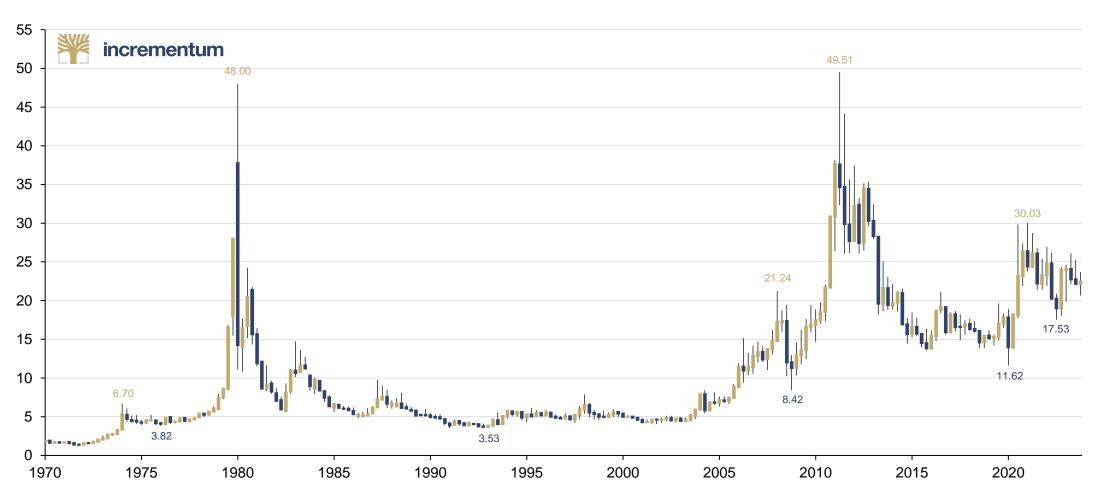
#### **Correlation Table for Silver, 10/31/2023**

		DXY	SIL	S&P 500	VIX	CRB TR	WTI	Copper	Bitcoin
	15D	-0.19	0.89	-0.16	0.59	0.50	0.63	-0.20	-0.32
ays	30D	-0.37	0.79	-0.01	0.26	0.46	0.43	0.25	-0.17
Day	60D	-0.45	0.71	0.15	0.17	0.31	0.22	0.32	-0.01
ng	90D	-0.56	0.75	0.25	-0.05	0.33	0.21	0.43	0.02
Trading	120D	-0.54	0.77	0.22	-0.09	0.34	0.20	0.42	0.00
Ë	150D	-0.53	0.76	0.16	-0.04	0.26	0.15	0.36	0.04
	180D	-0.57	0.78	0.08	0.04	0.23	0.11	0.23	0.19
	52 Week High	-0.33	0.91	0.63	0.40	0.56	0.49	0.67	0.64
	Date	10/27/2023	11/23/2022	01/06/2023	04/19/2023	11/01/2022	11/01/2022	09/06/2023	04/24/2023
Day	52 Week Low	-0.81	0.55	-0.43	-0.63	-0.12	-0.40	-0.21	-0.36
30 [	Date	12/29/2022	09/22/2023	04/21/2023	11/03/2022	05/08/2023	09/28/2023	04/21/2023	07/12/2023
( )	% Time (+)	0%	100%	74%	41%	93%	78%	88%	81%
	% Time (-)	100%	0%	26%	59%	7%	22%	12%	19%
	52 Week High	-0.49	0.84	0.57	0.19	0.48	0.38	0.60	0.42
	Date	10/23/2023	03/16/2023	12/19/2022	05/10/2023	01/19/2023	01/19/2023	12/16/2022	05/25/2023
)ay	52 Week Low	-0.71	0.71	-0.09	-0.48	0.11	0.01	0.07	-0.09
90Бау	Date	03/28/2023	09/29/2023	07/17/2023	12/21/2022	05/09/2023	09/27/2023	06/16/2023	10/25/2023
	% Time (+)	0%	100%	81%	27%	100%	100%	100%	90%
	% Time (-)	100%	0%	19%	73%	0%	0%	0%	10%





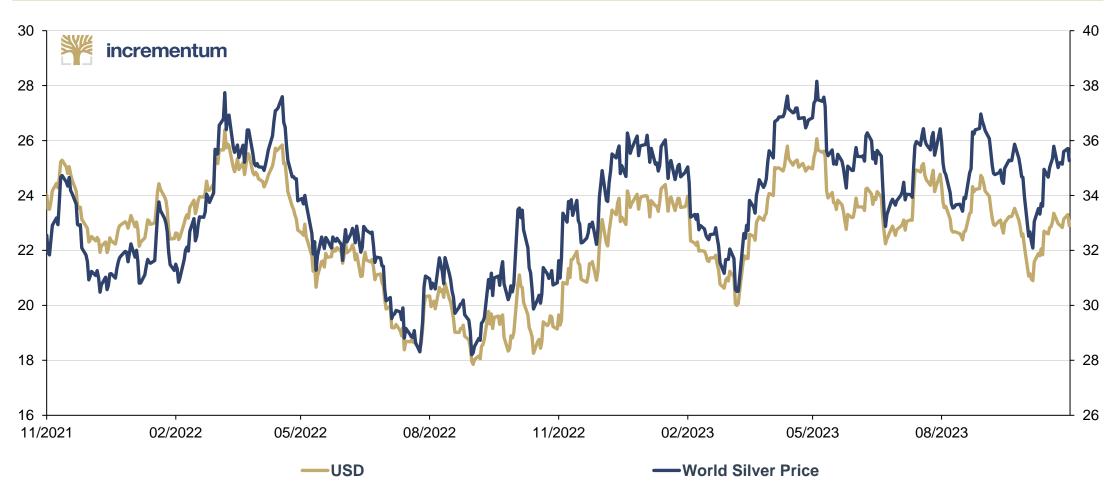
#### Silver, in USD, 01/1970-10/2023







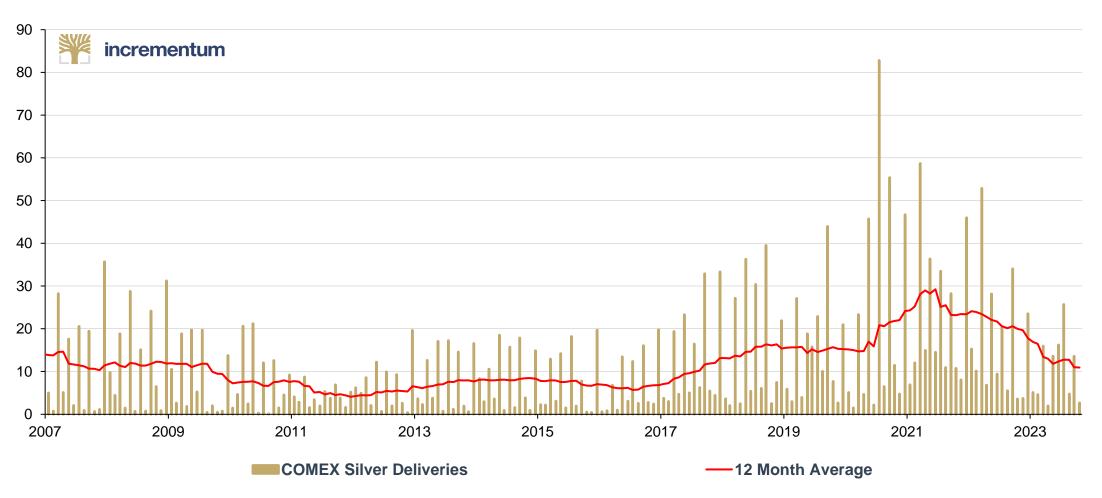
#### Silver in USD (lhs), and World Silver Price (rhs), 11/2021-10/2023







#### **COMEX Silver Deliveries, in Millions of Troy Ounces, 01/2007-10/2023**



Source: Nick Laird, Reuters Eikon, Incrementum AG



# Silver (Nominal), and Silver (US CPI Adjusted – September 2023), in USD, 01/1970-09/2023





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** 





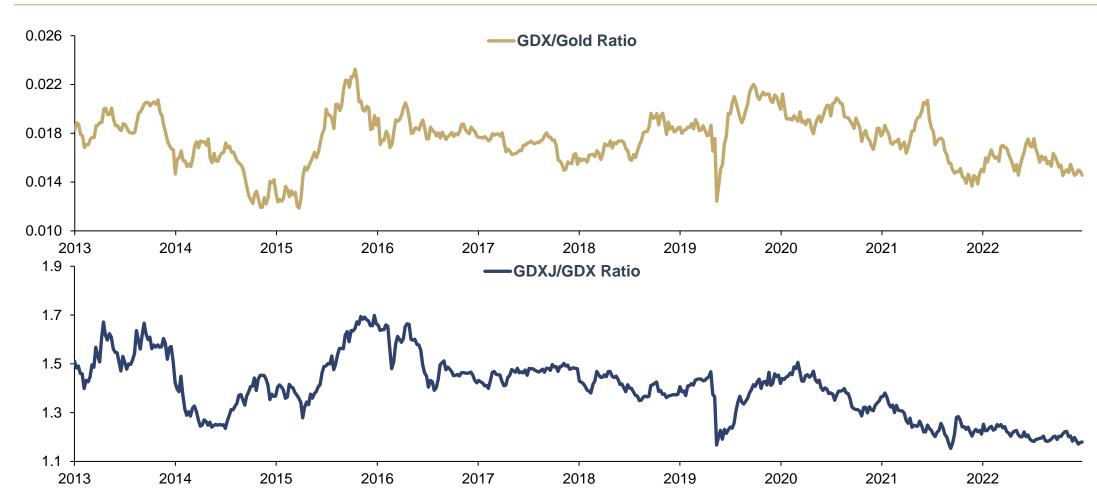
#### Monthly Performance of Bullion and Miners, 11/2021-10/2023

	Gold	HUI	GDX	GDXJ	Silver	SIL	SILJ
		HOI	GDA	GDAJ	Silvei	- JIL	
Nov-21	-0.51%	2.30%	0.28%	-1.34%	-4.41%	-2.83%	-1.44%
Dec-21	3.08%	1.67%	0.72%	-1.78%	2.06%	-2.78%	-4.07%
Jan-22	-1.75%	-4.54%	-5.62%	-8.59%	-3.59%	-10.11%	-9.05%
Feb-22	6.20%	13.31%	13.73%	12.52%	8.85%	3.34%	13.83%
Mar-22	1.54%	11.31%	11.55%	8.67%	1.44%	6.75%	8.98%
Apr-22	-2.11%	-9.41%	-8.76%	-8.36%	-8.20%	-9.71%	-12.71%
May-22	-3.13%	-9.89%	-9.32%	-8.71%	-5.30%	-7.49%	-10.01%
Jun-22	-1.64%	-13.23%	-13.71%	-18.39%	-5.98%	-14.75%	-14.01%
Jul-22	-2.31%	-6.09%	-4.05%	5.06%	0.36%	1.85%	3.68%
Aug-22	-3.09%	-9.91%	-9.40%	-11.93%	-11.56%	-11.64%	-10.55%
Sep-22	-2.98%	4.03%	1.34%	-0.51%	5.73%	3.43%	3.40%
Oct-22	-1.60%	0.72%	0.17%	0.14%	0.74%	3.77%	1.43%
Nov-22	8.29%	17.17%	20.24%	21.08%	15.96%	14.35%	16.86%
Dec-22	3.16%	0.18%	-1.34%	-0.20%	7.98%	-1.54%	-2.41%
Jan-23	5.67%	11.65%	11.72%	9.26%	-1.11%	7.53%	6.07%
Feb-23	-5.22%	-15.27%	-14.08%	-13.25%	-11.76%	-11.98%	-13.58%
Mar-23	7.70%	17.87%	17.59%	16.90%	15.11%	15.23%	14.99%
Apr-23	1.11%	1.74%	3.80%	0.63%	4.00%	-2.73%	-2.43%
May-23	-1.37%	-7.62%	-7.95%	-6.57%	-6.23%	-9.74%	-10.69%
Jun-23	-2.18%	-2.85%	-2.59%	-3.98%	-3.09%	-3.63%	-3.20%
Jul-23	2.32%	3.47%	4.32%	5.61%	8.87%	6.81%	10.02%
Aug-23	-1.24%	-6.06%	-6.84%	-4.43%	-1.35%	-4.54%	-7.36%
Sep-23	-4.71%	-9.06%	-8.03%	-10.45%	-9.31%	-9.81%	-11.30%
Oct-23	7.27%	5.19%	4.09%	3.44%	3.34%	0.54%	-0.59%
Average	0.5%	-0.1%	-0.1%	-0.6%	0.1%	-1.7%	-1.4%
MAX	8.3%	17.9%	20.2%	21.1%	16.0%	15.2%	16.9%
MIN	-5.2%	-15.3%	-14.1%	-18.4%	-11.8%	-14.7%	-14.0%
Current Price	1,983	217.5	28.0	33.34	22.90	24.03	8.43





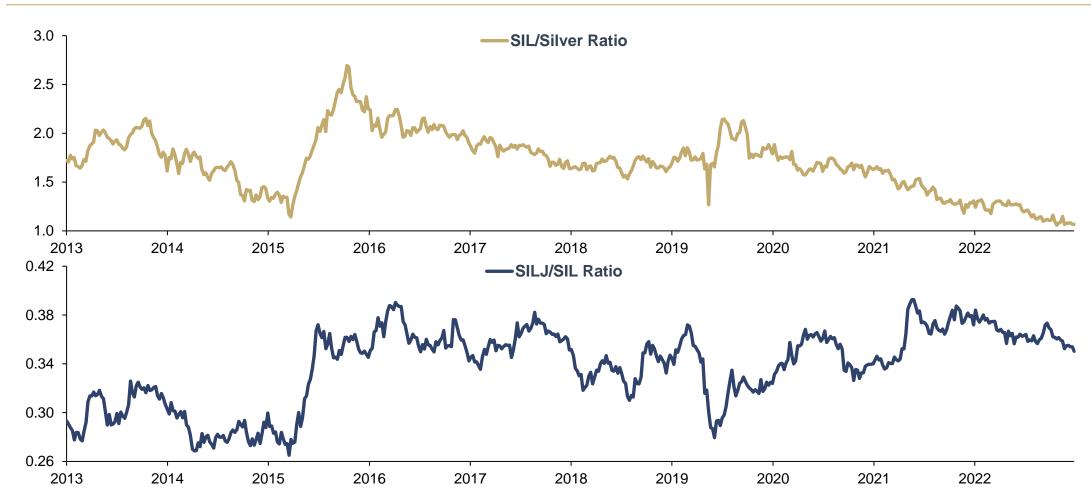
#### GDX/Gold Ratio (top), and GDXJ/GDX Ratio (bottom), 11/2013-10/2023







#### SIL/Silver Ratio (top), and SILJ/SIL Ratio (bottom), 11/2013-10/2023







### 4. Macro (Inflation, Markets, Positioning, etc.)

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

**Jerome Powell** 





#### Inflation Heat Map (Developed Markets), yoy, 10/2021-09/2023

	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
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%	7.83%
Jan-23	6.41%	5.92%	8.64%	9.17%	7.04%	10.67%	3.28%	10.05%	4.39%	5.17%	7.56%
Feb-23	6.04%	5.25%	8.50%	9.27%	7.29%	9.84%	3.37%	10.42%	3.28%	4.82%	7.29%
Mar-23	4.98%	4.30%	6.88%	7.75%	6.68%	8.09%	2.95%	10.06%	3.26%	4.24%	7.02%
Apr-23	4.93%	4.41%	6.95%	7.61%	6.89%	8.59%	2.57%	8.66%	3.55%	3.70%	6.69%
May-23	4.05%	3.36%	6.09%	6.26%	6.01%	7.99%	2.16%	8.68%	3.24%	3.32%	6.35%
Jun-23	2.97%	2.81%	5.50%	6.77%	5.33%	6.75%	1.71%	7.95%	3.34%	2.68%	6.03%
Jul-23	3.18%	3.27%	5.28%	6.47%	5.07%	6.29%	1.61%	6.83%	3.32%	2.26%	5.81%
Aug-23	3.67%	4.00%	5.22%	6.44%	5.72%	5.54%	1.55%	6.66%	3.12%	3.42%	5.59%
Sep-23	3.70%	3.80%	4.31%	4.34%	5.66%	5.62%	1.65%	6.65%	3.01%	3.73%	





#### Inflation Heat Map (Emerging Markets), yoy, 10/2021-09/2023

	Argentina CPI	Brazil CPI	Mexico CPI	South Africa CPI	Nigeria CPI	Turkey CPI	Russia CPI	China CPI	India CPI	Indonesia CPI	Thailand CPI
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%
Jan-23	98.80%	5.77%	7.91%	6.89%	21.82%	57.68%	11.81%	2.10%	6.52%	5.28%	5.02%
Feb-23	102.50%	5.60%	7.62%	7.04%	21.91%	55.18%	10.96%	1.00%	6.44%	5.47%	3.79%
Mar-23	104.30%	4.65%	6.85%	7.07%	22.04%	50.51%	3.51%	0.70%	5.66%	4.97%	2.83%
Apr-23	108.80%	4.18%	6.25%	6.84%	22.22%	43.68%	2.29%	0.10%	4.70%	4.33%	2.67%
May-23	114.20%	3.94%	5.84%	6.30%	22.41%	39.59%	2.50%	0.20%	4.31%	4.00%	0.53%
Jun-23	115.60%	3.16%	5.06%	5.37%	22.79%	38.21%	3.25%	0.00%	4.87%	3.52%	0.23%
Jul-23	113.40%	3.99%	4.79%	4.73%	24.08%	47.83%	4.31%	-0.30%	7.44%	3.08%	0.38%
Aug-23	124.40%	4.61%	4.64%	4.81%	25.80%	58.94%	5.16%	0.10%	6.83%	3.27%	0.88%
Sep-23	138.30%	5.19%	4.45%	5.37%	26.72%	61.53%	6.03%	0.00%	5.02%	2.28%	0.30%





#### Inflation Heat Map (United States), yoy, 10/2021-09/2023

	СРІ	Core CPI	PCE	Core PCE	PPI	Core PPI	US Import Prices	Case-Shiller US National HPI	Cleveland Fed 1 Y Inflation Expectations	Uni. Michigan 1Y Inflation Expectations	Uni. Michigan 5Y Inflation Expectations
Oct-21	6.22%	4.59%	5.41%	4.50%	8.90%	6.99%	11.03%	19.08%	1.85%	4.80%	2.90%
Nov-21	6.81%	4.98%	5.99%	4.95%	10.00%	8.01%	11.75%	18.81%	2.48%	4.90%	3.00%
Dec-21	7.04%	5.52%	6.18%	5.24%	10.20%	8.66%	10.27%	18.87%	2.62%	4.80%	2.90%
Jan-22	7.48%	6.07%	6.30%	5.37%	10.18%	8.61%	10.75%	19.26%	2.24%	4.90%	3.10%
Feb-22	7.87%	6.43%	6.55%	5.57%	10.56%	8.86%	11.41%	20.07%	2.63%	4.90%	3.00%
Mar-22	8.54%	6.45%	6.89%	5.55%	11.59%	9.71%	13.01%	20.81%	3.06%	5.40%	3.00%
Apr-22	8.26%	6.14%	6.62%	5.25%	11.08%	8.96%	12.51%	20.76%	3.39%	5.40%	3.00%
May-22	8.58%	6.02%	6.69%	5.07%	10.94%	8.62%	11.60%	19.97%	3.63%	5.30%	3.00%
Jun-22	9.06%	5.88%	7.12%	5.19%	11.06%	8.30%	10.66%	18.03%	4.23%	5.30%	3.10%
Jul-22	8.52%	5.89%	6.62%	4.96%	9.66%	7.60%	8.77%	15.66%	3.31%	5.20%	2.90%
Aug-22	8.26%	6.30%	6.52%	5.21%	8.69%	7.21%	7.67%	12.97%	3.38%	4.80%	2.90%
Sep-22	8.20%	6.64%	6.56%	5.47%	8.50%	7.17%	6.08%	10.69%	4.18%	4.70%	2.70%
Oct-22	7.75%	6.30%	6.35%	5.33%	8.16%	6.93%	4.24%	9.15%	2.88%	5.00%	2.90%
Nov-22	7.11%	5.97%	5.93%	5.09%	7.40%	6.25%	2.68%	7.56%	3.24%	5.00%	3.00%
Dec-22	6.45%	5.70%	5.44%	4.87%	6.41%	5.71%	3.20%	5.67%	2.87%	4.30%	3.00%
Jan-23	6.41%	5.55%	5.48%	4.90%	5.74%	5.02%	0.86%	3.84%	2.68%	3.90%	2.90%
Feb-23	6.04%	5.53%	5.19%	4.84%	4.75%	4.63%	-1.12%	2.16%	2.61%	4.20%	2.90%
Mar-23	4.98%	5.60%	4.44%	4.78%	2.71%	3.34%	-4.70%	0.76%	2.07%	3.60%	2.90%
Apr-23	4.93%	5.54%	4.45%	4.76%	2.30%	3.11%	-4.88%	-0.09%	2.65%	4.70%	3.00%
May-23	4.05%	5.33%	3.96%	4.69%	1.20%	2.79%	-5.74%	-0.35%	2.65%	4.20%	3.10%
Jun-23	2.97%	4.86%	3.20%	4.28%	0.30%	2.46%	-6.13%	0.00%	1.37%	3.30%	3.00%
Jul-23	3.18%	4.70%	3.40%	4.29%	1.19%	2.74%	-4.71%	0.99%	2.47%	3.40%	3.00%
Aug-23	3.67%	4.39%	3.45%	3.84%	1.93%	2.54%	-2.90%	2.57%	2.61%	3.50%	3.00%
Sep-23	3.70%	4.13%	3.44%	3.68%	2.15%	2.67%	-1.75%		2.81%	3.20%	2.80%





## Monthly Performance of Various Commodities, 11/2021-10/2023

	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
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%
Feb-23	-9.14%	-6.80%	-3.58%	-3.25%	0.83%	-4.70%	-5.22%	-11.76%	-5.81%	-14.09%	-2.31%	2.35%	-3.10%
Mar-23	-0.33%	9.21%	0.63%	-6.95%	-2.35%	-0.21%	7.70%	15.11%	4.09%	3.05%	-1.79%	-19.33%	0.17%
Apr-23	-3.43%	1.70%	-2.03%	-0.49%	1.73%	-0.75%	1.11%	4.00%	8.34%	2.81%	1.47%	8.75%	-5.71%
May-23	-8.37%	-2.42%	-4.65%	-8.77%	-1.83%	-5.64%	-1.37%	-6.23%	-7.52%	-9.27%	-11.32%	-5.98%	-6.18%
Jun-23	1.15%	-2.38%	4.60%	8.43%	9.83%	4.04%	-2.18%	-3.09%	-9.26%	-9.89%	3.75%	23.48%	3.03%
Jul-23	6.92%	4.00%	2.12%	11.90%	2.81%	6.26%	2.32%	8.87%	5.32%	4.47%	15.80%	-5.86%	6.78%
Aug-23	-4.69%	-1.68%	-1.93%	2.39%	-0.38%	-0.77%	-1.24%	-1.35%	1.93%	-5.26%	2.24%	5.09%	-5.56%
Sep-23	1.58%	-5.71%	-4.63%	4.39%	0.28%	-0.69%	-4.71%	-9.31%	-6.52%	2.56%	8.56%	5.82%	-1.23%
Oct-23	-4.06%	6.33%	1.86%	-2.74%	-1.22%	0.27%	7.27%	3.34%	3.23%	-10.49%	-10.76%	22.06%	-2.27%
Average	-0.28%	0.38%	0.47%	0.87%	0.77%	0.44%	0.52%	0.11%	-0.18%	-1.99%	0.33%	0.96%	-0.61%
MAX	14.53%	9.21%	8.85%	21.99%	9.83%	8.78%	8.29%	15.96%	11.56%	24.18%	17.21%	51.71%	11.12%
MIN	-15.97%	-6.80%	-9.16%	-17.13%	-6.77%	-10.77%	-5.22%	-11.76%	-9.26%	-14.68%	-20.81%	-40.02%	-13.52%
Current Price	313.7	494.5	64.68	83.7	54.80	238.1	1,983	22.90	933.7	1,115	81.02	3.58	3.64



## CFTC Futures and Options Net Long Positioning, Non-Commercial Traders, IGWT 10/27/2023



Asset	Gold	Silver	Platinum	Palladium	Crude Oil	Natural Gas	Copper
Last	153,221	21,479	-379	-11,240	339,436	-71,026	-20,948
W/W	43,136	4,412	-1,102	255	-8,066	-13,242	5,722
3M Avg.	120,819	16,531	5,867	-10,323	328,860	-93,898	-16,950
6M Avg.	152,017	20,414	13,128	-8,582	272,663	-103,484	-16,323
1Y Avg.	152,274	19,585	15,669	-6,280	267,216	-131,752	-8,206
1Y High	225,537	43,845	30,815	-883	390,627	-49,985	20,902
1Y Low	57,631	-10,232	-764	-11,495	170,119	-182,100	-35,712
1Y Z-Score	0.02	0.17	-1.68	-1.60	1.40	1.78	-0.93
3Y Avg.	184,527	26,685	14,162	-2,407	387,963	-107,224	11,851
3Y High	321,225	58,462	36,198	3,739	594,465	54,996	80,564
3Y Low	45,973	-12,811	-8,246	-11,495	170,119	-182,100	-35,712
3Y Z-Score	-0.55	-0.30	-1.33	-2.33	-0.41	0.63	-1.08
5Y Avg.	204,215	30,816	18,500	1,849	419,192	-99,010	4,634
5Y High	388,803	80,646	69,306	14,971	594,465	71,340	80,564
5Y Low	-22,931	-26,016	-8,246	-11,495	170,119	-262,534	-60,135
5Y Z-Score	-0.63	-0.46	-1.30	-1.93	-0.73	0.38	-0.79





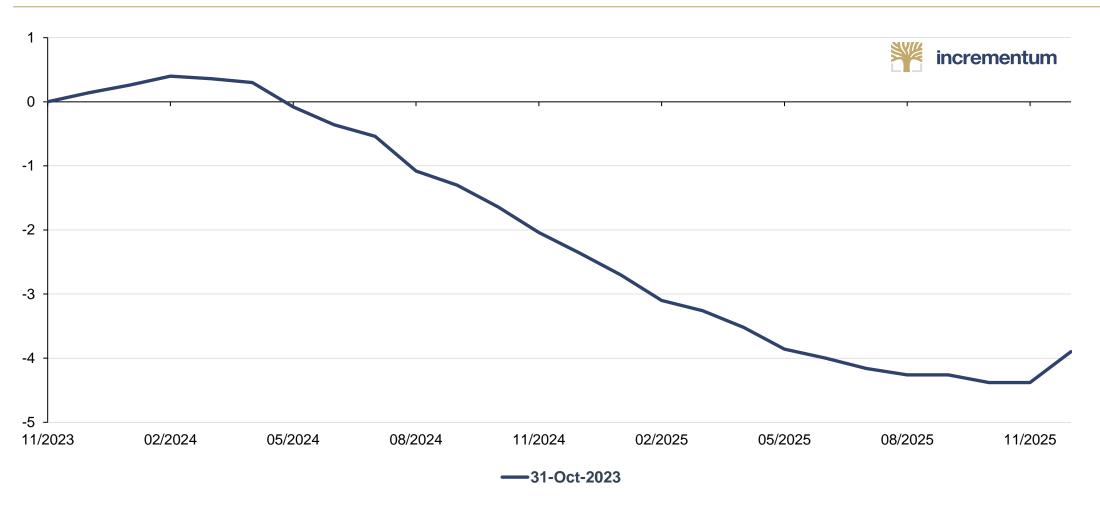
## Monthly Performance of Various Assets, 11/2021-10/2023

	S&P 500	VIX	Russell 2000	NASDAQ Comp.	Euro Stoxx 50	Nikkei 225	Shanghai Composite	MSCI World	DXY	US 2Y (∆ in bps)	US 10Y (∆ in bps)	DE 10Y (∆ in bps)	JP 10Y (∆ in bps)
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
Feb-23	-2.61%	6.40%	-1.81%	-1.11%	1.09%	0.43%	0.74%	-2.53%	2.72%	59.00	38.50	35.80	1.10
Mar-23	3.51%	-0.06%	-4.98%	6.69%	1.17%	2.17%	-0.21%	2.83%	-2.25%	-73.50	-42.40	-32.40	-17.70
Apr-23	1.46%	-11.21%	-1.86%	0.04%	2.73%	2.91%	1.54%	1.59%	-0.83%	0.20	-3.80	1.00	7.40
May-23	0.25%	2.33%	-1.09%	5.80%	-3.04%	7.04%	-3.57%	-1.25%	2.62%	32.60	18.50	-5.10	3.30
Jun-23	6.47%	-20.43%	7.95%	6.59%	2.00%	7.45%	-0.08%	5.93%	-1.36%	48.70	18.20	12.50	-3.50
Jul-23	3.11%	-0.98%	6.06%	4.05%	1.24%	-0.05%	2.78%	3.29%	-1.03%	-0.30	13.80	7.30	20.80
Aug-23	-1.77%	1.21%	-5.17%	-2.17%	-2.22%	-1.67%	-5.20%	-2.55%	1.73%	-1.50	13.40	0.40	4.70
Sep-23	-4.87%	18.13%	-6.03%	-5.81%	-1.10%	-2.34%	-0.30%	-4.45%	2.51%	18.70	48.00	36.70	12.00
Oct-23	-2.20%	2.00%	-6.88%	-2.78%	-2.76%	-3.14%	-2.95%	-2.97%	0.41%	2.50	30.40	-3.10	18.00
Average	-0.25%	1.31%	-1.14%	-0.56%	0.21%	0.37%	-0.58%	-0.43%	0.55%	19.07	13.83	12.09	3.57
MAX	9.11%	36.78%	10.94%	12.35%	7.12%	7.45%	8.91%	7.86%	4.73%	85.60	67.20	70.80	20.80
MIN	-9.34%	-23.41%	-9.95%	-13.26%	-6.05%	-7.67%	-7.65%	-9.46%	-5.00%	-73.50	-42.40	-54.00	-17.70
Current Price	4,194	18.13	1,662	12,851	3,812	30,859	3,019	2,769	106.7	5.07%	4.88%	2.81%	0.95%



## Fed Interest Rate Policy Implied by Federal Funds Futures (1 = 25 bps), 11/2023-12/2025

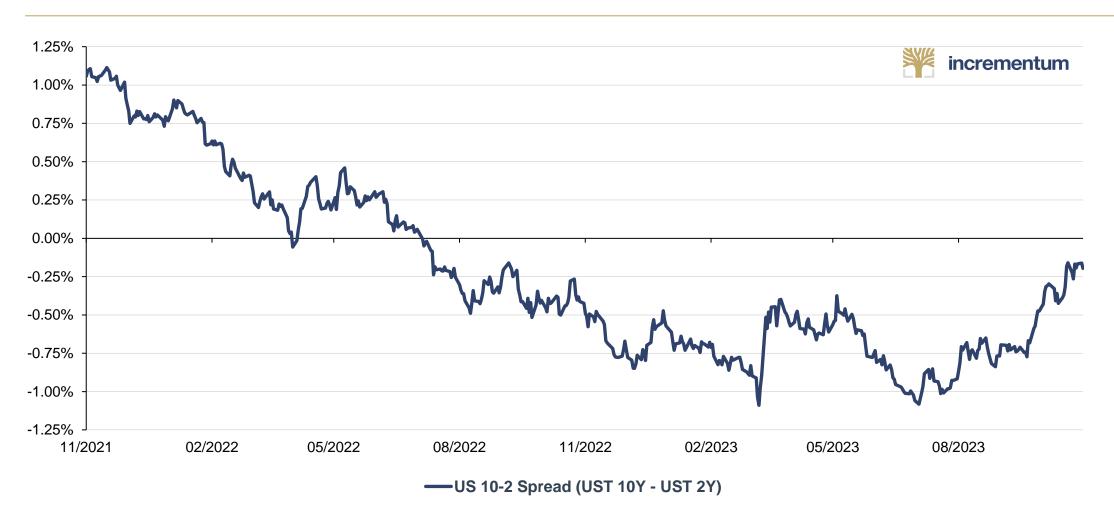








## US 10-2 Spread (UST 10Y - UST 2Y), 11/2021-10/2023







## 5. Long Term Charts

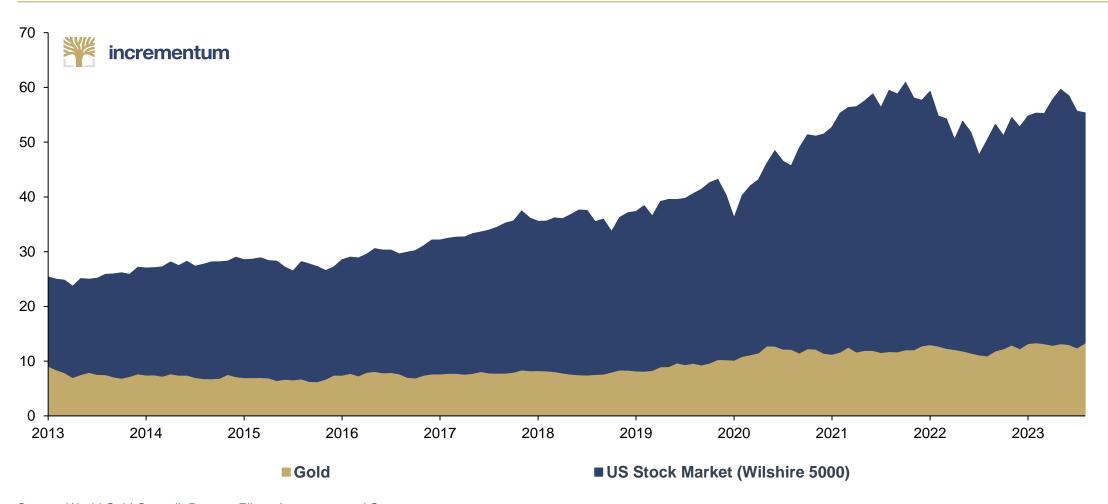
"If you decide you want to buy gold, you have the weight of history behind you."

**Herb Stein** 



# Market Capitalization of Gold, and US Stock Market (Wilshire 5000), in USD trn, 01/2013-10/2023



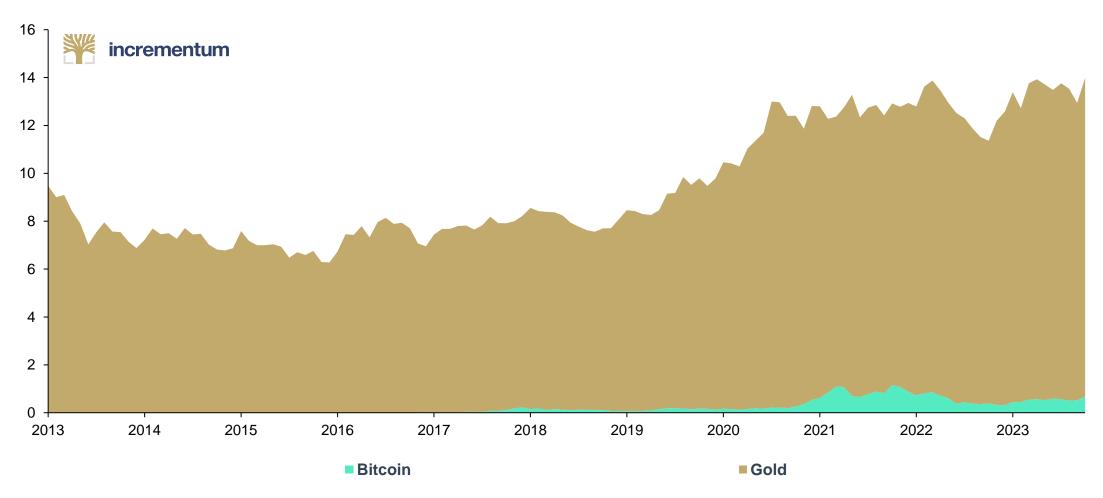


Source: World Gold Council, Reuters Eikon, Incrementum AG





## Market Capitalization of Bitcoin, and Gold, in USD trn, 01/2013-10/2023



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



# Aggregated Central Bank Balance Sheets (Fed, ECB, BoJ, PBoC), in USD trn (lhs), and yoy (rhs), 01/2000-09/2023

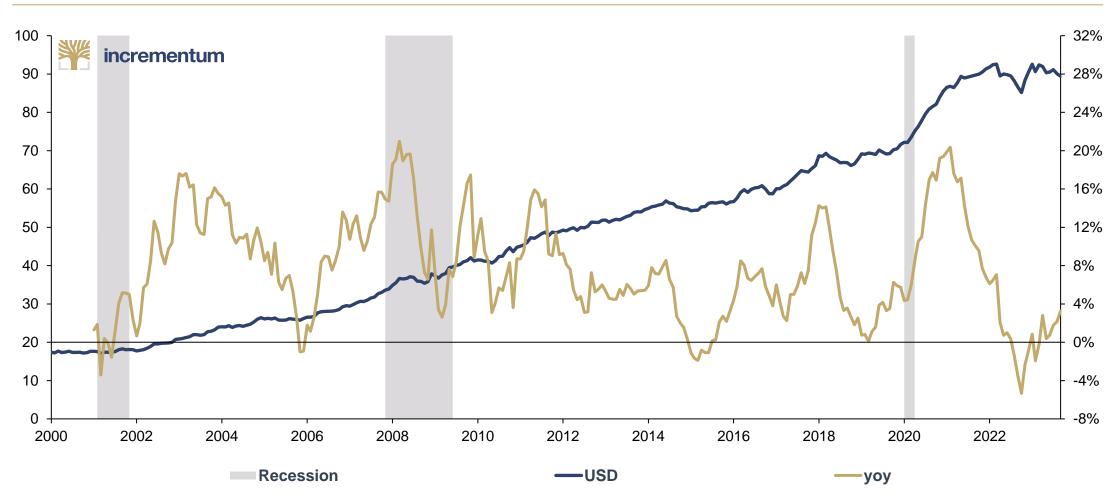






## M2 (US, EU, JP, CN, GB, CH), in USD trn (lhs), and yoy (rhs), 01/2000-09/2023

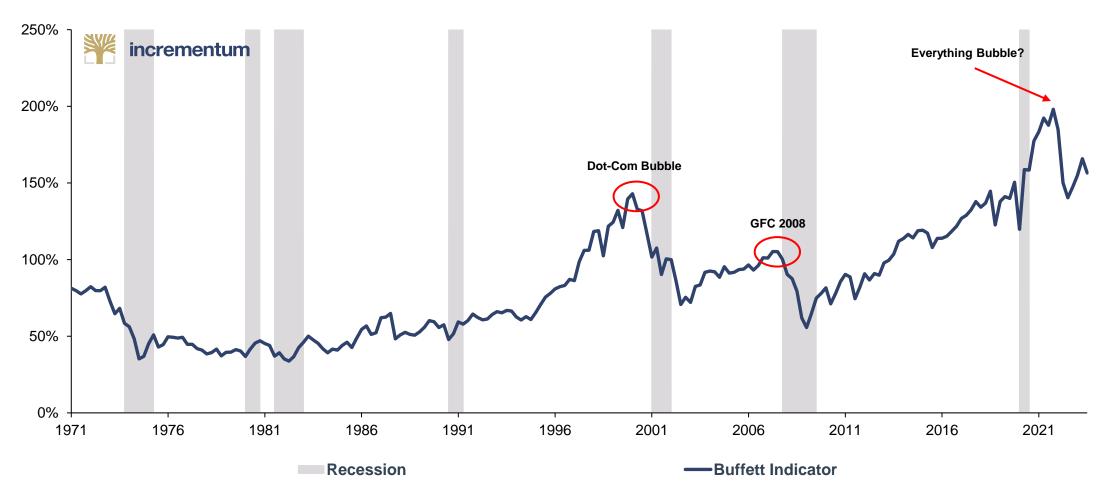








## Buffett Indicator (Wilshire 5000 as % of US GDP), Q1/1971-Q3/2023







## **S&P GSCI Total Return Index/S&P 500 Ratio**, 01/1971-10/2023



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



# Gold (lhs), in USD, and Real Federal Funds (Federal Funds - CPI) (rhs, inverted), 01/1970-10/2023

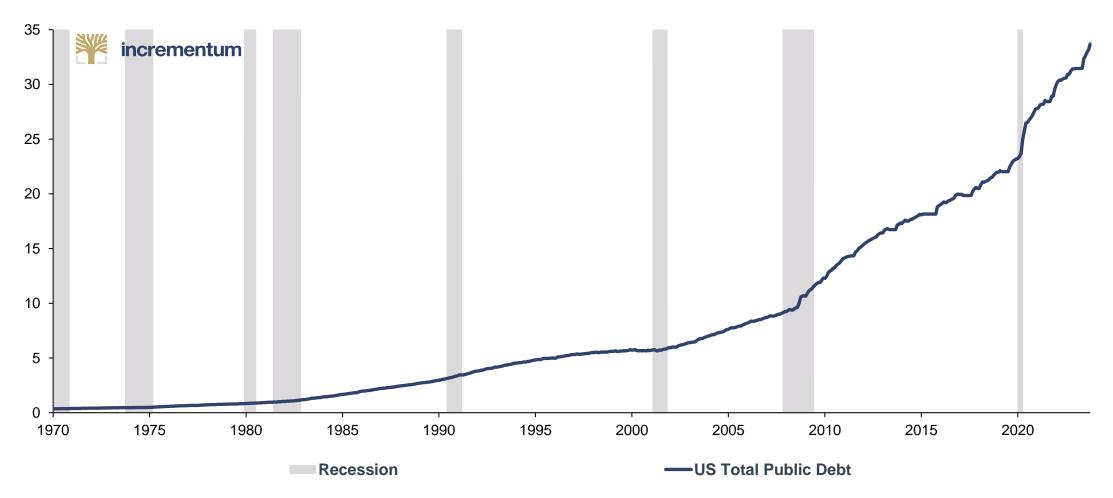








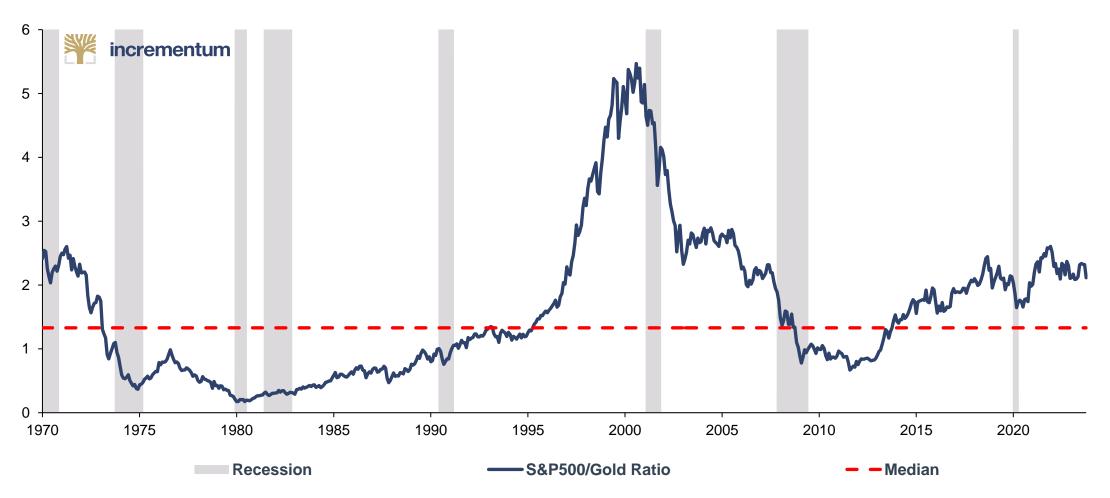
## **US Total Public Debt, in USD trn, 01/1970-10/2023**







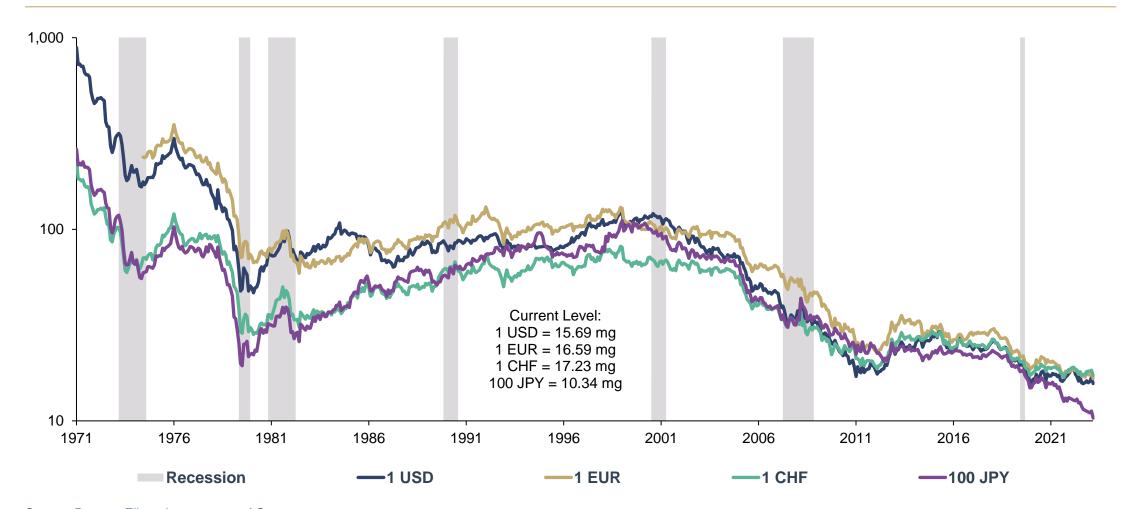
## S&P500/Gold Ratio, 01/1970-10/2023







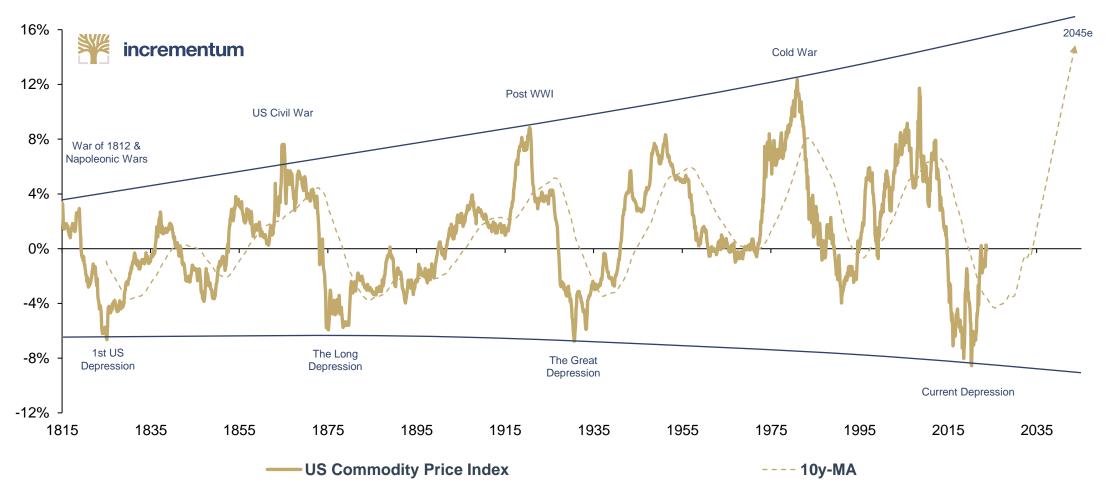
## Various Currencies in Gold (log), in mg, 08/1971-10/2023







## 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), 01/1997-10/2023



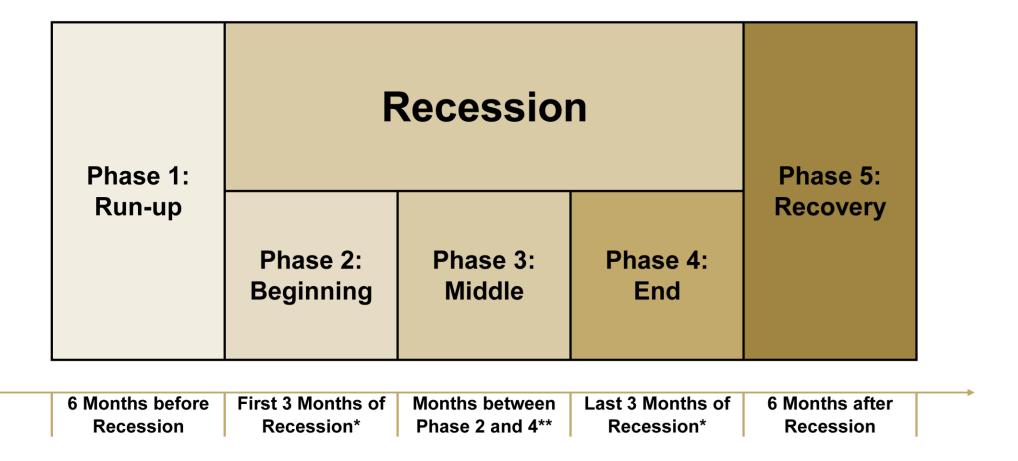






### Incrementum Recession Phase Model

Source: Incrementum AG, (For more details, see In Gold We Trust Report 2023, p. 137)







## Gold Performance in the Incrementum Recession Phase Model

Date	Duration (Months)	Recession	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
01/1970-11/1970	11	6.6%	-14.5%	0.1%	1.7%	4.7%	8.9%
12/1973-03/1975	16	73.8%	-12.0%	60.8%	14.7%	-5.8%	-19.7%
02/1980-07/1980	6	-5.9%	120.1%	-20.7%	n/a	18.6%	-17.5%
06/1981-11/1982	18	-9.0%	-23.1%	-10.9%	-3.6%	6.0%	0.3%
08/1990-03/1991	8	-4.1%	-10.0%	2.6%	3.3%	-9.5%	-0.4%
04/2001-11/2001	8	6.4%	-5.9%	5.0%	1.3%	0.0%	19.0%
01/2008-06/2009	18	11.1%	28.4%	9.9%	0.2%	0.9%	18.3%
03/2020-04/2020	2	6.0%	4.3%	-0.9%	n/a	6.9%	11.8%
Average	10.9	10.6%	10.9%	5.7%	2.9%	2.7%	2.6%
Median	9.5	6.2%	-8.0%	1.3%	1.5%	2.8%	4.6%





## Silver Performance in the Incrementum Recession Phase Model

Date	Duration (Months)	Recession	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
01/1970-11/1970	11	-12.3%	14.9%	3.2%	-2.7%	-12.6%	0.9%
		-12.570	14.370	3.270	-2.1 /0	-12.070	0.370
12/1973-03/1975	16	42.4%	14.0%	89.4%	-22.4%	-3.1%	6.4%
02/1980-07/1980	6	-53.5%	275.3%	-60.0%	n/a	16.3%	-15.2%
06/1981-11/1982	18	-7.5%	-43.3%	-13.7%	-13.3%	23.6%	38.1%
08/1990-03/1991	8	-19.8%	-7.3%	-13.3%	0.7%	-8.1%	7.3%
04/2001-11/2001	8	-3.0%	-11.7%	0.2%	-2.8%	-0.5%	20.2%
01/2008-06/2009	18	-8.1%	19.2%	16.5%	-24.9%	4.9%	24.0%
03/2020-04/2020	2	-9.9%	-9.2%	-16.2%	n/a	7.5%	57.3%
Average	10.9	-9.0%	31.5%	0.8%	-10.9%	3.5%	17.4%
Median	9.5	-9.0%	3.4%	-6.5%	-8.0%	2.2%	13.7%





## **BGMI Performance in the Incrementum Recession Phase Model**

Date	Duration (Months)	Recession	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
01/1970-11/1970	11	55.8%	-41.2%	33.3%	9.0%	7.3%	-2.3%
12/1973-03/1975	16	35.9%	46.0%	61.1%	-23.4%	10.2%	-17.2%
02/1980-07/1980	6	27.0%	76.3%	-10.2%	n/a	41.4%	-6.3%
06/1981-11/1982	18	-19.2%	-27.4%	-4.3%	-30.5%	21.6%	55.0%
08/1990-03/1991	8	-22.3%	-18.0%	-22.1%	8.3%	-7.8%	-0.5%
04/2001-11/2001	8	15.0%	2.2%	12.0%	3.6%	-0.9%	56.6%
01/2008-06/2009	18	-27.6%	25.7%	2.1%	-36.8%	12.3%	24.6%
03/2020-04/2020	2	-21.1%	7.3%	-4.1%	n/a	-17.7%	84.3%
Average	10.9	5.4%	8.9%	8.5%	-11.7%	8.3%	24.3%
Median	9.5	-2.1%	4.8%	-1.0%	-9.9%	8.8%	12.0%





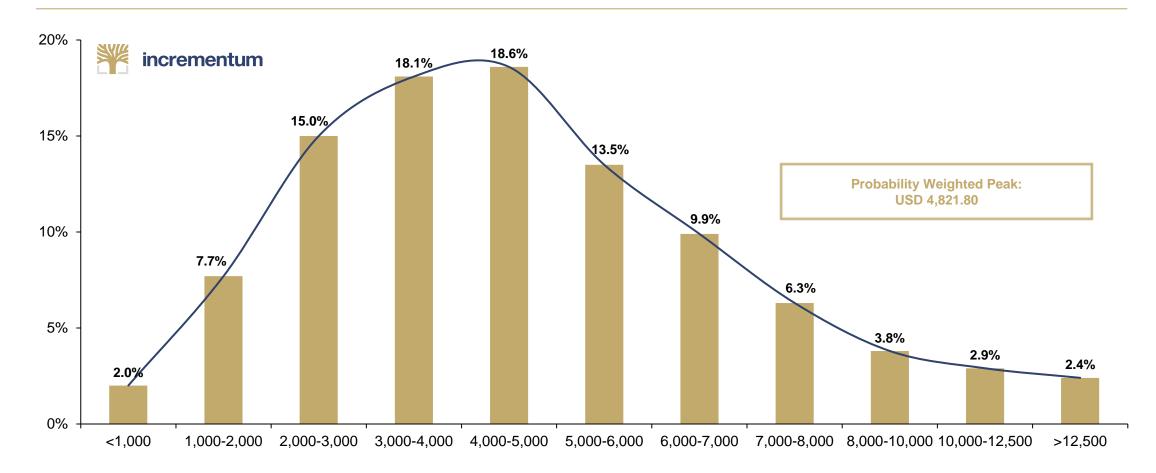
## BCOM Performance in the *Incrementum Recession Phase Model*

Date	Duration (Months)	Recession	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
01/1970-11/1970	11	16.29%	-0.41%	3.34%	10.99%	1.39%	2.04%
12/1973-03/1975	16	26.39%	17.97%	18.55%	20.57%	-11.57%	4.66%
02/1980-07/1980	6	-6.48%	57.45%	-17.82%	n/a	13.79%	-13.75%
06/1981-11/1982	18	-26.71%	-25.15%	-10.94%	-19.53%	2.27%	8.41%
08/1990-03/1991	8	1.91%	1.96%	16.03%	-6.17%	-6.40%	-0.35%
04/2001-11/2001	8	-13.68%	-1.50%	-3.61%	0.64%	-11.02%	7.48%
01/2008-06/2009	18	-33.75%	9.01%	8.99%	-45.54%	11.62%	13.59%
03/2020-04/2020	2	-14.20%	-7.82%	-12.85%	n/a	-1.55%	17.97%
Average	10.9	-6.3%	6.4%	0.2%	-6.5%	-0.2%	5.0%
Median	9.5	-10.1%	0.8%	-0.1%	-2.8%	-0.1%	6.1%





## Approximated Gold Price in 2030 by Distribution Probability



Source: Incrementum AG (For more details, see In Gold We Trust Report 2020, p. 348)





## **Gold, and Projected Gold Price for 2030, in USD, 01/1970-12/2030**







## Addendum

Because we care...

About our Clients.
About Society.
About the Future.

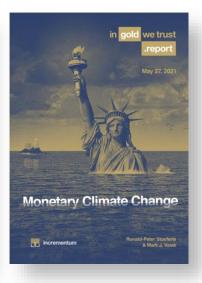


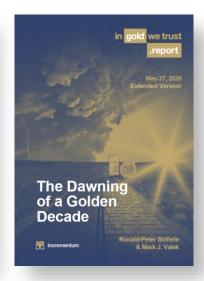
## About the *In Gold We Trust* Report















## **In Our Partners We Trust**

















































#### **Agnico Eagle**

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



#### **Asante Gold**

Asante Gold has developed its 400,000 oz per year production profile through organic growth 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 explorer operating in an emerging major gold camp in Finland's Central Lapland. The Company is making new discoveries on its Flagship Risti and Launi projects, and JVs with B2Gold and Kinross.



#### Caledonia Mining

Caledonia Mining is a profitable, dividend-paying gold miner, with a strong growth profile; since November 2021 has acquired Maligreen, Motapa and Bilboes. Its vision is to become a Zimbabwe focused multi-asset 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 a 20-year track record of smart deals. With more than 300 royalties and investments, EMX looks forward to a bright future with diversification into gold, copper, battery metals, strong partners like Franco Nevada, and rapidly increasing cash flow.



#### **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.







#### **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.



#### **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.



#### **Karora Resources**

Karora is TSX-listed gold miner (TSX: KRR) with operations in the tier 1 jurisdiction of Western Australia. Karora has a proven management team and is growing production to 170-195 koz by 2024.



#### **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.







#### **Flexgold**

Flexgold is the smart way to invest in physical precious metals, as flexible and simple as never before. With flexgold, SOLIT sets the gold standard for trust, security and transparency.



#### **Sprott Asset Management**

Sprott is a global asset manager providing investors with access to leader in precious metals and energy transition investments.



#### **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 mineral resource of 23.4 Moz AuEQ (Indicated) plus 7.4 Moz AuEQ (Inferred).



#### Victoria Gold

Victoria Gold ("VGCX") is Leading Yukon's New Gold Rush. As at 31Dec22 the Eagle Gold mine Reserve is 2.6 m oz Au (124 m tonnes grading 0.65 g/t), and is open at depth and along strike. Exploration priority targets include Raven and Lynx.



#### **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.





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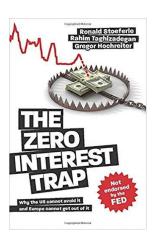






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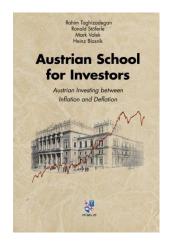
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## **Glossary**



- **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

- **DE 10Y**: German 10 Year Bond
- DXY: US Dollar Index
- **ECB**: European Central Bank
- Fed: Federal Reserve
- GDX: VanEck Gold Miners ETF
- GDXJ: VanEck Junior Gold Miners ETF
- HICP: Harmonised Index of Consumer Prices
- HUI: NYSE Arca Gold BUGS Index
- JP 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
- TR: Total Return
- trn: trillion
- US 2Y: United States 2 Year Bond
- US 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 J. 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 J. 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 J. Valek, CAIA

- 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.





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#### Research

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– we regularly publish relevant studies,

reports and chartbooks on the

investment topics of gold, crypto and
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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.



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