EVALUATION OF GOLD FROM 1997 TILL 2023:

RISK ADJUSTED RETURN, PORTFOLIO DIVERSIFICATION AND INFLATION PROTECTION

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AUGMONT | GOLD FOR ALL

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Policy changes since Independence

Year	Phases	Act/ Scheme Introduced
1947 - 1962	The Restriction Phase	Foreign Exchange Regulation Act (FERA) - 1947
1963 - 1989	The Prohibition Phase	Gold Control Act (1968)
1990 - 2011	The Liberalization Phase	Open General License Scheme (1997)
2012 - 2013	The Intervention Phase	80:20 Rule Introduced (2013)
2014 -	The Transparency Phase	GMS and SGB Launched (2015)

Source: WGC - India's gold market: evolution and innovation, 2017

Evaluation of Gold Policy Changes since 1997 (25 yrs)

1997	Banks allowed to import gold
1999	Gold Deposit Scheme introduced
2002	Banks permitted to sell gold coins
2003	MCX launched Gold Future trading
2007	Gold ETF launched
2008	Post Office allowed to sell gold
2012	Multiple Import duty hikes from 2% to 10%
2013	80:20 rule for exporting atleast 20% of Imported Gold
2014	80:20 rule abolished
2015	GMS and SGB launched
2016	Disclosure of PAN for all purchases above Rs 2 lakh
2017	3% GST introduced on Gold
2021	Revamped GMS introduced, Hallmarking introduced
2022	Import Duty hiked to 15%
2022	IIBX and Domestic Gold Spot Exchange launched Gold trading

Gold performance during "Sell-off in other asset Classes"

Event	Gold movement between peak and trough
2000 Dotcom Burst	11.7%
2006 Market Crash	-20.7%
2008 Stock and Oil Market Crash	-23.3%
2015 Oil Market Crash	-14.5%
2018 Crypto Crash	7.4%
2020 Pandemic Sell off in Crude Oil	11.5%
2021 Crypto Crash	9.6%

Gold performance during “Loose Monetary policy in US”

Event	Gold movement between peak and trough
2001-03 FED Interest Rate Cuts	29.3%
2007-08 FED Interest Rate Cuts	17.4%
Quantative Easing 1	52.2%
Quantative Easing 2	12.3%
2019-20 FED Interest Rates cuts	17.2%
Quantative Easing 4 - CARES Act	27.3%

Gold performance during "Financial Crisis / Recession"

Event	Gold movement between peak and trough
US Subprime Crisis	54.2%
Great Recession	17.1%
European Sovereign Debt Crisis	44.6%
BREXIT	25.5%
2020 COVID Pandemic Recession	7.7%

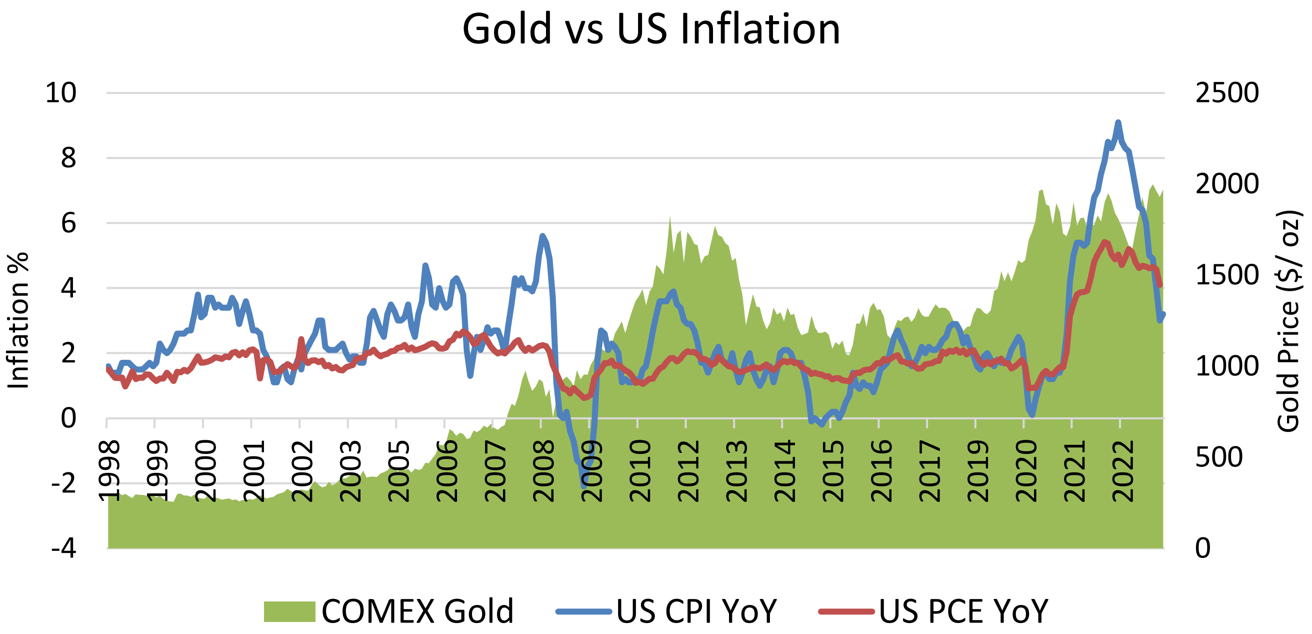
Gold performance during “Geopolitical Tension / Natural calamities”

Event	Gold movement between peak and trough
9/11 Attack	9.8%
Hurricane Katrina in US	21.1%
US-China Trade War	16.7%
2020 COVID Pandemic First Wave	31.1%
2021 COVID Pandemic Second Wave	13.4%

Gold performance during “Tight monetary policy in US”

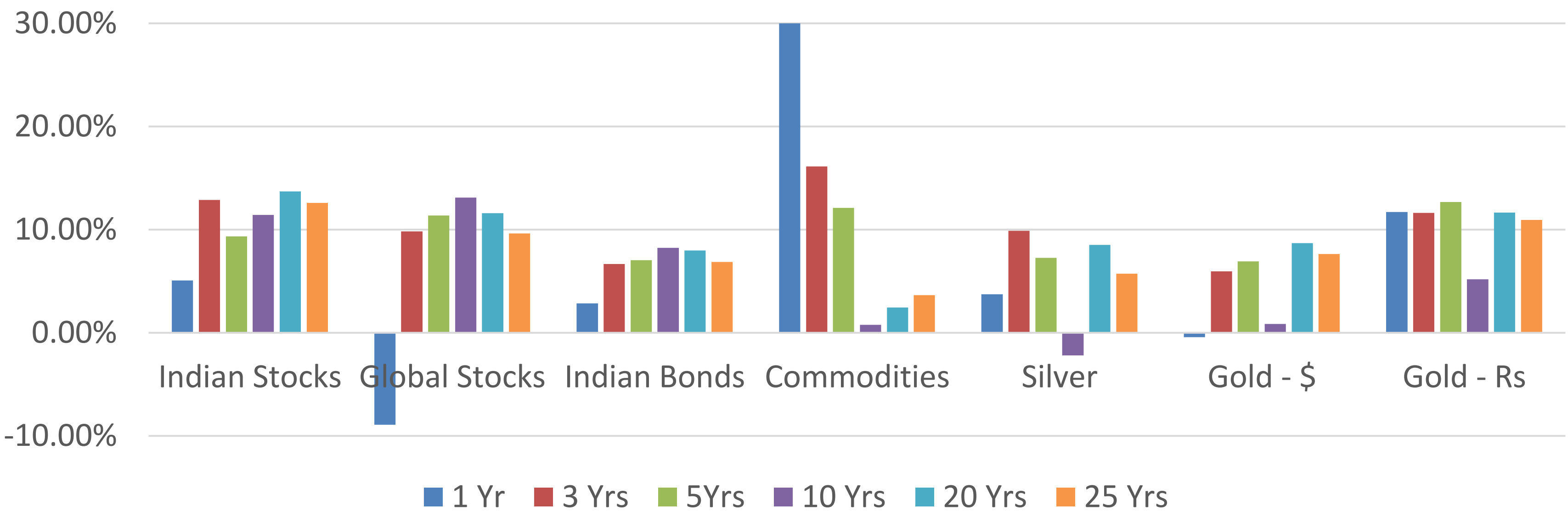
Event	Gold movement between peak and trough
2004-06 FED Interest rate rise	49.4%
Quantative Easing 3 with Risk- On	-24.0%
QE Tapering	-14.4%
2014-18 FED Interest rate rise	-10.2%
COVID Vaccination Development	-13.4%
2022-23 FED Interest rate rise	-22.1%

Gold performance during period of “High Inflation”

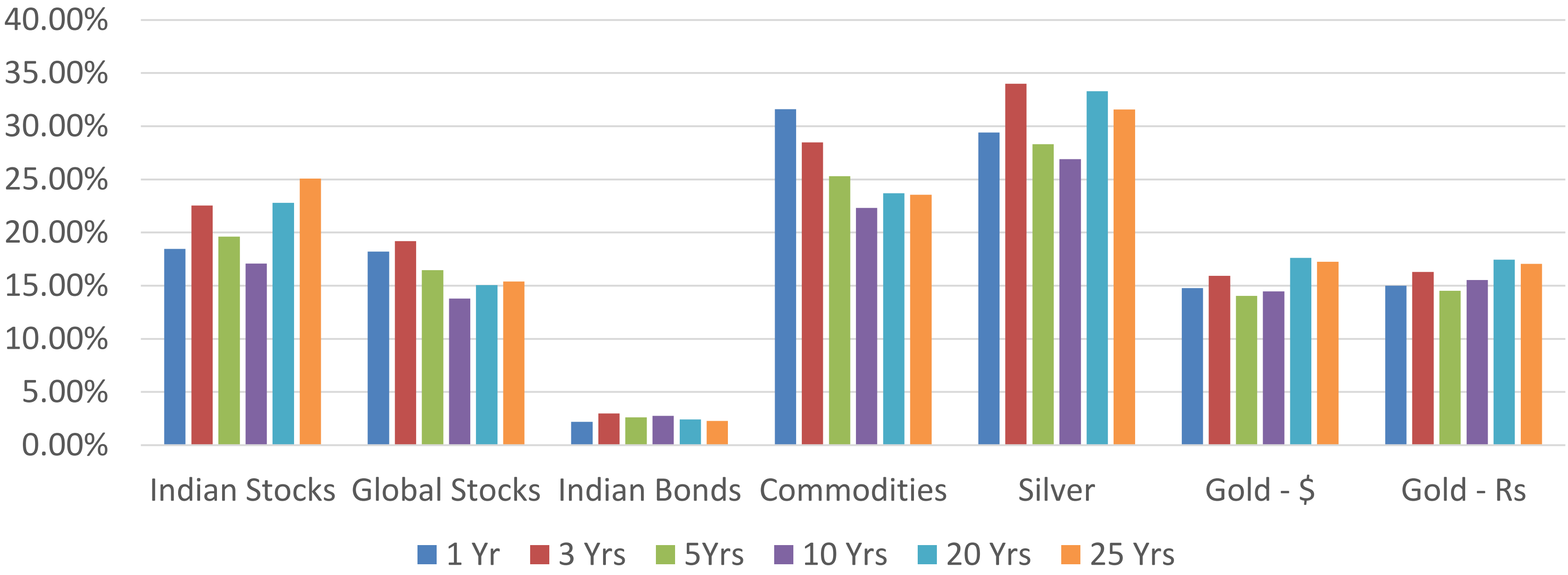


- Gold returns higher than 25% per annum, when Inflation is >5%
- Gold returns higher than 15% per annum, when Inflation is >3%
- Compared to just over 6% per annum when inflation has been <3%.

CAGR Returns of different assets



Volatility of different assets



Gold allocation with maximum Risk-Adjusted return

Hypothetical Allocation	Indian Stocks	Global Stocks	Indian Bonds	Gold	20 Yr RAR	25 Yr RAR
Portfolio 1:	80%	0%	0%	20%	**47%**	**37%**
Portfolio 2:	70%	5%	5%	20%	**44%**	**34%**
Portfolio 3:	60%	10%	10%	20%	**41%**	**31%**
Portfolio 4:	50%	10%	20%	20%	**37%**	**27%**
Portfolio 5:	80%	5%	0%	15%	**47%**	**36%**
Portfolio 6:	70%	5%	10%	15%	**43%**	**32%**
Portfolio 7:	60%	10%	15%	15%	**40%**	**29%**
Portfolio 8:	50%	10%	25%	15%	**35%**	**25%**
Portfolio 9:	80%	0%	10%	10%	**44%**	**34%**
Portfolio 10:	70%	0%	20%	10%	**40%**	**30%**

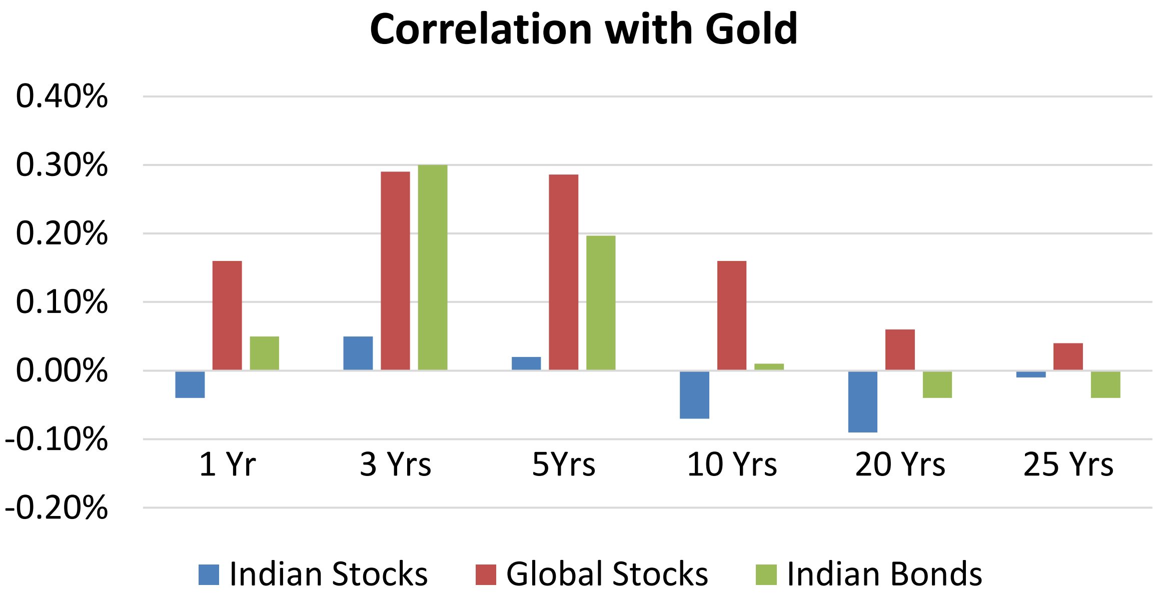
Gold allocation with maximum Risk-Adjusted return..cntd..

Hypothetical Allocation	Indian Stocks	Global Stocks	Indian Bonds	Gold	20 Yr RAR	25 Yr RAR
Portfolio 11:	60%	10%	20%	10%	**38%**	**28%**
Portfolio 12:	50%	10%	30%	10%	**34%**	**24%**
Portfolio 13:	80%	0%	15%	5%	**43%**	**33%**
Portfolio 14:	70%	10%	15%	5%	**41%**	**31%**
Portfolio 15:	60%	10%	25%	5%	**37%**	**26%**
Portfolio 16:	50%	10%	35%	5%	**33%**	**22%**
Portfolio 17:	80%	0%	20%	0%	**41%**	**31%**
Portfolio 18:	70%	10%	20%	0%	**40%**	**29%**
Portfolio 19:	60%	10%	30%	0%	**36%**	**25%**
Portfolio 20:	50%	10%	40%	0%	**31%**	**21%**

Gold increases Risk Adjusted Returns

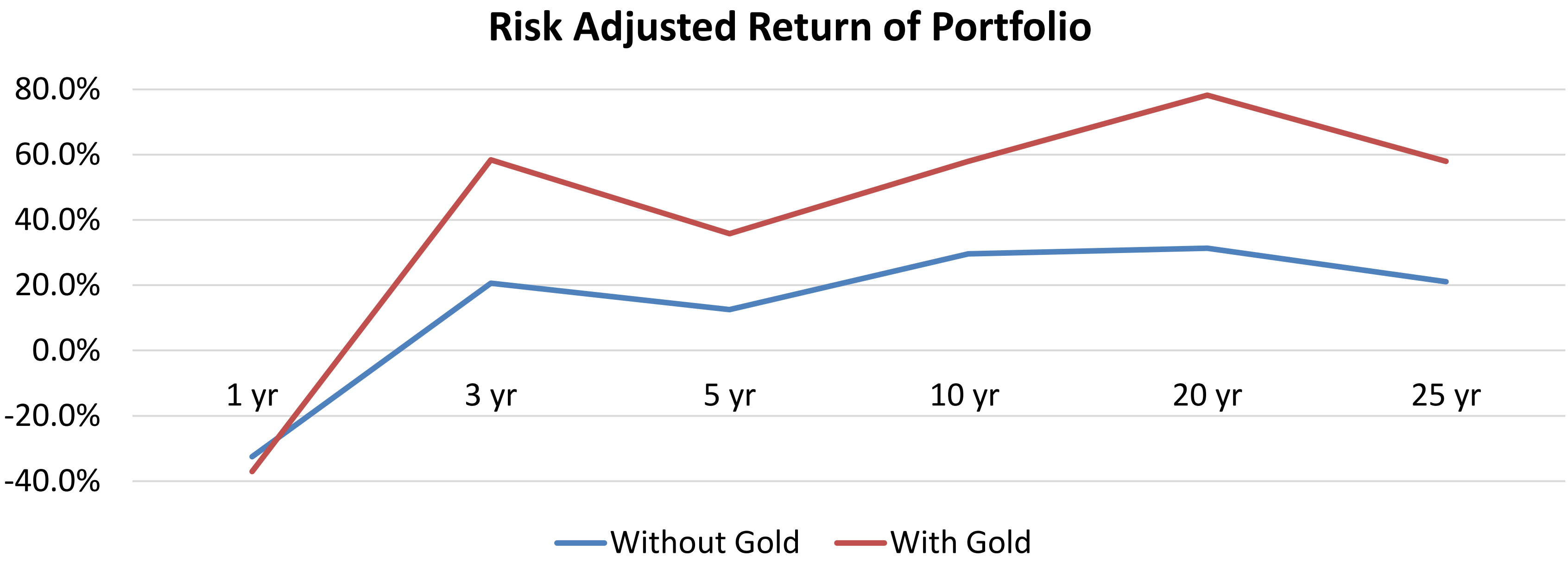
	1 yr	3 yr	5 yr	10 yr	20 yr	25 yr
Without Gold						
Annualised Return	2.8%	10.1%	8.6%	10.3%	11.2%	10.0%
Annulised Volatility	12.95%	14.90%	12.89%	11.20%	13.42%	14.26%
Risk-Adjusted Return	-32.5%	20.65%	12.48%	29.56%	31.31%	21.05%
With Gold						
Annualised Return	6.4%	12.6%	10.0%	10.2%	13.3%	12.3%
Annulised Volatility	13.47%	15.25%	13.30%	12.28%	14.43%	14.96%
Risk-Adjusted Return	-4.6%	37.73%	23.27%	28.37%	46.93%	36.88%

Divide (across asset classes) to Rule (last longer)

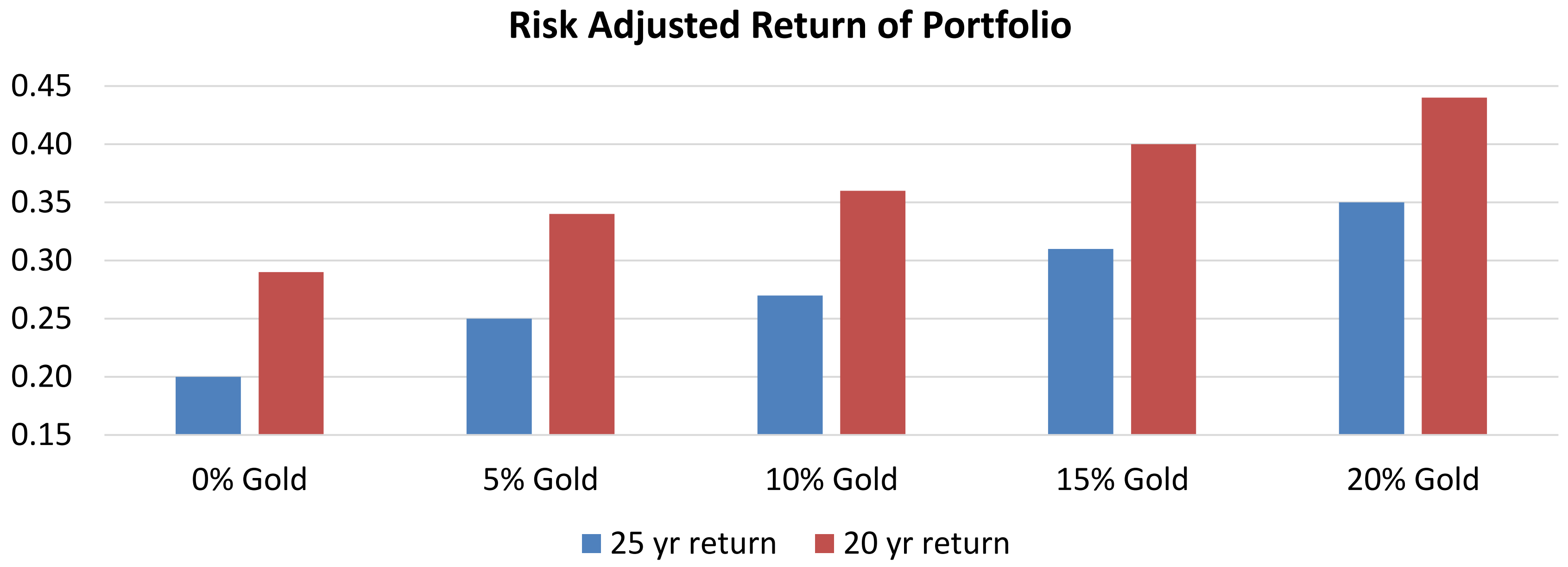


- When stocks do well - Gold may not (2013 to 2016)
- When stocks don't do well - bonds may do well (2000 to 2003)
- When gold did well & stocks didn't (2008 to 2013)

Performance of a portfolio with and without gold



Performance of a portfolio with and without gold



Conclusion

- Gold gives best return during times of Financial Crisis, Higher Inflation and Loose monetary policy(Interest Rate Cut/Quantative Easing) by FED
- Gold has very minimal correlation with Equity and Bonds
- Hypothetical portfolio with 20% allocation to Gold gives best Risk Adjusted Return in long-term
- Divide (across asset classes) to Rule (last longer)