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Gold Outperforms Almost All Emerging Markets Headline Stock Indices Returns



INTRODUCTION

The recent gold bull run alongside that of equity markets in India incited our interest in evaluating how the two asset classes have performed vis-à-vis their respective volatility, i.e., risk taken. Apart from India, we have also compared the local currency

gold returns of most of the major emerging markets (“EMs”) alongside their respective headline equity index returns w.r.t. their risk taken.

RESEARCH OBJECTIVES

This research aims to provide a comprehensive comparison of equity and gold returns across prominent EMs over multiple timeframes (10, 15, 20 and 25 years) w.r.t. their respective risks.

The key objectives behind this research are to evaluate the following:

- a.** How have the EMs’ headline equity indices performed vis-à-vis their respective local currency gold returns?
- b.** How do the EMs’ headline equity indices returns compare with their respective local currency gold returns w.r.t. their risk taken?

EXECUTIVE SUMMARY

Only India's headline equity index beat its local currency gold returns in all four timeframes. However, the reward-to-risk ratio of Gold was still better in 20-year and 25-year timeframes than that of India's headline equity index's.

Note: The key terms have been explained in the subsequent section, "Key Terms Used and Research Methodology."

Number of EMs' Headline Equity Indices Outperforming Gold on Various Parameters Across Timeframes

TIME-FRAME	ANNUALISED RETURNS	REWARD-TO-RISK RATIO	SHARPE RATIO	TOTAL EMS CONSIDERED
10 years	4	4	5	18
15 years	2	2	NA	15
20 years	1	0	NA	14
25 years	1	0	NA	11

SR.NO.	COUNTRY	10 YEARS RETURN COMPARISON (Jul 2014 - Jul 2024)		15 YEARS RETURN COMPARISON (Jul 2009 - Jul 2024)		20 YEARS RETURN COMPARISON (Jul 2004 - Jul 2024)		25 YEARS RETURN COMPARISON (Jul 1999 - Jul 2024)	
		Index > Gold	Margin	Index > Gold	Margin	Index > Gold	Margin	Index > Gold	Margin
1	Brazil	No	-7.27%	No	-8.04%	No	-3.35%	No	-4.31%
2	Chile	No	-6.44%	No	-5.48%	No	-3.87%	No	-4.08%
3	China	No	-3.71%	No	-6.74%	No	-4.75%	No	-6.25%
4	Colombia	No	-16.59%	No	-9.68%	NA	NA	NA	NA
5	Czech Republic	No	-3.05%	No	-4.39%	No	-5.33%	No	-2.58%
6	Egypt	No	-14.90%	No	-11.68%	No	-5.14%	No	-6.26%
7	Greece	No	-6.92%	NA	NA	NA	NA	NA	NA
8	Hungary	Yes	3.42%	NA	NA	NA	NA	NA	NA
9	India	Yes	2.84%	Yes	1.80%	Yes	2.25%	Yes	0.76%
10	Indonesia	No	-5.46%	No	-1.02%	No	-0.34%	No	-3.19%
11	Korea	No	-5.68%	No	-2.14%	No	-3.73%	No	-5.23%
12	Malaysia	No	-11.58%	NA	NA	NA	NA	NA	NA
13	Mexico	No	-7.43%	No	-3.48%	No	-3.39%	No	-2.88%
14	Poland	No	-8.12%	No	-5.88%	No	-7.73%	No	-7.50%
15	Saudi Arabia	No	-3.68%	No	-1.30%	No	-5.64%	No	-0.49%
16	South Africa	No	-5.71%	No	-3.53%	No	-4.50%	NA	NA
17	Taiwan	Yes	2.73%	NA	NA	NA	NA	NA	NA
18	Thailand	No	-8.46%	No	-1.35%	No	-5.11%	NA	NA
19	United Arab Emirates	Yes	1.36%	Yes	2.25%	No	-1.61%	NA	NA

KEY TERMS USED AND RESEARCH METHODOLOGY

a. Compounded annual growth rate (“CAGR”): It is a measure used to calculate the average annual growth rate of an investment, stock, index or financial metric over a specific period, assuming that the growth happens at a consistent rate year over year. It accounts for the effect of compounding, making it a more accurate representation of growth compared to simple averages.

Wherever the terms "return," "returns" or "annual returns" have been used in this report, it refers to CAGR for the specified time period.

b. Emerging markets: The 24 emerging markets (EMs) considered for this study have been adopted from the MSCI Emerging Markets Index. The EMs, their respective headline indices and currencies are as follows:

COUNTRY	HEADLINE INDEX	CURRENCY
 Brazil	Bovespa Index	Brazilian Real
 Chile	S&P/CLX IPSA	Chilean Peso
 China	Shanghai Composite Index	Chinese Yuan
 Colombia	COLCAP Index	Colombian Peso
 Czech Republic	PX Index	Czech Koruna
 Egypt	EGX 30 Index	Egyptian Pound
 Greece	ASE Index (ATHEX Composite)	Euro
 Hungary	BUX Index	Hungarian Forint
 India	Nifty 50 (National Stock Exchange)	Indian Rupee
 Indonesia	IDX Composite Index	Indonesian Rupiah
 Korea	KOSPI Index	South Korean Won
 Kuwait	Boursa Kuwait Main Market Index	Kuwaiti Dinar
 Malaysia	FTSE Bursa Malaysia KLCI	Malaysian Ringgit
 Mexico	IPC (Índice de Precios y Cotizaciones)	Mexican Peso
 Peru	S&P/BVL Peru General Index	Peruvian Sol
 Philippines	PSEi (Philippine Stock Exchange Index)	Philippine Peso

	Poland	WIG20 Index	Polish Złoty
	Qatar	QE Index	Qatari Riyal
	Saudi Arabia	Tadawul All Share Index (TASI)	Saudi Riyal
	South Africa	SOUTH AFRICA TOP 40	South African Rand
	Taiwan	TAIEX (Taiwan Capitalization Weighted Stock Index)	New Taiwan Dollar
	Thailand	SET Index (Stock Exchange of Thailand)	Thai Baht
	Turkey	BIST 100 Index	Turkish Lira
	United Arab Emirates	ADX General Index (Abu Dhabi)	UAE Dirham

Note: The data of a few countries' equity indices or local currency gold from the above was not available for historical analysis on the public portal. Such countries have been excluded from our analysis. We have specifically excluded Turkey for our analysis because the country has been experiencing an economic crisis since 2018, characterised by a depreciating lira (local currency), high inflation, and rising borrowing costs.

The gold returns as well as indices' returns have been calculated on price return index up to July 1, 2024. For equity indices, the total return index of respective countries has not been considered due to the limited availability of data.

c. Risk-free rate: The risk-free rate is the interest rate that an investor can expect to earn on an investment that has zero risk. In practice, the risk-free rate is often considered to be the same as the interest paid on a 10-year highly rated government treasury note.

The 10-year sovereign bond yield of each country was utilised as a proxy for the risk free rate.

d. Standard deviation: It is a statistical measure and is commonly used to assess the volatility of an investment's returns. A higher standard deviation indicates greater variability in returns, signifying higher risk, while a lower standard deviation suggests more stable returns.

The standard deviation was calculated for both equity indices and gold to assess the **volatility** and **risk** associated with each asset class.

e. Sharpe ratio: It is a measure of risk-adjusted performance that evaluates how much excess return an investment generates over the risk-free rate for each unit of risk taken (standard deviation). This ratio helps investors understand

the return of an investment compared to its risk.

The Sharpe ratio was calculated for each asset in each market, providing a measure of the **excess return per unit of risk**.

The Sharpe ratio was calculated to evaluate risk-adjusted returns. However, due to the unavailability of the risk-free rate for periods extending beyond 10 years, the average Sharpe ratio was calculated only for the 10-year data set. For the 15, 20 and 25-year data analyses, we have used the reward-to-risk ratio as an alternative measure.

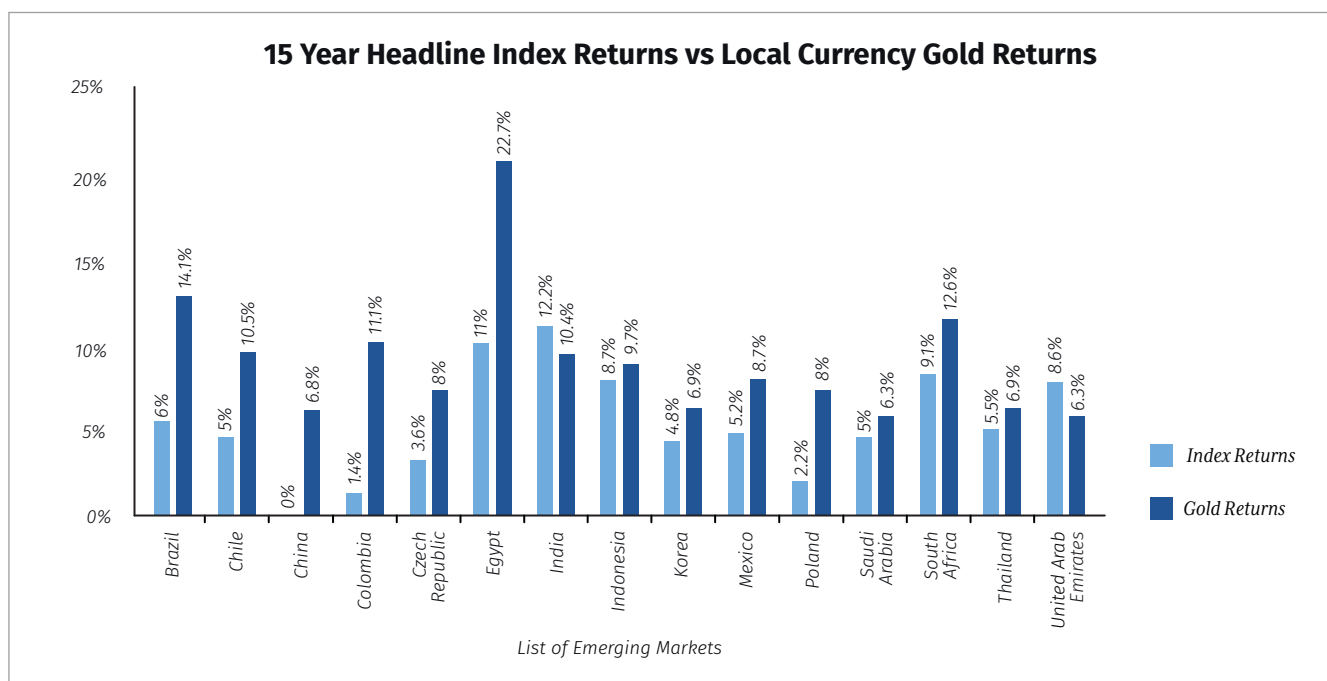
f. Reward-to-risk ratios: The reward-to-risk ratio is a metric that compares the realised returns of an investment to the level of risk that was undertaken. It is calculated by dividing the realised return of an investment by the measure of risk, i.e., the standard deviation of returns.

g. Local currency gold prices: The daily international gold prices (in USD) have been converted into local currency prices for various emerging market countries using the respective countries' exchange rates against the USD.

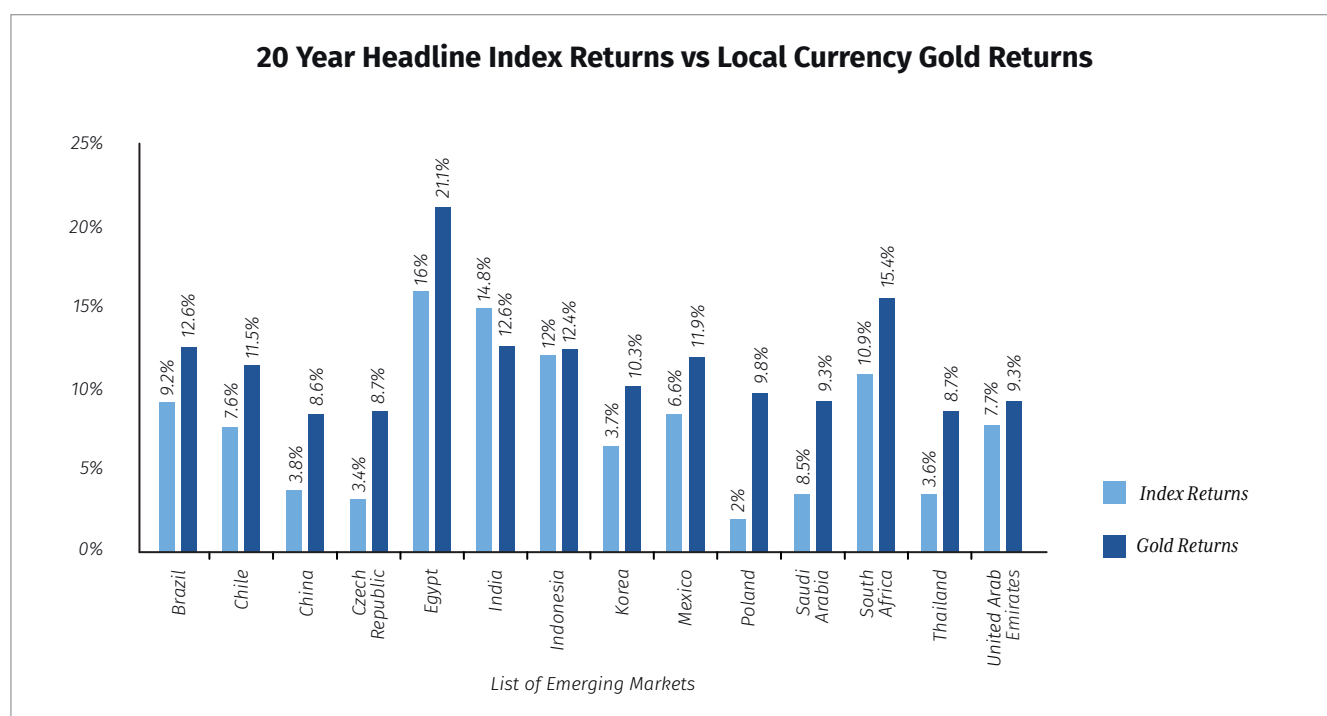
ANALYSIS AND OBSERVATIONS

a. Comparing each country's headline index returns with their respective local currency gold returns

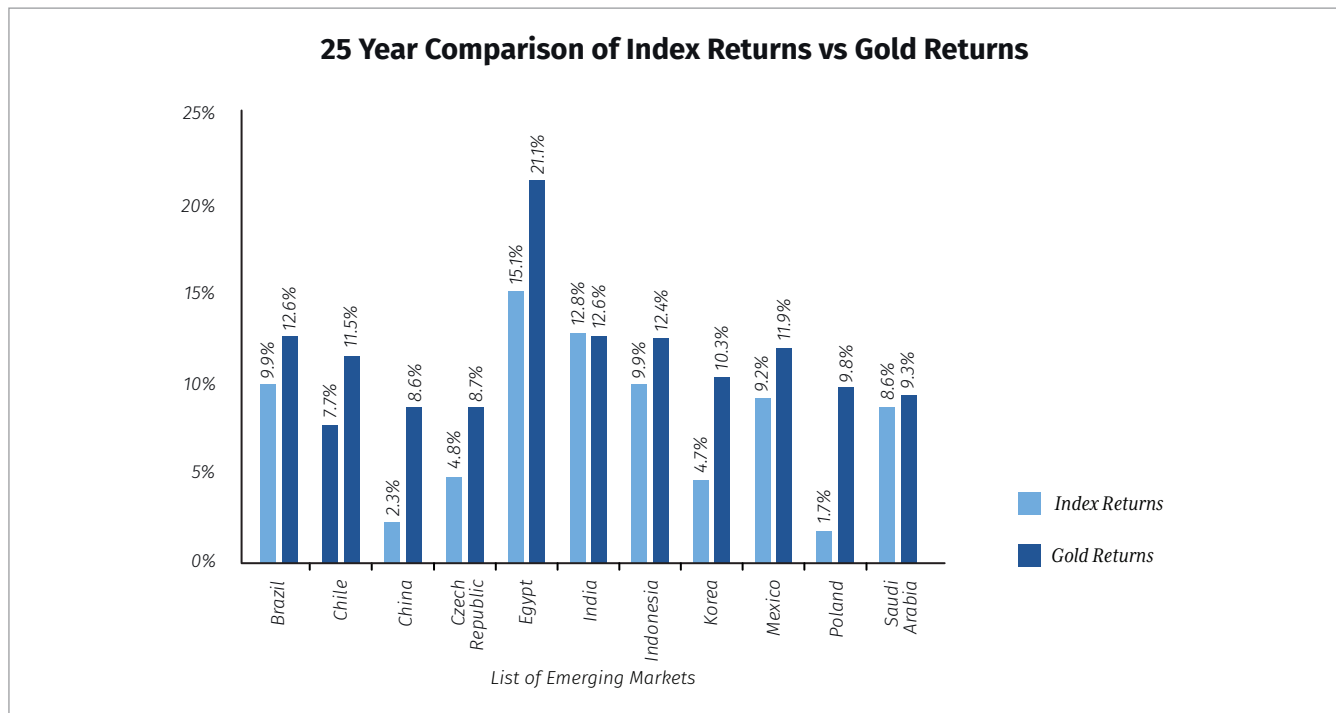
i. 15-year time frame: Only India's and UAE's headline equity indices beat their respective local currency gold returns, i.e., only two out of fifteen EMs.



ii. 20-year time frame: Only one EM (India) out of fourteen EMs outperformed its local currency gold returns.

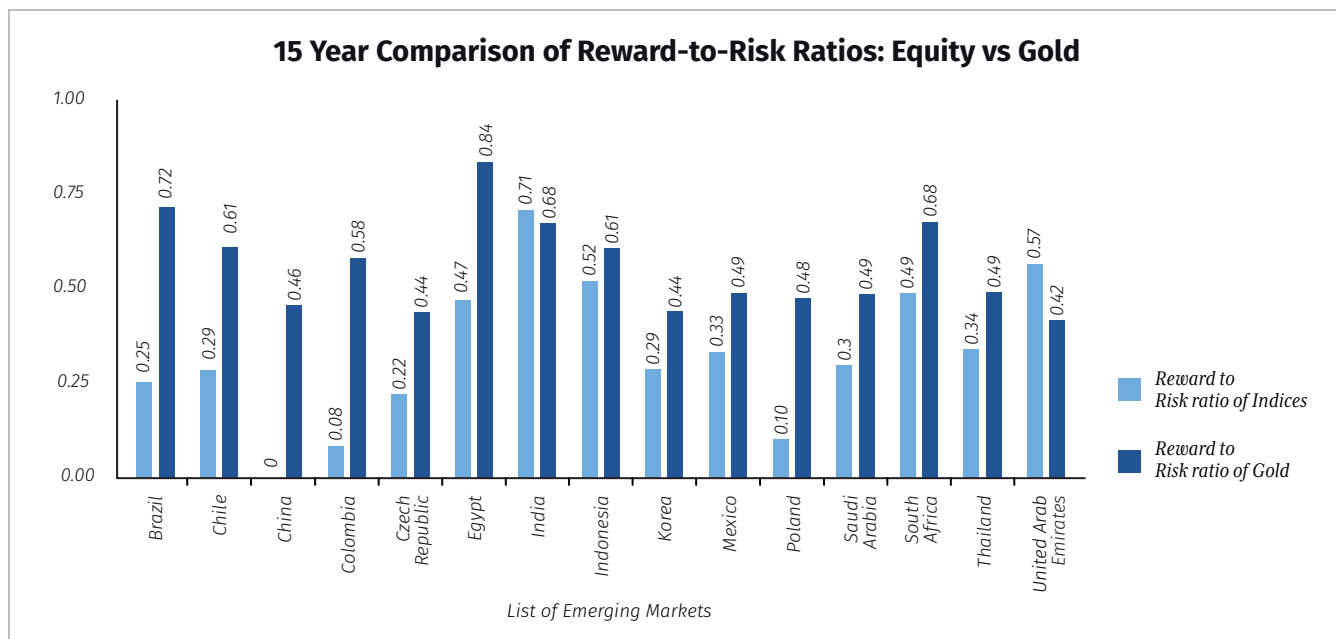


iii. 25-year time frame: Only one EM (India) out of eleven EMs outperformed its local currency gold returns.

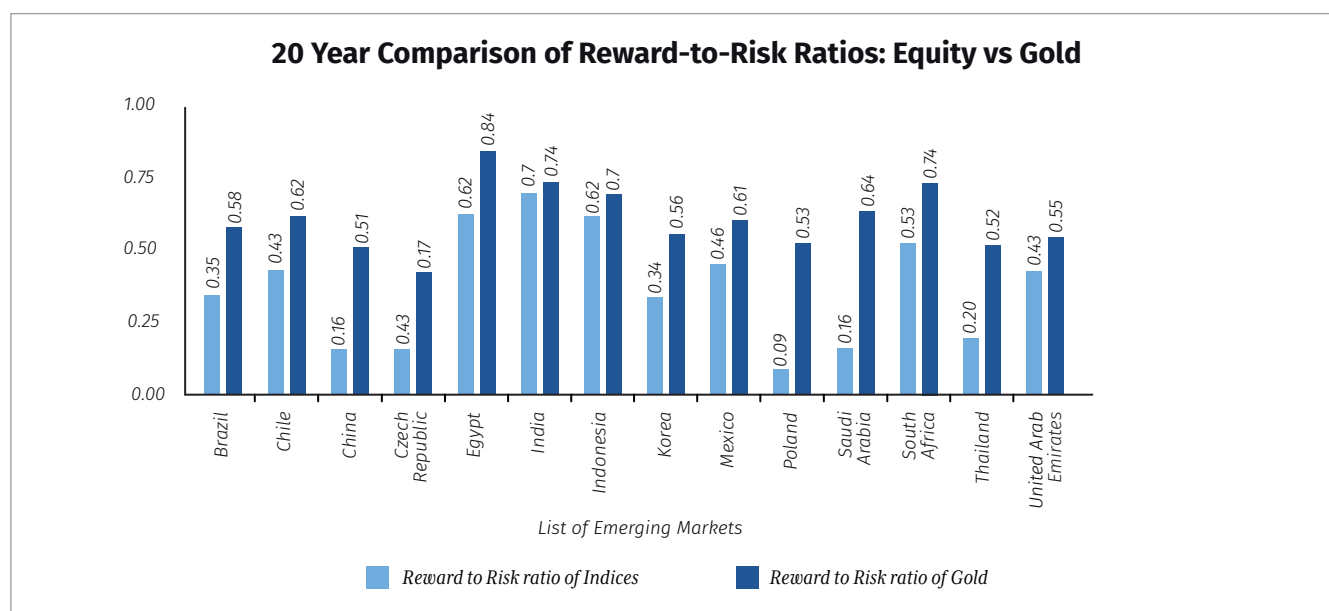


b. Comparing each country's reward-to-risk ratios of their headline indices and their respective local currency gold returns

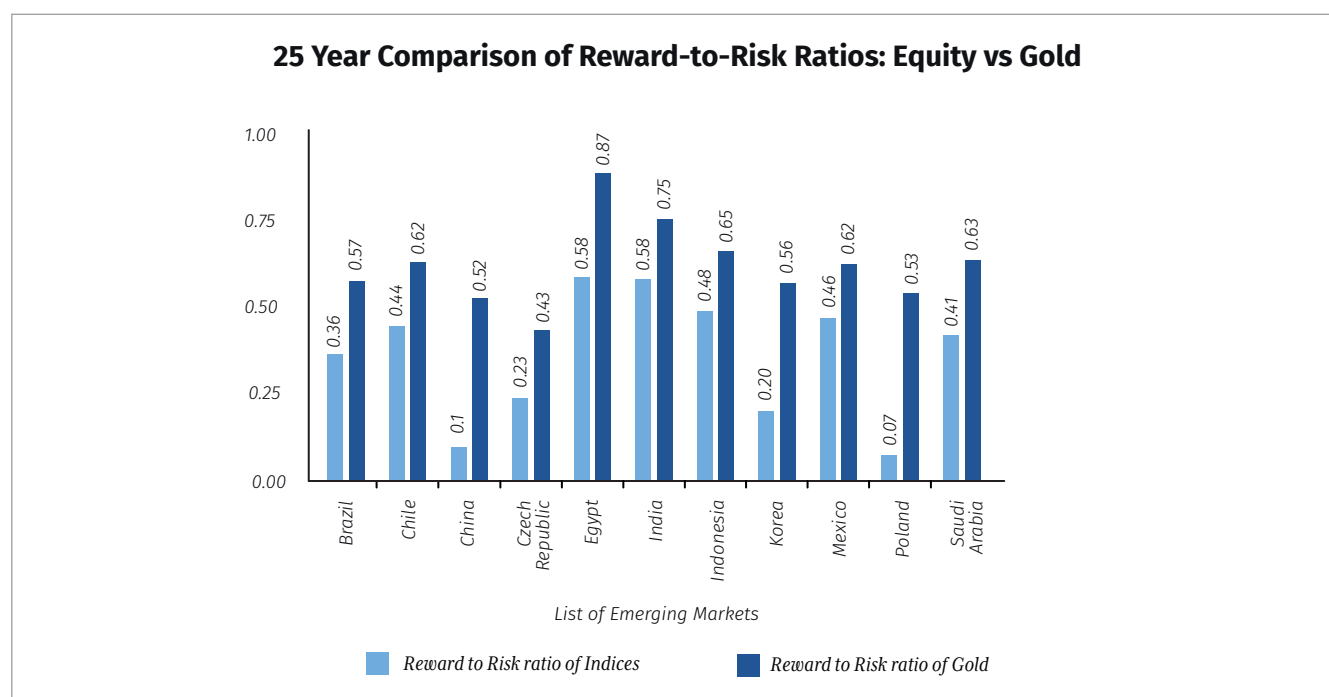
i. 15-year time frame: Only India's and UAE's headline equity indices reward-to-risk ratio was higher than their local currency gold's reward-to-risk ratio.



ii. 20-year time frame: No country's headline equity index's reward-to-risk ratio beat their respective local currency gold's return-to-reward ratio."



iii. 25-year time frame: No country's headline equity index's reward-to-risk ratio beat their respective local currency gold's return-to-reward ratio.

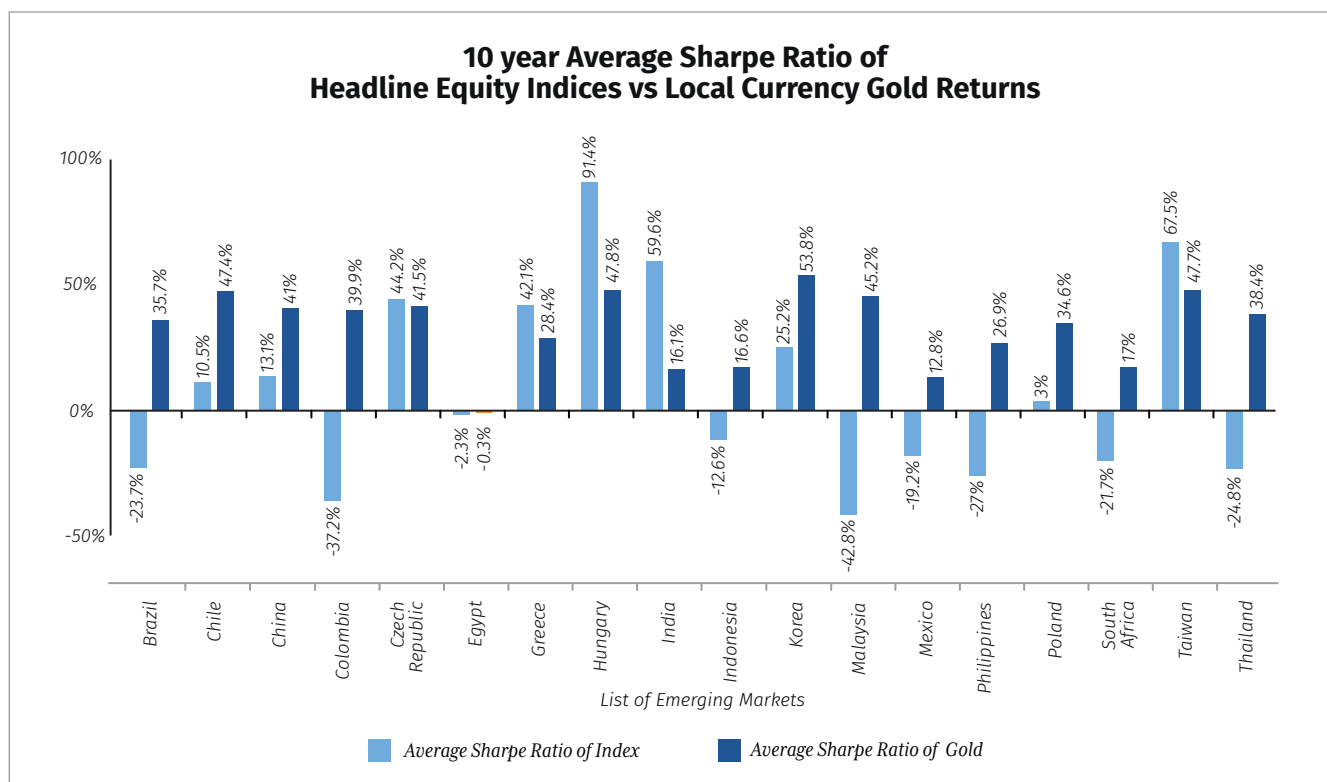


c. Comparing Sharpe ratios of each country's headline indices and their respective local currency gold returns on a 10-year time frame:

Investors assume more risk in alternate asset classes than risk-free treasury bonds to make more returns in the former than the latter. Sharpe ratio helps calculate the returns an asset has made over the risk-free rate for the volatility assumed in the concerned asset class (standard deviation).

Thus, Sharpe ratio is an accepted metric to calculate the reward of an asset class with another. However, due to limited availability of data, we could calculate the Sharpe ratios of sixteen EMs for a 10-year period only.

As per our study, five out of eighteen EMs' headline equity indices' Sharpe ratios beat their respective local currency gold's Sharpe ratios.



CONCLUSION

The data has been analysed across extensive time horizons to only help us come to the conclusion that during these time frames, investors would've been better off investing in gold than most EMs' headline equity indices, from both a return as well as relative reward-to-risk perspective.

However, both equity and gold are important asset classes to construct one's portfolio. We have observed that those actively seeking investment advice invest only 2-3% of their portfolios in gold. Thus, investors must consult their qualified financial advisors to re-evaluate the exposure of gold in their portfolios.

