

Is Gold a Safe Haven in all Currencies?

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Abstract

This paper shows that gold's safe haven property crucially depends on gold's exchange rate with the respective currency for local investors. A sample of 68 international equity market indices demonstrates that currencies significantly affect the strength of the safe haven effect, enhancing or diminishing the effect. Volatile and "risk-on" currencies boost gold's safe haven property while "risk-off" currencies weaken the safe haven effect.

Keywords: gold, safe haven, currency hedge, stock markets

JEL: F31, G01, G11, G14

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1 Introduction

A large literature tests whether gold is a safe haven against stock market declines in different markets and thus for different investors. Given the high correlation of stock markets, gold can only play different roles for investors with flexible exchange rates as the price of gold would be the same if all currencies were fixed. However, since most currencies are not fixed, exchange rate changes play an important role for the safe haven property.¹ For example, if all stock markets fall together in a crisis and the price of gold increases in US dollars, gold is a safe haven for US investors but not necessarily for investors in other countries with different currencies. If a currency depreciates against the US dollar, the price of gold in that currency increases even more than the price of gold in US dollars. Similarly, if a currency appreciates against the US dollar, the price of gold in that currency increases by less than the price of gold in US dollars or even falls. Importantly, if both gold and the US dollar are safe havens and increase in crisis times, it is possible that the price of gold in US dollars does not increase or falls while increasing in all currencies that do not appreciate. This suggests that a more comprehensive analysis of gold's safe haven property may be required. Figure 1 presents an example of how different gold price changes can be for gold denominated in different currencies during crisis times for Australia. The evolution of the stock market and gold prices denominated in US dollars and in Australian dollars for the Global Financial Crisis (GFC) and the COVID outbreak shows that the differences in gold prices can be significant. More precisely, the example shows that the price of gold in US dollar fell between August and October 2008 while the price of gold in Australian dollar increased over the same period. The fall in the price of gold is due to an appreciation of the US dollar (e.g. see [Fratzscher \(2009\)](#)) and implies that a comprehensive assessment of gold's safe haven property and performance must entail more than one currency denomination.

The gold prices for the COVID outbreak show a similar pattern with stronger gold price increases in Australian dollars than in US dollars.

[Figure 1 about here.]

This study demonstrates that such effects are not limited to a handful of countries but are

¹Gold's safe haven effect and the role of exchange rates on this effect is generally not explicitly analyzed and not for a large sample of countries and exchange rates.

significant and often substantial for the majority of the 68 global stock market sample. The analysis illustrates that risk-on currencies, i.e. currencies that depreciate when investors' risk aversion increases, boost the safe haven effect while risk-off currencies or safe haven currencies weaken the effect. We analyze all stock market - gold correlations for different currency denominations (US dollar and local currency) and find that gold is a safe haven for local investors in almost all of the 68 markets based on monthly data. In contrast, gold is not a safe haven for US investors in all 68 markets due to significant exchange rate changes. Finally, we also relate the exchange rate changes to stock market changes in periods of extreme stock market losses and find a clear negative relationship, that is, large (small) depreciations of the local currency are associated with large (small) losses in the stock market. This result suggests that capital flows and international investors play a key role in some markets.

The related literature includes studies that focus on gold as a safe haven for stocks (e.g. see [Baur and Lucey \(2010\)](#); [Baur and McDermott \(2010\)](#); [Gurgun and Unalmis \(2014\)](#); [Beckmann, Berger, and Czudaj \(2013\)](#)), gold as a safe haven for currencies (e.g. see [Reboredo \(2013\)](#); [Reboredo and Rivera-Castro \(2014\)](#)), gold as a currency hedge ([Capie, Mills, and Wood \(2005\)](#)) and safe haven currencies ([Ranaldo and Söderlind \(2010\)](#)).² It seems that there is no study yet that analyzes the safe haven effect against extreme stock market losses and the currency hedge effect jointly. Hence this paper fills a gap in the existing literature and contributes with a joint analysis of gold's safe haven property and gold's currency hedge property and the interaction between the two properties. In addition, the empirical analysis is based on an exceptionally large stock market and currency sample and a detailed analysis of all currency denominations, local currency and US dollar denominations of stock markets and gold.

The rest of the paper is structured as follows. Section 2 presents some theoretical considerations, Section 3 presents the data, Section 4 presents the empirical analysis with average correlations, correlations conditional on extreme negative stock market returns and correlations during crisis periods. The section also relates stock market returns to changes in currencies and finds that stock market losses are positively correlated with currency depreciations. Finally, Section 5 summarizes the main results and concludes.

²[Erb and Harvey \(2013\)](#) also discuss the currency hedge property and describe how this property is related to the claimed inflation hedge property of gold.

2 Theory

This section aims to provide some theoretical description of the stock market - gold - currency relationship. Gold's safe haven property against stock market losses can be defined as a zero or positive price change of gold during periods of extreme stock market losses (e.g. see [Baur and Lucey \(2010\)](#)). Gold's currency hedge property can be defined as a positive price change of gold in local currency for any depreciation of the local currency (e.g. see [Capie et al. \(2005\)](#)). The two properties differ with respect to the conditions for which they hold. The safe haven effect only holds in extreme adverse stock market conditions while the currency hedge property holds on average possibly but not necessarily including periods of extreme stock market conditions.

Since currencies and thus exchange rates can also change in extreme adverse stock market conditions the exchange rate changes can interfere with the safe haven effect. The following equation describes the relation between the price of gold in local currency and exchange rate changes:

$$R_{G,L} = (1 + R_{G,USD}) \times (1 + R_{L/USD}) - 1 \quad (1)$$

where $R_{G,L}$ denotes the return (R) of gold (G) in local currency (L). $R_{G,USD}$ denotes the return of gold in US dollars (USD) and $R_{L/USD}$ denotes the return of the L/USD exchange rate.

The equation shows that a depreciation of L (more L required to purchase one unit of USD) leads to an increase in the price of gold in local currency for any given price of gold in US dollar. Similarly, an appreciation of L (less L required to purchase one unit of USD) leads to a decrease in the price of gold in local currency. This relation implies that gold may be a safe haven in local currency but may not be a safe haven in US dollar or vice versa. Hence, exchange rate changes can strengthen or weaken and even destroy the safe haven effect of gold. Consequently, in a scenario in which all currencies and thus exchange rates are fixed there would be no difference between gold prices in different currencies as there would only be one price of gold.

Theoretically, gold could have very different roles for investors if global stock markets were not or only weakly correlated. For example, if the correlation between some markets was zero or even negative, gold would co-move with the stock market in some countries and not be a hedge

or a safe haven and move in opposite directions in other markets consistent with a hedge or a safe haven.

Empirically, however, the correlation is generally positive and relatively strong implying that global stock markets co-move and that gold has similar roles for investors across countries and markets.³

3 Data

The empirical analysis of this study is based on monthly gold prices and stock market prices of 68 markets (Datastream total market indices constituent list) denominated in local and in US dollar from end of December 1999 until end of July 2021. Tables 1 and 2 present the summary statistics of the local stock market returns and gold returns in local currency. The summary statistics are cross-sectional means. The granular summary statistics for each market and gold return in each country's local currency are included in Tables 14 and 15 in the Appendix.

Table 1 shows that the mean return over all 68 stock markets is positive and that 62 markets exhibit positive mean returns and 6 markets exhibit negative mean returns. Table 2 shows that the mean gold return over all 68 (local) currency denominations is positive and that there is not one market that exhibits a negative return.

[Table 1 about here.]

[Table 2 about here.]

4 Empirical Analysis

This section presents the empirical analysis of three types of correlations: average stock market - gold correlations, extreme stock market - gold correlations and crisis-specific stock market - gold correlations. The final part is based on cross-sectional data and relates exchange rate changes with extreme stock market changes.

³The average correlation of all stock markets in our sample is 0.40 for local currency returns and 0.48 for US dollar currency returns. It is important to note that the correlations are significantly higher for a less heterogeneous sub-sample such as stock markets belonging to the G7 countries or to emerging markets.

4.1 Average correlations

Figure 2 shows the distribution of the unconditional correlations and the correlations for extreme (5% and 1% quantiles) stock market returns for the stock market in local currency (SL) with gold in US dollars (GUSD), for the stock market in local currency with gold in local currency (GL) and for the stock market in USD (SUSD) with gold in USD for all 68 countries. The densities show that the local currency correlations are the most negative on average, the USD currency correlations are the most positive on average and the local stock market - gold in USD correlations are in between the two, roughly centered around zero. The location of the densities indicates that gold works best as a hedge for local investors and less so and for less markets for US or US dollar investors.

[Figure 2 about here.]

Figures 3 - 5 display the results for each of the 68 countries as barplots. Specifically, Figure 4 shows that Australia, Turkey and Brazil have the most negative stock market - gold correlations in local currency (all smaller than -0.25) and Venezuela, Egypt and Peru have the most positive correlations (all larger than 0.2). A negative correlation implies that gold increases in value when the stock market falls and that gold decreases in value when the stock market increases. A positive correlation implies that gold and the stock market co-move. Larger than average negative correlations are due to a depreciating currency that increases the price of gold in that currency by more than the price of gold denominated in a stable currency. Similarly, larger than average positive correlations are due to an appreciating currency that decrease the price of gold and leads to a co-movement of the stock market with the price of gold in local currency.

The high positive correlation for Venezuela is related to the high inflation rates of Venezuela that increase both the stock market and the value of gold in nominal terms. The higher gold price in local currency is a result of a depreciating Venezuelan currency implied by purchasing power parity.

[Figure 3 about here.]

[Figure 4 about here.]

[Figure 5 about here.]

Table 3 presents the correlation estimates for each market and Table 5 presents the summary statistics averaged over all markets.

[Table 3 about here.]

[Table 4 about here.]

The summary statistics add information to the density plots, e.g. the number of positive and negative correlations and the standard deviation of the correlations. The correlations in local currencies exhibit the largest number of negative correlations and the most negative mean followed by local stock market correlations with gold in USD (SL, GUSD) and the stock and gold correlations in US dollars (SUSD, GUSD).

[Table 5 about here.]

4.2 Extreme correlations

Tables 6 and 8 show correlation estimates conditional on extreme stock market losses in the 5% and 1% quantiles, respectively. Tables 10 and 11 display the respective summary statistics over all 68 markets.

[Table 6 about here.]

[Table 7 about here.]

[Table 8 about here.]

[Table 9 about here.]

The patterns for the conditional correlations based on extremes are similar to the unconditional correlations, e.g. for the 5% conditional quantile estimates, the local currency correlations (SL,GL) are the most negative on average, the (SL,GUSD) are in the middle and the

(SUSD,GUSD) are the most positive on average. The number of negative correlations is largest for (SL,GL) at 55 versus 13 compared with only 12 negative correlations for (SUSD,GUSD) and 25 for (SL,GUSD). For the 1% quantile conditional quantile estimates, the correlations are weaker and all closer to zero with positive and negative correlations essentially equal for (SL,GL).

[Table 10 about here.]

[Table 11 about here.]

4.3 Crisis correlations

This section analyzes correlations for two crisis periods, the 2008 Global Financial Crisis (GFC) and the 2020 COVID outbreak.

Figure 6 provides an example of the performance of gold and stock markets in both crisis periods for UK and US investors and demonstrates that gold prices can differ and deviate substantially from the US dollar price as shown for the UK market. Specifically, the graphs illustrate that an appreciation of the US dollar and a depreciation of the British pound lead to a stronger performance of gold in British pounds than in US dollars.

[Figure 6 about here.]

Table 12 presents a more comprehensive analysis of the effects during the two crisis periods for all 68 markets. The Table displays the (simple) sum of returns over 4-months for the GFC and COVID periods in nominal terms and relative to gold prices in US dollars denoted with a superscript *. The estimates show a positive performance of gold consistent with a safe haven for most countries in both crisis periods except for Japan, Switzerland, the US, and countries with a peg or quasi-peg to the US dollar such as Bahrain, China, U.A.E. and Venezuela. The Japanese yen, the Swiss franc and the US dollar are all considered safe haven currencies which explains why gold denominated in these currencies does not exhibit positive returns - the currency safe haven effect seems to be stronger than the gold safe haven effect. In fact, it is possible that the intrinsic price of gold (denoted as G) increases by 5% and that the US dollar (denoted as USD) increases by 6% leading to a decline in the price of gold in US dollars (denoted by G,USD) by about 1%. This can be expressed as $R_{G,USD} = (1 + R_G)/(1 + R_{USD}) - 1$ where R denotes the return.

[Table 12 about here.]

[Table 13 about here.]

The estimates also show that so-called commodity currencies such as the Australian dollar, the Canadian dollar, the Norwegian krona and the South African rand are risk-on currencies and thus show relatively large depreciations during crisis periods. Brazil, Russia and Turkey are other examples of currencies that clearly depreciate during the two crisis periods. In contrast, risk-off or safe haven currencies show relatively small or even negative returns in local currency due to the appreciation of the currencies related to their safe haven status (e.g. see [Habib and Stracca \(2012\)](#) and [Fratzscher \(2009\)](#) for an analysis of the US dollar during the 2008 Financial Crisis). Naturally, this also affects countries that have fixed or quasi-pegged their currencies to the US dollar such as China, Hong Kong and U.A.E. among others.

4.4 Why do currency values fall during stock market crisis?

The previous analysis illustrated that the safe haven effect of gold is often boosted by currency depreciations. This section aims to further our understanding as to why currencies depreciate when stock markets fall and the gold price increases.

Figure 7 shows the relation between large negative stock market changes and exchange rate changes when stock market returns exceed a 1% quantile threshold. The exchange rate changes are measured as the difference between gold in US dollar and gold in local currency. The scatter plot demonstrates that large negative stock returns are associated with large depreciations of the local currency and thus higher gold returns in local currency.

[Figure 7 about here.]

In other words, stock market losses appear smaller for countries whose currency is stable or appreciates and losses appear larger for countries whose currency depreciates. Investors fleeing certain markets causing stock markets and currencies to fall may explain these differences. The results indicate that flexible or floating exchange rates boost gold prices and the safe haven effect

potentially exerting a stabilizing effect on investors and markets. Naturally, countries whose currencies are pegged to the US dollar do not show a negative relation and lie on a horizontal line with the US.

5 Summary and Concluding Remarks

This paper analyzed a global sample of 68 stock markets and gold both in local currencies and in US dollars. The results show that gold is a safe haven for local investors in more than 60 markets and countries. Furthermore, the findings illustrate that exchange rate changes substantially influence the safe haven effect for local investors and generally the most for markets with large losses. In other words, the safe haven effect is negatively related to the value of the local currency implying that a fall in the value of the local currency enhances the safe haven effect. The analysis highlights that gold's currency hedge property works best in crisis times and often boosts gold's safe haven property for local investors. The findings also demonstrate that gold's safe haven property is not fully understood if the focus is on gold in only one currency denomination, e.g. the US dollars. Another interesting insight is that currency changes are more persistent and longer-lived than the rather short-lived "pure" safe haven effect which implies that the combined effect can be longer than the usual 10 - 15 days and thus also be evident in monthly data. Specifically, while the price of gold in US dollars generally reverts after about ten days, the local currency does not as quickly revert to pre-crisis levels which results in a longer-lasting safe haven effect for non-US dollar investors. The different gold price denominations also allow an analysis of currency changes relative to stock market changes and show that markets with large currency depreciations tend to have larger stock market losses than markets with small currency depreciations. This finding suggests that capital outflows are a key determinant of the enhanced safe haven effect.

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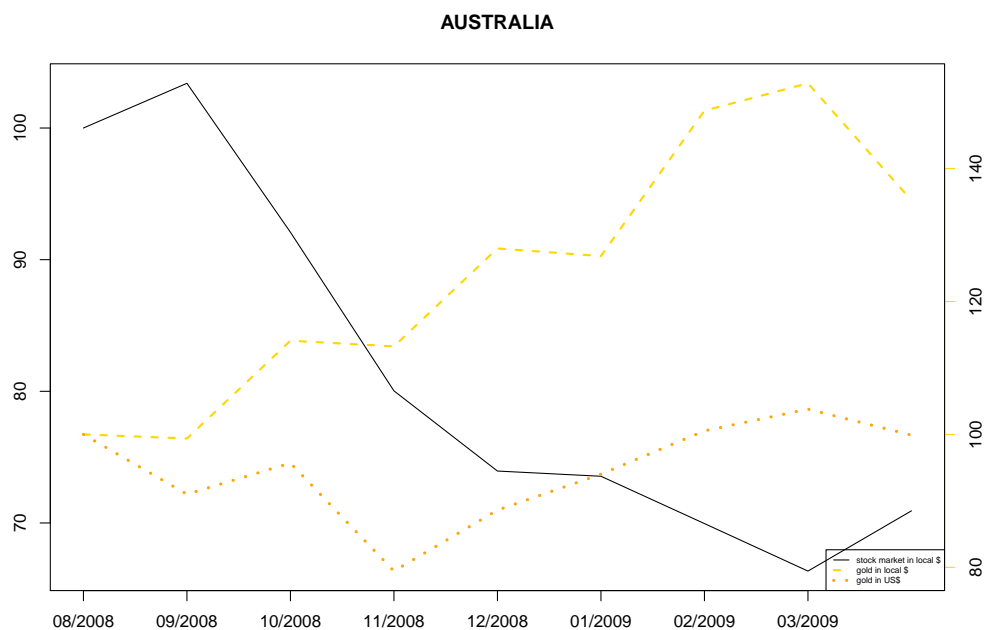
Appendix

[Table 14 about here.]

[Table 15 about here.]

Figure 1: Example how currency effects change the performance of gold as a safe haven in local currency (A\$) for two crisis periods (GFC crisis (Panel A) and COVID crisis (Panel B))

(a) GFC



(b) COVID

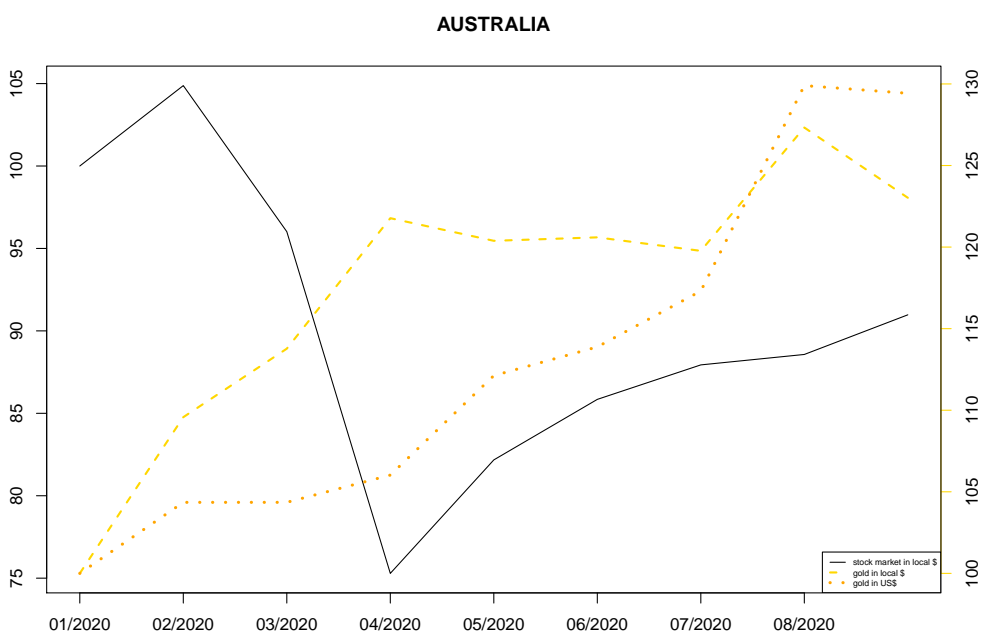
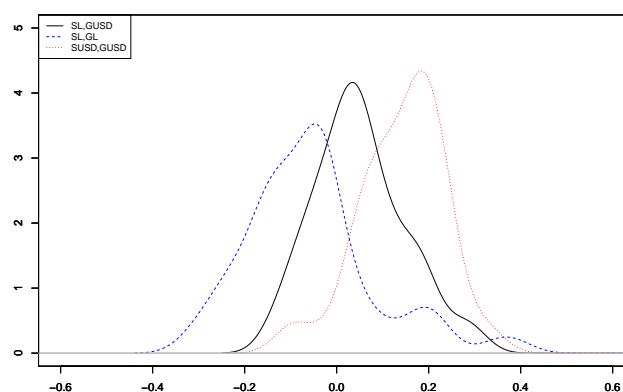


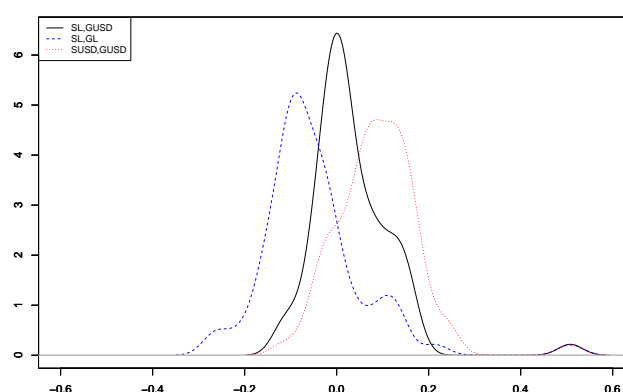
Figure 2: Correlation Distribution over 68 countries

The Figure shows the distribution of the correlations and the correlations for extreme (5% and 1% quantiles) stock market returns for the stock market in local currency (SL) with gold in USD (GUSD), for the stock market in local currency with gold in local currency (GL) and for the stock market in USD (SUSD) with gold in USD.

(a) Average



(b) 5% quantile stock market return threshold



(c) 1% quantile stock market return threshold

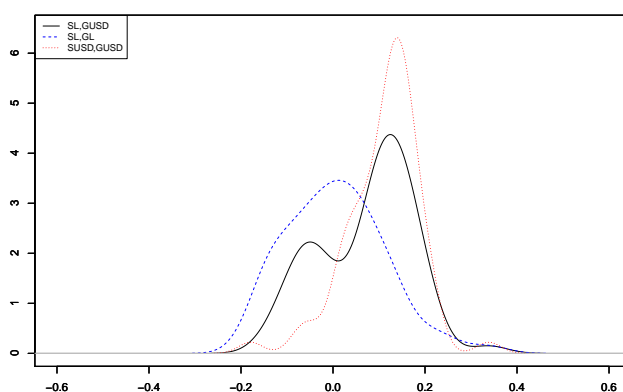


Figure 3: Correlations stock market in local currency with gold in USD
 The barplots show the correlation coefficients of local currency stock markets with gold in USD for 68 stock markets.

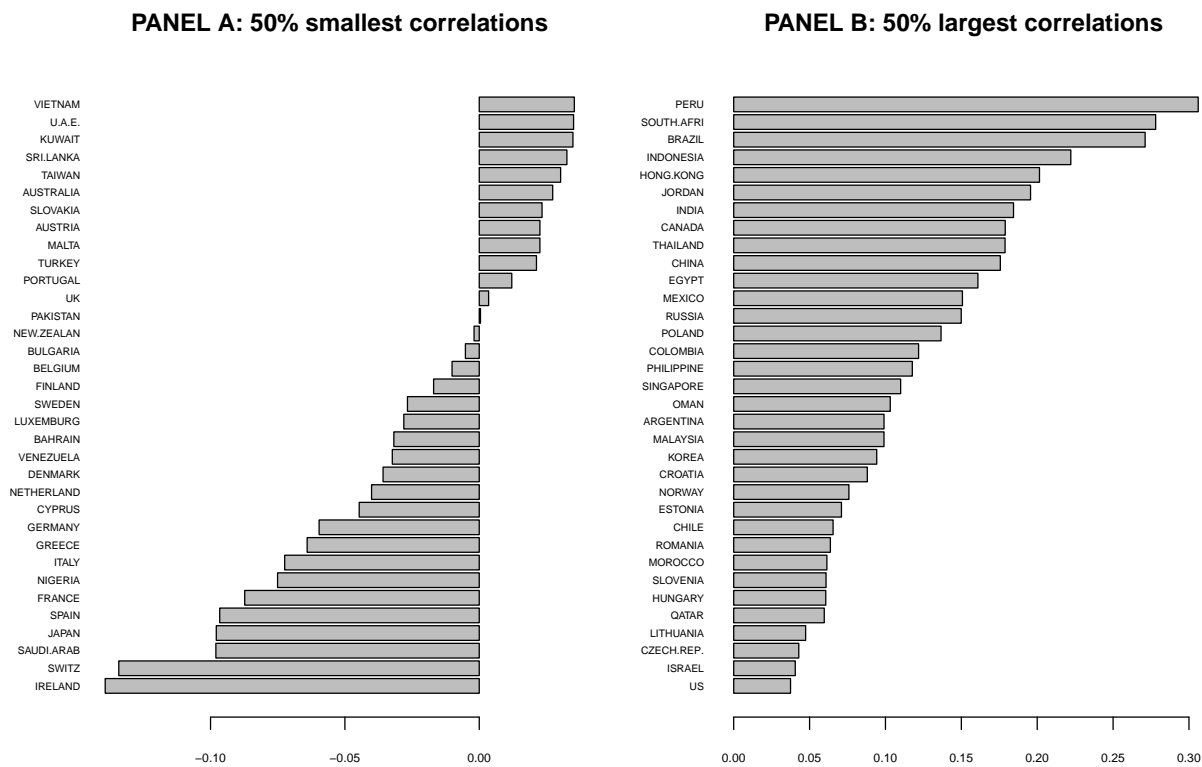


Figure 4: Correlations stock market in local currency with gold in local currency
The barplots show the correlation coefficients of local currency stock markets with local currency gold for 68 stock markets.

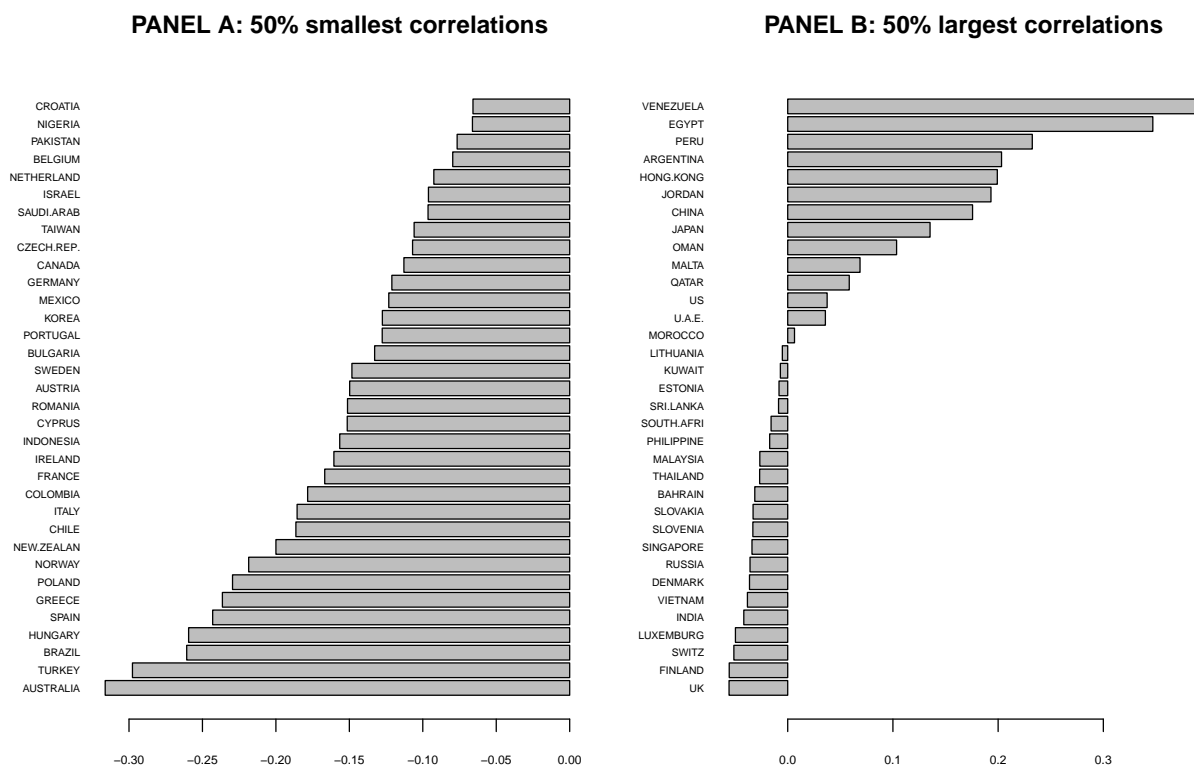


Figure 5: Correlations stock market in USD with gold in USD

The barplots show the correlation coefficients of stock markets in USD with gold in USD for 68 stock markets.

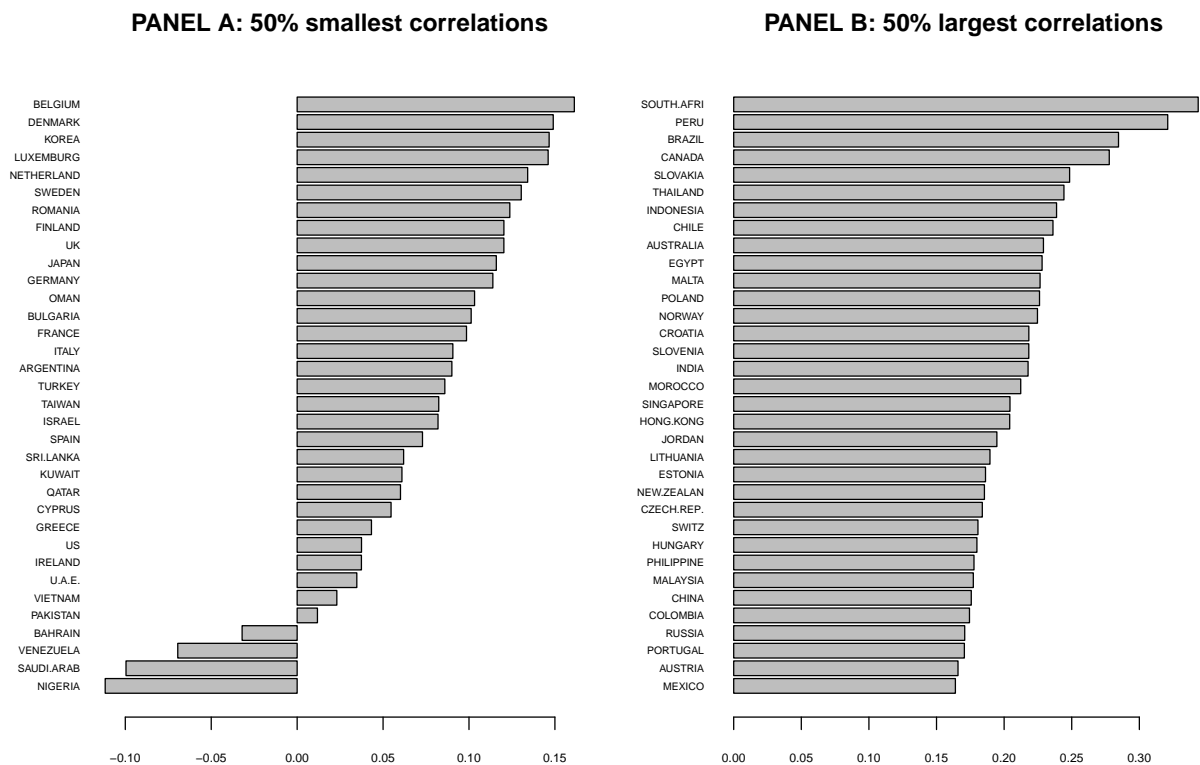
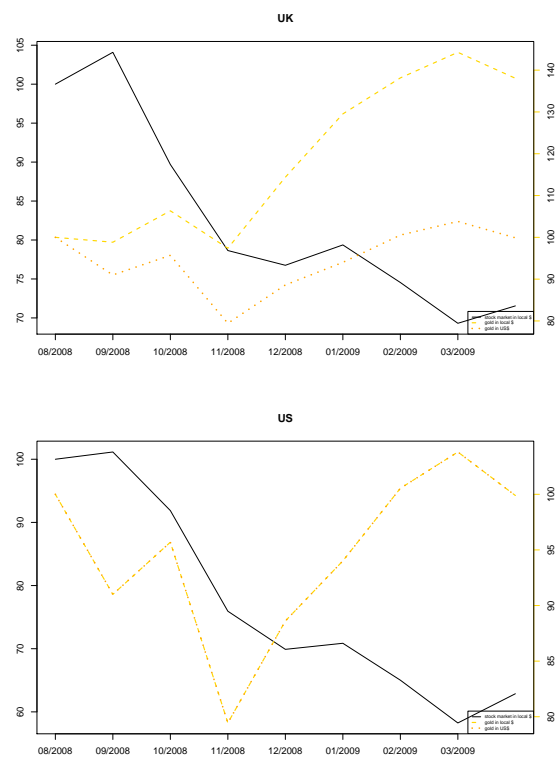


Figure 6: Crisis-performance of gold and currencies in UK and US

(a) GFC



(b) COVID

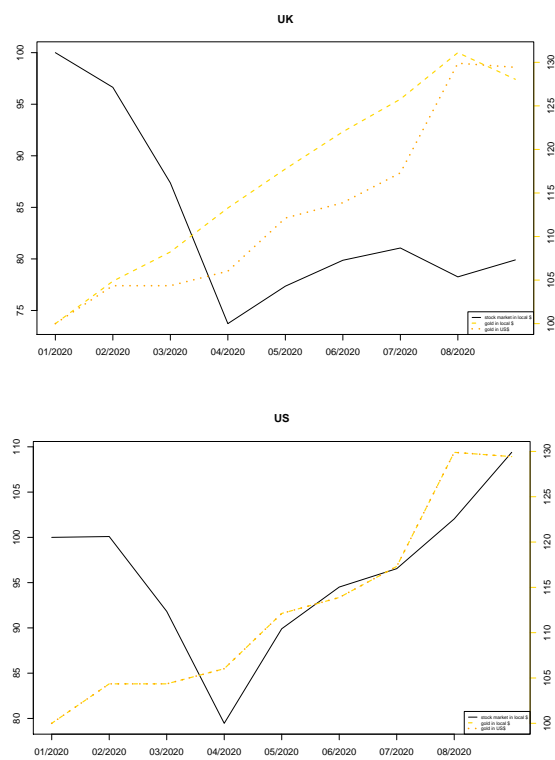


Figure 7: Currency changes and stock market returns

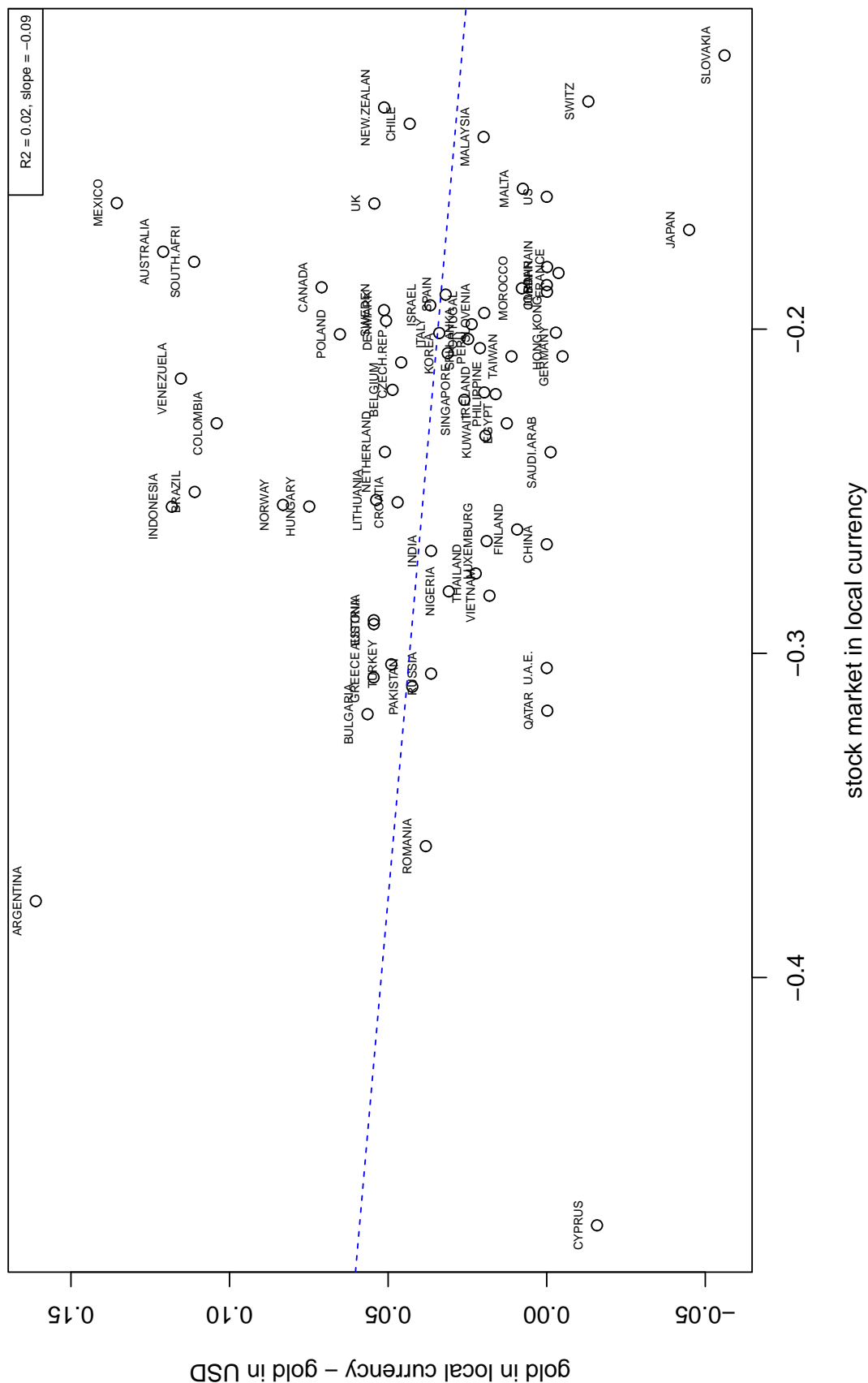


Table 1: Summary of distribution of local stock market return statistics (across 68 markets)

	Mean	SD	Min	Max	Skewness	Kurtosis	Ljung-Box
Min	-1.499	3.058	-65.468	8.552	-1.200	3.603	1.709
Max	14.037	37.637	-10.669	280.177	4.194	24.533	146.328
Mean	0.698	6.340	-23.785	25.988	-0.202	5.983	14.650
Median	0.460	5.535	-22.060	19.185	-0.377	5.127	8.765
Std Dev.	1.715	4.186	7.954	33.152	0.727	2.880	19.909
# r+	62	68	0	68	17	68	68
# r-	6	0	68	0	51	0	0

Table 2: Summary of distribution of local currency gold return statistics (across 68 markets/currencies)

	Mean	SD	Min	Max	Skewness	Kurtosis	Ljung-Box
Min	0.582	4.298	-31.397	12.132	-0.646	2.827	0.894
Max	36.109	249.968	-10.342	3,381.552	11.102	137.412	13.090
Mean	1.431	8.563	-14.277	69.460	0.610	7.699	4.642
Median	0.821	4.719	-13.223	16.008	0.309	3.627	3.500
Std Dev.	4.281	29.723	2.950	407.907	1.626	18.507	2.799
# r+	68	68	0	68	55	68	68
# r-	0	0	68	0	13	0	0

Table 3: Correlation coefficients of stock market with gold in different currency combinations
S denotes stock market, G denotes gold, L denotes local currency and USD denotes US dollar.

	SL,GUSD	SL,GL	SUSD,GUSD	SUSD,GL	SL,SUS	SUSD,SUS
ARGENTINA	0.099	0.203	0.090	-0.316	0.413	0.413
AUSTRALIA	0.027	-0.316	0.229	-0.412	0.755	0.791
AUSTRIA	0.023	-0.150	0.166	-0.219	0.713	0.705
BAHRAIN	-0.032	-0.031	-0.032	-0.032	0.362	0.362
BELGIUM	-0.010	-0.080	0.161	-0.178	0.719	0.752
BRAZIL	0.271	-0.261	0.285	-0.493	0.627	0.619
BULGARIA	-0.005	-0.133	0.101	-0.185	0.294	0.354
CANADA	0.179	-0.113	0.278	-0.171	0.815	0.817
CHILE	0.065	-0.186	0.236	-0.324	0.464	0.552
CHINA	0.176	0.176	0.176	0.176	0.453	0.453
COLOMBIA	0.122	-0.178	0.174	-0.378	0.363	0.482
CROATIA	0.088	-0.066	0.218	-0.145	0.522	0.605
CYPRUS	-0.045	-0.151	0.055	-0.196	0.388	0.439
CZECH.REP.	0.043	-0.107	0.184	-0.275	0.505	0.565
DENMARK	-0.036	-0.036	0.149	-0.145	0.661	0.736
EGYPT	0.161	0.347	0.228	-0.122	0.374	0.364
ESTONIA	0.071	-0.008	0.186	-0.090	0.373	0.443
FINLAND	-0.017	-0.056	0.120	-0.135	0.667	0.726
FRANCE	-0.087	-0.167	0.099	-0.246	0.817	0.830
GERMANY	-0.060	-0.121	0.114	-0.206	0.812	0.839
GREECE	-0.064	-0.236	0.043	-0.276	0.569	0.595
HONG.KONG	0.202	0.199	0.204	0.201	0.689	0.689
HUNGARY	0.061	-0.259	0.180	-0.406	0.602	0.623
INDIA	0.184	-0.042	0.218	-0.084	0.538	0.553
INDONESIA	0.222	-0.157	0.239	-0.287	0.501	0.521
IRELAND	-0.139	-0.161	0.037	-0.242	0.705	0.771
ISRAEL	0.041	-0.096	0.082	-0.196	0.566	0.640
ITALY	-0.072	-0.186	0.091	-0.252	0.708	0.731
JAPAN	-0.098	0.135	0.116	0.029	0.615	0.623
JORDAN	0.196	0.193	0.195	0.192	0.273	0.273
KUWAIT	0.035	-0.007	0.061	-0.0002	0.423	0.452
LITHUANIA	0.047	-0.005	0.190	-0.102	0.424	0.504
LUXEMBURG	-0.028	-0.050	0.146	-0.148	0.508	0.595
MALAYSIA	0.099	-0.027	0.177	-0.071	0.456	0.514

Table 3 (continued):

Correlation coefficients of stock market with gold in different currency combinations
 S denotes stock market, L denotes local currency, G denotes gold and USD denotes US dollar.

	SL,GUSD	SL,GL	SUSD,GUSD	SUSD,GL	SL,SUS	SUSD,SUS
MALTA	0.023	0.069	0.227	-0.071	0.236	0.387
MEXICO	0.151	-0.123	0.164	-0.317	0.660	0.721
MOROCCO	0.061	0.006	0.212	-0.037	0.229	0.355
NETHERLAND	-0.040	-0.092	0.134	-0.187	0.800	0.833
NEW.ZEALAN	-0.002	-0.200	0.185	-0.444	0.598	0.688
NIGERIA	-0.075	-0.066	-0.112	-0.372	0.319	0.300
NORWAY	0.076	-0.219	0.225	-0.313	0.732	0.738
OMAN	0.103	0.104	0.103	0.104	0.446	0.446
PAKISTAN	0.0005	-0.077	0.012	-0.124	0.259	0.282
PERU	0.306	0.232	0.321	0.170	0.345	0.376
PHILIPPINE	0.118	-0.017	0.178	-0.042	0.486	0.491
POLAND	0.137	-0.230	0.226	-0.376	0.607	0.648
PORTUGAL	0.012	-0.128	0.171	-0.209	0.612	0.634
QATAR	0.060	0.058	0.060	0.059	0.356	0.356
ROMANIA	0.064	-0.151	0.124	-0.246	0.367	0.435
RUSSIA	0.150	-0.036	0.171	-0.270	0.515	0.589
SAUDI.ARAB	-0.098	-0.096	-0.100	-0.098	0.443	0.444
SINGAPORE	0.110	-0.034	0.204	-0.004	0.691	0.706
SLOVAKIA	0.023	-0.033	0.248	-0.154	0.208	0.425
SLOVENIA	0.061	-0.033	0.218	-0.134	0.408	0.480
SOUTH.AFRI	0.278	-0.016	0.344	-0.391	0.601	0.624
KOREA	0.094	-0.128	0.147	-0.262	0.649	0.697
SPAIN	-0.097	-0.243	0.073	-0.295	0.699	0.708
SRI.LANKA	0.033	-0.009	0.062	-0.038	0.213	0.208
SWEDEN	-0.027	-0.148	0.130	-0.280	0.729	0.799
SWITZ	-0.134	-0.051	0.181	-0.167	0.766	0.768
TAIWAN	0.030	-0.106	0.082	-0.098	0.583	0.600
THAILAND	0.179	-0.027	0.244	-0.015	0.554	0.552
TURKEY	0.021	-0.298	0.086	-0.495	0.493	0.536
U.A.E.	0.035	0.036	0.035	0.035	0.322	0.322
UK	0.003	-0.056	0.120	-0.195	0.841	0.850
US	0.037	0.037	0.037	0.037	1	1.000
VENEZUELA	-0.032	0.390	-0.069	-0.391	0.185	0.113
VIETNAM	0.035	-0.038	0.023	-0.102	0.555	0.553

Table 5: Summary statistics of correlations

	SL,GUSD	SL,GL	SUSD,GUSD	SUSD,GL	SL,SUS	SUSD,SUS
Min	-0.139	-0.316	-0.112	-0.495	0.185	0.113
Max	0.306	0.390	0.344	0.201	1	1.000
Mean	0.050	-0.057	0.142	-0.168	0.532	0.568
Median	0.036	-0.061	0.163	-0.175	0.530	0.577
Std Dev.	0.099	0.141	0.092	0.164	0.183	0.179
# cor+	47	14	64	9	68	68
# cor-	21	54	4	59	0	0

Table 6: 5% threshold

	SL,GUSD		SL,GL		SUSD,GUSD	
ARGENTINA	0.099		-0.096	***	0.039	
AUSTRALIA	0.027		-0.265	***	0.133	***
AUSTRIA	0.023		-0.113	**	0.074	***
BAHRAIN	-0.032		-0.019		-0.019	
BELGIUM	-0.01		-0.047		0.142	***
BRAZIL	0.271	***	-0.086	***	0.245	***
BULGARIA	-0.005		-0.116	**	0.045	
CANADA	0.179	***	-0.062	*	0.147	***
CHILE	0.065		-0.144	***	0.165	***
CHINA	0.176	***	0.119	***	0.119	***
COLOMBIA	0.122	*	-0.1	***	0.164	***
CROATIA	0.088		-0.096		0.12	***
CYPRUS	-0.045		-0.117	**	-0.019	
CZECH.REP.	0.043		-0.003	*	0.188	***
DENMARK	-0.036		-0.143		0.042	**
EGYPT	0.161	***	0.085	***	0.181	***
ESTONIA	0.071		-0.103		0.044	***
FINLAND	-0.017		-0.01		0.13	*
FRANCE	-0.087		-0.072	***	0.022	
GERMANY	-0.06		-0.102	*	-0.017	*
GREECE	-0.064		-0.089	***	0.093	
HONG.KONG	0.202	***	0.091	***	0.075	***
HUNGARY	0.061		-0.087	***	0.161	***
INDIA	0.184	***	-0.015		0.071	***
INDONESIA	0.222	***	-0.137	**	0.172	***
IRELAND	-0.139	**	-0.155	**	-0.041	
ISRAEL	0.041		-0.039		0.018	
ITALY	-0.072		-0.108	***	-0.011	
JAPAN	-0.098		0.215	**	0.118	*
JORDAN	0.196	***	0.131	***	0.132	***
KUWAIT	0.035		-0.032		-0.002	
LITHUANIA	0.047		-0.058		0.131	***
LUXEMBURG	-0.028		-0.082		0.076	**
MALAYSIA	0.099		0.025		0.132	***
MALTA	0.023		-0.038		0.121	***

Table 6 (continued):

5% threshold

	SL,GUSD		SL,GL		SUSD,GUSD	
MEXICO	0.151	**	-0.158	**	0.157	***
MOROCCO	0.061		-0.08		0.078	***
NETHERLAND	-0.04		-0.101		0.075	**
NEW.ZEALAN	-0.002		-0.195	***	0.089	***
NIGERIA	-0.075		-0.126		-0.07	
NORWAY	0.076		-0.222	***	0.066	***
OMAN	0.103		0.101		0.101	
PAKISTAN	0		-0.091		-0.037	
PERU	0.306	***	0.133	***	0.228	***
PHILIPPINE	0.118	*	-0.011		0.16	***
POLAND	0.137	**	-0.154	***	0.131	***
PORTUGAL	0.012		-0.033	**	0.145	***
QATAR	0.06		-0.035		-0.036	
ROMANIA	0.064		-0.174	**	0.079	**
RUSSIA	0.15	**	-0.03		0.104	***
SAUDI.ARAB	-0.098		-0.114		-0.116	
SINGAPORE	0.11	*	-0.064		0.105	***
SLOVAKIA	0.023		0.132		0.185	***
SLOVENIA	0.061		-0.09		0.127	***
SOUTH.AFRI	0.278	***	-0.105		0.239	***
KOREA	0.094		-0.062	**	0.05	**
SPAIN	-0.097		-0.077	***	0.035	
SRI.LANKA	0.033		0.023		0.091	
SWEDEN	-0.027		-0.151	**	0.066	**
SWITZ	-0.134	**	0.042		0.053	***
TAIWAN	0.03		-0.025	*	0.051	
THAILAND	0.179	***	0.056		0.159	***
TURKEY	0.021		-0.264	***	0.089	
U.A.E.	0.035		-0.046		-0.045	
UK	0.003		-0.056		0.068	*
US	0.037		0.001		0.001	
VENEZUELA	-0.032		-0.08	***	0.022	
VIETNAM	0.035		-0.002		-0.012	

Table 8: 1% threshold

	SL,GUSD		SL,GL		SUSD,GUSD	
ARGENTINA	0.099		-0.182	***	-0.051	
AUSTRALIA	0.027		-0.129	***	0.151	***
AUSTRIA	0.023		-0.003	**	0.176	***
BAHRAIN	-0.032		0.013		0.013	
BELGIUM	-0.01		0.021		0.172	***
BRAZIL	0.271	***	-0.089	***	0.154	***
BULGARIA	-0.005		0.005	**	0.084	
CANADA	0.179	***	-0.048	*	0.181	***
CHILE	0.065		-0.137	***	0.149	***
CHINA	0.176	***	0.06	***	0.06	***
COLOMBIA	0.122	*	-0.079	***	0.131	***
CROATIA	0.088		-0.025		0.061	***
CYPRUS	-0.045		0.005	**	0.068	
CZECH.REP.	0.043		0.053	*	0.134	***
DENMARK	-0.036		-0.012		0.124	**
EGYPT	0.161	***	0.132	***	0.208	***
ESTONIA	0.071		0.032		0.144	***
FINLAND	-0.017		-0.057		0.111	*
FRANCE	-0.087		-0.067	***	0.11	
GERMANY	-0.06		-0.146	*	0.009	*
GREECE	-0.064		0.059	***	0.124	
HONG.KONG	0.202	***	0.219	***	0.214	***
HUNGARY	0.061		-0.007	***	0.186	***
INDIA	0.184	***	0.107		0.131	***
INDONESIA	0.222	***	-0.065	**	0.117	***
IRELAND	-0.139	**	-0.164	**	-0.001	
ISRAEL	0.041		0.069		0.169	
ITALY	-0.072		0.007	***	0.083	
JAPAN	-0.098		0.254	**	0.119	*
JORDAN	0.196	***	0.131	***	0.132	***
KUWAIT	0.035		0.056		0.075	
LITHUANIA	0.047		-0.059		0.136	***
LUXEMBURG	-0.028		-0.12		0.04	**
MALAYSIA	0.099		0.133		0.183	***
MALTA	0.023		-0.015		0.173	***

Table 8 (continued):

1% threshold

	SL,GUSD		SL,GL		SUSD,GUSD	
MEXICO	0.151	**	-0.131	**	0.143	***
MOROCCO	0.061		-0.041		0.017	***
NETHERLAND	-0.04		-0.006		0.128	**
NEW.ZEALAN	-0.002		-0.142	***	0.031	***
NIGERIA	-0.075		-0.075		-0.179	
NORWAY	0.076		-0.142	***	0.043	***
OMAN	0.103		0.21		0.21	
PAKISTAN	0		-0.118		-0.052	
PERU	0.306	***	0.12	***	0.168	***
PHILIPPINE	0.118	*	0.101		0.149	***
POLAND	0.137	**	-0.039	***	0.167	***
PORTUGAL	0.012		0.014	**	0.214	***
QATAR	0.06		0.1		0.1	
ROMANIA	0.064		0.075	**	0.039	**
RUSSIA	0.15	**	0.045		0.168	***
SAUDI.ARAB	-0.098		0.062		0.058	
SINGAPORE	0.11	*	0.071		0.105	***
SLOVAKIA	0.023		0.067		0.213	***
SLOVENIA	0.061		-0.16		0.108	***
SOUTH.AFRI	0.278	***	-0.047		0.156	***
KOREA	0.094		0.123	**	0.092	**
SPAIN	-0.097		0.04	***	0.105	
SRI.LANKA	0.033		-0.074		0.092	
SWEDEN	-0.027		0.047	**	0.158	**
SWITZ	-0.134	**	-0.002		0.152	***
TAIWAN	0.03		-0.097	*	0.065	
THAILAND	0.179	***	0.069		0.13	***
TURKEY	0.021		-0.12	***	0.034	
U.A.E.	0.035		-0.078		-0.078	
UK	0.003		-0.02		0.138	*
US	0.037		0.149		0.149	
VENEZUELA	-0.032		0.011	***	0.017	
VIETNAM	0.035		0.145		0.132	

Table 10: Summary conditional correlations on 5% quantile stock market threshold

	SL,GUSD	SL,GL	SUSD,GUSD
Min	-0.117	-0.265	-0.116
Max	0.167	0.215	0.245
Mean	0.026	-0.058	0.083
Median	0.015	-0.074	0.084
Std Dev.	0.068	0.093	0.077
# cor+	43	13	56
# cor-	25	55	12

Table 11: Summary conditional correlations on 1% quantile stock market threshold

	SL,GUSD	SL,GL	SUSD,GUSD
Min	-0.148	-0.182	-0.179
Max	0.216	0.254	0.214
Mean	0.068	0.002	0.106
Median	0.100	0.002	0.126
Std Dev.	0.097	0.100	0.075
# cor+	48	34	63
# cor-	20	34	5

Table 12: Performance of gold during crisis in local currency and relative to US dollar denomination

	GFC	COVID	GFC*	COVID*
ARGENTINA	9.3	27.3	12.5	14
AUSTRALIA	25.6	19.5	28.8	6.2
AUSTRIA	6.9	14.3	10.1	1
BAHRAIN	-3.2	13.4	0	0.1
BELGIUM	6.9	14.3	10.1	1
BRAZIL	38.7	45.5	41.9	32.2
BULGARIA	6.9	14.2	10.1	0.9
CANADA	13.9	19.9	17.1	6.6
CHILE	18.5	20.7	21.7	7.4
CHINA	-3.2	13.3	0	0
COLOMBIA	18.6	27.1	21.8	13.8
CROATIA	8.7	16.3	11.9	3
CYPRUS	6.9	14.2	10.1	0.9
CZECH.REP.	19.1	20.3	22.3	7
DENMARK	6.7	14	9.9	0.7
EGYPT	0.1	12.1	3.3	-1.2
ESTONIA	6.9	14.3	10.1	1
FINLAND	6.9	14.3	10.1	1
FRANCE	6.9	14.3	10.1	1
GERMANY	6.9	14.3	10.1	1
GREECE	6.9	14.2	10.1	0.9
HONG.KONG	-3.9	12.7	-0.7	-0.6
HUNGARY	20.3	19.2	23.5	5.9
INDIA	9.9	19.2	13.1	5.9
INDONESIA	15.4	19.5	18.6	6.2
IRELAND	6.9	14.3	10.1	1
ISRAEL	4.5	14.7	7.7	1.4
ITALY	6.9	14.3	10.1	1
JAPAN	-19.9	12.4	-16.7	-0.9
JORDAN	-3.1	13.3	0.1	0
KUWAIT	0.7	14.9	3.9	1.6
LITHUANIA	6.9	14.3	10.1	1
LUXEMBURG	6.9	14.2	10.1	0.9
MALAYSIA	2.3	19.5	5.5	6.2
MALTA	6.9	14.3	10.1	1

Table 12 (continued):

Performance of gold during crisis in local currency and relative to US dollar denomination

	GFC	COVID	GFC*	COVID*
MEXICO	28.9	31.3	32.1	18
MOROCCO	5.1	15.6	8.3	2.3
NETHERLAND	6.9	14.3	10.1	1
NEW.ZEALAN	18.7	22.2	21.9	8.9
NIGERIA	0	19.8	3.2	6.5
NORWAY	27.5	24.4	30.7	11.1
OMAN	-3.1	13.3	0.1	0
PAKISTAN	5.9	18.4	9.1	5.1
PERU	6.9	17	10.1	3.7
PHILIPPINE	3.4	13.2	6.6	-0.1
POLAND	33	19.2	36.2	5.9
PORTUGAL	6.9	14.3	10.1	1
QATAR	-3.1	13.3	0.1	0
ROMANIA	22.3	15.4	25.5	2.1
RUSSIA	23.9	27.8	27.1	14.5
SAUDI.ARAB	-3	13.4	0.2	0.1
SINGAPORE	1.3	18.4	4.5	5.1
SLOVAKIA	6.9	14.3	10.1	1
SLOVENIA	6.9	14.3	10.1	1
SOUTH.AFRI	19.2	38.4	22.4	25.1
KOREA	21.2	20.4	24.4	7.1
SPAIN	6.9	14.3	10.1	1
SRILANKA	1.6	16.1	4.8	2.8
SWEDEN	23	14.1	26.2	0.8
SWITZ	-1.8	12.4	1.4	-0.9
TAIWAN	3.2	13.4	6.4	0.1
THAILAND	-0.1	19.6	3.1	6.3
TURKEY	24.9	27.8	28.1	14.5
U.A.E.	-3.2	13.3	0	0
UK	28.7	20.3	31.9	7
US	-3.2	13.3	0	0
VENEZUELA	-3.2	222.9	0	209.6
VIETNAM	1.2	13.8	4.4	0.5

Table 14: local stock market returns

	Mean	SD	Min	Max	Skewness	Kurtosis	Ljung-Box	p-value
ARGENTINA	1.991	10.564	-38.617	61.836	0.685	7.617	5.879	0.318
AUSTRALIA	0.397	3.832	-21.586	9.723	-1.200	7.064	3.038	0.694
AUSTRIA	0.495	5.436	-27.455	20.766	-1.093	8.397	23.005	0
BAHRAIN	0.081	3.559	-15.784	10.930	-0.388	5.934	47.143	0
BELGIUM	0.300	4.962	-25.600	18.853	-0.988	7.142	22.797	0
BRAZIL	0.944	6.126	-27.390	17.132	-0.549	4.803	6.227	0.285
BULGARIA	1.144	8.511	-29.619	36.217	0.693	6.804	49.700	0
CANADA	0.443	3.879	-17.690	10.693	-0.978	6.237	7.111	0.213
CHILE	0.423	4.068	-14.736	13.454	0.053	3.839	3.047	0.693
CHINA	1.125	8.024	-26.769	27.059	-0.028	3.828	10.725	0.057
COLOMBIA	0.947	5.530	-26.352	14.740	-0.404	5.361	5.560	0.351
CROATIA	0.323	5.572	-24.700	22.913	-0.073	8.573	37.543	0
CYPRUS	-1.499	9.713	-65.468	32.150	-1.077	10.508	8.221	0.144
CZECH.REP.	0.585	5.540	-20.748	16.569	-0.224	4.280	2.802	0.730
DENMARK	0.854	4.939	-18.805	18.771	-0.528	4.891	10.224	0.069
EGYPT	0.844	7.634	-26.721	32.161	0.216	4.218	25.922	0
ESTONIA	0.965	7.335	-35.134	46.607	0.534	11.737	21.871	0.001
FINLAND	0.164	6.771	-27.978	29.235	-0.165	5.975	14.706	0.012
FRANCE	0.322	4.930	-17.058	18.085	-0.429	4.367	6.425	0.267
GERMANY	0.307	5.270	-21.425	16.385	-0.556	4.667	4.538	0.475
GREECE	-0.678	8.604	-29.440	24.833	-0.399	3.603	8.636	0.124
HONG.KONG	0.449	5.768	-21.013	19.110	-0.412	3.776	2.450	0.784
HUNGARY	0.583	6.411	-28.927	20.154	-0.445	4.924	6.264	0.281
INDIA	1.147	7.196	-27.357	33.579	-0.258	5.765	2.820	0.728
INDONESIA	0.794	6.391	-32.188	19.253	-0.600	5.530	17.297	0.004
IRELAND	0.349	5.669	-20.744	19.509	-0.744	4.710	14.803	0.011
ISRAEL	0.285	5.148	-18.150	14.203	-0.531	4.101	2.392	0.793
ITALY	0.068	5.600	-21.271	21.376	-0.158	4.586	6.598	0.252
JAPAN	0.159	4.877	-19.935	12.569	-0.379	3.636	10.700	0.058
JORDAN	-0.054	4.611	-20.165	17.717	0.433	7.020	9.199	0.101
KUWAIT	0.330	5.034	-17.543	17.184	-0.235	5.016	17.110	0.004
LITHUANIA	0.478	5.906	-26.196	36.980	0.429	10.326	39.279	0
LUXEMBURG	0.041	5.303	-27.555	20.205	-1	8.005	7.657	0.176
MALAYSIA	0.318	3.985	-14.317	13.426	-0.210	4.544	8.893	0.113
MALTA	0.037	4.255	-18.110	14.309	0.240	4.963	27.055	0
MEXICO	0.852	4.488	-16.868	14.817	-0.401	4.137	9.005	0.109
MOROCCO	0.450	4.368	-20.329	19.950	0.107	7.129	7.498	0.186
NETHERLAND	0.284	5.116	-23.938	12.255	-1.066	5.991	9.712	0.084
NEW.ZEALAN	0.471	3.249	-14.185	8.552	-0.831	4.863	5.426	0.366
NIGERIA	0.598	6.406	-22.725	15.981	-0.107	3.971	6.278	0.280
NORWAY	0.552	5.444	-23.994	13.512	-0.873	5.577	8.155	0.148
OMAN	-0.030	4.379	-21.230	15.539	-0.569	6.603	43.689	0
PAKISTAN	1.014	7.629	-38.532	32.032	-0.235	7.049	5.375	0.372
PERU	0.585	5.100	-27.054	17.065	-0.541	6.622	10.339	0.066
PHILIPPINE	0.531	5.304	-21.517	14.848	-0.466	4.734	7.220	0.205
POLAND	0.350	6.133	-22.426	23.330	0.098	4.301	4.597	0.467
PORTUGAL	-0.114	4.911	-20.645	12.779	-0.481	4.266	14.696	0.012
QATAR	0.805	7.961	-24.479	44.850	0.716	8.177	7.712	0.173
ROMANIA	1.330	9.296	-39.901	52.115	0.309	9.036	8.471	0.132
RUSSIA	1.414	7.750	-29.439	32.031	-0.085	5.400	3.413	0.637
SAUDI.ARAB	-0.021	7.111	-23.628	20.702	-0.295	4.238	1.709	0.888
SINGAPORE	0.228	5.082	-23.685	22.584	-0.592	7.079	13.996	0.016
SLOVAKIA	0.145	3.058	-10.669	10.653	-0.501	5.589	13.937	0.016
SLOVENIA	0.366	4.886	-18.768	13.691	-0.391	4.880	46.502	0
SOUTH.AFRI	0.857	4.726	-18.284	13.785	-0.374	4.130	3.192	0.670
KOREA	0.630	6.315	-21.694	23.339	-0.063	4.324	4.451	0.486
SPAIN	0.164	5.434	-20.648	22.951	-0.054	4.753	5.710	0.335
SRI.LANKA	1.090	7	-21.051	33.599	1.019	6.823	10.064	0.073
SWEDEN	0.567	5.545	-17.858	19.117	-0.323	4.446	9.749	0.083
SWITZ	0.317	3.740	-12.747	10.638	-0.639	3.735	12.326	0.031
TAIWAN	0.364	6.054	-20.674	25.426	0.119	5.237	13.243	0.021
THAILAND	0.619	6.782	-30.461	29.019	-0.146	6.641	5.185	0.394
TURKEY	1.326	9.667	-33.828	50.674	0.490	5.975	12.398	0.030
U.A.E.	0.990	7.518	-23.008	33.964	0.617	6.628	27.642	0
UK	0.165	4.065	-15.617	12.404	-0.648	4.447	4.364	0.498
US	0.543	4.289	-17.344	13.141	-0.568	4.385	5.818	0.324
VENEZUELA	14.037	37.637	-23.255	280.177	4.194	24.533	146.328	0
VIETNAM	0.534	7.748	-24.354	22.962	-0.394	4.389	10.354	0.066
Gold	0.821	4.711	-16.984	12.591	-0.104	3.425	3.828	0.574

Table 15: gold prices in local currency and in USD

	Mean	SD	Min	Max	Skewness	Kurtosis	Ljung-Box	p-value
ARGENTINA	2.874	9.742	-11.327	101.170	4.956	44.535	13.049	0.023
AUSTRALIA	0.776	4.752	-11.810	17.251	0.440	3.958	3.395	0.639
AUSTRIA	0.746	4.515	-12.984	16.008	0.309	3.627	3.498	0.624
BAHRAIN	0.822	4.930	-16.991	12.599	-0.126	3.370	3.677	0.597
BELGIUM	0.746	4.515	-12.984	16.006	0.309	3.627	3.496	0.624
BRAZIL	1.308	6.226	-13.135	32.986	0.771	5.947	13.090	0.023
BULGARIA	0.747	4.559	-12.994	15.981	0.323	3.639	2.886	0.718
CANADA	0.753	4.531	-10.926	17.492	0.327	3.586	4.370	0.497
CHILE	0.962	4.752	-11.588	14.328	0.286	3.129	5.339	0.376
CHINA	0.821	4.711	-16.985	12.591	-0.104	3.425	3.828	0.575
COLOMBIA	1.140	5.489	-13.249	18.792	0.228	3.287	4.348	0.500
CROATIA	0.854	4.808	-13.904	15.956	0.292	3.649	2.407	0.790
CYPRUS	0.746	4.514	-12.997	16.011	0.310	3.625	3.515	0.621
CZECH.REP.	0.629	4.886	-14.232	21.061	0.396	4.528	2.905	0.715
DENMARK	0.745	4.508	-12.957	16.177	0.311	3.653	3.524	0.620
EGYPT	1.523	7.302	-15.274	84.436	5.702	65.730	9.478	0.091
ESTONIA	0.746	4.514	-12.986	16.003	0.309	3.627	3.493	0.624
FINLAND	0.746	4.515	-12.984	16.008	0.309	3.627	3.497	0.624
FRANCE	0.746	4.515	-12.984	16.007	0.309	3.627	3.498	0.624
GERMANY	0.746	4.515	-12.985	16.007	0.309	3.627	3.498	0.624
GREECE	0.746	4.515	-12.985	16.008	0.309	3.627	3.499	0.624
HONG.KONG	0.821	4.695	-17.133	12.589	-0.121	3.466	3.819	0.576
HUNGARY	0.908	5.189	-13.518	30.187	0.851	6.541	1.346	0.930
INDIA	1.029	4.715	-12.592	17.241	0.346	3.319	6.074	0.299
INDONESIA	1.123	5.187	-18.048	23.185	0.307	4.542	7.712	0.173
IRELAND	0.746	4.515	-12.984	16.008	0.309	3.627	3.498	0.624
ISRAEL	0.733	4.963	-13.983	18.949	0.328	3.658	2.658	0.753
ITALY	0.746	4.515	-12.985	16.007	0.309	3.627	3.498	0.624
JAPAN	0.838	4.442	-23.095	12.487	-0.646	6.107	9.265	0.099
JORDAN	0.726	4.946	-16.952	12.587	-0.182	3.453	4.235	0.516
KUWAIT	0.828	4.850	-15.758	12.448	-0.058	3.264	2.707	0.745
LITHUANIA	0.746	4.515	-12.987	16.004	0.309	3.626	3.497	0.624
LUXEMBURG	0.746	4.515	-12.985	16.005	0.309	3.627	3.496	0.624
MALAYSIA	0.856	4.603	-14.368	13.821	0.106	3.321	8.107	0.150
MALTA	0.750	4.522	-12.987	16.008	0.306	3.615	3.449	0.631
MEXICO	1.140	5.381	-11.403	20.398	0.495	3.319	1.550	0.907
MOROCCO	0.761	4.429	-12.848	14.263	0.217	3.328	3.611	0.607
NETHERLAND	0.746	4.515	-12.984	16.007	0.309	3.627	3.498	0.624
NEW.ZEALAN	0.731	5.244	-15.559	23.268	0.632	4.766	3.994	0.550
NIGERIA	1.341	6.815	-10.342	54.556	3.487	27.557	0.894	0.971
NORWAY	0.855	4.672	-12.588	16.097	0.379	3.578	8.457	0.133
OMAN	0.849	5.007	-16.985	12.587	-0.141	3.387	2.341	0.800
PAKISTAN	1.275	4.912	-13.642	17.353	0.025	3.091	3.149	0.677
PERU	0.876	4.695	-13.700	12.132	0.042	2.827	7.865	0.164
PHILIPPINE	0.897	4.559	-13.684	12.900	0.054	2.884	11.334	0.045
POLAND	0.813	5.180	-14.029	25.532	0.690	5.188	1.927	0.859
PORTUGAL	0.746	4.515	-12.982	16.009	0.309	3.626	3.500	0.623
QATAR	0.822	4.925	-16.983	12.590	-0.129	3.382	3.639	0.602
ROMANIA	1.154	5.048	-13.499	23.542	0.490	4.597	0.958	0.966
RUSSIA	1.257	5.877	-16.014	25.795	0.831	5.428	10.744	0.057
SAUDI.ARAB	0.850	5.018	-17.212	12.596	-0.145	3.405	2.518	0.774
SINGAPORE	0.722	4.298	-13.836	13.386	0.040	3.426	6.263	0.281
SLOVAKIA	0.744	4.773	-12.986	16.007	0.298	3.597	3.495	0.624
SLOVENIA	0.746	4.515	-12.980	16.008	0.309	3.626	3.499	0.623
SOUTH.AFRI	1.209	5.746	-13.993	21.125	0.368	3.939	3.149	0.677
KOREA	0.846	5.154	-13.197	26.901	0.682	5.494	9.155	0.103
SPAIN	0.746	4.515	-12.984	16.008	0.309	3.627	3.498	0.624
SRI.LANKA	1.223	4.724	-15.429	12.969	-0.112	3.132	4.497	0.480
SWEDEN	0.824	4.743	-12.190	15.903	0.252	3.556	3.043	0.693
SWITZ	0.582	4.318	-13.950	16.620	0.288	4.551	9.097	0.105
TAIWAN	0.769	4.531	-14.890	13.183	-0.051	3.181	4.527	0.476
THAILAND	0.751	4.312	-13.954	13.052	0.094	3.319	6.160	0.291
TURKEY	1.984	6.565	-11.967	43.067	1.446	9.619	1.195	0.945
U.A.E.	0.822	4.932	-16.981	12.614	-0.127	3.366	3.641	0.602
UK	0.882	4.821	-12.766	18.455	0.327	3.859	1.752	0.882
US	0.821	4.711	-16.984	12.591	-0.104	3.425	3.829	0.574
VENEZUELA	36.109	249.968	-31.397	3,381.552	11.102	137.412	7.449	0.189
VIETNAM	0.929	5.386	-16.269	15.786	0.081	3.166	7.756	0.170
Gold	0.821	4.711	-16.984	12.591	-0.104	3.425	3.828	0.574