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Charles Robertson
+44 (207) 005-7835
CRobertson@rencap.com

Mobile +44 7747 118 756
@RenCapMan

Vikram Lopez
+44 (207) 005-7974
VLopez@rencap.com

Thoughts from a Renaissance man REER model – global recession scenario

We think a global recession would have a relatively mild impact on EEMEA, with the ZAR hit a lot of course, the RUB a little. In FM, we think the NGN would be particularly vulnerable if oil drops to \$40/bl.

The 2000-2003 recession may be the best template from the past 30 years

We see a 60% chance of a US recession becoming apparent in 2020, according to a composite of indicators we look at, joining the EU and Japan in the unhappy place and perhaps leading to a change of US president (the only three to lose their re-election bid since 1928 presided over a recession in their first term). We would like to provide data on the past 5-10 US recessions and show their impact on EM FX but this is impossible – the asset class was only created three recessions ago. We think 2000-2003 is the most relevant recession to look at, and EM FX in REER terms was roughly flat over those years. That comparison tells us to expect USD appreciation towards parity with the EUR, UST at 0.5-1.0%, and falling commodity prices for a year (oil at \$40-50/bl in 2H20?), with hard currency debt easily beating EM equities for 12 months. From end-2020 to end-2022, the USD weakens by 20-30% and commodities rise by 25-50%. The 40% risk case scenario is that we are in 2011-2013 and recession fears are proven to be false, which would presumably stem from the trade war being called off, benefiting the CNY and the KRW more than most.

We are not unveiling a whole host of revised forecasts because these are just scenarios. Instead we lay out the risks from a global recession. The benchmark EM currency is the ZAR, where 20% of that country's GDP is traded every day in the FX markets. ZAR14/\$ looks reasonable to us if there is no recession, we see ZAR15.5-16.5/\$ as more likely in a global recession by end-2020.

We see Egypt and Pakistan (nuclear war noise aside) as relative defensive plays – neither export very much – and so stick with the EGP depreciating to EGP18/\$ in 2020 (from 10% overvalued now to around 5% overvalued then) and the PKR stabilising to around PKR160/\$ over 2019-2020. Turkey too looks in a relatively good place, in our view, thanks to nearly 20% undervaluation and a balanced C/A, which lower oil could help sustain. We think the TRY undervaluation will have disappeared by 2021 if TRY5.8/\$ has not moved, by which time the country will once again be in a strong boom-bust cycle.

We will have to depreciate our end-2020 FX forecasts for the RUB (from RUB67/\$ to RUB73/\$) and KZT (from KZT375/\$ to KZT405/\$) if oil was to drop as low as \$40/bl. We would expect a nice rebound in 2021-2022. Russia would be mildest hit from global turbulence since independence. Elsewhere in the CIS, Moldova looks heavily overvalued. Belarus is very cheap.

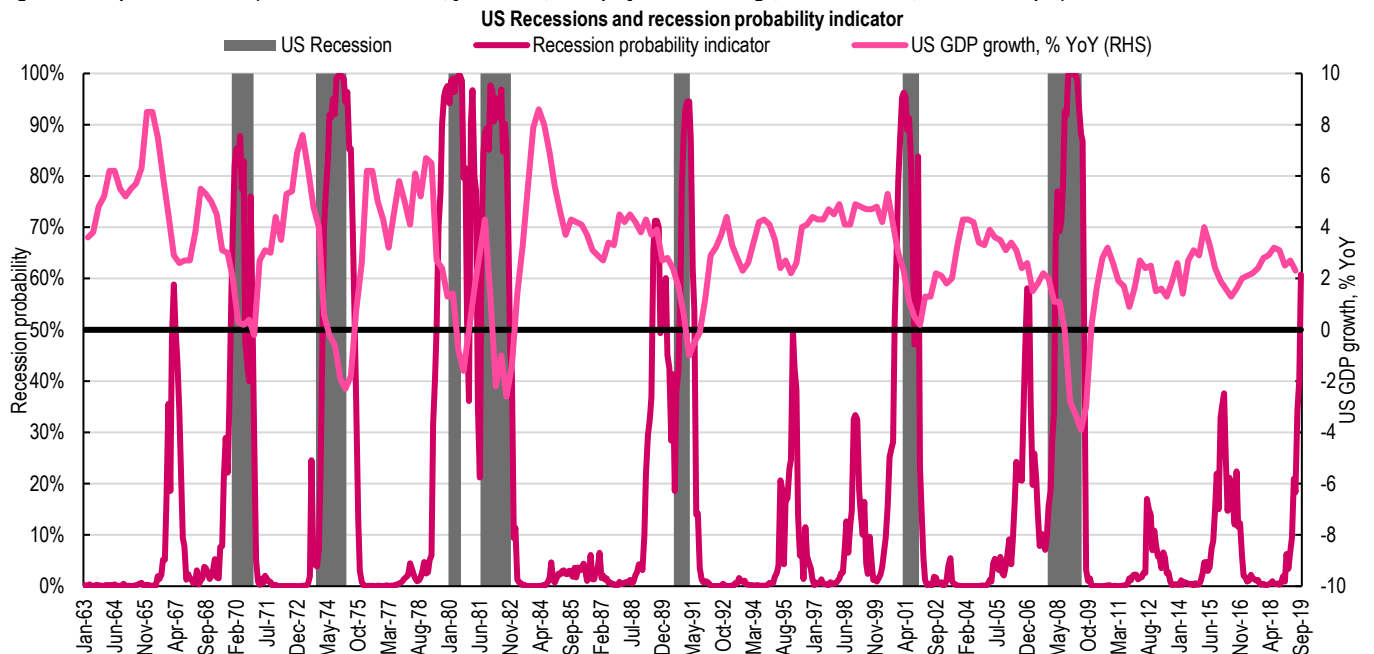
Among the most overvalued FM currencies, Lebanon is under pressure and devaluation there could raise concerns about Jordan too (we assume global financial support will keep the JOD in place). Bangladesh's BDT is now 35% overvalued, the country has lost competitiveness vs Pakistan and exports have begun to shrink, but a smaller oil bill can delay a (e.g.) 10% depreciation. Kenya's overvaluation is not getting much worse, as the strong currency appears to be pushing inflation down; and while external debt is rising, we assume KES depreciation will be a modest few percent.

Nigeria is a tougher call – partly as our London and Johannesburg FX models disagree on fair value – but the London model sees fair value at NGN500/\$ by end-2020, and cheaper than this would be justified by oil at \$40/bl. Much depends on the pace of reserves depletion running at \$1.5bn a month currently. Angola's currency is better value, but further weakness from lower oil would send external debt ratios sharply higher. Ghana and Tunisia remain undervalued, but the C/A and GDP growth figures make us strongly favour Ghana. Tunisia could become a top pick for us if a reform-minded government is found.



Our focus today is how EM and FM will be impacted by the US (and therefore global) recession, which leading indicators suggest to us is now 60% likely. We did not see recessions in 1967, 1989 or 2019 when this indicator suggested it was around 60% likely but it was at 60% or higher in seven recessions. Note the risk of recession drops to about 35% if we exclude the inverted yield indicator, which warrants caution on this.

Figure 1: Composite indicator (Conference Board LEI, yield curve, unemployment vs average, ISM new orders, industrial output) vs US recession

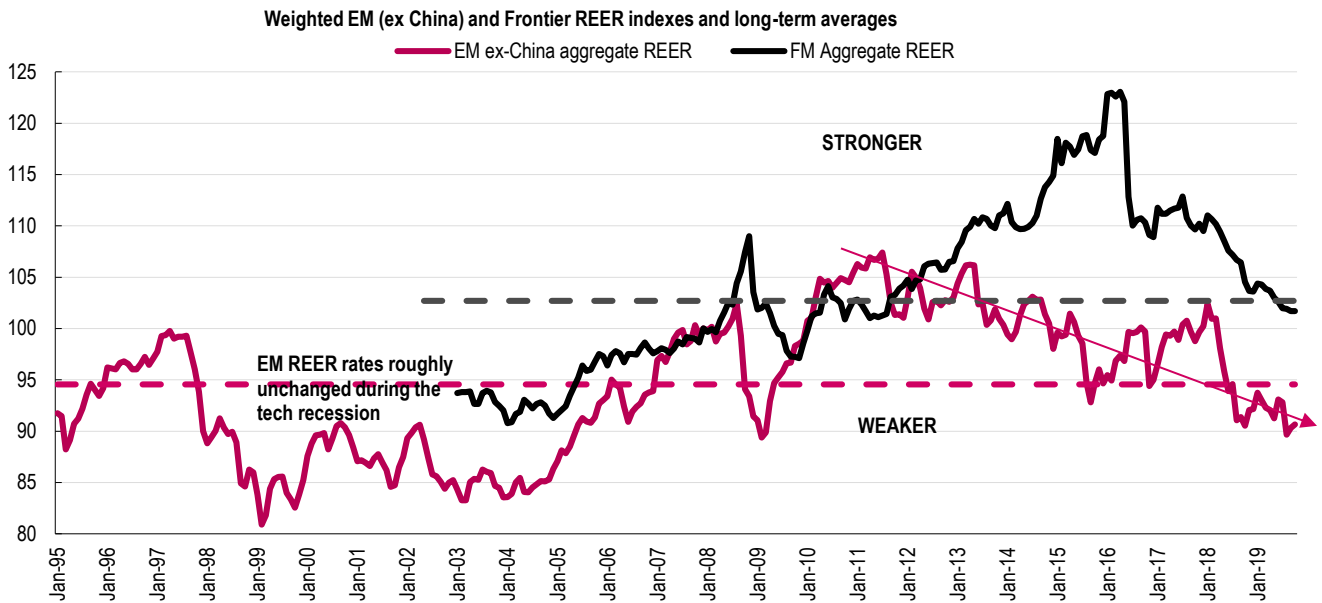


Source: NBER, Bloomberg, Renaissance Capital

Our base case is that this is not a game-changer for EM FX, on the assumption that this recession is more like 2001-2003 than most others. It is not a commodity crash recession like 2014-2016 or the early 1980s leading to the Latin American debt crisis. It is not a crisis in which EM looks particularly 'bubbly' as it did before the 1997-1998 Asian crisis or the 2008 GFC. Rather it carries similarities with 2001-2003, when it was DMs that weakened, EM was not in a great place but already looked relatively cheap to DM and commodity prices were relatively stable (Brent oil dropped from \$30/bl to \$20/bl but averaged \$27/bl over 2000-2003). EM FX on average was not much changed over the recessionary years.



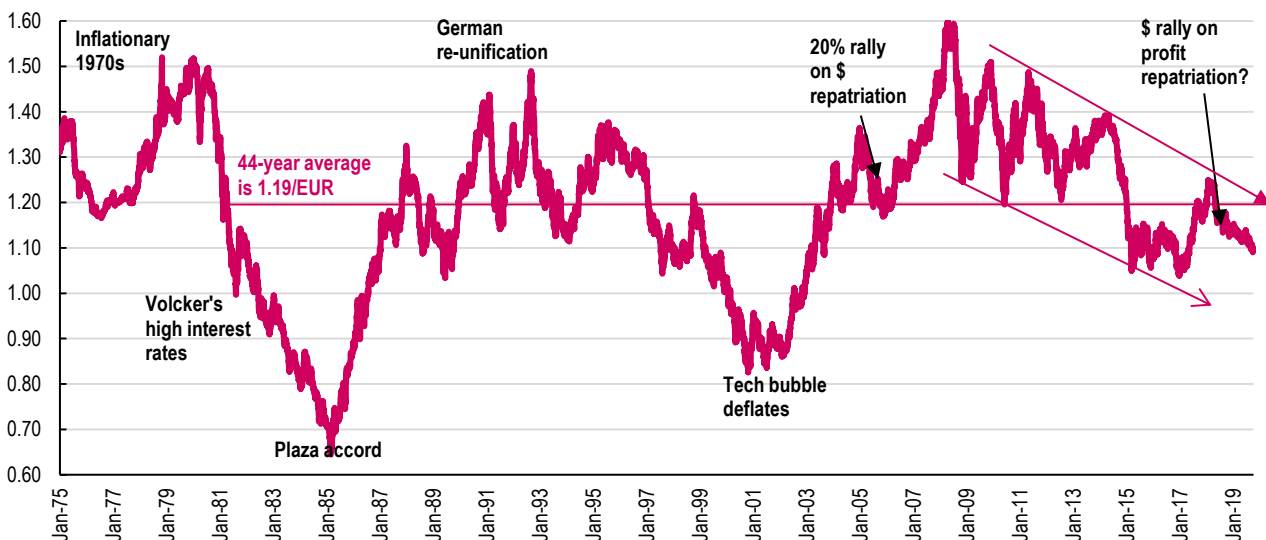
Figure 2: EM currencies (ex-China) went nowhere much over 2000-2003



Source: Bruegel, Bloomberg, IMF, Renaissance Capital

We look at individual currency performances in the appendix, in 2000-2003 but also in 2011-2012 when calls for a US recession were wrong (we see at least a 40% chance of that scenario) and other currencies did much better. **What we can't forecast is the EUR/USD. However, the comparison suggests USD strength in the coming 12 months.** The USD strengthened as the Fed cut rates in 2000 and the Nasdaq imploded, which we assume was partly a safety UST trade. Gold prices fell by nearly a fifth in the year after the S&P peaked (closer to 10% from pre-peak gold price levels though) and then did better after mid-2001. What is a little harder to explain is the USD weakening about 15% in 2002 and again in 2003. We see 2004+ USD weakness as easier to explain, attributable to both risk-on trades and rising commodity prices (as commodity exporters bought the EUR and other currencies as a diversification trade).

Figure 3: EUR/\$ moves since 1975 - we think 2000-2003 may be most relevant if we head into a global recession



Source: Bloomberg



Hard currency debt is likely to do better than local currency debt. A second big question is whether investors will hide in UST yielding 0.5-1.0% or whether they might buy much higher yielding local currency debt in EM and FM. Local currency debt was not such a big story in the early 2000s so comparisons are hard to make. We suspect that in the coming 12 months, due to USD appreciation, EM USD debt will be preferred. In a risk-off global recession, CIOs will struggle to justify adding risk. EM equities don't like either an actual US recession or a threatened one, in the first year at least.

Figure 4: EM asset class annual total returns in USD

Jul 00	Jul 00 to Jul 01	Jul 01 to Jul 02	Jul 02 to Jul 03	CAGR
EM IG USD total return	14%	7%	17%	13%
EM HY USD total return	0%	-8%	43%	10%
MSCI EM	-27%	0%	23%	-3%

Apr 11	Apr 11 to Apr 12	Apr 12 to Apr 13	Apr 13 to Apr 14	CAGR
EM HY USD total return	12%	14%	1%	9%
EM IG USD total return	11%	9%	-2%	6%
EM local govt TR	0%	11%	-4%	2%
MSCI EM	-12%	4%	-1%	-3%

Source: Bloomberg, Renaissance Capital

Export outlook: Commodities – negative for 12 months, then recovery

Although 2000-2003 was not a commodity crash, copper did fall by roughly 20% over a year or so, and oil did drop to two-thirds of its previous price. Both rebounded reasonably well in 2002-2003 (they soared higher from 2004 when China used up the world's last commodity reserves). The implication is that commodity exporters will see falling exports in the coming 12 months, and then recover.

Manufacturers will also struggle due to the recession and related trade wars. Specific stories could change the outlook e.g. if Germany's car industry gets past the diesel problem, or Korea pushes through the semi-conductor problem and tension with Japan.

EM export growth is likely to be negative in a number of countries. This may be sufficient to tip vulnerable countries into tougher times, as we saw in Turkey and Argentina in 2001, and Egypt over 2001-2003. It's certainly not what South Africa needs at present.

Current accounts and FDI

We expect a global recession will slow or reverse tourism growth. We outlined EM and FM tourism winners in 2016¹ and so Georgia, Lebanon, Thailand and Greece may all suffer somewhat if holidays are cut back.

It should also dampen down FDI. Why invest in new factories when there is plenty of spare capacity in the global economy?

However, the global recession can produce some winners here too. Central Europe attracted a huge amount of FDI in the early 2000s, partly because the global recession encouraged companies to cut costs by moving production (and some services) offshore out of Germany into much cheaper Czechia and Hungary. It is still possible then that Chinese or Romanian factories will shift to Turkey or Egypt for example, in order to cut costs (see the minimum wage graph below).

¹ See *Thoughts from a Renaissance Man: The Cost of Pride*, 14 September 2016



Cheaper tourist destinations might do relatively well too. Egyptian tourism may benefit if Europeans decide to drop their expensive Amalfi holiday in favour of Sharm El Sheikh (Egypt also could get a lift if Russia and the UK change their views on flights to that resort).

Carbon emissions

A global recession could reduce carbon emissions and cut the burden on companies that have to buy carbon permits.

Below we will go through our usual REER tables, while keeping the above pages in mind. To recap, we show the spot FX rate on 8 October, the average rate in today's money that the currency has been since 1995 (since 2010 in Kenya's case, 2003 in DR Congo), the relative overvaluation or undervaluation relative to that average, the IMF's April WEO C/A forecasts (soon to be updated), our own forecasts where relevant and one-year local interest rates.

EMs

Nothing in the EM world is as overvalued as some of the currencies in FM and Africa that we follow. EM ex-China is already cheap to its long-term average.

Figure 5: REER rates ordered by expensive (top) to cheap (bottom)

	Current FX rate vs \$	FX rate implied by long-term average REER	FX rate if REER falls to previous lows	Date of REER low	Long-term average divided by current rate	IMF 2019E C/A (% GDP)	IMF 2020E C/A (% GDP)	Standard deviations away from historic average	Yvonne's avg. REER 7/19 estimate	RenCap 19YE forecast	1Y local currency yields
Thailand	30.4	36.7	53.6	Jan-98	1.21	7.1	6.3	1			1.4
Czech Rep	23.6	28.3	43.7	Jan-95	1.20	-0.6	-0.8	1		24	1.4
India	71.0	84.5	104	Nov-96	1.19	-2.5	-2.4	1			5.4
China	7.14	8.44	11.6	Apr-95	1.18	0.4	0.3	1			2.6
Philippines	51.8	60.2	84.2	Feb-04	1.16	-2.2	-1.8	1			3.6
Qatar	3.66	4.15	5.28	Dec-03	1.13	4.6	4.1	1		3.66	3.0
Egypt	16.3	18.1	27.7	Dec-03	1.11	-2.4	-1.7	0	17.3	16.5	16.0
Peru	3.38	3.72	4.22	Jul-07	1.10	-1.4	-1.5	1			2.2
Saudi Arabia	3.75	4.12	5.02	Mar-08	1.10	3.5	2.8	1		3.75	2.0
Indonesia	14,162	15,480	40,331	Jun-98	1.09	-2.7	-2.6	0			6.0
UAE	3.67	3.98	4.57	Nov-07	1.08	5.9	5.1	1		3.67	2.3
Russia	65.2	69.2	135	Jan-99	1.06	5.7	5.1	0		66.5	6.5
Poland	3.95	4.00	4.83	Nov-97	1.01	-1.2	-1.5	0		4	1.2
Hungary	305	309	415	Apr-95	1.01	0.5	0.6	0		305	0.0
Korea	1,193	1,188	1,843	Jan-98	1.00	4.6	4.5	0			1.3
Chile	725	719	894	Jun-03	0.99	-3.2	-2.8	0			1.9
Taiwan	30.8	29.6	34.7	Nov-09	0.96	11.4	10.7	0			1.1
Brazil	4.08	3.91	7.55	Oct-02	0.96	-1.7	-1.6	0			4.8
Greece	1.10	1.15	1.00	Sep-00	0.95	-2.7	-2.6	0		1.08	0.2
Pakistan	157	147	169	Sep-01	0.94	-5.2	-4.3	0		160	13.5
Malaysia	4.19	3.90	5.89	Dec-98	0.93	2.1	2.1	0			3.1
Colombia	3,455	3,074	4,249	Mar-03	0.89	-3.9	-3.8	0			4.3
South Africa	15.3	13.3	19.8	Dec-01	0.87	-3.4	-3.7	-1	12.3	15	7.6
Mexico	19.6	16.8	27.1	Mar-95	0.86	-1.7	-1.9	-1			7.2
Turkey	5.83	4.81	7.15	Sep-18	0.83	0.7	-0.4	-1		5.8	13.6
Argentina*	57.8	40.5	90.3	Jun-02	0.70	-2.0	-2.5	0			70.1

Note: Govt bonds/bills except: Argentina (deposit rate), Qatar, Taiwan, UAE (Interbank rates). *Argentina's inflation data was unreliable for 2007-15 - we have constructed an REER series using 'shadow' inflation data

Source: Bruegel, IMF, Renaissance Capital

In **Thailand** potentially, and the **Gulf** with much more certainty, we expect currency overvaluation to be reduced via deflation rather than currency depreciation.

We think Thailand, Czechia and China, are less overvalued than our REER index implies – as we think productivity improvements in these three (and Poland and Hungary) are far in excess of the EM average over 25 years.



For **CE3** currencies, a stronger USD would clearly hurt investors in these currencies; in the longer term we fear higher wage inflation could worsen the C/As and provoke locally driven *FX weakness and rate hikes*².

As we have mentioned in our *trade wars piece*, we think a CNY move to CNY5-6/\$ would be required to make a serious dent in **China's** trade surplus with the US. However, any unified action to weaken the USD as we saw from the G5 in 1985 is unlikely because 1) the USD is not that excessively strong; and 2) the US in recent years has alienated many of the G5 allies that stood with it in 1985. Without a trade deal with the US, we assume China may depreciate its currency further.

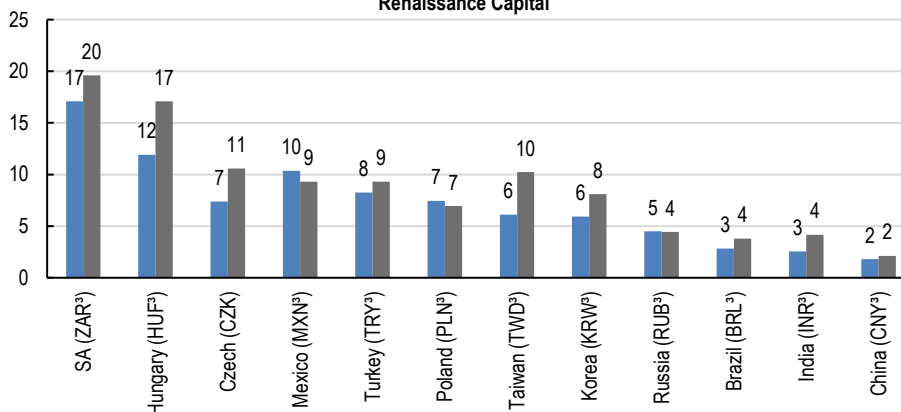
Our base case is that **Egypt's** C/A deteriorates in 2020, FDI does not increase due to the global recession, and that portfolio inflows lessen as interest rates are cut. We pencil in EGP depreciation to EGP18/\$ by end-2020³.

For **Russia**, we think the RUB could justifiably be much stronger than its current 7% overvaluation in our model, given the scale of the C/A surplus and interest rate premium over similarly rated credits. However, our Russia and CIS economist Sofya Donets pencils in gentle depreciation in 2020 to RUB67/\$ and RUB69/\$ in 2021. In a global recession which sees oil drop to \$40/bl, we would pencil in a RUB at RUB73/\$ and interest rates at around 7.25%.

Pakistan's currency appears to have stabilised at a level that allows the C/A deficit to shrink dramatically, and this should be supported by a global recession. Along with Egypt, Pakistan has the smallest export exposure in EM, but it does better than Egypt from falling energy prices.

South Africa is a tougher call. Our latest BIS estimates suggest 20% of South African GDP is traded daily in ZAR, a figure which is higher than the equivalent in any other EM. It is a proxy for EM overall. We see it in a ZAR15.5-16.5/\$ range by end-2020 if the trade wars continue and there is a global recession, with risks on the weak side, before a rebound in 2021.

Figure 6: 20% of South African GDP is traded every day in the FX markets
Daily FX turnover as % of annual GDP in 2016 (blue) and 2019 (grey) - BIS data via Renaissance Capital



Note: Numbers in the country names refer to BIS notes

Source: BIS, IMF, Renaissance Capital

Turkey looks good value – with a 16% undervalued currency amidst a C/A balance which will remain in decent territory if energy prices fall. Note the TRY's undervaluation will be entirely eroded by inflation by mid-2021. Our base case is TRY stability in 2020 against a

² See *Thoughts from a Renaissance Man: CE3 demographics to create MENA jobs*, 29 June 2017

³ See *Thoughts from a Renaissance Man: Egypt: Still the best reform story in EEMEA*, 8 March 2019



EUR/USD basket. Longer term, we think Turkey is gearing up for another boom-bust cycle – it looks like the president has decided against the investment and export-led growth model we thought was possible in February⁴.

FM (ex-Africa) and CIS

We generally don't have strong views on currencies that are within 10% of their long-term average rate.

Figure 7: FM and CIS currencies - REERs

	Current FX rate implied FX rate vs \$	FX rate if by long-term average REER	FX rate if REER falls to previous lows	Date of REER low	Long-term average divided by current rate	IMF 2019E C/A (%GDP)	IMF 2020E C/A (%GDP)	Standard deviations away from historic average	Yvonne's avg. REER 7/19 estimate	RenCap 19YE forecast	1Y local currency yields
Bangladesh	84.5	114	143	Dec-06	1.35	-1.9	-1.7	2		86	8.6
Vietnam	23,202	30,064	38,898	Jan-04	1.30	3.1	2.6	1			2.8
Nigeria	362	464	1,063	Apr-95	1.28	-0.4	-0.2	1	382	375	13.3
Kenya	104	126	264	Jul-95	1.22	-5.0	-4.9	1	129	105	9.8
Jordan	0.71	0.86	1.09	Sep-95	1.22	-8.2	-8.0	2			7.3
Kuwait	0.30	0.36	0.45	Jun-95	1.20	7.4	8.0	1		0.30	3.3
Estonia	1.10	0.92	0.54	Jan-95	1.20	1.5	1.1	1		1.08	na
Lithuania	1.10	0.93	0.47	Apr-95	1.18	1.1	0.6	1		1.08	-0.1
Lebanon	1,512	1,775	2,236	Apr-08	1.17	-28.2	-28.4	1			15.6
Oman	0.38	0.42	0.49	Nov-07	1.10	-8.7	-5.4	1			3.4
Mauritius	36.6	40.1	47.0	Dec-06	1.10	-7.4	-6.7	1			2.9
Romania	4.34	4.73	10.0	Feb-97	1.09	-5.2	-4.8	0			3.1
Bahrain	0.38	0.40	0.49	Jun-11	1.07	-3.6	-3.4	0			3.3
Sri Lanka	180	192	244	Feb-04	1.07	-2.8	-2.6	0			8.4
Slovenia	1.10	1.08	1.00	Aug-97	1.01	4.4	3.4	0		1.08	-0.6
Croatia	6.78	6.85	7.68	May-00	1.01	2.1	1.6	0			0.0
Morocco	9.71	9.66	10.3	Aug-12	0.99	-4.1	-3.5	0			2.3
Ivory Coast	600	595	692	Aug-97	0.99	-3.0	-2.8	0	560		5.6
Serbia	107	104	177	Feb-01	0.97	-5.5	-5.0	0			na
Senegal	600	569	628	Nov-00	0.95	-7.3	-10.2	-1	560		5.5
Kazakhstan	390	315	405	Jan-16	0.81	0.1	0.6	-1		380	10.3
Tunisia	2.86	2.19	3.18	Feb-19	0.77	-10.1	-9.1	-1		2.9	8.3
<i>Beyond Frontier</i>											
Moldova	17.7	24.3	39.7	Jun-99	1.38	-7.7	-8.0	1			6.9
Cambodia	4,086	5,103	6,426	Dec-04	1.25	-9.1	-9.0	1			6.2
Armenia	477	563	892	Mar-95	1.18	-4.6	-4.3	1			6.2
Ukraine	24.7	25.3	48.4	Feb-15	1.02	-2.5	-2.4	0			15.4
Georgia	2.97	2.84	4.82	Apr-95	0.96	-8.0	-7.8	0		2.9	8.0
Azerbaijan	1.70	1.61	2.19	Feb-04	0.94	11.7	13.3	0			6.2
Belarus	2.07	1.53	2.61	Oct-11	0.74	-4.0	-2.3	0			2.7
Iran (UNO rate)	104,650	45,525	104,257	Jun-95	0.44	-0.4	-0.6	-1			na

Note: Kenya's REER dates from 2010 only. Govt bonds/bills except: Morocco, Kenya, Senegal, Tunisia, Mauritius, Ivory Coast, Georgia, Azerbaijan, Belarus, Moldova, Saudi Arabia (auction yields); Oman, Bahrain, Jordan (interbank rates); Argentina (deposit rate); Kazakhstan (12M NDF implied yield)

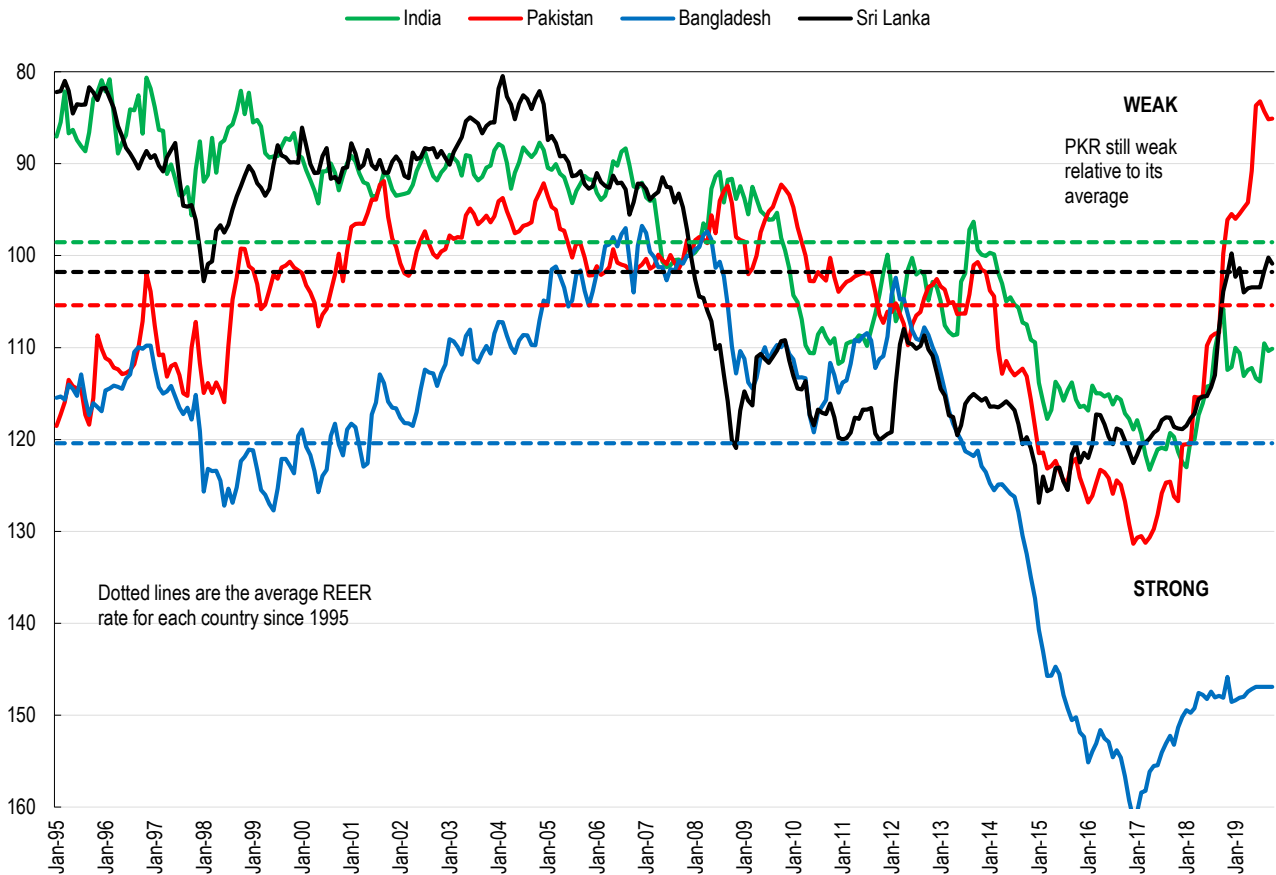
Source: Bruegel, IMF, renaissance Capital

We are not concerned long term about **Vietnam**, because we see it echoing China, Japan and Germany or Czechia, in being a long-term appreciation story driven by rapid productivity growth. Moreover, we assume Vietnam will be keen to appease the US by keeping the currency "overvalued". This would change if US President Donald Trump turns on Vietnam as he has threatened to do.

⁴ *Thoughts from a Renaissance Man: Turkey: 2020+ uncertain, 2019 looks good*, 7 February 2019



Figure 8: Among South Asia currencies - Bangladesh's BDT is by far the most expensive. Here we show the REER levels since 1995



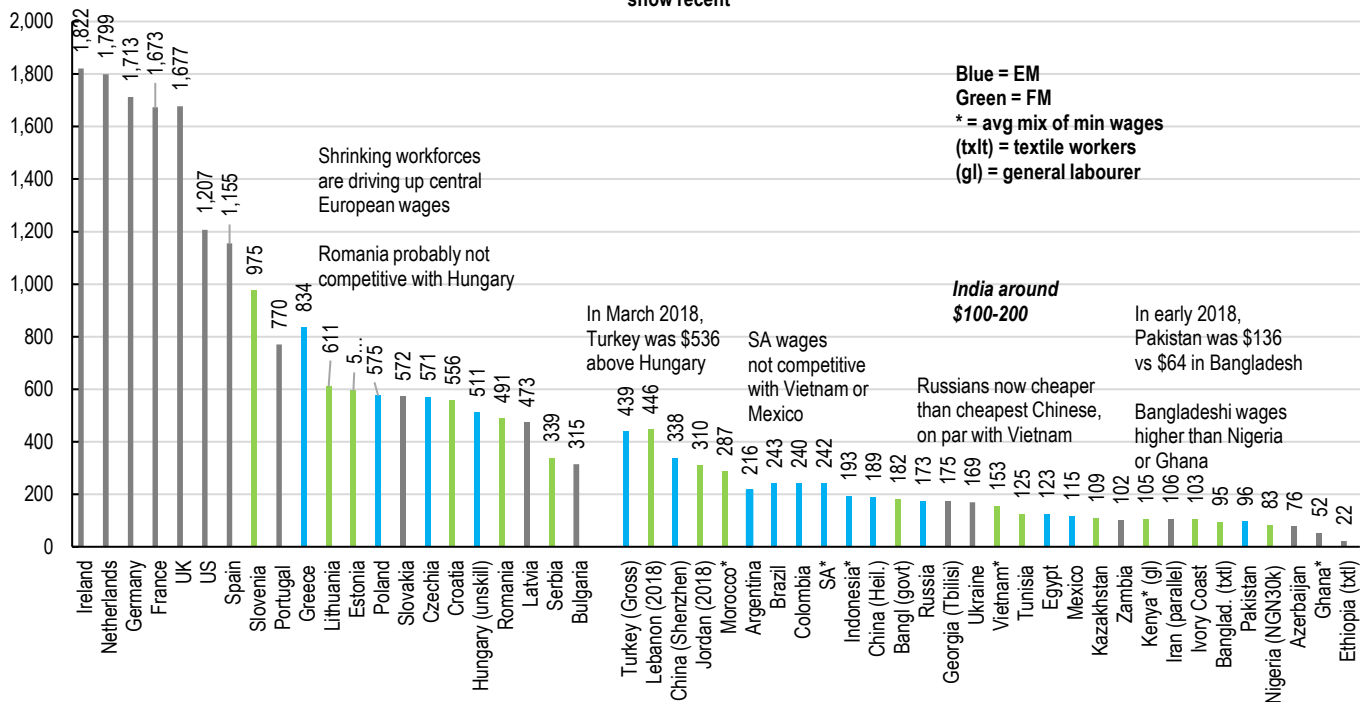
Source: Bruegel, Renaissance Capital

The BDT is now 35% overvalued but has only a small C/A deficit. We think the problems for **Bangladesh** stem from two sources: first, the steep minimum wage increase in 2018 means its textile workers were twice as cheap as Pakistan's but are now paid the same, and second, exports fell 3% YoY in 3Q19. On the positive side, it does benefit from lower energy import prices, so can sustain the currency at this rate for some time. The central bank is obviously in no rush to encourage BDT depreciation.



Figure 9: Latest minimum wage estimates, October 2019

Minimum wage in USD based on 8 October 2019 exchange rates - Eurostat and many other sources via Renaissance Capital, note data on right-hand side may be mix of gross or net wages (not so reliable) - ordered by wage levels in July 2019 to help show recent



Source: Eurostat, Bloomberg, Renaissance Capital estimates

Jordan's currency might be worth watching, especially if any devaluation in **Lebanon** triggers contagion concern. The country has lost manufacturing competitiveness vs Egypt, the C/A deficit remains wide and GDP growth is sluggish. It has been over 20 years since the last currency move but it gets significant Gulf/international support. As with other Gulf members, deflation is an alternative to depreciation to address JOD overvaluation.

In the CIS, **Kazakhstan** has looked cheap on our model for years, but the currency is anchored by the RUB/KZT rate. More interesting than our model saying it is roughly 20% undervalued, is that our economist Sofya Donets thinks we may see modest appreciation of a few percent in the coming one-to-two years (KZT375/\$ by end-2020). That would be undermined in a global recession scenario – we would see KZT386/\$ at \$50/bl oil and KZT405/\$ at \$40/bl oil. The healthy C/A limits the downside risk.

Elsewhere in the CIS, **Moldova** looks particularly expensive and **Belarus** is particularly undervalued. The C/A change expected by the IMF in both countries fits with the model's assumptions.

Africa

The most overvalued currency that investors might care about is **Ethiopia's**, which our model says should be ETB40/\$, nearly identical to the ETB40-42/\$ rate quoted in the parallel market. We see Ethiopia as among the least impacted by a global recession, as its key exports of tea and coffee are relatively recession proof, there is minimal risk of financial contagion (the only financial market asset is the eurobond), and much of the USD funding has come from China. We do not forecast that the 35% overvaluation will be closed anytime soon, and the authorities say similar.



Figure 10: African currencies – REER

	Current FX rate implied FX rate vs \$	FX rate if by long-term average REER	FX rate if REER falls to previous lows	Date of REER low	Long-term average divided by current rate	IMF 2019E C/A (%GDP)	IMF 2020E C/A (%GDP)	Standard deviations away from historic average	Yvonne's avg. REER 7/19 estimate	RenCap 19YE forecast	1Y local currency yields
C.A. Republic	600	1,091	1,586	Dec-99	1.82	-6.1	-6.0	2			na
Ethiopia	29.0	39.8	56.1	Jan-04	1.37	-6.1	-5.4	1	35.7		na
Nigeria	362	464	1,063	Apr-95	1.28	-0.4	-0.2	1	382	375	13.3
Congo (Rep)	600	741	1,027	Feb-95	1.23	4.7	5.9	1			na
Kenya	104	126	264	Jul-95	1.22	-5.0	-4.9	1	129	105	9.8
Eq. Guinea	600	708	1,121	Oct-00	1.18	-4.7	-5.7	0			6.7
Egypt	16.3	18.1	27.7	Dec-03	1.11	-2.4	-1.7	0	17.3	16.5	16.0
Mauritius	36.6	40.1	47.0	Dec-06	1.10	-7.4	-6.7	1			2.9
Botswana	11.1	12.1	14.3	Sep-98	1.09	8.6	8.0	1			na
Gabon	600	648	721	Sep-00	1.08	-3.6	-1.2	1			na
Angola	383	411	1,454	Oct-99	1.07	-3.8	-1.9	0	350		16.8
Zambia	13.2	13.9	25.3	Jul-95	1.06	-2.9	-2.7	0	11	13.3	21.6
Cameroon	600	619	711	Oct-00	1.03	-3.7	-3.4	0			3.8
Chad	600	618	783	May-00	1.03	-6.1	-4.3	0			6.0
Tanzania	2,298	2,345	2,938	Dec-93	1.02	-3.9	-4.2	0	2,328	2,300	6.5
Morocco	9.71	9.66	10.3	Aug-12	0.99	-4.1	-3.5	0	8.4		2.3
Ivory Coast	600	595	692	Aug-97	0.99	-3.0	-2.8	0	560		5.6
Mozambique	62.1	59.7	88.4	Sep-16	0.96	-51.1	-63.8	0			12.2
Algeria	120	115	134	Apr-08	0.95	-12.5	-9.3	0			na
Senegal	600	569	628	Nov-00	0.95	-7.3	-10.2	-1	560		5.5
Namibia	15.3	14.4	19.4	Dec-01	0.94	-3.9	-3.2	0			7.5
Uganda	3,693	3,450	4,385	Aug-11	0.93	-8.2	-9.1	0	3,400		10.4
Rwanda	923	851	1,132	Dec-03	0.92	-9.2	-8.7	0	839	926	8.5
South Africa	15.3	13.3	19.8	Dec-01	0.87	-3.4	-3.7	-1	12	15	7.6
Ghana	5.49	4.34	7.93	Aug-14	0.79	-3.0	-3.5	-1	4.3	5.6	15.5
DR Congo	1,653	1,306	1,938	Mar-18	0.79	-1.8	-2.9	-1	1,722		na
Tunisia	2.86	2.19	3.18	Feb-19	0.77	-10.1	-9.1	-1		2.9	8.3

Note: Auction yields except: Egypt, Nigeria, Uganda, South Africa

Note: The DRC figure has shifted significantly due to Bruegel using a World Bank data series that records minimal inflation in 2016/17. If we used IMF data, DRC would be around fair value - which we suspect is more accurate

Source: Bruegel, IMF, Renaissance Capital

Nigeria is the most controversial view we have relative to fixed income investors in the local market, who like the nearly balanced C/A, the high level of FX reserves and the Central Bank of Nigeria's (CBN) governor's commitment to a steady exchange rate. Fair value on our model dating back to 1995 is now at NGN464/\$⁵ and would need to be NGN527/\$ to be equivalent to the ZAR and NGN587/\$ to be as cheap as Ghana. That fair value estimate is likely to increase by roughly 7% annually, assuming 10% inflation in Nigeria vs 2% in the US (and faster productivity growth in Nigeria than the US) putting fair value at NGN500/\$ by September 2020. Weaker than this would be justified by a global recession driving oil prices to \$40-50/bl next year. Deflation as a means to address the overvaluation is something we see in the Gulf and other countries, but not Nigeria where import bans and government borrowing and infrastructure inadequacies conspire to keep inflation in double digits.

The global recession scenario is therefore pretty concerning for Nigeria. Already FX reserves have dropped by \$1.5bn a month over the past two months, which suggests by June 2020 we will be around \$30bn which historically has been a level that prompts devaluation concerns. This level would be reached faster if oil prices drop due to a global recession. The positive news is that devaluation – if combined with the removal of the fuel subsidy – could dramatically improve the budget situation (over half of federal budget revenues came from the energy sector in recent years), giving the government scope to up investment spending which is currently half the required level to converge per capita income with the US. It could reduce real interest rates locally⁶ from 2.7% to 1.0%, so supporting private sector investment. But in the short term, this would be painful for local

⁵ Note that Yvonne Mhango, our SSA economist, has an FX model dating back to 2004 with a far stronger fair value estimate of NGN382/\$, which I tend to favour when oil prices are above \$80/bl.

⁶ See *Thoughts from a Renaissance Man: How many babies are too many?*, 31 July 2019



fixed income investors and would send the external debt ratio up at a time when the government is transitioning to more borrowing from outside.

We have less concern about **Kenya**, which like Ethiopia is a relative beneficiary in terms of the trade balance, although tourism may be impacted. The overvaluation here is long-standing but sustainable for as long as Kenya can borrow externally. IMF estimates suggest that support will be less in 2020, implying modest currency depreciation in line with Yvonne Mhango's forecasts to KES111/\$ in 2020⁷.

Angola is interesting, partly because it is a much bigger oil exporter than Nigeria in per capita terms, and it has allowed the currency to depreciate very significantly since early 2017 when it was the most overvalued currency in Africa. Today the official rate is less than 10% overvalued and the parallel exchange rate at over AOA500/\$ is the cheapest in Africa. This should be positive for the C/A. It also suggests that even if the official rate was devalued because oil prices fell to \$40-50/bl, the inflation impact might be relatively limited (as it was in Nigeria in 2017) because many imports are likely to be already priced at the parallel rate. The difficulty is that official debt ratios would worsen (due to the high external debt) and further weaken the credit in the eyes of foreign investors. We remain concerned by downside risks in Angola⁸.

Zambia's troubles also worsen in a global recession scenario in which copper prices drop another 20% or so. The currency would need to weaken into undervalued territory. We see less impact on **DR Congo** as the currency is anyway fairly valued, and because the economy is less sensitive to the local exchange rate (most bank deposits are in USD). Note the model above suggests the DR Congo is undervalued, but we think this is due to confusion over DR Congo inflation – our assumption is the currency is still close to fair value, as Yvonne Mhango's model still shows.

EUR-linked CFA currencies and **Morocco** would depreciate in a stronger USD scenario.

Ghana keeps coming out as the interesting local markets credit – with investors protected by a currency that is already 20% cheap. The diversified export mix (cocoa, gold as well as oil) might offset falling oil prices. Double-digit interest rates help too. Nonetheless, with no IMF programme, and elections in late 2020 (Ghana has blown out its twin deficits in the last three elections) – we assume the market will stay jittery on Ghana. Investors are cautious even though the ruling party lost the last election when it was fiscally irresponsible in (2008) and won the last election when it maintained tight policy (2004), which does suggest positive fiscal surprises relative to market consensus might happen.

⁷ See *5th Annual East Africa Conference: Kenya: New treasury team in town*, 1 October 2019

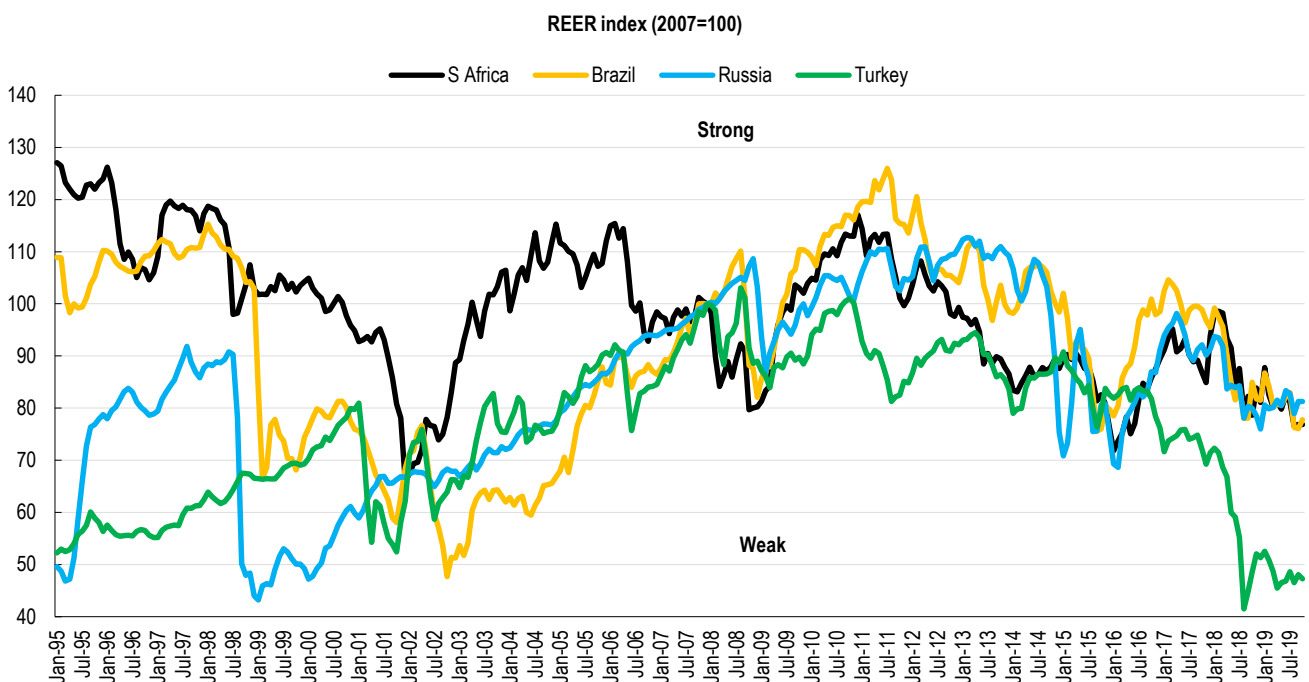
⁸ See *Angola Eurobonds: Reform effort but high debt risks*, 31 July 2019



Appendix: The 2000-2003 recession and the 2011-2013 non-recession

The trouble with a sample of one recession is pretty obvious – even if it does prove to be the most appropriate. This is why this section is an appendix. Turkey's dire FX performance from 2000-2001 was because its currency peg collapsed in 2001 – this time, Turkey has already had a big FX blow-out. There was a lot of negativity about South Africa in 2000-2002 (HIV and Zimbabwe were two factors in this) and the currency reached a record weak level in REER terms at that time. This time the ZAR is already cheap but admittedly could get cheaper. Pakistan was looking weak in the aftermath of the Asian crisis, and the currency suffered, but this time, as in Turkey, we think we are past the worst on a one-year outlook. Russia was coming back from extreme under-valuation in 1998-1999 so its bullish history is not very relevant. Brazil in 2000-2003 was impacted by the collapse of Argentina and that, oh yes, that is happening again actually.

Figure 11: Key EM countries had very weak currencies over the 2000-2003 period



Source: Bruegel, Renaissance Capital

For protection, Gulf pegs and having the EUR obviously helped. Central Europe did not have the EUR but it did well because FDI flooded that region, which is unlikely to happen again. Rather Egypt, Turkey or Morocco might experience a similar benefit this time around.



Figure 12: How did currencies perform vs the USD in the 2000-2003 recession period and in the fake recession of 2011-2013

31-Jul-00	Nominal			Real			30-Apr-11	Nominal			Real		
	0-12m	12-24m	24-36m	0-12m	12-24m	24-36m		0-12m	12-24m	24-36m	0-12m	12-24m	24-36m
China	0.0%	0.0%	0.0%	7.2%	-0.4%	-4.8%	China	3.4%	1.9%	-1.6%	7.8%	15.5%	15.0%
Korea	-14.0%	9.3%	0.7%	-6.3%	0.0%	-0.5%	Korea	-5.2%	2.6%	6.6%	-2.4%	2.2%	10.7%
Taiwan	-10.6%	3.0%	-1.9%	-6.8%	-8.2%	-15.3%	Taiwan	-1.8%	-1.2%	-2.3%	-0.6%	1.4%	0.2%
India	-4.5%	-3.2%	5.5%	3.1%	-2.4%	0.4%	India	-16.1%	-2.0%	-10.8%	-4.4%	-0.6%	-5.7%
S Africa	-15.8%	-18.9%	38.3%	-7.0%	-23.6%	-1.6%	S Africa	-15.6%	-13.5%	-14.5%	-6.8%	-14.4%	-23.9%
Brazil	-27.8%	-28.7%	16.7%	-19.6%	-25.0%	-19.4%	Brazil	-17.5%	-4.7%	-10.4%	-9.1%	-10.0%	-14.1%
Mexico	2.4%	-6.7%	-7.4%	9.1%	4.6%	-2.0%	Mexico	-11.5%	7.1%	-7.3%	-8.0%	2.7%	-2.4%
Russia	-5.1%	-6.7%	4.0%	20.5%	17.1%	28.1%	Russia	-6.9%	-5.3%	-13.2%	1.4%	1.5%	-6.5%
Malaysia	0.0%	0.0%	0.0%	6.4%	2.4%	-1.2%	Malaysia	-2.2%	-0.5%	-6.8%	-0.1%	3.5%	-1.1%
Thailand	-9.6%	8.7%	0.1%	-5.0%	-0.8%	-4.9%	Thailand	-2.9%	4.8%	-9.4%	-0.3%	11.6%	1.6%
Indonesia	-5.8%	4.8%	6.5%	0.9%	27.0%	38.7%	Indonesia	-6.7%	-5.5%	-15.9%	-1.2%	-0.6%	-10.7%
Poland	1.8%	1.9%	8.2%	13.8%	2.8%	-3.0%	Poland	-15.9%	-0.2%	4.4%	-5.2%	-4.1%	-3.8%
Philippines	-16.2%	4.6%	-6.4%	-5.6%	-3.8%	-9.6%	Philippines	1.4%	2.6%	-7.7%	4.0%	13.6%	7.4%
Turkey	-52.2%	-21.5%	18.7%	-23.0%	-21.9%	6.8%	Turkey	-13.4%	-2.0%	-15.3%	-1.7%	3.8%	-8.0%
Chile	-17.1%	-5.2%	-0.1%	-10.9%	-14.9%	-20.1%	Chile	-5.1%	2.9%	-16.5%	2.0%	6.1%	-5.8%
Qatar	0.0%	0.0%	0.0%	na	na	na	Qatar	0.0%	0.0%	0.0%	2.5%	7.4%	8.0%
UAE	0.0%	0.0%	0.0%	na	na	na	UAE	0.0%	0.0%	0.0%	1.5%	0.7%	3.9%
Colombia	-5.0%	-12.9%	-9.1%	3.6%	-3.4%	-14.8%	Colombia	-0.1%	-3.2%	-5.8%	6.4%	4.9%	0.3%
Peru	-0.5%	-2.4%	2.9%	5.7%	1.3%	-1.6%	Peru	7.3%	-0.3%	-5.9%	11.7%	17.1%	11.9%
Greece	-5.8%	12.1%	14.7%	-0.5%	5.8%	13.1%	Greece	-10.7%	-0.5%	5.4%	-3.4%	-4.8%	-4.9%
Hungary	-0.6%	12.7%	6.6%	10.0%	18.8%	18.9%	Hungary	-17.6%	-4.8%	2.7%	-9.1%	-9.6%	-11.3%
Czech	-1.6%	25.5%	7.5%	6.7%	24.7%	18.1%	Czech	-13.5%	-3.6%	-1.1%	-2.7%	-5.9%	-10.7%
Argentina	0.0%	-73.1%	27.2%	1.5%	-66.0%	-56.3%	Argentina	-7.6%	-14.9%	-35.2%	16.4%	19.1%	5.1%
Egypt	-11.6%	-15.0%	-24.5%	-5.6%	-24.4%	-45.4%	Egypt	-1.5%	-12.8%	-1.0%	10.0%	4.5%	8.7%
Saudi Arabia	0.0%	0.0%	0.0%	4.3%	-3.2%	-7.7%	Saudi Arabia	0.0%	0.0%	0.0%	3.3%	8.7%	8.9%
Pakistan	-16.5%	7.4%	3.1%	-11.2%	-8.0%	-9.7%	Pakistan	-6.9%	-7.5%	-0.1%	5.0%	2.7%	10.3%
Kuwait	0.2%	1.8%	0.5%	6.8%	1.8%	-2.9%	Kuwait	-1.0%	-2.5%	1.2%	5.4%	6.9%	9.1%
Nigeria	-6.1%	-16.0%	4.1%	19.6%	14.2%	13.5%	Nigeria	-1.7%	-0.4%	-1.6%	13.4%	23.4%	25.8%
Morocco	-9.1%	9.2%	11.3%	-4.7%	-3.0%	-2.0%	Morocco	-9.0%	-0.4%	4.4%	-2.1%	-0.6%	0.2%
Oman	0.0%	0.0%	0.0%	na	na	na	Oman	0.0%	0.0%	0.0%	4.0%	6.9%	6.5%
Kenya	-4.2%	0.5%	4.4%	5.8%	1.7%	9.1%	Kenya	5.2%	-0.8%	-3.6%	15.7%	20.3%	21.0%
Vietnam	-5.7%	-2.5%	-1.2%	1.4%	-5.3%	-9.3%	Vietnam	-1.1%	-0.3%	-0.7%	12.2%	21.9%	23.8%
Romania	-26.1%	-9.9%	-0.3%	2.5%	-1.0%	1.6%	Romania	-17.8%	1.8%	2.9%	-8.9%	-5.1%	-4.6%
Bangladesh	-11.1%	-0.1%	-1.7%	-5.9%	-8.8%	-9.8%	Bangladesh	-11.0%	5.0%	0.4%	-4.1%	8.4%	14.4%
Sri Lanka	-12.8%	-6.4%	-1.1%	2.6%	0.0%	-3.4%	Sri Lanka	-15.2%	2.3%	-3.0%	-8.2%	-0.1%	-1.2%
Kazakhstan	-2.8%	-4.6%	4.9%	5.8%	-0.5%	3.4%	Kazakhstan	-1.3%	-2.3%	-16.9%	4.6%	7.3%	-3.7%
Senegal	-5.4%	12.3%	14.4%	-0.1%	6.1%	8.6%	Senegal	-10.2%	-1.0%	5.2%	-1.7%	-2.5%	-2.1%
Estonia	-5.8%	12.1%	14.7%	2.4%	7.6%	10.4%	Estonia	-10.7%	-0.5%	5.4%	-0.8%	0.9%	3.2%
Lithuania	-5.8%	12.1%	14.7%	4.6%	7.2%	8.0%	Lithuania	-10.7%	-0.5%	5.4%	-1.3%	-1.2%	1.0%
Slovenia	-5.8%	12.1%	14.7%	-1.0%	3.6%	7.5%	Slovenia	-10.7%	-0.5%	5.4%	-1.2%	-0.7%	0.8%
Croatia	-0.4%	8.2%	13.2%	4.5%	4.7%	6.9%	Croatia	-12.2%	-1.6%	5.0%	-3.2%	-2.3%	-2.3%
Bahrain	0.0%	0.0%	0.0%	4.1%	-1.4%	-7.1%	Bahrain	0.0%	0.0%	0.0%	5.8%	9.1%	8.6%
Lebanon	0.3%	-0.2%	0.0%	na	na	na	Lebanon	-0.1%	0.0%	-0.3%	6.2%	16.9%	13.4%
Serbia	-82.6%	10.1%	5.0%	-58.5%	-51.9%	-51.4%	Serbia	-20.9%	0.7%	0.9%	-10.7%	-1.4%	-1.0%
Tunisia	-6.3%	6.3%	6.2%	-1.0%	-2.7%	-5.5%	Tunisia	-12.2%	-4.6%	0.6%	-1.2%	-0.6%	-0.7%
Jordan	0.0%	0.8%	-0.6%	7.7%	2.9%	-2.0%	Jordan	0.0%	-0.1%	-0.2%	5.8%	11.6%	12.2%
Mauritius	-11.2%	-1.3%	2.8%	-0.3%	-5.6%	-8.6%	Mauritius	-6.5%	-6.4%	3.4%	2.4%	-0.1%	3.9%
Ivory Coast	-5.5%	12.3%	14.4%	0.1%	7.2%	14.9%	Ivory Coast	-10.2%	-1.0%	5.2%	-9.1%	-6.1%	-3.7%
Georgia	-4.6%	-5.7%	3.7%	6.2%	-5.7%	-7.9%	Georgia	0.6%	-1.0%	-6.7%	2.3%	-1.8%	-4.0%
Armenia	-1.1%	-1.4%	-2.2%	4.9%	-6.2%	-7.3%	Armenia	-5.7%	-4.6%	-0.2%	0.0%	-4.5%	2.0%
Azerbaijan	-3.9%	-4.4%	-0.3%	-1.2%	-11.1%	-10.0%	Azerbaijan	0.8%	0.2%	0.1%	4.4%	3.1%	10.6%
Belarus	-46.1%	-22.5%	-11.5%	0.9%	2.2%	1.0%	Belarus	-62.6%	-7.0%	-13.4%	-22.0%	-13.0%	-10.7%
Ukraine	1.3%	0.5%	0.0%	12.9%	3.3%	-0.1%	Ukraine	-0.8%	-0.8%	-30.2%	2.9%	-0.4%	-26.9%

Source: Bloomberg, Bruegel, Renaissance Capital estimates



In the recession that never happened, after 2011, countries that became the Fragile Five were hit hard on the currency side, even though commodity prices stayed fairly high. Central Europe suffered this time around.

To conclude, in both episodes, currency pegs offered protection, either the Gulf's vs the USD, or the EUR-pegs we see in Greece, the Baltics, some of the Balkans and West Africa. In addition, currencies that performed well in 2011-2013 included China and Korea, and if recession was avoided because the trade wars are called off, it makes sense to assume this can happen again. But in either case, in this first year of uncertainty where indicators are uncertain but heading in the negative direction, EM FX did not provide positive nominal returns in either 2000-2001 or 2011-2012.

Renaissance CapitalMoscow
T + 7 (495) 258-7777**Renaissance Securities (Nigeria) Ltd.**Lagos
T +234 (1) 448-5300**Renaissance Securities (Cyprus) Ltd.**Nicosia
T + 357 (22) 505-800**Renaissance Capital Ltd.**London
T + 44 (203) 379-7777**Renaissance Capital**Nairobi
T +254 (20) 368-2000**Renaissance Capital Egypt for Promoting
and Underwriting of Securities S.A.E.**

Cairo

Renaissance CapitalJohannesburg
T +27 (11) 750-1400**Renaissance Capital**Cape Town
T +27 (11) 750-1164

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