

Equities

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The Search for Tail-Hedge Continues...

No Winners in Asia if USD Strengthens Further

■ Derivatives
■ Equities

- **Stronger USD in First Year of Recession** — While CIRA's house view is for a global growth slowdown, not recession, USD typically becomes stronger 12M after a recession starts. Technically, DXY has already broken out. FOMC meeting on 21 September announced "Operation Twist", but there was no action that raised USD supply. In our view USD can test higher levels as global risk appetite remains fragile.
- **On average, US +16%, AxJ -28%** — Historically, USD strength means pressure for Asian equities. In the past five periods since 1980 when DXY +18%, US +16% vs. -28%, -20% and -4% for AxJ, Australian and Japanese equities respectively.
- **No Outright, Only Relative, Winners** — Within AxJ, Utilities, Healthcare and Technology beat the other sectors. The worst performers were Real Estate, Materials and Oil & Gas.
- **Three Hedging Strategies** — We have emphasised hedging strategies since Jun-11. On the back of our findings in this article, we recommend:
 - Outperformance calls of SPX over EM Asia. This may seem contradictory to our view in [Pulse Check](#), [Cross-Asset](#), but this structure makes sense as a tail-risk hedge if past performance repeats itself. Investors may consider 12M 105% outperformance call of SPX over EM Asia equally-weighted basket (KOSPI2, TWSE, HSCEI and NIFTY), and can cheapen costs by introducing features such as "best-of" amongst the four Asian indices.
 - Basket Pair Trade on Strong-USD Winner and Losers. Winner-basket outperformed Loser-basket by 13% since 01-Aug-11. We recommend investors enter this trade when outperformance pulls back to <10%.
 - Finally, we reiterate our strategy in [How to Hedge Tail Risks Cheaper](#), i.e. buying Asian equity index puts which knocks-in when EURUSD falls. As an example, 29-Dec-11 95% HSCEI puts costs a 5.4% premium, which cheapens to 3.7% premium if EURUSD is 4% lower than initial spot at option maturity (EURUSD Initial Ref. Spot = 1.368. Knock-In at 1.32).

Daniel Lam, CFA
+852-2501-2718
daniel.k.lam@citi.com

See Appendix A-1 for Analyst Certification, Important Disclosures and non-US research analyst disclosures.

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Tail Hedges via Derivatives and Equities

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USD Strength at Recessions => Pressure on Asian Equities

We alluded to EURUSD downside, or USD strength, in [How to Hedge Tail Risks Cheaper](#). While CIRA's house-view is global growth slowdown, not a recession, USD typically became stronger 12M after recession begins, according to CIRA Macro Strategy team (Figure 1).

Figure 1. Performance of USD 12M before and 12M after recession

Year	-12M	-6M	0M*	+6M	+12M
1973	110.9	100.2	100	99.2	101.3
1980	102.9	101	100	98.8	106.4
1981	77.8	83.9	100	99	110.3
1990	111.2	103.6	100	94.6	106.2
2001	91.9	101.2	100	97.8	102.2
2007	108.6	107	100	95	106.3
Average	100.6	99.5	100.0	97.4	105.5

Source: Citi Investment Research and Analysis
*0M = When recession starts

In the past, USD strength means pressure for Asian equities. Figure 2 and Figure 3 come from the CIRA Pan-Asian Equity Strategy team. They show the past five periods since 1980 when DXY +18%:

- On average, US equities outperformed Asian ones: US +16% vs. -28%, -20% and -4% for AxJ, Australian and Japanese equities respectively;
- With the exception of the last strong USD period (Nov-09 to Jun-10), Asian equities fell on every such instance. In fact, that was the only time when Asian equities outperformed the US in periods of significant USD strength; and
- Within AxJ, Utilities, Healthcare and Technology beat the other sectors. The worst performers were Real Estate, Materials and Oil & Gas

Figure 2. Pan-Asian country performance during periods of USD Strength since 1980*

From	To	Trade-Wgt USD appre	MSCI Ch	MSCI HK	BSE 30	JCI	KOSPI	KCI	PCI	STI	TWSE	SET	AxJ	MSCI AU	MSCI JP	SPX
7/1980	3/1985	55%	-	-21%	73%	-	-14%	-12%	-93%	-1%	31%	-15%	-20%	-25%	106%	48%
4/1995	8/1998	28%	-16%	-31%	-31%	-84%	-80%	-81%	-71%	-64%	-18%	-90%	-45%	-9%	-47%	86%
10/1999	2/2002	18%	-7%	-24%	-29%	-49%	-11%	-5%	-46%	-32%	-33%	-17%	-25%	-4%	-47%	-19%
3/2008	11/2008	18%	-43%	-44%	-53%	-61%	-57%	-39%	-44%	-49%	-53%	-56%	-49%	-49%	-30%	-32%
11/2009	6/2010	19%	-7%	-3%	5%	26%	4%	9%	13%	2%	-3%	19%	1%	-16%	-3%	-6%
Average			-18%	-25%	-7%	-42%	-32%	-25%	-48%	-28%	-15%	-32%	-28%	-20%	-4%	+16%

Source: Citi Investment Research and Analysis
* Periods when DXY +18% or more

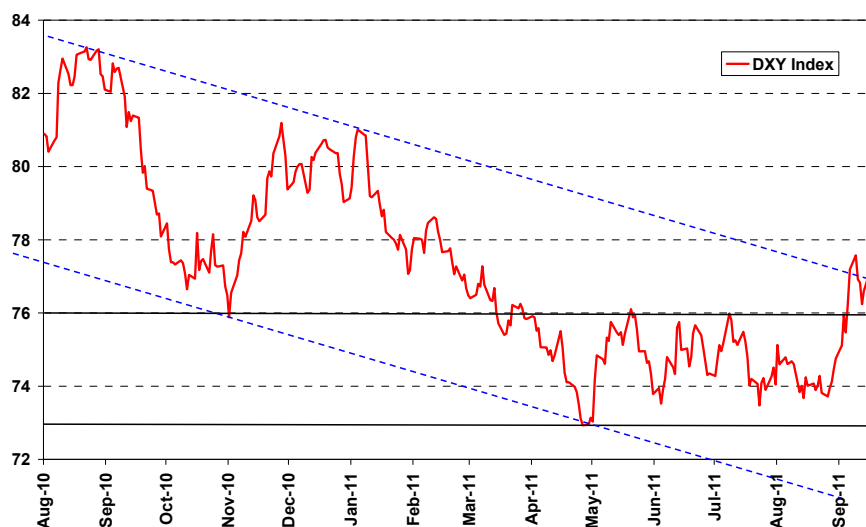
Figure 3. AxJ sector performances during periods of USD Strength since 1980*

From	To	Trade-Wgt USD appre	Oil & Gas	Basic Mats	Indust.	Cons Disc	HealthCare	Cons Stap	Telco	Util	Banks	Insur	Real Est	Tech
7/1980	3/1985	55%	-	-16%	-12%	-37%	24%	24%	-	46%	-14%	-	-48%	-
4/1995	8/1998	28%	-57%	-54%	-28%	-58%	-44%	-49%	-45%	-41%	-46%	-26%	-58%	27%
10/1999	2/2002	18%	-32%	-29%	-21%	-25%	-17%	-18%	-32%	-12%	-14%	-14%	-17%	-19%
3/2008	11/2008	18%	-49%	-64%	-57%	-51%	-39%	-45%	-41%	-35%	-40%	-42%	-55%	-53%
11/2009	6/2010	19%	7%	-7%	5%	13%	21%	10%	5%	4%	-5%	-7%	-9%	-1%
		Average	-33%	-34%	-23%	-32%	-11%	-16%	-28%	-7%	-24%	-22%	-38%	-12%

Source: Citi Investment Research and Analysis
* Periods when DXY +18% or more

Technically, DXY broken out of both 1) downward trend, and 2) sideways trading range (Figure 4). The FOMC meeting on 21 September announced “Operation Twist”, but there was no action which increased the supply of USD. Therefore, in our view USD can test higher levels as global risk appetite remains fragile.

Figure 4. DXY broke out technically. It can test higher levels as risk appetite remains fragile



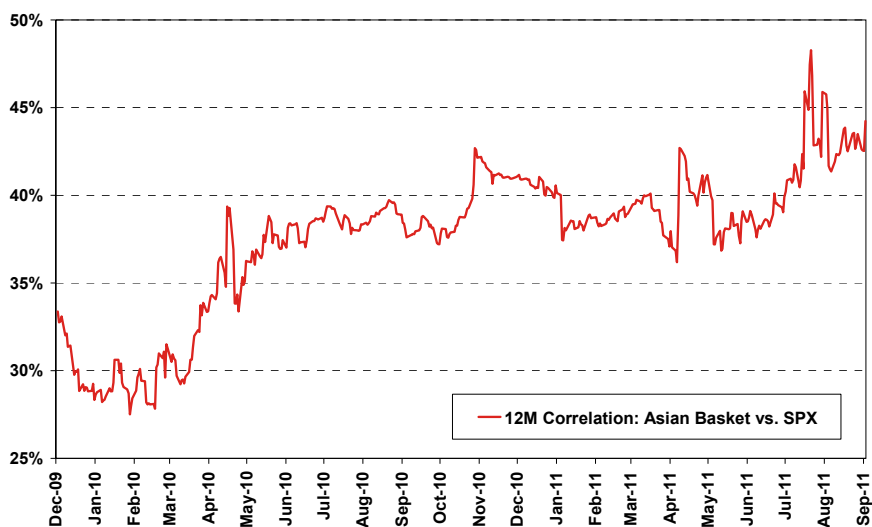
Source: Citi Investment Research and Analysis

Three Hedging Strategies

We recommend three hedging strategies for investors:

- Outperformance calls of SPX over EM Asia. This may seem contradictory to our view in [Pulse Check, Cross-Asset](#), where we preferred EM Asia vs. the US. However, this structure makes sense as a tail-risk hedge if past performance repeats itself as per Figure 2.
 - 12M 105% outperformance call of SPX over an EM Asia equally-weighted basket (KOSPI2, TWSE, HSCEI and NIFTY) costs 6.65% premium. This has to be taken into context that: 1) US equities outperformed Asian equities by 42% on average in periods of USD strength, and 2) Option premium may be cheapened considerably if we introduce features such as “best-of” amongst the four Asian indices
 - Figure 5 shows the relatively elevated correlation between SPX and the basket. This structure would be selling correlation

Figure 5. Relatively elevated correlation between Asian Basket and SPX



Source: Citi Investment Research and Analysis

- Basket Pair Trade on Strong-USD Winner and Losers, based upon the historical analysis in Figure 3:
 - Winner-Basket – Utilities, Healthcare and Technology, and hedge with
 - Loser-Basket – Real Estate, Materials and Oil & Gas
 - With poor liquidity in the markets, we kept these baskets simple – they are essentially the most active stocks in the region in these sectors. Figure 6 and Figure 7 show the constituents of these baskets.

Figure 6. Winner-Basket on Strong-USD*

Country	Name	BBG Code	Sector	P/E	P/B	Yld	ROE	MCap** Rtg
China	Sinopharm	1099 HK	HealthCare	26.8	3.3	1.1%	12.6%	6,290 1M
China	Mindray Medical	MR US	HealthCare	16.7	2.7	1.1%	16.2%	3,062 2L
India	Sun Pharma	SUNP IN	HealthCare	27.8	5.3	0.8%	20.9%	10,668 2L
India	Dr Reddy	DRRD IN	HealthCare	23.9	5.6	0.7%	24.8%	5,453 1L
India	Lupin	LPC IN	HealthCare	24.9	6.5	0.6%	29.5%	4,523 1L
Korea	SEC	005930 KS	Technology	10.4	1.2	1.3%	12.5%	105,658 1L
Korea	Hynix	000660 KS	Technology	34.9	1.5	0.7%	4.5%	11,657 1M
Taiwan	TSMC	2330 TT	Technology	13.6	2.9	4.2%	22.5%	62,333 1L
Taiwan	Hon Hai	2317 TT	Technology	9.5	1.2	1.5%	13.9%	25,674 1L
Taiwan	Catcher Tech	2474 TT	Technology	13.4	3.2	5.0%	29.4%	5,051 1H
Hong Kong	CLP Holdings	2 HK	Utilities	15.6	2.1	3.4%	13.7%	22,574 2L
Hong Kong	Power Assets	6 HK	Utilities	15.1	2.2	4.0%	15.3%	17,106 1L
Hong Kong	CK Infrastructure	1038 HK	Utilities	14.0	2.1	3.1%	15.9%	14,227 1L
Indonesia	PT PGN	PGAS IJ	Utilities	8.7	3.7	5.7%	46.3%	7,398 1L
Korea	KEPCO	015760 KS	Utilities	nm	0.2	0.0%	-1.1%	12,753 1L

Source: Citi Investment Research and Analysis

* Equally Weighted. Investors may put on USD 31MM per day on the basket, assuming we can capture 20% of daily turnover. This is also the restricting turnover of this pair trade (i.e. equivalent turnover is higher for the loser basket)

** In USD (MM)

Figure 7. Loser-Basket on Strong-USD*

Country	Name	BBG Code	Sector	P/E	P/B	Yld	ROE	MCap**	Rtg
China	China Shenhua	1088 HK	M&M	13.1	2.4	2.6%	19.9%	87,301	1L
China	China Coal	1898 HK	M&M	11.5	1.3	2.4%	12.1%	16,897	1M
China	Yanzhou Coal	1171 HK	M&M	7.7	1.8	3.9%	26.2%	13,067	1M
China	Jiangxi Copper	358 HK	M&M	6.8	1.3	2.0%	20.6%	8,293	1M
China	PetroChina	857 HK	Oil & Gas	9.8	1.5	4.6%	15.5%	231,134	2L
China	Sinopec	386 HK	Oil & Gas	6.7	1.1	2.4%	18.0%	84,013	1L
China	CNOOC	883 HK	Oil & Gas	7.0	1.9	5.2%	30.3%	79,458	1L
India	Reliance Ind	RIL IN	Oil & Gas	13.4	1.8	1.0%	14.1%	57,244	1L
China	China Overseas	688 HK	Properties	8.6	1.7	2.1%	21.5%	14,244	1L
Hong Kong	SHK PROPS	16 HK	Properties	12.3	0.9	3.2%	7.8%	34,040	1L
Hong Kong	Cheung Kong	1 HK	Properties	11.9	0.8	3.1%	7.1%	29,994	1L
Singapore	CapitaLand	CAPL SP	Properties	13.4	0.7	2.8%	5.5%	8,739	1L

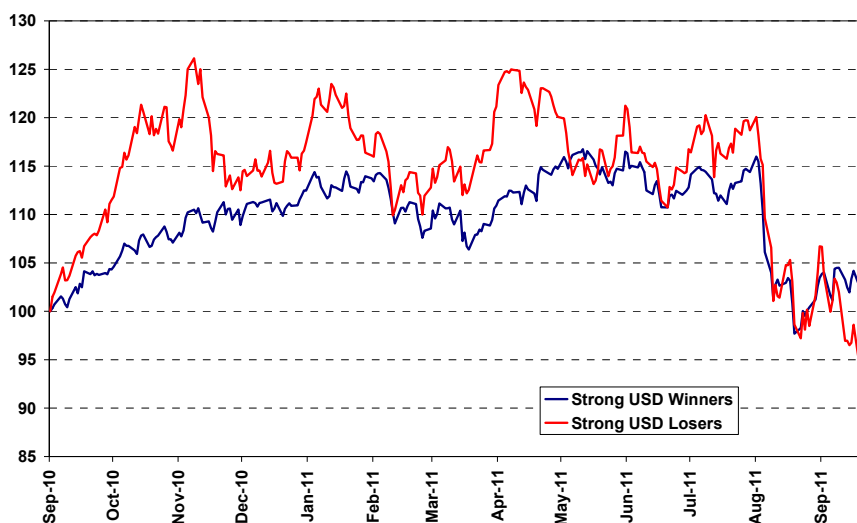
Source: Citi Investment Research and Analysis

* Equally Weighted

** In USD (MM)

- Figure 8 shows the Winner-basket outperformed Loser-basket by 13% since 01-Aug-11. We recommend investors enter this trade when outperformance pulls back to <10%.

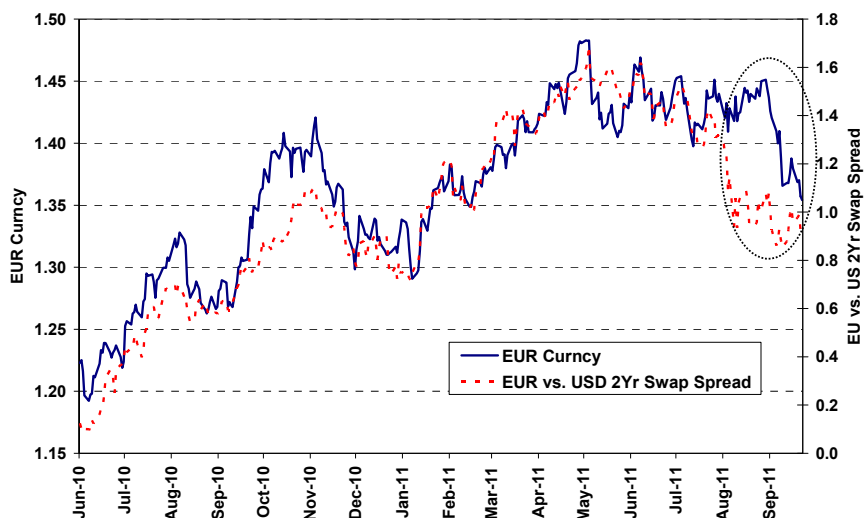
Figure 8. Winners of Strong USD outperformed Losers by 13% since Aug-11. Recommend putting on position when outperformance pulled back to <10% range



Source: Citi Investment Research and Analysis

- Finally, we reiterate our strategy in [How to Hedge Tail Risks Cheaper](#), i.e. buying Asian equity index puts, which knocks-in when EURUSD falls:
 - As an example, 29-Dec-11 95% HSCEI puts costs a 5.4% premium, which cheapens to a 3.7% premium if EURUSD is 4% lower than initial spot at option maturity (EURUSD Initial Ref. Spot = 1.368. Knock-In at 1.32)
 - Current rate differential between EUR and USD is pointing towards lower EURUSD, around the low 1.30s level (Figure 9)

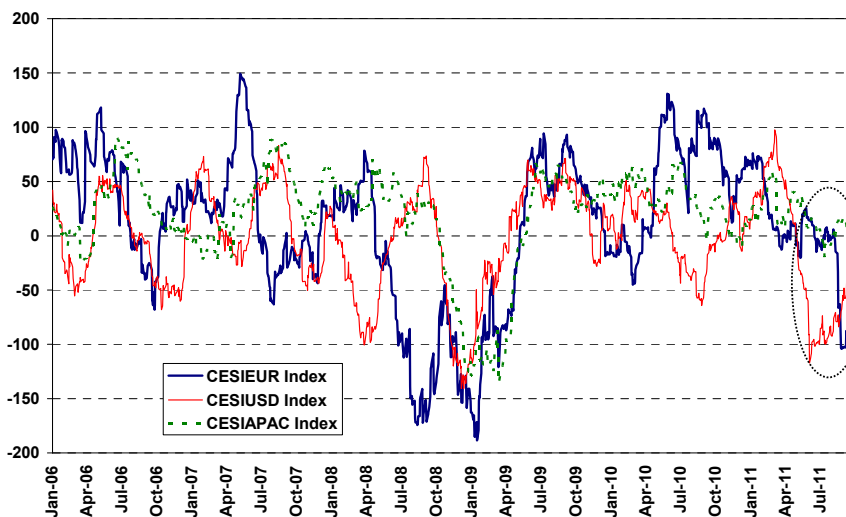
Figure 9. Rate differential between EUR and USD suggests low 1.30s for EURUSD



Source: Citi Investment Research and Analysis

- Citigroup Europe Economic Surprise Indicator fell aggressively and has stayed low. Asia's remained relatively solid, while US has been recovering (Figure 10)

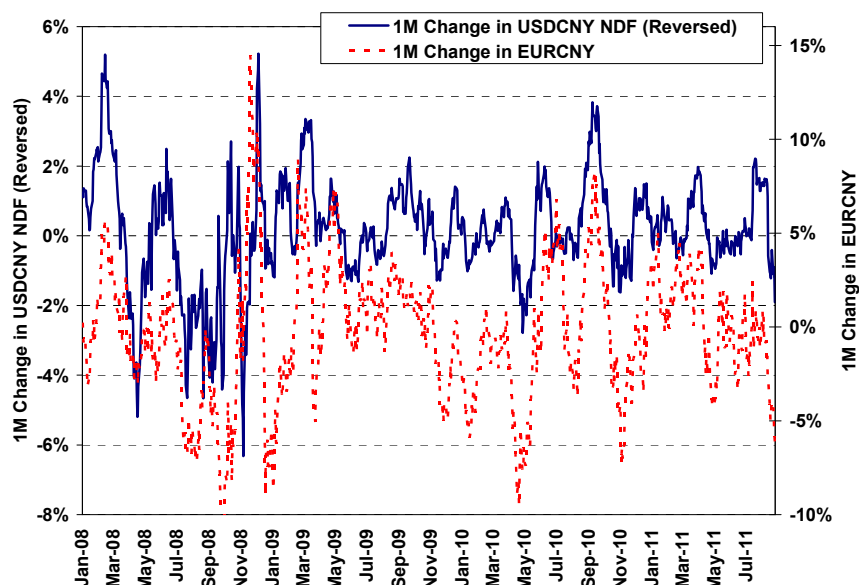
Figure 10. Citigroup European Economic Surprise Indicator weak vs. other regions'



Source: Citi Investment Research and Analysis

- Lastly, EM Central Banks slowed in buying EUR. We use China as an example. Figure 11 shows recent sharp fall in the speed of CNY appreciation – measured by 1M % change in USDCNY 12M NDF – and EURCNY. The pace of CNY appreciation is somewhat related to rises in EURCNY, and vice versa. This is consistent with Central Banks' goal to control inflation, but not building excessive USD reserves. The price action lately suggests Central Banks have slowed down in buying EUR. However, the current rate of depreciation in CNY vs. USD can come down further as history shows.

Figure 11. Pace of falling CNY vs. USD may accelerate as history shows. This can coincide with more weakness in EUR (and other risk currencies)



Source: Citi Investment Research and Analysis

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Appendix A-1

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