Local Selloff S&P 500 INDEX R1K Growth/Value GS Strong Weak BS R2K to SPX MSCI EM Local Change MARKIT CDX.NA.IG.26 06/21 MARKIT CDX.NA.HY.26 06/21 J.P. Morgan EMBI Plus Sovereig Episode Start Date Local Lo Date US Systemic SPX Index .R1KGV Index .GSSWBS Index .R2KSPX Index MSELEGF Index VIX Index GT2 Govt GT10 Govt IBOXUMAE Index IBOXHYSE Index JPEIPLSP Index 07/01/11 08/10/11 -15.2% -16.3% 4.1% 5.5% -6.1% -13.2% 27% -0.29% -1.08% 0.26% 2.40% 0.96% 2 11/06/15 -12.9% 0.7% 3.4% -8.8% 14% 0.46% 1.56% 1.06% 02/11/16 -11.9% -13.4% -0.24% -0.67% 3 07/20/15 08/24/15 -9.0% -11.0% -0.5% -1.0% -0.8% -13.6% 28% -0.14% -0.37% 0.22% 0.88% 0.78% 03/20/12 06/01/12 -8.5% -9.1% 0.8% 1.9% -2.2% -9.5% 11% -0.15% -0.91% 0.39% 1.75% 1.31% 09/19/14 10/15/14 -6.4% -7.4% 0.6% 2.1% 0.9% -5.7% 14% -0.26% -0.44% 0.18% 0.75% 0.50% -0.8% 0.09% 0.57% 6 12/24/14 01/15/15 -6.2% -4.3% 0.6% 0.0% 0.7% 8% -0.33% -0.55% 0.40% 12/31/13 02/03/14 -5.4% -5.8% 0.5% -1.0% -0.2% -5.3% 8% -0.09% -0.45% 0.12% 0.56% 0.71% 10/27/11 11/23/11 -9.6% 2.3% 2.0% -2.6% -7.2% 0.33% 2.04% 0.80% 8 -5.3% 9% -0.05% -0.51% 9 09/15/11 10/03/11 -4.9% -9.1% -0.3% 5.0% -6.0% -7.0% 13% 0.04% -0.33% 0.26% 2.18% 0.79% 10 -0.1% 1.06% 0.13% 08/15/11 08/22/11 -4.8% -6.7% -0.5% -2.9% -4.2% 11% 0.01% -0.20% 0.17% Median -7.1% 0.24% 0.78% 1.0 mths -6.3% -9.1% 0.6% 1.9% -2.4% 12% -0.14% -0.48% 1.31% Hit Rate 100% 100% 70% 60% 90% 90% 100% 80% 100% 100% 100% 100%

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			Local Selloff					WTI Cushing Crude Oil Spot Px	LMEX LONDON METALS INDEX	OIS Libor Spd (3m)	TED 3m Spot
<u>Episode</u>	Start Date	<b>Local Lo Date</b>	US Systemic	JPYUSD Curncy	AUD Curncy	DXY Index	Golds Index	USCRWTIC Index	LMEX Index	.OISSPD Index	.TED3m Index
1	07/01/11	08/10/11	-15.2%	5.2%	-5.5%	0.4%	20.5%	-12.7%	-8.7%	0.06%	0.04%
2	11/06/15	02/11/16	-11.9%	9.5%	0.9%	-3.6%	14.4%	-40.8%	-6.7%	0.14%	0.07%
3	07/20/15	08/24/15	-9.0%	4.9%	-2.9%	-4.8%	5.3%	-24.0%	-10.7%	0.03%	0.04%
4	03/20/12	06/01/12	-8.5%	7.3%	-7.4%	4.1%	-1.6%	-21.2%	-12.4%	-0.02%	0.02%
5	09/19/14	10/15/14	-6.4%	3.0%	-1.1%	0.5%	2.2%	-11.5%	-3.6%	0.00%	-0.01%
6	12/24/14	01/15/15	-6.2%	3.7%	1.3%	2.7%	7.5%	-16.9%	-7.4%	0.00%	-0.03%
7	12/31/13	02/03/14	-5.4%	4.3%	-1.8%	1.2%	4.3%	-2.0%	-4.4%	0.00%	0.03%
8	10/27/11	11/23/11	-5.3%	-1.8%	-9.7%	5.7%	-3.0%	2.0%	-10.2%	0.06%	0.08%
9	09/15/11	10/03/11	-4.9%	0.1%	-7.8%	4.2%	-7.3%	-13.2%	-15.9%	0.00%	0.03%
10	08/15/11	08/22/11	-4.8%	0.1%	-0.9%	0.3%	7.5%	-4.3%	-2.4%	0.03%	0.02%
Median		1.0 mths	-6.3%	4.0%	-2.4%	0.9%	4.8%	-12.9%	-8.0%	0.02%	0.03%
Hit Rate			100%	90%	80%	80%	70%	90%	100%	80%	80%