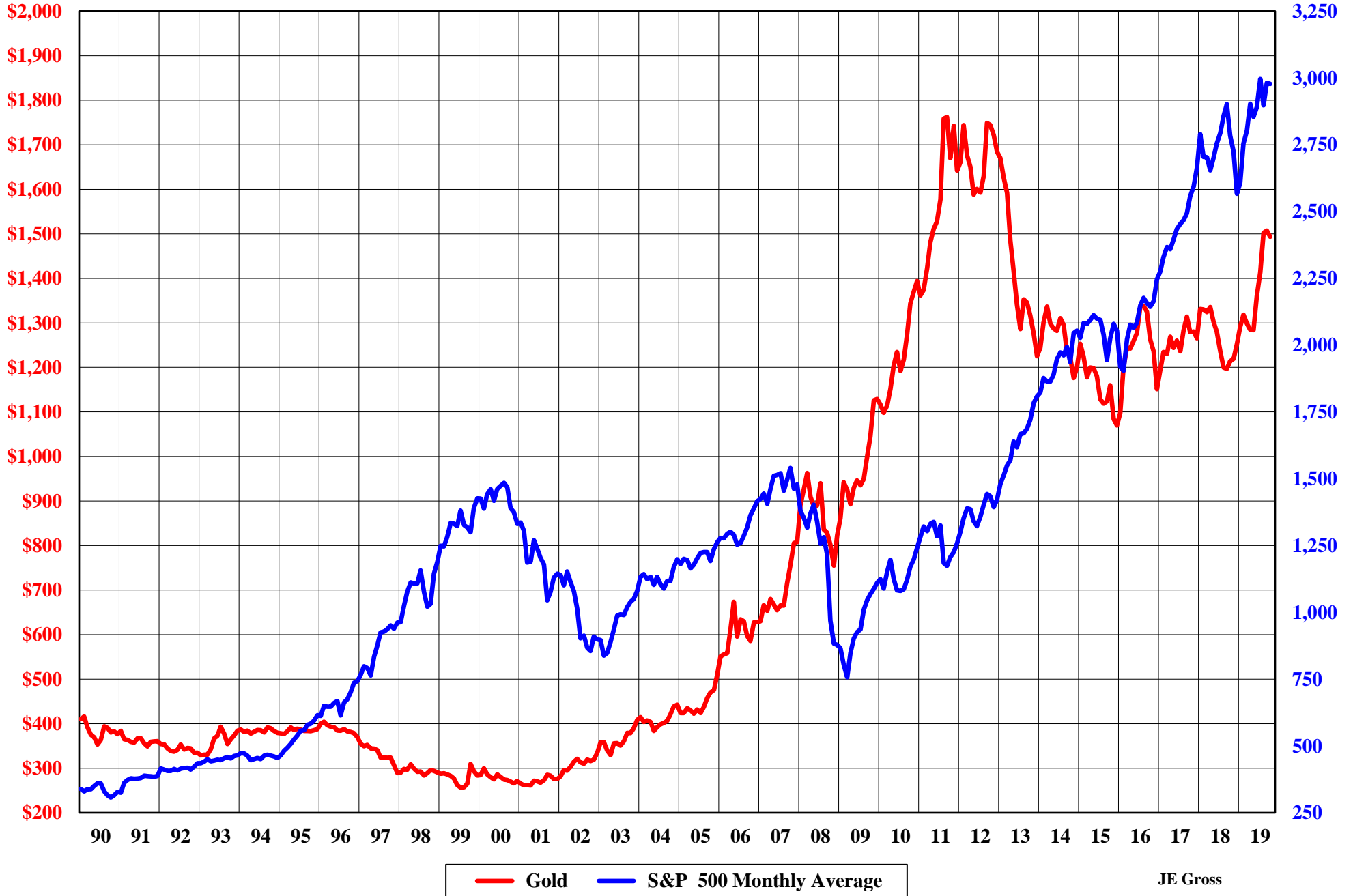


The Copper Journal
Monthly Report
Index Of Charts

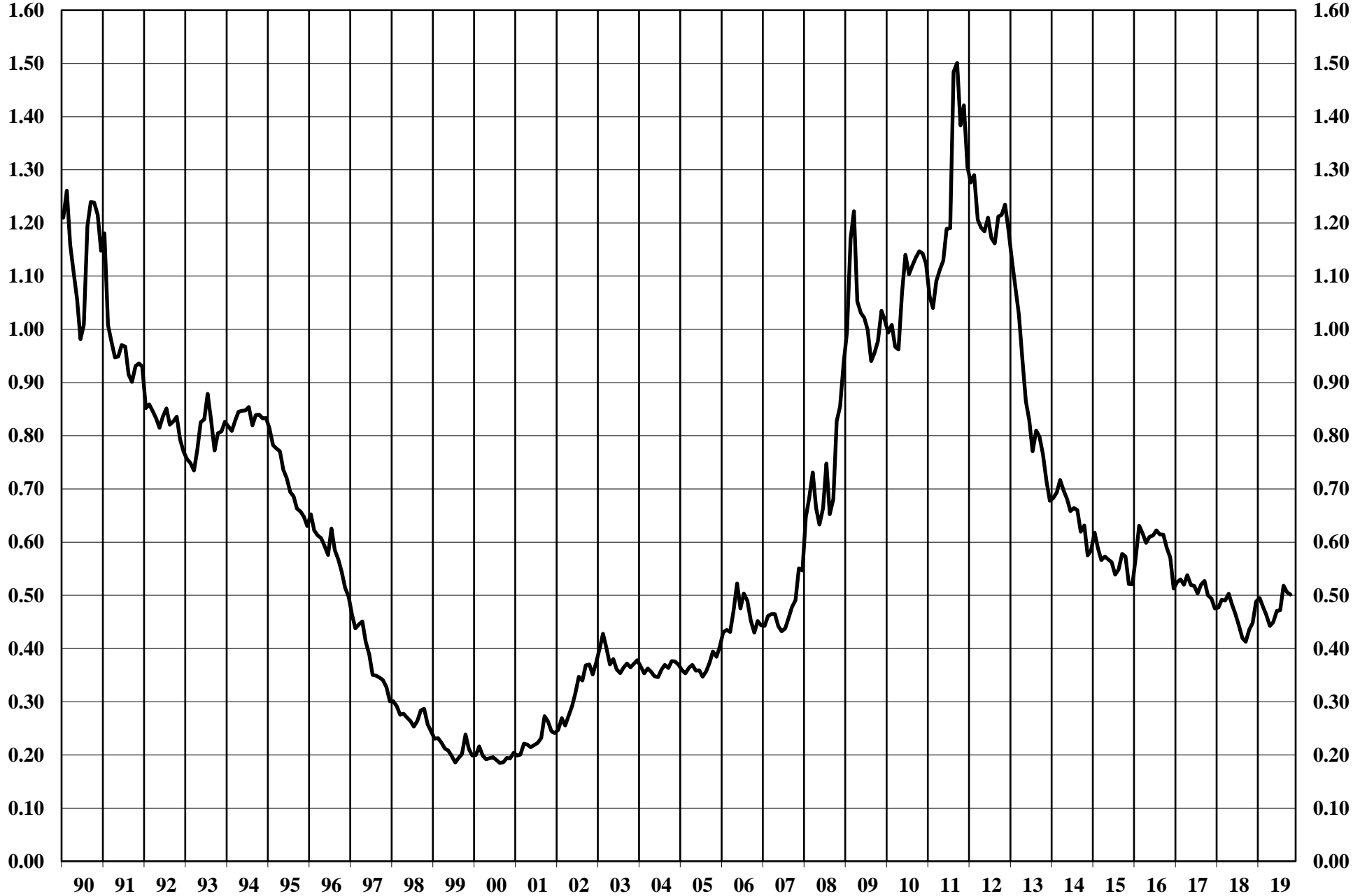
- 1** Gold Vs S&P 500
- 2** Gold Buys S&P 500
- 3** Price & Inventory Report
- 4** U.S. \$ Index
- 5** 1 \$ U.S. = Euro
- 6** 1 Euro = U.S. \$
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John E Gross

The Copper Journal
Gold Vs S&P 500
Monthly Average Price
1990 - October 2019



The Copper Journal
1 Ounce of Gold Buys 1 S&P 500
1990 - October 2019



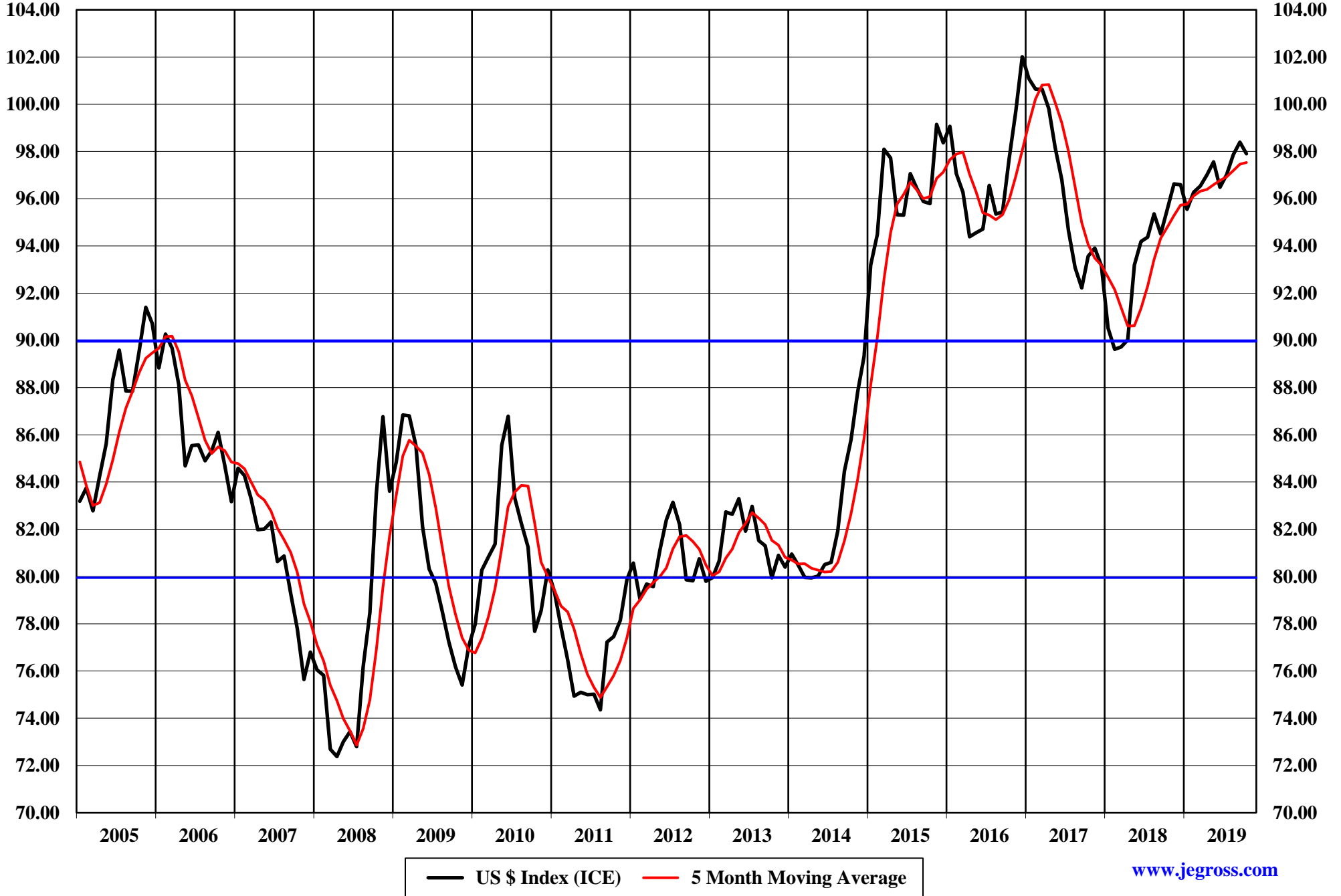
The Copper Journal
Monthly Price & Inventory Report

	Prices									
	Monthly Average				Change					
	October 2018	December 2018	September 2019	October 2019	Mo / Mo		YTD		Yr / Yr	
US \$ Index (ICE)	95.56	96.59	98.39	97.90	(0.49)	(0.5%)	1.31	1.4%	2.34	2.4%
\$1 US = € Euro	€ 0.8709	€ 0.8787	€ 0.9083	€ 0.9045	(€ 0.0038)	(0.4%)	€ 0.0258	2.9%	€ 0.0336	3.9%
1 € Euro = \$ US	\$1.1482	\$1.1380	\$1.1010	\$1.1056	\$0.0046	0.4%	(\$0.0324)	(2.8%)	(\$0.0426)	(3.7%)
Cx Silver	\$14.51	\$14.71	\$18.06	\$17.59	(\$0.47)	(2.6%)	\$2.88	19.6%	\$3.08	21.2%
Cx Gold	\$1,213.98	\$1,252.25	\$1,507.42	\$1,493.33	(\$14.09)	(0.9%)	\$241.08	19.3%	\$279.35	23.0%
NYM Platinum	\$830.35	\$794.01	\$943.31	\$899.40	(\$43.91)	(4.7%)	\$105.39	13.3%	\$69.05	8.3%
NYM Palladium	\$1,090.50	\$1,215.39	\$1,594.18	\$1,704.80	\$110.62	6.9%	\$489.41	40.3%	\$614.30	56.3%
Base Metals Barometer *	2.31	2.24	2.36	2.35	(0.01)	(0.4%)	0.11	4.9%	0.04	1.7%
Cx Copper	\$2.7593	\$2.7234	\$2.5974	\$2.6117	\$0.0143	0.6%	(\$0.1117)	(4.1%)	(\$0.1476)	(5.3%)
LME Copper	\$2.8192	\$2.7640	\$2.6059	\$2.6047	(\$0.0012)	(0.0%)	(\$0.1593)	(5.8%)	(\$0.2145)	(7.6%)
LME Aluminum	\$0.9225	\$0.8759	\$0.7934	\$0.7795	(\$0.0139)	(1.8%)	(\$0.0964)	(11.0%)	(\$0.1430)	(15.5%)
LME Lead	\$0.9002	\$0.8913	\$0.9391	\$0.9905	\$0.0514	5.5%	\$0.0992	11.1%	\$0.0903	10.0%
LME Tin	\$8.67	\$8.72	\$7.63	\$7.53	(\$0.1000)	(1.3%)	(\$1.19)	(13.6%)	(\$1.14)	(13.1%)
LME Nickel	\$5.59	\$4.91	\$8.01	\$7.76	(\$0.2500)	(3.1%)	\$2.85	58.0%	\$2.17	38.8%
LME Zinc	\$1.2117	\$1.1906	\$1.0520	\$1.1090	\$0.0570	5.4%	(\$0.0816)	(6.9%)	(\$0.1027)	(8.5%)
NYM Crude Oil	\$70.76	\$48.98	\$56.97	\$54.01	(\$2.96)	(5.2%)	\$5.03	10.3%	(\$16.75)	(23.7%)
NYM Natural Gas	\$3.21	\$3.92	\$2.52	\$2.34	(\$0.18)	(7.2%)	(\$1.58)	(40.3%)	(\$0.87)	(27.1%)
S&P 500	2,785	2,567	2,982	2,978	(4)	(0.1%)	411	16.0%	193	6.9%
Shanghai Composite	2,602	2,568	2,981	2,955	(26)	(0.9%)	387	15.1%	353	13.6%
2 Year Treasury Bond Yield	2.86%	2.68%	1.65%	1.55%	(0.0010)	(6.1%)	(0.0113)	(42.2%)	(0.0131)	(45.8%)
10 Year Treasury Bond Yield	3.15%	2.83%	1.70%	1.71%	0.0001	0.6%	(0.0112)	(39.6%)	(0.0144)	(45.7%)

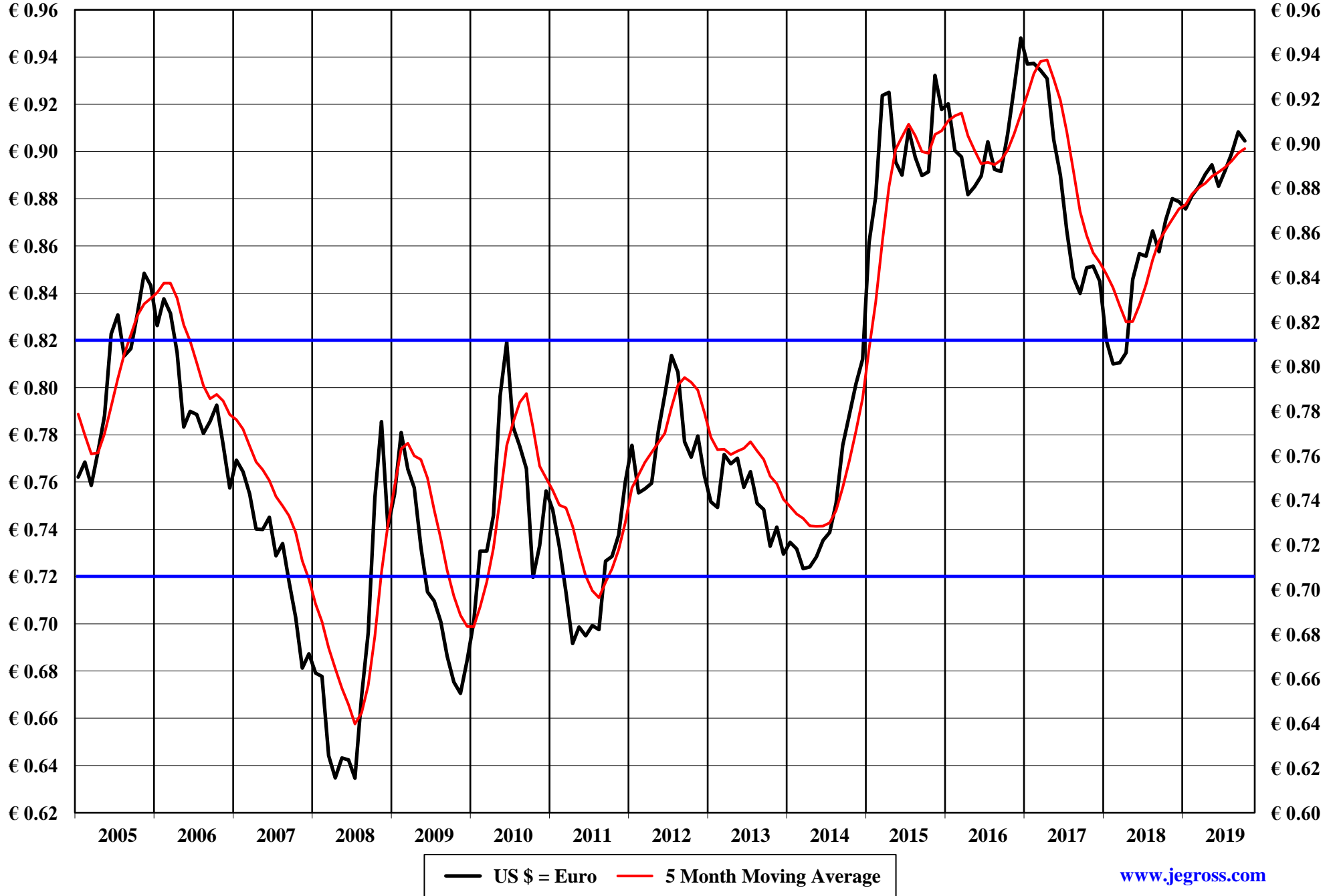
	Month End Inventories MT									
	Month Ending				Change					
	October 2018	December 2018	September 2019	October 2019	Mo / Mo		YTD		Yr / Yr	
Cx Copper	158,316	100,226	36,285	32,917	(3,368)	(9.3%)	(67,309)	(67.2%)	(125,399)	(79.2%)
LME Copper	139,250	132,175	264,425	255,025	(9,400)	(3.6%)	122,850	92.9%	115,775	83.1%
Shanghai Copper	148,943	118,686	117,455	149,911	32,456	27.6%	31,225	26.3%	968	0.6%
Total Copper	446,509	351,087	418,165	437,853	19,688	4.7%	86,766	24.7%	(8,656)	(1.9%)
LME Aluminum	1,048,825	1,271,200	927,475	956,200	28,725	3.1%	(315,000)	(24.8%)	(92,625)	(8.8%)
LME Lead	110,375	107,450	69,650	70,075	425	0.6%	(37,375)	(34.8%)	(40,300)	(36.5%)
LME Tin	3,155	2,175	6,855	6,185	(670)	(9.8%)	4,010	184.4%	3,030	96.0%
LME Nickel	218,970	207,330	157,986	66,306	(91,680)	(58.0%)	(141,024)	(68.0%)	(152,664)	(69.7%)
LME Zinc	152,225	129,325	67,300	54,500	(12,800)	(19.0%)	(74,825)	(57.9%)	(97,725)	(64.2%)

* The Base Metals Barometer is a weighted index of non-ferrous metal prices. January 2000 = 1.00

The Copper Journal
U.S. Dollar Index (ICE)
2005 -October 2019



The Copper Journal
\$1 U.S. = Euro
2005 -October 2019



The Copper Journal
1 Euro = \$ U.S.
2005 -October 2019



The Copper Journal
Copper Vs Euro
Monthly Average Price
2005 -October 2019

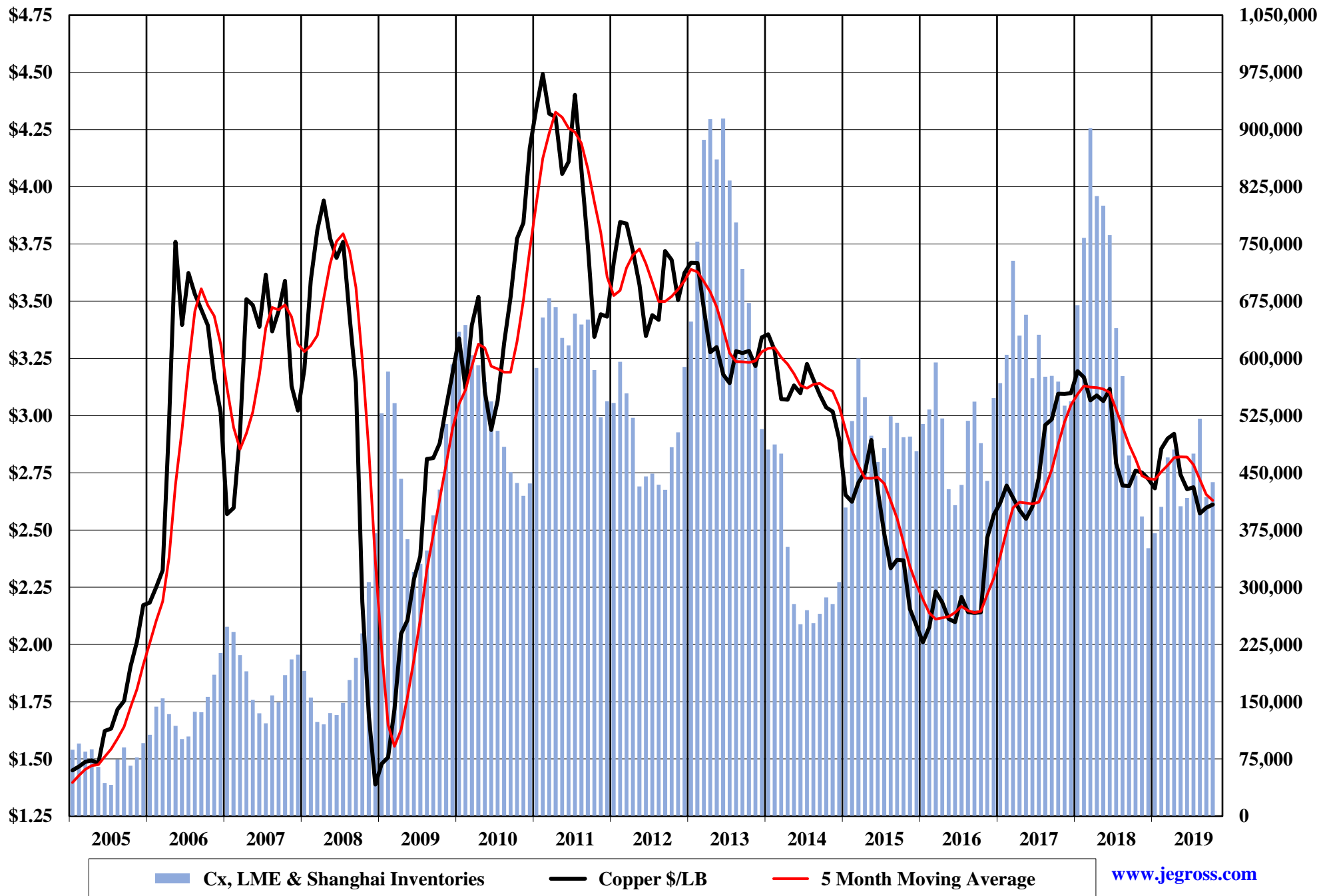


— Copper - \$ Per Pound — Euro = \$ U.S.

The Copper Journal
Base Metals Barometer
2005 -October 2019

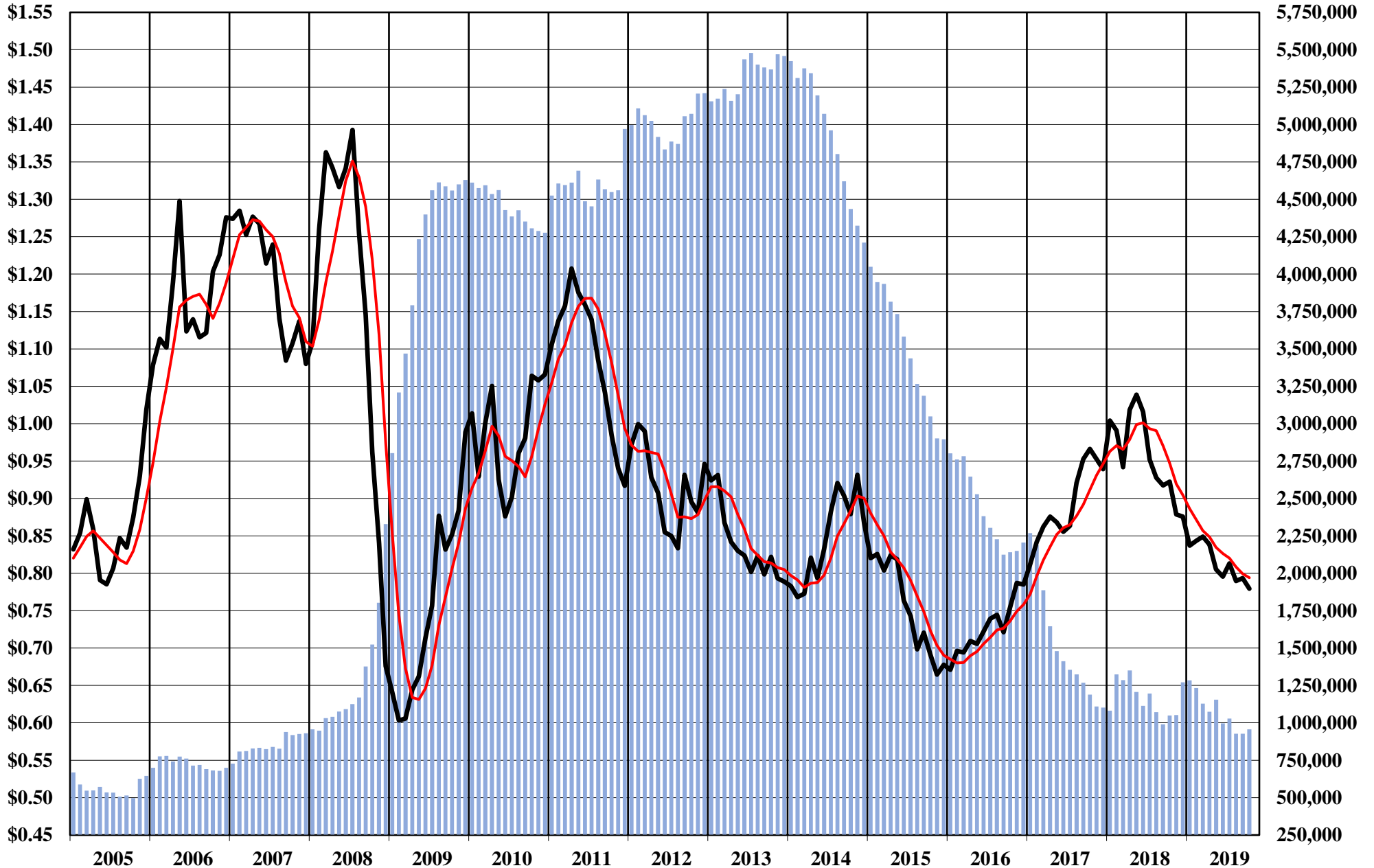


The Copper Journal
Copper
2005 -October 2019



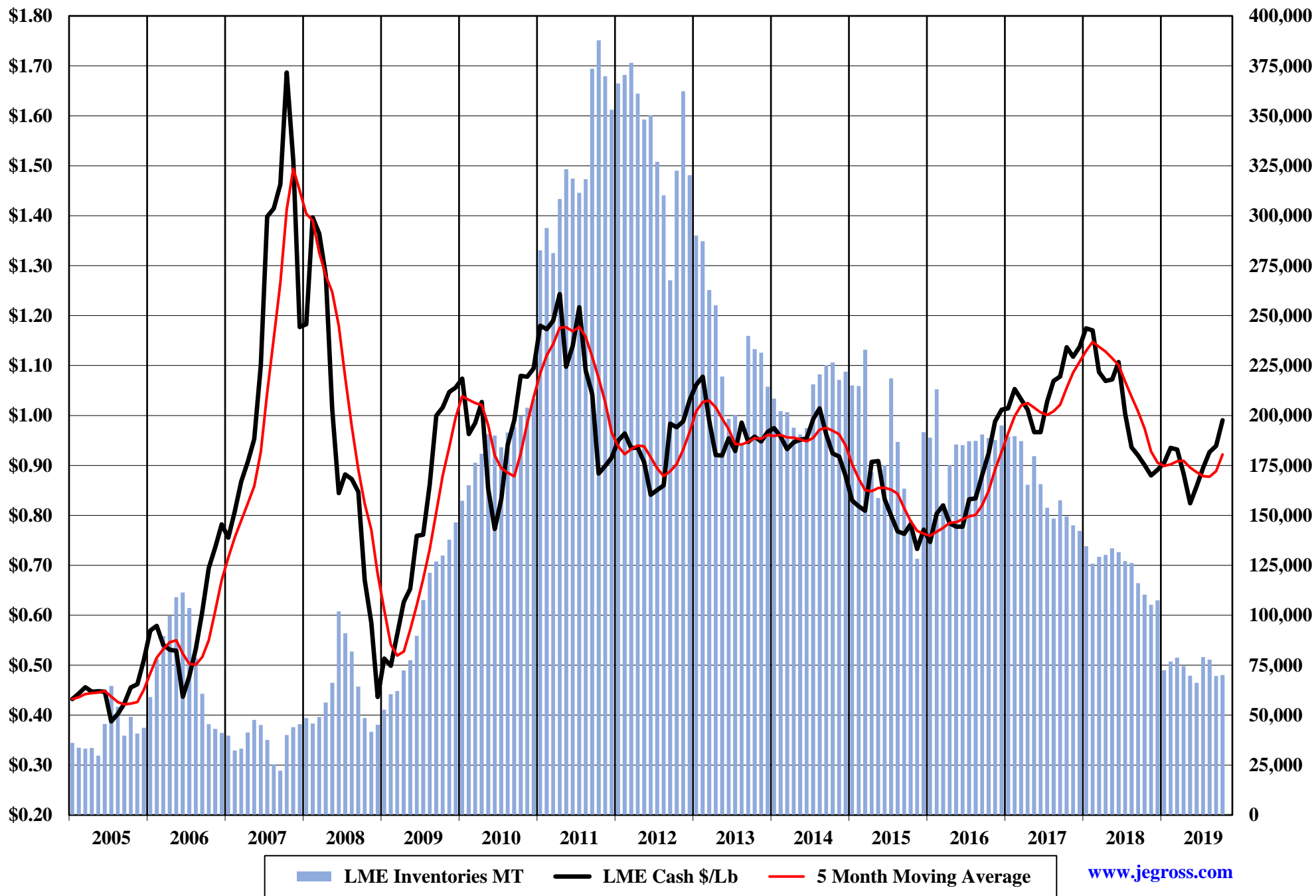
The Copper Journal Aluminum

2005 -October 2019

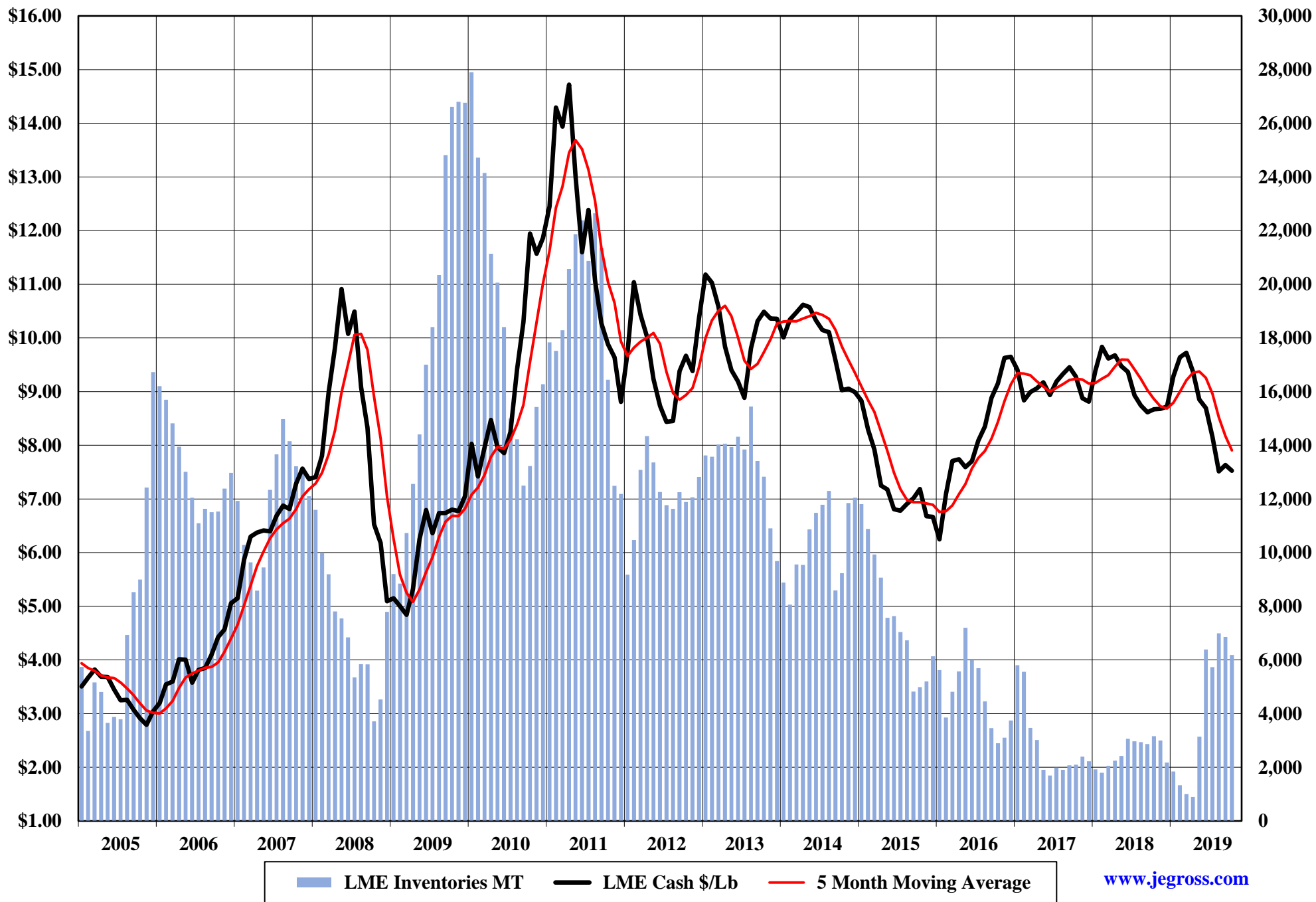


■ LME Inventories MT — LME Cash Aluminum — 5 Month Moving Average

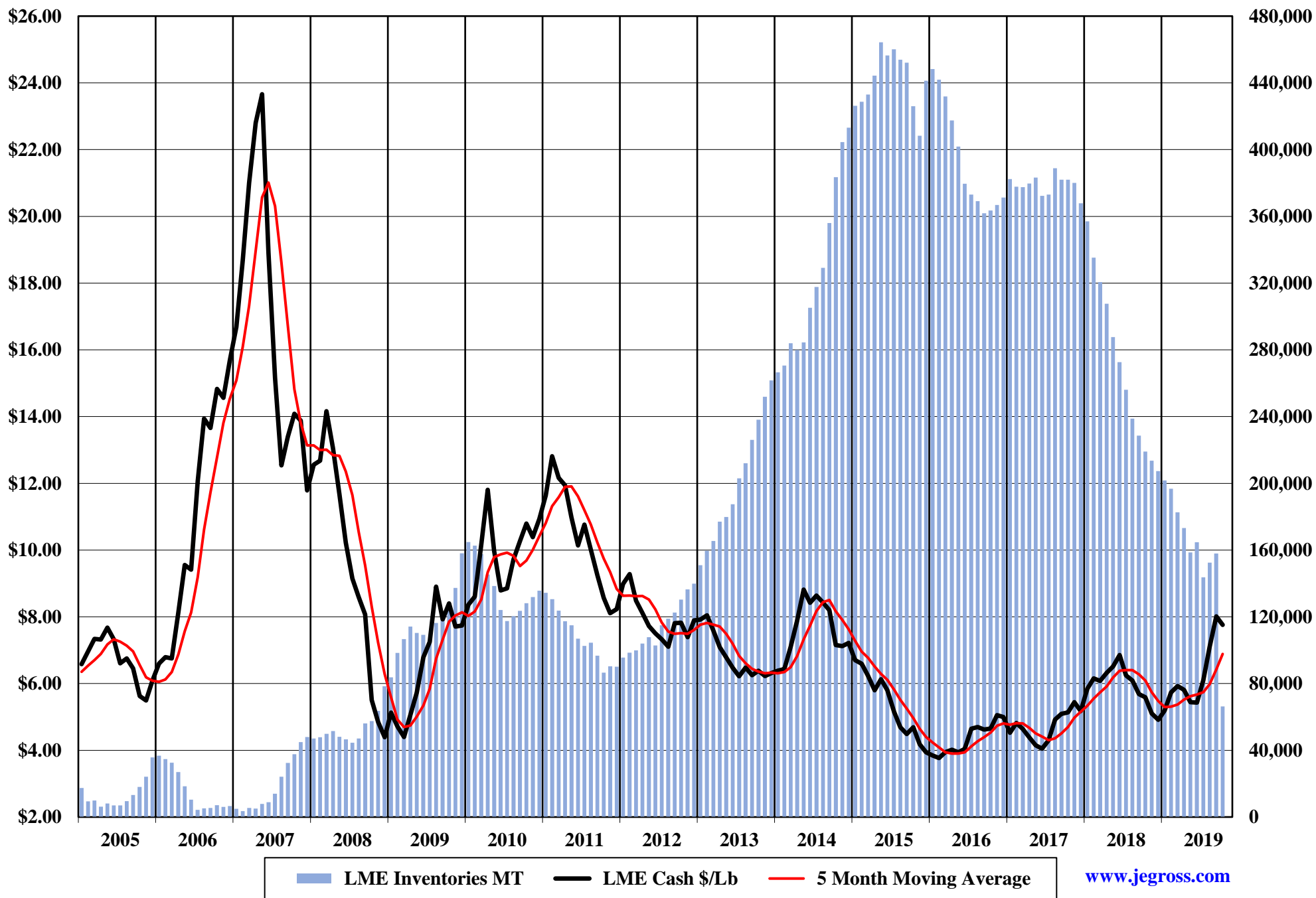
The Copper Journal Lead 2005 -October 2019



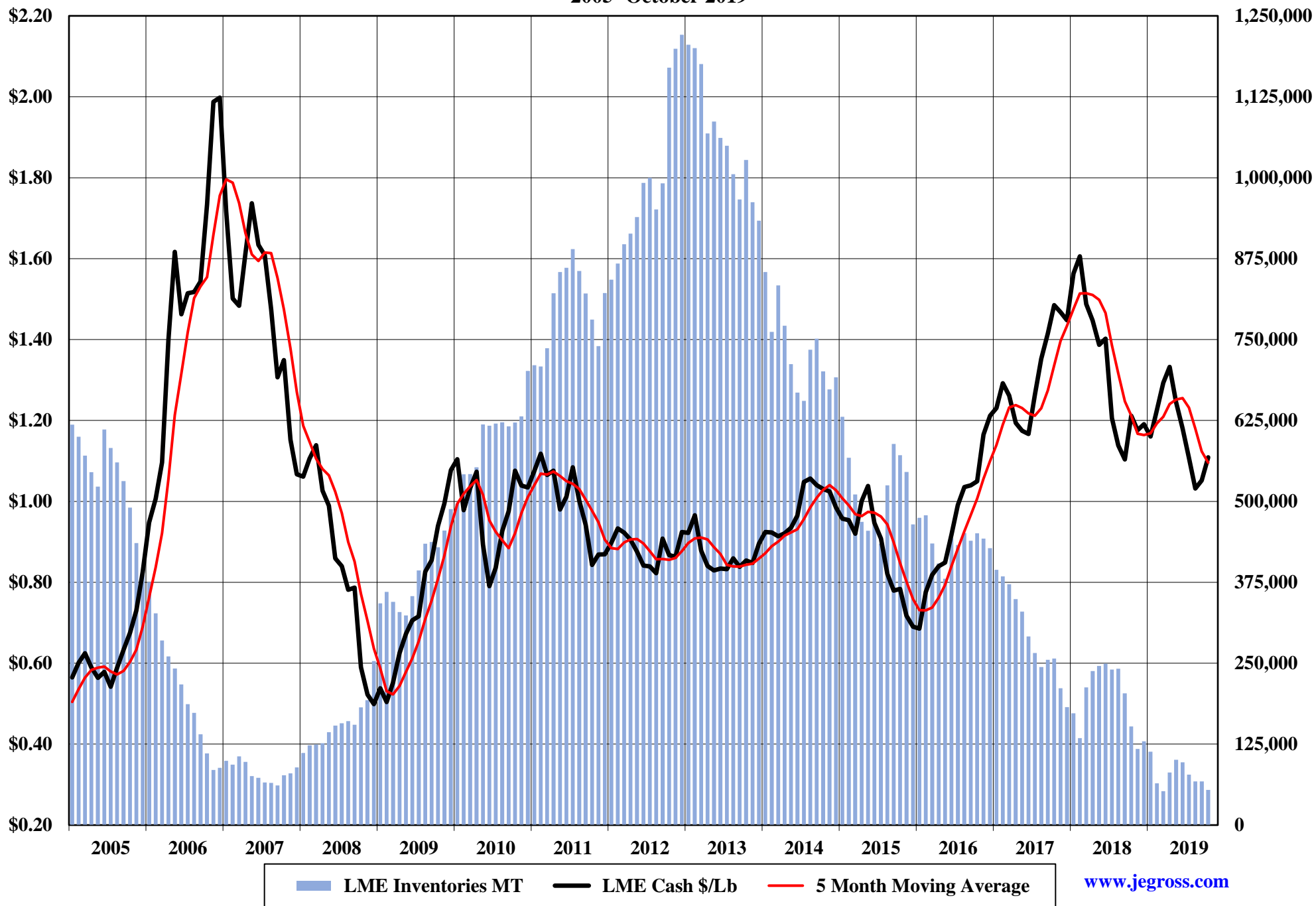
The Copper Journal
Tin
2005 -October 2019



The Copper Journal
Nickel
2005 -October 2019

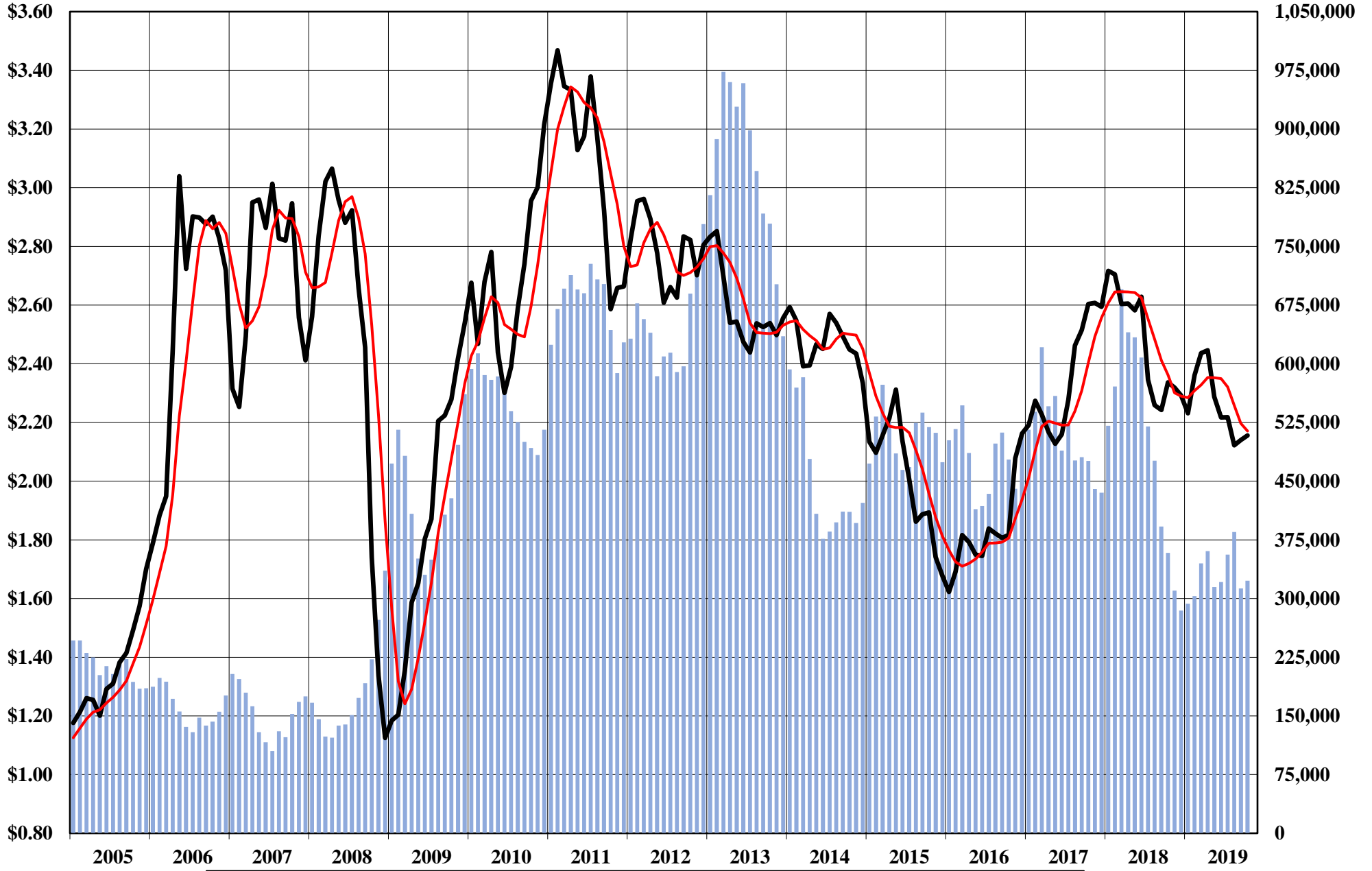


The Copper Journal
Zinc
2005 -October 2019



The Copper Journal
260 Brass
2005 -October 2019

70% Copper & 30% Zinc



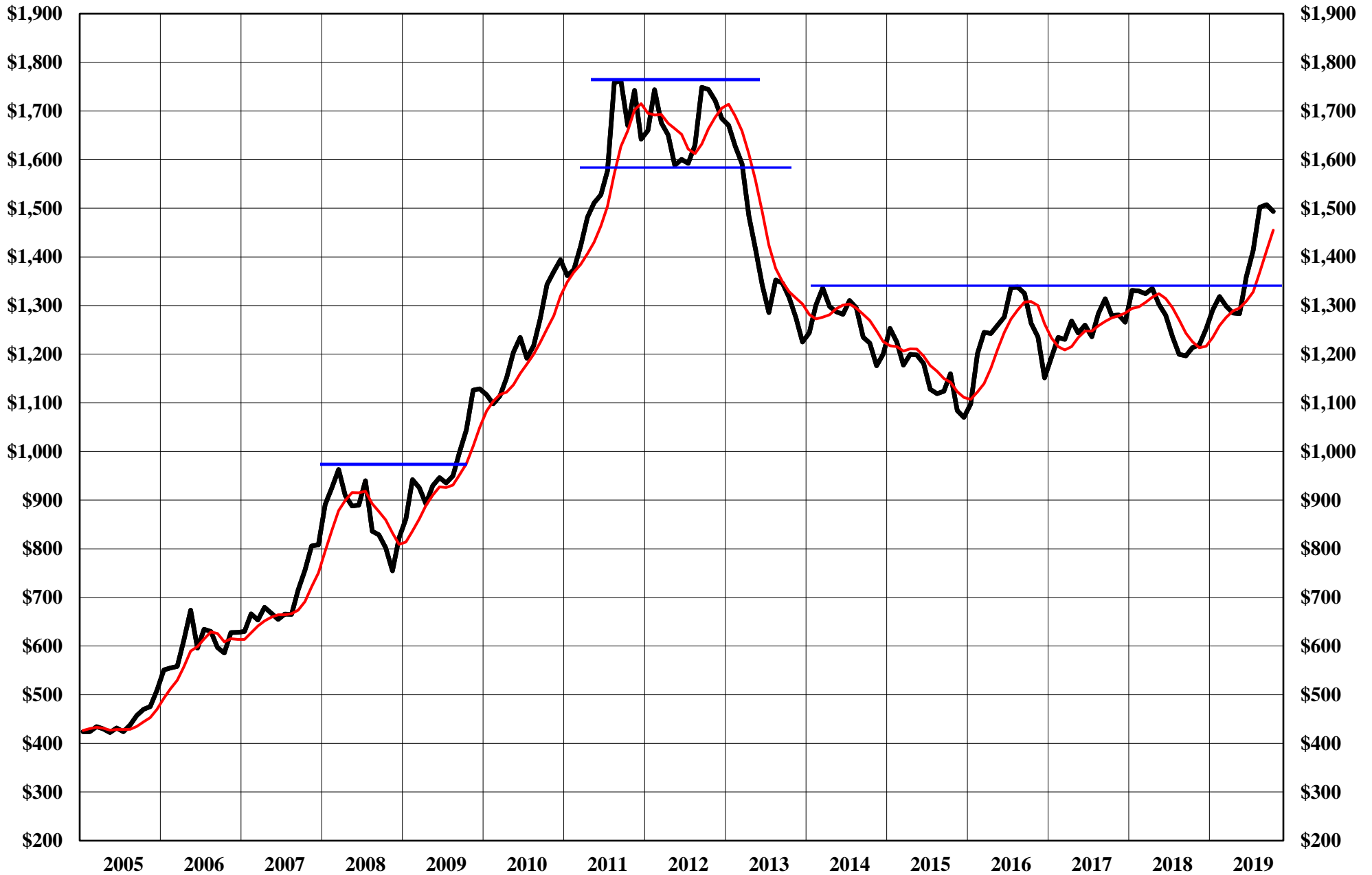
■ 260 Inventory Equalivent MT — 260 Brass — 5 Month Moving Average

The Copper Journal
Silver
2005 -October 2019



Comex Monthly Average - \$ Per Troy Ounce 5 Month Moving Average

The Copper Journal
Gold
2005 -October 2019



Comex Monthly Average Price - \$ Per Troy Ounce 5 Month Moving Average

The Copper Journal
Platinum
2005 -October 2019



Nymex Monthly Average Price - \$ Per Troy Ounce 5 Month Moving Average

The Copper Journal
Palladium
2005 -October 2019



Nymex Monthly Average Price - \$ Per Troy Ounce — 5 Month Moving Average

The Copper Journal
Crude Oil
2005 -October 2019



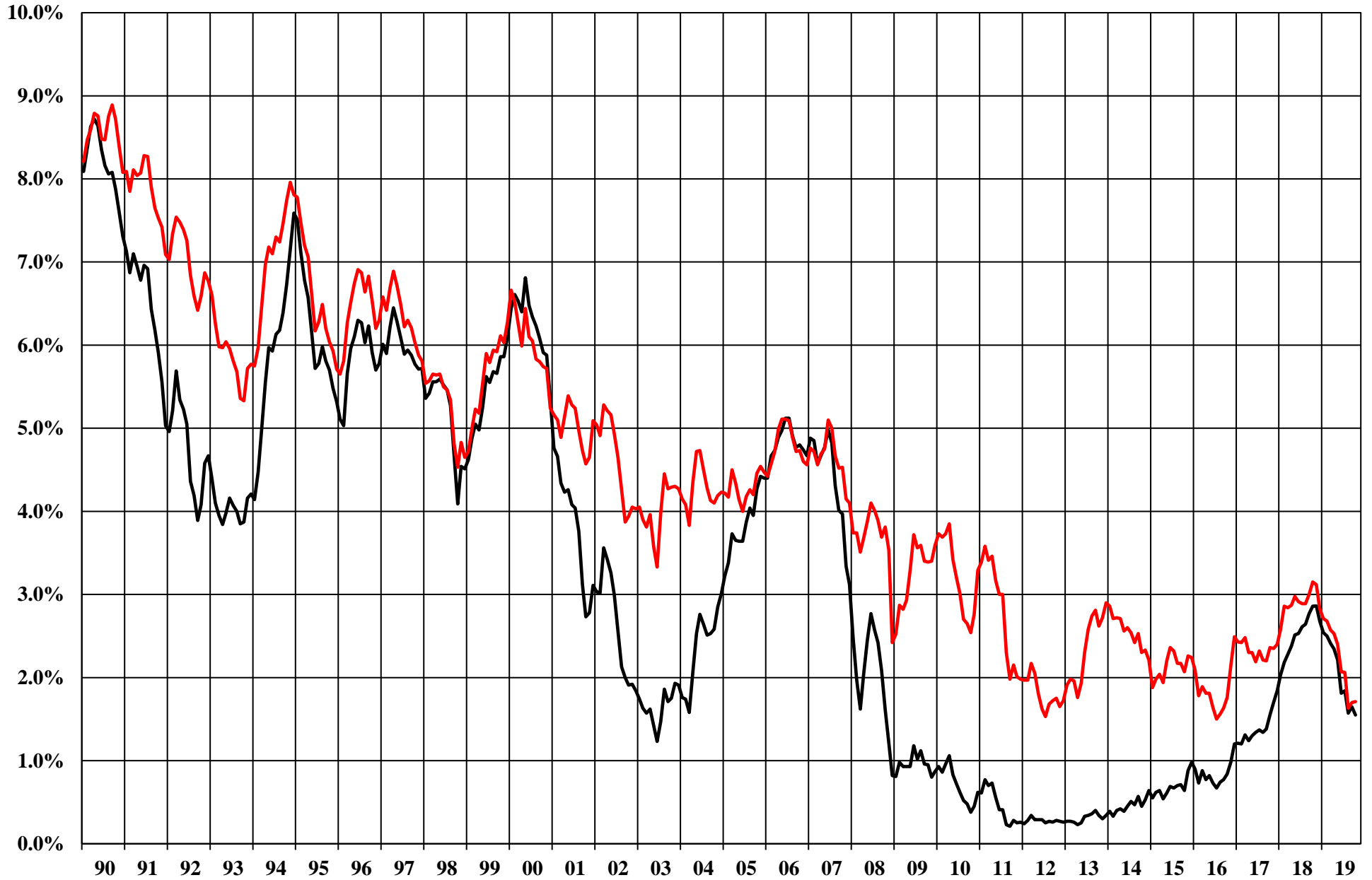
Nymex Monthly Average Price - \$ Per Barrel — 5 Month Moving Average

The Copper Journal
Natural Gas
2005 -October 2019



Nymex Monthly Average Price - \$ MM Btu — 5 Month Moving Average

The Copper Journal
2 Year & 10 Year Treasury Bond Yields
Monthly Average
1990 - October 2019



Source: Federal Reserve Bank of St. Louis

— 2 Year — 10 Year

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The Copper Journal
S&P 500
2005 -October 2019



— Monthly Average — 5 Month Moving Average

The Copper Journal
Shanghai Composite
2011 - October 2019

