

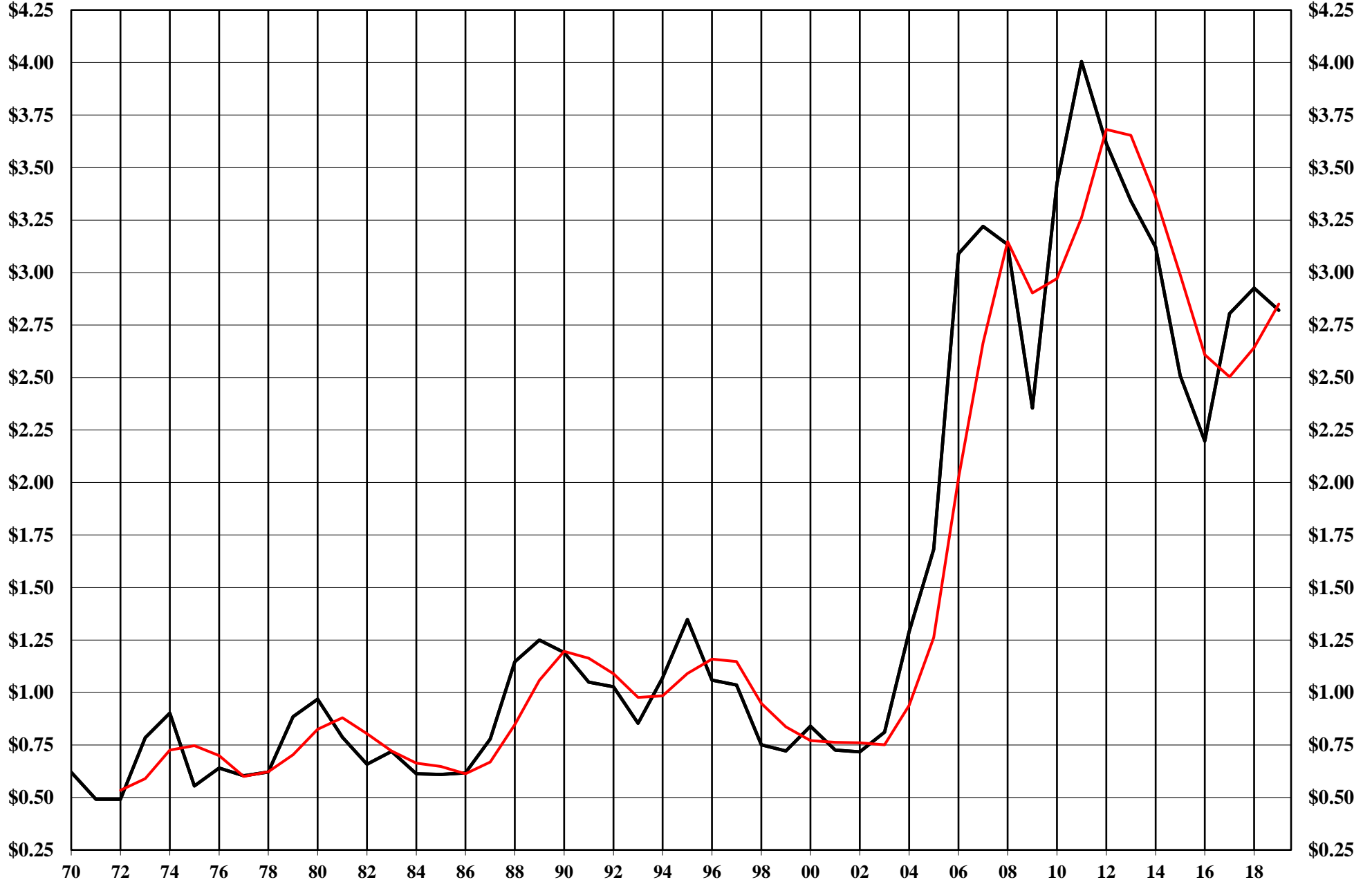
The Copper Journal
Monthly Report
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John E Gross

The Copper Journal
Comex Spot Copper - Annual Average Price
1970 - May 2019

3 Year Moving Average



The Copper Journal
Monthly Price & Inventory Report

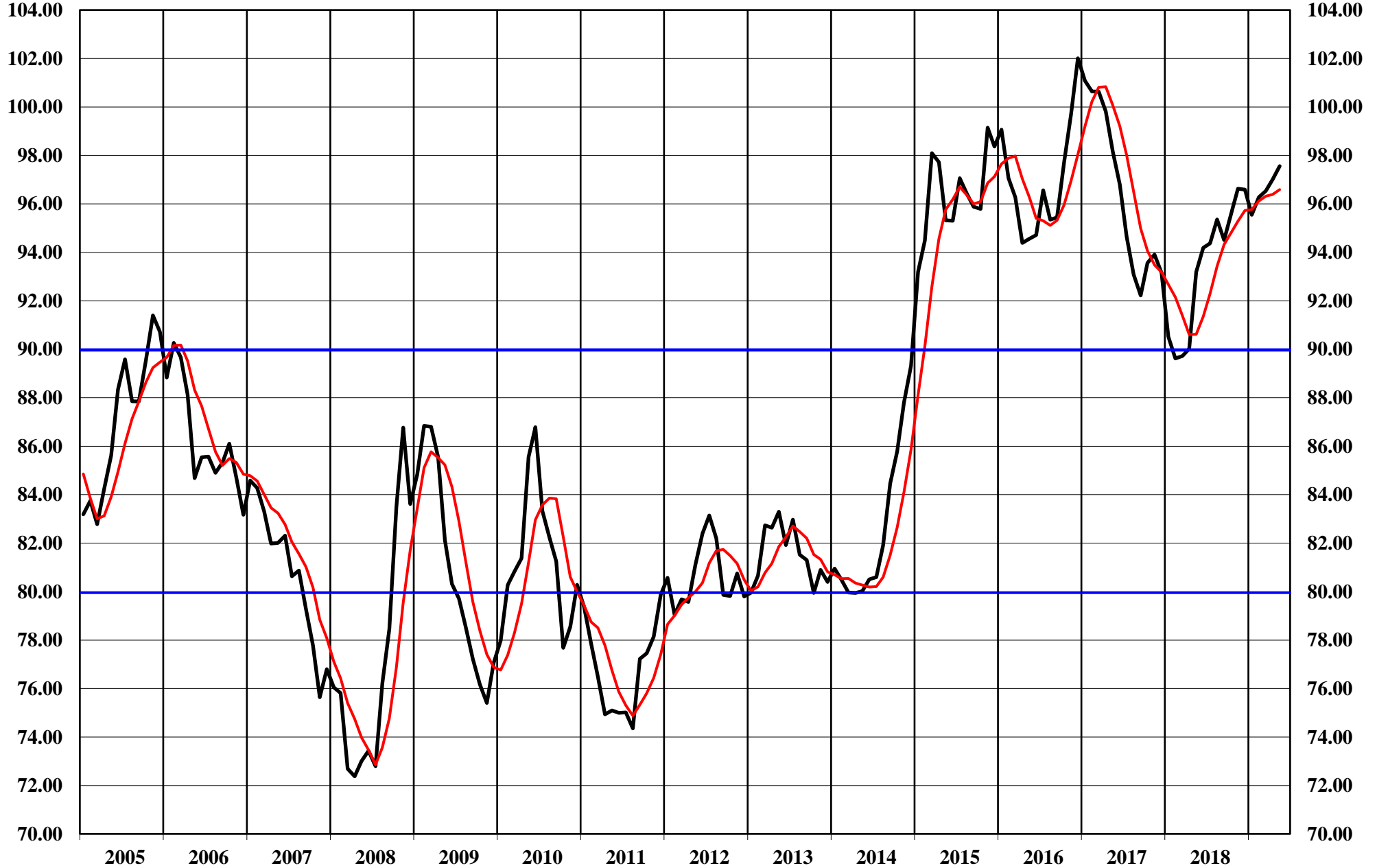
	Prices									
	Monthly Average				Change					
	May 2018	December 2018	April 2019	May 2019	Mo / Mo		YTD		Yr / Yr	
US \$ Index (ICE)	93.19	96.59	97.01	97.56	0.55	0.6%	0.97	1.0%	4.37	4.7%
\$1 US = € Euro	€ 0.8459	€ 0.8787	€ 0.8903	€ 0.8943	€ 0.0040	0.4%	€ 0.0156	1.8%	€ 0.0484	5.7%
1 € Euro = \$ US	\$1.1822	\$1.1380	\$1.1232	\$1.1182	(\$0.0050)	(0.4%)	(\$0.0198)	(1.7%)	(\$0.0640)	(5.4%)
Cx Silver	\$16.42	\$14.71	\$14.97	\$14.59	(\$0.38)	(2.5%)	(\$0.12)	(0.8%)	(\$1.83)	(11.1%)
Cx Gold	\$1,302.62	\$1,252.25	\$1,284.79	\$1,283.38	(\$1.41)	(0.1%)	\$31.13	2.5%	(\$19.24)	(1.5%)
NYM Platinum	\$901.82	\$794.01	\$888.27	\$832.48	(\$55.79)	(6.3%)	\$38.47	4.8%	(\$69.34)	(7.7%)
NYM Palladium	\$975.43	\$1,215.39	\$1,375.61	\$1,328.76	(\$46.85)	(3.4%)	\$113.37	9.3%	\$353.33	36.2%
Base Metals Barometer *	2.60	2.24	2.43	2.28	(0.15)	(6.2%)	0.04	1.8%	(0.32)	(12.3%)
Cx Copper	\$3.0640	\$2.7234	\$2.9201	\$2.7428	(\$0.1773)	(6.1%)	\$0.0194	0.7%	(\$0.3212)	(10.5%)
LME Copper	\$3.0941	\$2.7640	\$2.9232	\$2.7341	(\$0.1891)	(6.5%)	(\$0.0299)	(1.1%)	(\$0.3600)	(11.6%)
LME Aluminum	\$1.0387	\$0.8759	\$0.8385	\$0.8051	(\$0.0334)	(4.0%)	(\$0.0708)	(8.1%)	(\$0.2336)	(22.5%)
LME Lead	\$1.0720	\$0.8913	\$0.8837	\$0.8240	(\$0.0597)	(6.8%)	(\$0.0673)	(7.6%)	(\$0.2480)	(23.1%)
LME Tin	\$9.47	\$8.72	\$9.38	\$8.85	(\$0.5300)	(5.7%)	\$0.13	1.5%	(\$0.62)	(6.5%)
LME Nickel	\$6.51	\$4.91	\$5.81	\$5.44	(\$0.3700)	(6.4%)	\$0.53	10.8%	(\$1.07)	(16.4%)
LME Zinc	\$1.3868	\$1.1906	\$1.3326	\$1.2459	(\$0.0867)	(6.5%)	\$0.0553	4.6%	(\$0.1409)	(10.2%)
NYM Crude Oil	\$69.98	\$48.98	\$63.87	\$60.87	(\$3.00)	(4.7%)	\$11.89	24.3%	(\$9.11)	(13.0%)
NYM Natural Gas	\$2.83	\$3.92	\$2.60	\$2.59	(\$0.01)	(0.4%)	(\$1.33)	(33.9%)	(\$0.24)	(8.5%)
S&P 500	2,701	2,567	2,904	2,855	(49)	(1.7%)	288	11.2%	154	5.7%
Shanghai Composite	3,145	2,568	3,191	2,899	(292)	(9.2%)	331	12.9%	(246)	(7.8%)
2 Year Treasury Bond Yield	2.51%	2.68%	2.34%	2.21%	(0.0013)	(5.6%)	(0.0047)	(17.5%)	(0.0030)	(12.0%)
10 Year Treasury Bond Yield	2.98%	2.83%	2.53%	2.40%	(0.0013)	(5.1%)	(0.0043)	(15.2%)	(0.0058)	(19.5%)

	Month End Inventories MT									
	Month Ending				Change					
	May 2018	December 2018	April 2019	May 2019	Mo / Mo		YTD		Yr / Yr	
Cx Copper	209,890	100,226	31,507	28,711	(2,796)	(8.9%)	(71,515)	(71.4%)	(181,179)	(86.3%)
LME Copper	317,950	132,175	229,175	212,000	(17,175)	(7.5%)	79,825	60.4%	(105,950)	(33.3%)
Shanghai Copper	272,254	118,686	219,679	165,439	(54,240)	(24.7%)	46,753	39.4%	(106,815)	(39.2%)
Total Copper	800,094	351,087	480,361	406,150	(74,211)	(15.4%)	55,063	15.7%	(393,944)	(49.2%)
LME Aluminum	1,206,375	1,271,200	1,074,650	1,155,025	80,375	7.5%	(116,175)	(9.1%)	(51,350)	(4.3%)
LME Lead	133,475	107,450	74,450	69,700	(4,750)	(6.4%)	(37,750)	(35.1%)	(63,775)	(47.8%)
LME Tin	2,420	2,175	890	3,140	2,250	252.8%	965	44.4%	720	29.8%
LME Nickel	287,646	207,330	173,268	158,604	(14,664)	(8.5%)	(48,726)	(23.5%)	(129,042)	(44.9%)
LME Zinc	245,650	129,325	81,325	100,800	19,475	23.9%	(28,525)	(22.1%)	(144,850)	(59.0%)

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

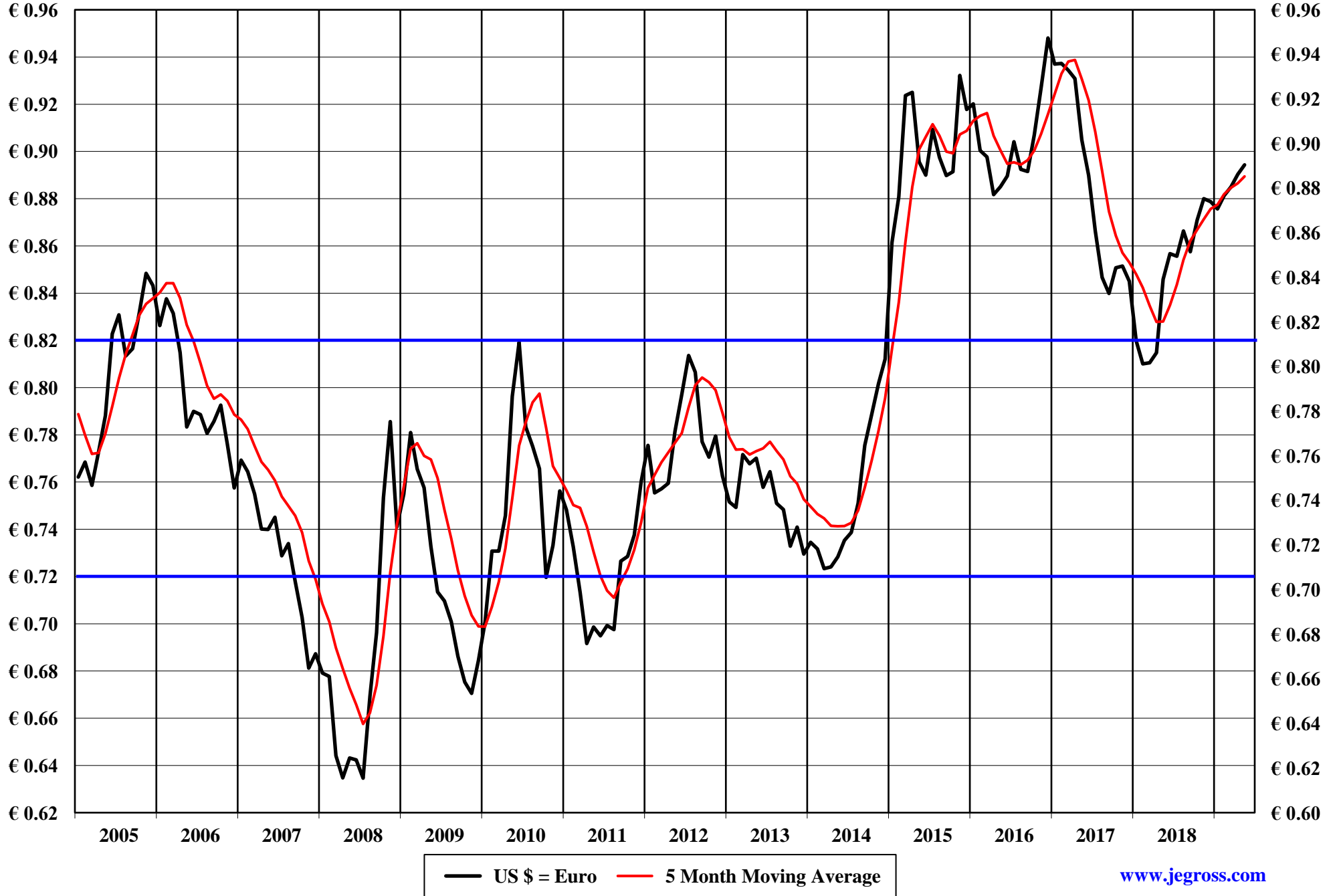
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The Copper Journal
U.S. Dollar Index (ICE)
2005 - May 2019

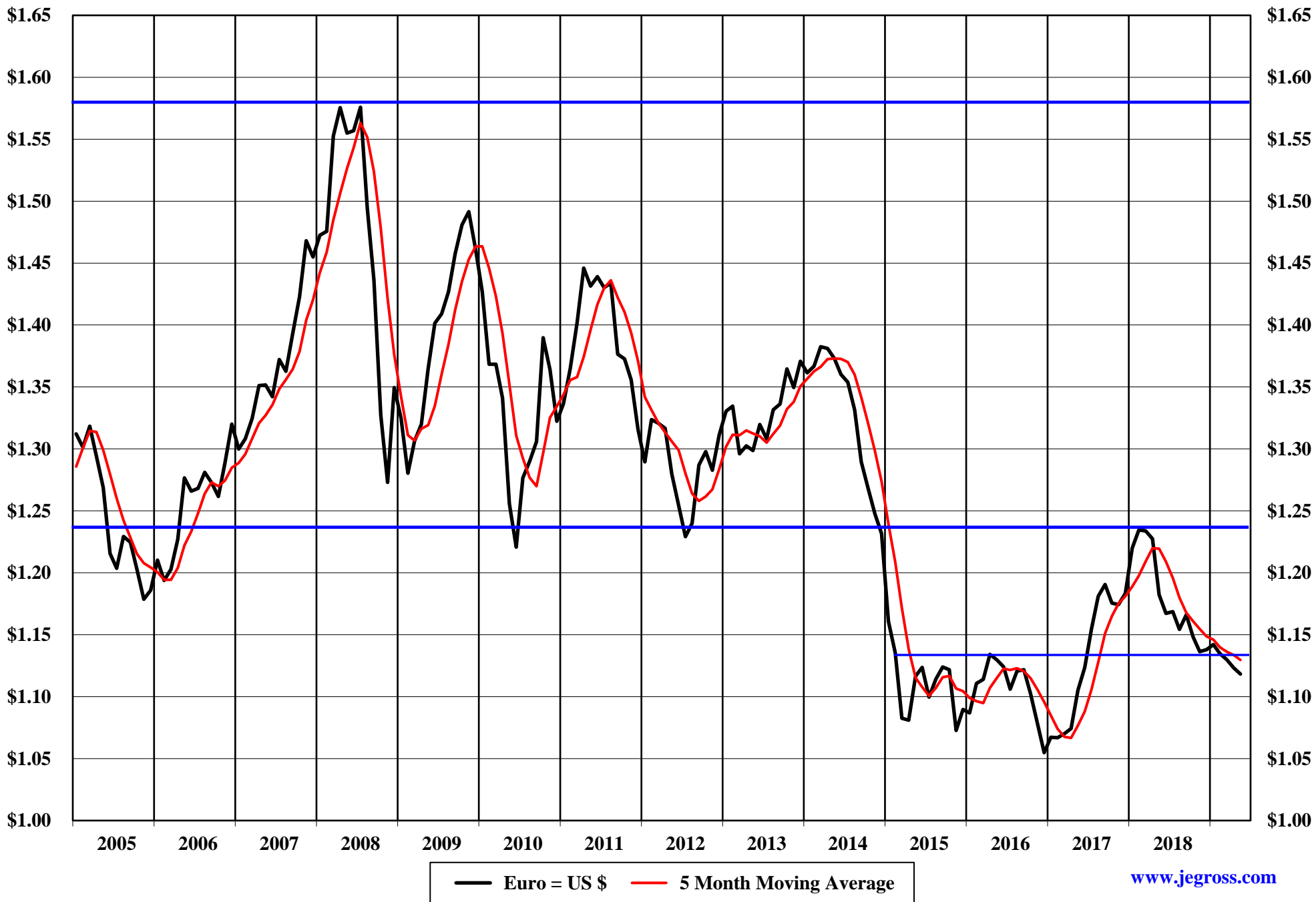


— US \$ Index (ICE) — 5 Month Moving Average

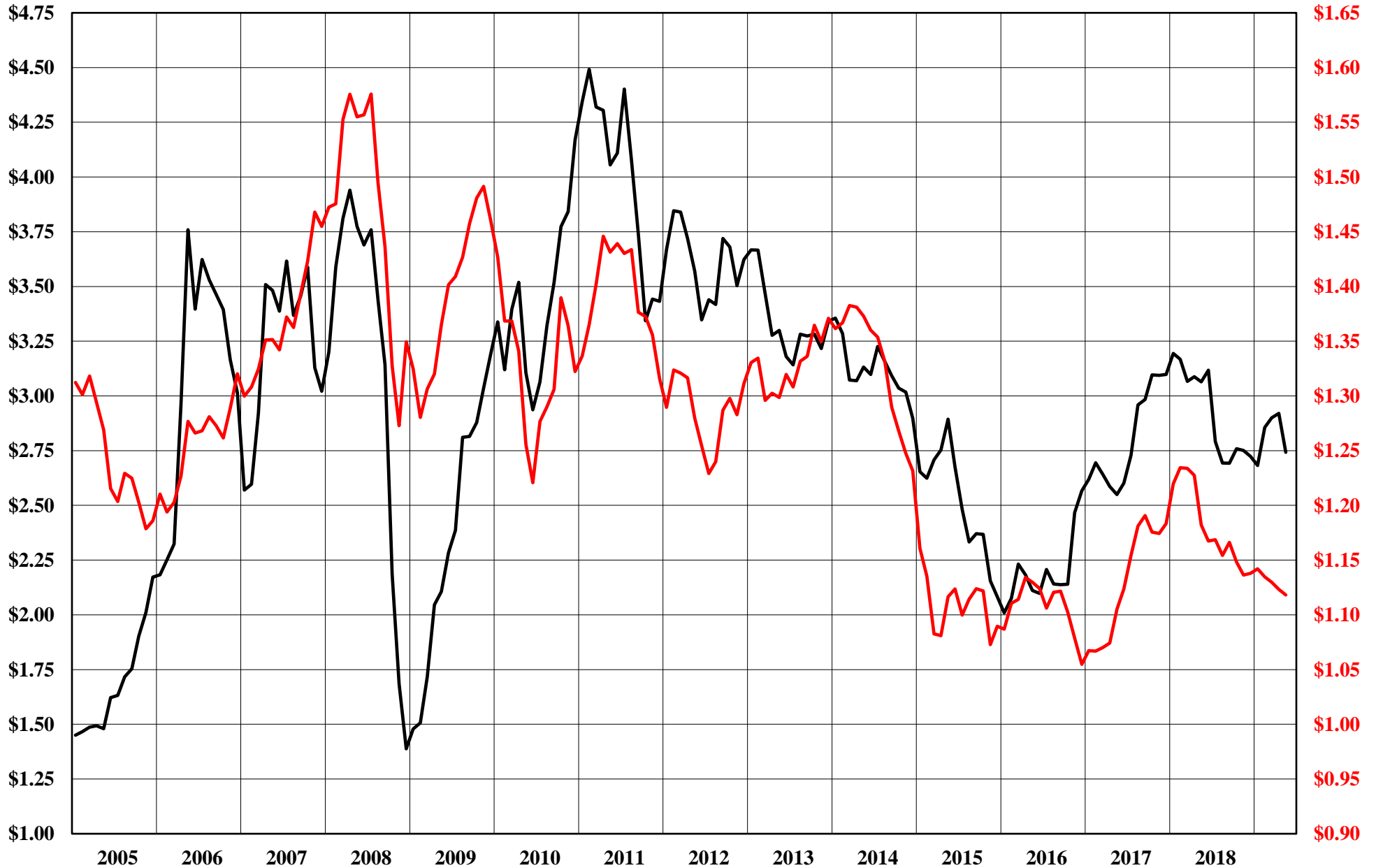
The Copper Journal
\$1 U.S. = Euro
2005 - May 2019



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



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



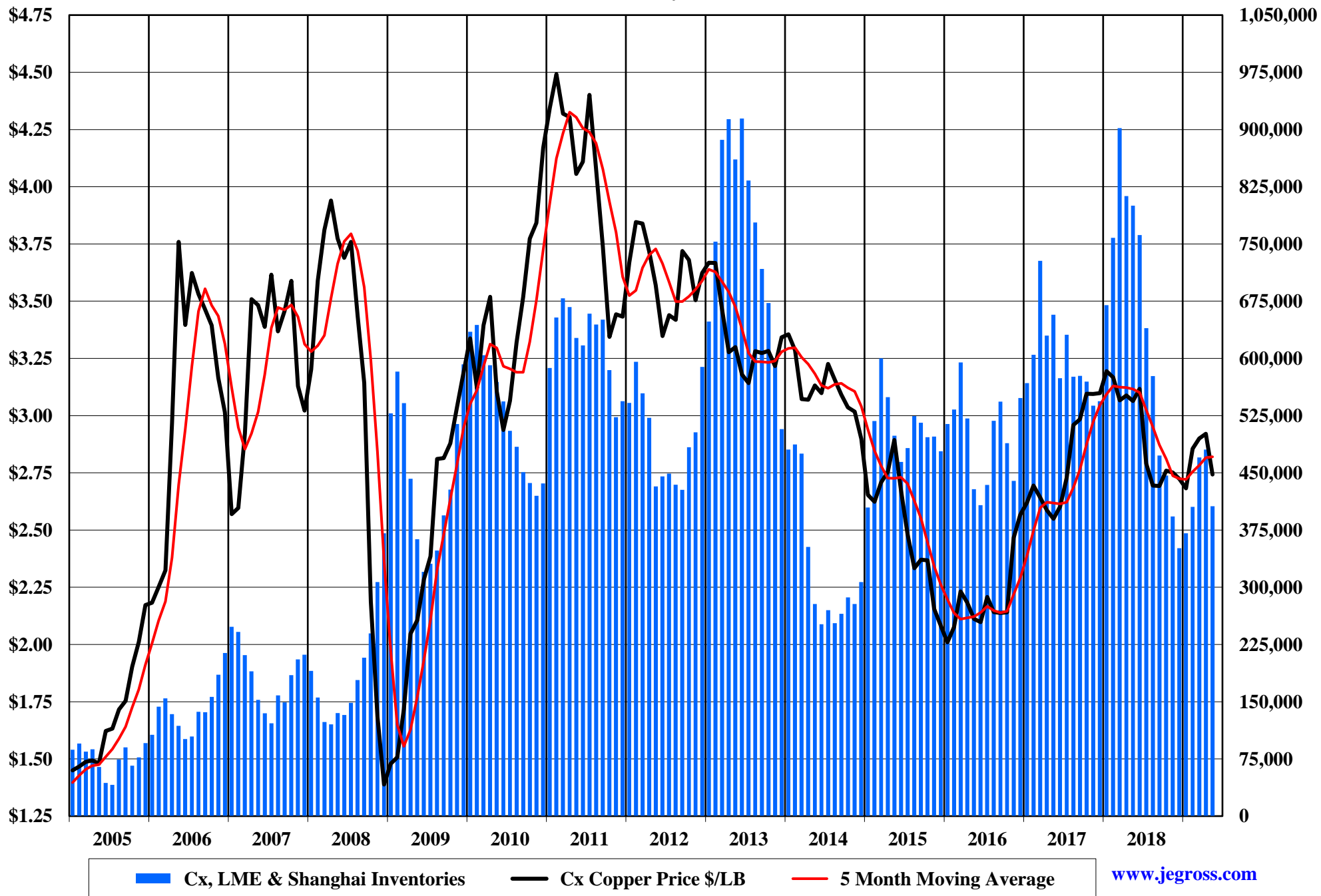
— Copper - \$ Per Pound — Euro = \$ U.S.

The Copper Journal
Base Metals Barometer
2005 - May 2019

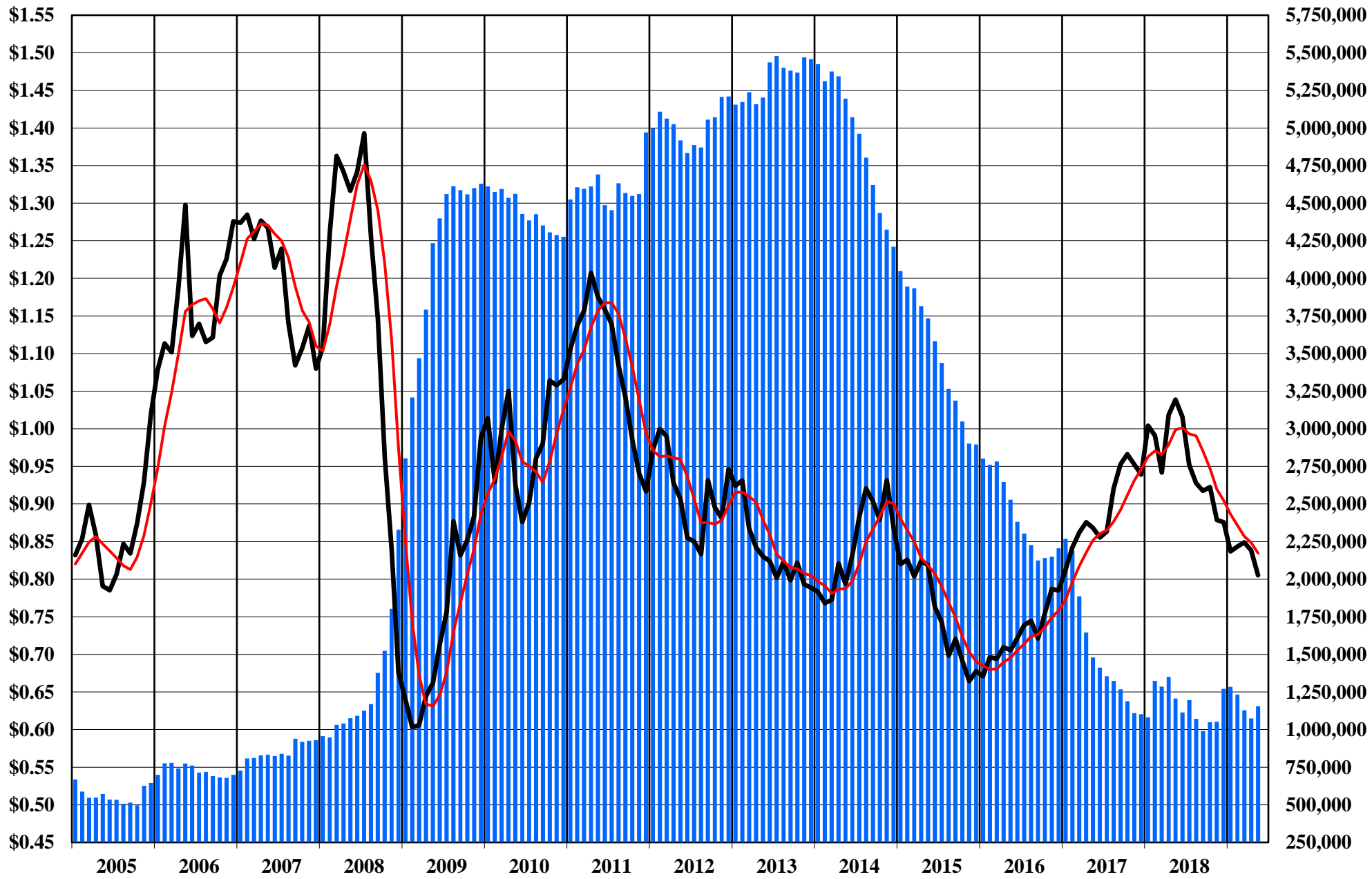


— BMB — 5 Month Moving Average

The Copper Journal
Copper
2005 - May 2019

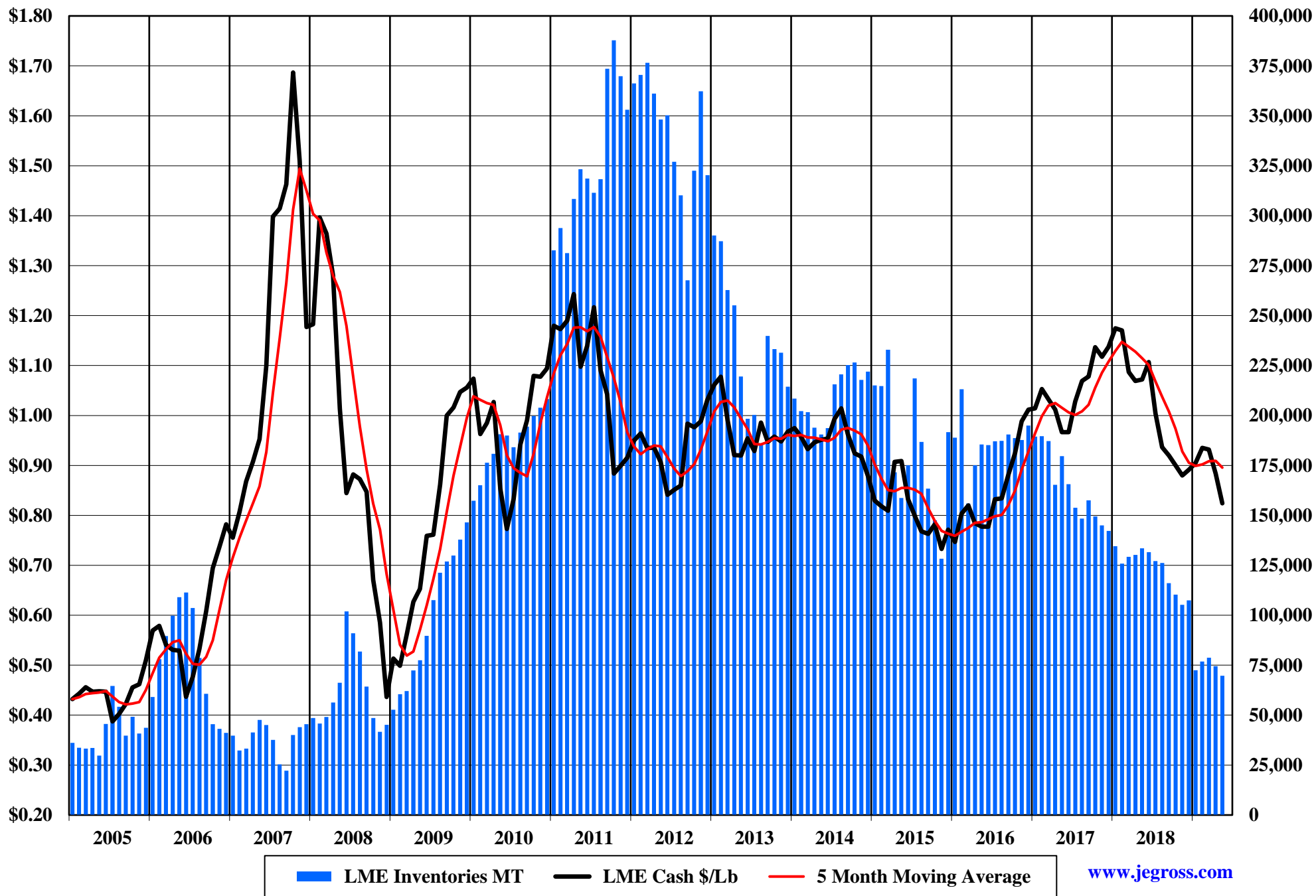


The Copper Journal
Aluminum
2005 - May 2019

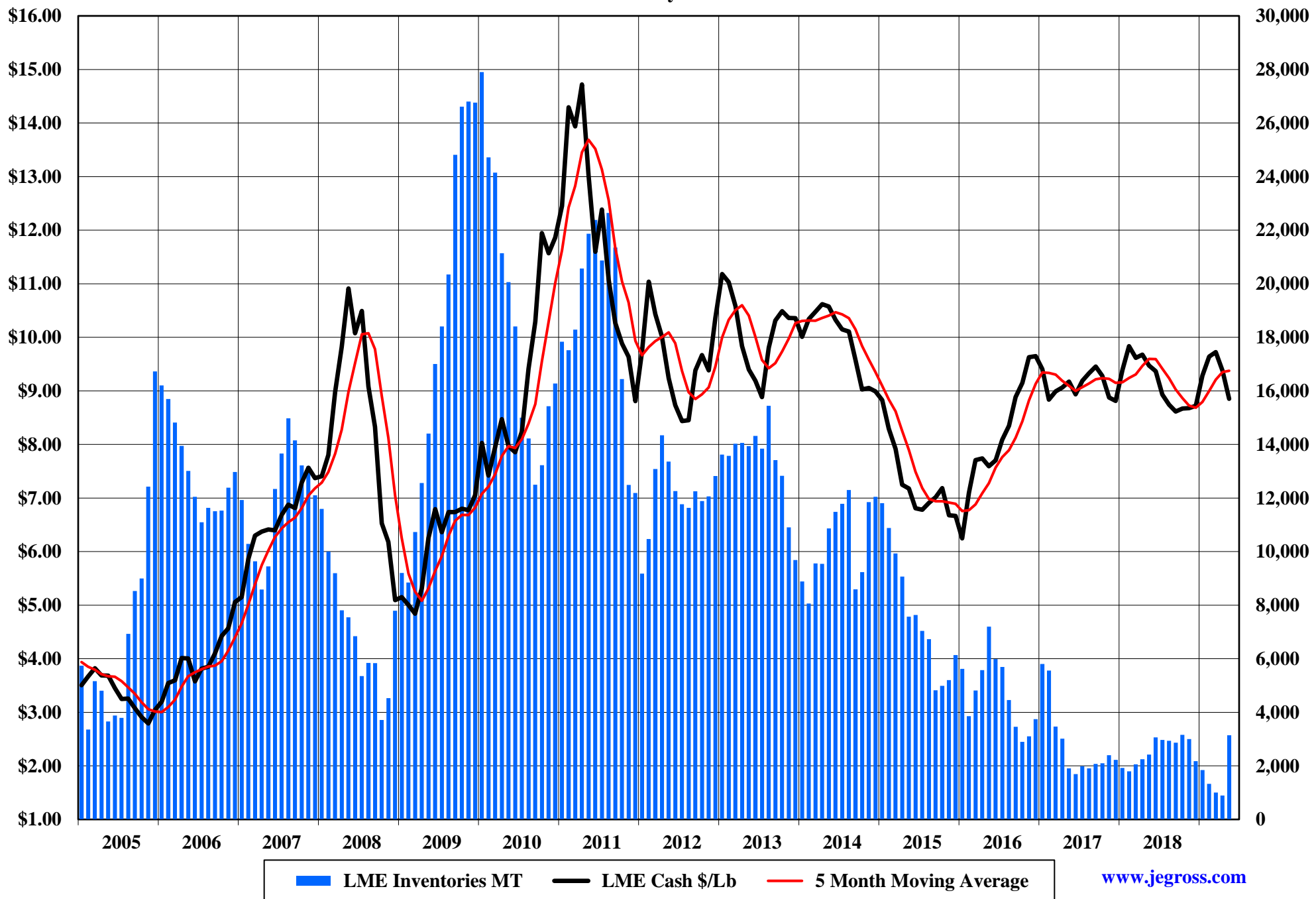


■ LME Inventories MT — LME Cash Aluminum — 5 Month Moving Average

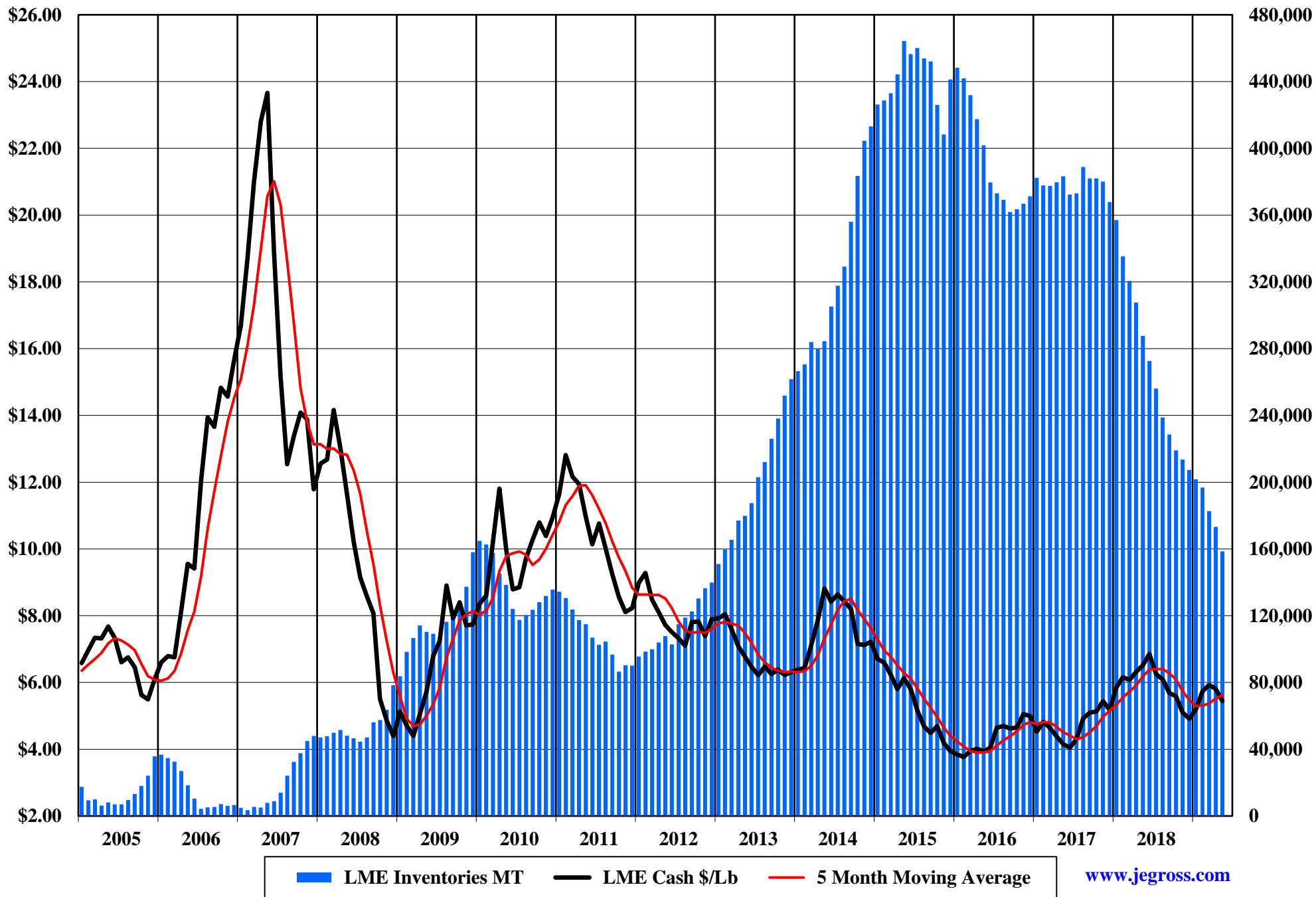
The Copper Journal
Lead
2005 - May 2019



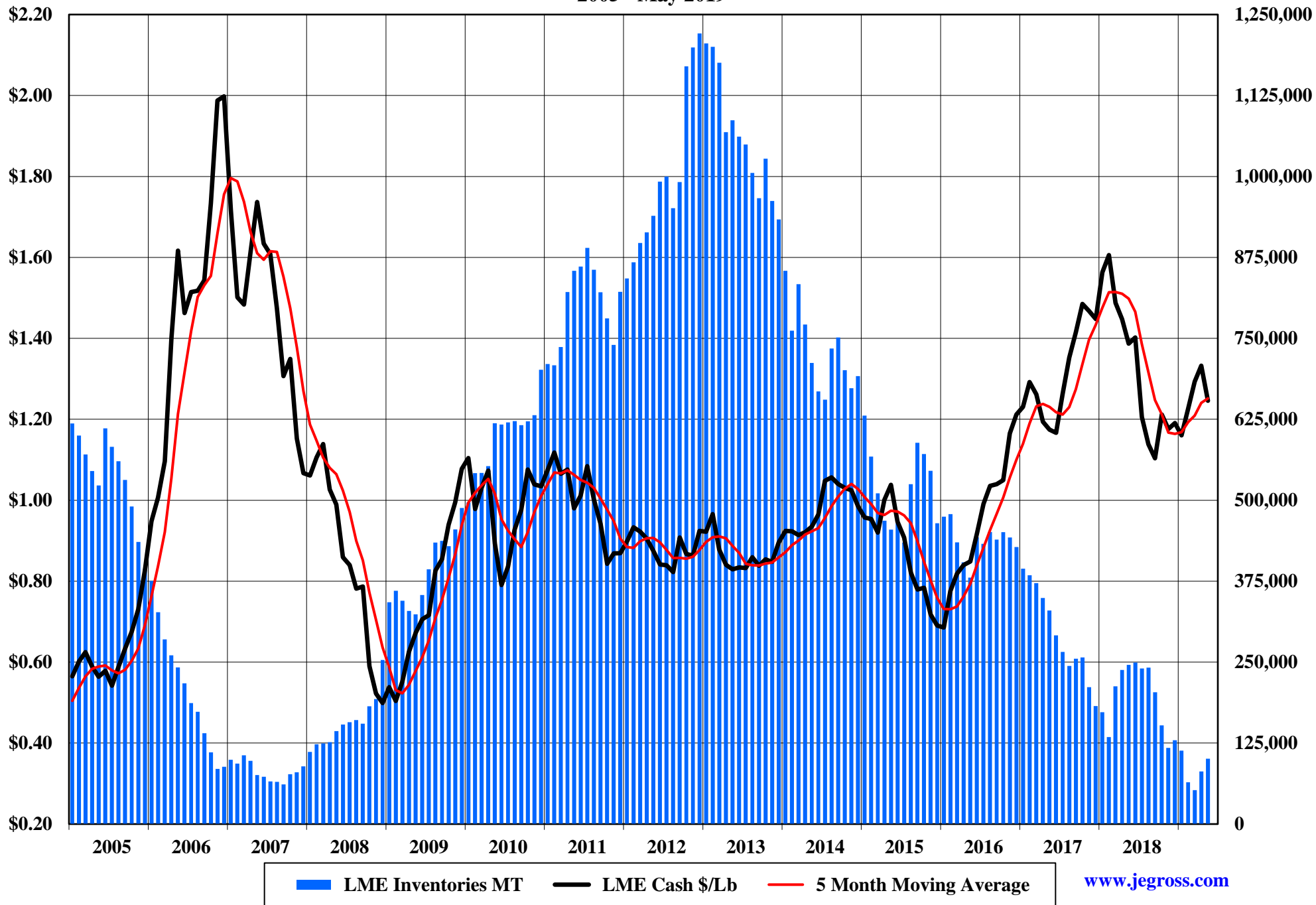
The Copper Journal
Tin
2005 - May 2019



The Copper Journal
Nickel
2005 - May 2019

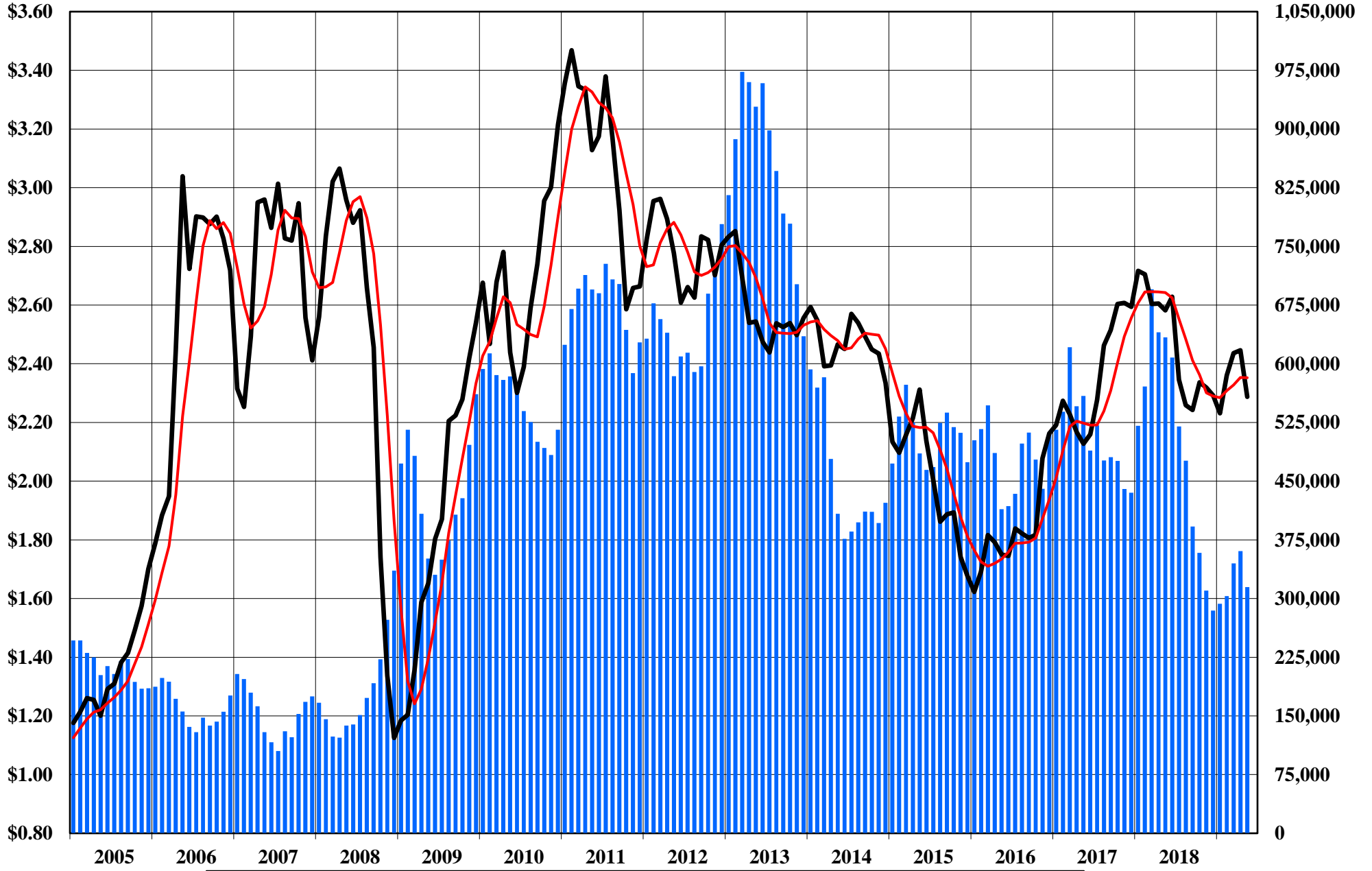


The Copper Journal
Zinc
2005 - May 2019



The Copper Journal
260 Brass
2005 - May 2019

70% Copper & 30% Zinc



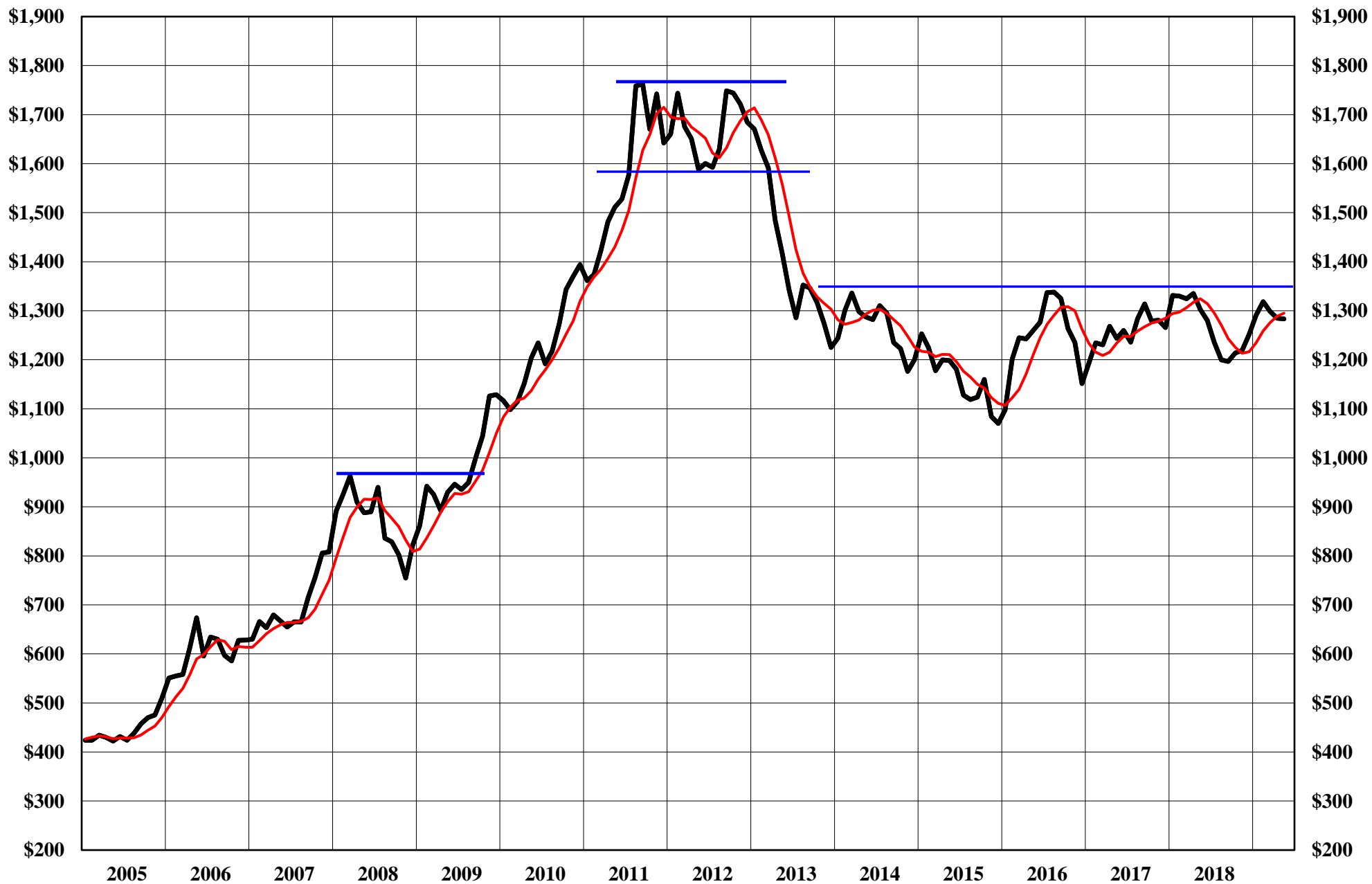
■ 260 Inventory Equalivent MT — 260 Brass — 5 Month Moving Average

The Copper Journal
Silver
2005 - May 2019



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

The Copper Journal
Gold
2005 - May 2019



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

The Copper Journal
Platinum
2005 - May 2019



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

The Copper Journal
Palladium
2005 - May 2019



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

The Copper Journal
Crude Oil
2005 - May 2019



Nymex Monthly Average Price - \$ Per Barrel

— 5 Month Moving Average

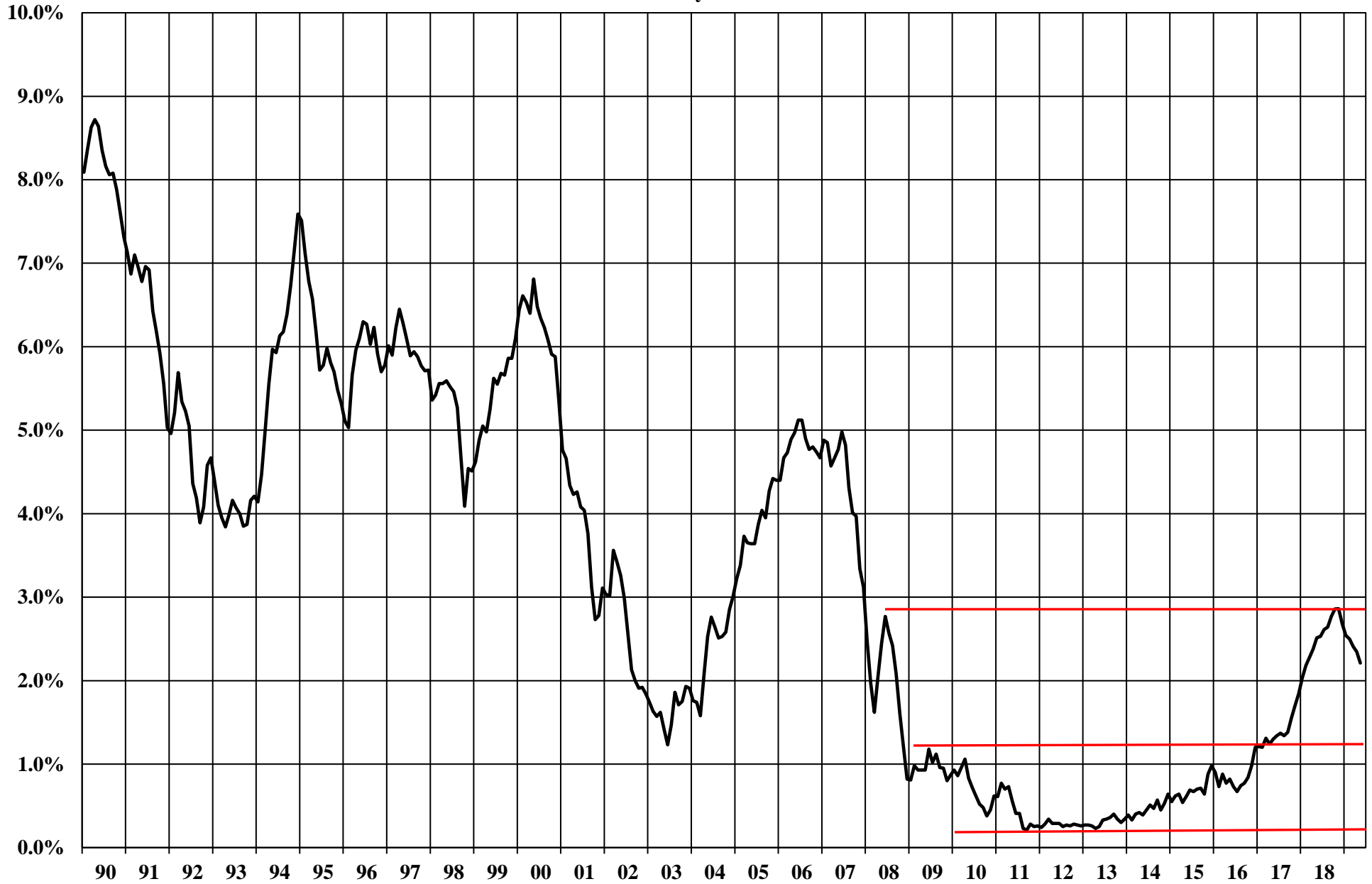
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The Copper Journal
Natural Gas
2005 - May 2019



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

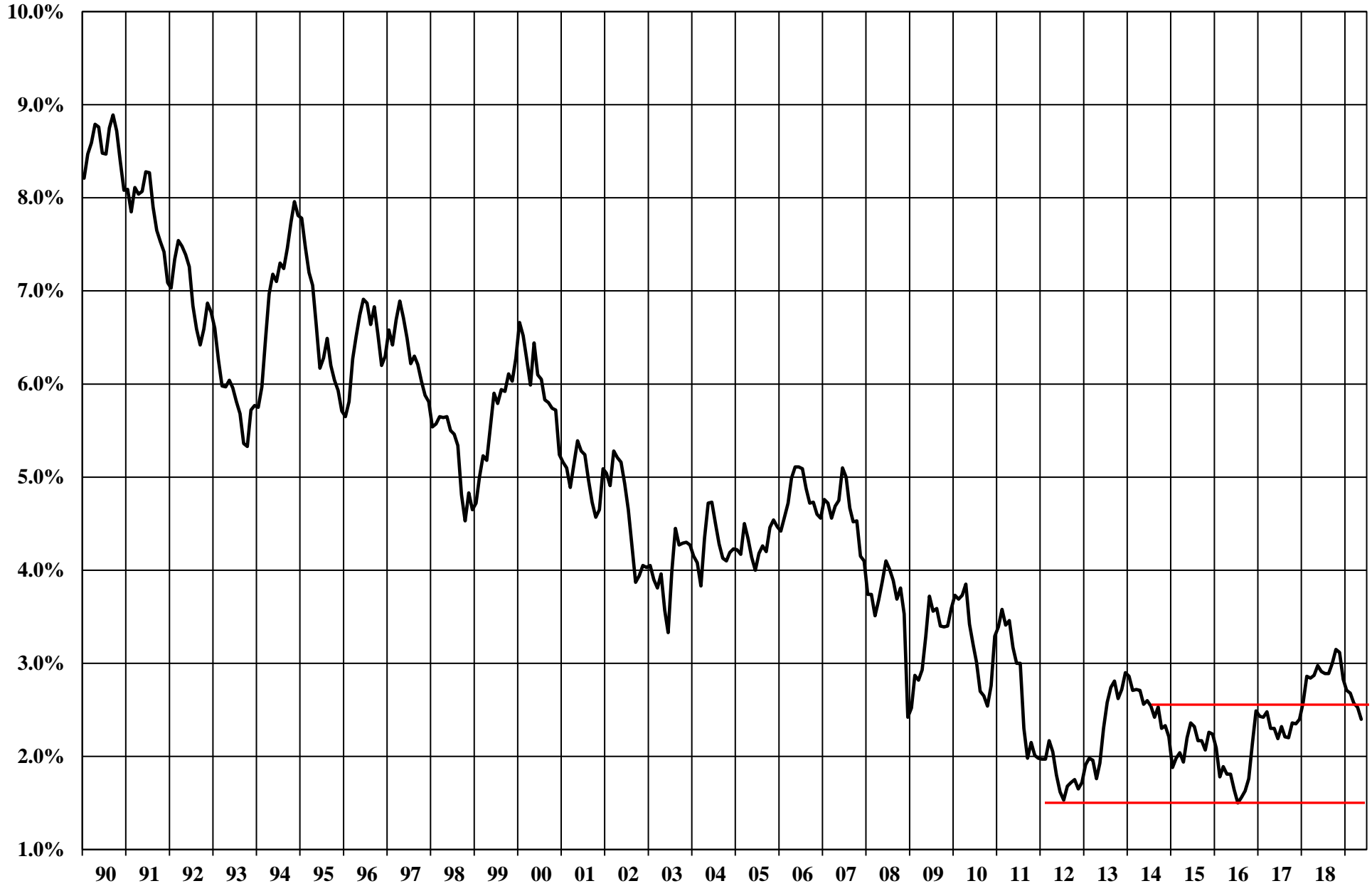
The Copper Journal
2 Year Treasury Bond Yield
Monthly Average
1990 - May 2019



Source: Federal Reserve Bank of St. Louis

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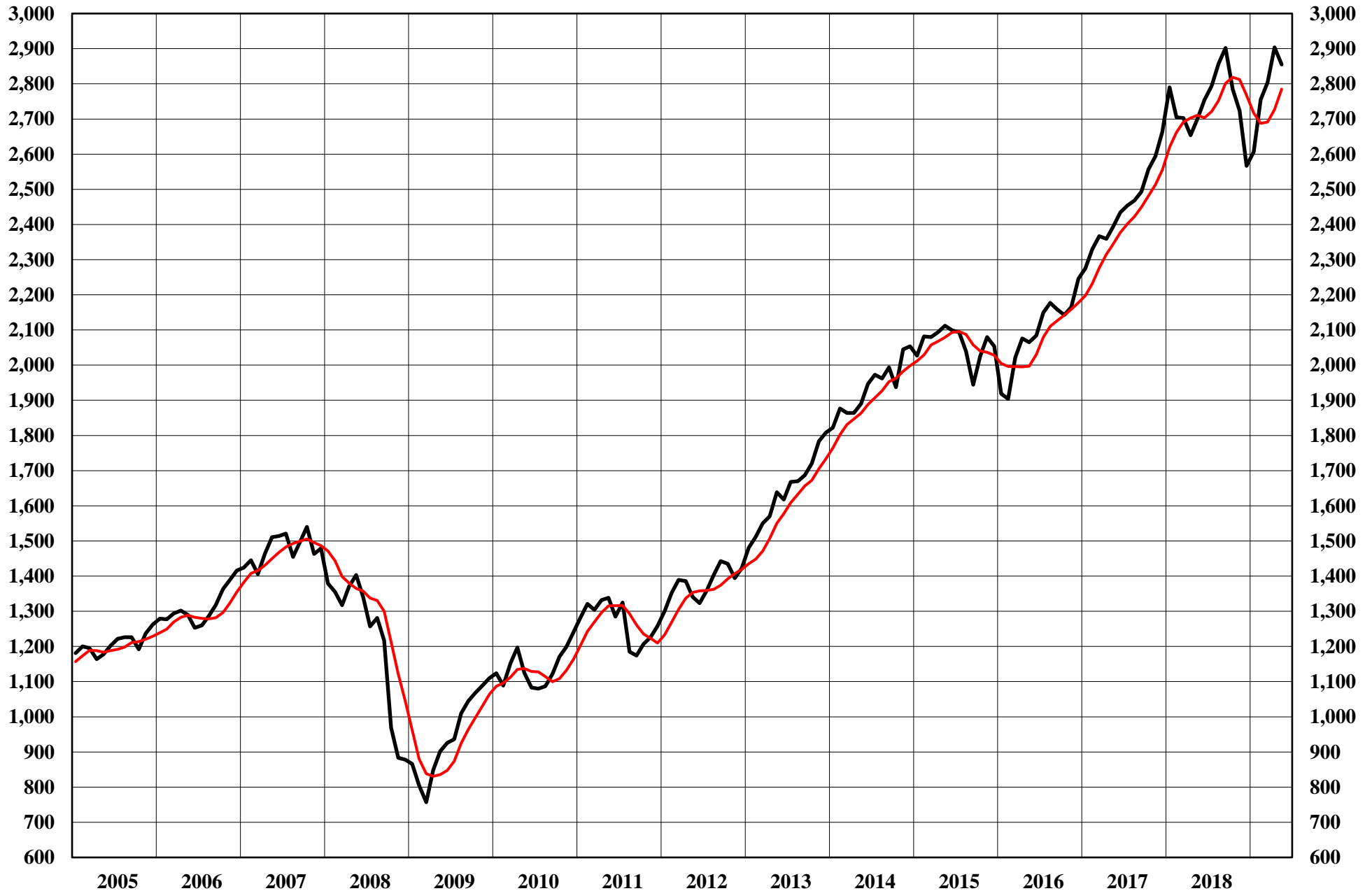
The Copper Journal
10 Year Treasury Bond Yield
Monthly Average
1990 - May 2019



Source: Federal Reserve Bank of St. Louis

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The Copper Journal
S&P 500
2005 - May 2019



— Monthly Average — 5 Month Moving Average

The Copper Journal
Shanghai Composite
2011 - May 2019

