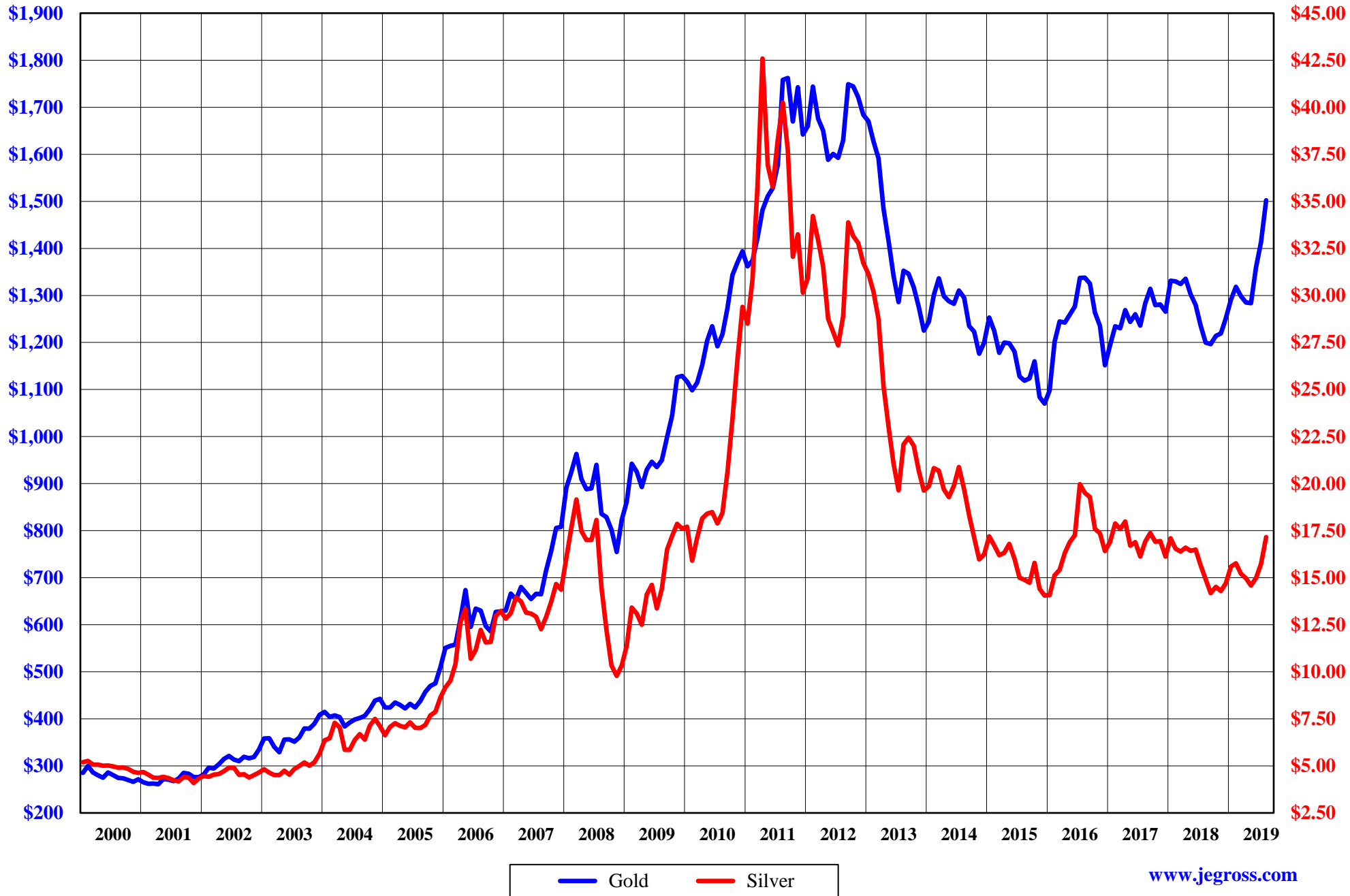


**The Copper Journal**  
**Monthly Report**  
**Index Of Charts**

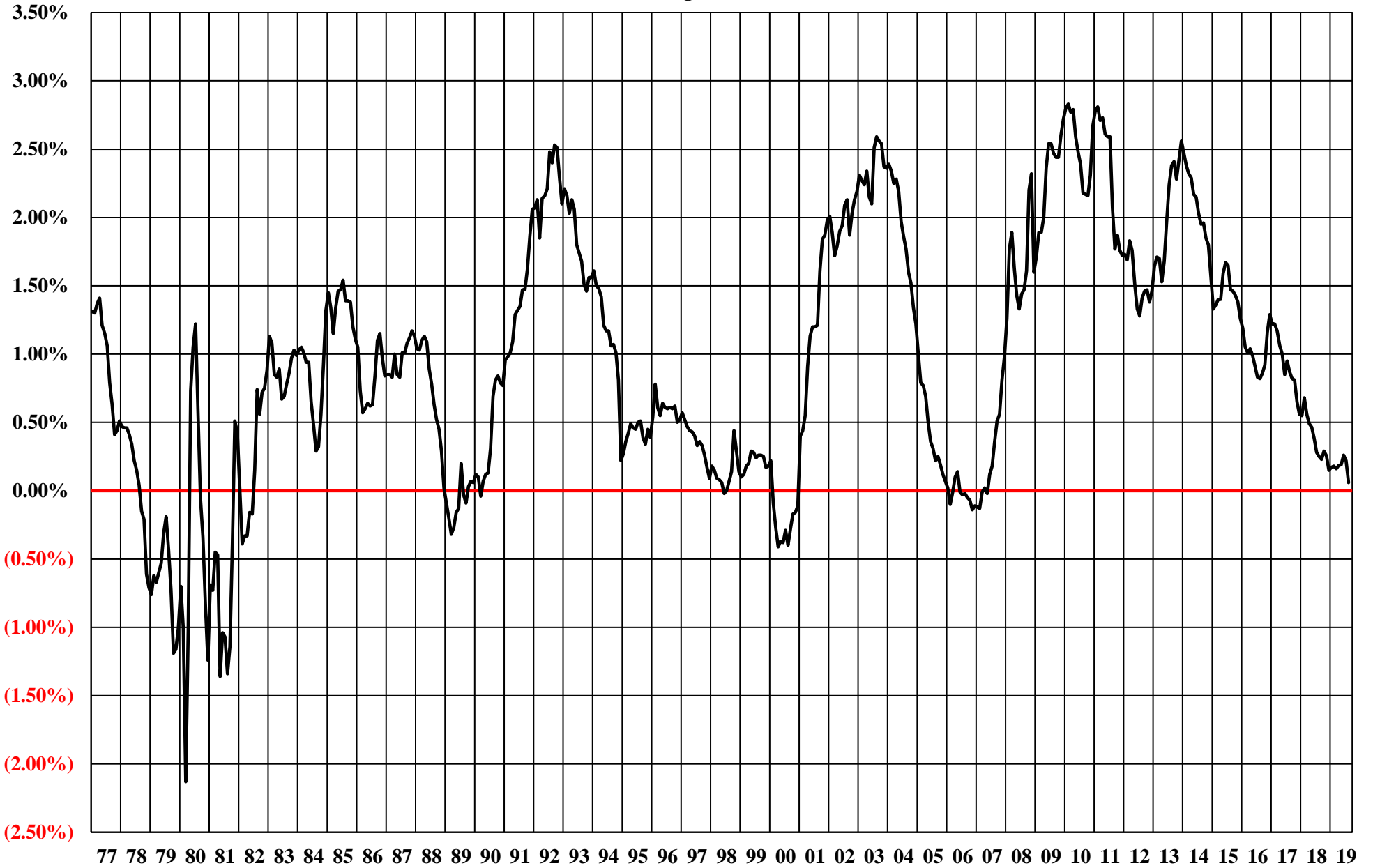
- 1** Gold Vs Silver Monthly Averages
- 2** 10 Year Minus 2 Year Treasury Yield
- 3** Price & Inventory Report
- 4** U.S. \$ Index
- 5** 1 \$ U.S. = Euro
- 6** 1 Euro = U.S. \$
- 7** Copper Vs Euro
- 8** Base Metals Barometer
- 9** Copper
- 10** Aluminum
- 11** Lead
- 12** Tin
- 13** Nickel
- 14** Zinc
- 15** 260 Brass
- 16** Silver
- 17** Gold
- 18** Platinum
- 19** Palladium
- 20** Crude Oil
- 21** Natural Gas
- 22** 2 & 10 Year Treasury Yields
- 23** S&P 500
- 24** Shanghai Composite

**John E Gross**

**The Copper Journal**  
**Comex Gold Vs Comex Silver**  
**Monthly Average Price**  
**2000 - August 2019**



**The Copper Journal**  
**10 Year - 2 year Treasury Bond Yield**  
**Monthly Average**  
**1990 - August 2019**



Source: Federal Reserve Bank of St. Louis

JE Gross & Co. Inc

**The Copper Journal**  
**Monthly Price & Inventory Report**

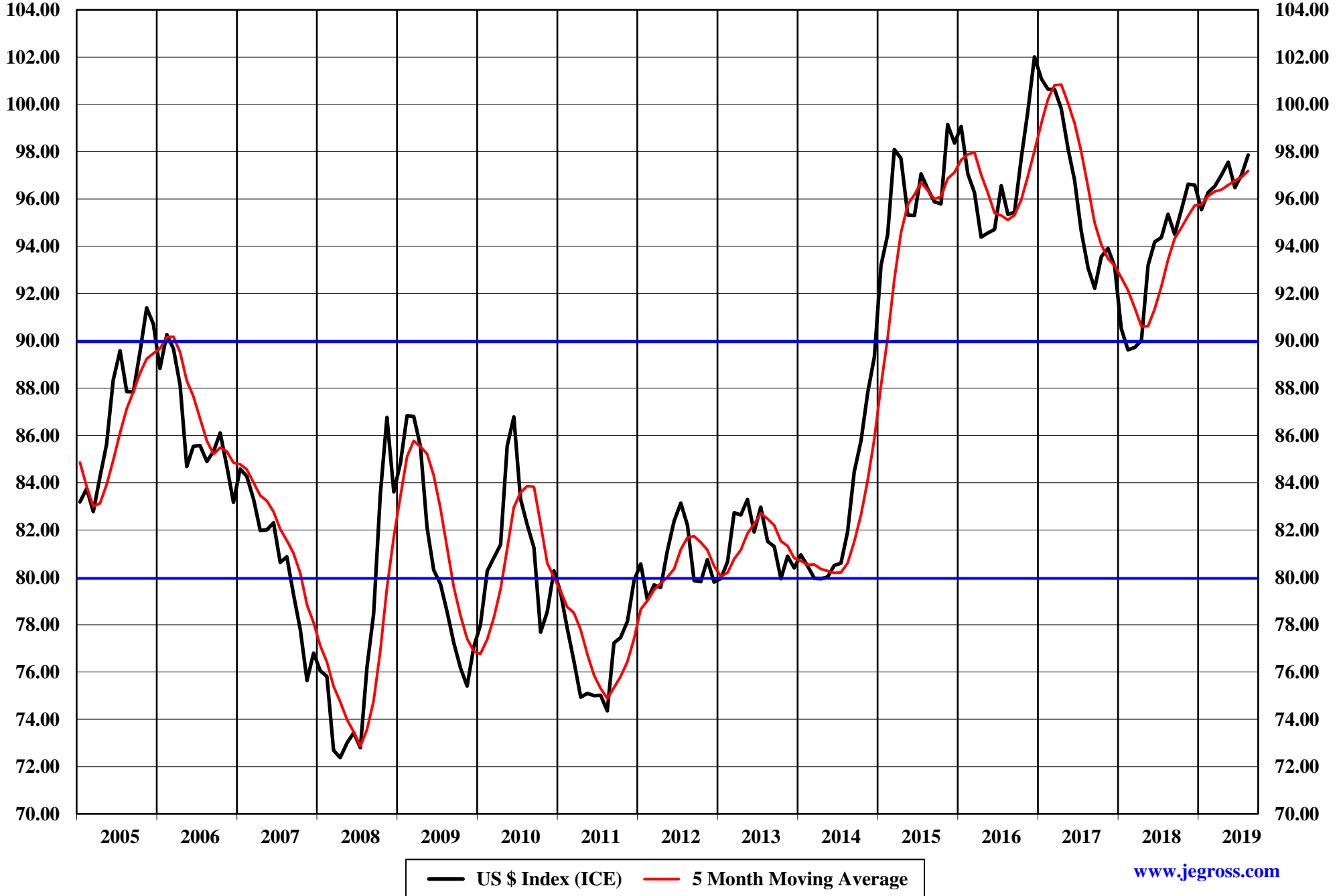
	Prices									
	Monthly Average				Change					
	August 2018	December 2018	July 2019	August 2019	Mo / Mo		YTD		Yr / Yr	
US \$ Index (ICE)	95.36	96.59	97.02	97.86	0.84	0.9%	1.27	1.3%	2.50	2.6%
\$1 US = € Euro	€ 0.8663	€ 0.8787	€ 0.8918	€ 0.8991	€ 0.0073	0.8%	€ 0.0204	2.3%	€ 0.0328	3.8%
1 € Euro = \$ US	\$1.1543	\$1.1380	\$1.1213	\$1.1122	(\$0.0091)	(0.8%)	(\$0.0258)	(2.3%)	(\$0.0421)	(3.6%)
Cx Silver	\$14.92	\$14.71	\$15.73	\$17.16	\$1.43	9.1%	\$2.45	16.7%	\$2.24	15.0%
Cx Gold	\$1,199.95	\$1,252.25	\$1,413.30	\$1,502.04	\$88.74	6.3%	\$249.79	19.9%	\$302.09	25.2%
NYM Platinum	\$800.46	\$794.01	\$843.26	\$863.47	\$20.21	2.4%	\$69.46	8.7%	\$63.01	7.9%
NYM Palladium	\$920.43	\$1,215.39	\$1,536.50	\$1,447.10	(\$89.40)	(5.8%)	\$231.71	19.1%	\$526.67	57.2%
Base Metals Barometer *	2.35	2.24	2.26	2.26	0.00	0.0%	0.02	0.9%	(0.09)	(3.8%)
Cx Copper	<b>\$2.6939</b>	<b>\$2.7234</b>	<b>\$2.6866</b>	<b>\$2.5724</b>	(\$0.1142)	(4.3%)	(\$0.1510)	(5.5%)	(\$0.1215)	(4.5%)
LME Copper	\$2.7394	\$2.7640	\$2.6940	\$2.5889	(\$0.1051)	(3.9%)	(\$0.1751)	(6.3%)	(\$0.1505)	(5.5%)
LME Aluminum	\$0.9276	\$0.8759	\$0.8131	\$0.7895	(\$0.0236)	(2.9%)	(\$0.0864)	(9.9%)	(\$0.1381)	(14.9%)
LME Lead	\$0.9364	\$0.8913	\$0.8952	\$0.9266	\$0.0314	3.5%	\$0.0353	4.0%	(\$0.0098)	(1.0%)
LME Tin	\$8.74	\$8.72	\$8.16	\$7.51	(\$0.6500)	(8.0%)	(\$1.21)	(13.9%)	(\$1.23)	(14.1%)
LME Nickel	\$6.09	\$4.91	\$6.10	\$7.11	\$1.0100	16.6%	\$2.20	44.8%	\$1.02	16.7%
LME Zinc	\$1.1385	\$1.1906	\$1.1072	\$1.0317	(\$0.0755)	(6.8%)	(\$0.1589)	(13.3%)	(\$0.1068)	(9.4%)
NYM Crude Oil	\$67.85	\$48.98	\$57.55	\$54.84	(\$2.71)	(4.7%)	\$5.86	12.0%	(\$13.01)	(19.2%)
NYM Natural Gas	\$2.91	\$3.92	\$2.30	\$2.17	(\$0.13)	(5.7%)	(\$1.75)	(44.6%)	(\$0.74)	(25.4%)
S&P 500	2,858	2,567	2,996	2,897	(99)	(3.3%)	330	12.9%	39	1.4%
Shanghai Composite	2,752	2,568	2,948	2,844	(104)	(3.5%)	276	10.7%	92	3.3%
2 Year Treasury Bond Yield	2.64%	2.68%	1.84%	1.57%	(0.0027)	(14.7%)	(0.0111)	(41.4%)	(0.0107)	(40.5%)
10 Year Treasury Bond Yield	2.89%	2.83%	2.06%	1.63%	(0.0043)	(20.9%)	(0.0120)	(42.4%)	(0.0126)	(43.6%)

	Month End Inventories MT									
	Month Ending				Change					
	August 2018	December 2018	July 2019	August 2019	Mo / Mo		YTD		Yr / Yr	
Cx Copper	173,856	100,226	35,610	39,480	3,870	10.9%	(60,746)	(60.6%)	(134,376)	(77.3%)
LME Copper	264,925	132,175	290,500	337,675	47,175	16.2%	205,500	155.5%	72,750	27.5%
Shanghai Copper	138,001	118,686	149,189	143,876	(5,313)	(3.6%)	25,190	21.2%	5,875	4.3%
<b>Total Copper</b>	<b>576,782</b>	<b>351,087</b>	<b>475,299</b>	<b>521,031</b>	<b>45,732</b>	<b>9.6%</b>	<b>169,944</b>	<b>48.4%</b>	<b>(55,751)</b>	<b>(9.7%)</b>
LME Aluminum	1,070,750	1,271,200	1,028,875	927,000	(101,875)	(9.9%)	(344,200)	(27.1%)	(143,750)	(13.4%)
LME Lead	126,150	107,450	79,050	77,825	(1,225)	(1.5%)	(29,625)	(27.6%)	(48,325)	(38.3%)
LME Tin	2,940	2,175	5,735	6,995	1,260	22.0%	4,820	221.6%	4,055	137.9%
LME Nickel	238,782	207,330	143,628	152,484	8,856	6.2%	(54,846)	(26.5%)	(86,298)	(36.1%)
LME Zinc	241,575	129,325	78,000	67,350	(10,650)	(13.7%)	(61,975)	(47.9%)	(174,225)	(72.1%)

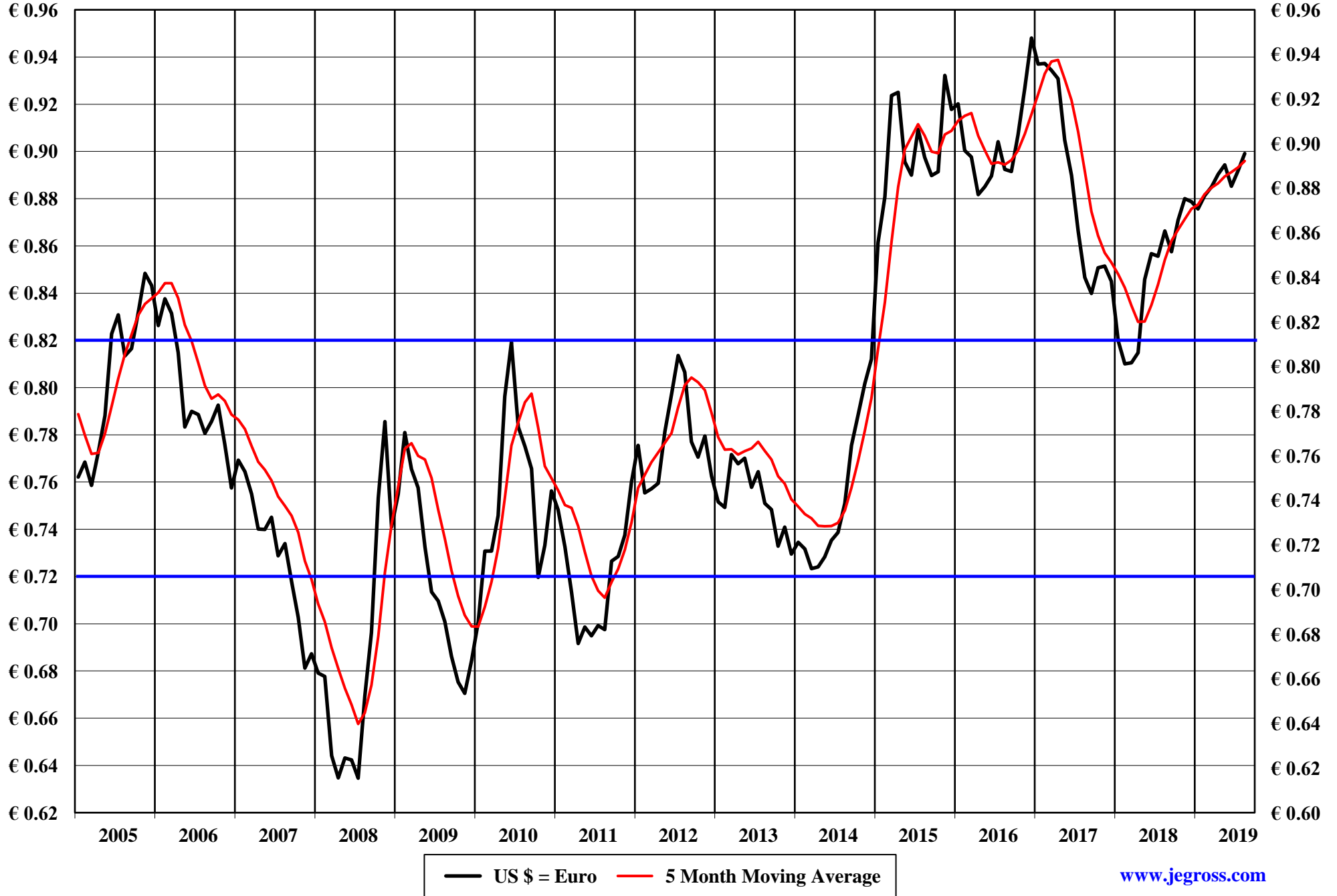
\* The Base Metals Barometer is a weighted index of non-ferrous metal prices. January 2000 = 1.00

[www.jegross.com](http://www.jegross.com)

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



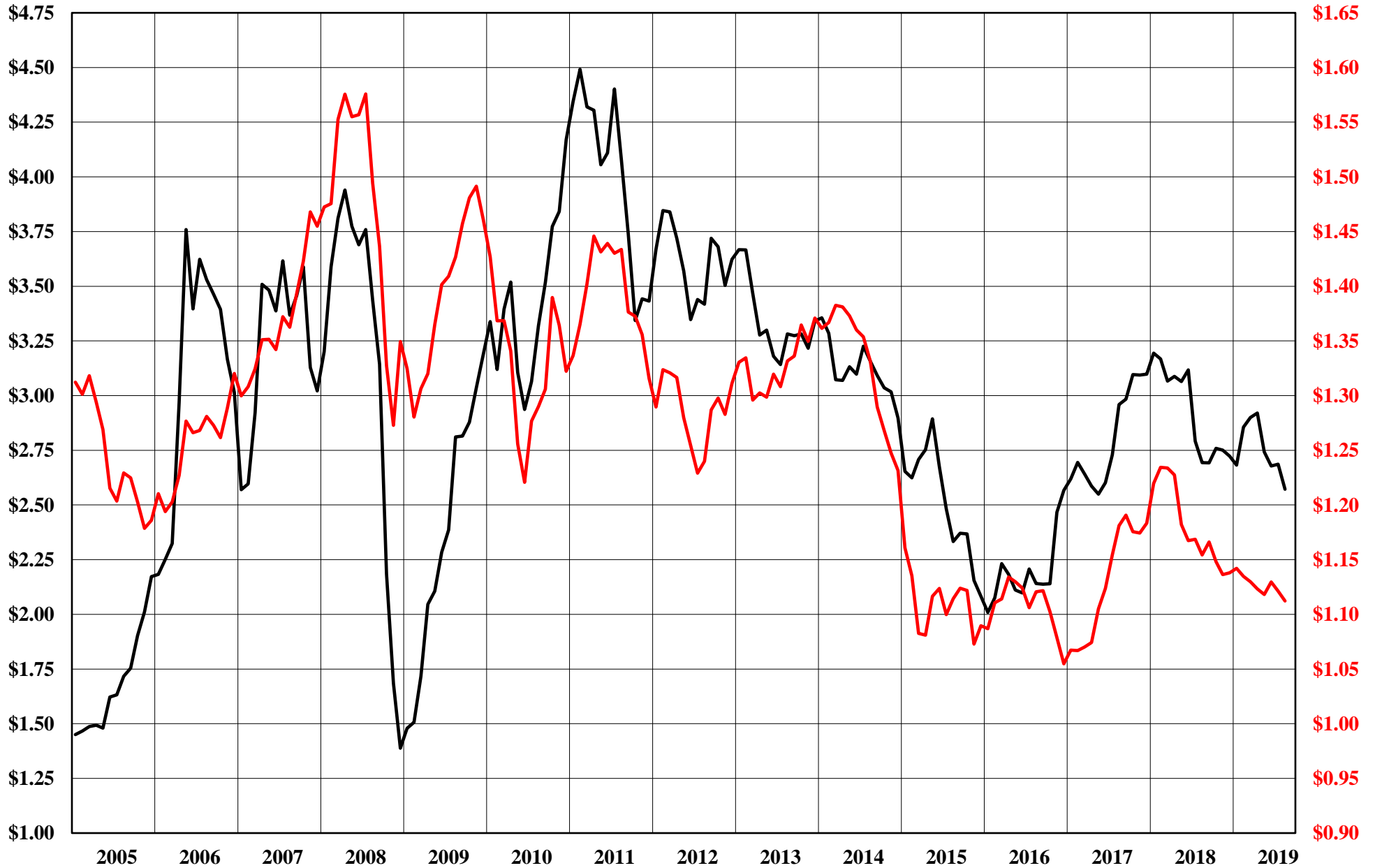
The Copper Journal  
\$1 U.S. = Euro  
2005 - August 2019



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



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



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

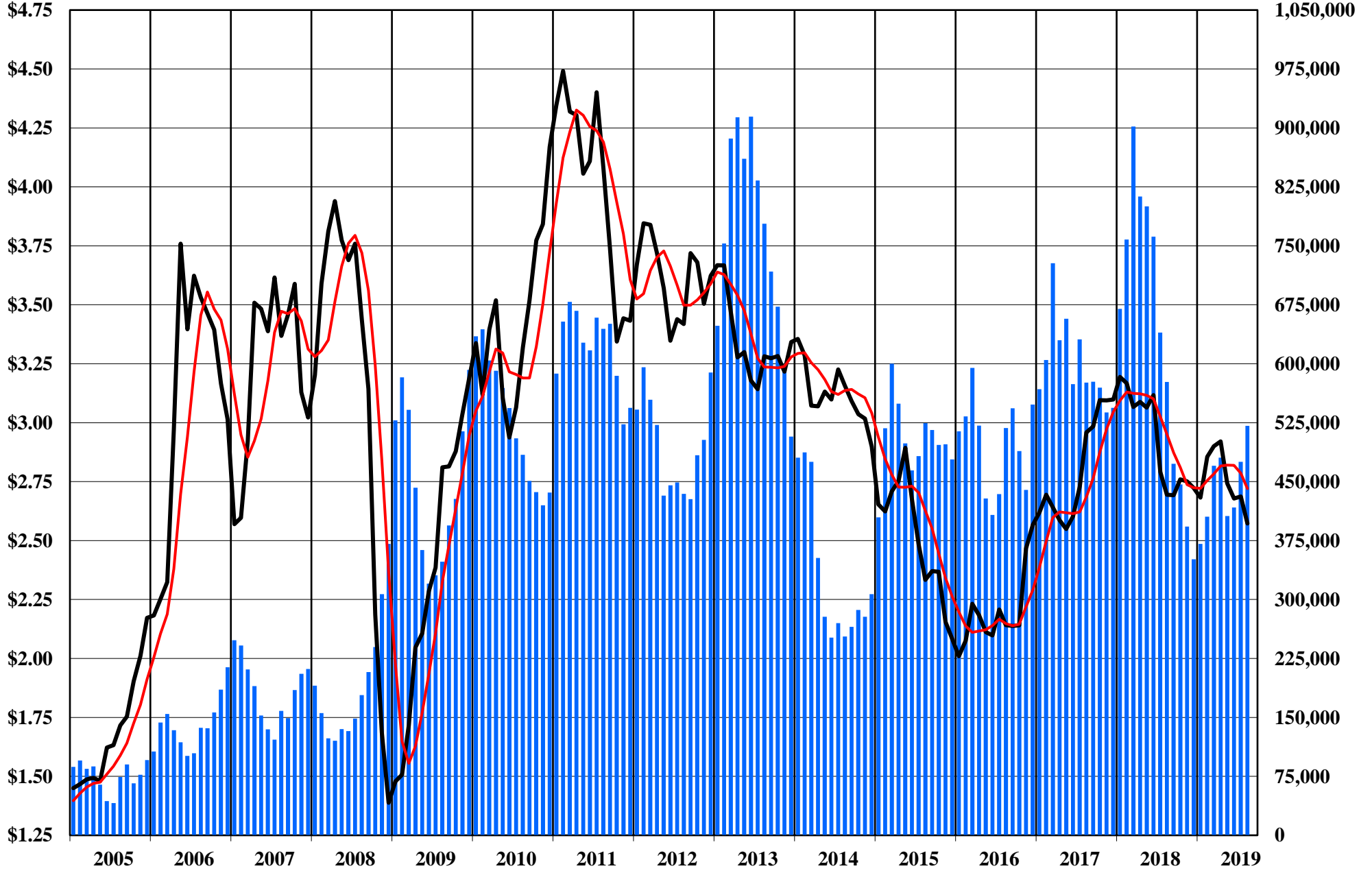


The Copper Journal  
Base Metals Barometer  
2005 - August 2019



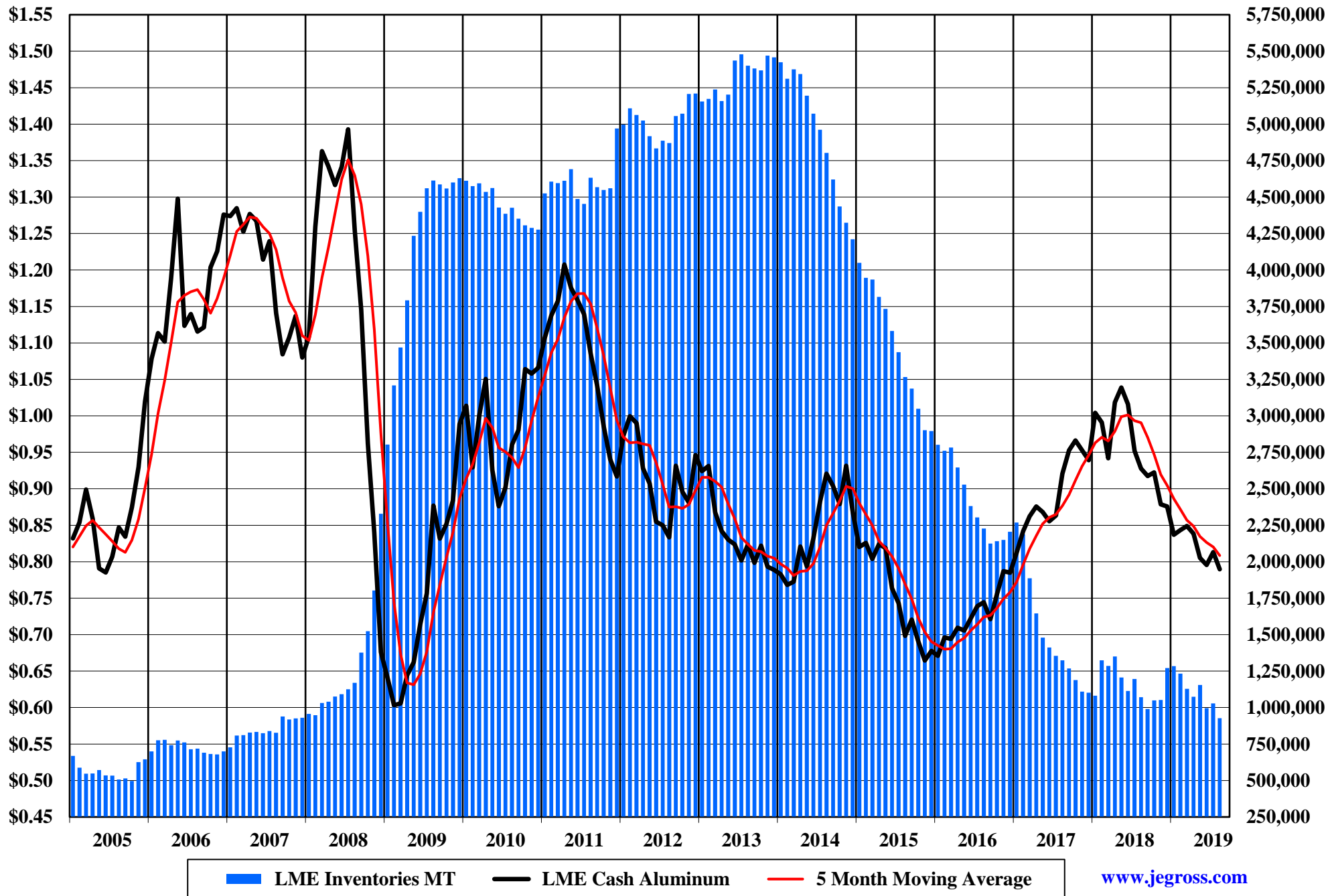
— BMB      — 5 Month Moving Average

The Copper Journal  
Copper  
2005 - August 2019

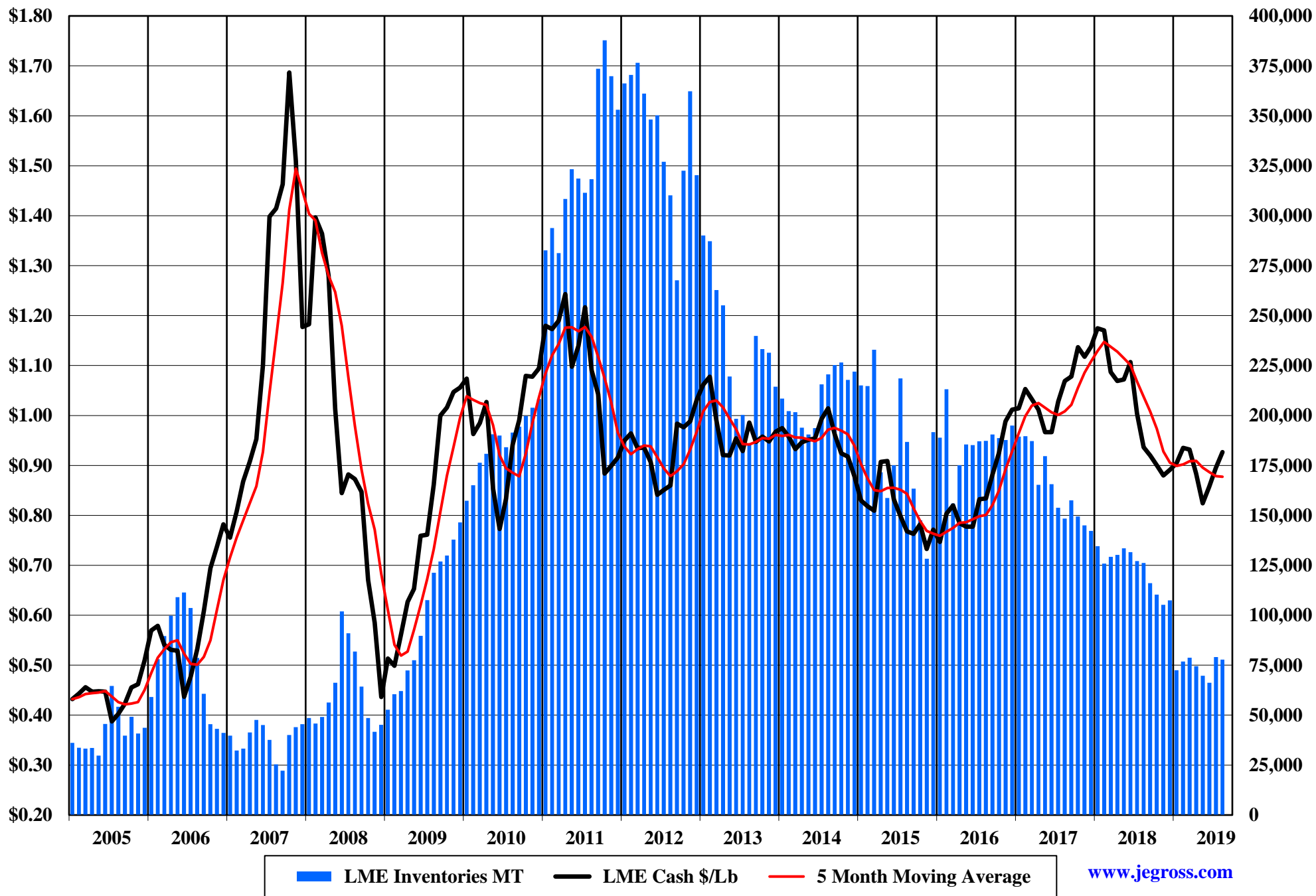


■ Cx, LME & Shanghai Inventories    — Cx Copper Price \$/LB    — 5 Month Moving Average

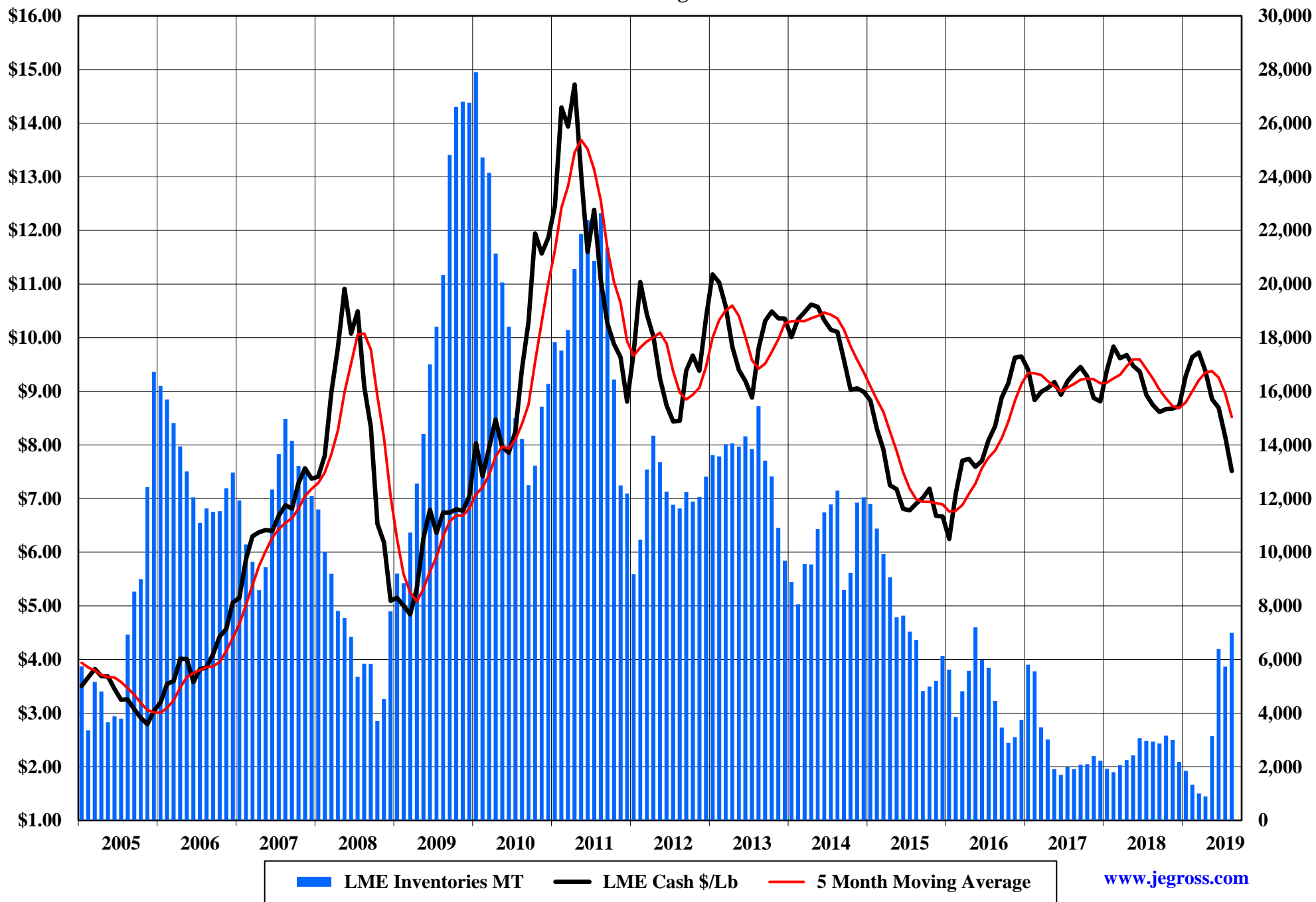
# The Copper Journal Aluminum 2005 - August 2019



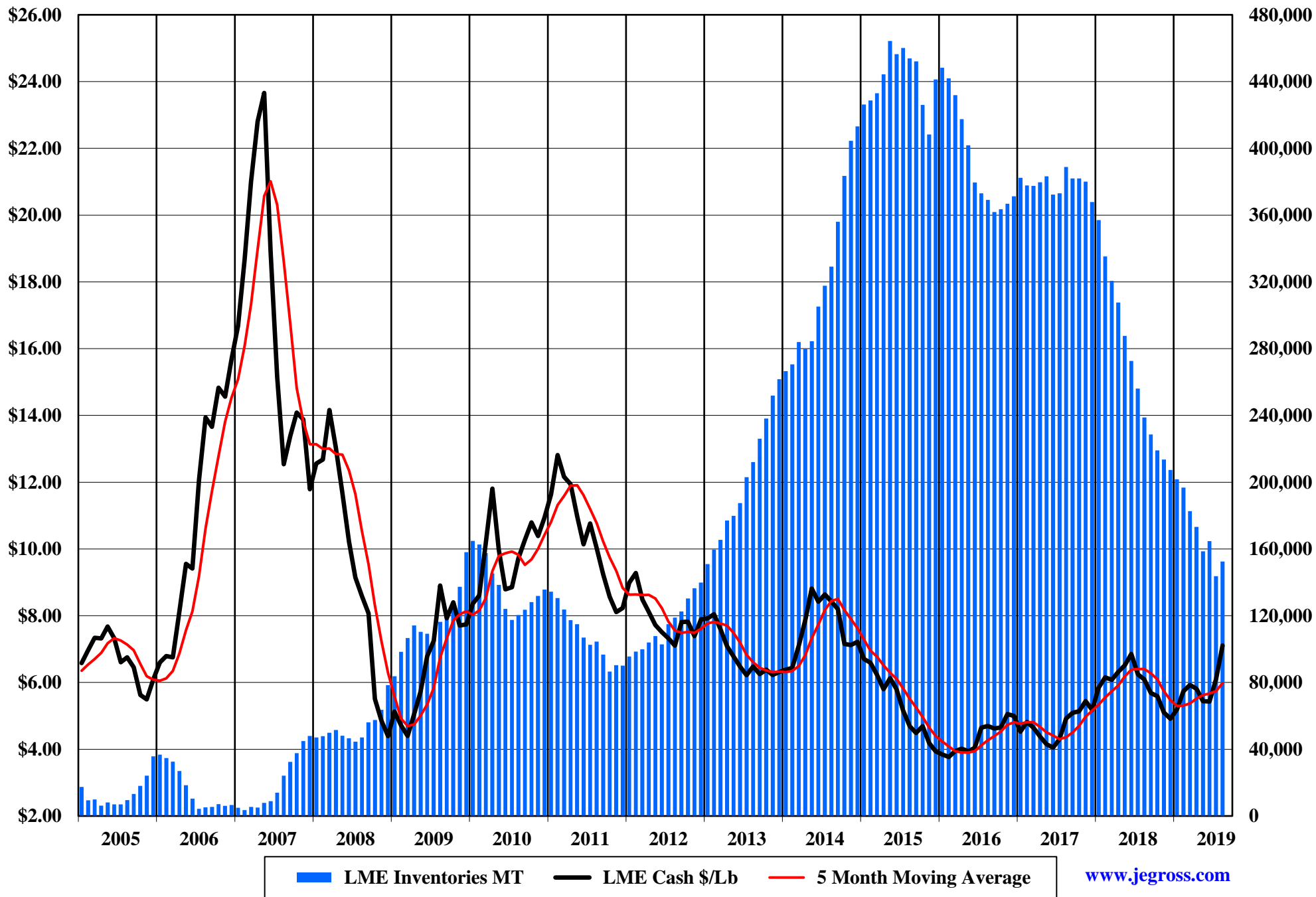
The Copper Journal  
Lead  
2005 - August 2019



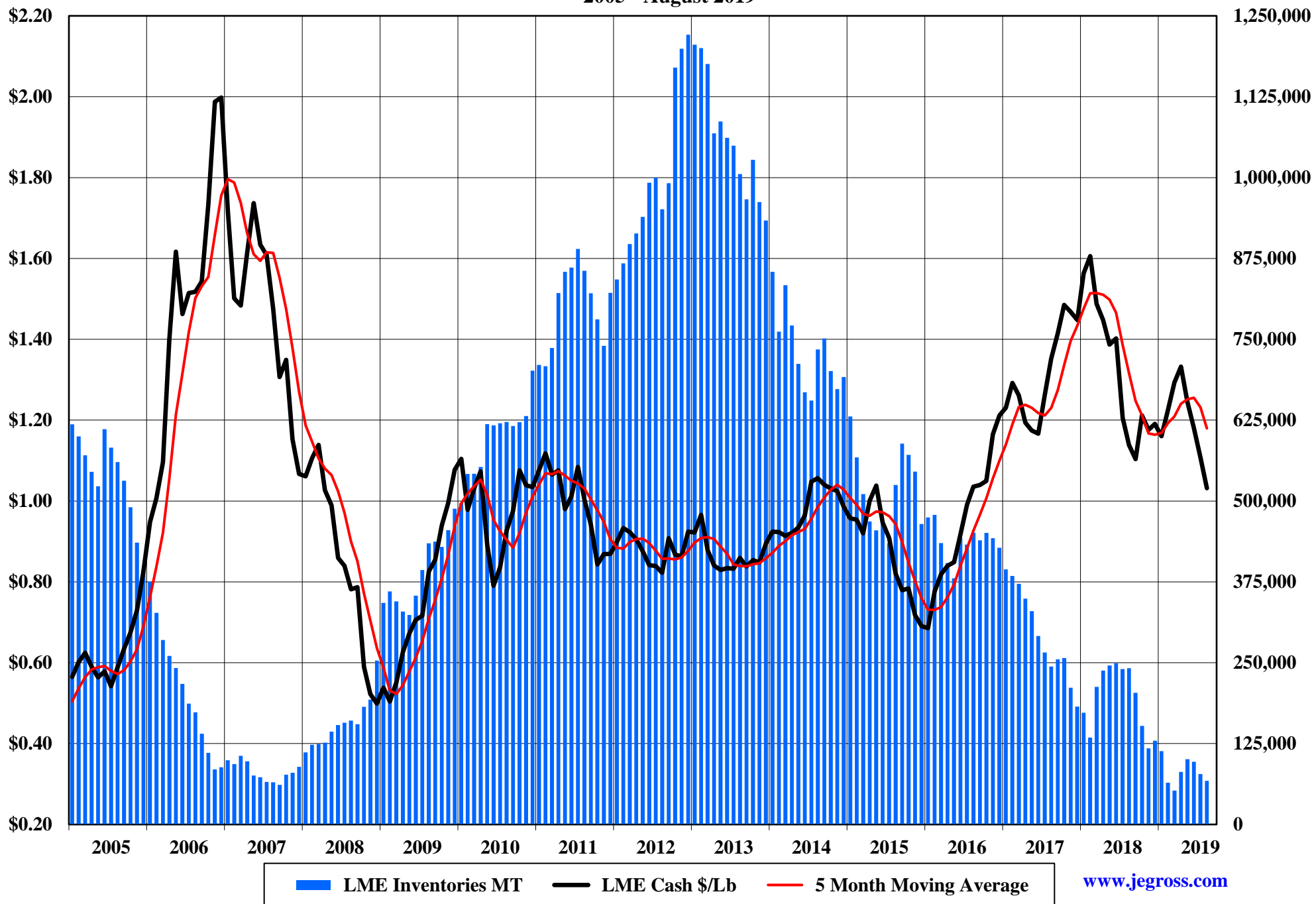
The Copper Journal  
Tin  
2005 - August 2019



The Copper Journal  
Nickel  
2005 - August 2019

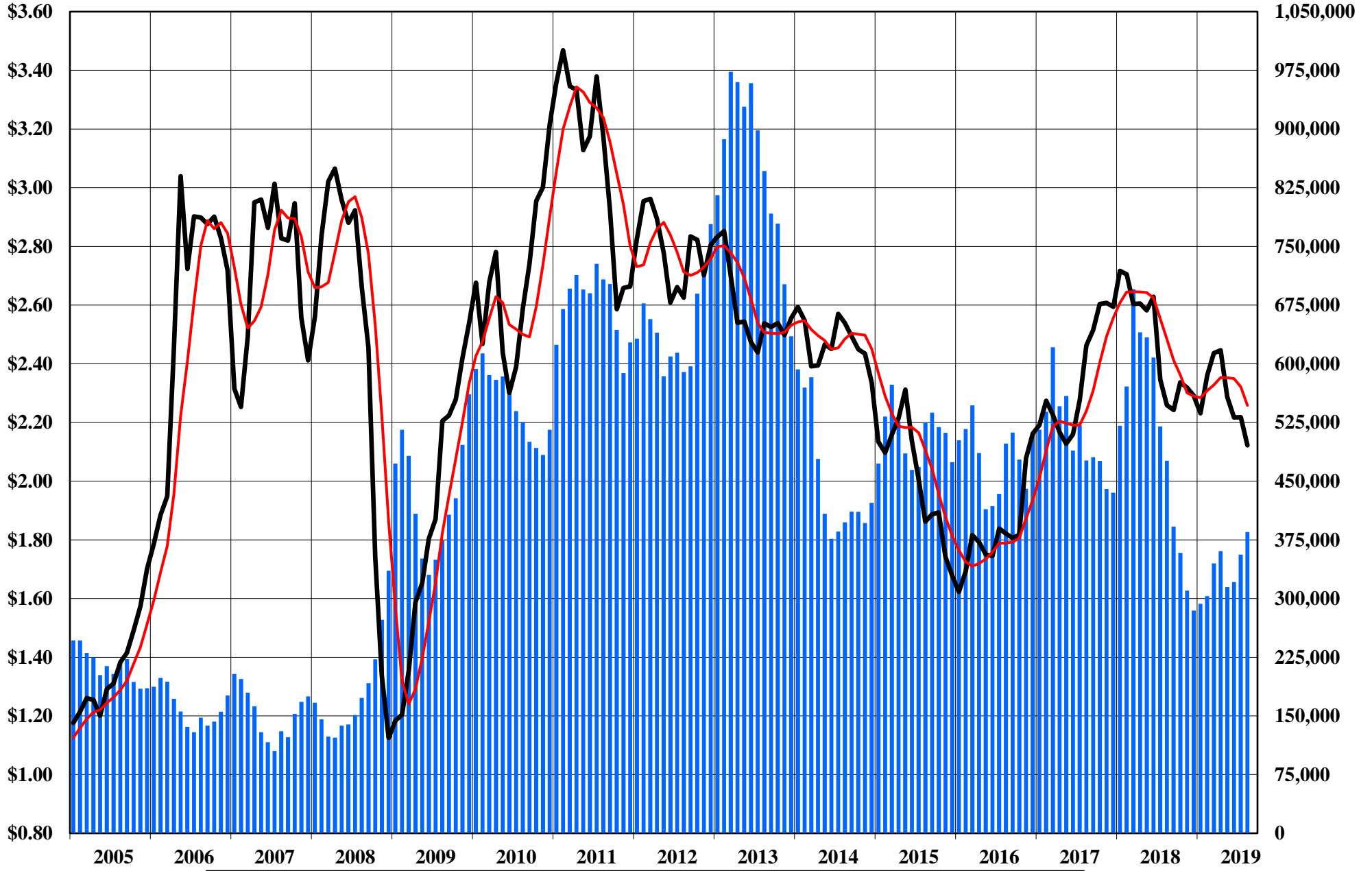


The Copper Journal  
Zinc  
2005 - August 2019



The Copper Journal  
260 Brass  
2005 - August 2019

70% Copper & 30% Zinc



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

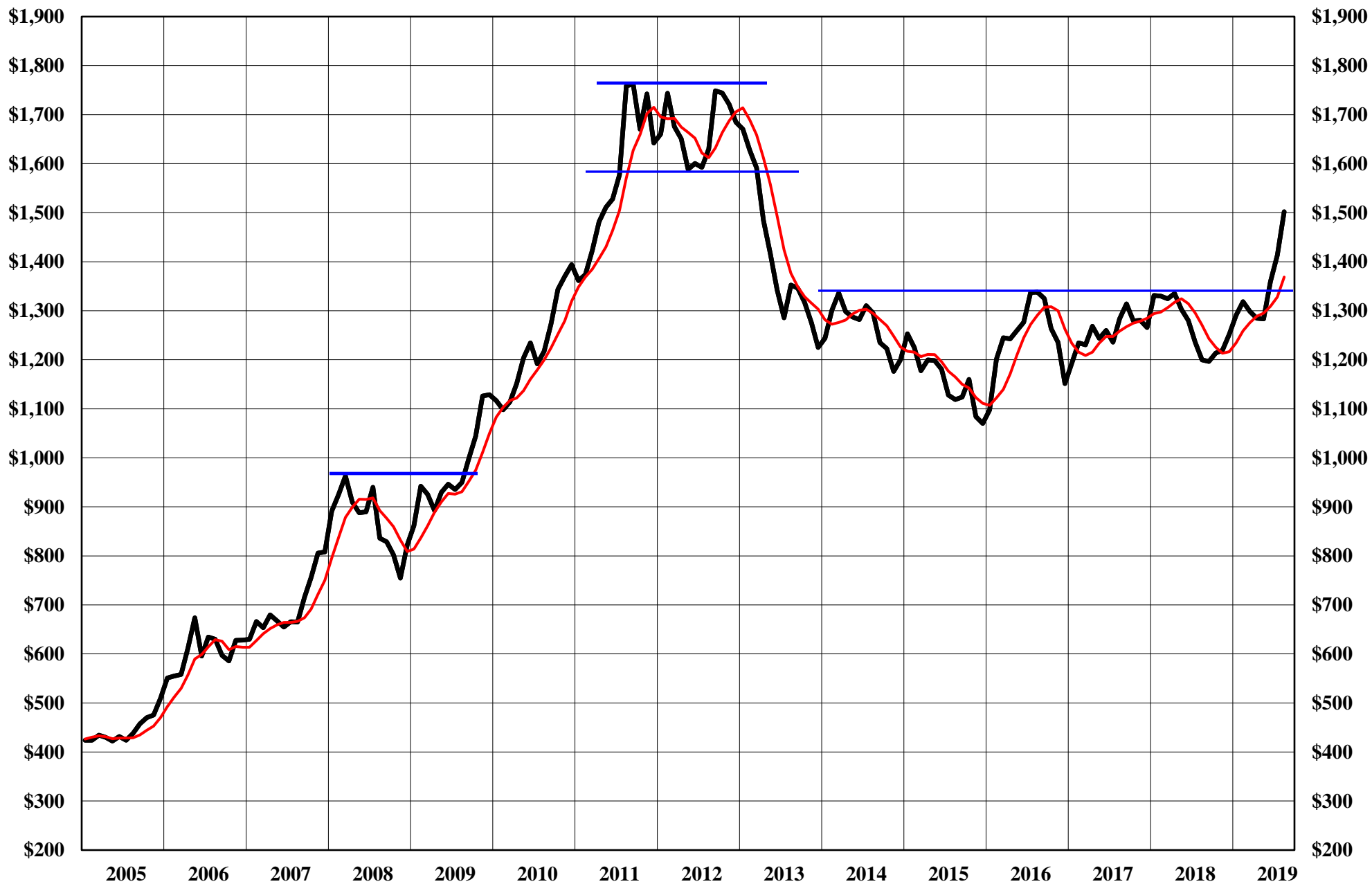


The Copper Journal  
Silver  
2005 - August 2019



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

The Copper Journal  
Gold  
2005 - August 2019



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

The Copper Journal  
Platinum  
2005 - August 2019



Nymex Monthly Average Price - \$ Per Troy Ounce

5 Month Moving Average

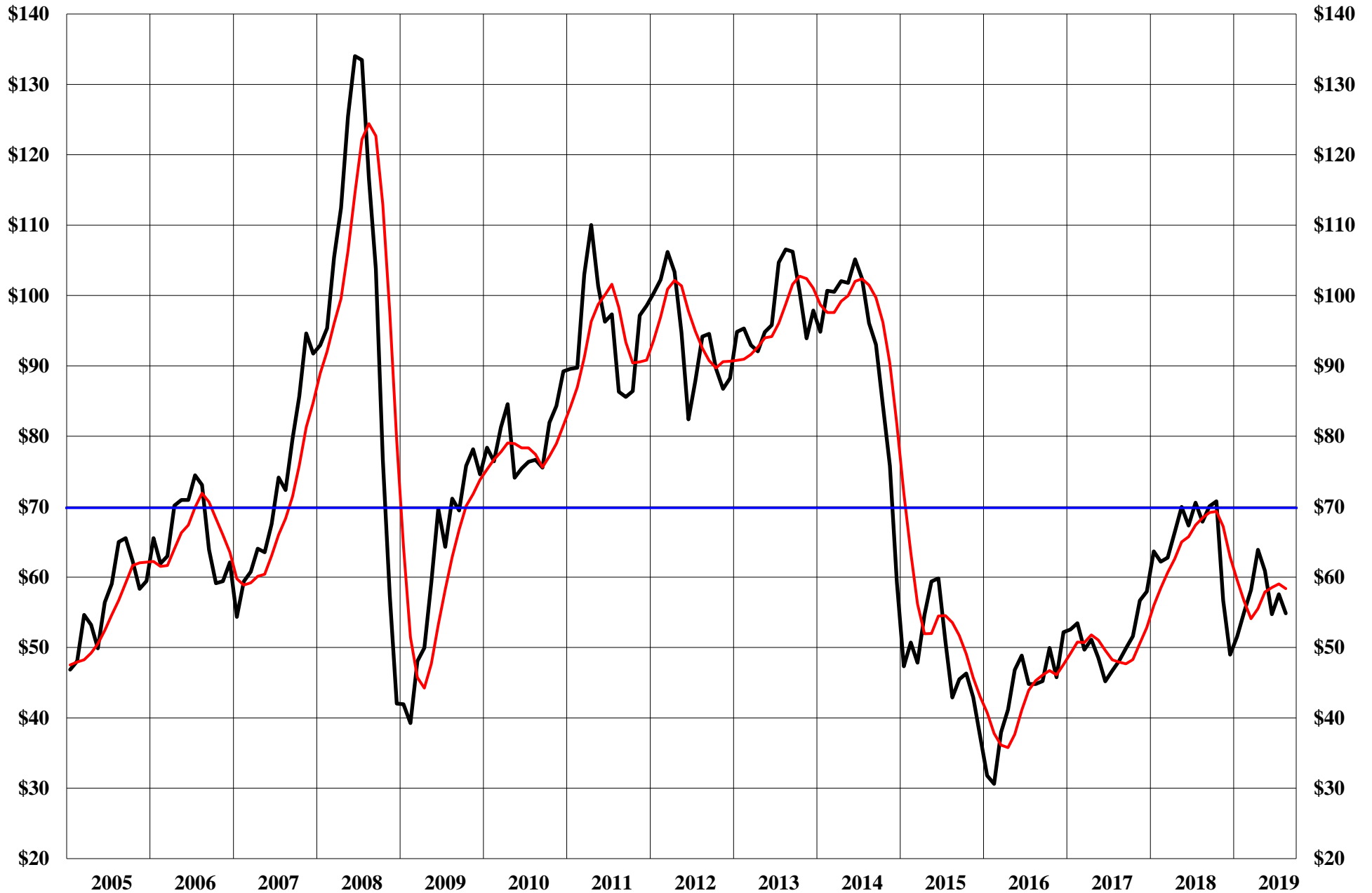
[www.jegross.com](http://www.jegross.com)

The Copper Journal  
Palladium  
2005 - August 2019



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

The Copper Journal  
Crude Oil  
2005 - August 2019



Nymex Monthly Average Price - \$ Per Barrel

— 5 Month Moving Average

[www.jegross.com](http://www.jegross.com)

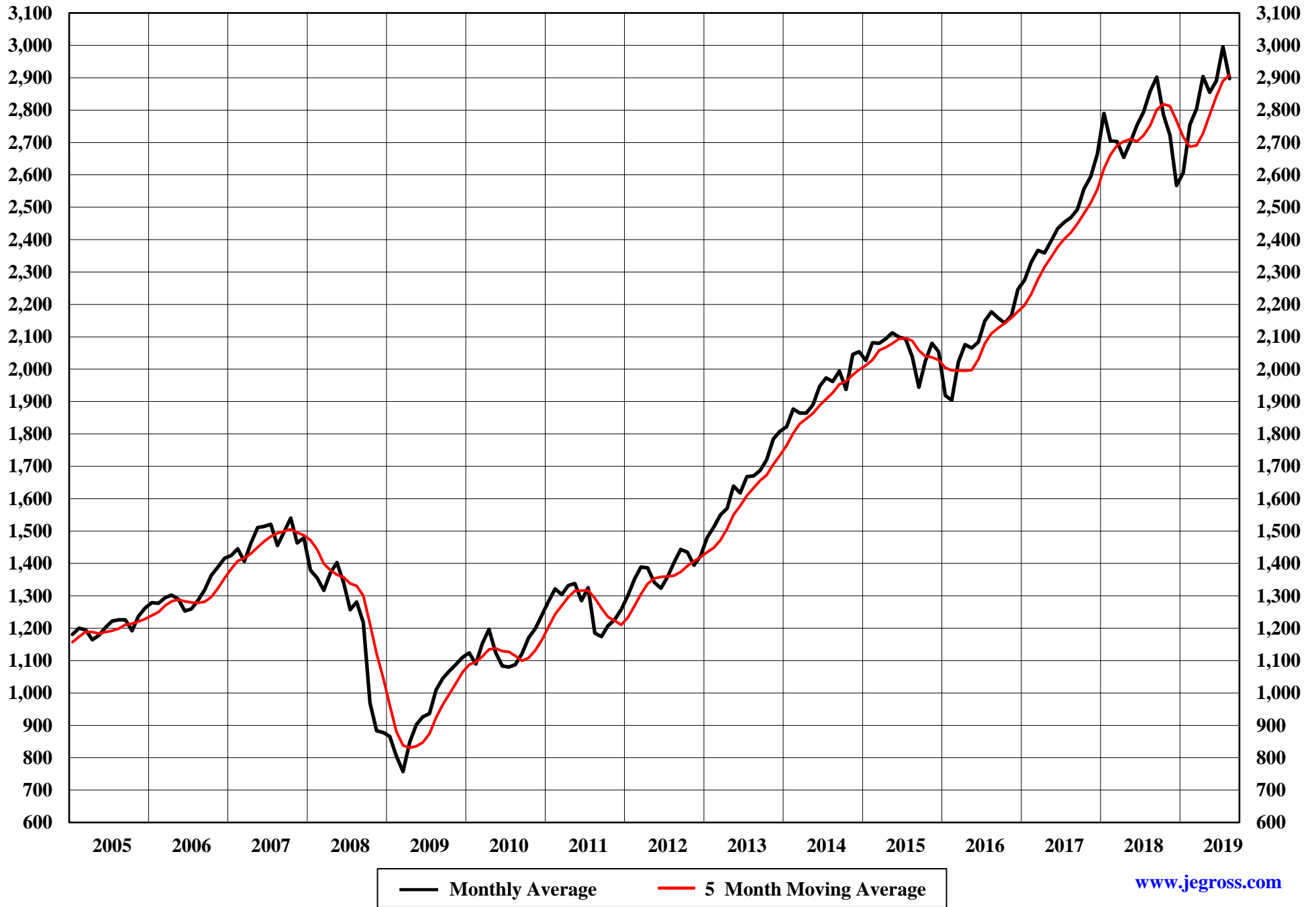
The Copper Journal  
Natural Gas  
2005 - August 2019



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



The Copper Journal  
S&P 500  
2005 - August 2019





The Copper Journal  
Shanghai Composite  
2011 - August 2019

