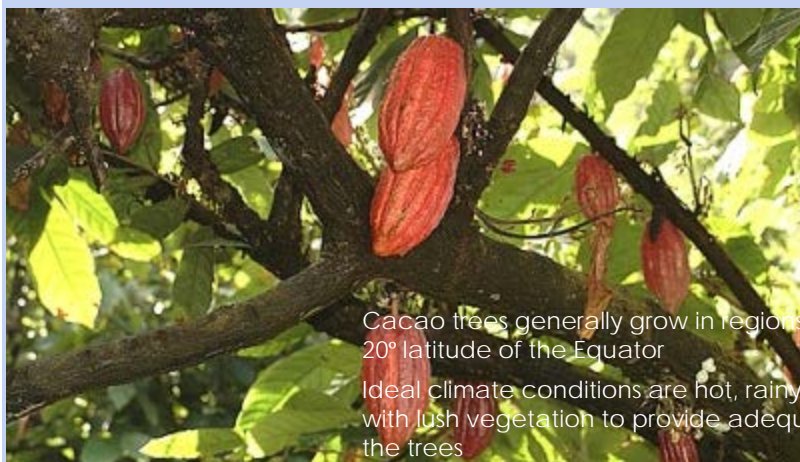


Cocoa Market Update



Cacao trees generally grow in regions located within 20° latitude of the Equator
 Ideal climate conditions are hot, rainy tropical areas with lush vegetation to provide adequate shading for the trees

A typical pod contains 20 to 50 beans and approximately 400 dried beans are required to make one pound of chocolate

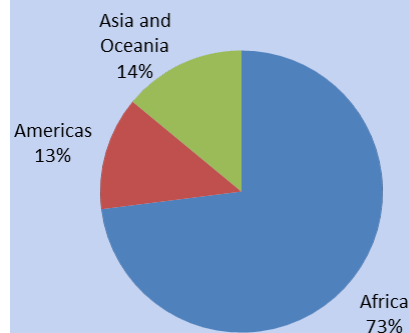
INTRODUCTION TO COCOA MARKET

Cocoa serves as an important crop around the world: a cash crop for growing countries and a key import for processing and consuming countries. Cocoa travels along a global supply chain crossing countries and continents. The complex production process involves numerous parties including, farmers, buyers, shipping organizations, processors, chocolatiers, and distributors. Cultivation of cocoa at the farm level is a delicate process as crops are susceptible to various conditions including weather patterns, diseases, and insects. Unlike larger, industrialized agribusinesses, the vast majority of cocoa still comes from small, family-run farms, who often confront outdated farming practices and limited organizational leverage. A steady demand from worldwide consumers draws numerous global efforts and funds committed to support and improve cocoa farm sustainability.

Cocoa trades on two world exchanges: London (LIFFE - Pound) and New York (ICE - USD). In 2011, trading volume of cocoa futures on the Intercontinental Exchange (ICE) was 4.95 million metric tonnes, outpacing production by 750,000 tonnes. Conversely, ICE traded 3.8 million tonnes in 2010, 390,000 tonnes less than total production. Comparatively, ICE traded 5.2 million metric tonnes of coffee futures in 2011 and 5.5 million metric tonnes in 2010.¹

KEY COCOA FACTS

World Producers of Cocoa



Major Producing Countries

Africa: Cote d'Ivoire (40% global), Ghana, Nigeria, Cameroon

Asia and Oceania: Indonesia, Malaysia, Papua New Guinea

Americas: Brazil, Ecuador, Colombia

Small cocoa farms provide more than 90% of world cocoa production

In Africa and Asia, a typical farm covers 2 to 5 hectares (4.9 -12.3 acres)

5-6 million cocoa farmers exist worldwide

40-50 million people depend on cocoa for their livelihood

¹ ICE Market Data: <https://www.theice.com/marketdata/reports/ReportCenter.shtml>

In November 2011, global sales of chocolate confectionery crossed \$100 billion for the first time, with consumer demand for chocolate anticipated to continue increasing and likely outpacing supply (*Bloomberg*).

SUPPLY: PRODUCTION

Numerous cocoa market experts and analysts provide reports based on historical, current, and projected levels. Cocoa bean production is closely monitored as trade balances, pricing, and futures contracts depend largely on supply side factors.

As depicted below, total production has increased in absolute terms from 3.66 million metric tonnes in 2007-2008 to 3.98 million metric tonnes in 2011-2012. Change in production has not been linear, however, and has fluctuated in various patterns among the different regions. Africa has been and is projected to remain the principal cocoa producer with 73% market share last year.

	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	07/08 to 11/12
	Total	Total	Total	Total	Total	% Change
Total Production (000 tonnes)	3,667	3,507	3,569	4,197	3,987	8.73%
% Change	7.2%	-4.4%	1.8%	17.6%	-5.0%	
Total Africa	2,603	2,451	2,428	3,076	2,801	7.61%
% Change	9.5%	-5.8%	-0.9%	26.7%	-8.9%	
Cameroon	188	210	205	230	220	17.02%
Cote d'Ivoire	1,431	1,234	1,184	1,668	1,400	-2.17%
Ghana	730	730	740	860	870	19.18%
Nigeria	200	210	230	240	230	15.00%
Other Africa	55	67	69	78	81	47.27%
Total Asia & Oceania	614	596	642	563	623	1.47%
% Change	-3.3%	-2.9%	7.7%	-12.3%	10.7%	
Indonesia	500	490	530	450	500	0.00%
Malaysia	32	25	20	18	18	-43.75%
Other Asia	82	81	92	95	105	28.05%
Total Americas	450	459	499	558	563	25.11%
% Change	10.7%	2.1%	8.5%	12.0%	0.8%	
Brazil	170	155	159	197	185	8.82%
Ecuador	115	130	150	160	170	47.83%
Other Latin America	165	174	189	201	208	26.06%

Source: ICCO, USDA, Reuters, LMC Report February 2012

Dry weather patterns across West Africa early in the 2011/12 season caused forecasts of production shortfalls. However, increased rains through March 2012 have changed these projections. Production for the 2011/12 season is expected to approximately match demand.²

² <http://www.bloomberg.com/news/2012-03-15/cocoa-rally-fading-as-african-rains-erase-shortage-commodities.html>

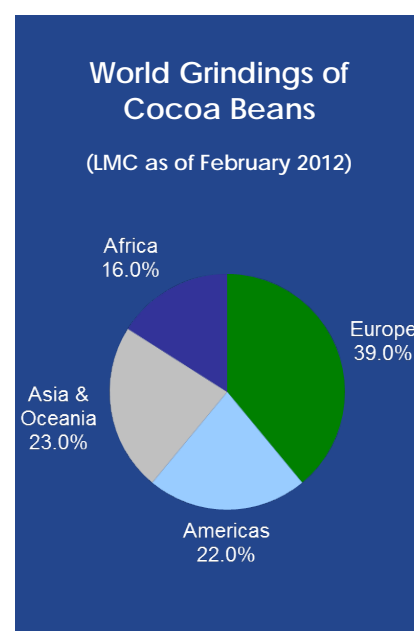
DEMAND: GRINDINGS

Once cocoa beans have been harvested, fermented, dried, and transported, cocoa processing is the next key step in preparation for commercial consumption. From supply of beans to demand by processors, it is important to analyze the import market for indications of cocoa trade balance. In general, grindings from cocoa beans serve as the key focus for market analysts for an overall view of anticipated demand relative to supply.

While processors of cocoa beans are located throughout the world, the highest percentage is based in Europe, followed by Asia & Oceania, the Americas, and then Africa.

Grindings of cocoa beans (000 tonnes)			
	2009-2010	2010-2011	2011-2012
Europe	1,492	1,595	1,554
Germany	361	439	421
Netherlands	500	525	490
Others	631	631	643
Share of Total	41.2%	41.7%	39.1%
Americas	801	839	865
Brazil	223	236	243
United States	380	390	400
Others	198	213	222
Share of Total	22.1%	22.0%	21.8%
Asia & Oceania	689	770	897
Indonesia	120	170	270
Malaysia	298	305	312
Others	271	295	315
Share of Total	19.0%	20.1%	22.6%
Africa	642	618	657
Cote d'Ivoire	390	340	380
Ghana	200	220	222
Others	52	58	55
Share of Total	17.7%	16.2%	16.5%
World Total	3,624	3,822	3,973
Origin Grindings	1,423	1,472	1,621

Note: Totals may differ from sum of constituents due to rounding.
Source: LMC as of February 2012



In terms of cocoa beans, market analysts provide ongoing tracking of grindings to compare and analyze against production estimates. Providing a breakdown of grindings per region for a three year time frame, ICCO shows a relatively constant market share for the Americas (~22%) and Africa (~17%) while Europe (~39%) has slightly declined and Asia & Oceania (~22%) have increased. Origin grindings have slightly increased to 41% out of total grindings over the time frame.

It is worthwhile to note the ranking of cocoa importing countries depends on the composition of the goods imported: trade is not only tracked by cocoa beans but also by semi-finished products of cocoa.

As an example of different metrics of interest, Global Trade Atlas tracks the following cocoa import data among others such as cocoa shells and cocoa paste. The Netherlands, as one of the main ports into Europe, leads in imports of beans; the US, with significant production of cocoa complementary food products, leads in imports of powder; and France, one of the biggest chocolate consumption per capita markets, leads in chocolate preparations.

2009 Imports (\$USD Value)

Cocoa Beans		Cocoa Powder and Cake		Chocolate Preparations	
Netherlands	2,075,860,000	United States	337,074,000	France	1,597,530,000
United States	1,228,060,000	Germany	110,855,000	Germany	1,465,840,000
Germany	976,677,000	France	100,286,000	United Kingdom	1,420,300,000
Malaysia	768,199,000	Japan	75,873,000	United States	1,407,960,000
France	493,246,000	Russia	73,286,000	Netherlands	762,134,000
Belgium	462,689,000	Spain	70,486,000	Canada	683,774,000
United Kingdom	426,156,000	Netherlands	67,114,000	Spain	535,130,000
Spain	244,124,000	Italy	61,799,000	Belgium	531,020,000
Singapore	208,586,000	Australia	59,417,000	Italy	480,966,000
Italy	206,966,000	China	47,147,000	Japan	479,535,000

Source: FAOSTAT as of March 2012

According to ICCO projections, stock levels are set to increase in the next year, with stocks/grindings ratio of 43% in 2013.³ ICCO projections are based on both macro- and microeconomic assumptions and are subject to change over time, as updated economic indicator information is received.

PRICE OF COCOA

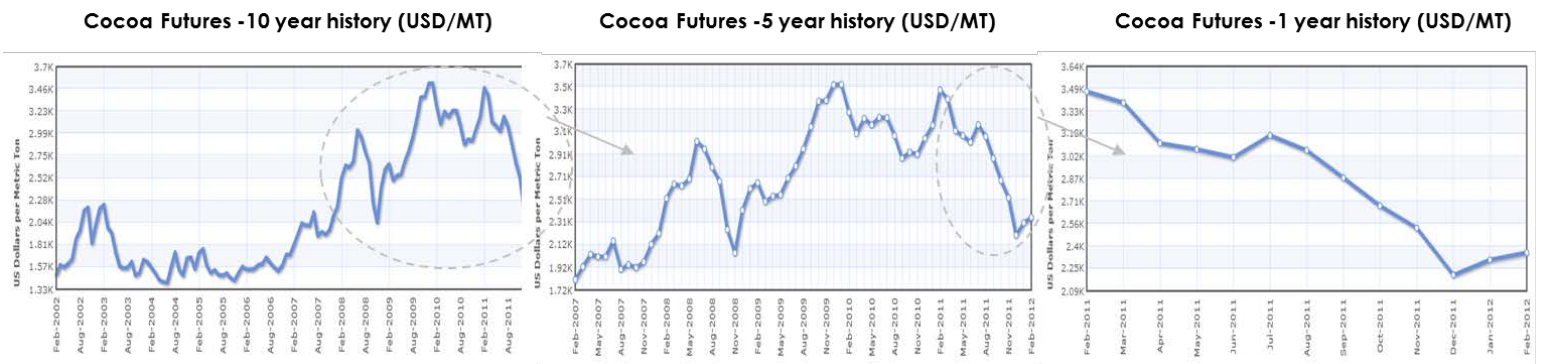
As mentioned, cocoa futures contracts are traded in London and New York with prices quoted in Great Britain Pounds / Metric Tonne and US Dollars / Metric Tonne. Cocoa is unique among soft commodities in its link to two currencies; the GBP-USD exchange rate assures the relationship between these two exchanges and offers an active arbitrage market to traders. According to the New York market (ICE), the GBP leads the price of cocoa by three calendar quarters, on average.

Information on cocoa prices:

- <https://globalderivatives.nyx.com/commodities/nyse-liffe>
- <http://www.liffe-commodities.com/>
- <https://www.theice.com/homepage.jhtml>
- https://www.theice.com/publicdocs/ICE_Cocoa_Brochure.pdf
- http://www.icco.org/statistics/daily_prices.aspx

³ ICCO: <http://www.icco.org> ; ICCO provides up to date publications on production and grindings statistics.

Cocoa prices are affected by various factors including stock/grind ratios, expectations for future production/demand, global food prices, and consolidation/fragmentation in cocoa trade and processing industries. These components generally set the tone for long-term trends in cocoa prices while trading by investment funds tend to drive movement in the short-term. Over the past five years, the price of cocoa overall has increased, but it has been prone to volatility from 2008 through 2011, spiking to a 30-year high of \$3,625/tonne in January 2010 and dropping back to \$2,200/tonne in December 2011.



Source: IndexMundi

Price increases may be attributed to, among other factors, delayed transport of cocoa to ports, limited producer selling, lower stockpiles, extreme weather conditions such as intense rainy or dry periods, and/or political instability in producing countries.

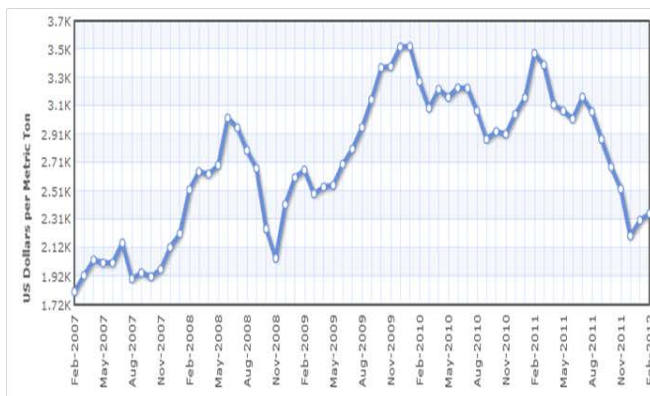
Price decreases may be attributed to, among other factors, favorable weather conditions, subsidized distribution of fertilizers and insecticides to farmers, expectations of a large crop or higher stockpiles, and/or decreased demand expectations among processors.

Price movement is also highly influenced by hedge fund managers and speculators with long and short positions in cocoa. This activity serves as a driving force behind short-term volatility. Speculative buying (long position) results in a price increase and selling (short position) results in a price decrease. Arbitrage between the two currency markets is an additional consideration. A weaker pound relative to the dollar puts downward pressure on cocoa as the attractiveness of supplies traded in New York decreases. A stronger pound relative to the dollar leads to price increases due to the appeal of cheaper commodities in New York.

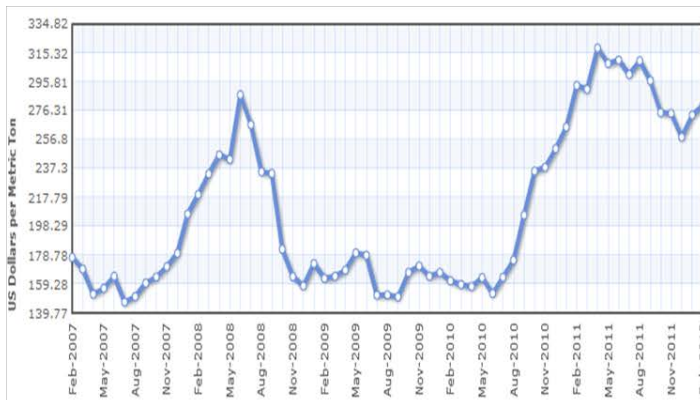
As demonstrated below, soft commodities saw dramatic overall price increases, following the global recessionary climate, which intensified in 2008. From a macroeconomic perspective, input cost inflation along with higher crude oil prices applied significant pressure to supply chain costs for commodities worldwide. Furthermore, the sharp decline in global equity markets in 2008 led funds to increase portfolio positions in commodities in subsequent years, driving prices to 5-year highs and increasing volatility in commodity prices between 2008 and 2012.

2007-2012 Monthly Price Levels

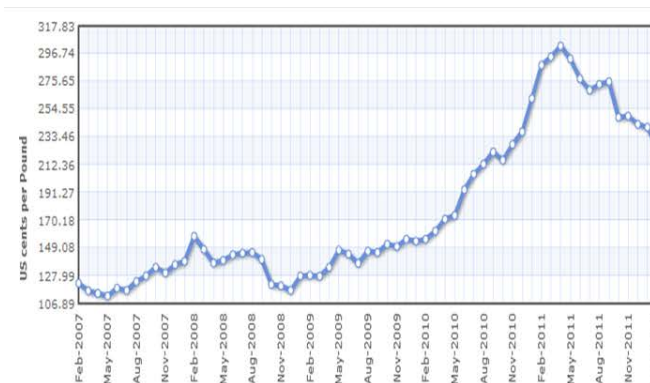
Cocoa beans monthly price



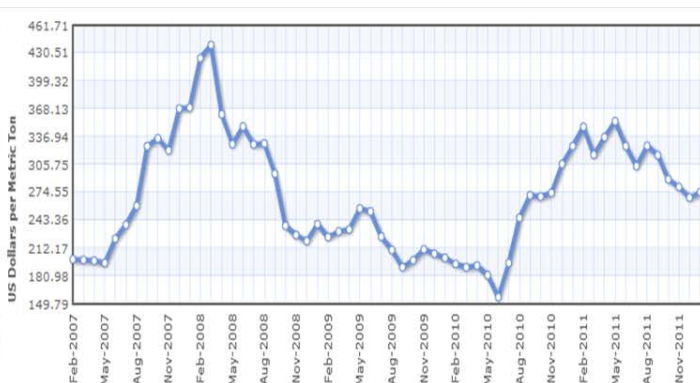
Maize (corn) monthly price



Coffee (other Mild Arabicas) monthly price



Wheat monthly price



Source: www.indexmundi.com

The fall in commodity prices from June of 2008 reflects, among other factors, lower input costs, falling oil prices, and deepening recessionary concerns of decreased consumer consumption among industrialized and developing countries. In addition, there has been significant pressure on prices as investment funds settle cash positions to bolster liquidity in light of global tightening of credit. The 2009 spike in cocoa prices has been attributed to growing fears of a weaker Ivorian crop for 09/10 season combined with recovering demand on the consumer side. The most recent price spike reflects significant political turmoil in Côte d'Ivoire during the first half of 2011, as sanctions on the country's cocoa exports decreased supply levels.

Due to a "bumper crop" in the 2010-2011 season, supply outpaced demand towards the beginning of the 2011-2012 season, causing prices to drop between October and December 2011.⁴ Prices began to rebound in January and early February 2012, as a lack of rain led to forecasts of a supply shortage later in the season.

⁴ Bloomberg: <http://www.bloomberg.com/news/2012-01-17/cocoa-falls-as-industry-is-well-stocked-barry-callebaut-says.html>

As referenced on page 2, Côte d'Ivoire produced 40% of the global cocoa supply in 2010/11; therefore the uncertainty around a new forward auction system for cocoa in February 2012 caused a further drop in global cocoa futures prices, as most exporters are expected to increasingly participate in the government-sponsored forward sales.⁵ Additionally, increased rains through mid-March led analysts to cut their shortage forecasts.⁶ This combination of factors may lead to further price drops as the 2011-2012 season continues.

As evidenced above, numerous economic and non-economic factors, on a macro and micro level, influence cocoa price movement. For further information on the cocoa market, please refer to sources referenced herein or www.worldcocoa.org.

⁵ *Bloomberg*: <http://www.bloomberg.com/news/2012-02-09/oil-natural-gas-gold-rise-cocoa-falls-commodities-at-close.html>

⁶ *Bloomberg*: <http://www.bloomberg.com/news/2012-03-15/cocoa-rally-fading-as-african-rains-erase-shortage-commodities.html>