

COMMODITY MARKETS OUTLOOK



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About the report

Commodity Markets Outlook is published four times a year in January, April, July and October. The report includes detailed market analysis for most primary commodities, including energy, metals, agriculture, precious metals, and fertilizers. It also includes historical and recent price data as well as price forecasts going up to 2025. Separately, commodity price data are published at the beginning of each month. The report and data can be accessed at: www.worldbank.org/commodities.

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Overview

Commodity prices are expected to remain weak for the remainder of 2014 and, perhaps through much of 2015. Crude oil has seen one of the sharpest declines, down more than 20 percent to \$83/barrel (bbl) on October 15 from this year's high of \$108/bbl in mid-June. Agricultural prices have weakened as well, down 6 percent since June. Metal prices remained relatively stable, from the sharp declines seen in 2011. A slowdown in the Euro area and emerging economies, a strong US dollar, increased oil supplies, and good crop prospects for most agricultural commodities have contributed to the recent gyrations in markets.

Energy and food price indices dropped about 6 percent each in 2014Q3 (Figures 1 and 2). The large spike in beverage prices reflects the rally in coffee (Arabica) prices due to weather problems in Brazil, the world's largest coffee supplier. Fertilizer prices gained almost 6 percent in 2014Q3; the metal price index made marginal gains as well. Precious metal prices changed little in 2014Q3 but they are down 4.5 percent from a year ago.

In the baseline scenario, which assumes a stable macroeconomic environment, **oil prices** are expected to average \$102/bbl in 2014, \$2/bbl lower than 2013 (Table 1). Prices are forecast to average \$96/bbl in 2015, a reflection of well-supplied markets and diminished geopolitical concerns, although tensions are still ongoing. Despite recent declines, natural gas prices in the United States are expected to remain elevated and strengthen even further

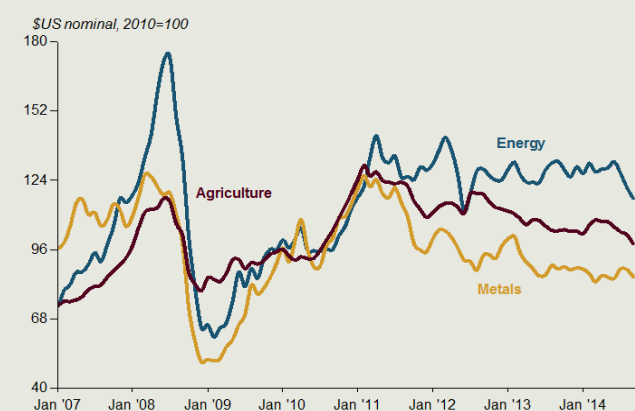
in the medium term in response to robust demand from energy intensive industries that are moving to the United States. **European and Japanese liquefied natural gas (LNG)** prices are expected to moderate due to weakening demand—currently the pricing of both gas prices is linked to the price of crude oil.

Agricultural prices, which declined more than 7 percent in 2013, are expected to fall further in 2014 under the assumption that current healthy crop conditions will persist for the remaining of the 2014/15 season. Yet, some variation is expected across different types of crops. Grain prices are projected to decline almost 20 percent in 2014 while prices of edible oils and meals will drop almost 6 percent. Prices of other food items, however, will gain almost 5 percent, driven by large increases in the meat category. Beverage prices will increase 22 percent, a reflection of gains made in coffee (Arabica) prices.

Metal prices are expected to decline 5.5 percent, on top of a similar decline last year. Fertilizer prices are projected to decline almost 12 percent in 2014 on capacity expansion in the United States. A similar decline is forecasted in precious metals as institutional investors are viewing them less attractive as “safe haven” investment vehicles; reduced demand by China will also contribute to the weakness.

There are multiple risks to these forecasts. Downside price risks in the oil market include weaker global demand, including from emerging economies, where most of consumption takes place as well as further substitution between oil and natural gas. The International Energy Agency expects demand from non-OECD economies to

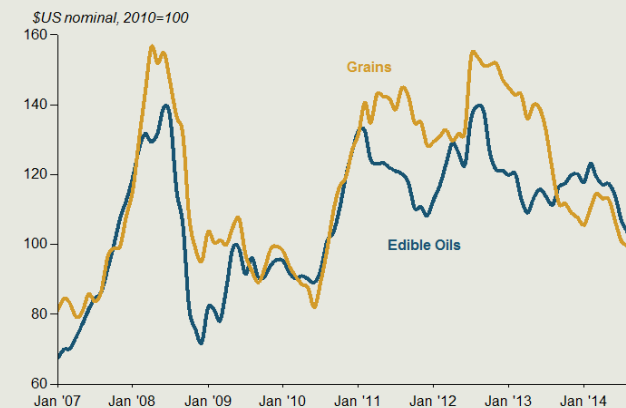
Figure 1 Commodity price indexes



Source: World Bank.

Note: Last observation is for September 2014.

Figure 2 Food price indexes



Source: World Bank.

Note: Last observation is for September 2014.

Table 1 Nominal price indices, actual and forecasts (2010 = 100)

	ACTUAL					FORECAST		CHANGE (%)		
	2009	2010	2011	2012	2013	2014	2015	2012/13	2013/14	2014/15
Energy	80	100	129	128	127	124	118	-0.1	-2.5	-4.6
Non-Energy	83	100	120	110	102	98	97	-7.2	-4.1	-0.5
Metals	68	100	113	96	91	86	87	-5.5	-5.4	1.2
Agriculture	89	100	122	114	106	103	102	-7.1	-3.1	-1.1
<i>Food</i>	93	100	123	124	116	107	107	-7.1	-7.0	-0.7
Grains	99	100	138	141	128	103	104	-9.3	-19.7	0.9
Fats and oils	90	100	121	126	116	109	110	-8.1	-5.6	0.1
Other food	90	100	111	107	104	109	106	-3.0	4.9	-3.1
<i>Beverages</i>	86	100	116	93	83	102	96	-10.1	22.2	-5.6
<i>Raw Materials</i>	83	100	122	101	95	93	93	-5.9	-2.7	0.3
Fertilizers	105	100	143	138	114	101	97	-17.4	-11.5	-3.5
Precious metals	78	100	136	138	115	102	100	-16.9	-11.0	-1.9
Memorandum items										
Crude oil (\$/bbl)	62	79	104	105	104	102	96	-0.9	-2.5	-5.7
Gold (\$/toz)	973	1225	1,569	1,670	1,411	1,275	1,240	-15.5	-9.7	-2.7

Source: World Bank.

Note: Actual and forecasted numbers refer to calendar averages.

account for 48.2 mb/d in 2015, up from 44.6 mb/d in 2012. On the contrary, OECD demand is expected to decline marginally during this period.

Risks in the oil market include a supply disruption in the Gulf or Central Asia. Brent prices gained more than \$5/bbl within a week in mid-June following the ISIS insurgency in Iraq. Although no physical disruption in the flow of crude oil took place, tensions in the region may have long-term implications given that a significant share of OPEC's capacity growth for the next five years is expected to come from Iraq.

Another source of uncertainty is associated with OPEC's reaction to changing global supply and demand conditions. During the past decade, OPEC has responded to weak prices by reducing supply. While the price threshold for taking action was initially set at \$35/bbl, it gradually increased to the \$100-110/bbl range. OPEC, which has not signaled any intention to reduce supply so far, will meet on November 27. Unless a decision on supply cuts is made earlier, it signals OPEC's inability or unwillingness to defend the \$100-110/bbl price range, in turn implying that the price weakness may persist for the rest of the year. Thus, price risks in oil markets are skewed on the downside.

In its October assessment, the U.S. Department of Agriculture maintained its comfortable outlook for most grains and oilseeds. The stock-to-use (S/U) ratio, a measure of whether markets are well supplied, is expected to increase for wheat and maize but decline marginally for rice. Most edible and oilseed markets are also expected to remain well supplied. Deteriorating El Niño conditions, mentioned often as a downside risk earlier in the year is less of a concern now, at least from a global perspective—though El Niño-linked adverse weather conditions has caused considerable crop damage in Central America.

Other often-mentioned risks for agricultural markets include the diversion of food commodities to the production of biofuels and trade policies. Both are less of a problem now compared to the peak of the price boom a few years ago. Production of biofuels has increased marginally during the past three years while there have been no export restrictions on food commodities. Lastly, investment fund activity (sometimes viewed as a source of price volatility), has stabilized.

The price outlook for metals depends on new supplies coming on board and, more importantly, on China's growth prospects, as the country consumes almost half of global metals supplies.

Focus: The role of income growth in commodities

Income growth, especially in emerging economies, has played a key role in post-2000 commodity price increases. This section argues that this role has been uneven across commodity groups. Metal prices have been affected the most by growth, especially that in China's manufacturing sector—China currently consumes almost half of world's metals, up from a mere 5 percent two decades ago. Income growth has been the key driver in energy prices; during 2004-13, oil consumption increased by 40 percent in non-OECD economies, while it declined 7 percent in OECD economies. Yet, the effect of income growth on agricultural commodities (including food) is mixed and limited.

Despite the recent weakness across many commodities, most prices are still high compared to recent history. For example, energy and food prices will be on average 150 and 60 percent higher, respectively, in 2014 than 2000-02. Metal, fertilizer, and precious metal prices will be much higher as well (80, 110, and 210 percent, respectively). Numerous factors are associated with these commodity price trends. They include a weak US dollar, which strengthens demand and limits supply from non-US dollar commodity consumers and producers. High prices of energy and other inputs have also played an important role in driving metal and agriculture prices. Low levels of past investment (in turn a reflection of a prolonged period of low prices), along with low inventories have contributed to the boom. Lastly, ample liquidity due to low interest rates and quantitative easing policies

in major high-income economies over the past few years are believed to have supported commodity prices as well. In the case of agriculture, prices have been affected by the diversion of food commodities to the production of biofuels as well as frequent extreme weather events.

Yet, strong and sustained economic growth in emerging economies, notably China, has been the most frequently discussed driver of commodity prices, not only as a cyclical factor but also as a key cause of the post-2000 super cycle—a primarily demand-driven price cycle that lasts several decades instead of the few years typically associated with the cyclicity of economic activity. Indeed, GDP and industrial production in emerging economies (where most of the growth in commodity consumption takes place) grew at an annual rate of 6.3 and 7.8 percent, respectively, during 2002-2012, the highest rate in any 10-year period over the past four decades. During the same period China's GDP and industrial production grew at an average annual rate of 10.6 and 14.7 percent, respectively.

The link between income growth and the post-2000 price increases, was first mentioned in the context of a super-cycle by Rogers (2004) and Heap (2005). In a conceptually related framework, Gordon and Rouwenhorst (2004) showed that diversified investment in commodities has a slightly lower risk than investment in equities, thus rendering commodities an effective risk-lowering mechanism. Other authors began casting the price boom in terms of a super cycle as well, including Cuddington and Jerrett (2008), Jerrett and Cuddington (2008), Stürmer (2013), Erten and Ocampo (2013), and Jacks (2013).

Figure F.1 Consumption of six base metals

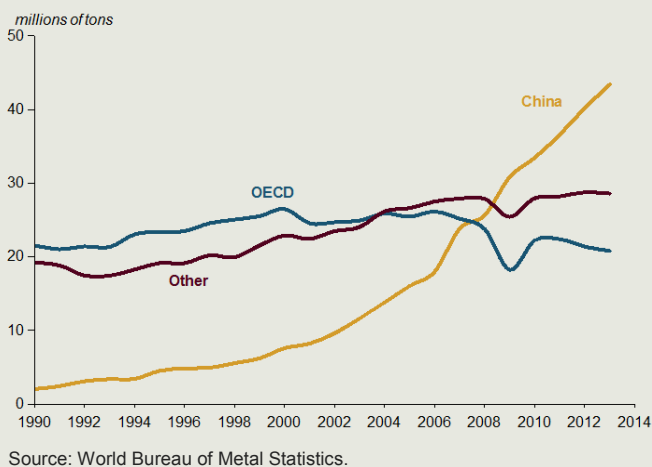
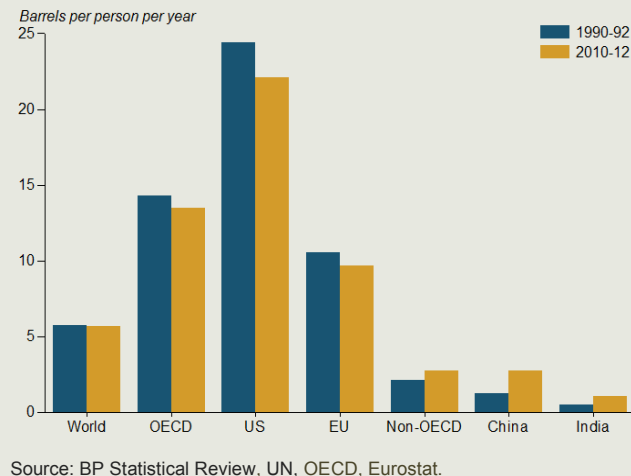


Figure F.2 Per capita crude oil consumption



Indeed, most industrial commodities have experienced an unprecedented consumption boom during the past 15 years. In 2012, China consumed almost half of the 91 million tons of metals produced globally, up from only 4 percent of global supplies of 43 million tons in 1990 (Figure F.1). In contrast, OECD economies consumed as much metals in 2012 as they did in 1990. Similarly, crude oil consumption increased by 40 percent during 2004-14 in non-OECD economies, while it declined 7 percent in OECD economies. In 2014, non-OECD economies will consume more oil than OECD economies for the first time in history—yet, on a per capita basis OECD economies consume 5 times more oil than non-OECD ones (Figure F.2)

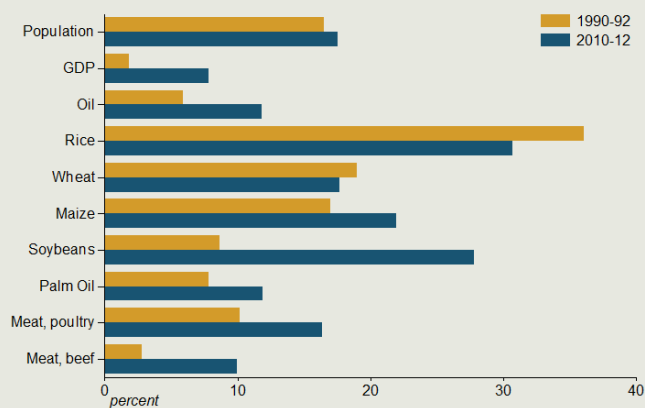
While there is a broad consensus on the role of income growth in industrial commodities, this is not the case for agriculture as reflected in debates in popular media. Krugman (2008) argued that the upward pressure on grain prices is due to the growing number of people in emerging economies, especially China, who are becoming wealthy enough to emulate Western diets. Likewise, Wolf (2008) concluded that strong income growth in emerging economies, including China and India, was the key factor behind the post-2007 increases in food prices. Similarly, Bourne (2009) noted that demand for grains has increased because people in countries such as China and India have prospered and moved up the food ladder.

Yet, the share in global consumption of most agricultural commodities by large emerging economics has not increased during the recent price boom as dramatically as often assumed (Figures F.3 and F.4). Indeed, this has been noted by numerous authors. For example,

Alexandratos (2008) concluded that China’s and India’s combined average annual increment in grain consumption was lower in 2002-08 than in 1995-2001. In a similar vein, FAO (2008) noted that since 1980, imports of cereals in these two countries have been trending down, on average by 4 percent per year, from an average of 14.4 million tonnes in the early 1980s to 6.3 million tonnes over the past three years. It also noted that China has been a net exporter of cereals since the late-1990s, with one exception during 2004-05. Similarly, India has been a net importer of these commodities only once, during 2006-07, since the beginning of the twenty-first century. Numerous other studies have reported similar findings regarding consumption patterns, including Alexandratos and Bruinsma (2012), Sarris (2010), Baffes and Haniotis (2010), FAO (2009), and Lustig (2008). In fact, Deaton and Drèze (2008) found that, despite increasing incomes, there has been a downward trend in calorie intake in India since the early 1990s.

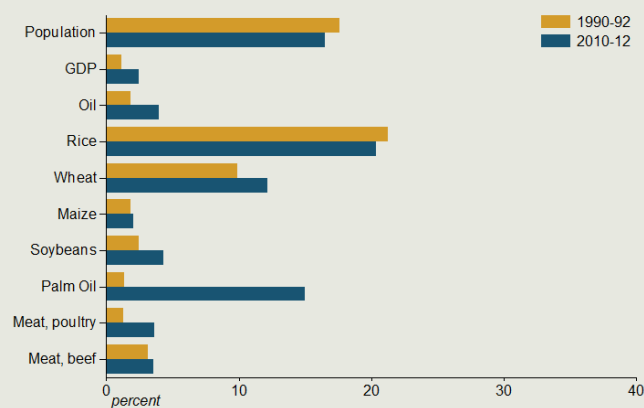
The dichotomy regarding the response of commodity prices to income is confirmed by the empirical literature. Food commodities are subject to Engel’s Law of less than unitary income elasticity, whereas metals and energy commodities are not. Indeed, Baffes and Etienne (2014) concluded that income elasticity for most food commodities is either small or close to zero. In contrast, income elasticity of metals (proxied by industrial production) exceeds unity by far (see, for example, Baffes 2007, Labys, Achouch, and Terraza 1999, Issler, Rodrigues, Burjack 2013, and Baffes and Savescu 2014). Likewise, the income elasticity of energy has been estimated to be around unity, based on a literature review by Webster, Paltsev, and Reilly (2008).

Figure F.3 China’s importance in key commodities



Source: World Bank.

Figure F.4 India’s importance in key commodities



Source: World Bank.

Energy

The World Bank’s energy price index plunged in 2014Q3 by 6 percent from a quarter before due to an across-the-board decrease in energy prices. Crude oil reversed course sharply (down 5.6 percent for the quarter) while coal and natural gas prices followed suit with declines of 6.6 and 11.6 percent, respectively. Such declines followed a period during which crude oil prices fluctuated within a remarkably tight band around \$105/bbl, which was also within OPEC’s “desired range” (Figure 3). In fact, 2011-13 has been one of the least volatile 3-year periods of the recent history of the oil market.

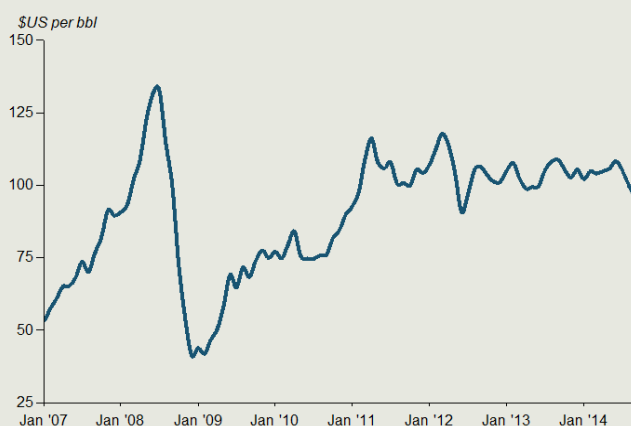
The weakness in oil prices reflects strengthening of the US dollar, ample supplies by both OPEC (including Iraq and Libya) and non-OPEC countries (notably the U.S.), and weakening global growth prospects, especially by emerging economies where most energy consumption takes place, but also in the Euro area.

Recent developments

For the last three years, rapid expansion of unconventional oil production in North America (shale and tar sands) offset supply disruptions in the Middle East almost barrel for barrel (Figure 4). These developments have kept the global oil market broadly in balance and prices within the \$100-110/bbl range. However, during 2014Q3, oil that was considered to be off the market began returning, especially from Libya and Iraq, which managed keep their output growing amid internal strife. The U.S. also continued its steady growth by adding of 1 million barrels per day (mb/d) to global output. The Saudi government—the balancing producer with the largest spare capacity—which would normally lead OPEC in production cuts to bring prices to the desired range has taken no action as of mid-October. On the contrary, it lowered its Official Selling Price in early October, to be followed shortly by Iran and Iraq, in turn signaling the willingness of these OPEC’s members to tolerate lower oil prices in favor of maintaining market shares.

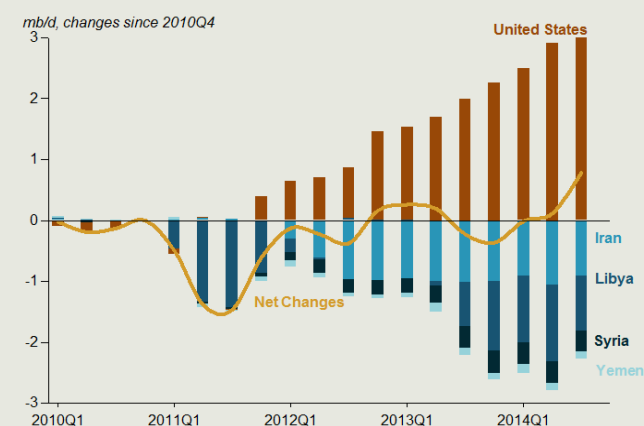
Increasing U.S. shale production, coupled with the growing Canadian tar sands output, contributed to a build-up of crude oil inventories at a time when U.S. oil consumption is moderating and natural gas supplies are increasing rapidly. The stock build-up caused West Texas Intermediate (WTI, the U.S. mid-continent price) to diverge from Brent (the international marker) since early 2011 (Figure 5). Although the spread reached a high of 30 percent late that year, it narrowed to 4 percent in September of 2014 as the southern leg of the Keystone pipeline was completed and

Figure 3 Oil prices (average of Brent, WTI, and Dubai)



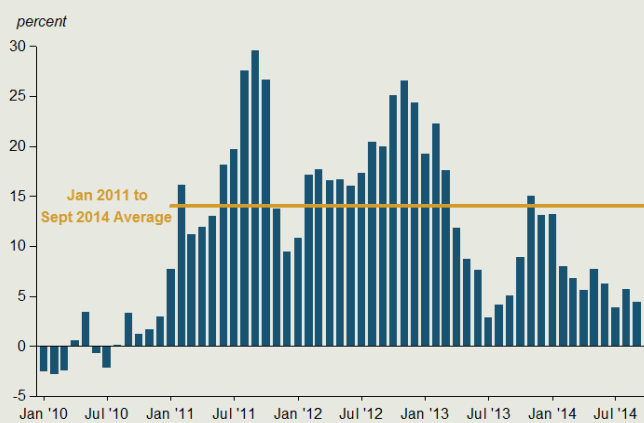
Source: World Bank.

Figure 4 U.S. crude oil supply growth and disruptions elsewhere



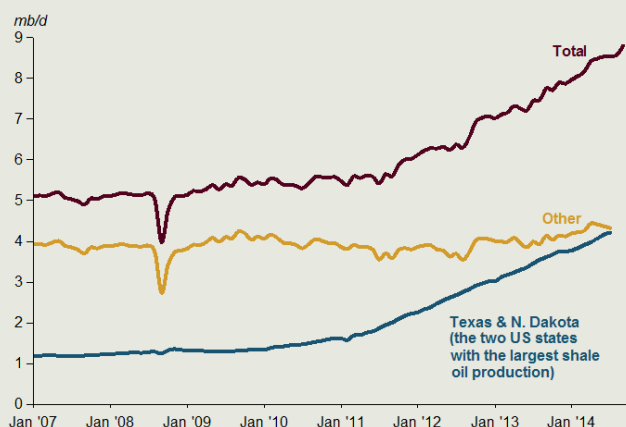
Source: World Bank, International Energy Agency.

Figure 5 Brent/WTI price differential



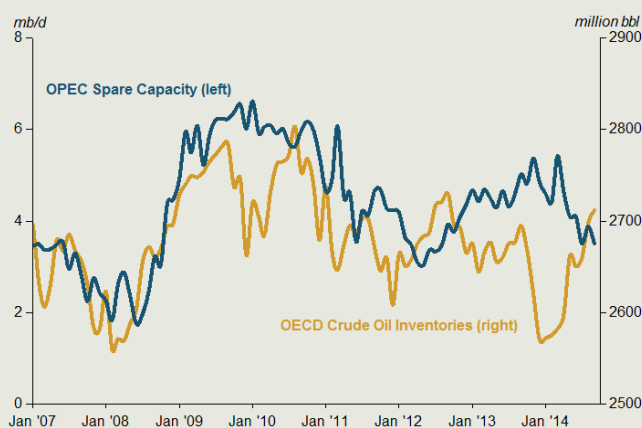
Source: World Bank.

Figure 6 U.S. crude oil production



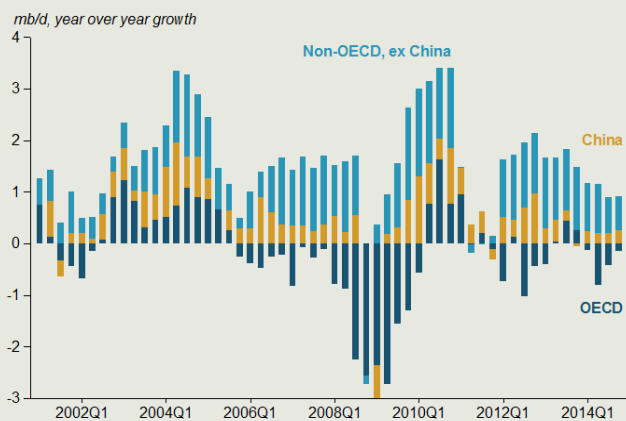
Source: U.S. Energy Information Administration.

Figure 7 OPEC spare capacity



Source: International Energy Agency.

Figure 8 World oil demand growth



Source: World Bank, International Energy Agency.

began transporting crude from Cushing towards the refineries in the Gulf of Mexico.

Non-OPEC oil output growth remains strong as producers added some 0.7 mb/d to global supplies in 2012 and an additional 1.3 mb/d during 2013, mainly reflecting earlier large-scale investments. Output picked up in 2014Q3 to 55.7 mb/d, up 0.8 mb/d from the same quarter in 2013. The U.S. added a cumulative 3 mb/d to global crude oil supplies since the beginning of 2011. Currently, the U.S. states of North Dakota and Texas, where most of shale oil production takes place, account for almost half of the total U.S. crude oil supplies—up from 25 percent three years ago (Figure 6).

Supply shortfalls in Libya and Nigeria during the first half of 2014 were partially reversed and further complemented by increases in Iraqi and Saudi output. All that resulted in an increase in OPEC output—it averaged 36.9 mb/d in 2014Q3, 0.5 mb/d up from the previous quarter. For 2013 as a whole, OPEC’s output declined by 0.7 mb/d. Yet, this production level is still 10 mb/d higher than in 2002Q2, OPEC’s lowest producing quarter in recent history.

OPEC’s spare production capacity that began declining in early 2010 has been reversed since 2012Q1 to reach almost 5 mb/d in 2013Q4, the highest since 2011Q1, before easing back to 3.6 mb/d in 2014Q3 on increased output (Figure 7). OECD stocks recovered to more than 2.7 billion barrels at the end of September from the sharp declines towards the end of 2013 when the cold winter depleted product stocks in North America.

World oil demand increased by 0.5 mb/d in 2014Q3 (y/y) with all the growth coming from non-OECD countries, 0.9 mb/d vs. -0.4 mb/d for OECD countries (Figure 8). In contrast to 2013, demand in OECD countries during first three quarters of 2014 contracted. Non-OECD countries are contributing positively to the global demand, though their contribution is softening as well. In fact, for the year as a whole, IEA estimates that the global demand will grow by 0.7 mb/d in 2014, the slowest annual expansion since the contraction following the 2008 financial crisis.

The natural gas market remains segregated by geography with large price differentials between the U.S., European, and Asian markets. Shale gas production growth in the US has created a glut of supplies that have been walled off from the global markets as the U.S. companies lack both export infrastructure and permits. Asian prices, on the other hand, remain largely linked to oil while European prices reflect a mixture of spot and oil-linked contracts. Demand for natural gas is seasonally weak during summer resulting in lower prices.

Outlook and risks

Nominal oil prices are expected to average \$102/bbl in 2014, \$2/bbl lower than 2013 (Table 1). This forecast is \$4/bbl lower than the July edition of the *Outlook* and for the most part reflects the easing of geopolitical tensions, ample supplies, moderating demand, and the strengthening of the US dollar on the macro side. Oil prices are expected to ease to \$96/bbl in 2015. In the longer term, real prices are expected to fall due to growing supplies of unconventional oil, efficiency gains, and (less so) substitution away from oil. The key assumption behind these projections reflects the upper-end cost of developing additional oil capacity from Canadian oil sands, currently estimated at \$90/bbl in constant 2014 dollars.

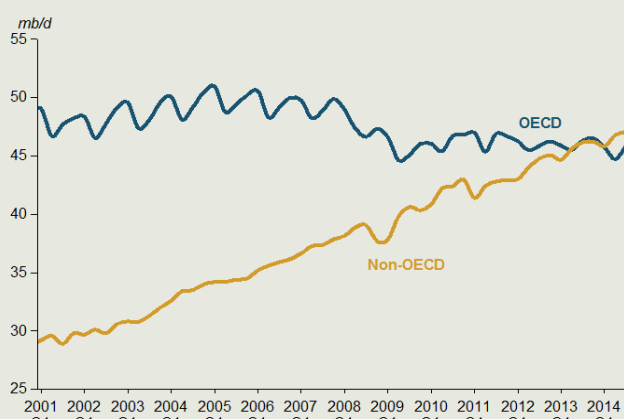
World demand for crude oil is expected to grow at less than 1.5 percent annually over the projection period, with all the growth coming from non-OECD countries, as has been the case in recent years (Figure 9). Consumption growth in OECD economies will continue to be subdued by slow economic growth and efficiency improvements in vehicle transport induced by high prices of the past few years—including a switch to hybrid, natural gas, and electrically powered transport. Pressure to reduce emissions due to environmental concerns is expected to dampen demand growth at the global level as well.

On the supply side, non-OPEC production is expected to continue its upward climb, as high prices in the past have prompted increased use of innovative exploration techniques (including deep-water offshore drilling and shale liquids) and the implementation of new extractive technologies to increase the output from existing wells.

Furthermore, prices of natural gas (in the U.S.) and coal are expected to remain low relative to crude oil and European and Japanese natural gas prices as has been the case during the past few years (Figures 10 & 11). Some convergence in prices may take place but its speed (which is expected to be slow) will depend on several factors, including the development of unconventional oil supplies outside the U.S., the construction of LNG export facilities and gas pipelines, relocation of energy intensive industries to the U.S., substitution by coal, and policies.

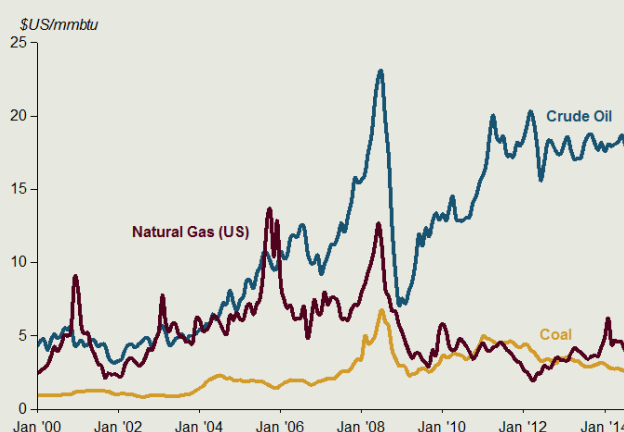
Short term risks in the oil market are currently on the downside, reflecting the diminished impact of geopolitical risks, OPEC’s reluctance to take action, and anemic growth in emerging economies. However, geopolitical risks may play a role in the medium term as Iraq is expected to account for half of OPEC’s growth in the next 5 years, while current (relatively) low prices may reduce investment in non-conventional technologies.

Figure 9 Global crude oil consumption



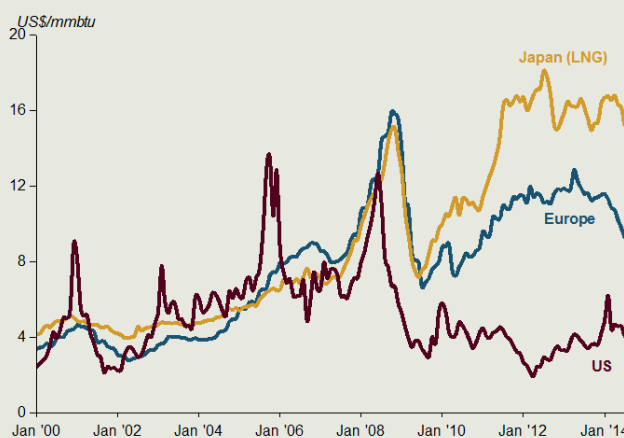
Source: International Energy Agency.

Figure 10 Energy prices



Source: World Bank.

Figure 11 Natural gas prices



Source: World Bank.

Metals

The World Bank metals price index reached a high of 126 in February 2011 (2010 = 100), up 164 percent since its December 2008 low (Figure 12). This increase, together with the sustained increases prior to the financial crisis, generated large new investments and a strong supply response resulting in a 3-year slow decline. Almost all of the additional metal supply went to meet demand from China, whose consumption share of world refined metals reached 47 percent at the end of 2013, up from 45 percent in the previous year (and up from 5 percent two decades ago).

The decline in prices was halted in 2014Q3, with the World Bank metals price index rising 2.6 percent (q/q). Base metals drove the increase in prices (up 5.3 percent, q/q) while iron ore prices experienced a steep drop (down 12 percent q/q). Iron ore prices are down for the third quarter in a row, reflecting expansion of low cost producers, particularly Australia. The rise in prices of base metals reflects expectations of tightening supply conditions, which have since dissipated and reversed course by the end of the quarter. On the demand side, Chinese imports have weakened as growth of imports of aluminum, zinc, copper and iron ore has slowed to zero or turned negative in three months to August (Figure 13).

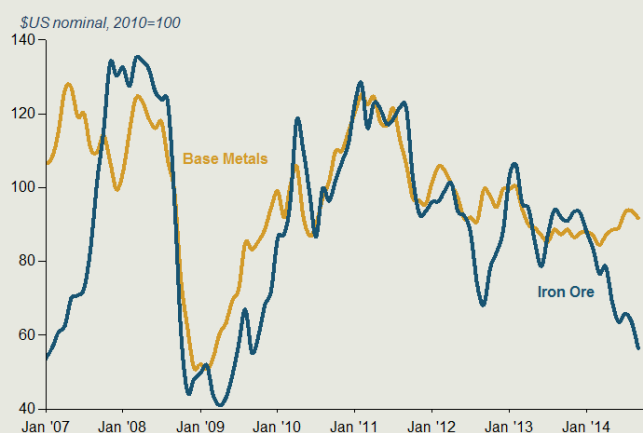
The strengthening in metals prices during 2014Q3 has been broad based. Prices of nickel, copper, lead, aluminum and zinc increased by 1, 3, 4, 10.5 and 11.5 percent, respectively, with tin being the only exception (down 5.3

percent q/q). Aluminum prices strengthened as production cuts outside of China have moved the market excluding China into deficit. However, the Chinese market remains in surplus and capacity continues to rise. Indonesia's export ban on unprocessed ore, which affected nickel the most, has been offset by surging exports from the Philippines. Zinc prices have increased on continuously falling inventories and concerns that future mine closures will leave the market in deficit. Prices of tin, meanwhile, have been on decline as demand from China has been weak and as exports from Myanmar compensated for production reductions and export limits in Indonesia.

Global inventories of metals at major metals exchanges declined by 5.5 percent during 2014Q3. For example, nickel inventories are down 58 percent at end-2014Q3 (y/y). Aluminum inventories, which have been rising since end-2008, decreased 12 percent during the same period, but they remain near their 10-year peaks. However, a substantial volume of aluminum inventories are tied up in warehouse financing arrangements and are not available to the market. Inventories of lead, zinc, tin and copper are all down (between 10-60 percent, respectively) over a year ago, giving some credence to the notion of tightening markets.

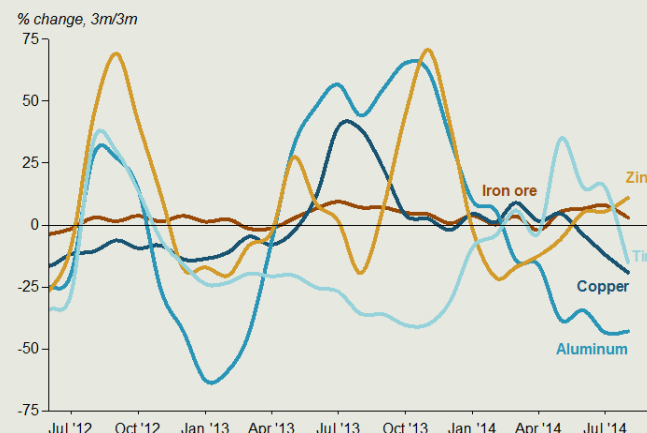
Metal prices are expected to decline by more than 5 percent in 2014 (which comes on top of last year's 5.5 percent drop) as new supplies will be coupled with weaker demand by China. Specifically, iron ore is expected to decline the most in 2014 (-26 percent), followed by copper (-5.6 percent). Lead and tin prices are not expected to change much, while zinc and nickel prices will gain 13 and 16 percent respectively.

Figure 12 Metals prices



Source: World Bank.

Figure 13 China's imports of metals



Source: China Customs, World Bank.

Precious metals

The World Bank precious metals price index, which declined 0.5 percent in 2014Q3 compared to the previous quarter, is 4.5 percent lower than a year ago (Figure 14). The index fell to a four-year low in September, with platinum, gold and silver down 1.3, 3.6 and 8 percent (y/y), respectively.

After finding some price support in 2014H1 due to geopolitical risks, fundamental weakness of the markets contributed to the declines in 2014Q3. Physical demand for precious metals by traditional buyers, notably China and India, is off compared to the last year, when a large drop in prices induced buying. Outflows from exchange traded funds (ETFs) continuing in 2014Q3 at 2 percent (q/q) rate with holding down 13 percent (y/y) as investors expect normalization of U.S. monetary policy.

The recent weakness in gold prices has prompted a number of mergers and acquisitions in South Africa's gold mining industry, with companies seeking to reduce operating costs and insulate investors from labor strike risks. The overall weakness in precious metal prices is likely to persist and the index is expected to average 11 percent lower in 2014 as institutional investors consider these commodities as less "safe haven" asset holdings. Precious metal prices are expected to fall an additional 2 percent in 2015. Long-term price pressures are predominantly on the downside and are expected to become more pronounced when the U.S. Federal Reserve eventually raises interest rates.

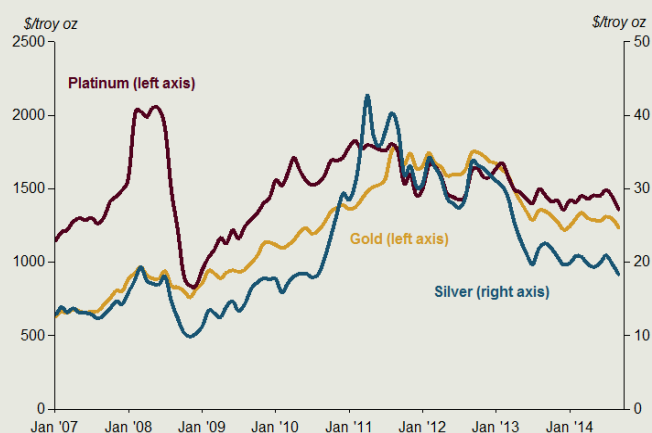
Fertilizers

Although fertilizer prices reversed their downward path in 2014Q3 (up 4.9 percent), they are 6 percent down since a year ago and 60 percent lower since their mid-2008 all-time high (Figure 15). Fertilizers are a key input to the production of grains and oilseeds, often exceeding half of purchased input costs in the agricultural sectors of high income countries. Because natural gas is used to produce nitrogen fertilizers, the recent energy revolution and the resulting lower natural gas prices in the U.S. is impacting the global fertilizer industry. Many fertilizer companies are building plants in the U.S. to utilize lower natural gas prices, including a recent corporate deal between a U.S. and an European fertilizer company, which, if finalized will form world's largest producer of nitrogen fertilizer.

The fertilizer price index is expected to decline 11.5 percent in 2014 and an additional 3.5 percent next year. Such declines come on top of the 13 percent drop in 2013. Yet, individual components of the index will follow different paths. Phosphate rock and potassium chloride will decline almost 25 percent each in 2015, urea will average 6.5 percent lower, but TSP and DAP will make some moderate gains. This outlook is based on the assumption that natural gas price in the U.S. will increase moderately.

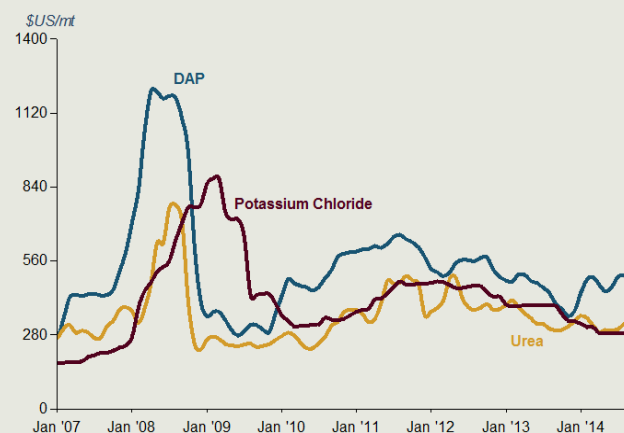
Short term price risks are balanced and depend on whether natural gas prices follow the projected path. However, in the longer term, stronger than expected demand growth from developing economies could put

Figure 14 Precious metal prices



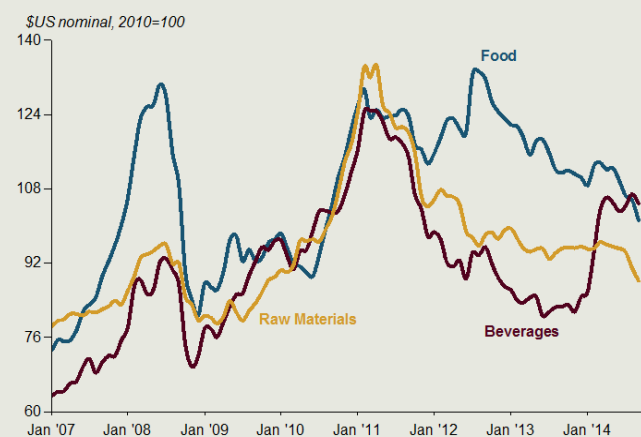
Source: World Bank.

Figure 15 Fertilizer prices



Source: World Bank.

Figure 16 Agriculture price indices



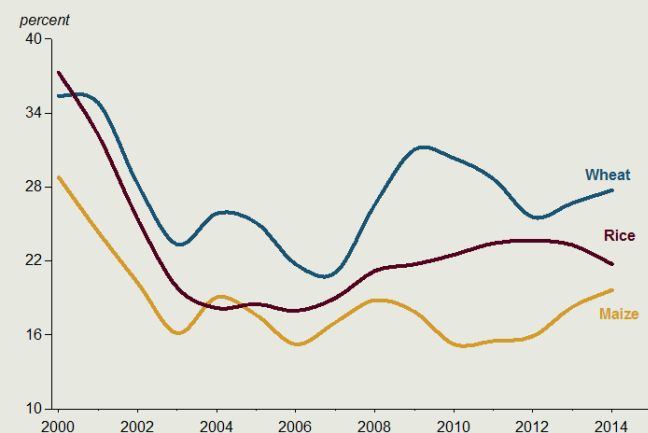
Source: World Bank.

Table 2 Global production (million tons)

	Maize	Rice	Wheat	Soybeans	Palm oil
1960/61	199.6	150.8	233.5	-	-
1970/71	268.1	213.0	306.5	42.1	19
1980/81	408.7	269.9	435.9	80.9	4.9
1990/91	482.0	351.4	588.8	104.3	11.0
2000/01	591.8	399.3	583.3	175.8	24.2
2005/06	700.7	417.9	618.9	220.9	35.8
2006/07	716.6	420.5	596.5	236.3	37.4
2007/08	795.5	432.9	612.7	219.0	41.2
2008/09	800.9	449.1	683.5	211.9	44.2
2009/10	825.6	440.9	687.1	260.5	46.1
2010/11	835.9	450.0	650.8	263.9	48.8
2011/12	889.3	467.0	695.9	239.7	52.1
2012/13	868.6	472.0	658.3	267.8	56.0
2013/14	988.6	476.6	715.1	285.0	59.6
2014/15	990.7	475.5	721.1	311.2	63.3

Source: U.S. Department of Agriculture (October 2014 update).

Figure 17 Stocks-to-use ratios for wheat, maize, and rice



Source: U.S. Department of Agriculture (October 2014 update).

Agriculture

Agricultural prices experienced broad-based declines in 2014Q3 with the overall agricultural price index down 5 percent for the quarter and 3 percent lower than a year ago (Figure 16). The key sub-indices, grains and edible oils & meals, are down 6.9 percent each. Other food items, however, gained 7 percent in the quarter, led by sharp increases in the meat category, notably beef and shrimp. Beverages prices gained little in 2014Q2 but they are up almost 30 percent from a year ago, due to a weather-induced rally in coffee (Arabica) prices.

In its October assessment (the sixth for the 2014/15 season), the U.S. Department of Agriculture has maintained its comfortable outlook for the upcoming season with global production of wheat projected to increase almost 1 percent while output of maize and rice will remain at roughly 2013/14 levels (Table 2). The stock-to-use (S/U) ratios are expected to increase in maize and wheat but decline for rice (Figure 17). The edible oil and meal outlook is comfortable as well with global supplies for the 8 most consumed edible oils set to reach a record 168.5 million tons in 2014/15, up 3.5 percent from last season's 162.8 million tons. Global production of oilseeds is expected to increase as well, from 489 million tons in 2013/14 to almost 507 million tons in 2014/15, a 3.7 percent increase.

Recent developments

Among key grains, the wheat and maize markets are well-supplied—the former much better than anticipated earlier in the year, while the latter will approach last year's record high. Wheat prices declined 18.5 percent in 2014Q3 on improved crop prospects in China, Central Asia, and the U.S. (Figure 18). Maize prices, which also declined by a similar magnitude in 2014Q3, are down almost 30 percent compared to a year ago, as favorable growing conditions drive U.S. production (the world's largest maize supplier), to an all-time high.

Rice prices averaged \$433/ton during 2014Q3, up 10 percent for the quarter but 9 percent lower than a year ago. The U.S. Department of Agriculture Outlook assessed global rice production for the 2014/15 season at almost 475 million tons (slightly lower than last season's 477 million tons), consistent with a S/U ratio of 21.7 percent, lower than last season's 23.3 percent but well above the 2006/07 lows. The recent upward pressure in rice prices reflects worsening production prospects in India, Indonesia, Philippines, and Sri Lanka.

The edible oil and meal index declined almost 12 percent in 2014Q3 (Figure 19). This broad-based weakness reflects record area expansion in soybeans, with global production projected to reach an all-time peak both among producers in the U.S. and in South America. Weak imports of edible oils, especially by China and India, has played a role as well.

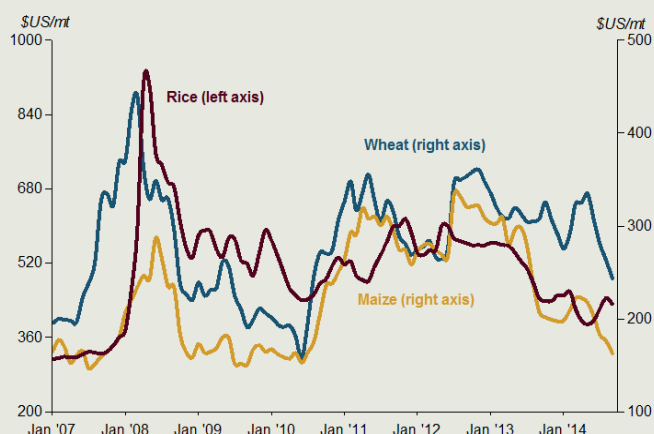
The beverage price index, which was relatively stable during the quarter, is 28 percent higher than a year ago, mostly aided by a rally in coffee (Arabica) prices (Figure 20). Because of drought in Brazil, the world's largest coffee supplier, the global coffee market will experience a deficit of almost 2 million bags. Coffee (Robusta) and tea prices moved very little during the quarter, but cocoa prices gained almost 5 percent (over 30 percent higher than a year ago) due to production problems in West Africa, especially Cote d'Ivoire. The risks to cocoa markets could be exacerbated if the Ebola epidemic spreads to cocoa producers in West Africa—the region accounts for almost half of world's cocoa supplies.

The raw material price index declined nearly 10 percent in 2014Q3, led by a sharp decline in natural rubber prices, 11 percent down in September alone, and almost 40 percent lower than a year ago (Figure 21). The decline reflects mostly weak demand, especially from the automotive sector (most natural rubber goes for tire manufacturing.) Cotton prices declined sharply as well, 17 percent down for the quarter, as the global cotton market entered the fifth consecutive season in which production exceeds consumption. The S/U ratio for cotton is expected to reach 83 percent in 2014/15 and 88 percent next season, the highest of the sector's history. Most cotton stocks have been accumulated by China.

Outlook and risks

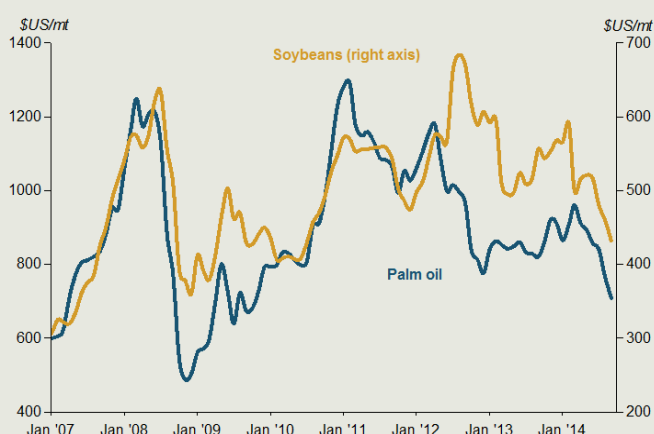
Agricultural commodity prices are expected to experience a moderate decline of 1.4 percent in 2014. Food commodity prices are expected to decline 3.1 percent. Grains have taken the largest hit, almost 20 percent down, while prices of edible oils and meals will decline 5.6 percent. Among grains, the largest decline will be in maize (27 percent down in 2014) and among edible oils soybean oil (13 percent down in 2014). Raw material prices are expected to decline as well, led primarily by weak demand prospects in the natural rubber market (its price is expected to decline almost 30 percent in 2014) and less so in cotton (expected to decline by 7 percent). Timber prices are expected to move in a mixed manner; a 6 percent fall in Sawnwood, Malaysia to be balanced by an equal increase in Logs, Cameroon.

Figure 18 Grain prices



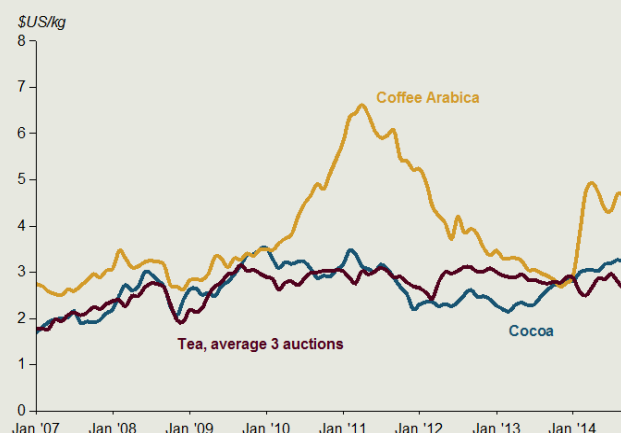
Source: World Bank.

Figure 19 Edible oil prices



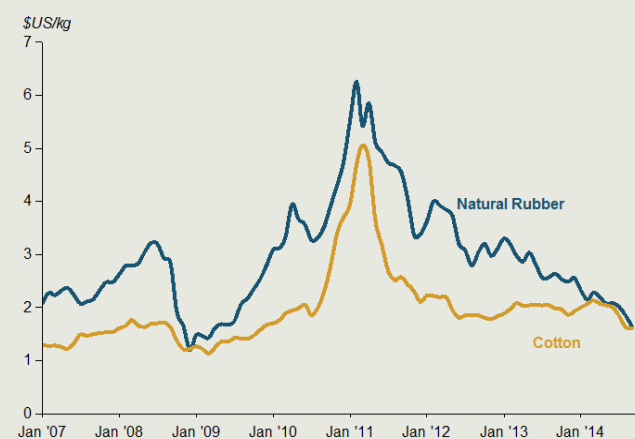
Source: World Bank.

Figure 20 Beverage prices



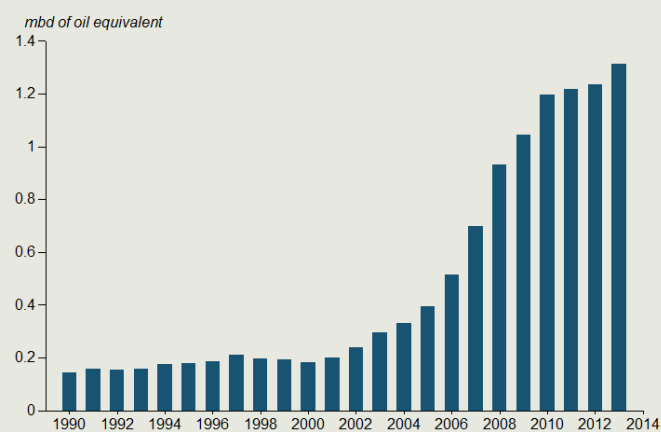
Source: World Bank.

Figure 21 Raw material prices



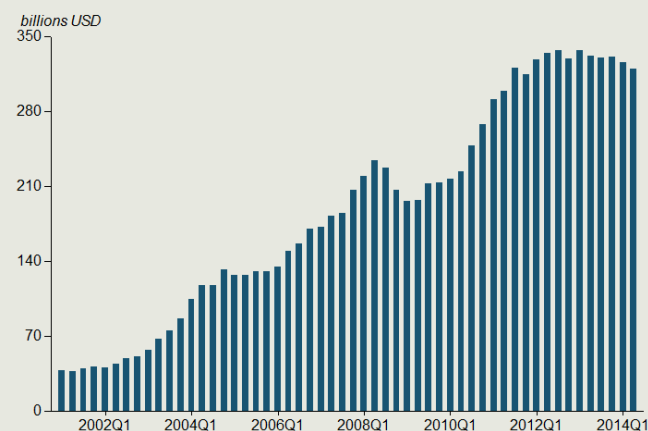
Source: World Bank.

Figure 22 Biofuels production



Source: International Energy Agency, BP.

Figure 23 Assets under management



Source: Barclayhedge.

A number of assumptions, along with associated risks, underpin the agricultural commodity outlook. On crop conditions, it is assumed that the 2014/15 season's outlook will be along normal trends. In its October 2014 assessment, the U.S. Department of Agriculture estimated the 2014/15 crop season's grain supplies (production plus stocks of maize, wheat, and rice) at 2.68 billion tons, marginally higher than last season's crop of 2.67 billion tons. This level of supplies is deemed adequate to maintain S/U ratios at normal levels, following the historical lows reached a few years ago. The upside price risks related to El Nino are also diminishing.

As noted above, oil prices are projected to average \$102/bbl in 2014, declining to \$96/bbl in 2015. Fertilizer prices are expected to fall considerably, almost 12 percent this year followed by another 3.5 percent decline next year. Given the high energy intensity of agriculture (it is estimated to be 4 to 5 times more energy intensive than manufacturing), the easing of fertilizer prices (some of which are closely linked to natural gas prices) will relieve the input price pressure that most food commodities have been subjected to during the past decade.

The outlook also assumes that biofuels will continue to play a key role in the behavior of agricultural commodity markets, but that role will be less important than in the recent past. Currently, production of biofuels corresponds to 1.31 mb/d of crude oil in energy-equivalent terms, up from 0.3 mb/d from a decade ago (Figure 22). Biofuels are projected to grow moderately over the projection period (much slower than earlier assessments) as policy makers are increasingly realizing that the environmental and energy independence benefits of biofuels by no means outweigh their costs. Indeed, global production of biofuels increased little during the past 3 years.

The outlook assumes that policy responses, such as export bans, are unlikely to be put in place in an environment of well-supplied agricultural markets. If the baseline outlook for production materializes, then even if policy actions are implemented, they are likely to be local and isolated events with minimal impact on world markets.

Lastly, investment fund activity, which was on the rise until 2011, has stabilized (Figure 23). According to Barclayhedge, which tracks developments in the hedge fund industry, assets under management in commodities (most of which have been invested in energy and agricultural markets) have been remarkably stable during the past three years (in fact, they averaged \$320 billion during 2014Q2, the lowest since 2011Q4). Such stability reflects both balanced in-flows compared to out-flows and low commodity price volatility.

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Annex

Historical commodity prices and price forecasts

Table A1.1 World Bank commodities price data

Commodity	Unit	Annual Averages			Quarterly Averages					Monthly Averages			
		Jan-Dec	Jan-Dec	Jan-Dec	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Jul	Aug	Sep	
		2011	2012	2013	2013	2013	2014	2014	2014	2014	2014	2014	
Energy													
Coal, Australia	\$/mt	a/	121.4	96.4	84.6	77.3	82.0	77.1	72.7	67.9	68.8	68.9	65.9
Coal, Colombia	\$/mt		111.5	84.0	71.9	65.8	71.1	68.4	64.8	66.8	66.1	68.8	65.5
Coal, South Africa	\$/mt		116.3	92.9	80.2	72.9	83.0	78.4	75.0	70.2	71.4	71.2	67.9
Crude oil, average	\$/bbl		104.0	105.0	104.1	107.4	104.5	103.7	106.3	100.4	105.2	100.1	95.9
Crude oil, Brent	\$/bbl	a/	110.9	112.0	108.9	110.1	109.4	107.9	109.8	102.1	107.0	101.9	97.3
Crude oil, Dubai	\$/bbl	a/	106.0	108.9	105.4	106.2	106.7	104.4	106.1	101.5	105.8	101.9	97.0
Crude oil, WTI	\$/bbl	a/	95.1	94.2	97.9	105.8	97.4	98.7	103.1	97.5	102.9	96.4	93.2
Natural gas, Index	2010=100		108.5	99.2	112.1	108.3	111.9	127.8	115.8	102.4	103.4	101.0	102.9
Natural gas, Europe	\$/mmbtu	a/	10.5	11.5	11.8	11.5	11.4	11.3	10.2	9.2	9.3	9.1	9.2
Natural gas, US	\$/mmbtu	a/	4.0	2.8	3.7	3.6	3.9	5.2	4.6	3.9	4.0	3.9	3.9
Natural gas, LNG Japan	\$/mmbtu	a/	14.7	16.6	16.0	15.6	15.7	16.7	16.4	16.0	15.2	15.5	17.2
Non Energy Commodities													
Agriculture													
Beverages													
Cocoa	\$/kg	b/	2.98	2.39	2.44	2.47	2.77	2.95	3.08	3.23	3.20	3.27	3.22
Coffee, arabica	\$/kg	b/	5.98	4.11	3.08	2.98	2.77	3.82	4.67	4.56	4.34	4.70	4.64
Coffee, robusta	\$/kg	b/	2.41	2.27	2.08	2.04	1.85	2.12	2.26	2.22	2.24	2.21	2.22
Tea, average	\$/kg		2.92	2.90	2.86	2.79	2.82	2.65	2.80	2.80	2.96	2.79	2.63
Tea, Colombo auctions	\$/kg	b/	3.26	3.06	3.45	3.37	3.77	3.72	3.60	3.44	3.51	3.49	3.34
Tea, Kolkata auctions	\$/kg	b/	2.78	2.75	2.73	2.76	2.56	1.94	2.81	2.94	3.29	2.86	2.68
Tea, Mombasa auctions	\$/kg	b/	2.72	2.88	2.40	2.23	2.14	2.29	1.98	2.01	2.10	2.03	1.89
Food													
Oils and Meals													
Coconut oil	\$/mt	b/	1,730	1,111	941	912	1,175	1,343	1,387	1,204	1,260	1,172	1,181
Copra	\$/mt		1,157	741	627	603	791	896	923	805	861	770	785
Fishmeal	\$/mt		1,537	1,558	1,747	1,699	1,600	1,583	1,693	1,767	1,806	1,773	1,723
Groundnuts	\$/mt		2,086	2,175	1,378	1,380	1,370	1,329	1,224	1,276	1,260	1,260	1,308
Groundnut oil	\$/mt	b/	1,988	2,436	1,773	1,694	1,537	1,311	1,228	1,345	1,325	1,350	1,360
Palm oil	\$/mt	b/	1,125	999	857	827	897	911	887	772	841	766	709
Palmkernel oil	\$/mt		1,648	1,110	897	871	1,057	1,278	1,262	988	1,116	943	904
Soybean meal	\$/mt	b/	398	524	545	552	570	582	566	493	502	509	468
Soybean oil	\$/mt	b/	1,299	1,226	1,057	1,006	991	977	967	865	888	857	851
Soybeans	\$/mt	b/	541	591	538	527	555	552	518	457	480	460	432
Grains													
Barley	\$/mt	b/	207.2	240.3	202.2	191.0	150.7	129.5	137.9	130.1	132.4	134.6	123.5
Maize	\$/mt	b/	291.7	298.4	259.4	241.9	199.4	209.9	214.0	174.1	182.7	176.4	163.1
Rice, Thailand 5%	\$/mt	b/	543.0	563.0	505.9	477.3	442.7	443.7	393.3	433.0	422.0	445.0	432.0
Rice, Thailand 25%	\$/mt		506.0	543.8	473.0	435.7	408.9	375.0	351.3	400.0	375.0	414.0	411.0
Rice, Thailand A1	\$/mt		458.6	525.1	474.0	440.5	411.8	426.7	397.8	448.6	435.4	460.6	449.9
Rice, Vietnam 5%	\$/mt		513.6	434.4	392.4	383.1	397.2	391.2	388.6	435.2	420.9	442.6	442.1
Sorghum	\$/mt		268.7	271.9	243.3	219.2	202.1	224.2	219.4	184.3	193.0	185.4	174.3
Wheat, US HRW	\$/mt	b/	316.3	313.2	312.2	305.8	308.0	297.1	322.1	262.5	280.4	263.4	243.7
Wheat, US SRW	\$/mt		285.9	295.4	276.7	257.7	276.4	264.0	263.7	213.8	218.3	220.4	202.8
Other Food													
Bananas, EU	\$/kg		1.12	1.10	1.02	0.98	0.94	1.05	1.14	0.99	1.02	0.99	0.97
Bananas, US	\$/kg	b/	0.97	0.98	0.92	0.93	0.93	0.95	0.92	0.94	0.93	0.96	0.92
Meat, beef	\$/kg	b/	4.04	4.14	4.07	3.89	4.03	4.23	4.30	5.58	5.02	5.72	6.00
Meat, chicken	\$/kg	b/	1.93	2.08	2.29	2.34	2.31	2.31	2.40	2.49	2.48	2.49	2.50
Meat, sheep	\$/kg		6.63	6.09	5.65	5.56	6.06	6.32	6.70	6.49	6.74	6.43	6.28
Oranges	\$/kg	b/	0.89	0.87	0.97	1.14	0.83	0.78	0.84	0.77	0.78	0.77	0.77
Shrimp, Mexico	\$/kg		11.93	10.06	13.84	15.15	16.70	17.09	17.75	18.08	18.08	18.08	18.08
Sugar, EU domestic	\$/kg	b/	0.45	0.42	0.43	0.43	0.44	0.45	0.45	0.43	0.44	0.43	0.42
Sugar, US domestic	\$/kg	b/	0.84	0.64	0.45	0.45	0.46	0.47	0.55	0.56	0.55	0.56	0.56
Sugar, World	\$/kg	b/	0.57	0.47	0.39	0.38	0.39	0.37	0.40	0.38	0.40	0.38	0.35

Commodity	Unit	Annual Averages			Quarterly Averages					Monthly Averages			
		Jan-Dec 2011	Jan-Dec 2012	Jan-Dec 2013	Jul-Sep 2013	Oct-Dec 2013	Jan-Mar 2014	Apr-Jun 2014	Jul-Sep 2014	Jul 2014	Aug 2014	Sep 2014	
Raw Materials													
Timber													
Logs, Cameroon	\$/cum		484.8	451.4	463.5	464.1	476.5	479.6	480.0	464.0	474.0	466.1	451.8
Logs, Malaysia	\$/cum b/		390.5	360.5	305.4	301.1	296.3	289.8	291.5	286.5	292.7	289.2	277.6
Plywood	¢/sheets		607.5	610.3	560.2	552.3	543.6	531.5	534.7	525.5	536.9	530.4	509.1
Sawnwood, Cameroon	\$/cum		825.8	759.3	749.2	743.8	776.0	792.9	806.5	800.0	818.2	800.3	781.6
Sawnwood, Malaysia	\$/cum b/		939.4	876.3	852.8	846.0	882.7	901.9	917.3	910.0	930.6	910.3	889.0
Woodpulp	\$/mt		899.6	762.8	823.1	830.9	858.7	870.2	887.5	875.0	875.0	875.0	875.0
Other Raw Materials													
Cotton, A Index	\$/kg b/		3.33	1.97	1.99	2.02	1.92	2.07	2.04	1.70	1.85	1.63	1.62
Rubber, RSS3	\$/kg b/		4.82	3.38	2.79	2.59	2.53	2.25	2.12	1.84	2.02	1.85	1.64
Rubber, TSR20	\$/kg		4.52	3.16	2.52	2.35	2.31	1.98	1.73	1.63	1.69	1.66	1.53
Fertilizers													
DAP	\$/mt b/		618.9	539.8	444.9	432.1	366.1	476.1	458.9	495.3	499.4	505.0	481.6
Phosphate rock	\$/mt b/		184.9	185.9	148.1	143.2	110.0	104.4	110.0	111.7	110.0	110.0	115.0
Potassium chloride	\$/mt b/		435.3	459.0	379.2	391.9	341.6	314.0	287.0	287.0	287.0	287.0	287.0
TSP	\$/mt b/		538.3	462.0	382.1	366.0	301.3	365.9	369.2	413.0	411.5	417.5	410.0
Urea, E. Europe	\$/mt b/		421.0	405.4	340.1	307.5	313.9	337.5	296.0	316.4	301.7	321.9	325.6
Metals and Minerals													
Aluminum	\$/mt b/		2,401	2,023	1,847	1,783	1,767	1,709	1,800	1,990	1,948	2,030	1,990
Copper	\$/mt b/		8,828	7,962	7,332	7,086	7,163	7,030	6,795	6,996	7,113	7,002	6,872
Iron ore	\$/dmt b/		168	128	135	133	135	120	103	90	96	93	82
Lead	\$/mt b/		2,401	2,065	2,140	2,102	2,114	2,101	2,097	2,182	2,193	2,237	2,117
Nickel	\$/mt b/		22,910	17,548	15,032	13,956	13,909	14,661	18,468	18,584	19,118	18,600	18,035
Tin	\$/mt b/		26,054	21,126	22,283	21,314	22,897	22,636	23,146	21,915	22,424	22,231	21,091
Zinc	\$/mt b/		2,194	1,950	1,910	1,861	1,909	2,026	2,071	2,311	2,311	2,327	2,295
Precious Metals													
Gold	\$/toz c/		1,569	1,670	1,411	1,329	1,271	1,293	1,289	1,281	1,311	1,295	1,237
Platinum	\$/toz c/		1,719	1,551	1,487	1,451	1,396	1,427	1,446	1,433	1,492	1,446	1,359
Silver	\$/toz c/		35.2	31.1	23.8	21.4	20.8	20.5	19.7	19.7	20.9	19.7	18.4
World Bank commodity price indices for low and middle income countries (2010=100)													
Energy			128.7	127.6	127.4	130.2	127.7	128.3	129.7	121.6	127.0	121.2	116.7
Non Energy Commodities			119.8	109.5	101.7	99.2	98.6	99.1	99.3	96.8	98.3	97.6	94.4
Agriculture			121.6	114.5	106.3	104.3	103.6	105.5	106.6	101.2	103.2	102.1	98.4
Beverages			116.0	92.6	83.3	82.2	83.1	94.5	104.8	105.3	104.3	106.9	104.9
Food			122.5	124.5	115.6	113.2	111.2	111.8	111.5	104.5	106.5	105.6	101.3
Fats and Oils			120.5	126.1	115.9	113.8	119.2	120.1	116.1	102.3	106.9	103.2	96.9
Grains			138.2	141.3	128.2	121.6	109.5	110.1	110.9	97.7	101.0	99.1	92.9
Other Food			111.1	107.1	103.9	104.7	102.4	102.4	105.9	113.4	111.1	114.7	114.6
Raw Materials			122.0	101.3	95.4	94.1	95.4	95.6	95.6	91.2	94.4	91.0	88.2
Timber			117.3	109.1	102.6	101.6	104.6	105.8	107.4	106.3	108.7	106.6	103.7
Other Raw Materials			127.2	92.8	87.6	85.9	85.4	84.3	82.6	74.7	78.8	74.0	71.3
Fertilizers			142.6	137.6	113.7	108.2	97.9	102.5	95.8	101.5	99.1	102.3	103.1
Metals and Minerals			113.5	96.1	90.8	87.8	88.5	85.7	84.9	87.1	88.2	88.0	85.1
Base Metals	d/		113.1	98.0	90.3	87.1	87.6	86.5	88.3	92.9	93.4	93.7	91.7
Precious Metals			136.3	138.5	115.1	107.4	103.1	104.3	103.3	102.8	105.9	103.8	98.6

Notes: a/ Included in the energy index, b/ Included in the non-energy index, c/ Included in the precious metals index, d/ Metals and Minerals excluding iron ore.

Abbreviations: \$ = US dollar ; bbl = barrel ; cum = cubic meter ; dmt = dry metric ton ; kg = kilogram ; mmbtu = million British thermal units ; mt = metric ton ; toz = troy oz ; .. = not available.

Source: Bloomberg, Cotton Outlook, Datastream, Fertilizer Week, INFOFISH, INTERFEL Fel Actualités hebdo, International Cocoa Organization, International Coffee Organization, International Rubber Study Group, International Tea Committee, International Tropical Timber Organization, International Sugar Organization, ISTA Mielke GmbH Oil World, Japan Lumber Journal, MLA Meat & Livestock Weekly, Platts International Coal Report, Singapore Commodity Exchange, Sopesco News, Sri Lanka Tea Board, US Department of Agriculture, US NOAA Fisheries Service, World Gas Intelligence.

Table A1.2 World Bank commodities price forecast in nominal U.S. dollars

Commodity	Unit	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Energy														
Coal, Australia	\$/mt	84.6	710	75.0	77.2	79.4	818	84.1	86.6	89.1	917	94.4	97.2	100.0
Crude oil, avg, spot	\$/bbl	104.1	1015	95.7	96.6	97.4	98.3	99.2	100.2	101.3	102.3	103.4	104.5	105.7
Natural gas, Europe	\$/mmbtu	118	10.3	10.2	10.1	9.9	9.8	9.7	9.6	9.5	9.3	9.2	9.1	9.0
Natural gas, US	\$/mmbtu	3.7	4.4	4.7	4.9	5.1	5.3	5.5	5.7	6.0	6.2	6.5	6.7	7.0
Natural gas LNG, Japan	\$/mmbtu	16.0	16.5	15.8	15.4	15.1	14.7	14.4	14.1	13.7	13.4	13.1	12.8	12.5
Non Energy Commodities														
Agriculture														
Beverages														
Cocoa	\$/kg	2.44	3.10	2.85	2.78	2.71	2.64	2.57	2.50	2.44	2.38	2.32	2.26	2.20
Coffee, Arabica	\$/kg	3.08	4.40	4.10	4.04	3.97	3.91	3.85	3.79	3.73	3.67	3.61	3.56	3.50
Coffee, robusta	\$/kg	2.08	2.20	2.10	2.07	2.04	2.01	1.97	1.94	1.91	1.89	1.86	1.83	1.80
Tea, auctions (3), average	\$/kg	2.86	2.70	2.75	2.79	2.83	2.88	2.92	2.97	3.01	3.06	3.10	3.15	3.20
Food														
Oils and Meals														
Coconut oil	\$/mt	941	1350	1200	1166	1133	1101	1070	1039	1010	981	953	926	900
Groundnut oil	\$/mt	1773	1300	1400	1440	1480	1522	1565	1609	1655	1702	1750	1799	1850
Palm oil	\$/mt	857	825	820	818	816	814	812	810	808	806	804	802	800
Soybean meal	\$/mt	545	530	525	520	516	511	507	502	498	493	489	484	480
Soybean oil	\$/mt	1057	915	940	946	952	958	964	970	976	982	988	994	1000
Soybeans	\$/mt	538	490	500	502	504	506	508	510	512	514	516	518	520
Grains														
Barley	\$/mt	202.2	130.0	140.0	143.6	147.2	151.0	154.8	158.7	162.8	166.9	171.2	175.5	180.0
Maize	\$/mt	259.4	190.0	195.0	197.4	199.8	202.2	204.6	207.1	209.6	212.2	214.8	217.4	220.0
Rice, Thailand, 5%	\$/mt	505.9	425.0	415.0	411.4	407.8	404.2	400.6	397.1	393.6	390.2	386.8	383.4	380.0
Wheat, US, HRW	\$/mt	312.2	283.0	285.0	284.0	283.0	282.0	281.0	280.0	279.0	278.0	277.0	276.0	275.0
Other Food														
Bananas, EU	\$/kg	0.92	0.93	0.94	0.94	0.94	0.93	0.93	0.93	0.93	0.93	0.92	0.92	0.92
Meat, beef	\$/kg	4.07	5.00	4.70	4.65	4.60	4.54	4.49	4.44	4.39	4.34	4.30	4.25	4.20
Meat, chicken	\$/kg	2.29	2.40	2.25	2.22	2.20	2.17	2.15	2.12	2.10	2.07	2.05	2.02	2.00
Oranges	\$/kg	0.97	0.80	0.83	0.84	0.85	0.86	0.88	0.89	0.90	0.91	0.92	0.94	0.95
Shrimp, Mexico	\$/kg	13.84	17.50	16.50	16.11	15.73	15.36	15.00	14.65	14.30	13.96	13.63	13.31	13.00
Sugar, World	\$/kg	0.39	0.38	0.37	0.37	0.37	0.36	0.36	0.36	0.36	0.36	0.35	0.35	0.35
Raw Materials														
Timber														
Logs, Cameroon	\$/cum	463.5	470.0	480.0	484.8	489.6	494.5	499.4	504.4	509.4	514.5	519.6	524.8	530.0
Logs, Malaysia	\$/cum	305.4	288.0	298.0	303.7	309.5	315.4	321.4	327.5	333.8	340.2	346.6	353.3	360.0
Sawnwood, Malaysia	\$/cum	852.8	905.0	915.0	930.3	945.8	961.7	977.7	994.1	1010.7	1027.6	1044.8	1062.2	1080.0
Other Raw Materials														
Cotton A Index	\$/kg	199	185	190	194	197	2.01	2.05	2.09	2.13	2.17	2.21	2.26	2.30
Rubber, Malaysian	\$/kg	2.79	1.98	2.10	2.16	2.22	2.29	2.36	2.42	2.50	2.57	2.64	2.72	2.80
Tobacco	\$/mt	4,589	5,000	4,500	4,480	4,459	4,439	4,419	4,399	4,379	4,359	4,339	4,320	4,300
Fertilizers														
DAP	\$/mt	444.9	480.0	445.0	444.5	444.0	443.5	443.0	442.5	442.0	441.5	441.0	440.5	440.0
Phosphate rock	\$/mt	148.1	110.0	105.0	103.4	101.8	100.3	98.7	97.2	95.7	94.3	92.8	91.4	90.0
Potassium chloride	\$/mt	379.2	295.0	300.0	301.0	302.0	303.0	304.0	305.0	306.0	307.0	308.0	309.0	310.0
TSP	\$/mt	382.1	390.0	380.0	376.9	373.8	370.7	367.7	364.7	361.7	358.7	355.8	352.9	350.0
Urea, E. Europe, bulk	\$/mt	340.1	318.0	300.0	297.9	295.9	293.9	291.8	289.8	287.8	285.9	283.9	281.9	280.0
Metals and Minerals														
Aluminum	\$/mt	1,847	1,875	1,925	1,946	1,968	1,990	2,012	2,034	2,057	2,080	2,103	2,126	2,150
Copper	\$/mt	7,332	6,920	6,880	6,872	6,864	6,856	6,848	6,840	6,832	6,824	6,816	6,808	6,800
Iron ore	\$/dmt	135	100	105	107	110	112	114	117	119	122	125	127	130
Lead	\$/mt	2,140	2,125	2,175	2,197	2,218	2,240	2,262	2,285	2,307	2,330	2,353	2,376	2,400
Nickel	\$/mt	15,032	17,475	17,000	17,097	17,195	17,294	17,393	17,493	17,593	17,694	17,795	17,897	18,000
Tin	\$/mt	22,283	22,200	22,500	22,738	22,979	23,223	23,469	23,717	23,968	24,222	24,479	24,738	25,000
Zinc	\$/mt	1,910	2,175	2,200	2,228	2,257	2,286	2,315	2,345	2,375	2,406	2,437	2,468	2,500
Precious Metals														
Gold	\$/toz	1,411	1,275	1,240	1,225	1,211	1,196	1,182	1,168	1,154	1,140	1,127	1,113	1,100
Silver	\$/toz	23.8	19.7	20.0	20.2	20.4	20.6	20.8	21.0	21.2	21.4	21.6	21.8	22.0
Platinum	\$/toz	1,487	1,420	1,400	1,384	1,369	1,353	1,338	1,323	1,308	1,293	1,279	1,264	1,250

Next update: January 2015.

Table A1.3 World Bank commodities price forecast in real 2010 U.S. dollars

Commodity	Unit	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Energy														
Coal, Australia	\$/mt	79.7	66.8	70.3	713	72.4	73.4	74.5	75.5	76.5	77.4	78.4	79.4	80.4
Crude oil, avg, spot	\$/bbl	98.1	95.5	89.7	89.2	88.8	88.3	87.8	87.3	86.9	86.4	85.9	85.5	85.0
Natural gas, Europe	\$/mmbtu	11.1	9.7	9.6	9.3	9.1	8.8	8.6	8.3	8.1	7.9	7.7	7.5	7.2
Natural gas, US	\$/mmbtu	3.5	4.1	4.4	4.5	4.6	4.8	4.9	5.0	5.1	5.2	5.4	5.5	5.6
Natural gas LNG, Japan	\$/mmbtu	15.0	15.5	14.8	14.3	13.7	13.2	12.7	12.2	11.8	11.3	10.9	10.5	10.1
Non Energy Commodities														
Agriculture														
Beverages														
Cocoa	\$/kg	2.30	2.92	2.67	2.57	2.47	2.37	2.27	2.18	2.09	2.01	1.93	1.85	1.77
Coffee, Arabica	\$/kg	2.90	4.44	3.84	3.73	3.62	3.51	3.41	3.30	3.20	3.10	3.00	2.91	2.82
Coffee, robusta	\$/kg	1.96	2.07	1.97	1.91	1.86	1.80	1.75	1.69	1.64	1.59	1.54	1.49	1.45
Tea, auctions (3), average	\$/kg	2.70	2.54	2.58	2.58	2.58	2.58	2.59	2.58	2.58	2.58	2.58	2.58	2.57
Food														
Fats and Oils														
Coconut oil	\$/mt	887	1270	1125	1078	1032	989	946	906	866	828	792	757	724
Groundnut oil	\$/mt	1672	1223	1313	1330	1349	1367	1385	1402	1420	1437	1454	1471	1488
Palm oil	\$/mt	808	776	769	756	744	731	718	706	693	680	668	656	643
Soybean meal	\$/mt	514	498	492	481	470	459	448	437	427	416	406	396	386
Soybean oil	\$/mt	996	860	881	874	867	860	853	845	837	829	821	813	804
Soybeans	\$/mt	508	461	469	464	459	454	449	444	439	434	429	423	418
Grains														
Barley	\$/mt	190.6	122.3	131.3	132.7	134.2	135.6	137.0	138.3	139.6	140.9	142.2	143.5	144.8
Maize	\$/mt	244.6	178.7	182.8	182.4	182.1	181.6	181.1	180.5	179.8	179.1	178.4	177.7	177.0
Rice, Thailand, 5%	\$/mt	477.0	399.7	389.1	380.2	371.6	363.0	354.5	346.0	337.7	329.4	321.3	313.4	305.7
Wheat, US, HRW	\$/mt	294.4	266.1	267.2	262.5	257.9	253.3	248.6	243.9	239.3	234.7	230.1	225.6	221.2
Other Food														
Bananas, EU	\$/kg	0.87	0.87	0.88	0.87	0.85	0.84	0.82	0.81	0.80	0.78	0.77	0.75	0.74
Meat, beef	\$/kg	3.84	4.70	4.41	4.30	4.19	4.08	3.98	3.87	3.77	3.67	3.57	3.47	3.38
Meat, chicken	\$/kg	2.16	2.26	2.11	2.06	2.00	1.95	1.90	1.85	1.80	1.75	1.70	1.65	1.61
Oranges	\$/kg	0.91	0.75	0.78	0.78	0.78	0.78	0.78	0.77	0.77	0.77	0.77	0.77	0.76
Shrimp, Mexico	\$/kg	13.05	16.46	15.47	14.89	14.34	13.80	13.27	12.76	12.27	11.79	11.33	10.88	10.46
Sugar, World	\$/kg	0.37	0.36	0.35	0.34	0.33	0.33	0.32	0.31	0.31	0.30	0.29	0.29	0.28
Raw Materials														
Timber														
Logs, Cameroon	\$/cum	437.1	442.0	450.1	448.0	446.2	444.1	441.9	439.5	437.0	434.4	431.7	429.0	426.3
Logs, Malaysia	\$/cum	288.0	270.8	279.4	280.7	282.0	283.3	284.4	285.4	286.3	287.2	288.0	288.8	289.6
Sawnwood, Malaysia	\$/cum	804.1	851.1	857.9	859.8	862.0	863.7	865.1	866.2	867.0	867.6	868.1	868.4	868.7
Other Raw Materials														
Cotton A Index	\$/kg	188	174	178	179	180	181	181	182	183	183	184	184	185
Rubber, Malaysian	\$/kg	2.63	1.86	1.97	2.00	2.03	2.06	2.08	2.11	2.14	2.17	2.20	2.22	2.25
Tobacco	\$/mt	4,327	4,702	4,219	4,140	4,064	3,987	3,910	3,833	3,756	3,680	3,605	3,532	3,459
Fertilizers														
DAP	\$/mt	419.5	451.4	417.2	410.8	404.6	398.3	392.0	385.6	379.1	372.8	366.4	360.1	353.9
Phosphate rock	\$/mt	139.7	103.4	98.5	95.6	92.8	90.0	87.3	84.7	82.1	79.6	77.1	74.7	72.4
Potassium chloride	\$/mt	357.5	277.4	281.3	278.2	275.2	272.1	268.9	265.7	262.5	259.2	255.9	252.6	249.4
TSP	\$/mt	360.2	366.8	356.3	348.3	340.7	333.0	325.3	317.8	310.3	302.9	295.6	288.5	281.5
Urea, E. Europe, bulk	\$/mt	320.7	299.1	281.3	275.4	269.7	263.9	258.2	252.5	246.9	241.3	235.9	230.5	225.2
Metals and Minerals														
Aluminum	\$/mt	1741	1763	1805	1799	1794	1787	1780	1773	1764	1756	1747	1738	1729
Copper	\$/mt	6,913	6,508	6,451	6,351	6,255	6,158	6,059	5,960	5,860	5,761	5,663	5,566	5,470
Iron ore	\$/dmt	128	94	98	99	100	101	101	102	102	103	103	104	105
Lead	\$/mt	2,018	1,998	2,039	2,030	2,022	2,012	2,002	1,991	1,979	1,967	1,955	1,943	1,930
Nickel	\$/mt	14,173	16,434	15,940	15,802	15,671	15,533	15,390	15,242	15,091	14,939	14,786	14,632	14,478
Tin	\$/mt	21,010	20,877	21,097	21,015	20,942	20,858	20,765	20,665	20,560	20,451	20,339	20,225	20,109
Zinc	\$/mt	1,801	2,045	2,063	2,059	2,057	2,053	2,049	2,043	2,038	2,031	2,025	2,018	2,011
Precious Metals														
Gold	\$/toz	1331	1199	1163	1132	1103	1074	1046	1018	990	963	936	910	885
Silver	\$/toz	22.5	18.5	18.8	18.7	18.6	18.5	18.4	18.3	18.2	18.1	17.9	17.8	17.7
Platinum	\$/toz	1402	1335	1313	1279	1247	1215	1184	1153	1122	1092	1062	1034	1005

Next update: January 2015.

Table A1.4 World Bank indices of commodity prices and inflation, 2010 = 100

Commodity	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Price indices in nominal US dollars (2010=100)													
Energy	127.4	124.2	118.4	119.6	120.8	122.0	123.4	124.8	126.2	127.7	129.2	130.8	132.5
Non-energy commodities	101.7	97.5	97.0	97.2	97.5	97.7	98.0	98.3	98.6	99.0	99.3	99.7	100.0
Agriculture	106.3	103.0	101.9	102.0	102.1	102.2	102.4	102.5	102.7	102.9	103.1	103.3	103.5
Beverages	83.3	101.8	96.1	94.8	93.5	92.2	91.0	89.9	88.7	87.6	86.5	85.5	84.5
Food	115.6	107.5	106.8	106.6	106.4	106.2	106.0	105.9	105.7	105.6	105.4	105.3	105.2
Fats and oils	115.9	109.4	109.6	109.4	109.1	108.9	108.7	108.5	108.4	108.2	108.0	107.9	107.7
Grains	128.2	103.0	103.9	104.2	104.5	104.8	105.1	105.4	105.7	106.0	106.4	106.7	107.1
Other food	103.9	109.0	105.6	105.1	104.5	103.9	103.4	102.8	102.3	101.7	101.2	100.6	100.1
Raw materials	95.4	92.8	93.1	94.6	96.1	97.6	99.2	100.8	102.4	104.1	105.8	107.5	109.3
Timber	102.6	106.0	107.7	109.6	111.4	113.4	115.3	117.3	119.3	121.4	123.5	125.6	127.8
Other Raw Materials	87.6	78.3	77.1	78.2	79.2	80.3	81.5	82.7	83.9	85.1	86.4	87.7	89.1
Fertilizers	113.7	100.7	97.1	96.5	95.9	95.2	94.6	94.0	93.4	92.8	92.3	91.7	91.1
Metals and minerals a/	90.8	85.9	86.9	87.5	88.2	88.8	89.5	90.2	90.9	91.6	92.3	93.1	93.8
Base Metals b/	90.3	89.9	90.3	90.8	91.2	91.6	92.1	92.6	93.0	93.5	94.0	94.4	94.9
Precious Metals	115.1	102.4	100.4	99.6	98.8	98.1	97.3	96.6	95.9	95.1	94.4	93.8	93.1
Price indices in real 2010 US dollars (2010=100) c/													
Energy	120.1	116.8	111.1	110.6	110.1	109.6	109.2	108.7	108.3	107.8	107.4	107.0	106.6
Non-energy commodities	95.9	91.7	90.9	89.9	88.8	87.8	86.7	85.7	84.6	83.5	82.5	81.5	80.5
Agriculture	100.2	96.9	95.6	94.3	93.0	91.8	90.6	89.3	88.1	86.8	85.6	84.5	83.3
Beverages	78.5	95.7	90.1	87.6	85.2	82.9	80.5	78.3	76.1	74.0	71.9	69.9	67.9
Food	109.0	101.1	100.1	98.5	97.0	95.4	93.8	92.3	90.7	89.1	87.6	86.1	84.6
Fats and oils	109.3	102.9	102.7	101.1	99.5	97.8	96.2	94.6	93.0	91.3	89.8	88.2	86.7
Grains	120.9	96.9	97.5	96.3	95.2	94.1	93.0	91.8	90.7	89.5	88.4	87.2	86.1
Other food	98.0	102.5	99.0	97.1	95.2	93.3	91.5	89.6	87.7	85.9	84.0	82.3	80.5
Raw materials	90.0	87.3	87.3	87.4	87.5	87.7	87.7	87.8	87.8	87.9	87.9	87.9	87.9
Timber	96.7	99.7	101.0	101.3	101.6	101.8	102.0	102.2	102.4	102.5	102.6	102.7	102.8
Other Raw Materials	82.6	73.7	72.3	72.2	72.2	72.2	72.1	72.0	71.9	71.9	71.8	71.7	71.6
Fertilizers	107.2	94.7	91.1	89.2	87.4	85.6	83.7	81.9	80.1	78.4	76.7	75.0	73.3
Metals and minerals a/	85.6	80.7	81.4	80.9	80.4	79.8	79.2	78.6	78.0	77.4	76.7	76.1	75.5
Base Metals b/	85.2	84.5	84.7	83.9	83.1	82.3	81.5	80.6	79.8	78.9	78.1	77.2	76.4
Precious Metals	108.5	96.3	94.1	92.1	90.1	88.1	86.1	84.2	82.2	80.3	78.5	76.7	74.9
Inflation indices, 2010=100 d/													
MUV index e/	106.1	106.3	106.7	108.2	109.7	111.3	113.0	114.8	116.6	118.4	120.4	122.3	124.3
% change per annum	(14)	0.3	0.3	15	14	15	15	15	16	16	16	16	16
US GDP deflator	105.2	106.9	108.9	111.1	113.3	115.6	117.9	120.3	122.7	125.2	127.7	130.3	133.0
% change per annum	14	16	19	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0

Next update: January 2015.

Notes:

a/ Base metals plus iron ore.

b/ Includes aluminum, copper, lead, nickel, tin and zinc.

c/ Real price indices are computed from unrounded data and deflated by the MUV index.

d/ Inflation indices for 2013-2025 are projections.

e/ Unit value index of manufacture exports (MUV) in US dollar terms for fifteen countries (Brazil, Canada, China, Germany, France, India, Italy, Japan, Mexico, Republic of Korea, South Africa, Spain, Thailand, United Kingdom, and United States).

DESCRIPTION OF PRICE SERIES

ENERGY

Coal (Australia), thermal, f.o.b. piers, Newcastle/Port Kembla, 6,700 kcal/kg, 90 days forward delivery beginning year 2011; for period 2002-2010, 6,300 kcal/kg (11,340 btu/lb); prior to year 2002, 6,667 kcal/kg (12,000 btu/lb).

Coal (Colombia), thermal, f.o.b. Bolivar, 6,450 kcal/kg, (11,200 btu/lb); during years 2002-July 2005 11,600 btu/lb, less than .8% sulfur, 9% ash, 90 days forward delivery.

Coal (South Africa), thermal, f.o.b. Richards Bay, 90 days forward delivery; 6,000 kcal/kg, during 2002-2005, 6,200 kcal/kg (11,200 btu/lb); during 1990-2001 6390 kcal/kg (11,500 btu/lb).

Crude oil, average price of Brent, Dubai and West Texas Intermediate, equally weighed.

Crude oil, U.K. Brent 38° API. Crude oil, Dubai Fateh 32° API. Crude oil, West Texas Intermediate (WTI) 40° API.

Natural Gas Index (Laspeyres), weights based on 5-year consumption volumes for Europe, US and Japan (LNG), updated every 5 years, except the 11-year period 1960-70.

Natural Gas (Europe), average import border price, including UK. As of April 2010 includes a spot price component. Between June 2000 - March 2010 excludes UK.

Natural Gas (U.S.), spot price at Henry Hub, Louisiana.

Natural gas LNG (Japan), import price, cif, recent two months' averages are estimates.

NON ENERGY COMMODITIES

BEVERAGES

Cocoa (ICCO), International Cocoa Organization daily price, average of the first three positions on the terminal markets of New York and London, nearest three future trading months.

Coffee (ICO), International Coffee Organization indicator price, other mild Arabicas, average New York and Bremen/Hamburg markets, ex-dock.

Coffee (ICO), International Coffee Organization indicator price, Robustas, average New York and Le Havre/Marseilles markets, ex-dock.

Tea, average three auctions, arithmetic average of quotations at Kolkata, Colombo and Mombasa/Nairobi.

Tea (Colombo auctions), Sri Lankan origin, all tea, arithmetic average of weekly quotes.

Tea (Kolkata auctions), leaf, include excise duty, arithmetic average of weekly quotes.

Tea (Mombasa/Nairobi auctions), African origin, all tea, arithmetic average of weekly quotes.

OILS AND MEALS

Coconut oil (Philippines/Indonesia), bulk, c.i.f. Rotterdam.

Copra (Philippines/Indonesia), bulk, c.i.f. N.W. Europe.

Groundnuts (US), Runners 40/50, shelled basis, c.i.f. Rotterdam.

Groundnut oil (any origin), c.i.f. Rotterdam.

Fishmeal (any origin), 64-65%, c&f Bremen, estimates based on wholesale price, beginning 2004; previously c&f Hamburg.

Palm oil (Malaysia), 5% bulk, c.i.f. N. W. Europe.

Palmkernel Oil (Malaysia), c.i.f. Rotterdam.

Soybean meal (any origin), Argentine 45/46% extraction, c.i.f. Rotterdam beginning 1990; previously US 44%.

Soybean oil (Any origin), crude, f.o.b. ex-mill Netherlands.

Soybeans (US), c.i.f. Rotterdam.

GRAINS

Barley (US) feed, No. 2, spot, 20 days To-Arrive, delivered Minneapolis from May 2012 onwards; during 1980 - 2012 April Canadian, feed, Western No. 1, Winnipeg Commodity Exchange, spot, wholesale farmers' price.

Maize (US), no. 2, yellow, f.o.b. US Gulf ports.

Rice (Thailand), 5% broken, white rice (WR), milled, indicative price based on weekly surveys of export transactions, government standard, f.o.b. Bangkok.

Rice (Thailand), 25% broken, WR, milled indicative survey price, government standard, f.o.b. Bangkok.

Rice (Thailand), 100% broken, A.1 Super from 2006 onwards, government standard, f.o.b. Bangkok; prior to 2006, A1 Special, a slightly lower grade than A1 Super.

Rice (Vietnam), 5% broken, WR, milled, weekly indicative survey price, Minimum Export Price, f.o.b. Hanoi.
Sorghum (US), no. 2 milo yellow, f.o.b. Gulf ports.
Wheat (US), no. 1, hard red winter, ordinary protein, export price delivered at the US Gulf port for prompt or 30 days shipment.
Wheat (US), no. 2, soft red winter, export price delivered at the US Gulf port for prompt or 30 days shipment.

OTHER FOOD

Bananas (Central & South America), major brands, free on truck (f.o.t.) Southern Europe, including duties; prior to October 2006, f.o.t. Hamburg.
Bananas (Central & South America), major brands, US import price, f.o.t. US Gulf ports.
Meat, beef (Australia/New Zealand), chucks and cow forequarters, frozen boneless, 85% chemical lean, c.i.f. U.S. port (East Coast), ex-dock, beginning November 2002; previously cow forequarters.
Meat, chicken (US), broiler/fryer, whole birds, 2-1/2 to 3 pounds, USDA grade "A", ice-packed, Georgia Dock preliminary weighted average, wholesale.
Meat, sheep (New Zealand), frozen whole carcasses Prime Medium (PM) wholesale, Smithfield, London beginning January 2006; previously Prime Light (PL).
Oranges (Mediterranean exporters) navel, EEC indicative import price, c.i.f. Paris.
Shrimp (Mexico), west coast, frozen, white, No. 1, shell-on, headless, 26 to 30 count per pound, wholesale price at New York.
Sugar (EU), European Union negotiated import price for raw unpackaged sugar from African, Caribbean and Pacific (ACP) under Lome Conventions, c.i.f. European ports.
Sugar (US), nearby futures contract, c.i.f.
Sugar (world), International Sugar Agreement (ISA) daily price, raw, f.o.b. and stowed at greater Caribbean ports.

TIMBER

Logs (West Africa), sapele, high quality (loyal and marchand), 80 centimeter or more, f.o.b. Douala, Cameroon beginning January 1996; previously of unspecified dimension.
Logs (Malaysia), meranti, Sarawak, sale price charged by importers, Tokyo beginning February 1993; previously average of Sabah and Sarawak weighted by Japanese import volumes.
Plywood (Africa and Southeast Asia), Lauan, 3-ply, extra, 91 cm x 182 cm x 4 mm, wholesale price, spot Tokyo.
Sawnwood (Cameroon), sapele, width 6 inches or more, length 6 feet or more, f.a.s. Cameroonian ports.
Sawnwood (Malaysia), dark red seraya/meranti, select and better quality, average 7 to 8 inches; length average 12 to 14 inches; thickness 1 to 2 inch(es); kiln dry, c. & f. UK ports, with 5% agents commission including premium for products of certified sustainable forest beginning January 2005; previously excluding the premium.
Woodpulp (Sweden), softwood, sulphate, bleached, air-dry weight, c.i.f. North Sea ports.

OTHER RAW MATERIALS

Cotton (Cotton Outlook "CotlookA index"), middling 1-3/32 inch, traded in Far East, C/F beginning 2006; previously Northern Europe, c.i.f.
Rubber (Asia), RSS3 grade, Singapore Commodity Exchange Ltd (SICOM) nearby contract beginning 2004; during 2000 to 2003, Singapore RSS1; previously Malaysia RSS1.
Rubber (Asia), TSR 20, Technically Specified Rubber, SICOM nearby contract.

FERTILIZERS

DAP (diammonium phosphate), standard size, bulk, spot, f.o.b. US Gulf.
Phosphate rock (Morocco), 70% BPL, contract, f.a.s. Casablanca.
Potassium chloride (muriate of potash), standard grade, spot, f.o.b. Vancouver.
TSP (triple superphosphate), bulk, spot, beginning October 2006, Tunisian origin, granular, fob; previously US origin, f.o.b. US Gulf.
Urea (Black Sea), bulk, spot, f.o.b. Black Sea (primarily Yuzhnyy) beginning July 1991; for 1985-91 (June) f.o.b. Eastern Europe.

METALS AND MINERALS

Aluminum (LME) London Metal Exchange, unalloyed primary ingots, high grade, minimum 99.7% purity, settlement price beginning 2005; previously cash price.

Copper (LME), grade A, minimum 99.9935% purity, cathodes and wire bar shapes, settlement price.

Iron ore (any origin) fines, spot price, c.f.r. China, 62% Fe beginning December 2008; previously 63.5%.

Lead (LME), refined, 99.97% purity, settlement price.

Nickel (LME), cathodes, minimum 99.8% purity, settlement price beginning 2005; previously cash price.

Tin (LME), refined, 99.85% purity, settlement price.

Zinc (LME), high grade, minimum 99.95% purity, settlement price beginning April 1990; previously special high grade, minimum 99.995%, cash prices.

PRECIOUS METALS

Gold (UK), 99.5% fine, London afternoon fixing, average of daily rates.

Platinum (UK), 99.9% refined, London afternoon fixing.

Silver (UK), 99.9% refined, London afternoon fixing; prior to July 1976 Handy & Harman. Grade prior to 1962 unrefined silver.



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