



Overview

- The global economy remains weak but is showing incipient signs of stabilization. While activity data remain soft, some recent survey indicators have ticked up.
- Many central banks continue to provide additional stimulus in the face of subdued activity and declining global inflation.
- Monetary easing and a rebound of financial market optimism about the global economy—partly linked to perceptions of progress in U.S.-China trade negotiations—have pushed up yields and boosted equity markets.

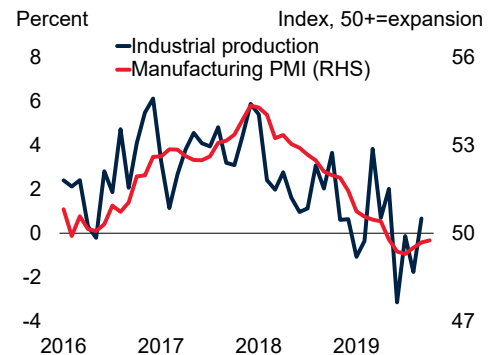
Chart of the Month

- Since early 2018, the manufacturing sector has been steadily weakening, and has spent a significant part of 2019 in contraction.
- Global industrial production increased in September. While the global manufacturing PMI is still below 50, it has inched up for three consecutive months, the first time this has happened since the downturn began.
- These improvements may signal that the sector is turning the corner.

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Global industrial production and manufacturing PMI



Source: CPB Bureau for Economic Policy Analysis, Haver Analytics, J.P. Morgan, World Bank.

Note: Purchasing Manufacturers' Index (PMI). Industrial production data is three-month moving average, annualized. Readings above 50 indicate expansion in economic activity; readings below 50 indicate contraction. Last observation is September 2019 for manufacturing PMI and August 2019 for industrial production.

Special Focus: The Role of Substitution in Commodity Demand

- High prices lead to changes in both the supply and demand of a commodity, by inducing investment and innovation, and by leading to efficiency gains, substitution, and reduced consumption.
- Demand for a commodity tends to rise when its own price falls, when the price of a complementary commodity falls, or when the price of a substitute commodity rises.
- As prices shift across markets, a change in demand for a single commodity typically sets in motion market forces that reallocate resources.



Monthly Highlights

Global activity: weak, with incipient signs of stabilization. Global economic activity likely slowed further in 19Q3, with weaker quarter-over-quarter growth in several major economies, including the United States, China and Japan. That said, the global manufacturing PMI for November suggests that global manufacturing may have begun to stabilize. While still in contraction, the index inched up in November for the third consecutive month. Services activity at the global level has continued to slow, in large part due to a VAT-hike induced decline in Japan, which offset a rebound in the Euro Area. A broad-based improvement in investor sentiment, underpinned by prospective signs of détente in the U.S.-China trade dispute and continued global monetary policy easing points to the possible bottoming out of the current global slowdown (Figure 1.A). Despite food price-driven increases in China and India, global inflation has continued to slow in September, reaching its lowest point since 2016.

Global trade: mixed developments. Global trade continued to contract in September, falling 1.1 percent (y/y). Incoming survey data for October is mixed, pointing to deteriorating industrial production of capital goods and intermediates in G20 countries, and a slight recovery in manufacturing and services export orders and container shipping. Following progress in bilateral trade negotiations, the United States did not follow through with plans to increase tariffs from 25 to 30 percent on \$250 billion worth of imports from China in October. Markets expect negotiations to make further progress in coming weeks, including the possible rollback of some existing tariffs. Members of the Regional Comprehensive Economic Partnership (RCEP), a pan-Asian free-trade agreement first announced in 2011, have finalized drafting the text and are planning on signing the pact in 2020. India decided not to join the agreement, however, citing “significant outstanding issues, which remain unresolved.” The RCEP includes 15 economies in the Asia-Pacific region (Australia, Brunei Darussalam, Cambodia, China, Indonesia, Japan, Republic of Korea, Lao, Malaysia, Myanmar, New Zealand, Philippines, Singapore, Thailand, and Vietnam), which together account for close to 30 percent of global GDP, 30 percent of the world’s population, and one-quarter of world trade (Figure 1.B). The implementation of this free trade agreement could deepen intra-regional integration and boost global trade.

Global financial conditions: stable but fragile. The Federal Reserve lowered its policy rate by another 25 basis points in October, as expected; markets now expect rates to remain at their current level until the end of 2020. Central banks in a number of EMDEs have also been adding stimulus, while the European

FIGURE 1.A Sentix index of global economic sentiment

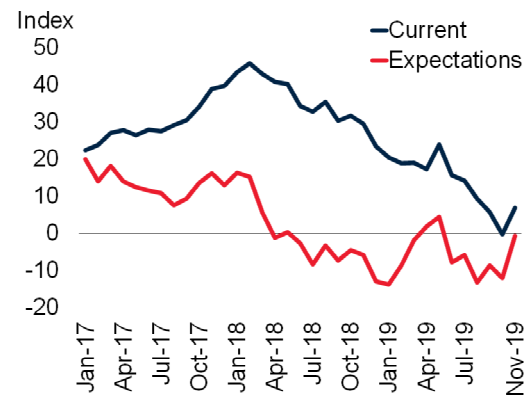


FIGURE 1.B Share of RCEP countries in global aggregates

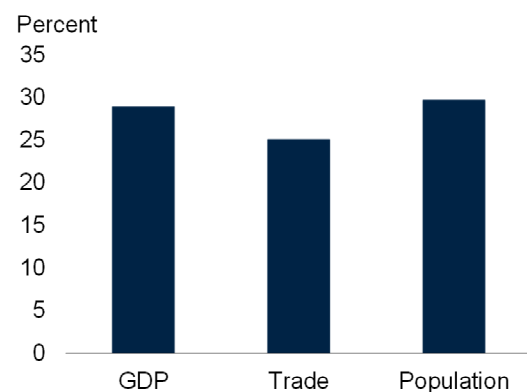
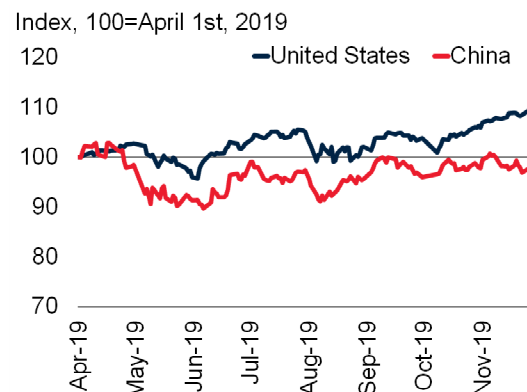


FIGURE 1.C Equity indexes in the United States and China



Source: Bloomberg, Haver Analytics, Sentix GmbH, World Bank.

Note: EMDEs = emerging market and developing economies,

RCEP = Regional Comprehensive Economic Partnership.

A. Figure shows Sentix economic indexes for current market conditions and

expectations of future market conditions. Last observation is November 2019.

B. Figure shows the share of the following countries in global aggregates:

Australia, Brunei Darussalam, Cambodia, China, Indonesia, Japan, Korea, Lao,

Malaysia, Myanmar, New Zealand, Philippines, Singapore, Thailand, and Vietnam.

C. Equity indexes are represented by the S&P 500 for the United States and

Shanghai Shenzhen CSI 300 Index for China. Last observation is November 25,

2019.



Central Bank's purchases of €20 billion worth of bonds per month have begun. Global equity valuations have benefited from monetary stimulus, diminished prospects of a disorderly Brexit, and the perception of a de-escalation of global trade tensions. Stock markets in the United States have reached record highs, while those in China have regained much of the value lost since peaking earlier in the year (Figure 1.C). Meanwhile, the recent upward trend in yields has reduced the stock of negative-yielding debt from its August high of \$17 trillion to below \$13 trillion in November, reflecting rising investor optimism about the global economy (Figure 2.A).

EMDE financing conditions: inflows into EMDE debt. Foreign investors continue to accumulate EMDE debt while divesting from EMDE equities (Figure 2.B). Market movements have been limited in November, however, with EMDE equity markets generally flat and spreads on most EMDE debt remaining compressed. EMDE currency movements have also been limited, except for a notable decline in the Chilean peso amid heightened civil unrest.

Commodity markets: declines in October, uptick in November. Commodity prices generally declined in October (Figure 2.C). Energy prices dropped nearly 4 percent last month as a result of continuing concerns over slowing global growth and a swift recovery in production following the attack on Saudi Arabian oil facilities. So far in November, oil prices have been rising, reflecting increased market optimism about the global economy. Metals prices declined by 1 percent (m/m) in October, led by a 5 percent slide in iron ore and a 3.5 percent slide in nickel. More recently, copper prices have risen as intensifying unrest in Chile, the world's largest producer, has led to supply concerns. Agricultural prices rebounded slightly in October, but insufficiently to regain ground lost in previous months.

United States: solid consumption, weak investment. The U.S. economy expanded 2.1 percent in Q3 (q/q saar). The primary driver of growth continued to be private consumption, which increased 2.9 percent, supported by a healthy labor market. About 128 thousand jobs were added in October, with significant upward revisions to previous months and rising labor force participation. Other components of GDP remain weak, however. Private investment contracted for the second consecutive quarter, and the continuing fall in banks' reported demand for commercial and industrial loans suggests that this weakness may persist (Figure 3.A). Similarly, industrial production declined 1.1 percent (y/y) in October, extending its first period of contraction since 2016. After contracting by 5.6 percent in Q2, exports rebounded by only 0.9 percent in Q3 (q/q saar), and are showing weak momentum moving into Q4.

FIGURE 2.A Cumulative change in 10-year government bond yields in major advanced economies

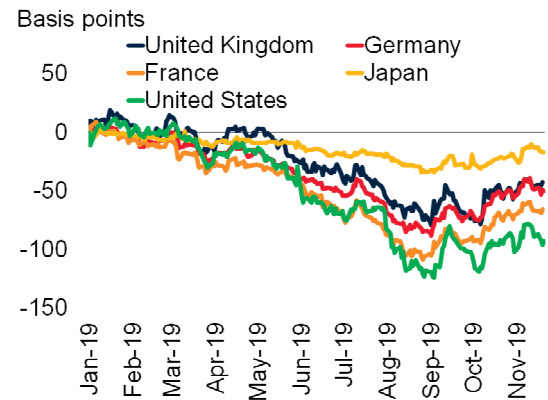


FIGURE 2.B EMDE capital flows

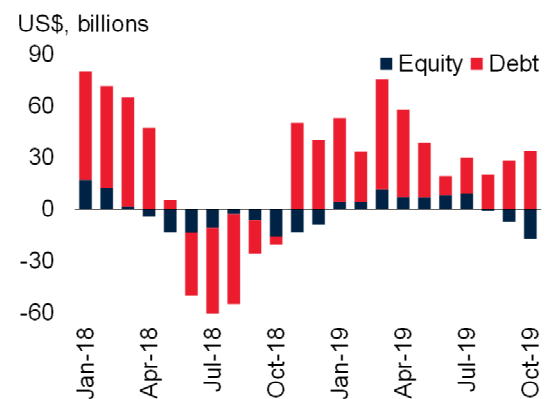
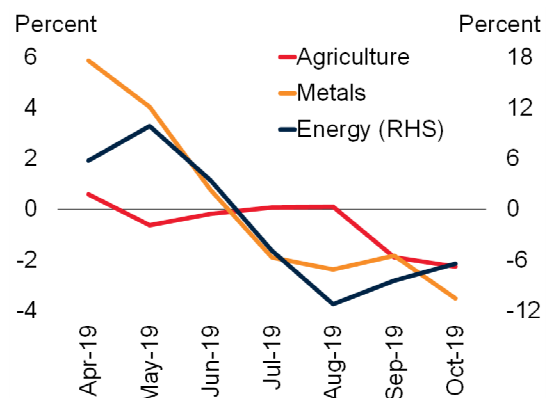


FIGURE 2.C Commodity prices



Source: Bloomberg, Institute of International Finance, World Bank.
A. Chart shows cumulative change since January 1, 2019. Last observation is November 25, 2019.
B. Chart shows cumulative 3-month flows. Last observation is October 2019.
C. Chart shows 3-month moving average data deflated by the World Bank's manufacturing unit value index.



Euro Area: Germany avoids recession. Third quarter activity remained subdued in the Euro Area, rising 0.9 percent (q/q saar). Growth was broadly stable in France (1 percent), Italy (0.3 percent), and Spain (1.8 percent). Germany remained the weakest major economy but avoided a technical recession by growing 0.3 percent (q/q saar). The German manufacturing sector continued to struggle, however. Industrial production (excluding construction) contracted 5.3 percent in September (y/y) and the manufacturing PMI remained deep in contraction territory at 42.1 in October (Figure 3.B). Euro Area productivity remains in a slump, growing 0.3 percent in Q3 (q/q saar), and has made no progress since late 2017. Similarly, both core and headline inflation remain feeble, at 1.2 and 0.7 percent in October (y/y), respectively.

United Kingdom: upcoming election. Following the extension of the Brexit deadline until January 31st, 2020 and the rejection of Prime Minister Johnson's renegotiated deal with the European Union, the U.K. Parliament voted to dissolve in preparation for an election on December 12th. Activity rebounded 1.2 percent in Q3 (q/q saar) but remains tenuous following contraction in Q2. Retail sales contracted in October, while inflation dipped to its lowest level in three years.

Japan: VAT increase. Activity in Japan rose 0.2 percent in Q3 (q/q saar). Final domestic demand was solid, but slowing inventory accumulation and contracting exports weighed on growth. The strength in consumption was partly due to anticipatory purchases prior to the October VAT hike. Retail sales surged in September, but may contract in October if the experience of previous VAT hikes is repeated (Figure 3.C). The government is contemplating a new stimulus package to counteract a possible slowdown, and to assist with reconstruction following typhoon Hagibis.

China: ongoing slowdown. High-frequency indicators point to a continued slowdown to start 19Q4. Industrial production and retail sales slowed to 4.7 percent and 7.2 in October (y/y), respectively, while trade improved but remained soft. The Caixin PMI suggests, however, that new orders are picking up, both domestically and from abroad (Figure 4.A). The People's Bank of China cut rates in early November despite a spike in consumer price inflation above the 3 percent target due to high pork prices following an outbreak of African swine fever.

Major commodity exporters: pockets of continued weakness. Surveys point to a stabilization in manufacturing activity for commodity exporters as a group (Figure 4.B). Nonetheless, social unrest appears to be on the rise in a growing number of countries, activity in several large economies remains weak, and some central

FIGURE 3.A Private investment and demand for commercial and industrial loans in the U.S.

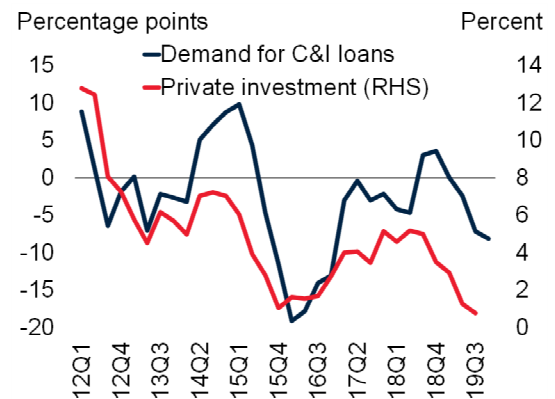


FIGURE 3.B Industrial production growth in Euro Area countries

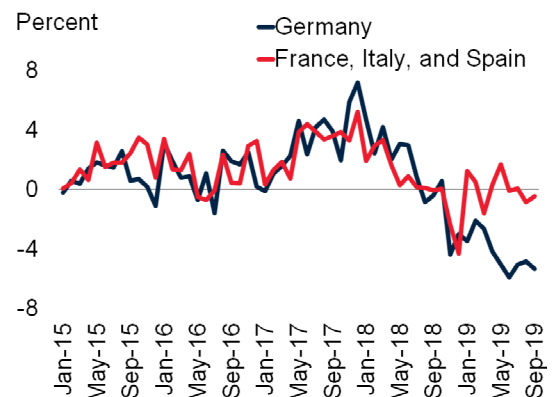
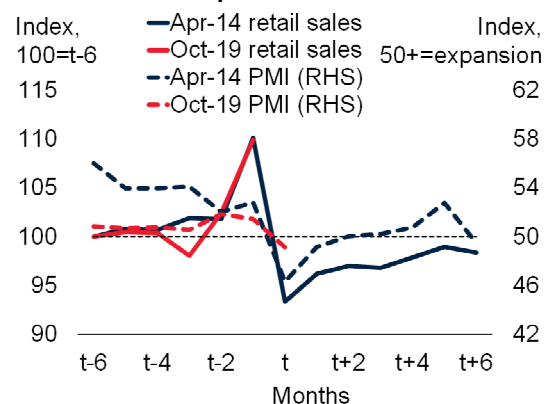


FIGURE 3.C Activity indicators around the time of VAT hikes in Japan



Source: Board of Governors of the Federal Reserve System, Haver Analytics, J.P. Morgan, World Bank.
 A. C&I loans represent commercial and industrial loans. Figure shows change in the share of firms that report stronger demand for commercial and industrial loans. Private investment is represented by year-on-year rate.
 B. Aggregate year-on-year growth rates calculated using GDP weights at 2010 prices and market exchange rates.
 C. "T" indicates the quarter when the value-added tax was raised. PMI = Purchasing Managers' Index. Readings above 50 indicate expansion, below 50 indicate contraction. Horizontal line indicates expansionary threshold. Last observation is October 2019 for PMI and September 2019 for retail sales.



banks have lowered policy rates. In *Russia*, preliminary estimates suggest that growth firmed to 1.7 percent in Q3 (y/y). The central bank lowered its policy rate by 50 basis points to 6.5 percent in October, marking its fourth rate cut this year. In *Brazil*, the central bank also lowered its policy rate by 50 basis points as inflation fell further below target. Industrial production appears to be stabilizing, however, after contracting for much of the year following the collapse of a dam at a major iron ore mine in January. In *South Africa*, activity indicators suggest that growth stalled in 19Q3, with manufacturing production in September contracting for the fourth consecutive month (y/y). Inflation fell to an eight-year low of 3.7 percent in October. Some other economies look healthier. In *Saudi Arabia*, the PMI edged up to 57.8 in October, registering its highest reading in more than four years. Growth in *Indonesia* was stable at 5 percent (y/y) in 19Q3, with exports rebounding strongly after three quarters of decline. In *Nigeria*, growth edged up to 2.3 percent (y/y) in 19Q3 partly due to strengthening agricultural and manufacturing activity.

Major commodity importers: monetary loosening, moderating activity. Activity in many commodity importers has continued to slow, prompting central banks to provide monetary stimulus. In *India*, industrial production fell 4.3 percent in September (y/y), the worst contraction in more than six years as problems in the financial system led to a sharp fall in commercial lending. This adds to a list of recent indicators pointing to slowing activity, including trade, motor vehicle sales, and consumer confidence (Figure 4.C). Despite this, inflation picked up to 4 percent as food prices rose, reaching the central bank's target for the first time in more than a year. In *Poland*, the PMI manufacturing index fell to 45.6 in October, reflecting a contraction in new export orders. Despite this, growth picked up to 5.3 percent in Q3 (q/q saar), buoyed by fiscal support. In *Turkey*, the industrial sector rebounded in September to 3.4 percent (y/y). The recovery remains tenuous, however, as the manufacturing PMI dipped back below 50 in October. Weak activity alongside easing headline inflation allowed the central bank to cut its policy rate 250 basis points to 14 percent. In *Mexico*, a 0.3 percent contraction in GDP in 19Q3 (y/y) and slowing headline inflation prompted the central bank to cut rates by 25 basis points in November. In *Thailand*, retail sales contracted 3 percent (y/y) in August, while business confidence in October remained near a three-year low. In contrast, growth in the *Philippines* accelerated to 6.2 percent (y/y) in 19Q3, bolstered by domestic demand. In *Egypt*, inflation subsided to 3.1 percent (y/y) from 7.3 percent in August, reaching the lowest monthly rate in three years. The central bank has offset the resultant increase in real rates by cutting its policy rate more than 400 basis points over the course of the year, including a 100 basis point cut to 12.25 percent in November.

FIGURE 4.A China manufacturing PMI components

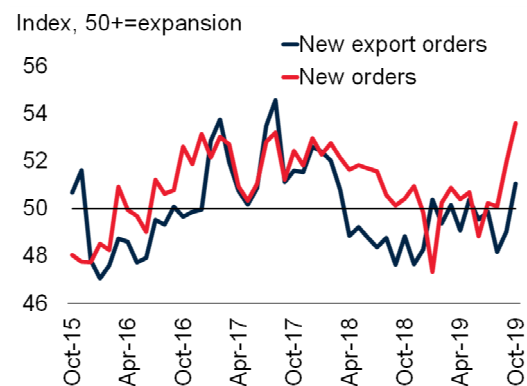


FIGURE 4.B Count of commodity-exporting EMDEs with manufacturing PMIs above/below 50

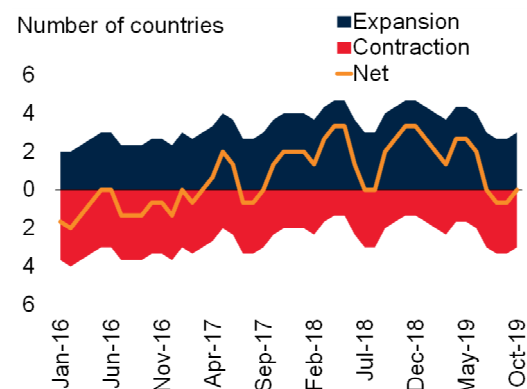
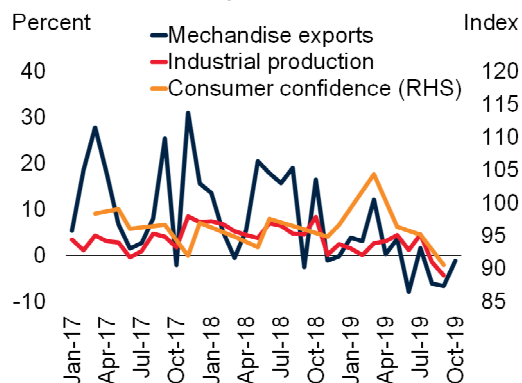


FIGURE 4.C Activity indicators in India



Source: Haver Analytics, Reserve Bank of India, World Bank.
A. Manufacturing and services output measured by Purchasing Managers' Index (PMI). PMI readings above 50 indicate expansion in economic activity; readings below 50 indicate contraction. Horizontal line indicates expansionary threshold. Last observation is October 2019.
B. Figure shows the 3-month moving average of the number of commodity exporters experiencing an expansion or contraction in manufacturing activity, and the difference in the two counts. Manufacturing is represented by the PMI. Readings above 50 indicate an expansion; readings below 50 indicate contraction. Sample includes 6 EMDEs. Last observation is October.
C. Consumer Confidence Survey: Current Situation Index (SA, 100=neutral). Exports and industrial production are represented by year-on-year rates. Last observation is October 2019.



Special Focus: The Role of Substitution in Commodity Demand

Surge in commodity consumption over the past two decades. Consumption of non-renewable resources surged over the past two decades, notably as a result of strong growth in emerging market and developing economies (EMDEs; Figures 5.A and B). The increase was most pronounced in metals, where consumption grew more than 150 percent during this period, largely driven by China. As in earlier booms, high commodity prices induced investment and innovation as well as efficiency gains, substitution, and reduced consumption. As a result, commodity prices fell—non-energy prices in a smooth decline since 2011 and crude oil prices in a steep plunge in 2014 (Figure 5.C). This Focus examines how substitution in commodity demand has evolved from a historical and empirical perspective. For more details, see the latest [Commodity Markets Outlook](#).

Substitution in the transportation sector. Innovation and substitutability in the transport industry goes back to the industrial revolution. In the late nineteenth century, with the invention of the steam engine, animal traction was replaced by trains. Demand for the agricultural commodities used to feed the animals receded in favor of demand for coal to power the steam engines. The wooden frames along with the cotton- or linen-based sail cloth of sail ships gave way to steel and iron ore structures and steam engines. In the early twentieth century the introduction of electric cars replaced animal traction. Then, the first-generation internal combustion engine vehicles that used biofuels substituted for electric vehicles. Later, vehicles powered by gasoline and diesel dominated ground transport and expanded to water transport (diesel and bunker fuel) and air transport (gasoline and jet kerosene). Recent innovations in battery technology, coupled with environmental concerns, are altering the landscape of the transportation industry once again, this time by the rapid growth of hybrid and electric vehicles.

Substitution in electricity generation. In the decade prior to 1972, global oil consumption was growing quickly. The 1973 and 1979 energy crises, which resulted in a seven-fold increase in oil prices, led to efforts to reduce oil consumption and seek alternative supplies. Efficiency improvements reduced the amount of oil used by the transport sector, while the use of oil for electricity generation was displaced by coal, nuclear power, and renewable energy sources (Figure 6.A). Global oil consumption declined significantly in the four years after 1979, while the share of coal in global energy consumption increased by 8 percent and nuclear energy consumption rose 60 percent. Coal's increasing use in

FIGURE 5.A Energy consumption

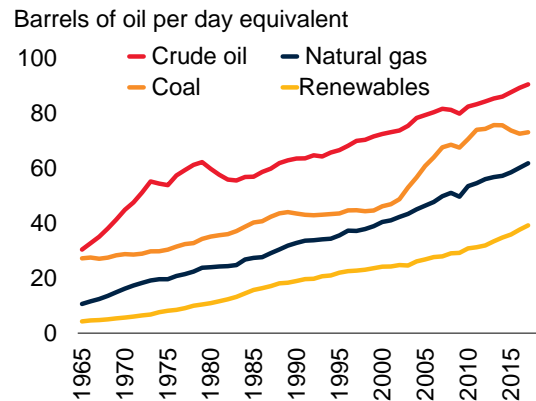


FIGURE 5.B Aluminum, copper, and zinc consumption

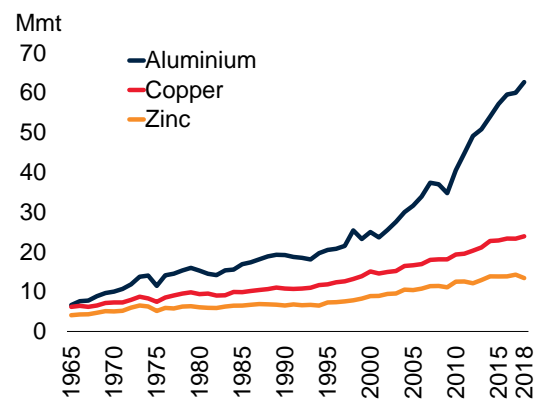
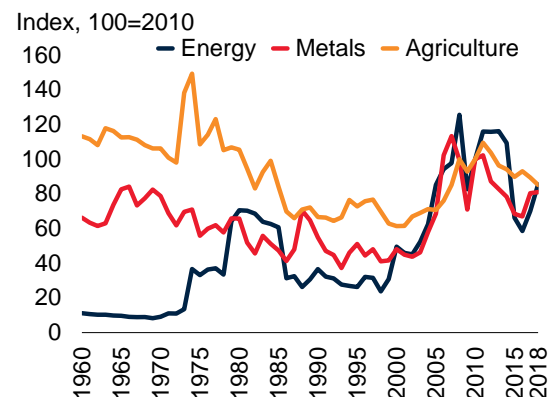


FIGURE 5.C Price indexes



Source: BP Statistical Review, World Bank, World Bureau of Metal Statistics.
A. Renewables includes hydroelectric and nuclear energy (in addition to biofuels, biomass, geothermal, solar, and wind sources).
B. Mmt = million metric tons.
C. Deflated by the World Bank's manufacturing unit value index at constant U.S. dollar, 2010 = 100.



electricity generation was encouraged by the International Energy Agency’s decision to ban its member countries from building new oil-fired electricity plants.

Substitution in industrial and consumer products. Advancements in chemistry have enabled considerable substitution of both agricultural and metal commodities by energy products and composite materials. Synthetic fibers, mostly derived from crude oil and natural gas, currently account for nearly two-thirds of global fiber consumption, replacing materials such as cotton. Synthetic rubber, a key input to tire manufacturing and derived from crude oil, currently accounts for more than half of total rubber consumption. Synthetic fertilizers (mostly nitrogen-based) replaced natural nutrients and have become an indispensable part of food production. Plastics, derived from crude oil, have become ubiquitous.

Among metals, copper has been increasingly replaced by plastic tubing in plumbing, while aluminum has displaced many heavier materials. In the beverage and food packaging sectors, there is competition between aluminum, composites, glass, paper, plastic, tin, and other materials. Advances in information technology have led to new types of substitution: paper (made from timber), which was used for information storage, is being gradually replaced by digital storage (which uses energy and metals in its processes). In the telecommunications industry, cables (made mostly from copper) are being replaced by fiber optic lines (made from petrochemicals) and, more recently, by wireless communication devices and satellites, which use rare-earth metals and composite materials.

Empirical estimates of commodity substitution. These effects are also apparent in the response of commodity demand to other commodities’ prices, as estimated in the Special Focus of the latest *Commodity Markets Outlook*. As expected based on their use in electricity generation, oil and coal are substitutes such as that a price increase of one increases demand for the other (Figure 6.B). In the case of metals, aluminum is apparently much more readily used as substitute for copper than vice versa. Aluminum demand does not respond significantly to copper price changes whereas an increase in aluminum prices significantly raises demand for copper (Figure 6.C). The weak response of aluminum demand to copper prices in part reflects that the volume of aluminum consumption is much larger than copper consumption, and that there is a greater diversity of uses of aluminum. Conversely, the robust response of copper demand to aluminum prices is consistent with the trend of replacing copper by lower priced aluminum in the electrical industry, particularly for high voltage electrical cables.

FIGURE 6.A Global electricity generation by fuel

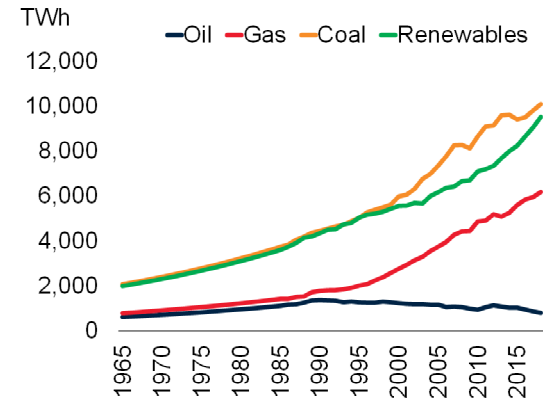


FIGURE 6.B Own and cross-price elasticity estimates for energy

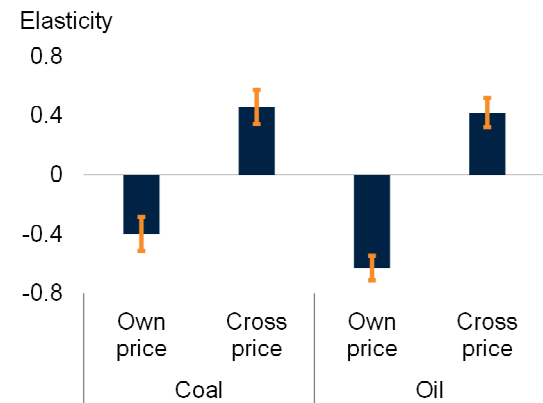
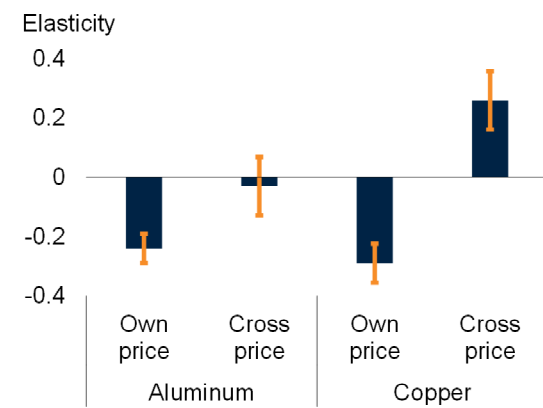


FIGURE 6.C Own and cross-price elasticity estimates for metals



Source: BP Statistical Review, World Bank, World Bureau of Metal Statistics
A. TWh = terawatt hours. Renewables includes hydroelectric and nuclear energy (in addition to biofuels, biomass, geothermal, solar, and wind).
B.C. Based on estimated long-run coefficients from autoregressive distributed lag estimation for up to 63 countries for 1965-2017. Blue bars denote elasticity estimates (i.e., a percent change in consumption in response to 1 percent change in price); yellow lines indicate 10 percent confidence intervals.

Recent Prospects Group Publications

Global Economic Prospects - January 2020 (forthcoming)

A Decade since the Global Recession: Lessons and Challenges for Emerging and Developing Economies

Commodity Markets Outlook - October 2019: The Role of Substitution in Commodity Demand

Global Economic Prospects - June 2019: Heightened Tensions, Subdued Investment

Commodity Markets Outlook - April 2019: Food Price Shocks: Channels and Implications

Inflation in Emerging and Developing Economies: Evolution, Drivers and Policies

Recent World Bank Working Papers

New Approaches to the Identification of Low-Frequency Drivers: An Application to Technology

Eurobonds: A Quantitative Analysis of Joint-Liability Debt

Fiscal Rules for the Western Balkans

Casting a Shadow: Productivity of Formal Firms and Informality

Inflation in Low-Income Countries

Growth in Low-Income Countries: Evolution, Prospects, and Policies

Recent World Bank Reports

Global Development Report: Bank Regulation and Supervision Ten Years after the Global Financial Crisis

World Development Report 2020: Trading for Development

Trade Integration as a Pathway to Development?

Africa's Pulse, October 2019: An Analysis of Issues Shaping Africa's Economic Future

East Asia and Pacific Economic Update, October 2019: Weathering Growing Risks

Europe and Central Asia Economic Update, Fall 2019: Migration and Brain Drain

Reaching New Heights: Promoting Fair Competition in the Middle East and North Africa

South Asia Economic Focus, Fall 2019 : Making (De)centralization Work

TABLE: Major Data Releases

(Percent change, y/y)

(Percent change y/y)

Recent releases: October 28, 2019 - November 27, 2019						Upcoming releases: November 28, 2019 - December 27, 2019				
Country	Date	Indicator	Period	Actual	Previous	Country	Date	Indicator	Period	Previous
Mexico	10/30/19	GDP	Q3	-0.4%	-0.8 %	Germany	11/28/19	CPI	OCT	1.1 %
France	10/30/19	GDP	Q3	1.3%	1.4%	Switzerland	11/29/19	GDP	Q3	0.3%
United States	10/30/19	GDP	Q3	2.0%	2.3 %	India	11/29/19	GDP	Q3	5.0 %
Euro Area	10/31/19	GDP	Q3	1.2%	1.2 %	Sweden	11/29/19	GDP	Q3	1.0 %
Italy	10/31/19	GDP	Q3	0.3%	0.1%	South Korea	12/1/19	CPI	NOV	0.0%
Hong Kong	10/31/19	GDP	Q3	-2.9%	0.4%	Turkey	12/2/19	GDP	Q3	-1.5 %
Spain	10/31/19	GDP	Q3	2.0%	2.0 %	South Africa	12/3/19	GDP	Q3	0.9 %
Brazil	11/1/19	IP	SEP	1.1%	-2.0%	Brazil	12/3/19	GDP	Q3	1.0 %
Turkey	11/4/19	CPI	OCT	8.6%	9.3%	Argentina	12/4/19	IP	OCT	-5.1%
Indonesia	11/5/19	GDP	Q3	5.0%	5.1%	Australia	12/3/19	GDP	Q3	1.4 %
Germany	11/7/19	IP	SEP	-4.4%	-3.9%	Greece	12/5/19	GDP	Q3	1.9 %
China	11/8/19	CPI	OCT	3.8 %	3.0 %	France	12/10/19	IP	OCT	0.1 %
Russia	11/13/19	GDP	Q3	1.7%	0.9%	United Kingdom	12/10/19	IP	OCT	-1.4 %
Euro Area	11/13/19	IP	SEP	-1.9%	-2.6%	United States	12/11/19	CPI	NOV	1.8%
Japan	11/13/19	GDP	Q3	1.4%	0.8%	Portugal	12/12/19	CPI	NOV	0.0 %
Germany	11/14/19	GDP	Q3	0.5%	0.4 %	Hong Kong	12/13/19	IP	Q3	0.4 %
Turkey	11/14/19	IP	SEP	4.2%	-1.6%	Ireland	12/17/19	GDP	Q3	6.0%
Euro Area	11/15/19	CPI	OCT	0.7 %	0.8 %	Argentina	12/18/19	GDP	Q3	0.6%
United States	11/15/19	IP	OCT	-1.1 %	-0.1 %	Euro Area	12/19/19	IP	OCT	-1.7%
Thailand	11/18/19	GDP	Q3	2.4%	2.3 %	Hong Kong	12/20/19	CPI	NOV	3.1%
South Africa	11/20/19	CPI	OCT	3.7%	4.1 %	Luxembourg	12/20/19	GDP	Q3	3.6 %