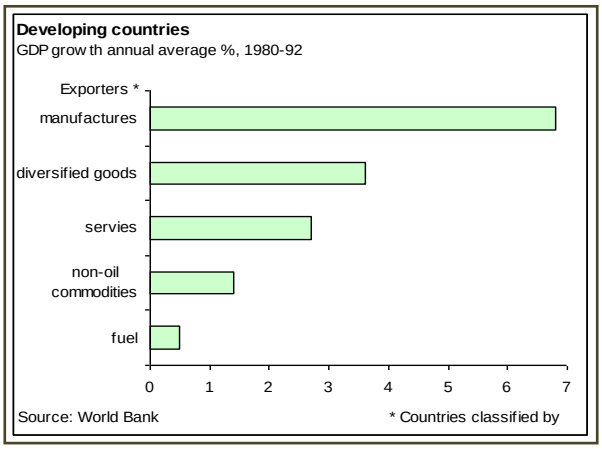
ECN230 SRP session 9. Specialization and Trade in Agriculture

Are third-world commodity producers condemned to eternal poverty?

"Economic development" is more a slogan than a term with a precise definition. In the thinking of politicians and economists around the world, it has long been synonymous with "industrialisation". Today's advanced economies grew rich by shifting resources from agriculture into industry, so it is no wonder that emerging economies from India to Brazil have sought to emulate that trick by fostering manufacturing [1].

This belief in the importance of industry is in conflict with one of the fashions of the 1990s, freer trade. In principle, reductions in trade barriers could open new markets for manufactured exports from developing countries. There is no assurance that this will happen. Under free trade, after all, each country will tend to specialize in those products in which it is relatively most efficient, compared with other countries. This might mean that some countries will end up producing coffee and cattle rather than computers and cars. If they get "stuck" in agriculture, are they condemned to poverty and slow growth [1]?

The World Bank's (WB) "Global Economic Prospects and the Developing Countries" (1994) focused on the less promising prospects of low-income commodity producers. Countries where manufactured goods accounted for at least 50% of total exports enjoyed average annual GDP growth of 6.8% between 1980 and 1992. Diversified exporters grew by 3.6% (see chart, GDP growth). However, those that exported mainly non-oil commodities grew by only 1.4% - so slowly, in fact, that their real income per head declined [2].

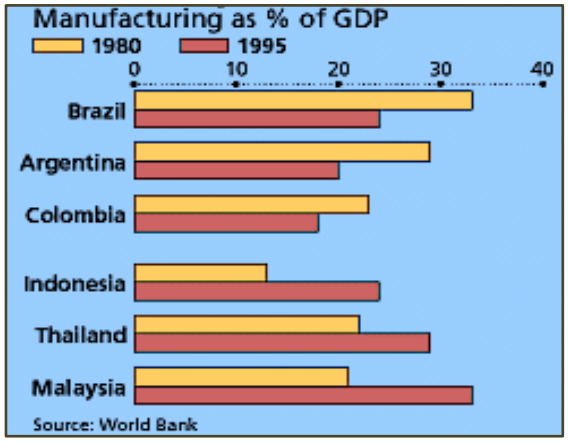


The 35 countries (26 in Africa) which the World Bank categorised as low-income commodity producers had an average GDP per head of only $420. They contained 31% of the world's population, but contributed only 3% of total output. In 1992, their average income per head was only 46% of the average for all developing countries, down from 63% in 1960. Does dependence on commodities act as permanent brake on economic growth [2]?

From 1980 to the early 1990s, average commodity prices dropped by more than half in real terms. This represented an annual loss to developing countries of $100 billion in 1993, almost twice what they received in foreign aid. Behind this was the fact that world trade in commodities grew more slowly than trade in manufactures and services. One reason is that, as countries get richer, the share of income spent on food shrinks. A second factor is the shift within economies to activities that use fewer raw materials. Combined with the introduction of synthetic substitutes, this reduced the demand for some metals. If nobody is predicting a commodity boom, can commodity producers grow faster only if they shift their output and exports into other sectors as quickly as possible [2]?

Some economists have taken this question seriously. Kiminori Matsuyama, a professor at Northwestern University, showed[1] that under free trade countries richly endowed with arable land and natural resources might grow more slowly relative to others because such natural wealth encourages the growth of agriculture at the expense of industry. This matters because in Mr Matsuyama's model manufacturing is special. He assumes there are economies of scale in manufacturing: the more resources employed in the sector, the faster productivity will grow. However, is it not possible that agriculture can have large productivity improvements as more capital and other resources are invested? If this were to happen, agriculture could have a special role in stimulating growth, just as Mr Matsuyama assumes manufacturing does [1].

The empirical evidence sectoral growth on GDP is mixed. As Mr Matsuyama's model assumes, the relative importance of manufacturing in Latin America shrank between 1980-95 as trade liberalisation took hold (see chart, manufacturing as % of GDP). However, the consequences were not as bleak as expected. This is because productivity growth in agriculture was as fast as in manufacturing [1].



Chile provided a good test case. Since the country opened up to trade in 1976, the relative size of its manufacturing sector has declined. Manufacturing accounted for 27% of Chile's GDP in 1973; in 1995, its share was only 16.8%. Agriculture, on the other hand, has not declined—as traditional models of development would have predicted—but instead it grew modestly as a share of GDP [1].

The decline of manufacturing did not mean slow growth, however. Chile's economy expanded at an average rate of 7.2% between 1987 and 1997. Exports were the engine of growth and agricultural products were the star performers. Chile went from being a small player in the global fruit market, exporting just apples in the 1960s, to become one of the world's largest fruit exporters in the 1990s [1].

Such exports are not manufactured, but the businesses that making and exporting them used increasingly sophisticated production technology and management methods. Although table grapes were by far the main fruit export, Chile began exporting wines in a significant way in the 1980s and achieving important world market shares in the 1990s. Similarly, fish exports, once produced almost entirely by an ocean-going fleet, were seeing the growth of salmon farms.

[1] "Agricultural Productivity, Comparative Advantage, and Economic Growth". *Journal of Economic Theory* (58), 1992.

Technological advances led to marked productivity increases in agriculture and higher incomes [1].

It is true that many of the most successful (Asian) emerging economies used to be heavily dependent on primary products. In 1965 commodities made up 89% of Malaysia's exports; in the early 1990s their share is only 28%. Some might conclude that it was because Malaysia shifted out of commodities that its economy has done so well since. They would be wrong. Malaysia's agricultural output boomed. Production of palm-oil rose more than 16-fold since 1970, while cocoa output soared from 3,000 tonnes in 1970 to 225,000 in 1993. Indonesia and Thailand are further examples of dramatic expansion of farm exports between the 1970s and early 1990s, precisely as their reliance on commodities fell [2].

The experience of these economies suggests that successful diversification away from commodities was itself triggered by efforts to boost output and productivity in their primary sectors. According to evidence presented by the World Bank (WB), total factor productivity growth (i.e., the increase in output that was not explained simply by the use of more labour and capital) was just as high, if not higher, in agriculture as in manufacturing. This means that commodity-exporting countries are not necessarily condemned to pitiful growth [2].

In successful countries, such as Malaysia, productivity increases in agriculture, spurred by newer technology and more efficient marketing methods, allowed countries to produce more with fewer workers, releasing labour into manufacturing. The implication, however strange, is that commodity exporters can best accelerate diversification and lift their growth rates by boosting the efficiency of primary-product industries. Governments can encourage this by lowering trade barriers and opening up to foreign direct investment, a springboard for diversification [2].

So does agriculture offer an alternative path of economic development? "We used to think that countries would develop by climbing ladders of production that led from textiles to clothing, to toys and eventually electronics," says Ricardo Hausmann, chief economist at the Inter-American Development Bank. "Now we know that there are different ladders, and countries can grow by going from fruit to wine, furniture, salmon… [1]"

Fair enough, say some advocates of industrial policy, but even if agriculture is highly productive, emerging economies need to industrialise because there is a limit to the demand for foodstuffs. This contention is based on the well-established finding known as "Engel's law", which holds that people tend to spend a smaller share of their budgets on food as their incomes rise. Engel's law, however, does not mean that agriculture will eventually become a slow-growth sector. Rather, it implies that producers must constantly adapt to changing tastes: wealthier societies consume less manioc and potatoes, but spend more on beef, fruit and oven-ready frozen foods [1].

In contrast, many African countries adopted policies that stunted the growth of agriculture (e.g., import barriers on manufactured goods such as tractors, and export taxes on farm produce). As a result, not only did Africa remain heavily dependent on primary commodities, but its market share had also fallen. The continent's share of world coffee production shrunk from 29% to 15% from the 1970s to the mid-1990s [2].

The WB admitted that the extent to which Sub-Saharan Africa can copy Malaysia, say, was limited by countries' low levels of physical and human capital. Even so, they could still achieve big efficiency gains in commodity production and export. There is a wrinkle. If all commodity exporters tried to boost their exports simultaneously, that would reduce prices and net export revenues could even fall. The WB reckons that this is a problem only for coffee, cocoa and tea. For other commodities, a rise in volume would bring a rise in net revenues. Even for tropical beverages, it says policies which boost efficiency in production and marketing are likely to achieve more lasting gains in net revenues than export quotas or taxes [2].

Supply shocks such as bad harvests make the prices of commodities twice as volatile as those of manufactures. This is a particularly serious problem for countries such as Zambia, Rwanda and Uganda, where a single commodity makes up more than three-quarters of the total exports. Uncertainty discourages long-term investment and so reduces long-term growth prospects. Is there anything developing countries can do to cushion themselves against these swings [2]?

Countries tried to stabilise prices by export quotas or by maintaining buffer stocks. Such schemes collapsed mainly because they attempted to support prices at too high a level. The WB argues that financial instruments such as futures contracts, swaps and options are a better way for countries to hedge their price risk. Such instruments are not widely used in developing economies. In some countries, their use is restricted by foreign-exchange controls. However, the WB could do more to familiarise governments and firms with the advantages of risk-hedging instruments. A big problem is that a country that lacks international creditworthiness is denied the benefits of these financial devices. The WB could help set up a system to underwrite counterparty risks on a case-by-case basis [2].

There is one final argument against the idea that countries will end up getting "stuck" in agriculture. This worry assumes that a country's comparative advantage is static, so that a country that grows bananas today will inevitably grow bananas in 20 years' time. This need not be the case. If a country does what it does best and sees its incomes grow as a result, it can afford better education and infrastructure. These, in turn, will give it an advantage in other products in future [1].

Just as few could have predicted the dramatic growth spurt of East Asian economies starting in the 1970s, it is hard to forecast how open, agriculturally-rich economies will continue to develop. It may be that they will move towards a service economy without ever having a large industrial sector. Perhaps, they may find new ways to prosper from their natural resources. Although open trade may make it difficult for them to establish certain kinds of industries, this does not necessarily doom them to slow growth, but it does not guarantee fast growth either. Their own economic policies matter, but so do the trade policies of wealthier nations. Many of these are more protectionist towards farm products than towards manufactured goods. No wonder officials in many emerging economies worry about being stranded on the farm [1]. ♦

Bello: Adam Smith in Chile, *Economist*, 19 Jan 2019, p. 53.

The parable of the cherry orchard

Chile has a booming new industry, cherries. The mix of market forces and government help is an example of what Chile needs to escape from the "middle-income trap". It is the country's good fortune that the southern-hemisphere cherry harvest comes just before Chinese new year. Cherries are marketed as something close to a luxury product than a humdrum fruit. This means that quality is paramount [3].

Cherries are eaily dmanaged by rain, hail or rough handling. They must be harvested by hand and processed

individually. At Greenex, a small firm, a $3.2 m intelligent proessing machine began work at the end of 2018. It washes the fruit, then guides it into individual channels, where the stems are plucked. The machine, which works only for about six weeks a year, sorts by colour, form, weight and defects. About 15% of the fruit is discarded as inferior, which goes for sale on the domestic market [3].

Seizing the opportunity of the Chinese market has required innovation. There are new varieties, and better farming practices such as high-density planting. Garces Fruit uses giant fans to warm the trees in winter and, after heavy rains, draughts of air from a helicopter to dry the cherries, since damp can cause them to split. The biggest changes were in logistics. To pack his product Mr Garcés brought plastic bags from the US that regulate the air inside them (they are now made in Chile). Ships ply the route from Chile to China in 22 days, compared with 40 in the recent past [3].

Thanks mainly to Chinese demand, Chile exported $1.1bn-worth of cherries in 2018, double the value of 2017 and two-thirds that of its much better-known wine exports. Such is the potential demand in China that Mr Garcés is confident that Chile's cherry exports can double again over the next five years [3].

That is welcome. If Chile is going to become a developed country, it must reduce its reliance on copper, which accounts for around half of its exports, and develop higher-value products. That transition began in the 1990s, with rising exports of wine, salmon and grapes, but had seemed to stall recently [3].

Creating new industries sometimes requires government involvement. The cherry industry would not exist but for Chile's free-trade agreement with China and its rigorous sanitary standards, for example. Corfo, the state development agency, provides seed money for innovative ventures. It is inviting bids to build and run a centre to develop lithium batteries. The country also has potential in astrodata, according to Sebastián Sichel of Corfo. With its clear, dark skies, Chile's desert is home to several of the world's biggest telescopes. Astronomy is the highest-paying profession in Chile, says Mr Sichel.

But the cherry industry, and Chile's diversification, also owe much to market forces. Cherries require field labour, which Chileans spurn. Some 700,000 immigrants, mainly from Haiti and Venezuela, arrived between 2015 and 2017, averting a labour shortage. Farmers are tearing out vines to plant cherry orchards, which are more profitable. Farther south, apple growers are switching to hazelnuts for the same reason.

Peru has enjoyed a similar agro-industrial revolution. It rivals Chile in exports of blueberries. Competition is leading to specialisation. Peru and Chile squabble over trademark rights to pisco (a grappa named after a Peruvian seaport). Nevertheless, Chile is now importing Peruvian pisco, a superior product. Although the cheap local version remains the favourite tipple of hard-up young people, some Chilean pisco producers have switched to making good white wine. Had he lived to see this happy evidence of the invisible hand of market forces, Adam Smith might have downed a glass and polished off a bowl of cherries to celebrate.

Link between trade and faster growth is under attack

It is an article of faith for most economists that free trade boosts growth. With good reason: trade allows countries to import others' technology, and foreign competition spurs domestic companies to become more productive. For good measure, study after study has found a positive correlation between freer trade and growth [4].

The IMF, World Bank, OECD and other institutions often cited an influential paper by Jeffrey Sachs and Andrew Warner of Harvard University[2] to lent support their advice to developing countries to liberalise their economies. The study found that developing countries with open economies grew by 4.5% a year in the 1970s and 1980s, but those with closed economies grew by only 0.7% a year. Rich open economies grew by 2.3% a year, closed ones by 0.7% [4].

While economists had some theoretical quibbles, the issue looked settled. However, Dani Rodrik, another Harvard economist, together with Francisco Rodríguez of the University of Maryland[3] challenged the findings of the cross-country studies that purport to establish a link between freer trade and faster growth. Rodrik was particularly scathing about the Sachs and Warner paper [4].

There are many difficulties in assessing the effect of trade on growth. One is that protected economies often have much else wrong with them as well, such as bad macroeconomic policies. So it is hard to tell if they are performing badly because they are protected, or for some other reason. Nor is it straightforward to measure how open to trade an economy is. For example, communist Poland had low import tariffs in the 1980s, but it was not an open economy. The government kept out imports by rationing foreign-exchange licences instead [4].

Messrs Sachs and Warner tried to overcome this problem in a novel way. They devised an openness indicator that takes account of the different ways that governments shut out imports. They classified economies as closed if they displayed any of five features: high import tariffs, high non-tariff barriers, a socialist economic system, a state monopoly on important exports, or a big gap between official and black-market exchange rates. By definition, their openness indicator is partly subjective, but it does not seem unreasonable; and their results appeared robust in a wide range of statistical tests [4].

Mr Rodrik disagrees. He thinks the openness indicator is a bad measure of trade policy, so its correlation with faster growth is spurious. Using fancy econometrics, he claims that two of the five criteria explains most of the correlation between openness and growth, the state monopoly on important exports and the black-market exchange-rate gap, neither of which was of much use. All the economies that Messrs Sachs and Warner considered closed because of a state export monopoly were in Africa and under World Bank care; their low growth may mostly be due to other factors. As for the black-market gap (which measures foreign-currency rationing), it may also reflect poor macroeconomic policy and be associated with corruption that could be the real dampener on growth [4].

These are potent criticisms. To Mr Rodrik they suggested "scepticism" about the merits of free trade. He believes in a rehashed version of the age-old infant-industry argument: that temporary protection can boost growth by encouraging specialisation in sectors that become competitive over time through "learning by doing". He stops short of advocating protectionism, but study doubtless was used to that end [4].

[2] Sachs, J. and A. Warner, "Economic Reform and the Process of Global Integration", *Brookings Papers on Economic Activity*, 1995.

[3] Rodriguez, F. and D. Rodrik, "Trade Policy and Economic Growth: A sceptic's Guide to the Cross-National Evidence", NBER paper no. 7081, Apr 1999.

However, free-traders did not need not worry too much because, for one thing, Mr Rodrik had not challenged the core of the pro-free-trade evidence. Export growth and overall GDP growth in developing countries are still strikingly correlated. As Mr Sachs pointed out, the first almost certainly causes the second. Developing countries need to export so as to get their hands on foreign currency. That enables them to import technology and capital goods only produced abroad. Thus, growth is likely to be impeded by any measure that in effect taxes exporters, particularly tariffs or quotas on imported capital goods, or a non-convertible currency [4].

There are answers to Mr Rodrik's specific charges too. Even if he is right that the state-monopoly indicator is flawed, it is not crucial to the argument, since most of the African economies would be classified as closed for other reasons. As for the black-market currency-gap, he is wrong to say that it reflects macroeconomic problems rather than protectionism. When a country has a flexible exchange rate, macroeconomic chaos does not drive a wedge between official and black-market exchange rates. That happens only when foreign exchange is rationed. Moreover, there are many countries (India, for example) that formally ration foreign exchange but do not suffer macroeconomic instability [4].

There is a broader point, however. Free-traders, be they Mr Sachs, IMF economists or lesser mortals, should not base their case for open markets too heavily on crude cross-country studies. They allow critics such as Mr Rodrik to pick holes in their econometrics—which, given measurement problems, is all too easy. A better case for free trade can be made from detailed studies of individual economies, which can more easily make statistical allowances for a host of other factors that affect growth. Almost all such studies show that free trade is indeed good for growth [4]. ♦

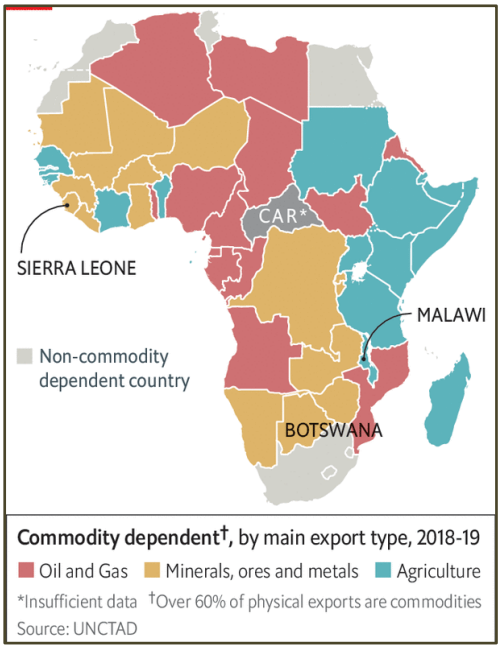
Resource curse – commodity dependency in Africa

The UN defines a country as dependent on commodities if they make up more than three-fifths of its physical exports. Too many countries in Africa rely too much on raw materials for their income. Fully 83% of African countries meet the UN's threshold, up from 77% a decade ago. Some depend on produce such as tea, but most rely on mining or on pumping oil. When commodities crashed in 2015, foreign direct investment (FDI) and growth tumbled and have yet to fully recover [5].

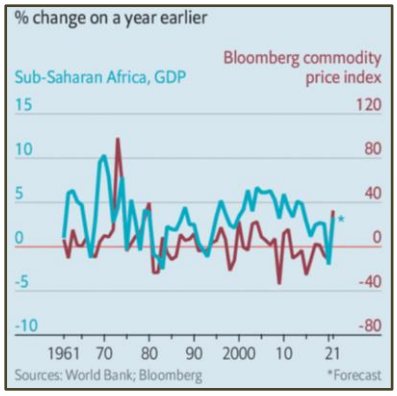
Broad averages obscure some of the progress that has been made to diversify economies. Since 2012, resources have become less important to GDP. The share of commodities in goods exports from the continent as a whole has fallen, too. In countries such as Botswana and Malawi, services have grown strongly. Even manufacturing is rebounding [5]. This suggests there is some degree of economic diversification taking place.

Yet Africa has a long way to go if it is to break free of the resource curse (see chart, commodity dependency by type). In countries rich in diamonds or oil, political power can be a licence to loot. Resource-rich countries are more likely to suffer dictatorships, and also tend to have more and longer civil wars. Diamonds fuelled a bloody conflict in Sierra Leone that dragged on for 11 years [5].

Commodity prices leap and fall, leading to booms and busts. Cash crops create jobs, but, without processing, do relatively little to improve productivity (which is needed to make a country rich). Worse still, commodities exports can often hold back the rest of the economy by pushing the exchange rate up and making other exports uncompetitive. Being endowed with commodities is correlated with too little economic diversification. Every extra dollar in foreign currency earned from exporting resources reduces non-resource exports by $0.74, reckon Torfinn Harding of the NHH Norwegian School of Economics and Anthony Venables of Oxford University. So tight is this straitjacket that Michael Ross of the University of California found that among 38 big oil exporters, neither good government nor democracy has any solid relation with diversification. The only thing that correlates is having less oil [5].



In Sub-Saharan Africa, GDP growth rates still move in tandem with commodity prices (see chart, % change in GDP). This is yet more evidence that some countries fortunes as still closely tied to commodities.



It is too easy to blame economics alone. Governments often spend windfalls from commodities on fat salaries rather than investing them in infrastructure or education. Too often when cash is tight and governments are frustrated at the lack of revenue, politicians try to renegotiate existing deals to get more tax revenue, nationalize the ownership of resources, or simply expropriate mining or oil companies. Yet the result of state ownership is usually idle or unprofitable mines and angry investors who take their money and skills elsewhere [5].

Often overlooked is the reality that some politicians simply do not want to diversify. Oil revenues tend to go through state coffers, giving the connected political class access to those funds. The politically connected can benefit in other ways too, says Rabah Arezki, a former chief economist at the African Development Bank. In many cases imports, which tend to jump during commodity booms, are controlled by a few big players. If there is little competition from domestic producers, they can bump up prices and gouge ordinary folk. As long as they share some of this

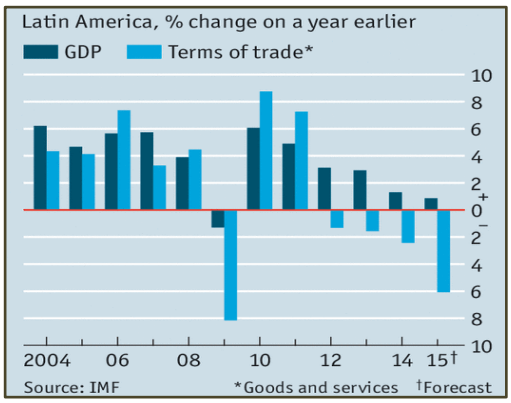
wealth with their friends in politics, the government might do little to encourage local production. In any case, creating, say, a clothing industry from scratch is slow, so there is little reason for politicians to put in the effort if the credit will be claimed by their successors [5].

Even so, it is possible for governments to manage their commodities better. One basic principle, especially for things like oil and minerals that will run out, is to turn riches in the ground into other sources of wealth, such as roads or an educated population. The World Bank now argues that, even if countries cannot diversify their exports, they will still be making progress if they diversify their sources of wealth [5].

Commodities and trade: Latin America's uneven growth

The rise in the prices of commodities—minerals, oil and grains—brought about by China's industrialisation unleashed a golden decade in Latin America's commodity-exporting countries. Growth averaged 4.1% in the decade to 2012. In its train came a social transformation: 60m were lifted out of poverty, and the middle class swelled [6].

The good times are over as Latin America's economy screeched as its growth slowed to just 1.3% in 2014. IMF estimates put growth in 2015 at 0.9%, marking the fifth successive year of deceleration (see chart, Latin America's GDP and TOT). Not only did this surprise forecasters, but Latin America's growth slowed more than any other emerging region. Many reckon it now faces a "new normal" of growth of just 2-3% a year. That would jeopardise recent social gains; already the fall in poverty has halted [6].



So what has gone wrong? Did Latin America squander its boom? An immediate explanation for the slowdown is the fall in the region's terms of trade—the ratio of the price of its exports to the price of its imports. Having risen threefold between 2003 and 2011, commodity prices fell somewhat thereafter before plunging sharply in 2014. Since 2011, investment in the region's economies has slowed; the IMF finds that it is closely correlated with commodity prices [6].

In the past, such abrupt reversals tended to cause panic and capital outflows. This time is at least partly different. Better macroeconomic policies, such as floating exchange rates and lower public debt, have allowed many countries to adjust smoothly. Chile, Colombia and Peru, which have handled their affairs responsibly, are still growing, but much more slowly. Mexico, Central America and the Dominican Republic, net importers of commodities, are set to do better than average in the coming years [6].

"The boom was not completely wasted, but neither was it completely capitalised on," Guillermo Perry and Alejandro Forero of the University of the Andes in Bogotá conclude in a paper. Most of its proceeds went on a consumption binge and imports. By contrast, Asia's expansion was powered by manufactured exports, investment and infrastructure spending, increasing its potential for future growth [6].

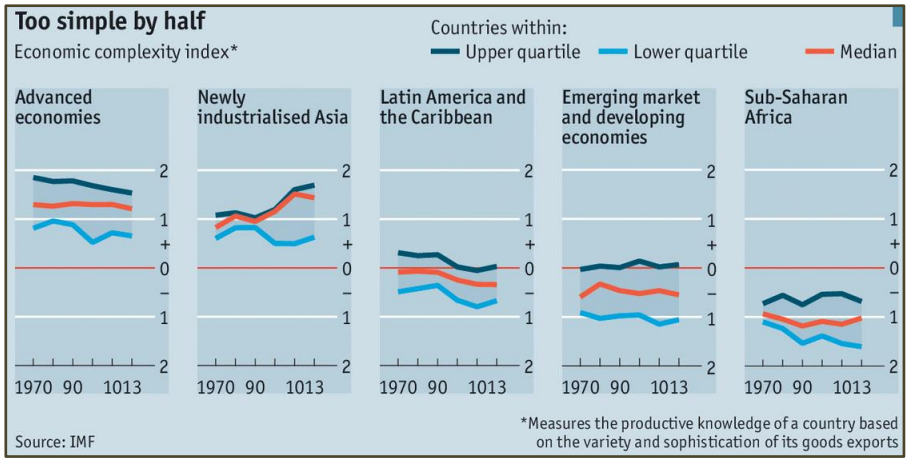
Latin America's traditionally low investment levels did increase. Stronger and better-regulated banks and public finances and higher levels of international reserves meant that the region sailed through the great recession of 2008-09 with only a brief downturn, but many governments were then too slow to withdraw the fiscal stimulus they applied. With the partial exception of Chile and Peru, no government now has scope to mitigate the slowdown through monetary or fiscal policy [6].

To return to faster growth, Latin America must address its chronic structural weaknesses. Put simply, it exports, saves and invests too little, its economies are not diversified enough and too many of its firms and workers are unproductive [6].

To make matters worse, the rise of China, and of the emerging world generally, since the 2000s exacerbates some of these problems, a World Bank 2015 report concluded. China reinforced Latin America's role as a commodity exporter while the relative weight of its manufactured exports diminished, the bank found. That is partly because of Latin Americans' low savings rate (under 20% of GDP, compared with 30% in South-East Asia). The region has relied on drawing in foreign savings, which meant that its currencies appreciated during the boom more than they might otherwise have done, rendering many non-commodity businesses uncompetitive [6].

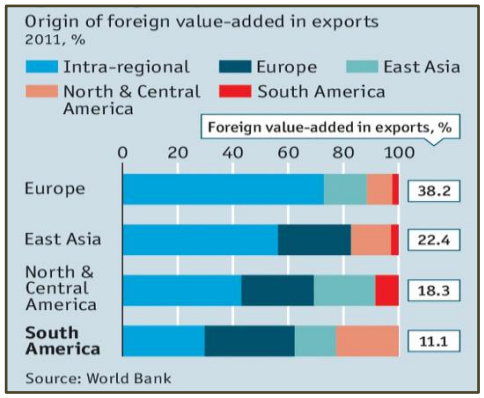
In the 1990s, Latin America began to diversify its exports, selling a bigger variety of products. However, that reversed in 2000. Only a small and declining percentage of the region's exports are of "complex" (ie, knowledge-intensive) products (see chart, economic complexity index). Ricardo Hausmann, a Venezuelan economist at Harvard, found a close correlation between the diversity and complexity of exports and subsequent economic growth. The problem Latin America faces, says Mr Hausmann, "is the things that could be there and are not". Latin Americans "seldom talk about technology and innovation, so there are no new industries to take over from commodities" [6].

Latin America's problem is its failure to join what are called "global value chains"—which are in fact mainly regional. Modern industry needs elaborate supply chains with parts coming from several different (neighbouring)



countries. Some 72% of the "foreign value-added" in exports from European countries is intra-regional, in other words it originates in other European nations; the equivalent for East Asia is 56% and for South America only 30%, according to the World Bank (see chart, origin of value added). Only Mexico is plugged into these value chains, thanks to its economic integration with the US [6].

The productivity gap between Latin America and the rest of the world has been widening. According to the Inter-American Development Bank (IDB), Latin America's total factor productivity (the efficiency with which labour and capital work together) was slightly over half the level in the United States in 2010, compared with almost three-quarters in 1960. Over the same period, East Asia has narrowed the gap from around half to a third [6].



Why are Latin Americans so relatively unproductive? Latin America has large modern companies, some of which have evolved into successful multinationals, but the typical Latin American business resembles a family workshop, lacking scale, technology and professional management [6].

There are several reasons why Latin American firms find it hard to be more productive. Andrés Velasco, who was Chile's finance minister, stresses the lack of competition in what, Brazil and Mexico apart, are smallish national markets. Achieving greater scale is vital for raising productivity, and that means going abroad. Despite much talk about integration, Latin America is still quite protectionist. Growing beyond the region is hard, given South America's location. As Mr Velasco points out, exporters in Germany or China have 20% of the world economy within fair proximity (less than 3,000km); their Chilean counterparts have no such advantage. So global value chains may be out of reach. "To sell to Asia you have to sell the whole product, not part of it," he says [6].

Another old explanation for low productivity is that half of Latin Americans work in informal non-registered businesses, which struggle to obtain technology and capital; such firms compete unfairly with legal ones and make their tax burden bigger. Informality is in part a consequence of baroque regulation which adds to business costs. [6].

An even more powerful brake on productivity is the region's lack of infrastructure (roads, ports and so on). While China invests 9% of its GDP in infrastructure and India 6%, Latin America manages just 3%, according to CAF, a development bank. Lack of money is no longer the main problem: countries such as Chile, Colombia and Peru have mobilised private finance for infrastructure. Rather, it is the difficulty of building anything. Take Peru, between 2005 and 2013 the government awarded contracts for 62 infrastructure projects worth $15 billion. Only 55% of the money was spent, says Gonzalo Prialé, a lobbyist [6].

Governments have failed to expropriate the necessary land. Then there are the permits required before you start pouring concrete. Environmental impact studies take three years on average, says Mr Prialé. A 1,100km gas pipeline in the south of the country needs 4,102 separate permits [6].

A third traditional explanation for low productivity is an ill-educated workforce. Latin America has made huge strides in expanding educational coverage, but the quality of teaching in schools is poor: the eight Latin American countries that participated in the PISA international tests of 15-year olds all came in the bottom third of the ranking. Some economists caution that schooling is no panacea; there is little evidence directly linking more education to higher productivity. They point to the danger that sociology graduates will drive taxis—unless governments try to stimulate the demand for, as well as the supply of, better-qualified workers [6].

Latin America has traditionally been poor at innovation. Its spending on research and development as a share of GDP is less than half that in developed countries. Farming is a shining exception. In Brazil, agriculture "is the only sector that has put technology at the heart of its business," says José Roberto Mendonça de Barros, an economist in São Paulo. The latest innovation, pioneered by Enalta, a firm in upstate São Paulo, is called "precision farming" and involves installing sensors in farm machinery to control planting and fertiliser use, boosting productivity. Almost half the farmers in Mato Grosso have adopted the technology, says Mr Mendonça de Barros. He expects agribusiness to grow by 2.5% this year, even as the rest of Brazil's economy contracts [6].

The Centre for Agroindustrial Technological Innovation, founded by the Peruvian government in 2000 with Spanish aid and private support has helped to raise productivity in Peru's grape, wine and pisco industries. It advises farmers, for a fee, and offers them the services of a small research laboratory and a model distillery. Since 2000, output of grapes per hectare has more than doubled. Peru is now the third-biggest exporter of table grapes to China; annual production of pisco, a grappa-style brandy, has risen from 1.8m litres to 7.8m, says Pedro Olaechea, a winemaker who chairs the centre's board. Peruvian pisco, an ancient product, is starting to gain a global name. Mr Ghezzi, the production minister, has plans for several more such technology centres, starting with leather goods, forestry and dairy products [6].

Extracting more value from natural resources by applying technology is part of Latin America's future, but the region also needs to develop new businesses, in industry and services. The IDB, in an influential report in 2014, called for "productive development policies", in which governments try to foster such new enterprises [6].

Heavy-handed industrial policies have often failed in Latin America. The latest example is a new approach calling for a lighter touch, to provide things—from training in specific skills, to new roads, or grants for innovation—whose absence may deter private investment. For example, Costa Rica's investment agency helped to develop a surgical-devices industry by persuading a US firm to set up a sterilising service. Start-Up Chile offers a grant and visa to would-be tech entrepreneurs from around the world. It has survived, with tweaks, a change of government [6].

Since 2000, only one Latin American country has become an important node in the world trading system, notes Augusto de la Torre, the World Bank's chief economist for the region. Mexico has joined global value-chains, diversified its exports and moved into more complex products. Yet Mexico's economic growth (averaging 2.4% a year for 20 years) and productivity have disappointed [6].

One theory is that Mexico has too many monopolies, especially in services. Others cite a weak legal culture and

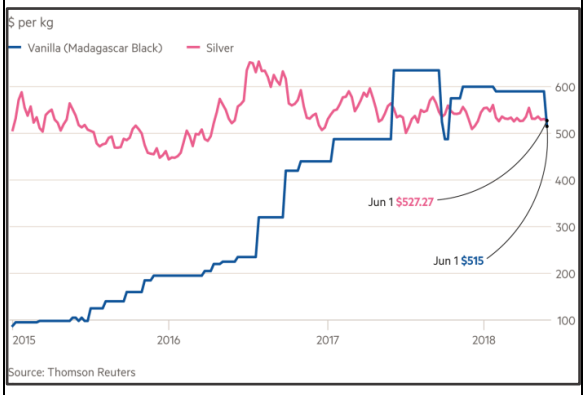
contract enforcement, and violent crime, as factors that deter investment. The underlying problem is the gulf in productivity between large modern companies, mainly in the north of the country, and small, informal producers and the south [6].

The same goes for other countries. "The problem of Latin America is that it has not been able to replicate its better-performing regions nationally," says Mr Hausmann. Doing so requires better transport, the upgrading of skills, more competition and the spread of technology. During the commodity boom, many governments could ignore that challenge. They can't any longer [6].

Dutch Disease: The Case of Vanilla in Madagascar

Madagascar supplies 80% of the world's natural vanilla and was in the grip of a vanilla boom in 2018. "People said: 'I don't care about growing food to feed myself. I only want to grow vanilla'," says Eugenia Lopez, an agricultural expert with Swiss development agency Helvetas. Though some farmers have done well from the vanilla rush, many more did not. The lion's share of profits go to the buyers, intermediaries and exporters who purchase vanilla, process it and sell it to the world's makers of chocolate, perfume, ice cream and flavouring. The price hike caused ripples as far away as London and New York where some ice-cream parlours took vanilla off their menus [7].

While the likes of Coca-Cola, Unilever, the British-Dutch consumer goods group, or Danone, the French food company, were forced to pay inflated prices, farmers received only 5 to 10 per cent of the value of their crop, according to industry observers. Worse, they say, if farmers switched to lucrative vanilla and abandon food crops such as rice and manioc, they could be left in desperate straits when the vanilla market crashes, as it inevitably will. Vanilla has been through violent booms and busts before. In 2013, it traded at $20 a kilogramme against some $515 now, down from a recent peak of $600 and compared to a silver price of $528/kg (see chart, price in $/kg). "You know the Dutch disease?," says Patrick Imam, the IMF representative to Madagascar, referring to the curse that commodities sometimes bring. "Well, I call this the vanilla disease [7]."



The inability to convert natural wealth into a decent standard of living is not only of concern to Madagascar and other, mostly poor, commodity-producing countries in Africa, Asia and Latin America. Increasingly, it is a problem for the buyers of commodities too. Consumers are more concerned about where their food comes from and the environmental and social impact of their buying preferences [7].

"I think what everybody's discovering is that the supply chain is broken," says Victoria Mars, a fourth-generation member of the family that owns Mars, which purchases about 0.5% of the world's vanilla, mainly for chocolate brands such as Snickers and Twix. "We've got to take some responsibility," she says. "Vanilla is a small piece, but we've got to start somewhere." Barry Parkin, head of procurement and sustainability at Mars, says companies must change the way they buy commodities. In fact, he goes so far as to declare the age of commodities dead [7].

"Historically, commodities have been something that's uniform, that people bought at arm's length, that you didn't know where it came from," he says. When he was buying cocoa for Mars 15 years ago, the specification was "west African flavour". Mars did not know whether it came from, Ghana, Nigeria, Cameroon or Ivory Coast — nor anything about the conditions for production. "We bought it from the cheapest supplier that week, that month." That sort of relationship will no longer wash, says Mr Parkin, who credits NGOs with exposing the underbelly of supply chains that too often see luxury goods at one end and malnutrition, deforestation and child labour at the other [7].

"This train is running and running fast," he says. "The big commodity houses — the Cargills, the Archer Daniels Midlands, the Bunges, the 200-year-old companies that were built on moving commodities around the world at the most efficient price — they did not see this coming." Emmanuel Faber, chairman and CEO of Danone, another big purchaser of vanilla, expresses similar views. He estimates that Danone sources its ingredients from 70 to 100 countries [7].

"For generations, consumers in the western world have entrusted large brands to supply delicious, affordable food," Mr Faber says. "The next generation came educated with doubts about the system, doubts about climate change, doubts about inequality." That means, he says, that multinationals like Danone have to make credible efforts to find out what is going on in their supply chains and to tackle issues when they identify them. "Food and water is not just a consumer good," he says. "That's a huge ideological simplification we maintained for 50 years [7]."

Role of land reform

A voluminous literature ponders the causes of the East Asian miracle, in which first Japan, then the four original "Asian tigers"—Hong Kong, Singapore, South Korea and Taiwan—and then China sustained bounding growth for decades. Most studies point to market-friendly policies that encouraged exports of manufactures and the rapid accumulation of capital, including the human sort. Others emphasise the importance of institutions. Yet one crucial factor has been relatively underplayed: restructuring agriculture [8].

"Land reform" sounds innocuous but involves great upheaval: seizing land from those who have it and giving it to those who do not. Yet radical action may be necessary in countries with big, impoverished, rural populations. As Joe Studwell points out in "How Asia Works", farm yields often stagnate in such places. As populations grow, making land scarce, landlords jack up rents and lend at extortionate rates. That leaves poor tenant farmers mired in debt, with no means to invest [8].

China provides a stark example. By the 1920s, a tenth of the population owned over seven-tenths of the arable land. Three-quarters of farming families had less than a hectare. Mao Zedong's Communists reallocated land in every new territory they seized. After the defeat of the Kuomintang

(KMT) in 1949, they rolled out land reform nationwide. Landlords, some with scarcely more land than most, were blamed for everything. In the decade after 1945 millions of them were beaten to death or shot, or left to starve. Revolution, Mao said, was not a dinner party [8].

The effect was immediate. Grain output leapt by perhaps 70% in the decade after the war. When farmers can capture most of the value of their land, they have a powerful incentive to produce. And while smallholder agriculture is hugely labour-intensive, that makes sense when labour is abundant. (Only a few years later the Communists embarked on the madness of collectivisation. China emerged from that disaster in 1978, after Mao died. North Korea is starting to do so only now) [8].

China's early success challenged Japan, South Korea and Taiwan. These countries, pressed by the US to carry out land reform, showed that it does not require mass murder. By the war, half of Japan's arable land was worked by tenant farmers, and rent was never less than half the crop. After the war, farm size was limited to three hectares. Land committees on which tenants outnumbered landlords oversaw a reapportionment that took land from 2m households and gave it to 4m others. Compensation fell short (and was gobbled up by inflation), but there was little violence among farmers. Perhaps it helped to be able to blame the occupiers when politely taking over someone's paddy field. At any rate, agriculture boomed [8].

South Korea had the most unequal land ownership in the region, and resistance by the elites was strongest. Some landlords lost as much as 90% of their land. But Taiwan under the KMT shows the clearest benefits from land reform, which started with rent controls and reforms to tenancy. Sales of formerly Japanese-owned land followed. Then, in 1953, came appropriation. The share of land tilled by the owner rose from just over 30% in 1945 to 64% in 1960. Yields on sugar and rice leapt. New markets sprang up for exotic fruits and vegetables. Household farmers dominated early exports. Crucially, income inequality shrank thanks to the new farmer-capitalists. Less spent on imports of food, more money in Taiwanese pockets, a new entrepreneurialism: farming was the start of Taiwan's economic miracle [8].

Indonesia, Malaysia and Thailand could have followed Taiwan's example, but didn't. Their economies have done far worse. With between 25% (Malaysia) and 48% (Thailand) of their populations still living in the countryside, land distribution matters. The state favours agribusiness and plantations over small farmers. There is a yawning gap in income between countryside and city [8].

The situation is worse in the Philippines, which had a similar income per person to Taiwan's just after the war. Before independence in 1946, the US auctioned off the Catholic church's huge estates. Only the local elites could afford them. These became the hacienda class that thrives today, forming the basis of many political dynasties. Admittedly, after the People Power revolution (led by Cory Aquino, from one landed family, who married into another), political pressure for land redistribution culminated in a reform law passed in 1988. Nearly 30 years on the law, replete with loopholes, is still being implemented. The operations of many big estates have hardly been affected, while household farmers still lack technical and financial support. Many of those given plots have had to lease them back cheaply to the big planters, becoming wage labourers on their own land [8].

There are political consequences too. In South Korea and Taiwan inclusive agricultural growth prefigured the inclusive politics of today's thriving democracies. In South-East Asia, by contrast, cronyism and inertia are consequences of an economy that is unfair to those at the bottom. The Philippines and Thailand have most clearly paid a price, in the form of insurgencies and rural unrest, for keeping poor people down. When weighed against the costs, land reform, done well, starts to look cheap [8].

Structural change in Africa

In much of Africa, the informal service economy is a crowded place to be. But it is hard to find work anywhere else. In 2016, GDP in sub-Saharan Africa grew by just 1.4%. Income per person fell. But growth in itself is not the issue that troubles policymakers and intrigues academics: for most of this century, after all, African economies have been among the fastest-growing in the world. What has flummoxed observers is where that growth comes from. In 1954 Arthur Lewis, a Nobel prize-winning economist, argued that development occurs as labour shifts from an unproductive "traditional" sector—activities such as subsistence farming, or petty trade—into modern, capitalist activities [9].

Research by Margaret McMillan, of Tufts University, and Dani Rodrik, of Harvard, investigates how far Africa has followed this pattern. They distinguish two traditions of thinking about growth. One focuses on raising labour productivity within sectors of the economy, by adding capital or improving skills and technology. The other stresses structural change, as workers move between sectors. The output of the average African manufacturing worker is five times that of his agricultural counterpart [9].

Move people from farms to jobs in factories or high-value services and growth will follow. As a thought experiment, consider changing the sectoral distribution of African workers to match that in the advanced economies, holding everything else constant. Productivity in Ethiopia would increase sixfold; in Senegal by a factor of eleven [9].

Things are rarely so simple, however. In the 1990s structural change in sub-Saharan Africa actually went into reverse; it was a drag on growth. In Zambia, for example, workers returned to their fields, as industries and mines shut down. But in the new millennium, momentum picked up again. Between 2000 and 2010 structural change accounted for almost half of productivity growth in a 19-country sample. The effect was especially strong in places with a lot of farmers, such as Ethiopia, Malawi and Tanzania. Overall, the proportion of Africans employed in agriculture fell by 11 percentage points [9].

This was no industrial revolution, however. For every ten workers to lay down their hoes, only two found their way into industry. The service sector absorbed the rest. Cities like Nairobi offered new jobs for skilled professionals in technology and finance. But most workers were more likely to be hawking phone credit than designing the next app; selling second-hand clothes, not stitching new ones. In the oil-soaked cities of Luanda and Lagos, they manned construction sites or waited on tables for the rich. "There's been structural change," says Yaw Ansu of the African Centre for Economic Transformation, a Ghana-based think-tank, "but not the type that really improves the lives of people" [9]

In East Asia both kinds of growth have occurred at once: workers have moved into more productive sectors, and productivity in those sectors has increased. So another puzzle is that in African countries that have seen large-scale structural change, productivity outside agriculture has often fallen [9].

From 19th-century Britain to 21st-century Vietnam, sustained growth has been built on manufacturing. Factories

create lots of low-skilled jobs. And, as Mr Rodrik has shown, manufacturing productivity in poor countries tends to catch up with the most advanced economies, even in places with shoddy institutions or bad geography. But African manufacturing has stagnated. Its contribution to GDP has changed little since the late 1970s [9].

Orthodox remedies, focused on trimming regulation and improving governance, have lost their appeal. So there has been a revival of interest in active industrial policies. Ethiopia, where manufacturing employment has quintupled this century (from a low base), is experimenting with this approach. A new paper by Cornelia Startiz and Lindsay Whitfield for the Centre of African Economies, at Roskilde University in Denmark, describes how the government has encouraged Asian apparel exporters to open factories in industrial parks, while protecting local firms in the domestic market. Foreign investment helps, if multinationals connect with local suppliers and share know-how [9].

Yet the record of interventionist industrial policy elsewhere is mostly a sorry one. And old-style industrialisation is in any event becoming more difficult. Automation is transforming manufacturing, as it becomes a viable substitute for labour in countries at ever-lower levels of income per head. The result is that Africans are competing not just with low-wage workers in Bangladesh and elsewhere, but with even lower-wage robots. The development path followed by Japan, the East Asian tigers and, most spectacularly, China—moving from agriculture to low-margin labour-intensive manufacturing such as clothing and toys—may be fast closing. Trade patterns have changed, too. Instead of producing finished products in one country, African industries must slot into global supply chains [9].

Structural change is about more than factories. John Page of the Brookings Institution, an American think-tank, argues for the importance of “industries without smokestacks”: tradable, productive sectors, like cut flowers, call-centres and tourism. Africa can learn from the successes of other regions, such as East Asia. But it will take a different path [9].

Fair Trade Branding

The trend is clear: Fairtrade is going mainstream. When some of the biggest names in retail want a piece of your image, you're well on the way from being the little brand that could to actually doing big business. Major companies have issued statements emphasising their dedication to social responsibility, but a straightforward statement of capitalist logic is: "This initiative is being led by consumers. They want Fairtrade and they want it now" [10].

The Fairtrade calculus is simple. For a guaranteed minimum price for their product, Fairtrade coffee growers in the Third World join certified co-operatives that meet certain employment and environmental standards. Included in the Fairtrade minimum is a $0.05 premium - like a voluntary consumption tax - that must be invested in the growers' communities [10].

In a commodity market that has seen prices at historic lows in recent years, Fairtrade growers reap significant benefits, price protection chief among them [10].

From the consumer's perspective, buying Fairtrade is an easy way of satisfying a Western conscience that wants to help poor people on the other side of the world, but at the same time isn't prepared give up lattes. Their Fairtrade guarantee comes in the form of certified virtue [10].

From the buyer's perspective, Fairtrade offers an avenue into the luxury end of the retail coffee market without the hard work of building an independent brand. By leveraging Fairtrade's cachet among discriminating consumers, plain vanilla distributors can spread the brand's equity across their entire range of products, even if only a small percentage are certified [10].

This helps them compete with the successful boutique brands, such as Java Republic, that have actually put in the effort to make sure "fair trade" products are known for quality.

Also, retailers and distributors that pay the small Fairtrade premium for their beans can then turn around and jack up the prices of the end product, knowing that the conscientious customers will pay over the odds for a mug of steaming justice [10].

None of this is as simple as "little Fairtrade good, Big Coffee bad", however. In fact, the exploding consumer market for speciality coffees in the last decade has arguably delivered more in terms of price fairness for producers than Fairtrade's certification model. Starbucks, the Death Star of the coffee world in the eyes of many fair trade advocates, actually pays an average price of $1.20 per pound - about double the average market price and only six cents shy of the Fairtrade price floor [10].

Just to put this into perspective: Starbucks alone buys more coffee each year - in excess of 2 per cent of the world's production - than Fairtrade certifies for all its growers. In terms of relative impact, coffee connoisseurship may do more for Third World producers than ethical consumption [10].

This is where Fairtrade defies categorisation. Using a kind of ideological judo, the brand has managed to redefine consumption as a moral response to global economic inequality by using the power of capitalism against itself. Guaranteeing a minimum price for a commodity may be contrary to free market principles, but it's the free market that is choosing Fairtrade products in abundance [10].

It's no accident that Java snobbery and Fairtrade have developed in tandem. In a segmenting market where cheap often means lousy, Fairtrade is reassuringly expensive luxury choice for the discerning coffee drinker [10].

The unspoken premise of the Fairtrade ethic is that differences in wealth are always unfair. It's hard to imagine a market that could work without such differentials, though. Ironically, the success of Fairtrade farms depends on the existence of a consumer market with enough disposable income to artificially boost prices in far away, poorer places [10].

The trick now for Fairtrade and other models of ethical consumption will be to keep pace with specialisation. A niche brand that loses its exclusivity by proliferating indiscriminately risks undermining its own selling proposition [10].

Growing consumer demand for ethical food has encouraged more companies to certify their output, leading to the emergence of new fair trade schemes and putting pressure on established fair trade certifiers to expand their operations, despite limited resources. “We have ended up with a proliferation of labels because there are some strong differences in how producers and people in the fair trade movement believe they can best respond,” says Anna Canning, campaigns manager for Fair World Project, a fair trade watchdog [11].

The trend threatens to undermine consumer confidence, while encouraging "fairwashing" — when a company applies for a fair trade label to gloss over its problems — Ms Canning says. Some leading producers have recently pulled out of established fair trade schemes to set up their own ethical labels. The decision in 2016 by Cadbury, the British confectionery maker owned by US food group Mondelez International, to pull out of the Fairtrade scheme in favour of its own sustainability programme, Cocoa Life, placed a question mark over the viability of established fair trade organisations. Green & Black's, which pioneered organic Fairtrade chocolate and was bought by Cadbury in 2005, joined Cocoa Life the following year [11].

Fairtrade

Fairtrade attracts considerable criticism despite its small market share. The Institute of Economic Affairs (IEA) criticized it in *Fair Trade without the Froth*. The IEA champions free markets, so one could expect an attack along familiar lines: Fairtrade guarantees farmers minimum prices for products from coffee to cotton, distorting the markets in which it operates. By effectively subsidising growers, it encourages over-production and discourages poor communities from shifting to more promising activities. However, Sushil Mohan, the report's author, is more nuanced. A Fairtrade buyer, like any other consumer, simply makes a choice. "Fairtrade rests as much on market forces as conventional trading does. Fairtrade works not because it subsidises goods no one wants, but because some free market consumers are willing to support it [12]."

Buying Fairtrade chocolate no more distorts the chocolate market than buying a Louis Vuitton handbag distorts the handbag market. In both cases, buyers send a signal: they are prepared to spend more on a bag with a prestigious label, or on chocolate that provides cocoa growers with a better life. Fairtrade gives a buyer the satisfaction of helping the neediest [12].

Does Fairtrade really help the neediest? Consumers thinks so. Fairtrade products represented only 0.01% of global food and beverage sales in 2009, but revenues rose by more than 40% annually between 1998 and 2007, by 22% in 2008 and by 15% in 2009. In some niches, Fairtrade exercises considerable clout: it took only 1% of the global coffee market in 2009, but had 20% of UK retail sales of ground coffee [12].

Mr. Mohan questions whether Fairtrade consumers make a difference in terms of helping the poor. Certification is expensive: £1,570 in the first year, so it is more likely to help farmers in middle income countries. In 2007, the four leading Fairtrade-certified nations were Mexico, Colombia, Peru and South Africa. Fairtrade counters that it operates in the poorest countries too, e.g., Democratic Republic of Congo, Afghanistan, Ethiopia, Tanzania, Mali, and supports those who cannot afford certification [12].

How much of the Fairtrade price premium actually goes to the producers? Studies cite a premium of 10% to 25%, but how well monitored is the system? A 2006 *Financial Times* investigation found Fairtrade coffee farms in Peru paid workers below the country's minimum wage. Mr. Mohan, Fairtrade said, confused the retail price premium with the "social premium", a sum that producers use to build schools or clinics. The farm workers concerned in the *FT* report earned 25% more than they could elsewhere. Several sellers of Fairtrade products, such as J Sainsbury (bananas), Ben & Jerry's (ice cream) and Cadbury (chocolate), switched to Fairtrade without charging consumers extra. Fairtrade did not guarantee a retail price premium, insists that producers receive the minimum price and the social premium. A 2006 *FT* investigation into Fairtrade cotton in Mali found that the social premium built schools and concrete grain stores and that the system appeared to work well [12].

Mr. Mohan noted that free trade and more open markets lift many more millions out of poverty than Fairtrade ever could, and adds that Fairtrade is not a strategy for development worldwide. Given its small size, that is probably true. But so what? Fairtrade beneficiaries get more of a lift than free trade by itself [12].

In 2017, UK retailer J Sainsbury announced it would also drop the Fairtrade label from its own-brand tea, launching its Fairly Traded label instead. Meanwhile, Nestlé is expanding its in-house Cocoa Plan sustainability programme. Trishna Shah, senior analyst at market researcher Euromonitor International, says that "2009 was the year when the big global fair trade brands became important to companies, they began to seek them out — Cadbury, Mars and Nestlé went fair trade; 2017 is when they switched". While Fairtrade, UTZ and the Rainforest Alliance have been seen as the gold standard for fair trade certification in recent years, there is now "a ripple of change", with leading manufacturers moving to self-certification, Ms Shah says. "For some manufacturers with complex supply chains, established fair trade schemes don't offer enough flexibility. That's why they are looking to adapt to the current business climate," she says. In this sense, the best-known fair trade certification brands are victims of their own success [11].

"Fair trade has been one of the most important ways of getting more people to think about where the stuff they buy comes from, and the conditions under which it is produced. That's a fantastic thing," says Christopher Cramer, development economist and professor at Soas, University of London, and co-author of one of the few in-depth academic studies of the impact of fair trade schemes [11].

"There is a neoclassical view that it doesn't work to intervene in markets — I disagree. You are more likely to reach poor people through larger producers who are in the public eye," he says. However, research four years ago, led by Prof Cramer, questioned the positive effect of fair trade on the people it is supposed to benefit: the producers. "We found that fair trade made no positive difference to the poorest people in the supply chain. We had statistically significant evidence suggesting that we don't know enough, and that what we know is that it doesn't make much difference," he says [11].

Fairtrade International says it has since worked closely with the researchers "to listen to their views and better understand some of their findings". But the organisation is bullish about its prospects, claiming to represent almost 1.7m Fairtrade farmers and workers, and being a partner to 2,400 companies selling more than 30,000 products with the Fairtrade mark. "The producers will tell you that Fairtrade provides more benefits for them," says Dario Soto Abril, chief executive of Fairtrade International. "We set the bar high, we are the gold standard — we put the producers in the driving seat" [11].

Among consumers, the Fairtrade brand has the highest recognition, with nine out of 10 shoppers in the UK knowing about it, he says. Mr Soto Abril sees the trend towards self-certification by large manufacturers as a vindication. "We are disruptive of the terms of trade. Part of being disruptive is that we force companies to catch up," he says. Rather than being bypassed by Mondelez, Fairtrade is now partnered with the company, monitoring closely what

it does, Mr Soto Abril says. Fairtrade is also responding to the changing business environment, he says. Next year it will launch Fairtrace, which uses blockchain technology to increase traceability and allow shoppers to know more about the origin of the products they are holding in their hands [11].

The move is a recognition that sustainability is a lot more nuanced, with consumers more demanding and inquisitive than before, making it harder for companies to win their trust. Ms Shah at Euromonitor says a wave of start-ups is trialling digital platforms such as blockchain and smart labelling to connect consumers with the ethical credentials of brands. "One of the big buzzwords in 2018 has been traceability," Ms Shah says [11].

Paradoxically, a problem stems from the success of consumer labels that purport to tackle the issues involved, e.g., sustainability, inequality, and poverty. There has been a dizzying proliferation of sustainability and fair-trade labels. The Guardian, a UK paper, counted more than 460 in 2019 offering everything from dolphin-free tuna to bird-friendly coffee. Many big companies have abandoned eternal certifications, devising in-house labels – often without outside auditing – promising conscience-free shopping [13].

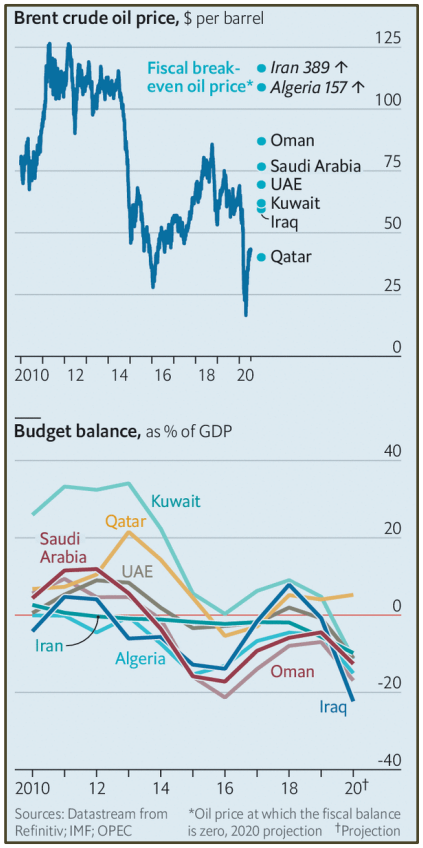
Covid, Oil Prices and Commodity Dependence

Covid-19 sent the price of oil plummeting to all-time lows as people stopped moving around to limit the spread of the virus and as economies entered lockdown, slowing economic activity. When commerce resumed in mid-2020, the price ticked back up slowly [14].

However, the world's economies are moving away from fossil fuels. Oversupply and the increasing competitiveness of cleaner energy sources could mean that oil might be cheaper in the foreseeable future. Is the turmoil in oil markets an aberration or a glimpse of the future? It was wondered whether the world had entered an era of low prices. If so, then no region would be more affected than the Middle East and north Africa. Oil revenues in the region, which produces more of the black stuff than any other region, fell from over $1trn in 2012 to $575bn in 2019, says the IMF Their government budgets were not adding up. Algeria needs the price of Brent crude, an international benchmark for oil, to reach $157 dollars a barrel to balance its books. Oman needs it to hit $87. No Arab oil producer, save tiny Qatar, could balance its books at the mid-2020 price of around $40 (see chart, oil price and budget balance) [14].

Qatar and the United Arab Emirates have huge sovereign-wealth funds. Saudi Arabia, the region's largest economy, had foreign reserves worth $444bn in mid-2020, enough to cover two years of spending at the current rate. But the region was hit hard by the pandemic, as well as low oil prices. And they have long overspent. Arab leaders knew that sky-high oil prices would not last forever. In 2016 Muhammad bin Salman, the de facto ruler of Saudi Arabia, produced a plan called "Vision 2030" that aimed to wean his economy off oil. Many of his neighbours have their own versions. [14].

This was before Russia's invasion of Ukraine, of course, which caused price spikes from the ensuing uncertainty and disruption of energy and agricultural commodity markets. The return of high oil prices can again lead to the bankrolling of unproductive economies, propping up unsavoury regimes and inviting unwelcome foreign interference. The region would do well to continue to spread riches through trade, tourism and investment in other sectors to create a more dynamic economy [14].



Moving Along the Commodity Value Chain

African cocoa-growers move upstream: the economics of chocolate

West Africa produces 70% of the world's cocoa, an important source of income. In 2018, Ghana and Côte d'Ivoire accounted for about 60% between them. The largest producer, Côte d'Ivoire, earns over 20% of its export revenues from cocoa. In 2007, sales of cocoa beans earned $4 bn, but global sales of chocolate amounted to $75 bn. In 2018, Ghana and Côte d'Ivoire's cocoa-export earnings were equivalent to less than a tenth of world chocolate sales. Chocolate earns the real money. African farmers have not been in a position to expand into chocolate-making. Or are they?

The power lies with a small group of trading firms and chocolate-makers in rich countries. "we send raw materials, they add value," sighs Owusu Afriyie, Ghana's agricultural minister.

In 2018, Ghana and Côte d'Ivoire were trying to further claw up the value chain. Ghana was close to finalising a $600m loan form the African Development Bank, some of which was expected to support cocoa processing. It was also seeking Chinese help to build a state-run processing plant. Observers see cocoa as a test-case for African industrialisation. But it is not a very useful model. Cocoa is unlikely to bring much revenue or many jobs. The capital invstment required to create one job grinding cocoa could create over 300 jobs processing cashew nuts, said the World Bank in 2012.

Granted, there have been some successes. In 2018, about 21% of the world's cocoa is ground in Africa, up from 15% a decade ago. Côte d'Ivoire grinds near a third of its beans and rivals the Netherlands as the world leader by volume. In Ghana's Tema "free zone", where firms earn tax breaks, the smell of cocoa is in the air. Niche Cocoa, one of several processors there, ships cocoa butter,

liquor and cake abroad, while selling chocolate at home. Customers cannot believe it is made in Ghana, chuckles Lloyd Ashiley, the plant manager.

Most of the processing the region is done by the same multinationals that were already grinding cocoa in Europe or elsewhere. In Ghana, the government dominates the cocoa industry and gives a discount of smaller, "light-crop" beans to encourage local processing. But when the cheap beans run out, machines sit idle. Nearly half of capacity is unused.

Divine Chocolate, founded in the UK in 1998, counts cocoa farmers as its biggest shareholding group. Kuapa Kokoo, Ghana's largest co-operative, with a membership of 45,000 cocoa growers, owns 45% of Divine and has two seats on its board. The chocolate, made in Germany, is sold alongside more familiar chocolate brands, says Sophi Tranchell, Divine's boss. Sales were £9m ($18m) in 2006, and in 2007, Divine launched a US affiliate that is one-third owned by Kuapa Kokoo.

Before becoming owners of Divine, most members of Kuapa Kokoo had never tasted chocolate, and many had never even heard of it. Commercial skills honed in local African markets seem applicable to Divine's business and the farmers take a keen interest in their company. "The farmers are very proud that they own something like this outside Ghana," says Erica Kyere, Kuapa Kokoo's head of research.

Could stepping into a consumer market expose growers to unanticipated risk? Not so far. Divine bought 1,200 tonnes of cocoa from Kuapa Kokoo in 2006, all of it on Fairtrade terms. The co-op sold 98% of its production at commodity prices to Ghana's state-run marketing board. Kuapa Kokoo's cocoa finds its way to supermarket shelves under many brand names besides Divine's.

Ms Tranchell says Divine's structure has proved its strongest asset, distinguishing it from competitors, attracting high-profile endorsements and mobilising activists to insist that supermarkets sell it. It has also unlocked non-traditional sources of finance, receiving investment from charities and development lenders and loan guarantees from aid agencies. Without Kuapa Kokoo, says Ms Tranchell, "it would have been implausible to set up a chocolate company in this very competitive, very mature market with so little money." (In the UK, Cadbury, Nestlé and Mars account for over 80% of the market.)

Other firms are pursuing similar strategies. Agrofair, a Dutch-based tropical-fruit distributor, is half-owned by producers. It owns part of Oké USA, which markets Fairtrade bananas there. Pachamama, a federated co-operative of Latin American coffee growers, completed its first year roasting coffee in the US. With the help of in-kind loans of green coffee from its members, the firm has not had to solicit outside investors at all. Coffee Pacifica, a coffee importer publicly traded in the US, is one-third owned by the Papua New Guinea Coffee Growers Federation, which represents 120,000 farmers. In 2006 its sales doubled to $3m in the US and Europe.

Anna Laven, a researcher at the University of Amsterdam who studied Kuapa Kokoo, cautions that this approach is not always possible for producers. Without support and advice from charities, formal organisation and reliable export channels, she says, moving upstream through "functional upgrading" is not feasible for most farmers. Divine is an exception to this rule: Kuapa Kokoo expects to the board to announce its first-ever dividend.

The biggest problem is geography. Most of the value in chocolate comes from marketing and branding. And it is a big step from grinding to chocolate-making. Consumers are mostly in Europe or North America. Transporting chocolate through tropical climates is a logistical headache. Chocolate consumption in Africa is low.

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