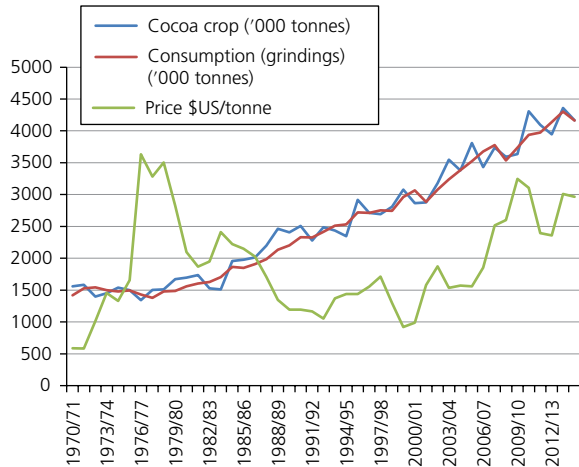


Figure 2.14 World cocoa production, consumption (grindings) and prices. Adapted from ICCO.



supply of cocoa of assured quality at competitive prices into their factories. The international cocoa markets function as intermediaries between producers and users, allowing prices to be established and providing opportunities for risks to be reduced for all parties.

There are two types of cocoa market: first, the “Actuals”, cash or physical market and, second, the “Futures and Options” or “Terminal” market.

2.4.2.1 “Actuals” market

Anyone who buys and sells physical cocoa beans can be considered as participating in the “Actuals” market (Dand, 1999). In practice, virtually all business is conducted using standardised contracts for sales that were developed by the cocoa trade associations. These are the Cocoa Merchants’ Association of America (CMAA) and the Federation of Cocoa Commerce (FCC) in Europe.

Both associations provide arbitration procedures to resolve disputes. The basis of the contract prices in the “Actuals” market is determined by the price in the “Futures” or “Terminal” market. In the “Actuals” market, it is possible to buy or sell forward, for example to buy cocoa beans in June for delivery in September.

2.4.2.2 “Futures and Options” or “Terminal” markets

These markets can be used to minimise the risk of adverse price movements for the producer, trader and the user. They are primarily “paper” markets in that no physical cocoa usually changes hand. There are two active futures markets run by the InterContinental Exchange (ICE): one in New York and the other in London. The markets have standard contracts, which are restricted to certain weights (multiples of 10t, the lot size), certain grades or types of cocoa. They also state where and when the cocoa could be delivered. Each trade passes through a central body or clearing house in the market. Trading is conducted openly so the volume, price and delivery dates are public.

Although futures trading rarely results in the delivery of physical cocoa, this possibility means that the price has to remain close to the actual value of the cocoa. This value is determined by supply and demand and the activity of speculators. The role of speculators is often considered to be negative as their aim is to maximise their profit. However, they risk their capital and contribute by bringing liquidity to the market (e.g. by enabling a producer to sell when users are not buying).

2.4.2.3 Example of a simple hedge using the “Actuals” and “Futures” markets

Traders, manufacturers and producers can use a simple hedge to reduce the risks associated with adverse changes in price (adapted from Dand, 1999). For example, it is normal for manufacturers to purchase physical cocoa for delivery in the months ahead. This is to guarantee that the factory will have a supply of cocoa. If we are in May and want to purchase 1000 t of cocoa for delivery in December, we deal with a trader (in the Actuals or physical market) and agree a price of, say, US\$ 2000/t. If we believe that prices may rise above this level in the next few months, we could do nothing and come December we would take delivery of 1000 t of cocoa at what would then be a favourable price. If, however we thought prices might fall, perhaps due to an exceptionally large crop, we would turn to the Futures and Options market. In this market we would sell 100 lots of 10 t for delivery in December. The price changes in each market are then likely to offset each other (Table 2.2). This can be seen in the simple example below where the cocoa price declines by US\$ 100 between May and December.

In this example the manufacturer has made a profit in the Futures market of US\$ 100 000 when he purchased 100 lots to square his position (i.e. to avoid having to deliver the lots of cocoa he sold in May). Whilst this profit is real, had he waited until December to buy his physical cocoa, he would have saved US\$ 100 000 over the price he paid back in May. This is given as an assumed loss in the example above. So, the manufacturer has effectively guaranteed the delivery of cocoa in December into his factory but at the same time has cushioned himself (or hedged) against a fall in prices through the Futures market. Hedges can be used by traders, manufacturers and producers to “lock” a price and hence reduce

Table 2.2 Example of a simple hedge to reduce risk.

Month	Actuals or physical market	Futures or Terminal market
May	Buy 1000 t of cocoa at US\$ 2000/t	Sell 100 lots at US\$ 1950/t for delivery in December
December	Could have purchased 1000 t at US\$ 1900/t Assumed loss US\$ 100 000	Buy 100 lots @US\$ 1850/t to square position Profit US\$ 100 000