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**POTENTIAL APPLICATIONS OF STRUCTURED COMMODITY FINANCING  
TECHNIQUES FOR BANKS IN DEVELOPING COUNTRIES**

Study prepared by the UNCTAD secretariat

**GE.**

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## INTRODUCTION

1. Technological changes and the process of globalization have forced a dramatic change in the structure of the banking sector over the past few years – for already large banks, mega-mergers have been the rule, while others have been moving into specific niches. At the same time, the global commodity economy has been going through a process of drastic change over the past decade. These processes provide threats as well as opportunities for banks in developing countries – and most of the opportunities would seem to lie in these banks developing new financing approaches.<sup>1</sup>

2. This paper describes a number of financial techniques that can be used by developing country banks to open up new financing possibilities in the commodities sector. The first chapter discusses these various techniques, which can most easily be used in the commodity sector but which can also be adopted by industries servicing the commodity sector, and for financing on the basis of "commoditized" income streams. The second chapter highlights some of the practical models that developing country banks might apply, and concludes.

3. This study follows earlier UNCTAD reports on commodity financing,<sup>2</sup> and is part of a larger programme of policy advice and technical assistance in this area. This is part of the work programme specified for the organization in the Bangkok Plan of Action, which states, among other things:

“Given the importance of commodities to many developing countries for employment, income and export earnings, UNCTAD should enhance its support to developing countries in this area. UNCTAD’s work should focus on: ...

- Assisting, in concert with other multilateral partners as appropriate, such as the World Bank, in the management of price risks by traders and producers, as well as in the utilization of structured finance instruments for the generation of additional resources which can be used for the development or diversification of the commodity sector;
- Providing technical assistance and policy advice on relevant mechanisms, including financial risk management instruments, to producers and users of oil and gas in developing countries, in particular in the context of implementing privatization and liberalization schemes, aimed at protecting Governments as well as private users and consumers from the risks of high price volatility...”<sup>3</sup>

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<sup>1</sup> This is no different from the situation of smaller banks in developed countries. For example, in an article on United States agricultural banks (“Will agricultural banks prosper in an age of vertical integration?”, *American Bankers Association Banking Journal*, New York, November 1999), it is noted that “concentration in agribusiness (has) some agricultural bankers concerned about their long-term future”, and, it concludes that “it may be that the agricultural bank’s future lies in going beyond the traditional lending model. It is possible that financial modernization could help ... Today’s lender could be tomorrow’s local investment banker”.

<sup>2</sup> Particularly N. Budd. Legal and regulatory aspects of financing commodity exporters, UNCTAD/COM/56, Geneva, 1995; UNCTAD. Collateralized commodity financing, with special attention for warehouse receipt, UNCTAD/COM/84, Geneva, 1996; UNCTAD. Government policies affecting the use of commodity price risk management and access to commodity finance in developing countries, UNCTAD/ITCD/COM/7, Geneva, 1998; F. Youssef. Documentary risk in commodity trade, UNCTAD/ITCD/COM/Misc.31, Geneva, 1998; UNCTAD. Report of the expert meeting to examine the effectiveness and usefulness for commodity-dependent countries of the new tools in commodity markets: risk management and collateralized finance, TD/B/COM.1/16, Geneva, 1998; and UNCTAD. Report of the ad-hoc expert meeting on applications of structured commodity finance techniques for commodity-dependent countries, UNCTAD/ITCD/COM/Misc.39, Geneva, 1999. The question has also been addressed in papers published for the UNCTAD Oil Trade and Finance conferences organized yearly since 1996, UNCTAD warehouse receipt finance conferences in India and Indonesia in 1998, and the Partnership Summit organized in 1998 by UNCTAD in Lyon, France.

<sup>3</sup> UNCTAD, *Plan of Action*, TD/386, Geneva, February 2000.

## Chapter I

### OVERVIEW OF STRUCTURING TECHNIQUES FOR COMMODITY FINANCE

4. Many of those active in commodity production, processing or trade are considered by banks as posing “difficult” credit risks – will they reimburse loans in time, and if not, can banks enforce their rights? Credit risks can be mitigated in many different ways. Risks can be externalized, security can be taken on collateral and/or trade receivables, other safeguards can be built into the financing structure. This section describes some of the basic approaches. After a broad introduction on structured finance, the chapter deals with a number of trade financing techniques:

- Factoring and forfaiting, in which a financier effectively makes a cash payment to a supplier in return for taking over contractual payment obligations from a buyer;
- Countertrade, which covers a range of techniques in which, in effect, products are paid with other products;
- Warehouse receipt finance, in which a financier provides a credit to a seller against the security of goods in an independently controlled warehouse;
- Export receivables financing, in which the payment flows from foreign buyers are captured – but in a way different from forfaiting and factoring;
- Pre-payments, a financing system in which a financier effectively channels financing for an upcountry supplier through a trading company, and shares the risks of this financing with this trading company;
- A variety of Islamic financing techniques, some of which bear a close resemblance to non-Islamic financing structures.

And finally in the description of trade financing techniques, a number of techniques that can be used to structure import finance will be discussed.

5. Then, project finance is briefly described, particularly with respect to applications that have some potential relevance for the financing of commodity trade. In quite a few applications, techniques for project and trade finance, for a long time different areas managed by different departments in banks, are now growing closer together. The chapter closes with a discussion of asset-backed securities and non-bank financing, the latter growing increasingly important for commodity production and trade.

#### A. What is structured commodity finance?

6. Structured finance is the art of transferring risks in trade financing from parties less able to bear those risks to those more equipped to bear them in a manner that ensures automatic reimbursement of advances from the underlying assets. Such assets include inventory and export receivables.

7. Structured commodity finance is particularly relevant for commodity companies in countries that are considered as risky by financiers. There are many cases where relatively well-run resource-rich companies do not have access to funds for a number of reasons, including historical ones and including the perception of risk of their country. Structured finance allows many of these companies to obtain finance at reasonable terms. Sound companies in countries considered as risky by financiers can actually often get credit at lower rates than those paid by their countries' Governments, simply by using structured finance solutions.

8. Structured finance can also be very relevant for new companies without track records. One of the first things that a bank will usually ask for in normal balance-sheet-backed, working-capital-type finance

is track record. In a structured finance transaction, such requirements count much less: what matters is the transaction and the ability of the company to perform its obligations.

9. If one compares structured commodity finance with the more traditional forms of finance, which are based on the company and not on the transactions that are being financed, there are a number of important differences. There are differences with regard to the importance of country risk and with regard to the importance of balance sheets. The role of the actual transaction is completely different in the two forms of finance. The needed financing skills are different, and financing costs are different.

10. First, let us deal with country risks. With normal financing, no company is able to get money from banks at a rate lower than what is paid by the country in which it is based. The sovereign risk factor will be the main determinant of the interest rates paid by companies within that country. With structured finance, companies can obtain rates better than those paid by their Governments by shifting parts of the risks abroad. This is an important advantage of structured finance because there are many countries in which Governments pay 5-10 per cent above the London Inter-Bank Offered Rate (LIBOR) for their loans; if extremely good companies are not able to do better than that, how can they compete in the currently very competitive world markets?

11. Second, there is the question of the importance of the balance sheet. Traditional, balance-sheet-based financing has a number of weaknesses. One of them is the difficulty of knowing the real value of the balance sheet that a company presents. In many parts of the world, accounting standards are not truly satisfactory from a financier's point of view. With structured finance the role of the balance sheet is fairly minor; what matters more are the transactions for which finance is sought-if the profitability of these transactions can be reliably ascertained, they could be financed, even if the company has a poor balance sheet.

12. Third, and related to the point above, the transactions of the borrowing company are not very important in traditional financing. Structured finance, in contrast, enables banks to isolate the financing for sound transactions from the overall accounts of the company.

13. Fourth, there are a number of obstacles to structured finance which do not exist in the case of more traditional forms of financing. In many countries, the understanding and the awareness of structured financing techniques and modalities are quite weak, and this has often resulted in legal and policy barriers to this form of finance (e.g. restrictions on the use of escrow accounts, or on the transferability of export contracts, or on the ability to pledge certain assets). Additionally, there is, for State-owned or State-controlled enterprises, a potential problem with the World Bank's negative pledge covenants (and similar covenants from other multilateral financial organizations), which do not permit such entities to pledge their assets to foreign banks, other than for transactions covering less than one year, or with a specific exemption from this organization.<sup>4</sup>

14. Finally, there is also a difference in the transaction costs of setting up traditional financing and setting up structured financing. While leading to financing at much better conditions, structured financing is relatively labour-intensive, and is generally not worthwhile for small transactions. This is one reason why local banks could have a definite competitive advantage over international banks even in Africa. Not only do they know the local legal environments, but also they are able to structure transactions at a much lower cost and they can therefore set up financing structures at much lower volumes.

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<sup>4</sup> These issues are extensively discussed in UNCTAD, Counterpart and sovereign risk obstacles to improved access to risk management markets: issues involved, problems and possible solutions, TD/B/CN.1/GE.1/3, Geneva, 1994.

15. How does structured finance work? The first aspect of structured finance is that it moves risk away from the party which is being financed – this credit risk is replaced by the credit risk of another, commercially stronger, counterparty, or by risk on the commodity or transaction that is being financed, or by another risk (or series of risks) that are less than that of the ultimate borrower. This implies that structured finance, is relatively safe for a bank; during recent financial crises in Latin America, the Russian Federation and South-East Asia, while large losses were made on traditional commodity financing, losses on structured commodity finance, were few.

16. A second important aspect of structured finance is that it converts wealth into ready capital - wealth in the sense of having oil in the ground, plantations to produce cocoa or coffee, even fields to produce annual crops such as cotton. Structuring techniques make it possible to raise funds on the basis of this wealth, funds that can then be used to access this wealth and converting it into ready money.

17. Structured commodity finance demands a lot from bankers in terms of imagination, in terms of their ability to structure the financing around the conditions of a company and the conditions of the country in which it operates. However, at the same time, structured financing is a very systematic process. Box 1 gives an indication of how bankers can design sound financing structures.

**Box 1**  
**How to develop innovative (and secure) financing transactions**

1. Identify current or expected regular earnings or payment flows which are not being used to generate low-cost finance (payment flows are relevant because perhaps, with the appropriate financing package, you can convert these into earnings for one of your clients, replacing traditional suppliers).
2. Identify which economic actors are involved in the generation and processing of these earning flows (create a first flow chart).
3. Decide whether you can, and want to work with at least one of the major actors involved in these earning flows. Is the possible deal significant enough? Is the performance of at least one of the actors reliable?
4. If the demand for finance has not originated with one of your existing clients, this is the first stage where you really have to enter into contact with your potential new client(s). Determine what the actors need – inputs, machinery, electricity, services... or perhaps just more working capital. Perhaps, they do not need anything new.
5. Then, design a structure for the financing: which part of the product chain would you be financing, and what would the money be used for? How will you be reimbursed? This basically means drawing up one or more financing flowcharts.
6. This done, determine who would take care of securing the various flows in this flow chart – and that includes the performance of the various actors. If goods are transported, how will you make them secure – if you can't do it yourself, are there proper collateral management agents? Are you able to check documentary requirements? To check the borrower's physical facilities? If you need insurance, is this available?
7. Design specific risk-mitigating measures, which will make the transaction safe for you as a financier, for the various components of the financing structure. This can include use and assignment of insurance, responsibilities given to outside agents (such as inspection companies), hedging of price and/or currency risks. In this 7th step, you start estimating how big the loan you can give is (how much over-collateralization do you need?), and what the terms would be.
8. Then, the negotiations start. Is everyone willing to play the role that the bank envisaged? The original flow chart may have to be revised.
9. Have a due diligence done. If problems are found, go back to 6. If there are no problems, try to close the deal.

## B. Factoring and forfaiting

18. Factoring and forfaiting are both forms of receivables discounting; in other words, a specialized financial firm pays a company cash up-front for the amounts due to them by their customers.

19. This is an old form of financing and management of receivables, developed to mitigate counterparty risks in the trade between the United Kingdom and its colonies. However, the real growth of the factoring and forfaiting industries started only in the 1960s.

20. While forfaiting is mostly for international transactions, factoring is now predominantly used for domestic trade, in developed countries as in well as a number of developing ones. Both domestic and international factoring are growing fast-the industry's volume in 1998 was almost twice that of 1994.

21. The Unidroit Convention on International Factoring (Ottawa, 28 May 1988<sup>5</sup>) defines factoring as the assignment by a supplier of receivables arising from contracts of sale of goods made between the supplier and its customers (debtors) to a factor, in which the factor "is to perform *at least two* of the following functions:

- finance for the supplier, including loans and advance payments;
- maintenance of accounts (ledgering) relating to the receivables;
- collection of receivables;
- protection against default in payment by debtors."

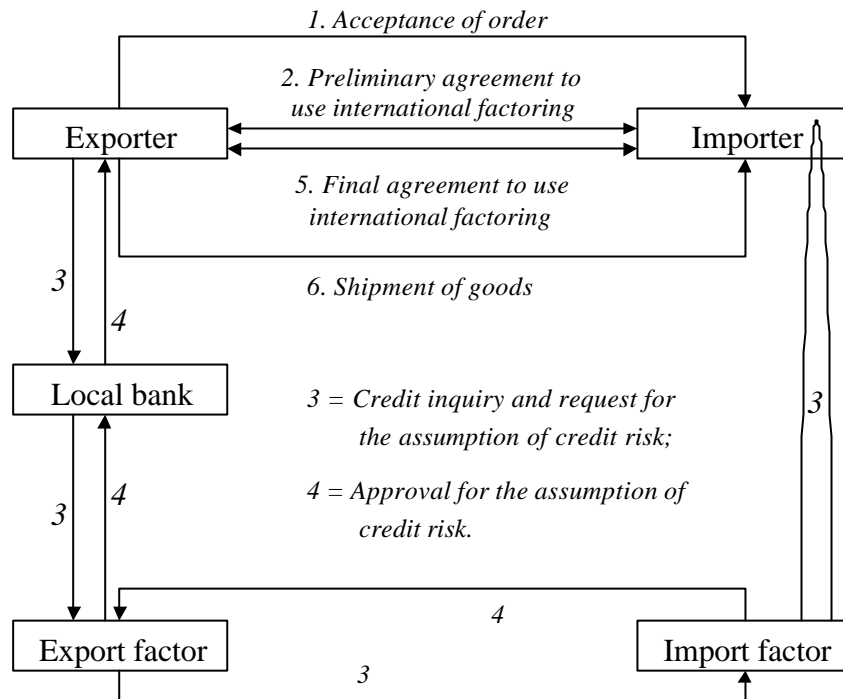
Table 1  
Major facets of factoring and forfaiting

	<u>Factoring</u>	<u>Forfaiting</u>
<b>Regional orientation</b>	Mostly domestic in Organization for Economic Co-operation and Development (OECD) countries. Relatively weak, but growing possibilities to do factoring in/for trade with developing countries.	Mostly international. As the transactions are based mostly on bank guarantees, ability to do business in relatively wide spread of countries.
<b>Products covered</b>	Mostly consumer goods, and services	For a large part, equipment (often in large projects) and commodities
<b>Size of market</b>	Domestic factoring: US\$ 499 billion International factoring: US\$ 31 billion (1998)	Consolidated figures not available; estimates range from US\$40 to 100 billion.
<b>Tenor</b>	Mostly 30-180 days, for contracts which foresee a single payment.	Mostly 1-7 years, for contracts which specify payment in installments.
<b>Size of contracts covered</b>	Mostly US\$ 2,000 to 100,000. Average contract size in international factoring: US\$ 29,000.	Minimum deal size: US\$ 100,000, with individual maturities > US\$ 25,000. Mostly US\$ 500,000 to 20 million.
<b>Timing compared to the contract</b>	Factoring normally follows already established contracts or contractual relations.	The contract is often negotiated on the basis of prior commitments from a forfaiting company.
<b>Contract selection</b>	Factors will usually want access to a large percentage of a seller's business receivables	Most deals are on a one-contract basis.
<b>Secondary market</b>	Very small, as most operations are evidenced only by invoices.	Large, as the receivables are normally avalized and thus negotiable.

Sources: London Forfaiting Company, International Factors Group, Factors Chain International.

<sup>5</sup> See <http://www.unidroit.org/english/conventions/c-fact.htm>, article 2(b).

**Box 2**  
**International factoring flowchart**



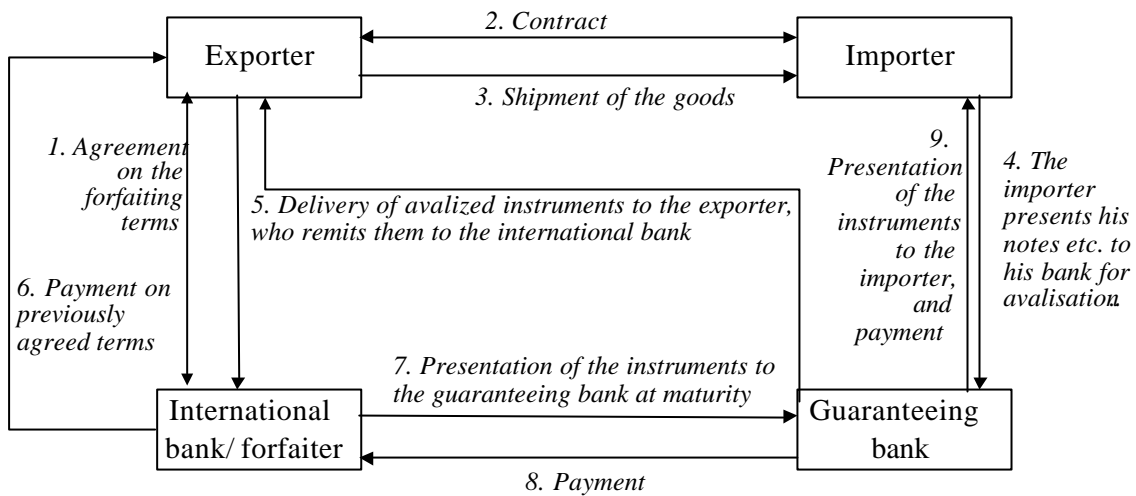
This flowchart shows a typical mechanism for international factoring. Factoring normally follows the acceptance of an order from a buyer by a seller. The exporter discusses payment modalities with the importer, and the two can agree (particularly to eliminate the counterparty risk of the exporter towards the importer without the importer having to pay a cash advance), in a preliminary manner, to use the international factoring system for payment and collection, subject to terms and conditions which the export factor shall offer later.

The exporter then contacts the export factor (possibly through his own local bank) to check whether the importer is indeed an acceptable counterparty for the factor. The export factor initiates a credit inquiry through his counterpart in the importer's country, and asks the import factor whether he is willing to take on the importer's credit risk.

Based on the decision made by the import factor on this request, the export factor issues a "letter of undertaking" of the credit risk. He sends the original to the exporter's bank, and a copy to the exporter. On this basis, the exporter and importer make their final decision on using the factoring system, and the exporter ships the goods. The exporter will then receive an advance from the export factor on delivery of the documents through his bank.

The goods are accompanied by an invoice which specifies that the importer has to deposit the payment into an account which may be in the exporter's name, but which is controlled by the import factor. The local bank sends the shipping documents to the import factor, and the import factor remits the documents to the importer – he may require the importer to pay prior to this. Then, the import factor ensures the transfer of the sum paid (minus his own commissions and costs) to the exporter, through the export factor (either through a corresponding bank, or directly). Within at least one of the major factoring networks, a mutual offset arrangement has been developed.

### Box 3 Forfaiting flowchart



Forfaiting is most often “built into” the commercial contract. For example, the exporter knows that the importer is willing to pay with, say, promissory notes which are avalised or guaranteed by a prime bank. The exporter then makes contact with the forfaiting branch of an international bank, or with an independent forfaiting company, to obtain a price quote (which remains valid only for a few hours or at most, days), or if negotiations take longer, to buy an “**option to discount**”, offering forfaiting terms for the specific transaction. Then, the exporter negotiates on this basis with the importer, and is hopefully able to sign a commercial contract.

Once the contract has been signed, the exporter converts the “option to discount” into a firm offer from the forfaiter and ships the goods. Upon shipment or delivery (or whatever other time has been set in the contract), the importer presents his promissory notes or other previously agreed documents (using a previously agreed format and language, which follow international norms), to his bank for an aval or a guarantee.

The guaranteeing bank remits the avalized instruments, or the instruments together with its guarantee to the exporter. The exporter endorses them and sends the guaranteeing bank a copy of the invoice, bill of lading and other required documents. The endorsed avalized instruments are sent to the international bank/forfaiter, which checks the validity of the notes and the signatures. If notes and signatures are in order, the forfaiter pays the exporter as per the previously agreed terms. If verification takes too much time, another solution would be an immediate payout made under the proviso that the validity of the signatures be confirmed.

Assuming that he does not sell the paper on the secondary market, the forfaiter then waits until maturity of the instruments, and upon maturity, presents them to the guaranteeing bank, which remits the payment as specified. It is the responsibility of the guaranteeing bank to collect payments due from the importer.

22. In principle, factoring can therefore mean the “outsourcing” of credit management and collection functions, no finance being provided to the supplier. But in practice, the majority of factoring operations are done for financing purposes. For this reason, factoring is often described as “cash for invoices”.

23. The factor can pay for the accounts receivable (invoices) in different ways:

- **Advance-based factoring** (the most common form): normally, between 70 and 85 per cent of the invoice amount is paid to the seller at the time of purchase of the invoices.
- **Maturity-based factoring**: payment is made on an agreed number of days after the invoice date.

- **Collection-based factoring:** payment is made upon collection of the invoices. Here, the factoring is not a cash flow management tool, but rather a credit risk management tool. It is comparable to documentary collection (letter of credit), and can be cheaper; however, it is likely to be slower.

24. Forfaiting is the term generally used to denote the purchase of obligations falling due at some future date, arising from deliveries of goods and services—mostly export transactions—without recourse to any previous holder of the obligation.

25. In a forfaiting transaction, an exporter (seller) remits guaranteed debt (normally in a hard currency—United States dollars, German marks and Swiss francs are the major denominations) which results from a sale on credit, to a forfaiting company. The forfaiting company pays him cash, up-front, the face value of the debt minus a discount. The debt has to be *guaranteed*. That is to say, simple invoices are not sufficient, nor are promissory notes from buyers (except for highly-rated buyers). Rather, the debt has to be enhanced through an aval or guarantee from a bank or other financially strong institution. Most of the debts remitted to forfaiting companies come in the form of letters of credit, banker's acceptances and bills of exchange.

26. Once the debt has been accepted by the forfaiter, the exporter is no longer liable for a failure of the buyer to pay—the forfaiter only has recourse to the exporter for non-payment if the initial transaction was fraudulent, or if the non-payment results from a failure of the exporter to comply with his contract with the buyer (e.g. the products provided were of poor quality).

27. Many forfaiters refinance their operations through the active secondary market for the trade paper that underlies forfaiting transactions. However, it is also possible to tap directly into the capital market, either by issuing notes to a special purpose vehicle, or by assigning the payments due to them to a special purpose vehicle. In both cases, the latter then issues investment-grade bonds, which can be sold to institutional investors. Securitization releases some of the regulatory capital of forfaiters, and enables them to share the credit risk of their portfolio with institutional investors.

### C. Countertrade

28. Countertrade is one of the oldest methods of payment in international trade. According to some estimates, it is used for about one fifth of world trade, and this share is increasing. It generally involves the exchange of goods and/or services as a condition of purchase, or as financing of purchases.<sup>6</sup>

29. Countertrade in its various forms has evolved as an important tool for doing business in difficult markets. It is particularly valuable in markets where there is a shortage of foreign exchange reserves, where the currency is not freely convertible, or where there is difficulty in obtaining export credits.<sup>7</sup>

30. Countertrade covers several sorts of trade in which the seller is required to accept goods, services, or other instruments of trade, in partial or whole payment for its products. It is an umbrella term for a range of reciprocal or compensatory trade mechanisms including barter, compensation, counterpurchase, buyback, offset, switch trading and tolling.<sup>8</sup> In all cases, the main objective is to oblige a seller to

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<sup>6</sup> See for a general overview Rowe, M. *Countertrade*, Euromoney publication PLC, London, 1989.

<sup>7</sup> The website of the United States Department of Commerce (<http://www.doc.gov>) contains detailed information about the countertrade regulations of various countries—particular country information can be found by executing a search on "countertrade" plus the country name.

<sup>8</sup> See for an overview Gauchery, L. *Les compensations internationales: moyen de financement des exportations, outil de négociation commerciale*, <http://www.avenir-export.com/index/exportation/temoignages/export254.htm>

generate foreign exchange for the buyer. The structure of countertrade transactions varies according to the characteristics of the deals financed and the types of assets that form the means of repayment. At its basis, it is a trade practice whereby a supplier or exporter is contractually linked with the buyer, having as a condition of sale the obligation to undertake reciprocal "commercial" actions which benefit the importer and/or the importing country.

31. Most countertrade is for short-term trade purposes, in the form of barter trade, counterpurchase, compensation, tolling and switch trading, although such transactions may take place under a longer-term arrangement (e.g. a Government-to-Government clearing account). But countertrade also has project financing applications, through offsets and buy-backs, which will be discussed in the relevant sections.

32. The financial problems in Asia have increased interest in the various forms of countertrade and many countries in that region are strengthening and reinforcing their countertrade regulations. Most Governments have no specific laws, regulations, or published policies regarding countertrade. However, 88 countries now stipulate in their foreign trade policies that for all purchases some amount of countertrade or proportional purchase of value-added products must be part of each transaction. In some countries countertrade is viewed as a second-best alternative to be engaged in only when normal trade cannot be conducted.

33. A growing number of countries-mainly developing countries-are requiring their foreign suppliers to purchase national products to a greater or lesser degree. Western businesses have organized themselves to face this situation by creating or extending services specializing in the selection and redistribution of compensation products. In some OECD Member countries, Governments have set up public or semi-public agencies to brief national firms on these new practices. Some regional centres also exist and act as clearing houses for countertrade deals-the Miami International Currency and Barter exchange in the United States, and the Association pour la Compensation des Echanges Commerciaux (ACECO) in France<sup>9</sup>.

34. Countertrade principles and terminology are extensively covered in a United Nations "Legal Guide on Countertrade Transactions", which sets out general guidelines.<sup>10</sup> Detailed terms of each deal are negotiated individually.

35. While in many countries there is no specific approval process for countertrade transactions, traders must in most cases obtain prior approval from the Reserve/Central Bank or a specific export/import licence by the Ministry of Trade before concluding any countertrade transaction. The major forms of countertrade are discussed below.

### **Barter**

36. Barter is the oldest and simplest method of compensation in which goods and/or services are exchanged against other goods and/or services of equivalent value, and where little or no money is exchanged between buyer and seller. It is the only way of undertaking a trade activity with no money involved.

37. Barter involves a single contract that covers both transaction flows. It covers a limited number of products and is a once and for all operation. In the simplest case, the goods are delivered to the exporter,

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<sup>9</sup> See for information on ACECO Martini, H. *La compensation, une source de financement des exportations à la portée des PME*, <http://www.geoscopie.com/managinter/operations/o86compen.html>.

<sup>10</sup> United Nations Commission on International Trade Law (UNCITRAL), *UNCITRAL Legal Guide on Countertrade Transactions*, United Nations Publication Sales no. E.93.V.7, Vienna 1993. The guide is available on the UNCITRAL website (<http://www.uncitral.org/en-index.htm>).

and he tries to sell them. But often, a third party agrees to take the goods and pay their value, less discount, to the exporter.

38. Although barter is the most widely known form of countertrade, today it is also one of the least common. A "pure" barter trade arrangement is seldom used now because of liberalization and privatization of commodities markets, and because of its emphasis on balanced trade, and the difficulties for both parties to identify and accept the products in addition to the risk of not getting the reciprocal goods. A few years ago, much of the countertrade business was located in the Far East and Eastern Europe, but also in some African and Latin American countries with extensive currency restrictions, and at times by some oil-dependent countries. Nowadays such agreements are mainly concluded when foreign exchange or raw material are difficult to source; and specifically on a government-to-government basis, where the motives for entering into a barter agreement may be more of political, rather than financial or commercial, interest.<sup>11</sup>

### **Counterpurchase**

39. Counterpurchase is a reciprocal purchase agreement of goods for cash involving two separate contracts contingent upon each other.

40. In this most commonly used form of countertrade, two independent contracts are concluded; one contract settles the sale and the other settles the purchase of goods as a means of compensation for the goods sold. Since the two contracts are independent, the exporter may subscribe a warranty with an insurance organisation, such as HERMES Kreditversicherung AG (more commonly known as HERMES), Germany and the Compagnie Française d'Assurance pour le Commerce Extérieur (COFACE), France. Counterpurchase involves an agreement between the exporter and importer (by signing a *protocol contract* to fulfil the counter-obligation) to reciprocal purchases of goods for cash within a given period of time. It is an operation through which the seller is granted normal payment terms but agrees at the same time to buy goods from the importer or from a company nominated by the importer, or agrees to arrange for their purchase by a third party. The goods being sold by each party are typically unrelated but may be equivalent in value. Unlike in bartering, both parties pay for their purchases in cash but commit themselves to fulfilling their counter-obligations. At the same time, transactions do not form part of one single contract, but are entered into under different contracts.

41. Counterpurchase therefore involves the use of two separate contracts: the original commodity sales contract between the exporter and the importer (principal order which is paid for on normal cash and credit terms), and a separate, although technically related, contract between the importer and the exporter that obligates the exporter to buy a defined value of goods (or services) from the importer's country over a fixed time period. Thus, an exporter who signs a counterpurchase agreement first has to ship a commodity (cotton for example) to the importer under a normal letter of credit, while the exporter, under a separate commitment, then has to handle and pay for a commodity from the importing country (such as coffee), thus satisfying the counterpurchase obligation. These two transactions are independent from each other. However, the counter-obligation may involve the need for a third party, such as the coffee exporter, to handle the commodity, and the use of one or more commercial banks.

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<sup>11</sup> See for an extensive overview of past developments Verzariu, P. *The evolution of international barter, countertrade, and offset practices: a survey of the 1970s through the 1990s*, U.S. Department of Commerce International Trade Administration, Washington D.C., March 2000, <http://www.countertrade.org/resources.htm>

#### **Box 4**

#### **Contractual issues in countertrade**

The main contractual issues in countertrade transactions relate to *product choice, market limitation and transferability, quantity of goods, price, commitment time and penalty clauses*.

1. The importing country (or country requesting countertrade) will usually try to restrict the **list of products** available for counterpurchase to those products which it cannot otherwise sell. The proposed available list may also be quite specific in order to limit the product options of the exporting company, particularly if the importer only has a limited need for its products. The exporting company should negotiate for a wide ranging list of available products, with general product descriptions. If the exporting company is offering a scarce commodity or one that is particularly important to the importing country, a lower countertrade percentage and a broader list of available products may be negotiated.
2. The importing country may attempt to place **geographical limitations** on the resale of its countertraded goods to protect existing markets and existing distributors. The exporting company should insist that no resale restrictions be included in the contract. Not only will a resale restriction eliminate potential markets for the goods, third parties such as trading houses often will not accept products for resale if the contract contains a geographical restriction.
3. The **quantity of goods** to be received as payment in a counterpurchase is usually expressed in terms of percentage of value of the exported goods rather than in currency amounts or in number of units.
4. The **price terms** in a countertrade contract should be expressed as a formula or other general criteria rather than as a fixed price. For example, the contract might specify that the price should be an "acceptable international market price at the time of delivery". This method may be used when the exact goods to be taken as payment are unknown as product prices will usually fluctuate over the term of the countertrade. The exporting company should insist on a most favoured customer clause in the contract which provides for a price that equals the lowest price being charged to other customers by the importing country. This will protect it from competing in other markets against lower priced products sold by the importing country.
5. The contract should include the **time frame** within which the exporting country must purchase the importing country's goods. The exporting company will generally want a long period of time and the importing company will want its goods purchased for hard currency as soon as possible.
6. The exporting company should consider inserting a **penalty (or escape) clause** into the contract which will limit the size of potential losses in the event the company is unwilling or unable to fulfil its countertrade obligations. Such a clause limits the company's exposure for breach of contract to a predetermined amount. Often the importing country will require the exporting company to furnish a bank guarantee for the penalty amount.
7. An insurance policy that covers insurable risk should be taken out. Insurance coverage for countertrade transactions is an added but often necessary cost of doing business in many developing countries. Insurance covering credits which exceed a bank's lending limit to a particular country can qualify the insured loan as a domestic risk in the eyes of the bank. Insurance companies will sometimes prefer to provide coverage for transactions involving deferred payment terms rather than for outright countertrade arrangements.

By their nature, countertrade agreements would involve two complications not normally found in contracts governing the sale of goods for cash between private parties. First, countertrade agreements and actions for their breach can get extremely complicated, because each party is both buyer and seller of goods and each is potentially entitled to the full range of both buyer's and seller's remedies. Second, a countertrade is very often entered into with a Government or a governmental agency. The exporting company therefore needs to be aware of the possible effects of sovereign immunity and other governmental defences such as the Act of State Doctrine.

42. There are two forms of counterpurchase: parallel transactions and linked transactions. *Parallel transactions* occur when a supplier sells goods to a buyer under a sales contract and agrees, under a separate contract or understanding (generally referred to as a separate protocol), to buy goods (counterpurchase) from the buyer or from a company nominated by the buyer. The counterpurchase must be completed within a certain period of time and, should the supplier fail to do so, a penalty is normally payable. *Linked transactions* occur when the buyer negotiates the right to link and set-off subsequent sales against his or her purchases.<sup>42</sup> In both cases, transfer of the counterpurchase to a third party is usual. The contracts are normally implemented through evidence accounts, and maintained with selected banks in each of the exporter's and importer's countries. Such accounts both provide an umbrella for continuous trade flows, but at the same time permit monitoring of purchases by the exporter. The parties concerned agree that the purchases made by the exporter in the customer's country give the right to a credit against counterpurchase obligations arising on later deliveries.

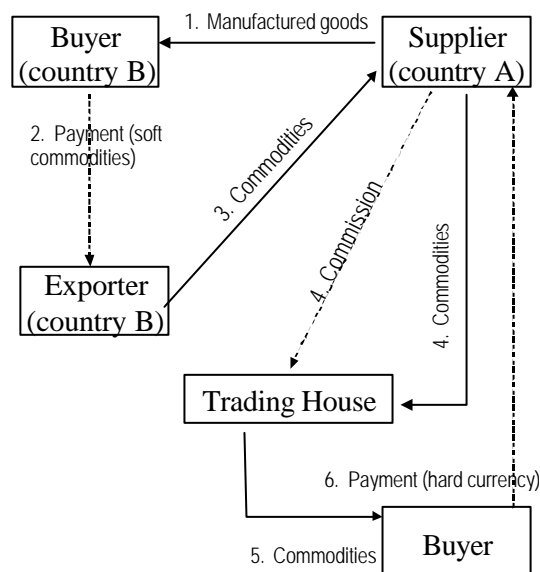
### Compensation

43. Compensation is a compensatory protocol arrangement between industries linking exports and imports; it combines cash and barter. It is effectively a protocol arrangement between industries in two countries linking exports and imports, where the foreign supplier agrees to take full or partial payment in kind for the goods sold. Compensation can be *total* (that is, the financial value of the goods exported is equal to that of the goods imported), or *partial* (the party making the first delivery receives part of the payment in cash).

44. In a typical compensation transaction, a supplier from an industrialized country would sell manufacturing goods to a buyer from a developing country and a monetary claim would be registered against that buyer. Such claim would be cancelled by a compensating delivery of commodities by the buyer. Both transactions would be part of the same contract. Where the manufacturing goods are supplied first, the transaction would be supported by a cash deposit made by the buyer of manufacturing goods into an escrow account. This cash deposit would be released to the buyer once he or she has duly delivered the commodity, perhaps under a letter of credit arrangement. In the absence of foreign exchange, the claim can also be cleared via an evidence account at a bank of the developing country. If the commodity is supplied first, as is often the case, a similar method could be used involving a cash deposit by the supplier.

45. More often, the supplier may use or transfer the purchasing commitment to a third party, who may be the end-user of the products, or a trading house. In a *triangular compensation*, a supplier may agree to sell manufacturing goods to a buyer and at the same time agree to take commodities as compensation, but not necessarily from the same party. If the supplier of the manufactured goods does not want the commodities, he or she would still take delivery of the commodities but then assign them to a trading company that would sell them for a commission to a second buyer.

**Chart 1**  
**Triangular compensation**



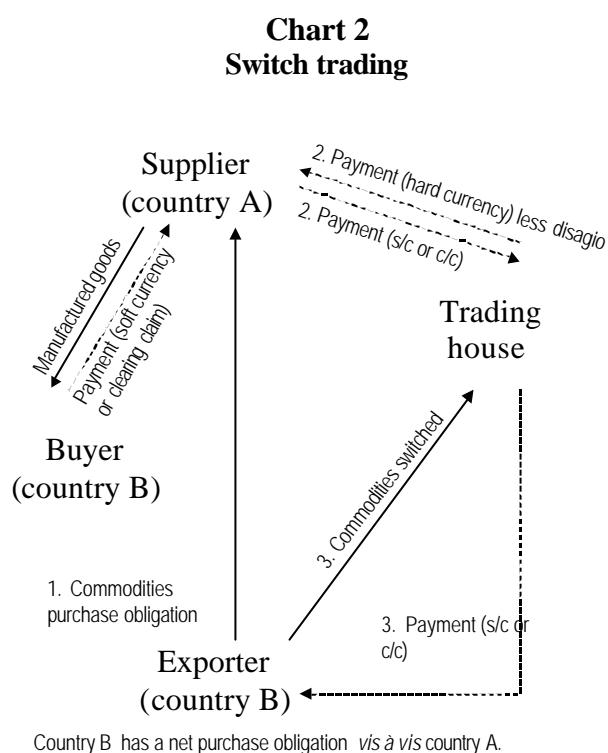
## Tolling

46. Tolling is the exchange of raw material for a finished product produced with this raw material. A typical tolling transaction would take place with the intervention of a trading company, which would borrow from a bank to purchase raw material to be delivered to a processing company that would in turn deliver the finished product back to the trading company. The trading company would then sell the finished product on the market and repay the bank. The loan would involve limited recourse to the trading company, meaning that the bank would bear the performance risk of the processing company and the payment risk of the trading company.

47. Tolling is typically used when the finished product is also a commodity, for example raw sugar into white sugar or alumina into aluminium.

## Switch trading

48. Switch trading is the multilateral use of bilateral trade imbalances. In certain cases, sovereign States enter into bilateral or multilateral trade agreements, under which agreed volumes of goods are imported and exported over a specific time period. Bilateral switch trading is also known as a bilateral payment arrangement (BPA).<sup>12</sup> The central or foreign trade banks of the contracting states operate clearing accounts which record the flow of mutual trade. Buyers and sellers pay in local currency, and the settlements between the local banks and the Central Bank are in local currency. At the end of the agreed time period, the balance, if any, is settled in the currency of the accounts (usually United States dollars), carried forward into a new agreement, or the countries resort to switch trading to restore the account balance.



49. Switch trading is a complicated form of countertrade, involving a chain of buyers and sellers in different markets. In a typical switch trade transaction, a supplier would accept payment in the form of a clearing claim or a non-convertible currency, which could then be exchanged with a switch dealer (a trade house) for a hard currency, less the switch dealer's fee (disagio). Switch dealers will only exchange clearing claims if they can either use them to offset purchase of goods or sell them to another party. A switch trade can also be part of a triangular compensation transaction.

<sup>12</sup> One example was a 1992 BPA between the Central Banks of Sudan and Malaysia. Under this arrangement, Sudan could import palm oil on deferred payment terms for a period of 2 years, and pay for the palm oil via exports of groundnut oil, sesame seed oil and beef; these products were then sold in Malaysia and to third countries. Information based on a communication by David Hew, Secretary-General of the Asia-Pacific Countertrade Association.

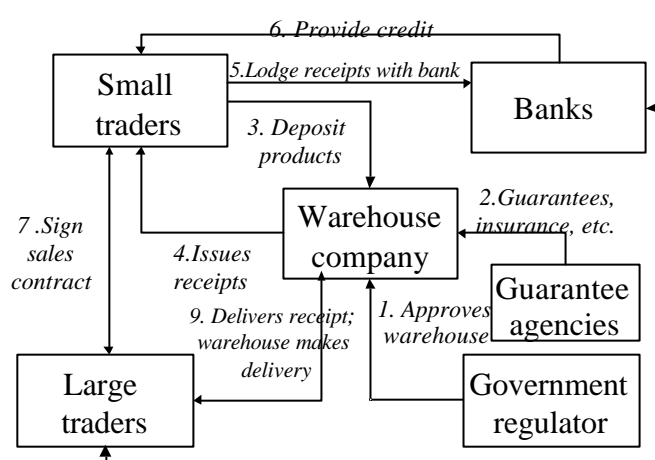
50. The two most common forms of switch trade arrangements are the following:

- The creditor country will buy goods from a third country, which will be paid by the debtor country in hard currency. The amount paid by the debtor country will correspond to the equivalent in hard currency of the remaining debtor balance, minus a discount, which the creditor country will be willing to accept.
- The creditor country will sell the debtor clearing balance to a third country against hard currency and at a discount, and the involvement of a third country could enlarge the trade possibilities.

#### D. Warehouse receipt finance<sup>13</sup>

51. In warehouse receipt finance, a bank, or trader, relies on goods in an independently controlled warehouse to secure a financing. The warehouse operator issues warehouse receipts, in one form or another (depending on a country's legal and regulatory system), which then form the basis of financing. Rather than relying on the producer's (or exporter's) promise that the goods exist and that the proceeds of their sale will be used to reimburse the credit provider, the goods are put under the control of the independent warehouse operator (the credit provider still needs to ensure himself that the goods have not been pledged previously). The warehouseman becomes legally liable for the goods he stores. If these goods are stolen, damaged or destroyed, through any fault of his, he and his insurance companies have to make up for the value lost (additional insurance can be obtained for catastrophic events). The integrity of this warehouse operator is secured by government licensing and controls, and by outside guarantees which the warehouseman has obtained from bonding companies (subsidiaries of banks which provide against defaults) and insurance companies (for a variety of risks, including the risk of fraud by the warehouse company's employees). Compared with a simple bill of sale (which gives title to commodities to the credit-providing institution), the use of warehouse receipts as collateral provides the additional advantage that the commodities are no longer in the possession of the borrower, and hence, if the borrower defaults, the lender has easy recourse to the commodities. Banks or trading companies normally have few problems with advancing funds against commodities that are being stored in a reliable warehouse and have been assigned to the bank or trading company through warehouse receipts.

**Chart 3**  
**Warehouse receipt finance: an example**



52. In considering to provide credit on the basis of warehouse receipts, the financier should ask for:

- the warehouse receipts (in the case of a credit provided by a foreign bank, these receipts are most likely to be checked by a local corresponding bank). Instead of, or pending issue of, actual warehouse receipts, banks may also accept telex releases from reliable warehouses. In this case, the depositor of the commodities instructs the warehouse to hold goods on behalf of the bank (as holder of a security interest), and the warehouse then telexes the bank informing it that it is holding X parcels of Y goods to the bank's order pending further instructions. The bank then responds by telex or fax, advising the

<sup>13</sup> A more extensive discussion can be found in UNCTAD. Collateralized commodity financing, with special attention for warehouse receipt, UNCTAD/COM/84, Geneva 1996.

### **Box 5** **Warehouse control and ownership** **- the terminology**

#### **Private warehouses**

In a private warehouse, manufacturing and warehousing take place under the same roof; that is, the primary business of the controlling company is not warehousing but manufacturing, wholesaling or retailing, with the warehouse operated as a part of its general business. There is therefore a close relation between the warehouse and the owner of the stored commodities, making it difficult to prove that bailment exists (bailment, an essential prerequisite for warehouse receipt financing, means that the ownership of the commodities resides in one person and the possession of it in another. For bailment to exist, the depositor, while retaining ownership, must relinquish possession of the commodities and the warehouseman must assume continuous and exclusive possession of them. If bailment cannot be proved, the holder of a warehouse receipt probably has no priority over other creditors in the case of a default).

#### **Public warehouses**

A public warehouse is operated by a warehouseman, who stores commodities for third parties for a set fee. As the warehouseman does not obtain title to the commodities stored, but only retains possession, it is easy to prove that bailment exists.

There are two types of public warehouses:

- A *terminal* warehouse is separate and distinct from the physical plant of the firm or firms owning the goods stored in the warehouse. It is usually a large storage area (e.g. located in a port), that serves many businesses and is owned and operated by an independent warehouse company. Since this type of warehouse is geographically removed from the depositor's place of business, using such a warehouse for collateral purposes may be inconvenient, and brings with it a risk of transportation (because of which there are added insurance fees compared to field warehouses).
- A *field* warehouse, on the other hand, is on or near the premises of the firm depositing the commodities. The warehouse belongs to the firm which wants to obtain credit, but in order to obtain credit, an arrangement is set up whereby an independent warehouse operator leases (part of) the storage facility for a nominal fee, and becomes responsible for control of the commodities to be used as collateral. The primary purpose of this kind of warehouse is to enable the owner of the stored goods to borrow against them and still have the goods close at hand.

In principle, only public warehouses can provide warehouse receipts of use for international trade; with private warehouses, there is no control over whether the commodities against which the receipts are issued are indeed in the warehouse, and whether they have been used several times as collateral or not. In practice, some trading firms do accept receipts issued by private warehouses, as additional security in what is, in any case, a financing relationship largely based on trust.

warehouse not to dispose of or otherwise release, the goods without express written authority of the bank. This mechanism is often used for larger cargoes, where it can take quite a lot of time to issue the actual warehouse receipts (e.g. in the case of metals which need some transformation before being eligible for London Metal Exchange (LME) warrant, or coffee that needs grading before it is eligible for London International Financial Futures Exchange (LIFFE) warrant).

- accepted certificates of quality or active warehouse control by an international surveying company; and
- proof that the commodity is pre-sold or hedged. Confirmed sales contracts and also letters of credit (L/C) with a red or green clause opened by foreign buyers are accepted as such proof.

53. Once the bank or trading company has the warehouse receipt in its hands, it advances a specified percentage of the value of the goods represented by the receipt to the borrower. The amount it lends is primarily based on the acceptability and the ease of control of the collateral-the identity of the

borrower (whether this is a triple-A rated company or a one-person firm) is of very little relevance. It should be noted, though, that once banks have positive experiences with their borrowers, they are likely to be willing to increase the percentage of the collateral's value they are willing to lend. The funds advanced are to be repaid with the cash collected from the sale of the goods.

54. The main advantages of warehouse receipt financing are:<sup>14</sup>

- (a) In all countries it is much easier to deal with security given in the form of a possessory pledge, as the identity of the collateral is incontestable and the intention of the borrower to pledge the collateral is clear, avoiding disputes as to ownership and competing claims.
- (b) In the case of a loan, default collateral covered by documents of title can be auctioned or sold promptly and at minimal cost "as is where is" by the lender, by negotiation of the document or written notification to the warehouse operator.
- (c) A lender holding a warehouse receipt has a claim against the issuer (the warehouse company) as well as the borrower in the event of the non-existence or unauthorised release of the collateral.
- (d) In some countries, such as Central and Eastern Europe and the Commonwealth of Independent States (CIS), the existence of competing creditors and unpaid sellers is often difficult to verify with certainty. Having a document of title to goods in store can then cut off the claims of such competing creditors.

55. Warehouse receipts can be negotiable or non-negotiable. A non-negotiable warehouse receipt is made out to a specific party (a person or an institution). Only this party may authorize the release of goods from the warehouse. He may also transfer or assign the goods to another party, for example a bank. The warehouse company must be so notified by the transferor before the transfer or assignment becomes effective.

56. The non-negotiable warehouse receipt in itself does not convey title and, if it is in the name of, say, an exporter, it cannot be used as possessory collateral; it needs to be issued in the name of, or transferred to, the bank in order for the bank to obtain possessory collateral rather than just a security interest. The difference is important in that, firstly, if the bank has possessory collateral, it has direct recourse to the warehouse storing the commodities when the commodities are delivered to another party; and secondly, in the case of bankruptcy of the borrower, it is much easier for the bank to sell the commodities in a speedy manner. On the other hand, the surrender of the non-negotiable receipt to the warehouseman is not necessary for release of all or part of the stored merchandise. All that is needed is a delivery order signed by the party in whose name the receipt is issued-or to whom it has been transferred (usually the financing institution)-instructing the warehouseman exactly what types and quantities of goods are to be released to the person named in the order. This makes the use of non-negotiable receipts for short-term trade finance rather easy.<sup>15</sup>

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<sup>14</sup> Budd, N. *A brief description of the field warehouse pledge as an appropriate security device for developing countries and the new market economies*, paper presented at the UNIDROIT/International Bar Association Conference on current trends in the modernization of the law governing personal property security, Rome, 28 November 1994.

<sup>15</sup> It also causes an extra risk for the bank: the borrower may have surrendered his warehouse receipts to the bank, but as long as the warehouse operator has not been notified of this, the borrower still has the possibility to take the commodities out of the warehouse: a simple order, signed by the party to which the original warehouse receipt was issued, is enough to effect a delivery out of the warehouse. To obtain additional security, banks therefore have to "perfect" their security interest in the commodities for which they have been remitted warehouse receipts by registering this security interest or by entering into a "constructive pledge". If a country's legal and regulatory

### **Box 6** **Trust receipts**

Processors are among the key beneficiaries of improved financing systems. The value of the commodities they have to keep in stock is often high, especially in relation to their processing margin. This problem is even stronger in developing countries than in developed ones, as poor road infrastructure and logistics make just-in-time delivery prohibitively difficult. The processor owns commodities, but naturally, their storage in an independently controlled field warehouse is impractical because the processor requires the goods for further processing to make the final sale. In such cases, and if the bank has a great degree of trust in the processor, it may be willing to release the goods to the processor against the signing of a *trust receipt* in which the processor:

- acknowledges receipt of the goods or the title documents (warehouse receipts) from the bank;
- recognizes the bank's security interest in the goods he is receiving;
- states that he is acting as the bank's trustee in delivering the goods to the customer;
- promises to remit the proceeds from the sale of these goods to the bank in payment of the loan (or to return the goods to the bank if they are not sold); and
- agrees to keep the goods fully insured against all insurable risks.

In releasing the goods that acted as collateral to the processor, the bank loses its physical possession of the goods—this is replaced by a mere security interest, which may be more difficult to enforce if problems arise. The signing of the trust receipt does not prevent the dishonest misuse of the goods or the proceeds. The bank will therefore release goods on a trust receipt only when it has full confidence in the reliability and moral responsibility of the processor. Although some larger processors (for example metal processors in China, or sugar processors in the CIS) manage to obtain international finance which is to be reimbursed by the proceeds of the sales of their locally-sold products, in general it would appear that locally-based banks are best placed to evaluate the commercial reliability of processors.

If the funding is attributed to a producer or exporter which has to have its commodities processed (with the processor "tolling" the commodities for a fixed fee) before sale is possible, banks also have to ensure that the processor cannot seize the commodities if, for example, the producer or exporter has financial problems. In practice, this makes it very difficult to finance this type of operations if the bank does not have an office or representative in the country concerned.

57. A negotiable warehouse receipt is made out to the order of a named person or to bearer. It is a negotiable commodity paper which serves as possessory collateral. When the bearer of a properly endorsed receipt surrenders it to the warehouseman, he receives delivery of goods stored against this negotiable receipt. If the commodities stored have been properly graded, delivery of a negotiable warehouse receipt may replace normal physical delivery.

58. Contrary to non-negotiable warehouse receipts, negotiable warehouse receipts cannot easily be claimed in part: if a buyer is found for, say, half of the goods in storage, the negotiable warehouse receipt would have to be redrawn to allow continuing warehousing of the remaining half, which entails considerable extra cost. This makes them less suited to the financing of continuing operations, that is, in cases where the pool of commodities in the warehouse continually changes. Negotiable warehouse receipts are in practice mainly useful for stocks that are held for longer periods (e.g. security or seasonal stocks), or for stocks of commodities that are more or less fungible (e.g. metals or grains).

### **E. Export receivables financing**

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environment does not allow for this perfection of a security interest, warehouse receipt finance will be an unattractive option for banks.

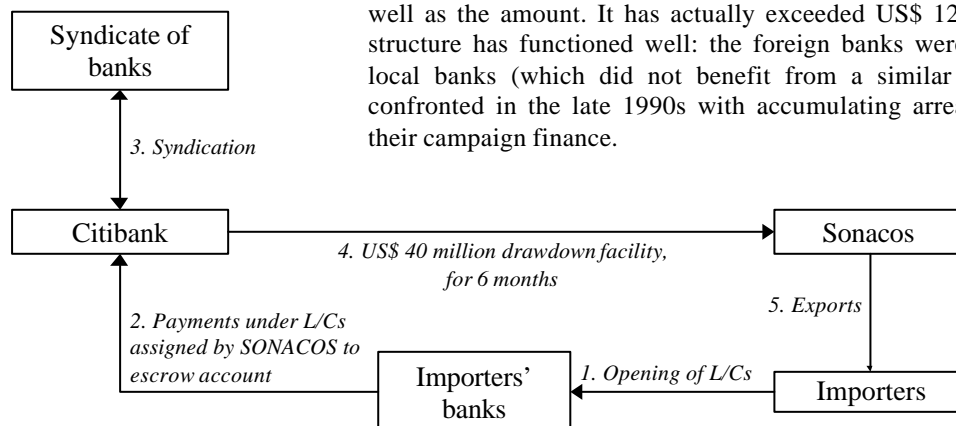
59. In export receivables financing, a loan is made to the exporter on the back of assigned export contracts either already executed or to be executed with the funds of the loan. Such assignment would normally be acknowledged by the buyer with payments made directly to the lender. Where an export receivables facility is granted post shipment, it is regarded as re-financing to keep the exporter in funds, enabling him to continue operations without having to wait for the buyer's payment.

60. Conceptually, export receivables financing is akin to forfaiting and factoring. The main difference is that the future payments from the buyer are discounted (and the financier often takes most or all of the payment risks) in forfaiting and factoring, while these future payments act as guarantee for the bank's reimbursement in export receivables financing. The buyers normally only have to pay when they actually receive the goods as stipulated in the contract – that is to say, when these goods are of the proper quality come in the right quantity and at the agreed time (note, however, that it is also possible that the buyer gives a “take or pay” guarantee, meaning that he will pay even if the goods are not delivered in accordance with the contract). The bank, therefore, takes a performance risk on the exporter: will the exporter be able to meet his obligations under the contract?

### Box 7 Export receivables financing: an example

A relatively simple example of export receivables financing is a transaction which enabled Société Nationale de Commercialisation des oléagineux du Sénégal (SONACOS), a Senegalese government-owned groundnut processor with a monopoly on exporting groundnut oil, to obtain US\$ 40 million from the international market in 1995. Local borrowing rates were LIBOR plus 300-400 basis points; this transaction enabled SONACOS to obtain funds at LIBOR plus 150 bp. SONACOS asked its buyers to open letters of credit, and the payments under these L/Cs were then assigned to Citibank, as Arrangers. As the L/Cs were opened with creditworthy banks, only the performance risk of SONACOS remained. Since SONACOS had a good track record, the financing was only for 6 months, and the deal was “over-collateralized” (the normal value of the transactions for which L/Cs were assigned was much larger than US\$ 40 million), this performance risk was deemed acceptable.

The success of the facility has virtually made it an annual ritual for SONACOS and the army of financiers willing to partake in the syndicate has continued to grow, as well as the amount. It has actually exceeded US\$ 120 million at one time. The structure has functioned well: the foreign banks were fully reimbursed, whereas local banks (which did not benefit from a similar escrow arrangement) were confronted in the late 1990s with accumulating arrears in the reimbursement of their campaign finance.



61. Export receivables financing is one of the major forms of structured commodity finance. Other than for bank credits, these future flows can also be used to secure other funding arrangements – this is further discussed in the section on asset-backed securities.

## F. Pre-payments

62. With the spread of information technology, the liberalization of commodity trade and the disappearance of most State commodity marketing boards, the landscape of commodity trade has changed dramatically over the past decade. For banks, it has meant that their traditional clients for pre-export finance (relatively well-established local counterparties) have largely disappeared. At the same time, traders have difficulty making a profit from the traditional port-to-port business because their information advantage has mostly disappeared. While many have perished, others have adapted, mostly by moving from purchases at the level of export ports, to up-country purchasing. If banks want to keep a strong position in commodity finance, they have to be able to follow the changes in trading structure. Pre-payment finance is probably their major response to this structural change in commodity trade.

63. In difficult commercial situations, pre-payment structures are often the best solution, as they enable a bank to share key financing risks with the trading company. In pre-payment financing, a bank provides funds to an international company (the “obligor”) which enable it to make a pre-payment to a local company for the local purchase (and processing) of commodities. Such commodities may already be in a third party warehouse or about to be assembled with the proceeds of the facility.

64. By making the pre-payment, the obligor obtains titles to the commodities under the contract. In other words, legally speaking, this is a purchase and not a “financing”, and therefore, many of the legal/regulatory constraints of pre-export financing do not apply to pre-payments. Among other things, having the title rather than holding a pledge normally increases the likelihood that in case of, say, a bankruptcy of the local company, the commodities being financed will be assigned to the obligor without having to go through lengthy bankruptcy proceedings.

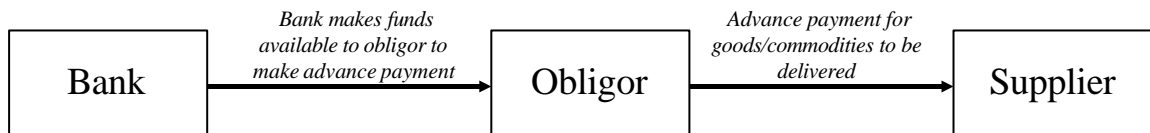
65. The obligor transfers all his rights under the contract to the bank. Thus, the bank’s security lies in the assignment of the pre-paid export contracts, including also a charge over the commodity, either in the warehouse or as and when assembled.

66. The supplier also makes a number of commitments under the pre-payment contract with the bank—commitments to provide information to the financier (who can thus easily use an independent collateral manager), to maintain sufficient insurance, to give priority to the physical contract in question (sort of first-in-the-queue rights), not to undertake further borrowings under the contract, etc.

67. Pre-payment finance is generally *limited-recourse finance*. That is to say, the obligor only has the obligation to repay if the supplier fully meets his commitments under the contract. Therefore, the bank has to evaluate the performance risk of the supplier in the transaction in close detail. If the pre-payment is for commodities which are already in stock, then the performance risk can in most cases be mitigated quite easily. An independent warehousing company can be given control over the goods in storage, and this company is instructed to release the goods from the warehouse only on instruction from the bank. Insurance can be taken out to cover country risks (e.g. the risk of an export ban). However, if the commodities are not in stock yet, but the pre-payment will allow the exporter to produce these goods or to procure them from local farmers, then performance risks become much higher. Good due diligence is then required. If the exporter is himself the producer, the due diligence will have to enable an assessment of the exporter’s capacity to produce the quantity and quality of products under the contract, and the risk of default. If the exporter has to procure the commodities, a more cautious structuring of the transaction will be needed, with risk mitigants put in place where necessary.

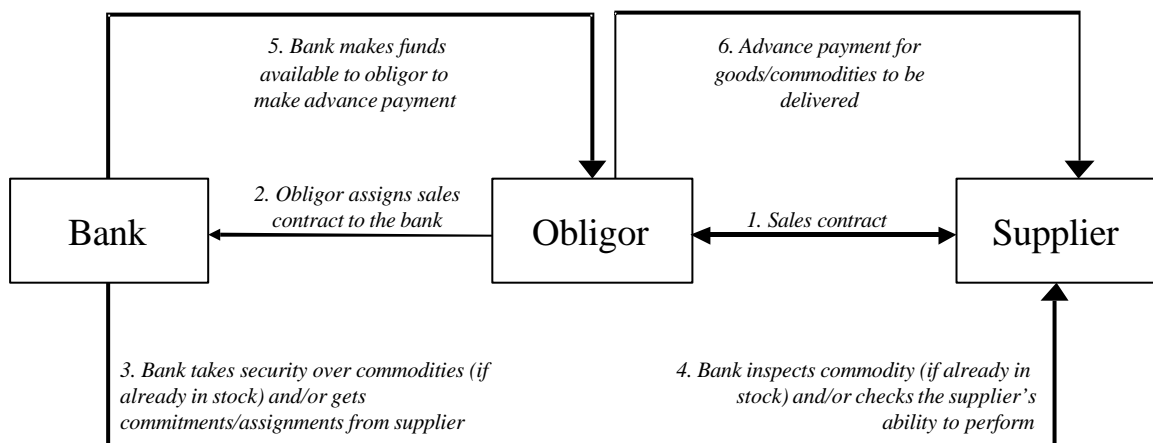
**Box 8**  
**Schematic overview of pre-payment finance**

Simplified, pre-payment financing looks as follows:



In practice, pre-payments are more complex than this. The bank will carefully evaluate the legal environment in the country for pre-payments. Will the obligor really have title? Is this enforceable? Will it have priority over unpaid sellers' rights, and claims of local tax authorities, employees, warehousemen, etc.? If the beneficiary is not itself the exporter, are the intermediary parties under an obligation to perform? Are any government (or Central Bank) consents necessary? Given the likely importance of the warehouseman, the bank will carefully monitor his operations. The bank will also look at what will happen if it has to take possession-is the product easy to sell, can it export, does it have to sell through public auction, etc.?

In practice, then, pre-payment financing often looks as follows:



68. Pre-payments are structured in such a way that they deal with the risks between the bank and the international trading company; the risks between the international trader and his local suppliers; and the in-country risks of the local suppliers.

69. The first two categories of risk are similar to those that a bank would meet in pre-export finance, backed for example by receivables. To list the main ones:

- A currency mismatch or unfavourable price developments causes a loss for the borrower. The bank should normally minimize this risk by scrutinizing the trader's operations to ensure that he properly hedged price and currency risk-this could even be a loan covenant. The hedge account can normally be assigned to the bank, or can be managed through a sight account.
- A change in local regulations forces the international trader (whose payments were assigned to the bank) to pay the hard currency funds to the local trader, who then has to obtain permission/hard currency to reimburse his earlier loan. This risk is insurable.
- The goods are lost/damaged in transit. Solution: the bank ensures that sufficient insurance coverage is in place, and has this insurance assigned to itself.

- The trader receives the goods, but defaults on his payment obligations. In pre-payment finance as in pre-export finance, the bank has title to the goods once they are exported, and as it should have all the relevant papers, it can take possession and sell them on the open market. Proper collection control procedures, legal documentation, assignment of contracts, and collateral management arrangements can all make the bank's recourse easier.
- The international trader who has confirmed the assignment of the payments for the exports never receives the goods because the local trader defaults on his obligations, and instead, exports to someone else. However, with a pre-payment and proper documentation, the international trader is the owner of the commodities, and can thus claim them even if they have been sold to another entity. In principle, the same should be the case for pre-export finance, but the bank's title can be more difficult to prove.

70. The bank cannot stop at just identifying these risks. After all, it has only limited recourse: if the international trader does not receive the goods, he is not obliged to repay the loan. While from the moment that the goods leave the port, pre-payment does not have many advantages over traditional pre-export finance, the situation is different for most of the in-country risks:

- The local trader falls bankrupt, leaving coffee or cotton in his warehouses and throughout the processing/transport system. With a pre-payment, and assuming proper legal documentation, the international trader is the owner of the goods in the pipeline, which therefore do not fall under general bankruptcy proceedings. The international trader can then appoint another agent to take possession of the commodities and continue the proper operation of the export process. The protection that pre-payments give compared with pre-export finance is significant, but in many jurisdictions it can be useful to perfect one's security interest to the extent possible (although unfortunately, stamp duties for registration are prohibitively high in some countries). In certain countries, the international trader would also have difficulties exporting the goods, because the export licence/permit is not automatically transferred to him. One general solution to this problem is to take out confiscation risk coverage (in the case of pre-export finance to a non-State entity, one would often have to take out more expensive contract frustration risk insurance to get a similar level of protection).
- The local trader diverts funds to more profitable activities. Solution: provide funds in instalments, with independent monitoring/collateral management to ensure that funds are used as expected.
- The local trader has insufficient funds to do the operation. This is a problem that should be brought out through proper due diligence. Has allowance been made for transport and storage costs? Does the trader have the funds to pay taxes?
- Local credit risks: the trader will use buyers, and provide some pre-finance to cooperatives and the like. The bank should understand the local trader's way of operating and, if possible, prevent undue risks through proper monitoring and collateral management.
- Transport risks: the trader is exposed to the risk of theft or loss by the transport company. The bank should check the reputation of the transport companies used, and insist on sufficient insurance. Proper monitoring also prevents problems.
- Quantity risk: if insufficient products are available, supply will fall short of what is necessary to reimburse the bank. This could result not just from harvest shortfalls, but also from changing farmers' expectations as to what prices should be (several countries have seen periods when farmers massively withheld sales). The bank will take ample margin to protect itself against this risk. The local trader or a third party can be asked to certify that sufficient quantities of the product have been grown to meet obligations under the contract. In rare cases, quantity insurance is also possible (e.g., in one financing in Western Africa, an international insurance company is providing coverage under

which it will pay a bank syndicate X amount for any tonne that exports of the relevant commodity are below benchmark quantity Y – e.g., US\$ 400 for each tonne that exports are below 50,000 tonnes).

- Quality risk: if the local trader does not have the quality of products required under his export contract, the off-taker is not obliged to buy. Proper quality assurance already starts at the farmgate level: inspection, monitoring and collateral management can help to reduce this risk, by clearly tying the bank's credit to the quality of the commodities in stock, or being processed/transported.
- Legal risk: legal title is always lost during the processing of a commodity. Proper contractual arrangements with the processor, backed up by monitoring and collateral management, are needed to solve this risk.
- At the processor, the level the trader is also exposed to a processing risk: the processor, despite good-quality inputs, may not be able to produce proper processed commodities (or will swap the better quality with a worse one). Co-mingling may also make it impossible to identify the traders' stocks (one needs to look at local law to see how co-mingling affects one's title). Due diligence and collateral management can help.
- Similar risks apply to storage, at all levels of the processing chain. Risks of improper storage, theft, co-mingling, switching of lots, etc. need to be managed by working with proper warehouse operators (who are backed-up by appropriate insurance) and active monitoring.
- There is also the risk that the traders' agents did not pay the farmers, and that the latter will lay claim on the products in stock. "Perfecting" the security interest may be possible, but may not hold up in local courts.
- When the trader is finally ready for export, there is a political risk: will his export licence remain valid? Will the Government not interfere with prices? Could there be port strikes and the like? Political risk insurance can be used to cover these risks.

71. The possibilities of externalizing certain risks are growing. New types of insurance can provide good cover; service providers are at times willing to provide certain guarantees (e.g. one large inspection company is now willing to compensate for losses if it is found on import, that the quality is not as it was certified earlier); and a few new, specialized collateral managers are developing fast, offering, for example, field warehousing services in many countries.

## **F. Islamic trade finance<sup>16</sup>**

72. Islam encourages people to use money in legitimate, profit-oriented ventures. But it discourages making money through usury or interest-earning ("riba"). Islam recognizes capital as a factor of production which has its cost; however, it does not accept that this factor can make a prior or predetermined claim on a productive activity in the form of interest. Broadly speaking, Islamic finance should conform to the following rules:

- Any predetermined payment over and above the actual amount of the principal is prohibited. This includes indirect benefits-as one commentator noted, "this prohibition applies to any advantage or benefits that the lender might secure out of the loan, such as riding the borrower's mule, eating at his table, or even taking advantage of the shade of his wall".

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<sup>16</sup> Much information on Islamic finance is available on the Internet. A very complete website is <http://islamic-finance.net>. The website of Pakistan's Business Recorder contains a number of good articles: <http://www.brecorder.com/story/S0005/S0507/S0507000.htm>. Islamic economics - banking and financial markets has a section on Islamic banking: <http://members.xoom.com/iecons/index.html>.

- The lender must share in the profits or losses arising from the enterprise for which the money was lent.
- Making money from money is not acceptable.
- Unnecessary risk (known as “gharar”), gambling and ignorance (“jahl”) are prohibited. Contracting parties should have perfect knowledge of the countervalues intended to be exchanged as a result of their transactions.
- Financing should only support practices or products that are not forbidden or discouraged by Islam.

73. Islamic banking has seen a fast development since the late 1970s. This has been strongly driven by the pressure of funds looking for ‘halal’ (lawful, or “clean”) investments; such funds are currently estimated at around US\$ 80-100 billion (up from US\$ 5 billion in 1985). Most of these funds are now handled in Europe, mainly in the London financial markets by Western banks (e.g. ABN/Amro, ANZ, BNP, Citibank, Dresdner, HBSC), which are offering competitive products meeting Islamic finance requirements. Specialized banks which only provide Islamic financing instruments also exist, but their market share is rather limited (partly because their costs are higher because they cannot invest their liquid resources in treasury bills and money market instruments but have to keep it in cash, or at best, invest it in metals futures markets where they can reap the contango on certain contracts).

74. As banks are not allowed to charge interest, they have to make their income through their fees and other fixed commissions (which implies they can provide normal banking services such as documentary collections) and through their earnings on the more or less risky ventures that they are financing. Similarly, depositors are not paid an interest on their savings, but a share in the profits of the operations that they financed (and generally, they have some choice in their selection), or they are given discretionary “gifts”, prices or bonuses (monetary or non-monetary) by their bank.

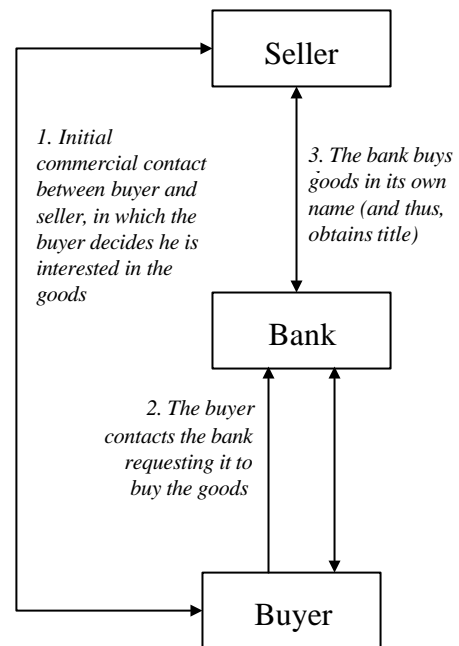
75. Like traditional finance, Islamic finance can be applied to trade and to projects; and Islamic banks can use their own capital (including through syndications) or act as an investment bank and place a financing with Islamic (institutional) investors. Islamic finance was “reborn” only in the 1960s, and started growing only in the 1980s. Thus, it is a very young industry in which techniques are under full development. While Islamic finance is now mostly based on a few “standard forms” discussed further below, it is likely that these will be used more and more as building blocks of more complex financings in the future.

76. The major Islamic trade finance forms are murabaha, salam, musharaka and istisna. Islamic financing also has project financing applications, which are discussed below.

77. *Murabaha* is the most commonly used Islamic financing form. In principle, it is simple buyer's credit, but it is often used for more complex structured financing and can be the basis for securitization. Most applications are for trade financing, although it has also been used to finance certain investments (e.g. in ships), on the back of future receivables (e.g. shipping fees to be paid under fixed contracts).

78. In murabaha financing, the bank buys from the seller (in effect, it appoints the ultimate buyer as its agent to negotiate and arrange the transaction), and ensures prompt payment. It then “delivers” the goods to the commercial buyer, specifying deferred payments (possibly in installments). In the price that the buyer has to pay, the bank will add certain mark-ups on its own purchasing price. The mark-up is a function of the time between the moment when the bank buys the good (which of course is shipped straight to the final buyer-the bank just retains the corresponding documents) and the moment(s) when the buyer pays the bank. Although this is technically not an interest rate, most banks will actually determine the mark-up on the basis of the interest rates prevailing in international markets.

**Chart 4**  
**Murabaha: flow chart of the basic transaction**



79. There is a serious problem with payment delays in murabaha because it is impossible to charge extra interest on late payments. To overcome this problem, some banks have resorted to what is called mark-down, in effect giving time-limited rebates as an incentive for early payments.

80. To make these transactions more secure, banks may keep title to the goods until they have been fully paid for. In general, murabaha is used in conjunction with letters of credit (although the equivalent of "Cash Against Documents" is also used) and normal documentary credit collections. In international financing, it is also common for a local bank to provide a standby letter of credit as guarantee.

81. If a company is simultaneously seller and (with a mark-up) buyer of goods or assets, this evidently amounts to a credit for the goods or assets concerned (this is called "al-bai bithaman ajil" financing). The resulting payment obligations (formalized as "syahadah al-dayn", or certificates of debt) can be traded on the secondary market and they can also be used as the underlying for securitization. It should be noted that neither of the two are considered legitimate by some Islamic scholars, notably in Arab countries. Securities can be issued on the back of a (revolving) trade paper, but also on project-related payments.

82. A second form of Islamic finance used in trade is *ba'I salam*. Salam is in principle a simple pre-paid forward sale, to which several conditions must apply:

- the full purchase price is paid when, or near the moment that, the contract is signed;
- the underlying asset is standardizable, easily quantifiable and of determinate quality;
- the contract cannot be for specific commodities, for example, commodities identified as coming from a specific field;
- quantity, quality, maturity date and place of delivery must be specified clearly in the contract; and
- the underlying asset must be available and actively traded on the markets throughout the period of the contract.

83. Salam is mostly used for seasonal agricultural purchases, but can also be used to buy other goods in cases where the seller needs working capital before he can deliver. While it can be used for direct forward contracts between buyer and seller, it is often used by banks to provide pre-finance to small farmers and businesses. So it is used, for example, for pre-export finance for traders. The predetermined price in the contract is generally lower than the spot price, and banks would "hedge" their price risks by entering into a back-to-back contract (a "parallel salam") with a commercial buyer. This also protects them from having to take delivery of the commodity.

84. The buyer/bank is allowed to require security from the seller, in the form of a guarantee or mortgage. In case of default in delivery, the borrower or his guarantor may be asked to deliver the same commodity by purchasing it from the market, or to recover the money advanced to him.

85. *Musharaka* is considered by some to be the purest form of Islamic finance. It is similar to a Western-style joint venture. Profits or losses will be shared between the partners. At times, the activity resembles more venture capital: to compensate for its high risks, the bank requires a relatively high share of the profits. This, of course, can discourage investors who can access non-Islamic financing sources (banks thus have an adverse selection problem).

86. The equity-investment-type *musharaka* financing is risky for financiers because they rely on the “partner” to manage the business properly. This can be attractive if the partner is a major enterprise. In practice, however, such partners can be difficult to find, and *musharaka* is therefore mostly used for very limited purposes, such as the procurement of goods and their onward sale, with or without processing (in the latter case, the bank would normally agree on a lump-sum cost for the processing with his “partner”, to reduce the risk of manipulation of the accounts).

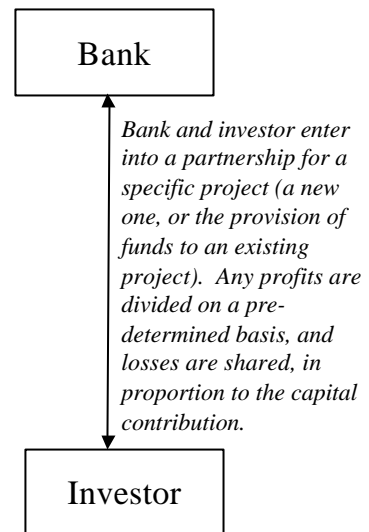
87. One application of *musharaka* resembles a back-to-back L/C, established on the basis of an L/C drawn on a foreign bank. The bank and the exporter would form a *musharaka* to finance the goods in order to ensure that they can be collected, prepared for exports, etc., so that the exporter is able to meet his requirements under the foreign L/C. The exporter agrees to prepare the products strictly as specified under the L/C and agrees to indemnify the bank for any losses that may arise if he fails to do so. Once the payments under the L/C have been received, the *musharaka* is extinguished.

88. If the proposed export is under a documentary collection (instead of a L/C arrangement), the financing will be undertaken on the basis that goods will be acquired and made ready for export under joint ownership of the bank and the exporter. The ultimate buyer will agree to buy the bank's share in these goods at an agreed price when the goods are ready for shipment.

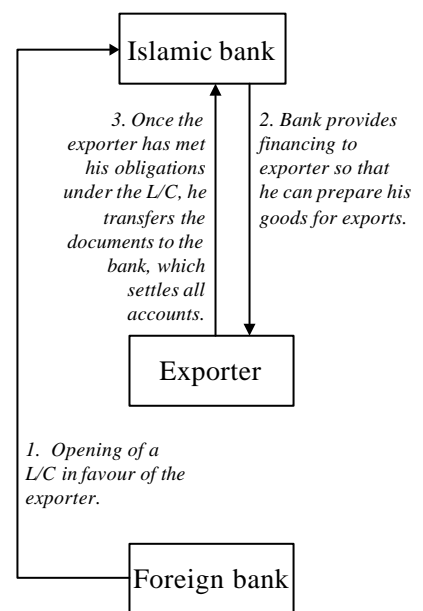
89. *Musharaka* can also be used for financing imports under a L/C, with deferred payment terms for the importer.

90. Finally, *istisna* has both trade and project applications. In trade finance, it is used in pre-export finance for manufactured goods (which are broadly defined as any goods that undergo some form of processing by the beneficiary of the financing). The structures basically amount to packing credit and working-capital for gathering goods for processing/export, usually on the back of firm export contracts. In principle, it is very similar to *salam* in that it constitutes a simple pre-paid forward sale. However, it only applies to manufactured goods. A bank or buyer instructs a manufacturer to make a certain good, which is to be delivered at a fixed price. Some flexibility is left with respect to the delivery period, but a maximum time within which the good has to be delivered is normally fixed; should the manufacturer wish to deliver the product after this date, the buyer could refuse it (it is also possible to include a penalty clause for late delivery in the contract).

**Chart 5**  
**Musharaka: the principle**



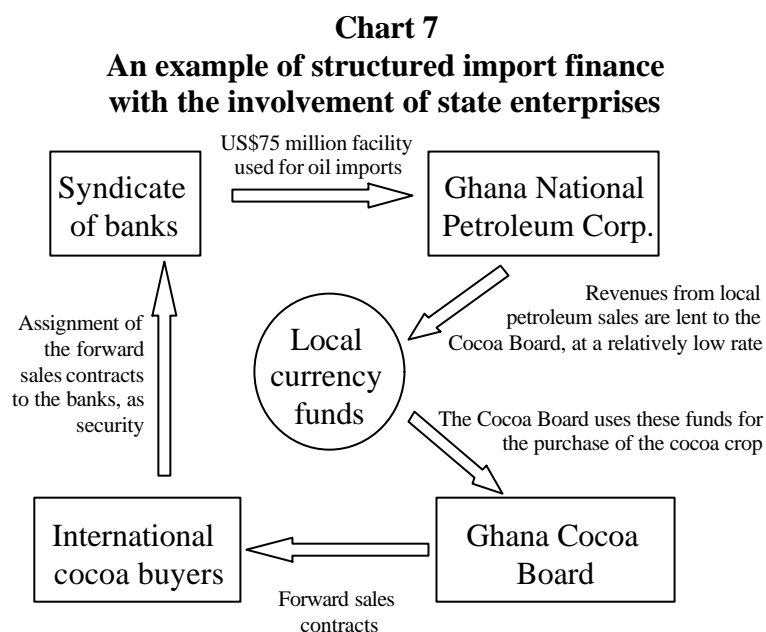
**Chart 6**  
**Musharaka: practical applications**



91. The contract only becomes binding once the manufacturer starts the manufacturing process; before that, it can be cancelled by both parties. The buyer/bank can pay the manufacturer in advance, but is not obliged to do so. As long as the good conforms to the previously agreed specifications, the bank/buyer does not have the right to reject it.

### G. Structured financing techniques for commodity imports

92. Until the early 1990s, government entities were responsible for a large part of commodity exports and of imports in developing countries and countries with economies in transition. In many cases also, private sector exporters were obliged to exchange their export proceeds against local currency with the Central Bank. Until the onset of the Latin American debt crisis, Governments were able to obtain credits for their imports on reasonable conditions. But in the mid-1980s, the risks of lending to entities in developing countries entities suddenly became a major issue for the credit committees of Western banks, and consequently, much of the credit supply dried up. In this environment, bankers started looking at ways to shift risks away from the developing country lender to others. This was much more difficult for imports than for exports. The first structured solutions to the problem of import finance were developed for countries where the exports and imports were both in the hands of a government parastatal, or at least, where the Government controlled the proceeds of exports. In such conditions, one can also use export proceeds to procure import finance at better terms; chart 7 gives an overview of a facility created in the early 1990s for Ghana.



93. Similar schemes were operated in several other countries. For example, imports of fertilizers and other agricultural goods by the Kenya Tea Development Authority were financed using a structure in which export revenues for the resulting crop were used for reimbursement. One such case, in the United Republic of Tanzania (where an oil import facility was structured on the basis of the assignment of the proceeds of coffee exports), illustrates well why these structures have become rare these days: this deal had to be interrupted midway because the country's Structural Adjustment Programme forced the Government to release its control over the proceeds of coffee exports. Another form of import finance, in which banks financed imports by a State importer, and then collected local proceeds through their local branch offices (used, for example, to finance Zambia's oil imports<sup>17</sup>) also became more difficult because of the process of privatization.

<sup>17</sup> In this case, a local subsidiary of the international bank providing oil import finance to the State import agency was responsible for receiving all payments for the local sale of this oil. Before the financing was approved, all the local sellers had to commit themselves (irrevocably) to pay for the oil that they bought from the import agency through an escrow account. The bank of course received these payments in local currency, and thus ran a currency risk. This was mitigated through the use of forward currency contracts.

94. In the mid-1990s, banks in developed countries were confronted with the disappearance of their traditional borrowers for import finance. Many banks just gave up on providing credits to importers from developing countries, allocating their credit lines for African countries to the ever fewer syndicated deals that came to the market (this is probably one of the reasons why the margins on the Ghana Cocobod financing have continued to fall). Others developed new approaches. These could be simple adaptations of the previous financing structures. For example, in 1996, a South African bank found that its country's Export Credit Agency was only willing to cover 85 per cent of the credit risk on the financing of a US\$ 50 million hydro-electric rehabilitation project in Congo. To reduce the risk further, electricity offtake contracts were signed with oil companies that were receiving electricity from the plant, under which these oil companies paid for the electricity supply with their hard currency earnings.<sup>18</sup>

95. More complex financing schemes using local warehouses were also developed. The financiers (banks and, as a new trend, international traders) built up systems to maintain control over the commodity being financed until the moment it was sold to (semi-) wholesalers in the importing country. For example, cereals and sugar imported into landlocked West African countries were transported under tight control from the international trader, deposited in the trader's warehouse/depot, or in one that was controlled by an internationally acceptable collateral manager, and only left the financier's control on cash payment by a local buyer. Similar schemes were used for petroleum products, fertilizers, and even for spare parts and computer equipment.

## H. Project finance

96. Contrary to the forms of structured commodity trade finance described above, there is much literature on project finance, and much of this is easily available. Hence, this section just gives a very broad overview, with a more in-depth look at some of the more exotic forms of project finance.

97. In an excellent book by the International Finance Corporation project finance is defined as "a form of financing in which lenders look solely or primarily to the cash flows of a project to repay debt service and to all of the underlying project assets (including all physical and contractual assets) as collateral for the loan".<sup>19</sup> This is a simplification: project finance is a technique to repackage financing risks in such a way that they become acceptable to the financiers, and therefore, the actual structure of the financing is closely adapted to the conditions of the project, and the country in which it is to be executed. For example, taking the underlying assets as collateral may be difficult under local law – then, the project finance has to be structured in such a way that sufficient comfort can be attained even without such collateral.

98. Project finance has been used extensively to finance toll roads, toll bridges, electricity and water plants, mine expansions, oil and gas pipeline construction, refineries and other large processing plants, airport renovations and other revenue-generating assets such as ships and airplanes. In many cases, revenues would be generated locally, in local currency. In its simplest form, project finance usually has the following characteristics:

- There are many different parties involved in the project: the project sponsors (often a consortium of local and international companies who are to construct and operate the project); various categories of financiers; and various parties that provide some form of insurance, guarantees or undertakings.

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<sup>18</sup> See "Africa trade finance, from the inside looking in", *Project and Trade Finance*, Euromoney, London, December 1996.

<sup>19</sup> Ahmed, P.A. *Project Finance in Developing Countries*, Washington D.C., International Finance Corporation, 1999. It is available on the World Bank website: <http://www.worldbank.org/html/extpb/projfina/projfina.htm>.

- The project is structured as an independent legal entity: a special purpose vehicle (SPV) is created to execute the project and receive the revenues. This entity borrows funds and uses them to “pay” the project sponsors to do the necessary work on the project (e.g. construct the pipeline). The entity is legally owned by an agent for the financiers, whose primary responsibility is to reimburse the financiers out of any funds received.
- The project sponsors provide equity capital, which, however, is heavily leveraged with loans (generally of different kinds – principally subordinated debt from the project sponsors and others, bridge loans, export credit agency credit, and project finance). They, and in many cases, outside guarantors, also provide guarantees during the construction phase – for example, if there is a cost overrun, they have to make up for it; and if the project is not finished in time, the financiers obtain full recourse to the project sponsors. The conditions for determining whether a project is “economically complete” are defined in detail.
- After the project is declared completed and starts generating revenue, the financiers have recourse mainly to the project itself – that is to say, if the project does not generate the expected revenue, there is no recourse to the project sponsors.
- In many cases, a significant part, if not most of the revenue risk after completion is covered through contracts with offtakers, or potential offtakers. For example, an offtaker can guarantee that it will buy all the project’s output at market prices, or at a certain minimum price; or even, that it will pay a certain sum each month, whether or not any products are actually produced and delivered. Service providers can guarantee certain standards, for instance, in maintenance (compensating the entity when, for example, plant efficiency is less than was guaranteed). Where project revenue is in the form of fees paid by consumers (e.g. for the use of toll roads, or electricity), Governments can guarantee that they will not reduce these fees below a certain level, or that they will index them in a certain manner. For “value-adding” projects (e.g. aluminium smelters, for which electricity is a major cost, or fertilizer plants, which use natural gas), there can be long-term supply contracts, which limit the price risks for these future inputs.
- Generally, there are also other guarantees and undertakings from the Government of the country/countries where the project is to be constructed – for example, to make foreign currency available so that local currency receipts can be easily exchanged.
- Project finance can be generated through the syndicated bank market and through capital markets. The use of capital market is still somewhat limited, but expanding, particularly through 144A issues (private placement of bonds to major institutional buyers).

99. Just like structured trade finance isolates specific transactions from the overall balance sheet of the company which benefits from the finance, project finance isolates a specific project from the overall operations of the project sponsors.<sup>20</sup> A major difference is that funds for project finance have been relatively more easily available than for trade finance. Project finance is for relatively longer terms and for relatively large amounts, making it attractive for both banks and institutional investors. Due to this “oversupply” of money, many project finance transactions were structured with much less care than was deemed normal in structured trade finance. As a result, quite a few project financings went bankrupt, had to be renegotiated or had to be taken over by governments between 1997 and 1999, in many cases because revenue expectations were unduly optimistic, but also because financiers had not bothered to manage exchange rate risks, and had often failed to protect themselves properly against sovereign risk.<sup>21</sup>

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<sup>20</sup> But the “transaction costs” of project finance tend to be high, in the range of 7 to 10 percent of total project value, easily double that of normal debt finance. See Estache A. and Strong J. *The rise, the fall and the emerging recovery of project finance in transport* (mimeo), The World Bank Institute, Washington D.C., 2000.

<sup>21</sup> For example, in many cases financiers thought they had covered exchange rate risks because Governments had agreed to local tariffs (for electricity, water, use of toll roads, etc.) that were linked to a United States dollar-

100. The remainder of this section will discuss two particular forms of project finance, using countertrade and Islamic financing techniques.

### **Project finance applications of countertrade**

101. Because of their self-liquidating, off-balance-sheet financing characteristics, countertrade and project finance deals have the potential to complement each other when integrated into a single project's financial package. Countertrade, if integrated into project finance structures, can provide developing countries with an opportunity to finance infrastructure projects with their exports, to mitigate risk and to secure repayment.<sup>22</sup>

102. Countertrade arrangements have been used to finance extractive projects through production-sharing agreements for petroleum and minerals. They have also been used to finance the construction of chemical, steel, and other industrial evergreen plants, either through output offtake (buyback or direct compensation) or through export sales of goods and services that are not related to, or derived from, the financed project (counterpurchase or indirect compensation).

103. Buyback is the exchange of inputs for finished products produced with these inputs as payment. In a buyback transaction (which, at times, is considered a sub-form of compensation trade), companies sell inputs, such as technology, turn-key plants, patents, machinery or equipment and agree to repurchase (buy-back) a certain percentage of the project's output as a full or partial payment for the contract. This type of arrangement has developed rapidly since the late 1960s, mainly in medium- and long-term projects (5 to 25 year periods) such as supply of turn-key factories and mining materials.

104. The major difference between buyback arrangements and traditional project finance techniques is that in a buyback, the recourse for repayment is directly connected to the project's offtake; that is, the project's main contractor is also responsible for the marketing of the output. In project finance deals the recourse is directly connected to the proceeds from the offtake the marketing of the output being carried out by third-party end users under long-term contracts.

105. Buy-back arrangements are often concluded at government levels when the new project is supported by export credit finance or insurance. For example, 10 per cent of the contract value of the US\$104 million expansion project for the Latakia cotton yarn spinning plant (Syrian Arab Republic), arranged at the end of 1996, was anticipated to be paid through a buy-back structure with the Peco Trading company (Germany). The remaining 90 per cent was to be financed by the opening of a standard line of credit. In most cases, goods are bought directly by the exporting company and not by a specialist trader. This may lead to problems for the exporter who has agreed to a buy-back: in one instance, a West German company bought back large quantities of East German textiles produced by machinery it had supplied. It then found itself in direct competition with many of its other customers when it tried to sell the textiles, losing out as a result.

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denominated world market equivalent. But when local currencies depreciated, political conditions made it near impossible to increase local rates sufficiently fast to meet such agreements. Thus, local currency receivables were not sufficient to meet debt service requirements.

<sup>22</sup> See, for example, Verzariu P. "Risk mitigating roles for countertrade techniques in project finance", *Journal of Project Finance*, Fall 1998.

### **Box 9**

#### **Mitigating market risk in project finance**

Market risk is the risk that products or services are produced in the project as originally planned, but fail to generate the anticipated revenue. This may be the result of falling prices of the products or services, or of falling sales. The latter, in turn can be the result of non-competitive production costs, the new entry of competing suppliers/products, low quality of production or low consumer purchasing power.

While financiers generally lay off only a part of the risks related to operating costs (through cost guarantees from sponsors, longer-term input supply contracts with fixed prices or prices fixed in relation to output prices, Government guarantees that eventual import duties will not be increased), they tend to lay off market risk in a systematic manner. It should be noted, however, that since the late 1990s, there is a growing appetite of some capital market investors to accept selected price risks in project financing.

Market risks in project financing have generally been absorbed through long-term contracts extending beyond the end of the loan life. As a general rule of thumb, the financiers aim for the net present value of the sales proceeds net of operating costs to be at least 1.3 times (or 1.15 to 1.3 for an infrastructure project) the amount of loan outstanding.

Most of these arrangements are take-and-pay contracts and take-or-pay contracts. In a take-and-pay contract, the payment by the buyer is contingent upon delivery. If the project fails to lead to delivery, there is no obligation to pay. Usually, financiers do not take much comfort from this kind of sales contract, unless the “performance” risk of the project can be adequately covered by other risk mitigants.

A take-or-pay contract is a long-term contract to make periodic payments over the life of the contract in certain fixed or minimum amounts, as payments for a service or a product. The payments are in a sufficient amount to service the debt needed to finance the project which provides the services or the product, and to pay operating expenses of the project. Minimum payments must be made whether or not the service or product is actually delivered (even when the facilities are destroyed by some natural event-the contract often includes a clause like “payments must be made ‘come hell or high water’”, a clause based on unconditional ship charters), and the contract is in principle not cancelable. The take-or-pay buyers will usually pay to a trustee which pays the debt service directly to the creditors. The take-or-pay buyer will normally protect its interests by retaining rights to take over the project if the supplier fails to perform-on the condition that, when doing so, he would automatically assume all project debt.

Take-or-pay contracts have become increasingly common in recent years, and buyers are not necessarily limited to companies which are themselves among the project sponsors (although this remains most often the case). From a financier’s point of view, a take-or-pay contract is equivalent to a guarantee, but for a sponsor, it has less negative impact on its credit. The buyers are normally creditworthy companies. If there are doubts in this regard, the financiers can ask for (government) guarantees; for direct assignment of part of the buyer’s revenue stream (e.g. if the offtaker of an independent power plant is a mining company which itself is an exporter), or for an escrow account which covers several months’ debt service.

Other mitigants include throughput guarantees or agreements (e.g., for use of a pipeline, or refinery, by the project sponsors), including with merchants/suppliers/final consumers in the financing (who then have a vested interest in making the project work). Buy-back clauses, through which one of the sponsors or a related party guarantees a minimum price, are also used. Long-term sales contracts may also contain pricing clauses which shift the burden of increasing input costs on the buyer by indexing the sales price to input prices. Hedging price risk on financial markets is another possibility, although it is used relatively rarely. In case the project’s output is sold locally, the project financiers would normally insist that the price, even if denominated in local currency, is indexed to world market prices-this provides protection against currency devaluation.

106. A variation on buy-back is the *Build-Operate-Transfer (BOT)*, a project financing approach that has become very popular in recent years. BOT consists of the temporary or permanent granting of a

licence by a Government to a project sponsor, consortium, or joint venture to deliver a particular service. Such a licence is generally sufficient to permit the sponsors to raise necessary funds on a project basis. BOT is therefore used to finance new projects requiring finance. After the end of the concession period, ownership is handed over to the host Government free of charge or at a pre-specified price. Operations may be extended by the Government, depending on the economic viability of the project and the performance of the sponsors.

107. *Offset* (often classified as a sub-type of counterpurchase) occurs when a large supply contract (e.g. for military equipment or airplanes) is conditional upon the incorporation into the contract of certain goods or services supplied by the buyer's country that should be offset from the final price. Offset activities may be in the form of investments, joint ventures, purchasing transactions, training programmes, technology transfers, licences, job creations or export promotions. Offset schemes are utilized in all regions of the world. Such schemes often play an important role in securing and realizing projects of exporting companies in developing, as well as in industrialized, countries. Offset is at times used as a means to repatriate investors' profits resulting from projects located in countries with strict foreign exchange controls. This diminishes the hard currency outlay for the buyer, creates new jobs in the buyer's country and often leads to inflow of capital and valuable technology.

### Project finance applications of Islamic finance

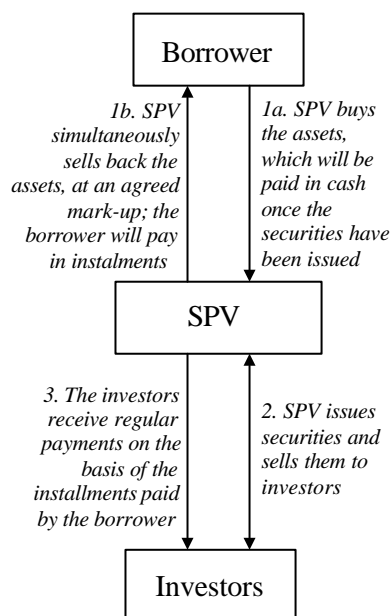
108. Several forms of Islamic finance already discussed above can be used not just to structure trade finance, but also for project financing. For example, forward payment obligations under *murabaha* contracts can be used to back a notes issue. *Mudaraba* amounts to non-recourse project finance. *Ijara* is equal to leasing and hire-purchase arrangements (and cannot be used for consumer goods). *Istisna* can be used in various forms of project finance, including for pipelines, ships, plants, machinery, independent power projects, etc. There is also a form called "investment auctioning".

109. The way *murabaha* contracts can be used for project finance is sketched in chart 8. This structure has been used to finance airlines, airports, roads, railways, water supply works, and oil and gas infrastructure.

110. *Mudaraba* is a form of finance similar to non-recourse finance. One party (called the 'rabb al-mal'-beneficiary owner or sleeping partner) entrusts money to another (called the 'mudarib'-managing trustee or labour partner). The *mudarib* is to use the funds in an agreed manner (e.g. to set up a factory), and then return the principal and a pre-agreed share of the profits to the *rabb al-mal*, over an agreed period of time. The division of profits must be on a proportional basis: the *mudarib* cannot be asked to commit himself to pay a certain minimum sum, or a lump sum. Also, the bank stands to lose its principal if the project is a failure (irrespective of the overall financial status of the investor-in other words, the bank has no recourse to the investor).

111. *Istisna* is often used for rather large, longer-term financings (e.g., infrastructure, electricity projects, transport equipment, pipelines). Naturally, the structure can then become quite complex. The buyer, or investor(s), would approach the bank, providing background information about their company, its investment plan, a feasibility/ market study for the proposed investment, the company's historical audited accounts and projections, as well as details of the security they can offer (through other

**Chart 8**  
Use of *murabaha* for project financing purposes



companies, banks or the Government). If the bank agrees, buyer and seller have to deposit security bonds, and the buyer can “order” the equipment (as agent for the bank).

112. The manufacturer has to provide a performance bond, and also a guarantee to refund the progress payments made by the bank if he fails to make delivery or if he delivers non-conforming goods. He also has to insure the assets under construction (or which are being manufactured), and assign the insurance contract to the bank. The buyer could also give guarantees (to make its regular instalments to the bank)

other than those from the Government; he can ask his bank, or have a parent company provide a guarantee.

113. The bank may pay an advance to the manufacturer (against acceptable bank guarantees). For the regular payments on the work-in-progress, the bank would ask the manufacturer to open a letter of credit in favour of the supplier of the materials which the manufacturer is using; alternatively, the bank can reimburse the manufacturer for the expenses he already incurred (the manufacturer will have to deliver the appropriate documents). The buyer, through his bank, would reimburse the bank, most likely in instalments.

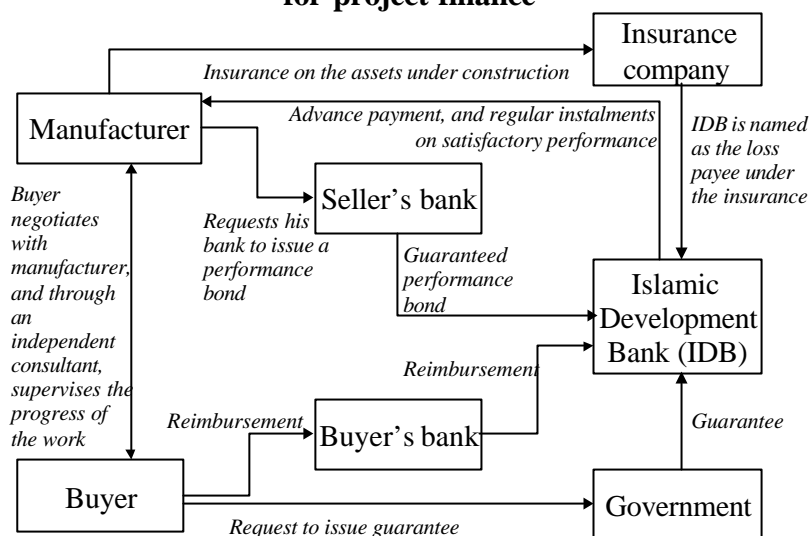
### I. Asset-backed securities

114. Finance for commodity trade and production may come from banks, but is increasingly coming from the capital market – institutional and private investors who wish to put part of their investments into commodity projects.

115. The principle of the structure is that receivables (such as receipts from future exports or the future provision of services) are “sold” to a SPV. This SPV then sells securities, often through a small group of investors. The funds generated by the sale are used to pay the ultimate beneficiary of the financing for his sale of the receivables; this company can use the funds in various ways, for example, to finance a project, fund working capital needs, restructure debt, etc. The securities will be serviced through the proceeds generated by the receivables. The security issue is generally rated, and the ultimate beneficiary of the financing would normally wish to achieve an investment-grade credit rating (which is done by the systematic mitigation of risks). They often pierce the sovereign ceiling – that is to say, the issues are rated higher than the rating of the country of domicile of the issuer (see box 10 on rating criteria).

116. Asset-backed securities finance took off after the Latin American debt crisis of the 1980s. Securities were used to provide United States dollar-denominated finance to large companies (local companies as well as subsidiaries of multinationals) which had acceptable credit profiles (usually measured by their local currency ratings) but could not access the dollar market at a reasonable cost. The

**Chart 9**  
**An example of the use of an istisna structure for project finance**



## Box 10 The rating process

If one wishes to tap into the capital market at attractive terms, it will in most cases be necessary to have the transaction rated by an independent rating agency. This does not need to be expensive (it may cost as little as US\$ 25,000), and the rating agency will work with the beneficiary of the financing and the arranging bank to improve the financing structure, and thus, obtain better ratings.

The rating agency effectively evaluates the *credit quality* of the notes being rated; in other words, the ability of an issuer to pay principal and interest on the rated securities *in full and on time*. The rating of an asset-backed security evaluates credit, legal, and structural risk, taking into consideration the country, collateral and deal specifics. The following are key aspects:

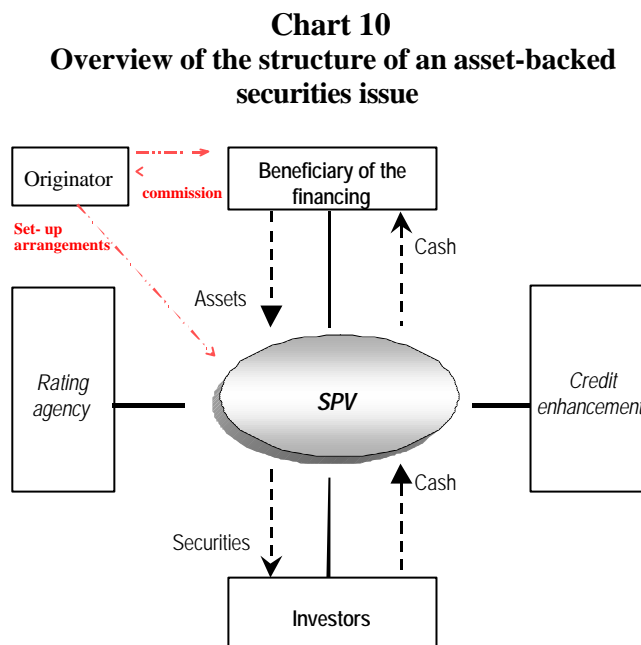
- **Establishment of a SPV** which should have the legal rights to the assets/collateral, and should also have a clear structure to deal with payment/collection risks (i.e. the assignment or sale of assets and cash flow generated by those assets must be fully controlled and managed by the SPV).
- **Identification of the credit strength of all the third parties** that play a monetary role in the transaction. Their inability to fulfil their role could cause the collapse of the transaction. Therefore, attention should be given to:
  - \* the quality of the buyers (who need to show a consistent payment record).
  - \* the quality of key contractors/service providers.
  - \* the local performance of the producer.
  - \* the reliability of the originator (if he is providing a guarantee or credit support).
- **Acceptance of the collateral by the rating agency.** Collateral does not necessarily have to be rated. The rating agency evaluates the collateral itself as an integral part of the rating process to determine that the collateral meets the agency's standard for inclusion in the transaction. Assets are eligible collateral if they can be analyzed as having either *reliable streams of income* or *secondary market liquidation values*. It is important to fully understand the potential credit risks inherent in the asset and how the asset can be used to ensure value to the investors. Key elements in evaluating an asset are its location and the jurisdiction by which it is governed.
- **Protection to deal with generated risk** (credit enhancement).
- **Cash reserve to deal with payment and liquidity.**
- **Diversification of risk** (many buyers or only one buyer if the rating of this buyer exceeds that of the issuer).
- **Limited exposure to market price risks** (hedging or forward fixed-price contract).

Once the term sheet of the financing is set, an evaluation of the credit risks involved can be made, and the strengths and weaknesses of the structure identified. The rating methodology implies consideration of seven factors:

1. **The company:** Assessing the strength of the company producing the product, taking into account both underlying business and financial risks of the company. The rating agency assesses the ability of the company to meet all its financial obligations on time whether denominated in foreign or local currency.
2. **Ability to produce:** Assessing the strength of the company within its industry and its competitive position in order to estimate the likelihood of continued production. Other elements such as the company's position related to a specific product should also be considered in the case of a diversified firm. Country considerations that could affect a company's ability to produce are the impact of sovereign risk on the local business environment, including changes in economic activity, the price and availability of credit, market volatility, competition and labour costs. Also considered is the potential for regulatory oversight and government intervention affecting pricing, production, distribution, and access to raw materials and other inputs, as well as potential nationalization.
3. **Ability to export:** Assessing the historical track record of the country, in terms both of controlling exports generally and of controlling exports of a specific product or industry. Overall, what must be assessed is the existence of strong underlying economic and political incentives to allow for continued export of the product.
4. **Nature of the product:** Assessing the demand for the product in the international market (i.e. the liquidity of the product on the international market).
5. **The receivables and purchase contract (if any):** Assessing the credit strength of the purchaser to determine its ability and willingness to honor its contractual commitments and generate the receivables. When reviewing the purchase contracts, an analysis includes the sensitivity of the contracts to commodity price declines, production interruptions, volume fluctuations, and exposure to construction and technical risk
6. **The size and term of the debt issue:** Assessing the size of the transaction relative to the seller's cash flow. A small debt issue relative to the cash needs of the company would provide a better situation to handle.
7. **The terms and legal structure of the debt issue:** Assessing the overall structure (availability of assets and cash flows to make payment). Many characteristics of traditional asset-backed securitization are used to help mitigate potential disruptions in the generation of cash to service debt. However, debt issue can be backed by a guarantee from the producing company, such as a collateral that covers several times the amount of the loan, or cash liquidity (debt service reserve fund). These guarantees give additional recourse and protection to bondholders. On the other hand, in some very limited cases, the use of an SPV may not be required. Tax is also taken into consideration, as taxes could affect cash flows.

first transactions were for telecommunications companies, but transactions for oil companies and then metal companies followed soon. They are often used to supplement bank finance (straight loans or, less commonly, structured bank loans), partly because they tend to provide longer-term capital.

117. Chart 10 gives a simplified overview of an asset-backed securities issue. It typically involves the sale or pledge by a company to an off-shore trust or special purpose vehicle (incorporated in the United States or a tax-beneficial jurisdiction such as the Cayman Islands) of future hard-currency receivables arising from the sale of goods or provision of services to a group of pre-identified companies based in other (generally, OECD) countries. The trust or special purpose vehicle (SPV) then issues amortizing securities or enters into a loan agreement, backed by such future receivables. The securities or notes may be sold into the capital markets as a private placement or pursuant to Rule 144A, funded with a bank loan, or sold to a commercial paper-funded securitization conduit.



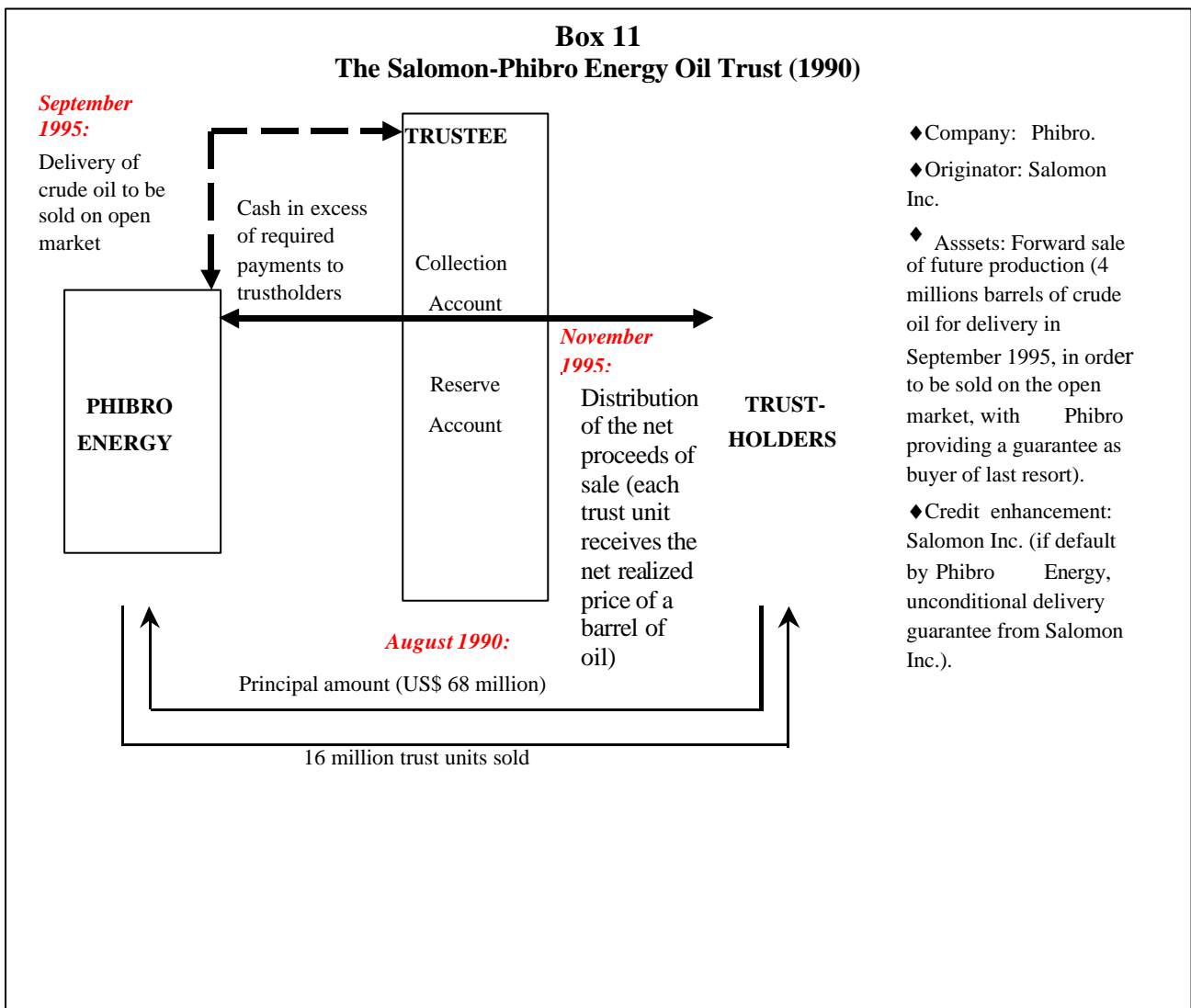
118. The trust/SPV structure provides investors with protection if the beneficiary of the finance (i.e. the producer or service provider) goes bankrupt, and makes it easier to classify the transfer of assets as a sale (which is essential in the United States in order to give the holders of the securities priority over other creditors in the case of a bankruptcy). The trust or SPV is managed and controlled by a non-related bank which ensures that the financial flows resulting from the assets held as collateral are properly distributed.

119. Generally, the securities issued are first graded by a rating agency – many institutional investors are only allowed to buy issues which meet certain credit rating criteria. In order to enable a rating which is satisfactory for the client, the rating agency may request further credit enhancement (beyond the assignment of the receivables) in order to minimize the risks of the deal and fill the remaining risks in different parts of the transaction chain (i.e. production, transport, shipping, delivery/import procedures, reception by the buyer, payment, market condition, etc.). Such extra guarantees can be supplied by buyers (e.g. promises for payment), producers (or their parents companies), the originator (the bank setting up the transaction), or other parties (such as insurance companies, which may provide coverage on selected risks, or, in the case of monoliner insurance companies, could “wrap”, that is, guarantee, the full transaction).

120. Box 11 gives an overview of one of the earlier and quite simple asset-backed securities issue, dating from 1990.<sup>23</sup> Since that time, structures have become more complex, and more sophisticated risk management techniques have allowed a widespread adoption of asset-backed securities financing in a wide range of industries. However, in the commodities industry, such issues still have in common that they are all for large companies. Applications for the agricultural sector are rare, even in developed countries. It can be argued (as is further elaborated in box 12) that the next frontier to reach is that of

<sup>23</sup> Financial Times, Phibro's synthetic oil field coming to the market, 23 May 1990.

adapting the techniques for financing a revolving bundle of relatively small commodity-related transactions – which would enable the mass of agricultural producers to tap into today's lowest-cost source of funding. This process has already started, from different fronts. On the one hand, a few private banks (which manage the fortunes of wealthy individuals) have started to put some of their funds into investment funds dedicated to finance trade (including commodity trade) in developing countries. On the other, commodity exchanges in Latin America have started to offer products that effectively allow institutional investors to make short-term (less than 11 months) investments in agriculture. For example, in Colombia and Venezuela, institutional investors such as pension funds have invested, through the commodity exchanges of these countries, in warehouse receipts for grains; in Colombia, they have also invested in paper backed by livestock (with their funds used for the fattening of the cattle).



### **Box 12**

#### **The new building blocks for commodity-backed securities issues**

Looking at asset-backed securities issues, one cannot help but notice a key difference between issues done for commodity firms and non-commodity issues. Commodity-backed issues have all been backed by payment flows coming from deliveries by one single large commodity firm. In contrast, in other sectors, securities issues are generally backed by payment flows coming from a multitude of small entities-in many cases, individuals.

For example, credit-card-backed issues have, as their underlying security, the credit card payments of many individuals who, at the time the securities are issued, are not even known-rather, the rating company as well as the investors rely on the fact that, if past statistics are a guide, a certain number of persons will spend a certain amount of money in the country concerned. Other issues are backed by financial transfers from guest workers back to their mother countries; by telephone calls from one country to another; by mortgage payments from many households; or by record purchases by a large number of music fans.

This apparent contradiction is not because there is no need to securitize small commodity-sector loans. The credit ceilings for such loans, in particular for more risky countries, are not very high, and very often constrain banks' ability to place loans. If they were able to lay off such loans to the financially very deep securitization market, this would make it possible for them to expand their business. Investors should be interested in this new product: after all, it helps them to diversify their portfolio. And ultimately, the expanded capacity of banks to lend to the commodity sector would benefit commodity sector firms. Everyone would benefit from this. So why are banks with a portfolio of commodity sector loans not bundling them, packaging them for a securities issue?

There are two reasons. One is human: the banks which have a large portfolio of commodity sector loans in developing countries generally have little in-house expertise in asset-backed securitization. The banks which have such expertise generally look at "big-ticket" issues which they can handle themselves, that is, directly working with large commodity firms rather than with other banks. The other is technical: there is, as yet, no model for structuring securities issues around warehouse receipts, or other small commodity sector loans, and the data to construct such a model are scarce.

A first difficulty lies in the actual structuring of such a transaction: it has not been done before, so lawyers will need to do much original work, which can be costly. Furthermore, securities issues need to be rated, and rating firms rely to a large extent on hard data to arrive at one rating level or another. In particular, the rating firms will try to identify the risk that the future payment flows from the assets which underlie the securities issue will not be sufficient to serve the financial obligations under the securities issue. The risk level thus identified corresponds exactly to the rating category. Unfortunately, it can be difficult to determine the expected cash flow from a series of warehouse receipt-based loans, for example. The rating firm will need exact information on the quality of the controls over the warehouse receipts in the different countries involved. It will need to obtain some long-term data on the experience with such loans. It will need to be sure that the bank which benefits from the financing still has an interest in guaranteeing the quality of its loan portfolio. It is possible to short-circuit this process by obtaining third-party insurance, for example from a monoliner insurance company. However, monoliners have not insured this kind of asset-backed issues yet, and as they too will have difficulties in assessing the risks, such insurance may prove expensive. Nevertheless, monoliners are now moving into this type of business – in 1998, MBIA, the industry leader, “wrapped” a US\$ 230 million financing for United States grain elevators (albeit for a commercial paper programme rather than for a securities issue – but this is a logical next step; see <http://www.mbia.com/news/press/981109.html>); it has also started covering export-receivables-backed securities issues for Latin American companies.

Given the sheer size of the commodity financing market, and the fact that everyone would benefit from securitization of small commodity loans, it is very likely that in the course of this decade, there will be such security issues. Banks which can generate the building blocks for such issues (that is, banks with a portfolio of warehouse receipt finance and other commodity loans in a number of countries) will then suddenly find their business much easier-and more profitable.

## Chapter II

### POTENTIAL NEW ROLES FOR LOCAL BANKS

121. In many developing countries and countries with economies in transition, the domestic banking sector has gone through a radical restructuring. Until around 1990, there was a strong participation of state in the banking sector, interest rates were set by the Government and credits were allocated over sectors. In many instances, policy and political considerations prevailed over credit analysis. In the late 1980s and early 1990s, this situation became unsustainable, partly because of outside pressure.

122. The first half of the 1990s saw a gradual privatization of State banks, the relaxation of entry rules, an improvement in the management of State banks, the abolishment of credit allocation and the liberalization of interest rates. The results were, overall, disappointing. There was little effect in terms of savings or gross domestic investment. Liberalization initially produced high real interest rates, squeezing investments. The lack of competition between banks led to widened spreads between lending and deposit rates. Most lending remained short-term and targeted international trade, construction and large companies. Paradoxically, banks often had enough liquidity, but were unwilling to lend (for example, in Brazil, most banks preferred to deposit their funds, with the Central Bank at a zero interest rate, rather than meeting mandatory agricultural lending targets). The weakening of standards for new banks led to a mushrooming of banks, followed by banking crises in many countries.

123. More than before, the health of local banks has a direct impact on the health of national economies – local subsidiaries of international banks can partly meet local needs, but in many cases, such subsidiaries limit themselves to certain activities and rarely venture outside of the capital. Domestic banks can provide an essential link in creating a new financing chain from the international capital market down to the producers. If the domestic banks are too large in number and too new on the market for international banks to evaluate properly, then regional banks can provide the missing link.

124. Domestic banks can provide comfort to international banks (experience shows that it is often easier to syndicate loans if local banks are involved). They can bring in their expertise on commodity sectors. They can act as local facility agents and/or controller of a financing transaction (e.g. ensuring the physical presence of collateral, or holding title documents). They can co-finance. They may be able to provide forward currency cover, or facilitate regional trade.

125. All the indications point to an increasing potential for domestic banks to play an important role in commodity production and trade finance. In many countries, the legal conditions for such finance are improving (more transparency on what the laws and regulations are, and more security of ownership titles). The fragmentation of trade/withdrawal of the Government is continuing, progressing into the minerals and fuels sectors. Domestic banks have a natural advantage in facilitating commodity financing transactions. They are present locally, often also outside of the capital. They know the local players, including the service providers (warehousemen, inspection companies, etc.). They are in a position to spot problems early on, and to resolve them informally or legally. So far, only very few domestic banks are playing this role. Most do not even know how warehouse receipt finance works. Valuable profit opportunities are thus lost, and the country's commodity producers and traders are, again, badly served by their commercial environment. These problems clearly point to the need for increased assistance to institution- and capacity-building in the developing countries' banking sector.

126. In this concluding chapter, some potential roles for domestic banks in structured commodity finance are discussed. They are examples only, indicative more of the need for the managers of domestic banks to be pro-active and creative than of the actual opportunities present in each country.

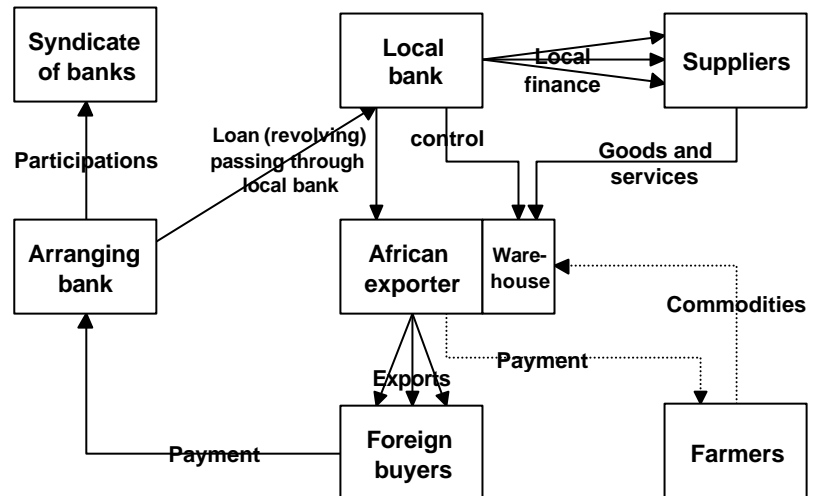
### A. Building on warehouse receipt finance structures

127. Local banks can often play a crucial role in warehouse receipt finance. For example, in Nigeria, cocoa farmers prefer to be paid by buyers before they return to their villages. Traders rarely have the required funds, and international banks and traders rarely have the necessary trust in these traders to provide them with a credit. In at least one case, the problem has been short circuited by a scheme in which farmers deliver their cocoa to an exporter in an independently controlled warehouse. This warehouse then issues warrants to the exporter, against which he can obtain local currency finance from a domestic bank to pay the farmers. When the exporter has accumulated sufficient cocoa for an export transaction, an export sale is made.

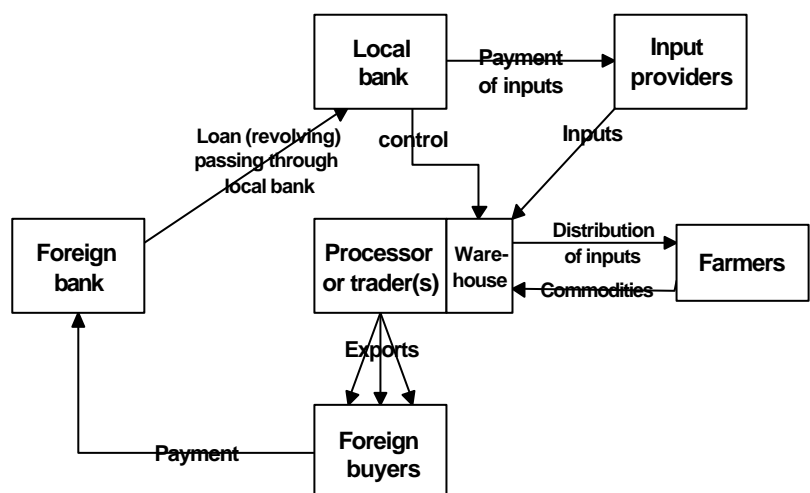
Again using the warehousing system, a local subsidiary of an international bank then advances him, the foreign trader's payment through the local bank (which deducts the sums due to it).<sup>24</sup>

128. On a simple warehouse receipt finance system, one can build many credit structures. For example, a local bank could be used by an international bank to act as an integral part of the financing of an exporter. Normally, international banks would feel comfortable only with financing goods that are already in port. The involvement of a local bank, and an inspection agency able to carry out the necessary collateral controls, can enable a deeper penetration of the funds into the countryside. Through the local bank, the disbursement of funds is controlled, with part being used to finance input suppliers (in bigger deals, such suppliers can even be made a more formal part of the structure by obtaining their commitment not to service, say, the machinery they delivered, if the borrower defaults). Once the exporter has taken delivery of the commodities, they fall under the control of the local bank, which, apart from the exporter's own warehouses, may also use other warehouses close to the centres of production (and ensure that the

**Chart 11**  
Local banks as facilitators of pre-export finance  
- an example of a financing scheme



**Chart 12**  
An example of facilitating finance for processors



<sup>24</sup> "It's possible with cocoa", *Project Finance*, African trade and commodity finance supplement, Euromoney, London, March 1998.

transport between these upcountry warehouses and the port warehouses is properly controlled).

129. Local banks can also play an active role in arranging finance for local processors or smaller domestic traders, possibly with support from an international financier. In many countries, there is a large demand for such funds. Processors often have a low capacity utilization due, in part, to poor management, but also to a large extent, to the inability of processors to carry a large stock of raw materials. Local traders often stop buying on local market places because they have run out of funds. Structured financing techniques can easily be applied in such cases. Apart from simple tolling arrangements, the local bank can pay, for example, for the sale of fertilizers and pesticides to a processor or group of traders – and these products are then stored in a bank-controlled warehouse. The processor, or group of traders, is then responsible for deciding on the distribution of these products among farmers, who reimburse in kind, with delivery, again, to a bank-controlled warehouse.

130. Independently controlled warehouses are not essential – a financier may feel comfortable enough with certain counterparties to accept that goods are stored in their warehouses. For example, in a transaction in Sudan, an Indonesian trading company provides agricultural inputs on credit to farmers (using funds borrowed from European banks). The inputs are imported, then delivered to its local partners, warehouses, from which they are distributed to farmers against crop repayment contracts (primarily for sorghum and cotton). On harvest, the farmers deliver the crops to the warehouses, the quality is checked, and the farmers' repayment obligations settled. Then the products are exported to the overseas partners of the Indonesian trading company.<sup>25</sup> This particular example does not involve local banks, but one can well imagine local banks initiating and arranging this kind of transactions.

#### **B. Identifying new receivables: the examples of migrant remittances and payment flows**

131. Many banks, and not just in developing countries, have an extremely limited perspective of what constitutes acceptable collateral – other than cash, real estate and near substitutes, very little is deemed to give sufficient credit comfort. In effect, with relatively simple financial skills, banks could greatly widen the scope of acceptable collaterals and thus widen their possibilities to finance transactions.

132. As has been discussed in the previous chapter, there are many techniques through which financiers can mitigate credit risks. The assignment of receivables looms importantly among these. One interesting aspect of receivables as credit risk mitigant is that what constitutes a receivable is, in effect, “in the eye of the beholder.” Many of the more innovative financings of the last decade were based on the recognition of a receivable where earlier, financiers had not seen any. Imbalanced telecommunication flows (leading to systematic payments from country A to B), obligatory use of local facilities/services by companies which generate hard currency (airline overflights over a country, use of airports and ports), services provided by local companies to multinationals active in the country (e.g., to the oil, mining and tourist industries), continuing sales of records made by successful artists, continuing ticket sales and advertising income from successful sports teams, even continuing federal subsidies to loss-making municipalities, were all recognized as receivables, enabling the receivers to obtain up-front credits against the “sale” or pledging of funds to be received in the future.

133. Such underutilized receivables are not limited to developed countries. They abound in developing countries too, and generally, only give rise to income – they are not used to underwrite and thus, facilitate finance. Herein lie large opportunities for local banks, who can work to identify and isolate such receivables.

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<sup>25</sup> “Trading success in Sudan”, *Project Finance*, African trade and commodity finance supplement, Euromoney, London, March 1998.

134. Two examples are briefly discussed in this section. One is that of migrant remittances finance. Many developing countries have seen an often significant part of their populations leave to more prosperous countries, temporarily or permanently. These migrants generally send an important part of their earnings back to their home country. These migrant remittances are relatively predictable – the number of migrants is reasonably well-known, and their past remittances are at least partly registered in the country’s balance of payment. If these remittance flows pass through certain channels, then they can be isolated – a structure can be created whereby the hard currency paid in by the overseas migrant is first used to service debt obligations. A local partner in the transaction, meanwhile, guarantees payment of the equivalent of the remittance in local currency. The foreign financier obtains access to virtually guaranteed hard currency for the reimbursement of his loan, and his major risk is that the local partner will not be able to meet its local currency obligations. This risk, in turn, can be identified by looking at the local partner’s local currency rating. In many cases, local banks have local currency ratings that are vastly superior to their international credit ratings (which are often constrained by their country’s poor credit rating). This mechanism has been used to channel relatively low-cost funds to banks in Ghana, Mexico, the Philippines and Turkey, but the number of countries where these transactions are possible far exceed this.

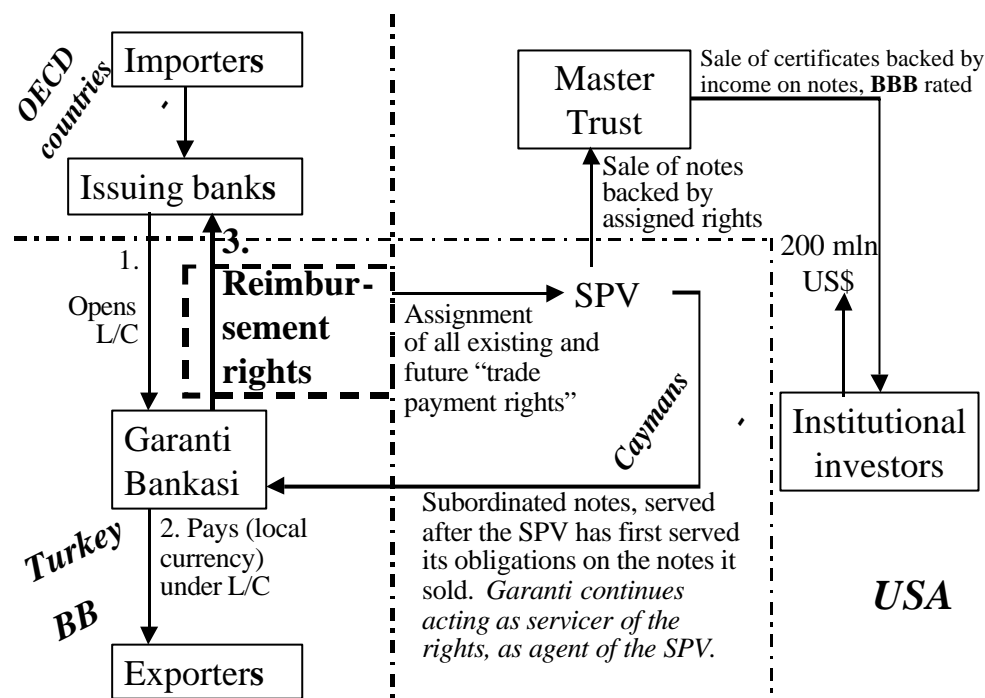
135. The other example is that of using payment flows – this mechanism is, in principle, feasible in all countries, and can enable all banks involved in export transactions to overcome difficult country risk conditions. This form of finance is very recent – the first case dates from June 1999 – but once one recognizes the possibility, the structure is relatively straightforward.

136. Many banks process a large volume of trade-related payments. To recognize that this has inherent potential to create a new *financing* instrument for an individual bank, one has to take a few logical steps:

1. One has to establish that the bank will continue this business in the future.
2. Then, the crucial aspect is recognizing that when a foreign client of an exporter opens a letter of credit, or agrees to a cash-against-documents payment procedure, this *leads to a payment obligation*, or more specifically *trade payment rights*, of a foreign bank to the local bank which acts for the exporter.
3. Therefore, the local bank has a *future flow of receivables*, assuming that it will continue its business as usual.
4. Therefore, by committing this future flow of receivables the bank eliminates most of the risk of its not being able to obtain sufficient foreign exchange to service its foreign debt.
5. As a consequence, if foreign financiers are willing to accept the pledge of these future receivables, the local bank can eliminate most of the “country risk” part of its rating and can pierce the sovereign ceiling, reducing its credit costs, perhaps quite significantly.

137. The issue then becomes what is necessary to ensure that foreign financiers feel comfortable with these *trade payment rights* as an underlying source of repayment for a financing. The principle is as has been discussed earlier for structured finance: the domestic bank needs to be removed from the control over the payments made under these trade payments rights. The mechanism chosen in the first ever transaction of this type, in Turkey, was for the local bank to sell the trade payment rights to an overseas Special Purpose Company (in the Cayman Islands), which in turn sold them to another overseas Trust Fund (in the United States). The latter thus had first title to the proceeds from the trade payment rights. On this basis, it was able to issue securities worth US\$ 200 million, which were then transferred to the Turkish bank as payment for the sale of the receivables. Graph 13 below illustrates the structuring of the transaction.

**Chart 13**  
**The Garanti trade payment flows securitization**



138. The banks making payments to the Turkish bank were instructed to use certain correspondent banks, which signed an agreement and acknowledgement to deposit such funds into concentration accounts (held in each bank). These funds were transferred at the end of each day to a collateral account held by the Trustee. They were used to meet quarterly debt service payments, and the remainder was transferred to the Turkish banks. The risks inherent in this transaction were deemed small by the foreign financiers, enabling the Turkish banks to obtain funds at very favourable terms (not surprisingly, a similar transaction was set up later in the same year by another Turkish bank).

### C. Encouraging the use of forfaiting structures

139. Banks in developing countries need to be creative and provide a long-term commitment to their clients. They should be able to get ahead of competition, including by facilitating trade finance transactions. Banks need to look at value-added trade products to serve their clients appropriately. One of these mechanisms is forfaiting.

140. Forfaiting is a non-recourse financing technique based on discounting bills of exchange or promissory notes. If implemented by local banks it would be an instrument to enhance imports and exports, including for intra-regional trade. The introduction of forfaiting would support companies in mitigating counterparty risks which may arise from a trade transaction.

141. Local banks can deepen the forfaiting market in two ways:

1. discounting notes, which helps export operations;
2. avalizing their clients' notes, which supports import financing.

## 1. Discounting notes

142. Through the discounting of notes from overseas buyers (representing a promise to pay for goods to be delivered), a local bank can absorb the risks of collecting payment from the buyer without recourse to the supplier. This would free up the supplier's working capital, and in addition, enable him to quote more attractive payment conditions to overseas buyers. If the notes are denominated in United States dollars or British pound sterling, and the buyers are in OECD countries, then the local bank can even sell the notes as "Bankers' Acceptances" in the large secondary market, or can discount them (at highly favourable rates) with the Federal Reserve in Chicago (for United-States-dollar denominated notes) or with the Bank of England (for pound-sterling-denominated notes).<sup>26</sup>

143. Forfaiting is not widely used in developing countries due to its perceived risk. In addition, the secondary market lacks depth and does not attract enough foreign investors, meaning that banks that forfait bills carry them on their balance sheet for longer than expected.

144. As a further limitation, most developing banks cannot carry huge sums on one obligor due to credit policies stipulations and sometimes regulatory body provision regarding credit allocation. At the same time, central banks may have stringent rules in relation to foreign currency allocation. This could hinder local banks from engaging in forfaiting transactions, as their foreign currency portfolio is insufficient to generate primary papers. However, it is possible for local banks to circumvent this hurdle by working closely with the regional banks and/or their international networks and establish Note Discounting Lines solely for forfaiting transactions. For instance, once a local bank generates primary paper from its customers, it can re-discount them with a regional bank or its network banks under the framework of the existing discounting lines.

## 2. Avalizing notes

145. By discounting notes, a bank enables its local clients to manage the counterparty risks of overseas buyers. Avalizing notes helps clients to improve their own credit profile, enabling them to buy on credit from overseas suppliers.

146. Therefore, to support developing country imports of commodities, banks can provide an aval or guarantee on promissory notes as well as bills. Through this process, the bank puts its own risk in the place of that of its client company. This option should be considered very attractive as long as the beneficiary client company is credible, since the commitment is off balance-sheet. However, it does require banks to develop skills in rating their clients' credit risks, and the ability to "price" these risks appropriately.

### D. Educating exporters on new financing instruments

147. Local banks ought to realize that the era of arm-chair banking is over. As globalization sweeps across every aspect of human endeavour, the finance sector has also witnessed radical changes in terms of novel techniques and instruments. The dismantling of commodity boards opened the way for private sector participation in export activities. Unfortunately, most of these newcomers know very little about the workings of the new instruments and techniques. As a result, they tend to reject moves to do business on terms different from the normal procedure of letters of credit. Certainly, this cannot help in the effort to boost trade in developing countries.

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<sup>26</sup> The relevant regulations of the Federal Reserve are available on the internet, <http://www.chicagofed.org/discountwindow/fra.htm>.

148. Against this background, the local banks have a role to play, especially in educating their clients on the appropriateness of new financing modalities. For instance, exporters need to understand that having their bills discounted (under a forfaiting structure) does not affect their profits, as long as they take the discounting margins into consideration in their price quotations.

### **E. Conclusion**

149. The landscape of commodity finance has changed radically over the past decade. The companies involved in commodity trade have changed, the regulatory regime under which they operate has seen a far-reaching liberalization, borders between banks, investment funds, insurance companies and international traders have opened up, developing countries have been freed from much of the past Government controls, and their competitors in developed countries are going through a rapid process of consolidation and specialization under the combined pressures of globalization and the Internet.

150. These changes most certainly pose threats to banks of developing countries, but, at the same time, provide them with opportunities to position themselves in a strong manner in their countries' economy. Governments of developing countries may be tempted to assist their banks by removing the threats, i.e. keeping foreign competitors out, but stimulating banks to take on new opportunities may be the preferable response. As has been argued in this and the previous chapter, there are many interesting opportunities that local banks are well-placed to capitalize on, using the structured financing techniques that have been described here.

151. The international community may consider expanding its assistance in this regard.<sup>27</sup> Capitalizing on these opportunities requires a certain knowledge and skills from local bankers, which international banks are often loath to share (indeed, most international banks refrain from imparting much structured financing skills to their staff in developing countries subsidiaries, lest they share their newfound skills with local competitors). Ideally, awareness-raising and training activities would be all that is required in this regard – once the management of domestic banks recognize the opportunities and possess skilled staff to realize them, they will have strong incentives to follow through. However, rules and regulations in many countries may also not have caught up with these changes, and as a result, may also act as barriers for banks to take the opportunities.<sup>28</sup> In such circumstances, international agencies may consider providing assistance to Governments for adapting such rules and regulations to the requirements of today's international commodity sector.

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<sup>27</sup> United Nations, *Report of the Secretary-General to the Preparatory Committee for the High-Level International Intergovernmental Event on Financing for Development*, A/A C-257/12, United Nations, New York, January 2001, para. 77, follows earlier General Assembly resolutions in recommending that “The relevant international organizations should urgently formulate measures to help developing countries to deal with commodity price risks, including the possible establishment of a new global facility to facilitate developing country access to commodity price risk management and structured commodity finance mechanisms and to assist in the development of regional and national commodity exchanges.”

<sup>28</sup> As discussed in UNCTAD. Government policies affecting the use of commodity price risk management and access to commodity finance in developing countries, UNCTAD/ITCD/COM/7, Geneva, November 1997.