International Trade & Working Capital Management

Reading: Chapters 20, 21 (685-690) and 22

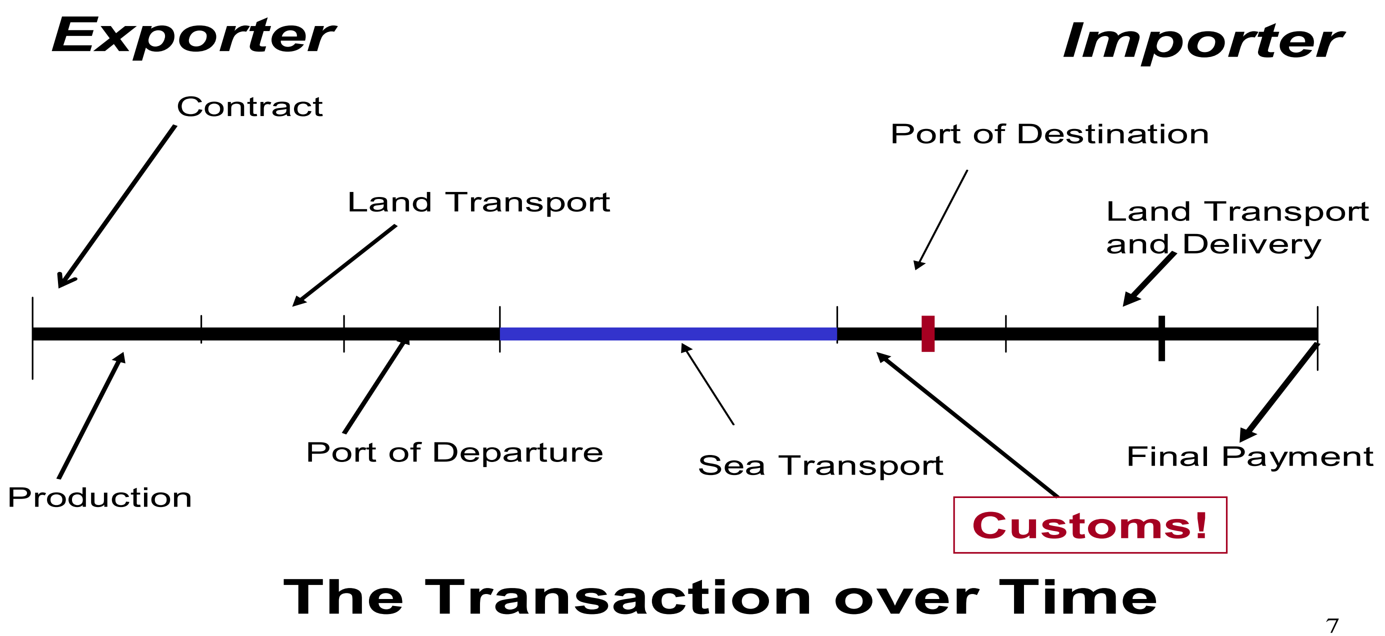
Lecture Outline

- International Trade
  - Trade Dilemma
  - Letter of Credit, Draft and Countertrade
- Working Capital Management
  - Cash, Accounts Receivable, Inventory
  - Short-Term Financing
- Managing the MNE Financial System

International Trade

- Most MNEs are heavily involved in international trade (exporting and importing), so it is important to know how it works and the risks involved.

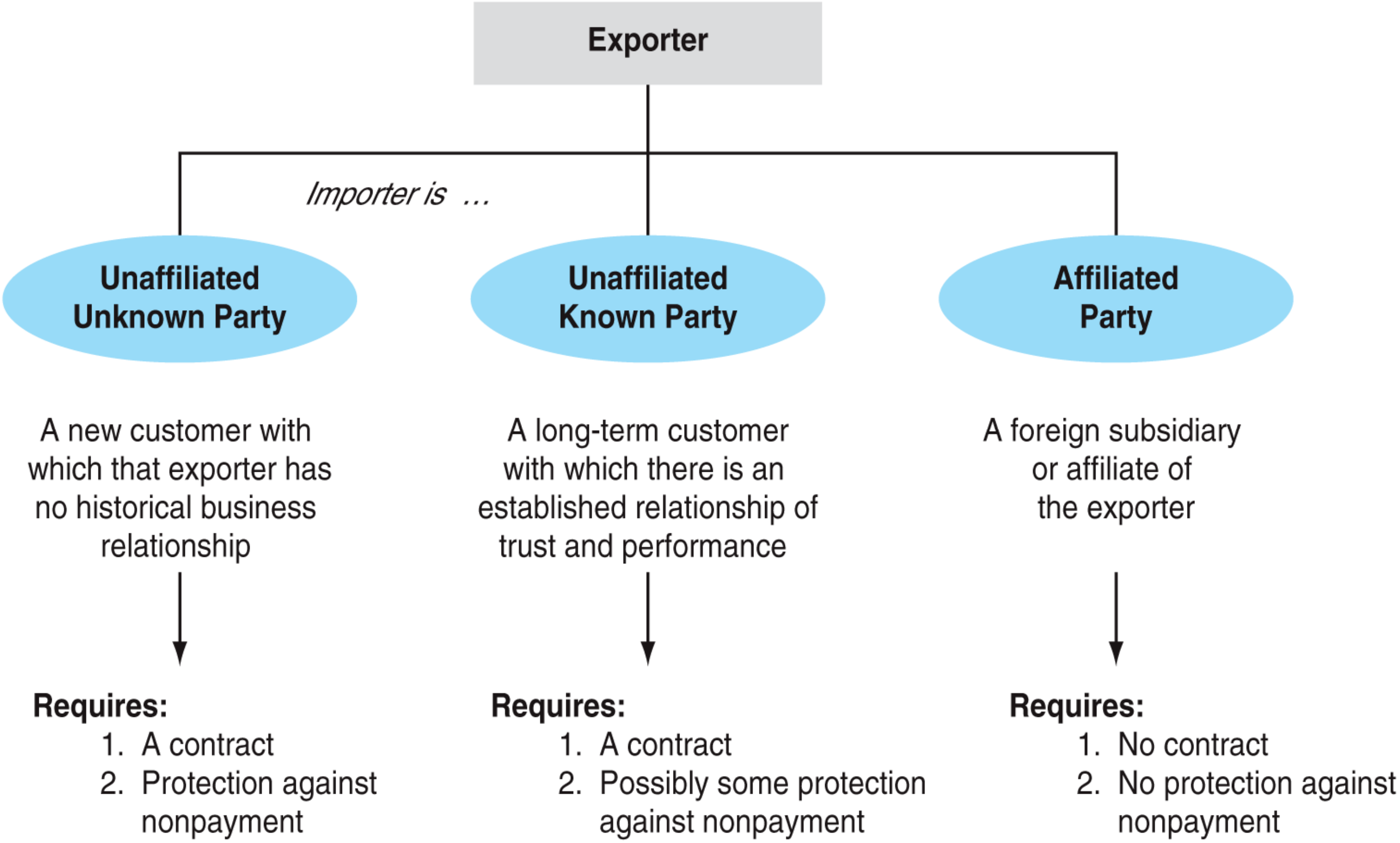
The Trade Cycle



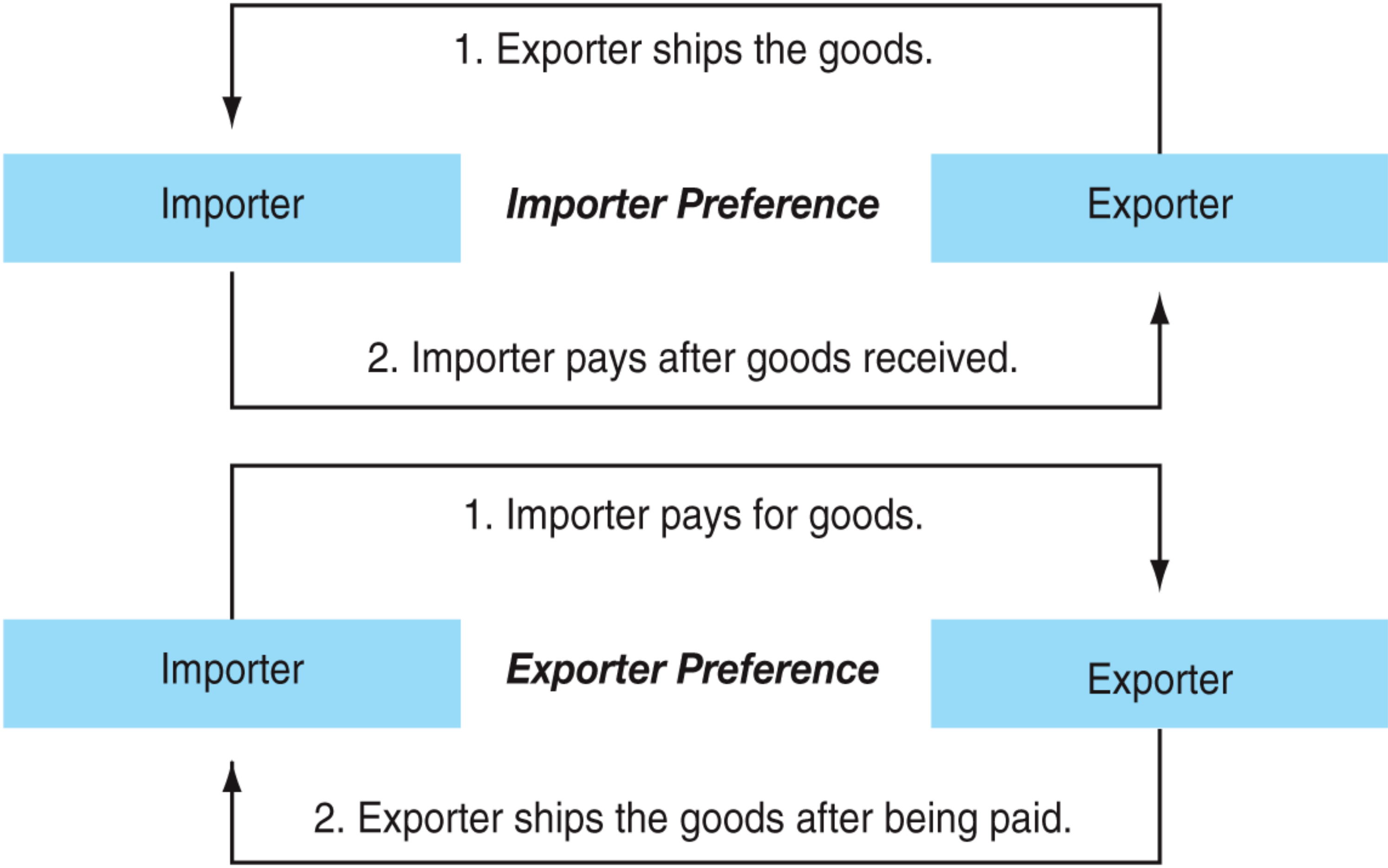
Trade Relationships

- The nature of the relationship between the exporter and the importer is critical to understanding the methods for import-export financing utilized in industry.
- There are three categories of relationships (see next exhibit):
  - Unaffiliated unknown
  - Unaffiliated known
  - Affiliated (sometimes referred to as *intra-firm trade*)
- The composition of global trade has changed dramatically over the past few decades, moving from transactions between unaffiliated parties to affiliated transactions.

Trade Relationships



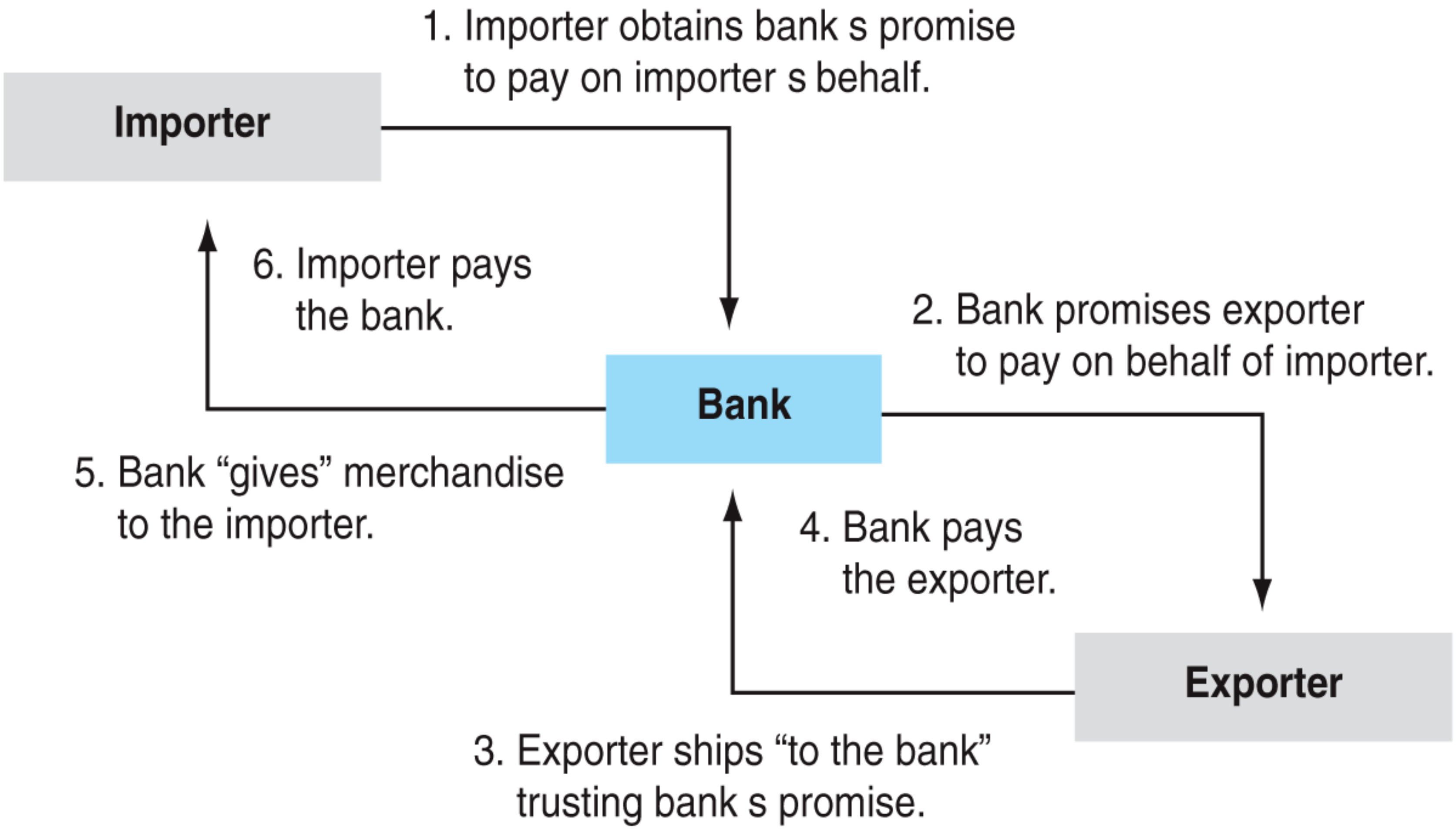
Trade Dilemma



Trade Dilemma

- The fundamental dilemma of being unwilling to trust a stranger in a foreign land is solved by using a highly respected bank as an intermediary.
- The following exhibit is a simplified view involving a *letter of credit* (a bank's promise to pay) on behalf of the importer.
- Two other significant documents are a *bill of lading* and a *sight draft*.

Solving the Trade Dilemma



Solving the Trade Dilemma

- This system has been developed and modified over centuries to protect both the importer and exporter from:
  - The risk of noncompletion
  - Foreign exchange risk
  - And, to provide a means of financing

Letter of Credit

- A *letter of credit* (L/C) is a bank's conditional promise to pay issued by a bank at the request of an importer, in which the bank promises to pay an exporter upon presentation of documents specified in the L/C.
- An L/C reduces the risk of non-completion because the bank agrees to pay against documents rather than actual merchandise.

Letter of Credit

- Letters of credit are also classified as:
  - Irrevocable versus revocable
  - Confirmed versus unconfirmed
- The primary advantage of an L/C is that it reduces risk – the exporter can sell against a bank's promise to pay rather than against the promise of a commercial firm.
- The major advantage of an L/C to an importer is that the importer need not pay out funds until the documents have arrived at the bank that issued the L/C and after all conditions stated in the credit have been fulfilled.

Letter of Credit

Bank of the East, Ltd.
[Name of Issuing Bank]

Date: September 18, 2005
L/C Number 123456

Bank of the East, Ltd., hereby issues this irrevocable documentary Letter of Credit to Jones Company *[name of exporter]* for US$500,000, payable 90 days after sight by a draft drawn against Bank of the East, Ltd., in accordance with Letter of Credit number 123456.

The draft is to be accompanied by the following documents:
1. Commercial invoice in triplicate
2. Packing list
3. Clean on board order bill of lading
4. Insurance documents, paid for by buyer

At maturity Bank of the East, Ltd., will pay the face amount of the draft to the bearer of that draft.

Authorized Signature

Draft

- A *draft*, sometimes called a *bill of exchange* (B/E), is the instrument normally used in international commerce to effect payment.
- A draft is simply an order written by an exporter (seller) instructing and importer (buyer) or its agent to pay a specified amount of money at a specified time.
- The person or business initiating the draft is known as the *maker*, *drawer* or *originator*.
- Normally this is the exporter who sells and ships the merchandise.
- The party to whom the draft is addressed is the *drawee*.

Draft

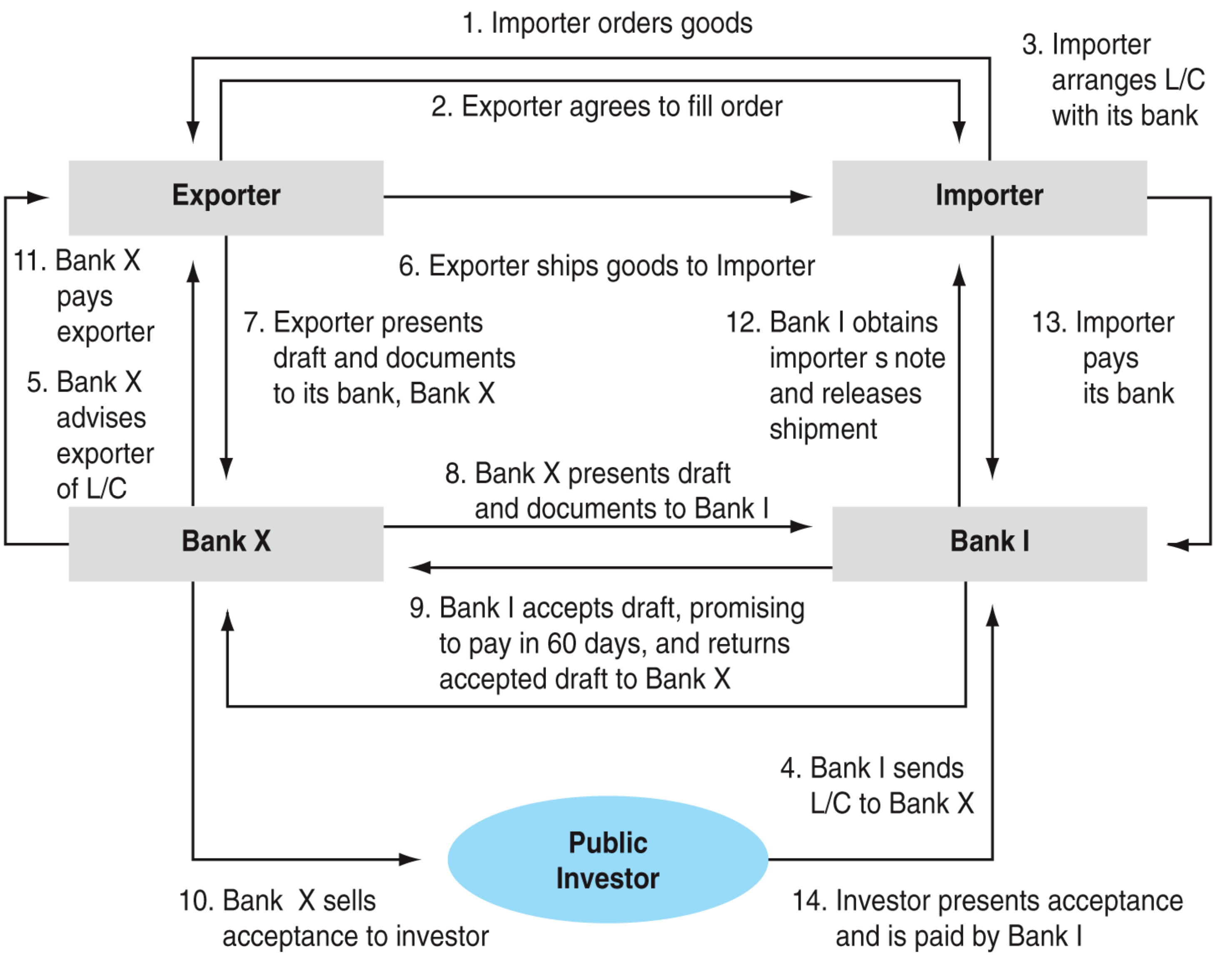
- If properly drawn, drafts can become *negotiable instruments*.
- As such, they provide a convenient instrument for financing the international movement of merchandise (freely bought and sold).
- To become a negotiable instrument, a draft must conform to the following four requirements:
  - It must be in writing and signed by the maker or drawer.
  - It must contain an unconditional promise or order to pay a definite sum of money.
  - It must be payable on demand or at a fixed or determinable future date.
  - It must be payable to order or to bearer.
- There are *time* drafts and *sight* drafts.

Bill of Lading

- The third key document for financing international trade is the *bill of lading* or B/L.
- The bill of lading is issued to the exporter by a common carrier transporting the merchandise.
- It serves three purposes: a receipt, a contract and a document of title.
- Bills of lading are either straight or to order.

Typical Trade Transaction

- A trade transaction could conceivably be handled in many ways.
- The transaction that would best illustrate the interactions of the various documents would be an export financed under a documentary commercial letter of credit, requiring an order bill of lading, with the exporter collecting via a time draft accepted by the importer's bank.
- The following exhibit illustrates such a transaction.


1. Importer orders goods
2. Exporter agrees to fill order
3. Importer arranges L/C with its bank
Exporter
Importer
6. Exporter ships goods to Importer
11. Bank X pays exporter
5. Bank X advises exporter of L/C
7. Exporter presents draft and documents to its bank, Bank X
12. Bank I obtains importer s note and releases shipment
13. Importer pays its bank
8. Bank X presents draft and documents to Bank I
Bank X
Bank I
9. Bank I accepts draft, promising to pay in 60 days, and returns accepted draft to Bank X
4. Bank I sends L/C to Bank X
Public Investor
10. Bank X sells acceptance to investor
14. Investor presents acceptance and is paid by Bank I

Trade Financing Alternatives

- In order to finance international trade receivables, firms use the same financing instruments as they use for domestic trade receivables, plus a few specialized instruments that are only available for financing international trade.

- There are short-term financing instruments and longer-term instruments in addition to the use of various types of barter to substitute for these instruments.

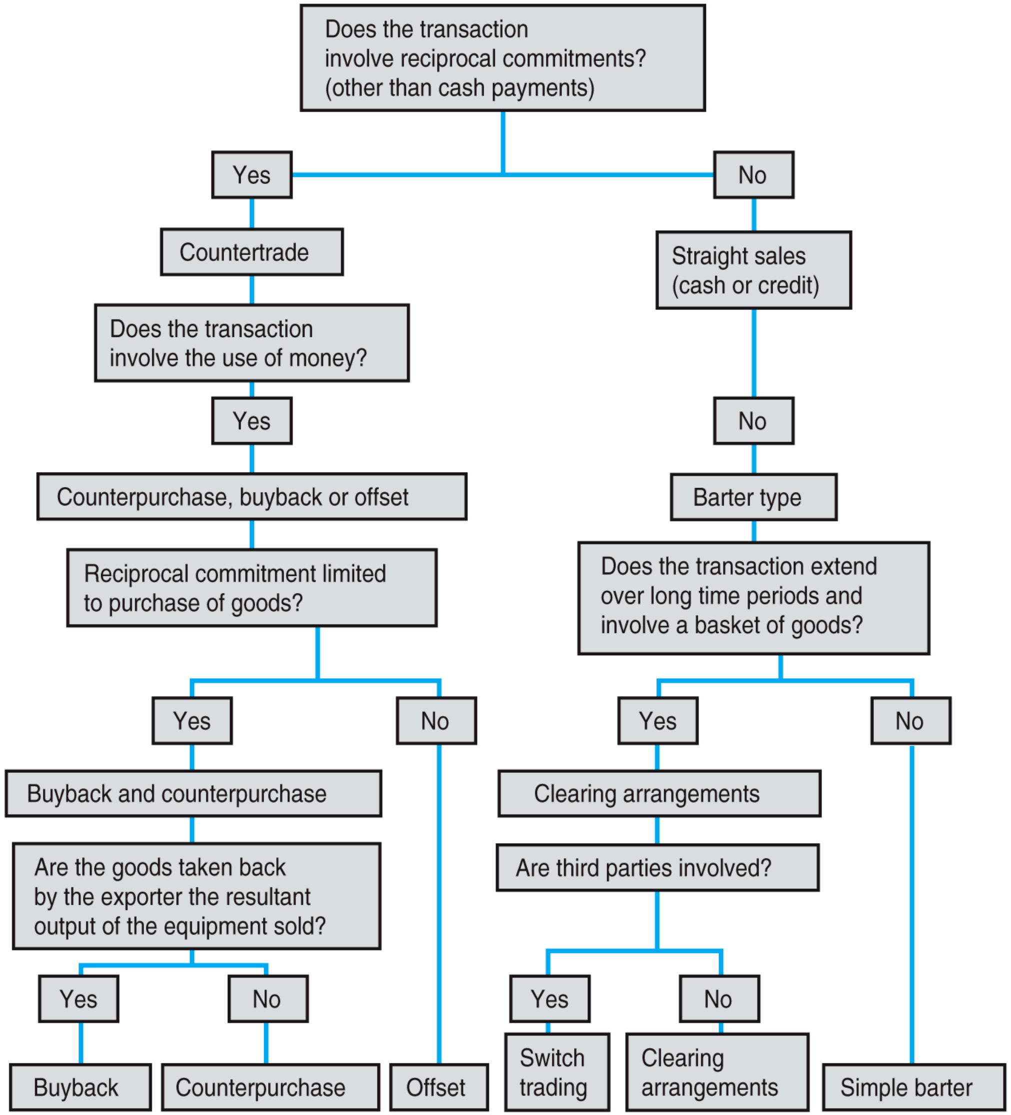
Trade Financing Alternatives

- Some of the *shorter term* financing instruments include:
  - Bankers Acceptances
  - Trade Acceptances
  - Factoring
  - Securitization
  - Bank Credit Lines Covered by Export Credit Insurance
  - Commercial Paper
- Forfaiting is a *longer term* financing instrument.

Countertrade

- The word *countertrade* refers to a variety of international trade arrangements in which goods and services are exported by a manufacturer with compensation linked to that manufacturer accepting imports of other goods and services.
- In other words, an export sale is tied by contract to an import.
- The countertrade may take place at the same time as the original export, in which case credit is not an issue; or the countertrade may take place later, in which case financing becomes important.

EXHIBIT 20.10 Classification of Forms of Countertrade



Source: Jean-Francois Hennart, "Some Empirical Dimensions of Countertrade," *Journal of International Business Studies*, Second Quarter 1990, p. 245. Reprinted with permission.

Government Trade Promotion

- Governments of most export-oriented industrialized countries have special financial institutions that provide some form of subsidized credit to their own national exporters.
- These export finance institutions offer terms that are better than those generally available from the competitive private sector.
- Thus domestic taxpayers are subsidizing lower financial costs for foreign buyers in order to create employment and maintain a technological edge.
- The most important institutions usually offer export credit insurance and a government-supported bank for export financing.

Working Capital Management

- Working capital management in a multinational enterprise requires managing current assets (cash balances, accounts receivable and inventory) and current liabilities (accounts payable and short-term debt) when faced with political, foreign exchange, tax and liquidity constraints.
- The overall goal is to reduce funds tied up in working capital while simultaneously providing sufficient funding and liquidity for the conduct of global business.
- Working capital management should enhance return on assets and return on equity and should also improve efficiency ratios and other performance measures.

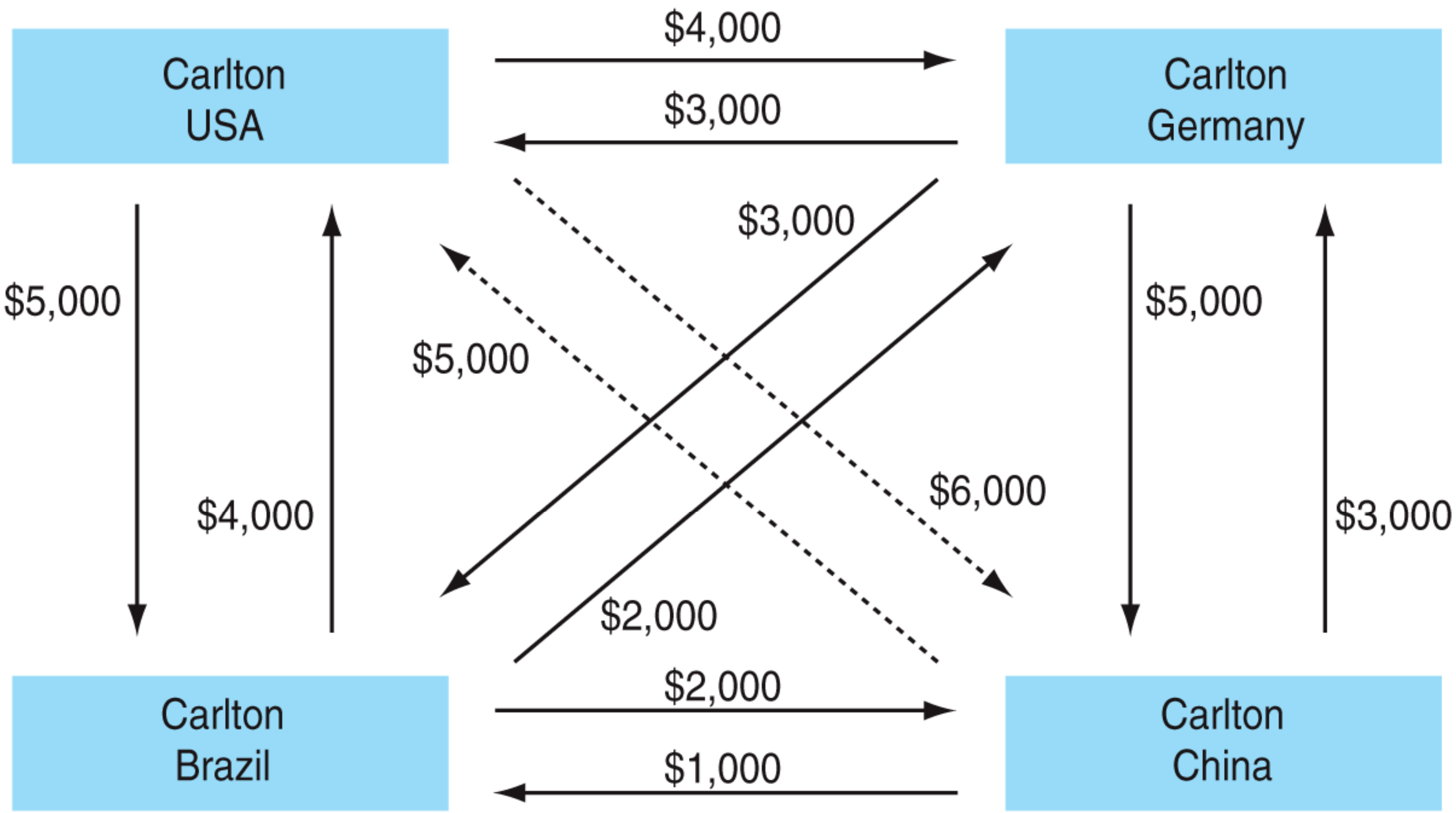
International Cash Management

- *International cash management* is the set of activities determining the levels of cash balances held throughout the MNE (*cash management*) and the facilitation of its movement cross-border (*settlements and processing*).
- These activities are typically handled by the international treasury of the MNE.
- Cash balances, including marketable securities, are held partly to enable normal day-to-day cash disbursements and partly to protect against unanticipated variations from budgeted cash flows. These two motives are called the *transaction motive* and the *precautionary motive*.

International Cash Management

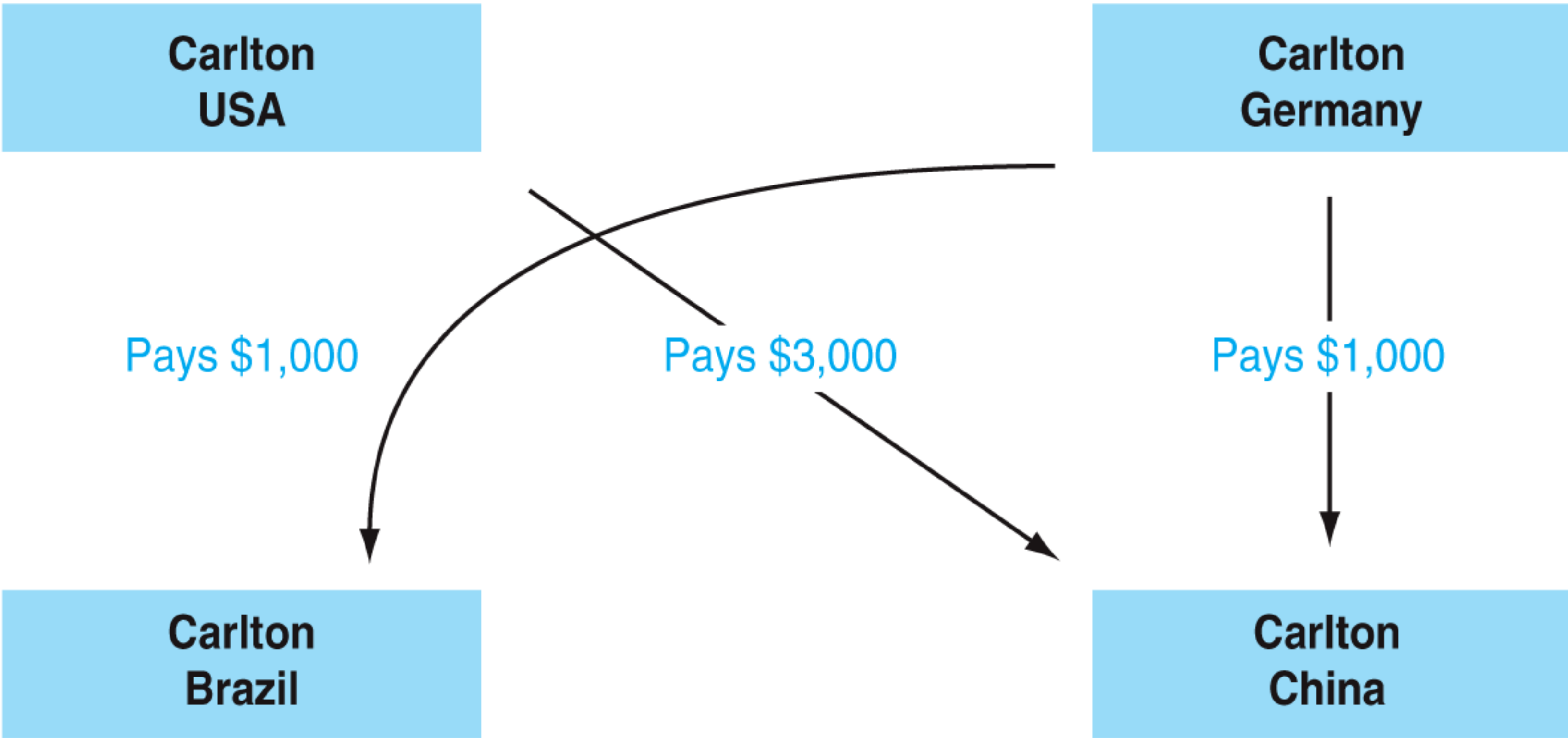
- Efficient cash management aims to reduce cash tied up unnecessarily in the system, without diminishing profit or increasing risk, so as to increase the rate of return on invested assets.
- Over time a number of techniques and services have evolved that simplify and reduce the costs of making cross-border payments.
- Four such techniques include:
  - Wire transfers
  - Cash pooling
  - Payment netting
  - Electronic fund transfers

Payment Netting



Prior to netting, the four sister Carlton companies have numerous intrafirm payments between them. Each payment results in transfer charges.

Payment Netting



After netting, the four sister Carlton companies have only three net payments to make among themselves to settle all intrafirm obligations.

Accounts Receivable Management

- Trade credit is provided to customers on the expectation that it increases overall profits by:
  - Expanding sales volume
  - Retaining customers
- Companies must keep a close eye on who they are extended, why they are doing it and in which currency.
- One way to better manage overseas receivables is to adjust staff sales bonuses for the interest and currency costs of credit sales.

Inventory Management

- MNCs tend to have difficulties in inventory management due to long transit times and lengthy customs procedures.
- Overseas production can lead to higher inventory carrying costs.
- Must weigh up benefits and costs of inventory stockpiling.
- Could adjust affiliates profit margins to reflect added stockpiling costs.

Inventory Management

- Example: Cypress Semiconductor decided not to manufacture their circuits overseas. By producing overseas they can reduce labour costs by $0.032 per chip.
- BUT, offshore production incurs extra shipping and customs costs of $0.025 per chip.
- AND, ties up capital in inventory for extra 5 weeks:

Capital cost = cost of funds x extra time x cost of part

= 0.20 x 5/52 x $8

= $0.154

Short-Term Financing

- Take advantage of discount on Accounts Payable?
  - 2/10 net 60 – effective cost?

- Three principal short-term financing options:
  - Internal financing – borrowing from parent company or other affiliates.
  - Local currency loans – overdrafts, line of credit, discounting (commercial paper) and term loans.
  - Euro market loans/issues – Euronotes and Euro-CP.

Managing the MNE Financial System

- A firm operating globally faces a variety of political, tax, foreign exchange and liquidity considerations that limit its ability to move funds easily and without cost from one country or currency to another.
- *Political constraints* can block the transfer of funds either overtly or covertly.
- *Tax constraints* arise because of the complex and possibly contradictory tax structures of various national governments through whose jurisdictions funds might pass.
- Foreign exchange *transaction costs* are incurred when one currency is exchanged for another.
- *Liquidity needs* are often driven by individual locations (difficult to conduct worldwide cash handling).

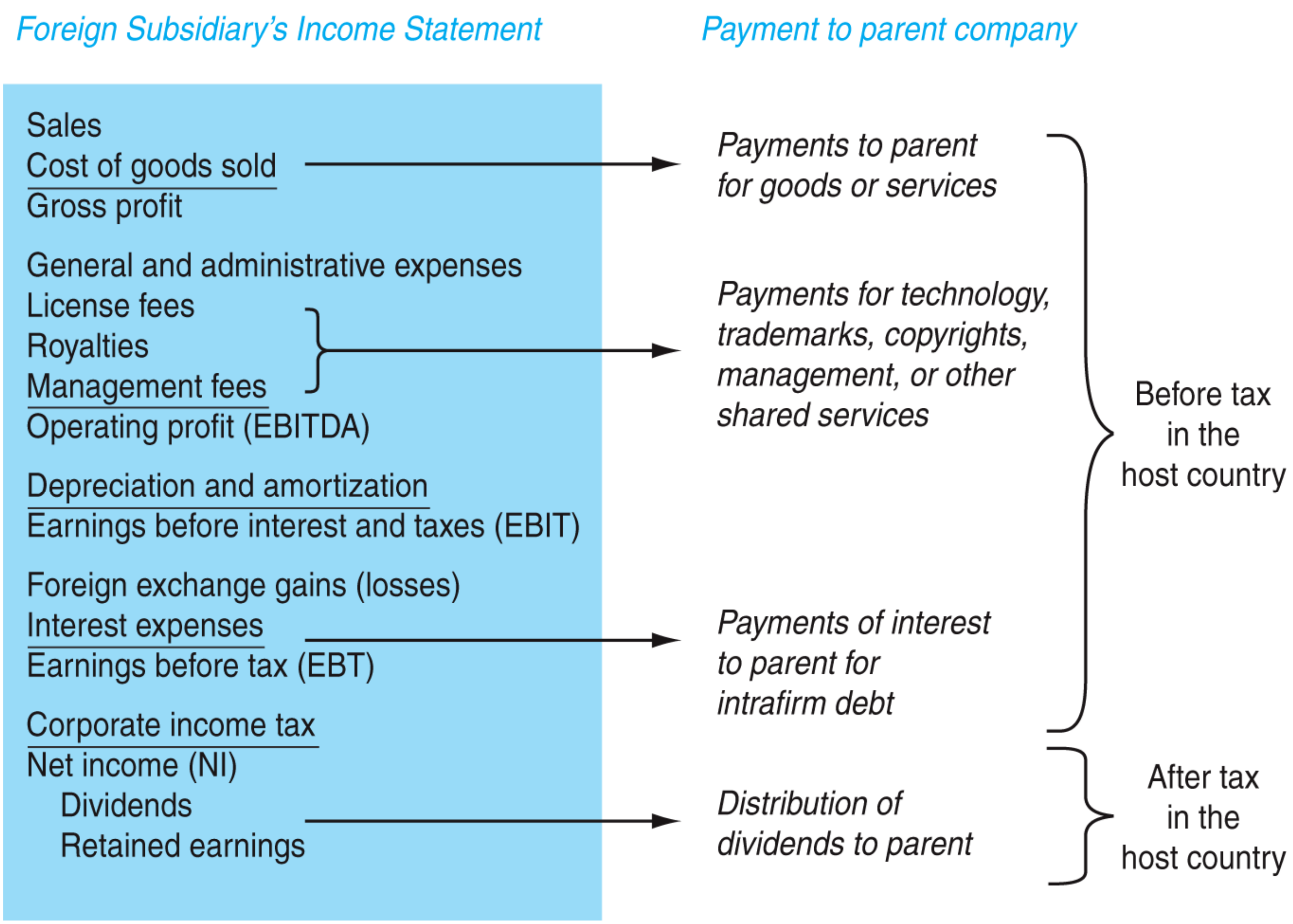
Managing the MNE Financial System

- However, MNEs have developed the following techniques, which overcome many of these problems and help to maximize global profits:
  - Unbundling funds
  - Transfer pricing
  - Reinvoicing centers
  - Internal loans

Unbundling Funds

- Multinational firms often *unbundle* their transfer of funds into separate flows for specific purposes.
- Host countries are then more likely to perceive that a portion of what might otherwise be called remittance of profits constitutes and essential purchase of specific benefits that command worldwide values and benefit the host country.
- Unbundling allows a multinational firm to recover funds from subsidiaries without piquing host country sensitivities over large dividend drains.

Unbundling Funds



Transfer Pricing

- Pricing internally traded goods of the firm for the purpose of moving profits to a more tax-friendly location.
- This can reduce taxes, tariffs and circumvent exchange controls.

- Example: Suppose that affiliate A produces 100,000 circuit boards for $10 apiece and sells them to affiliate B. Affiliate B, in turn, sells these boards for $22 apiece to an unrelated customer. Pretax profit for the consolidated company is $1 million regardless of the price at which the goods are transferred for A to B.

Transfer Pricing - Example

(internal unit price = $15):

	A	B	A+B
Revenue	1,500	2,200	2,200
COGS	-1,000	-1,500	-1,000
Gross Profits	500	700	1,200
Expenses	-100	-100	-200
Income b/t	400	600	1,000
Taxes (30/50)	-120	-300	-420
Net Income	280	300	580

Transfer Pricing - Example

HIGH MARK-UP POLICY (unit price = $18):

	A	B	A+B
Revenue	1,800	2,200	2,200
COGS	-1,000	-1,800	-1,000
Gross Profits	800	400	1,200
Expenses	-100	-100	-200
Income b/t	700	300	1,000
Taxes (30/50)	-210	-150	-360
Net Income	490	150	640

Transfer Pricing

- In effect: Profits are shifted from a higher to a lower tax jurisdiction.

<u>Basic rules:</u>

- If $t_A > t_B$ then set the transfer price and the mark-up policy as LOW as possible.

- If $t_A < t_B$ then set the transfer price and the mark-up policy as HIGH as possible.

Transfer Pricing

- Methods of Determining Transfer Prices
  - Tax Office regulations provide three methods to establish arm’s length prices:
    - Comparable uncontrolled prices
    - Resale prices
    - Cost-plus calculations
  - In some cases, combinations of these three methods are used.

Reinvoicing Centers

- Reinvoicing centers can help coordinate transfer pricing policy. They are set up in low-tax countries.
- Goods travel directly from buyer to seller, but ownership passes through the reinvoicing center.
- Advantages:
  - Easier control on currency exposure
  - Flexibility in invoicing currency
- Disadvantages:
  - Increased costs
  - Suspicion of tax evasion by local governments

Internal Loans

- Internal loans add value to the MNE if credit rationing, currency controls or differences in tax rates exist.
- Three main types:
  - Direct loans – from parent to affiliate.
  - Back-to-back loans – deposit by parent is lent to affiliate through a bank.
  - Parallel loans – like a loan swap between two MNEs and their affiliates.

Remember…

- All of these internal funds flow mechanisms are designed so that the MNE wins at the expense of other parties – usually governments.
- Therefore, it is imperative that MNEs do this as quietly and subtly as possible.