

International Trade and Finance, Part 3

International Trade and Finance, Part 3

International Trade Finance

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CONESTOGA OPEN LEARNING
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Preface

International Trade and Finance is a unique series of open educational resources that connects world events to economic and financial analysis. This OER explores not only the economics of international trade but also the feasibility analysis for making decisions regarding international trade and the role such analysis plays in selecting appropriate trading partners. The series also explores the risks faced by international organizations in trade finance and the various financial tools available to mitigate them. Thus, the *International Trade and Finance* series covers three key areas in three parts:

- *Part 1: Economics of International Trade* (Chapters 1 to 8)
- *Part 2: Feasibility of International Trade* (Chapters 9 to 15)
- *Part 3: International Trade Finance* (Chapters 16 to 22)

Part 1: Economics of International Trade introduces readers to the benefits of the free movement of goods and services and the factors of production, such as capital and labour, for participating countries and the world. We also explore the protectionist policies that limit the international trade in goods and services and productive resources. Readers are introduced to the effects of several protectionist policies, such as tariffs, quotas, and economic integration, on economic well-being and to the conditions under which such policies can make individual countries better off economically. Some policies and practices, such as dumping and export subsidies, adopted by governments and domestic producers to encourage exports are also evaluated.

Part 2: Feasibility of International Trade introduces readers to multiple tools and frameworks for assessing whether an organization is ready to enter international markets and to help them select the correct market for their products and services. We also present various rules and regulations applicable to international trade and provide readers with links to online resources where they can learn about various government organizations that help businesses with international expansion.

Part 3: International Trade Finance introduces readers to the role of trade finance in international trade decisions. Organizations around the world face many financial challenges when they decide to go global, including non-payment, non-performance, currency risk, etc. The text sheds light on the role financial tools and international financial organizations play in mitigating these risks.

After reading the three parts of *International Trade and Finance*, students of international business will have a sound knowledge of these key concepts and their application in the real world.



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Introduction

Welcome to **Part 3: International Trade Finance**. This OER is designed to provide readers with an opportunity to understand the basic and advanced concepts of trade finance, with special reference to Canadian companies. Trade finance is a niche concept in international finance and deals with special financial tools available to mitigate risks in international trade.

This OER will introduce readers to concepts such as risks in trade finance, the role of the exchange rate in trade decisions, tools available to mitigate and manage fluctuations in the exchange rate, trade finance instruments and the role they play in trade decision-making, and the role international financial organizations play in mitigating and managing trade finance risks. The final chapter focuses on the sustainable financial practices of different organizations and the importance of sustainability in the financial sector.

International Trade and Finance – Part 3: International Trade Finance was developed for use in **FIN2170 International Trade Finance** in the Business – International Business diploma program at Conestoga College.

Features of this OER

Each chapter in *International Trade and Finance* is introduced with chapter-level **Learning Objectives** and a **Think About It!** box introducing the chapter's main themes, which may include a short **YouTube video**, a **Test Yourself** H5P quiz, or a set of **Reflection Questions**.

Think About It! boxes throughout the chapters give readers the opportunity to explore certain terms and ideas further, such as with videos or interactive H5Ps.

Let's Explore and **Review** boxes introduce external resources to help learners explore the foundations of a key concept or learn more about it.

Did You Know? boxes share interesting stories or supplemental information with readers.

Each chapter ends with a **Chapter Summary** based on the chapter's Learning Objectives and gives readers a chance to assess their learning with **Check Your Understanding** H5P quizzes.

Each part includes a complete **Glossary**, with **pop-up definitions** linked to terms used in context.

Acknowledgments

Land Acknowledgment

At Conestoga College, we would like to acknowledge that in Kitchener, Waterloo, Cambridge, and Brantford, we are located on the Haldimand Tract, the land promised to the Haudenosaunee people of Six Nations, which includes six miles on either side of the Grand River. This is the traditional territory of the Anishinaabe, Haudenosaunee, and Neutral peoples. Recognizing the land is an expression of gratitude and appreciation to those whose environment we reside in and a way of honouring the Indigenous people living and working on the ground for thousands of years.

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— Kiranjot Kaur

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About the Authors & Editors

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Kiranjot Kaur, MBA, PhD, is a professor in the Business – International Business program at Conestoga College. She completed her MBA degree with distinction and was offered a fellowship to pursue and complete her doctorate for her excellence in research. Her area of research for her PhD in business administration was international economics and trade. Kiranjot has participated in and presented papers at several international conferences, and she is the author of *Competitiveness and Complementarities in BRICS Trade* and the OER *Global Value Chain*. In industry, Kiranjot has worked in both the media and supply chain sectors. As an enthusiastic advocate of open pedagogy, this project was the result of Kiranjot's dedication to improving the quality of curriculum guidance. Kiranjot enjoyed working with her Conestoga colleagues, Kenrick and Dina, to create *Part 3: International Trade Finance* by sharing ideas and collaborating on the pedagogy of learning.

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CHAPTER 16: INTRODUCTION TO INTERNATIONAL TRADE FINANCE

Introduction

16.1 International Trade Finance

16.2 Stakeholders in Trade Finance

16.3 Risk and Trade Finance

16.4 Managing and Mitigating Trade Risk

16.5 Mitigating Trade Finance Risk

Summary

Chapter 16 Introduction



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Learning Objectives

After reading this chapter, you should be able to

1. Describe the basic aspects of international trade finance.
2. Identify the key stakeholders in trade finance.
3. Describe the major risks involved in trade finance.
4. Describe the risk management cycle used to manage trade risk.
5. Discuss trade finance risk mitigation tools.

Think About It!

Video: What Is Trade Finance?

Before reading this chapter, watch this video outlining the basic aspects of trade finance.



One or more interactive elements has been excluded from this version of the text. You can view them online here: <https://ecampusontario.pressbooks.pub/internationaltradingfinancepart3/?p=5#oembed-1>

Source: Trade Finance Global. (2016, July 7). *What is trade finance?* [Video]. YouTube. <https://www.youtube.com/watch?v=OHvOyUGcC5Y>

Test Yourself



An interactive H5P element has been excluded from this version of the text. You can view it online here: <https://ecampusontario.pressbooks.pub/internationaltradingfinancepart3/?p=5#h5p-5>

Introduction

Trade finance plays a critical role in trade transactions. The users of trade finance are always in

need of funds to complete their trade transactions and are helped by trade finance providers who fulfil such financing needs. Along with the need of money, exporters and importers are also concerned about the risks they face in cross-border trading. It makes it easy for stakeholders to operate globally if they are aware of these risks as they can then find ways to manage them. Managing risk usually involves taking steps to identify, assess and control the risks to increase the earnings of international traders. Mitigating risk involves lowering of exposure to the various risks often using trade finance instruments provided by financial institutions.

16.1 International Trade Finance

International trade and its impact on economic growth depend significantly on the **globalization** process. The economic success of any country is influenced by foreign trade. No country has yet managed to create a healthy economy by isolating itself from the world economic system. Understanding the structure, health, and potential risks of an economy are important key factors to consider while deciding to trade internationally.

One of the major risks that trade **stakeholders** face, particularly importers and exporters, is related to availability of funds. Financing is crucial for importers to make payments on time and for exporters to buy materials and deliver products as expected.

International trade finance helps mitigate risks for all stakeholders by providing monetary support and assurance, often with creative financing methods. International trade finance also helps organizations with the strategic decision-making required to be successful internationally.

Siddhi Parekh (2023) explains that,

International trade finance refers to the financial support given by banks or other financial institutions using a variety of financial tools, like bank guarantees, letters of credit, to importers and exporters to enable them carry out commercial transactions without experiencing financial hardships.

References

Parekh, S. (2023, February 17). International trade finance explained. DRIP Capital Finance Guides. <https://www.dripcapital.com/en-us/resources/finance-guides/international-trade-finance>

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16.2 Stakeholders in Trade Finance

While discussing international trade finance, it is important to know the **stakeholders** in trade finance. Just as it takes many parts to make an international business run smoothly, there are many people, organizations, and entities that have a “stake” in the success of any business. In this section, we will look at who these stakeholders are and how they affect international business. To facilitate understanding, we have divided stakeholders into two categories: users of trade finance and providers of trade finance.

Users of Trade Finance

Users of trade finance are the parties that need financial support during cross-border trading and can be any of the following:

- **Exporters:** Exporters are the sellers in any trade transaction. Sellers sell goods and services and are paid for them. In any trade transaction, it is important that sellers are paid on time as most of the trade works on credit. Sellers might have promised a payment to another party based on the money they will receive from a transaction. Delay in payment in one transaction may have ripple effects that can extend to other parties and can impact exporter's image/goodwill in the market.
- **Importers:** Importers are the buyers in any trade transaction. Buyers buy goods and services and pay for them. On the importer's part, it is important that they do not miss or delay payments as this may impact their relationships with the other parties in trade.

By now, you might have started getting an insight on the importance of payment terms in a trade transaction. Payment terms are the payment-related promises between exporters and importers. They may include components such as method of payment, time of payment, mode of payment and has contractual obligations on all the parties. In all successful trade transactions, payment terms are made with agreement between both the parties and are followed with diligence to maintain healthy trade relationships.

Providers of Trade Finance

The parties that help the users of trade finance with their finance-related needs are called the providers and can be any of the following:

- **Banks:** In international trade, banks act as financial intermediaries. A financial intermediary is a party that stands between two other parties and supports them with all their financing needs, (e.g., accepting and issuing payment, verifying, and issuing documents etc.). These trade activities are so big for banks that sometimes they have specialized departments working to manage trade transactions. In addition to helping trade partners to manage their money flows, banks also provide them with advisory and consulting services.
- **Financial Institutions:** Other than banks, there are certain financial institutions around the world that help users with their specialized trade finance needs. For instance, export credit agencies help exporters by providing export credit finance and helping them in getting started with their businesses in difficult times. Every country has their public and private financial institutions catering to different trade finance needs of their clients.

Sometimes, we also use the term “financial intermediaries,” which can be banks or financial institutions or other agents and third-party service providers that collaborate with banks and financial institutions to support foreign trade transactions. **Forfaiting** and **factoring**, for instance, help importers by buying their receivables and getting quick access to money.

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16.3 Risk and Trade Finance

As already highlighted in the previous section, the stakeholders of trade finance are always exposed to **risks**. These risks could be related to non-payment and non-performance of the users or could be about risks associated with banks, financial institutions, and intermediaries with respect to complexity in trade. It is critical that financial managers are aware of the risks present in the countries with which they are trading so they can have preventive measures and mitigation strategies in place.

The growing tendency towards the opening of economies and increasing volumes of international business mean that businesses face many risks that must be managed effectively. The risks firms face when doing business internationally fall into four main categories: technical, management, commercial, and external. **Table 16.1** lists the various types of risks included in these main categories.

Technical risk, for instance, highlights the importance of technology in creating contracts and understanding markets by defining requirements, assessments, and assumptions. Management risk becomes even more important when organizations are dealing with international parties. The common issues that organizations face while managing international projects are trust resource availability, communication, and bank risk. Commercial risk plays a vital role in business success. It is one of the areas in trade finance that can make or break a business. External risk is the risks which are not in an organization's control, for example, country risk, foreign exchange risk, weather, and ecology, etc.

Table 16.1: Types of Risk by Category
Source: Adapted from Nezhyva, M., Zaremba, O & Mysiuk, V. (2021). International trade risk management under the impact of globalization. CC BY-NC-SA 4.0

Technical risk	Management risk	Commercial risk	External risk
Contract content development in terms of technical issues	International project management	Non-payment risk	Country risk
Defining Requirements	International program or portfolio management	Non-performance risk	Currency exchange rates
Assessments and assumptions	Operational activity management	Internal and external logistics	Production facilities
Discovering technical process	Provision of resources	Trust between counterparties	Weather and ecology
Discovering alternative technology	Communication	Client stability	Sustainability
Technical interfaces	Bank risk	Agreed conditions in the contract	Competition

Let's investigate some risks that have a direct role to play in trade finance.

Commercial Risk

Commercial risk is the risk to which exporters and importers are commonly exposed. Commercial risk involves the risk of non-payment faced by exporters and the risk of non-performance faced by importers. Exporters are always concerned about the receipt of payment for their goods on a timely basis. In cases where the importer does not pay or delays the payment, an exporter is exposed to non-payment or buyer's risk. Importers are always concerned about the goods they will receive and want to be certain that the items they are receiving are in line with the contract they have signed. In cases where the exporter does not meet their obligations and fails to deliver goods as per contract, the importer is exposed to non-performance risk.

It is hard for a trading partner to assess commercial risk if working with the other party for the first time. That is why it is important to exercise due diligence before signing the contract to reduce or limit commercial risks in trade finance.

Exchange Rate Risks

Volatile exchange rates make international trade and investment decisions more difficult because volatility increases exchange rate risk. Exchange rate risk refers to the potential to lose money because of a change in the exchange rate. Such volatility not only increase the risk of losses relative to plans for traders but also increases the costs to protect against those risks.

Country Risk

Country risk is the risk of loss that stems from economic and political events or circumstances in a country that affect payments for imports or the receipt of exports or that can generally hamper an international trade transaction. Some of the more significant factors in country risk are various kinds of export and import restrictions, exchange rate restrictions, expropriation, and political upheaval.

Financial/Bank Risk

Even though banks play an important role in domestic economies as well as in international trade, there are risks for firms that stem from their involvement with banks. Bank risk arises when banks fail to perform their duties in support of trade transactions and pay as per the contract. Banks become involved in trade transactions when importers and exporters do not have established relationships and cannot trust another party. In such a case, banks act as intermediaries, facilitating the movement of documents, products and payments between exporters and importers.

Let's Explore: Commercial Risk and Trade Finance

Every business exists to earn profit. Rather than making goods, importers obtain their profit by bringing goods into a market. Exporters sell internationally to expand and increase their business value. But international trade is complex and risky. Thus, it is very important for trade parties to be aware of risks involved that have direct implication on their profit. Commercial risk is one of them and needs to be handled carefully in trade finance as non-payment and non-performance can have long-term impact on any business.

Learn more about commercial risk on the International Trade Risk page of the First National Bank of

Botswana website. Explore the implications for importers and exporters with respect to this risk on the “What to consider” section.

References

Nezhyva, M., Zaremba, O & Mysiuk, V. (2021). *International trade risk management under the impact of globalization*. SHS Web of Conferences, 111, 01016. <http://dx.doi.org/10.1051/shsconf/202111101016>

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16.4 Managing and Mitigating Trade Risk

So far, we have identified many different types and categories of risks related to international trade finance and provided a few examples of these risks. To operate successfully, all business organizations must find ways to manage and mitigate the risks to which they are exposed. To manage risk successfully requires the decision-maker to understand and assess the impact of risk on the operations and earnings of the business. While there are multiple ways to manage risk, some organizations follow a formal procedure to identify, analyze, and mitigate risk. We will investigate one such procedure in the next section.

One way to mitigate trade finance risks is to use an appropriate method of payment and to ensure that the trade organization is working with reliable international financial institutions or supporting governmental agencies.

Foreign organizations need to use an effective risk management process that includes identifying, assessing, responding, communicating, and monitoring risks in trade. One process is called the *risk management cycle*, in which these five steps are followed in a continuous way, as illustrated in **Figure 16.1**. In this sense, risk management is an ongoing process, with known risks being monitored consistently and new risks being identified as they arise.

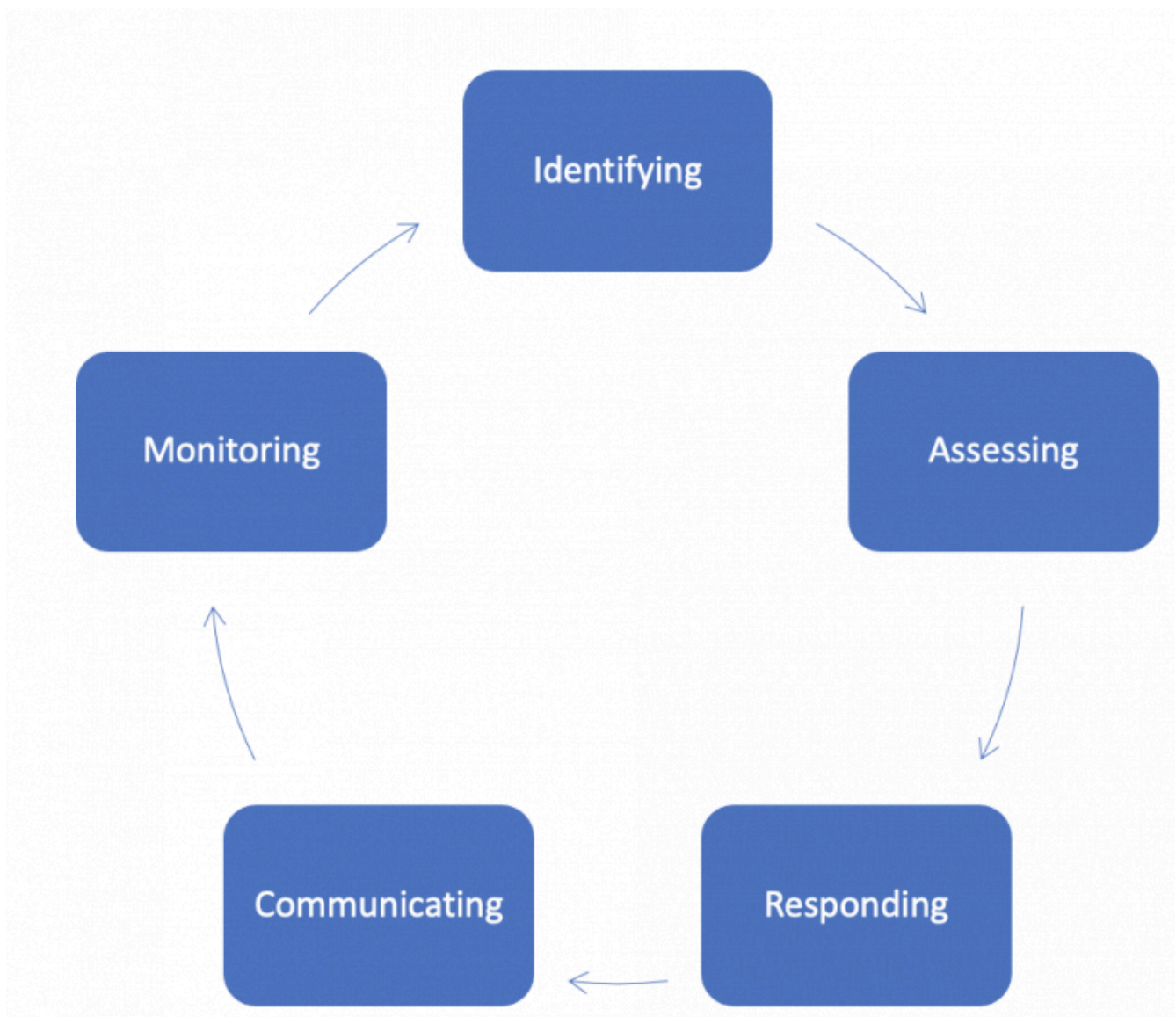


Figure 16.21: The Risk Management Cycle. [See image description].

Source: Adapted from Treasury Board of Canada Secretariat (2016).

Credit: Figure 7.4 Risk Management Cycle in "7.4 Risk Management Strategies to Mitigate the Supply Chain Vulnerability" by Kiranjot Kaur and Iuliia Kau, CC-BY-NC-SA 4.0.

Identifying Risk

Identifying risk is the initial step in the risk management process. In this step, the organization has to identify as many risks as possible and share them with every stakeholder. Next, identify warning signs of risks by creating questions (FITT, 2021). For example, is our new technology proven and mature for our business? Why does the organization have significant gaps between partners and in information? Why does the organization not have a mitigation or contingency plan?

Assessing Risk

Assessing risk includes analyzing and prioritizing steps (Treasury Board of Canada Secretariat, 2016). The scope of the risk must be determined by the assigned person. Also, determine the factors influencing the severity of this risk and how this risk impacted businesses in the past. The likelihood and the impact of an event are the significant parts of this step. There is a variety of assessments: qualitative, quantitative, and semi-quantitative. Quantitative assessment consists of numerical risk criteria which can be measured. Qualitative assessment is based on the qualitative descriptions of risks, for example, characteristics or information that cannot be counted. Semi-quantitative assessment combines quantitative and qualitative data. After getting information, risks must be measured and ranked. The top priority risks have the highest probability and greatest impacts (FITT, 2021).

Responding to Risk

According to the Treasury Board of Canada Secretariat (2016), responding to risk includes selecting and implementing measures to the risk. Responding to the threat has several mitigation strategies: *accepting, reducing, avoiding, monitoring, and transferring* risks (Treasury Board of Canada Secretariat, 2016).

- **Accepting risk** is the same as retention risk, and an organization accepts a particular risk because it is not worthwhile to spend money to mitigate it. Accepting risk is the most common approach for small risks in any business.
- **Reducing risks** can be done through control or prevention. Installing security systems, burglar alarms, protective equipment, and insurance companies are common approaches to minimizing risks.
- **Risk avoidance** is applicable for organizations that want to eliminate as many challenges as possible and potential risk sources. This strategy is not acceptable for all hazards, but some risks can be mitigated by creating policies, procedures, training and so forth. For example, if a country is not politically stable, the company can avoid the political risk by avoiding expansion into that country.
- **Risk monitoring** must be an ongoing process within the global value chain. Companies can transfer risks to insurance companies by purchasing an insurance policy.
- Also, **risk can be transferred** to the third party who will be responsible for consequences and loss.

Communicating Risk

The Treasury Board describes this step as the risk management process of making decisions according to the communication and reporting information about risks. The communication process must be, internally, between employees and, externally, among clients, stakeholders, and third parties. An integral part of communications is providing enough information to make the right decision (Treasury Board of Canada Secretariat, 2016).

Monitoring Risk

Regular review of information on risks and of the risk mitigation plan should be an ongoing process for any business. The responses to risk should be reviewed to ensure that the mitigation plan is properly implemented.

It is an essential part of the whole cycle because improvements or opportunities can be effectively identified and executed (Treasury Board of Canada Secretariat, 2016).

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FITT. (2021). *FITTskills: Global value chain*, (7th Ed.). Forum for International Trade Training.

Treasury Board of Canada Secretariat. (2016, May 12). *Guide to integrated risk management*. <https://www.canada.ca/en/treasury-board-secretariat/corporate/risk-management/guide-integrated-risk-management.html>

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Image Descriptions

Figure 16.1: The Risk Management Cycle

The image is a circular flow chart composed of five blue rectangular boxes connected by arrows. Each box contains white text. The flow chart begins at the top with the first box labelled “Identifying,” followed by the second box labelled “Assessing” on the right. Moving clockwise, the third box labelled “Responding” is at the bottom right, followed by the fourth box labelled “Communicating” at the bottom left. Completing the cycle, the fifth box labelled “Monitoring” is at the top left, connecting back to the “Identifying” box.

[back]

16.5 Mitigating Trade Finance Risk

Trade finance risk is mostly connected to non-payment and non-performance, i.e., commercial risk. Exporters and importers always are concerned about commercial risk and try to mitigate it in early stages of their trade transaction. The users of trade finance should always act proactively and find ways to mitigate commercial risk while signing their sales contract. This can be done only if both parties are aware of the risks and the ways to mitigate them. Let us look at some mitigation strategies.

- **International trade finance instruments:** Trade finance instruments have evolved significantly over the past few decades. The growth of trade has changed the risks organizations face these days and ways that they use to mitigate such risks. There are four instruments that are commonly used: *open account*, *advance payment*, *documentary collection*, and *documentary letters of credit* (FITT, 2023). Each of these methods has its own characteristics. Thus, selection of these methods of payment broadly depends upon the kinds of risks importers and exporters are facing. Chapter 20 discusses these methods of payments in detail.
- **International financial institutions and aid agencies:** These financial institutions and aid agencies can be banks, intermediaries or third parties providing financing to importers and exporters. With growth of trade financing needs, there has been growth in such institutions and the variety of services offered by them. These could be public and private funded organizations, could be operating at domestic or global level. Chapter 21 provides numerous examples of these financial institutions and trade agencies.

In the real world of international trade, there could be some cases where managing or mitigating risk is difficult. In such cases, organizations end up in disputes. In international trade, disputes could be complex to handle but there are alternative dispute resolution mechanisms developed to help resolve disputes. There are many international organizations that have now started providing consulting services in such disputes.

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Chapter 16 Summary

LO 16.1 Basic Aspects of International Trade Finance

- Finance is crucial for importers to make payments on time and exporters to buy materials and deliver as expected.
- International trade finance helps in mitigating risks for all stakeholders by providing monetary support and assurance, often with creative financing methods.
- International trade finance helps organizations with the strategic decision-making required to be successful internationally.

LO 16.2 Key Stakeholders in Trade Finance

- There are two categories of stakeholders: users and providers of trade finance.
- Users are the exporters and importers that need financial support during cross-border trading.
- Providers are the banks, financial institutions, and intermediaries that help users with finance-related needs.

LO 16.3 Major Risks Involved in Trade Finance

- There are four categories of risk: technical risk, management risk, commercial risk, and external risk.
- Technical risk, for instance, highlights the importance of technology in creating contracts, understanding market by defining requirements, assessments, and assumptions.
- Management risk becomes even more important when organizations are dealing with international parties. The common issues that organizations face while managing international projects are trust, resource availability, communication, and bank risk.
- Commercial risk (non-payment and non-performance risk) plays a vital role in business success. It is one of the areas in trade finance that can make or break a business.
- External risk are the risks which are not in organization's control e.g. country risk, foreign exchange risk, weather, and ecology etc.
- The risks that have direct role of play in trade finance are:
 - Commercial risk is divided into non-payment risk and non-performance risk. It is always hard to assess commercial risk if you are working with the other party for the first time.
 - Exchange rate risk refers to the potential to lose money because of changes in the exchange rate.
 - Country risk relates to any potential disruption of an international trade transaction because of a political or economic development in the country of either the exporter or the importer.
 - Bank risk arises when banks fail to perform their duties and pay as per the contract.

LO 16.4 Risk Management Cycle Used to Manage Trade Risk

- Foreign organizations need to use an effective risk management process that includes identifying, assessing, responding, communicating, and monitoring risks in trade. One process is called the risk management cycle, in which these five steps are followed in a continuous way
- Identifying Risk is about identifying warning signs and sharing it with stakeholders.
- Assessing Risk involves determining the scope of risk along with factors influencing severity of the risks identified.
- There can be five ways to responding to risk: accepting risk, reducing risk, risk avoidance, risk monitoring and risk transfer.
- There then arises a need to communicate the risk effectively to internal and external parties to help with effective decision making.
- Once the risks have been identified and have been communicated to stakeholders, next step in risk management cycle is to monitor the implementation of risk mitigation plan.

LO 16.5 Trade Finance Risk Mitigation Tools

- There are two risk mitigation strategies: International trade finance instruments and International financial institutions and aid agencies.
- There are four trade finance instruments that are commonly used: open account, advance payment, documentary collection and documentary letters of credit.
- The financial institutions and aid agencies can be banks, intermediaries or third parties providing financing to importers and exporters. These could be public and private funded organizations, could be operating at domestic or global level.

Check Your Understanding



An interactive H5P element has been excluded from this version of the text. You can view it online here:

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CHAPTER 17: MACROECONOMICS AND TRADE FINANCE

Introduction

17.1 International Economics and Trade Finance

17.2 Macroeconomic Indicators

17.3 Balance of Payment and Its Components

17.4 Calculating the Current Account, Financial Account, and Capital Account

17.5 Reasons for a Zero Balance

17.6 International Investment Position

Summary

Chapter 17 Introduction



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Learning Objectives

After reading this chapter, you should be able to

1. Describe the relationship between economics and trade finance.
2. Describe major macroeconomic indicators in trade.
3. Explain balance of payment and its components.
4. Explain the calculation of current account, financial account, and capital account.
5. Identify the reasons for a zero balance of payment.

6. Explain the concept of the international investment position.

Think About It!

Video: The Difference Between Finance and Economics!



One or more interactive elements has been excluded from this version of the text. You can view them online here: <https://ecampusontario.pressbooks.pub/internationaltradefinancepart3/?p=132#oembed-1>

Source: Investopedia. (2015, December 3). *The difference between finance and economics* [Video]. YouTube. https://youtu.be/WSZpF3xUcfk?si=x_2l5T650dPGh3nX

Test Yourself



An interactive H5P element has been excluded from this version of the text. You can view it online here: <https://ecampusontario.pressbooks.pub/internationaltradefinancepart3/?p=132#h5p-7>

Introduction

A country's macroeconomic performance helps companies to choose their trade partners. International finance helps to reflect an economy's performance by using macroeconomic variables such as gross domestic product (GDP), unemployment, inflation, balance of payment, exchange rates, and interest rates. Balance of payment is one of the important indicators of an economy as it measures the difference between spending flowing into a country and spending flowing out of it.

In other words, it is any gap between a nation's dollar value of its exports, or what its producers sell abroad, and a nation's dollar value of imports, or the foreign-made products and services that households and businesses purchase. It can be calculated using three accounts: the current account, the capital or financial account, and the official international reserves account. The current account is made up of the value of its balance of trade in goods and services (i.e., the trade balance), net flows of incomes and net unilateral transfers. The capital account or financial account is the net value of flows of private financial assets in and out of a country.

The official international reserves account tracks changes in the official holdings of international reserves. This further helps in describing a country's international investment position (IIP), which measures the total value of foreign assets held by domestic residents minus the total value of domestic assets held by foreigners.

17.1 International Economics and Trade Finance

Increased international trade in goods and services and the international movement of productive resources like capital and labour are among the primary features of globalization. Associated with such international flows of products and resources is a set of international financial flows. International economics helps us to make sense of these real and financial flows. Specifically, international economics is a field of study that examines the implications of international trade in goods and services, international investment, and international lending and borrowing. Within international economics, there are two broad areas: the study of international trade and the study of international finance.

International economics can be defined as a field of study that assesses the implications of international trade, international investment, and international borrowing and lending. There are two broad subfields within the discipline: international trade and international finance.

The study of *international trade* uses microeconomic models to examine why countries trade as well as the implications of trade for consumers, businesses, governments, the nation, and the world. Standard theories suggest that countries trade with each other because they have a **comparative advantage** in producing specific goods. That is, countries tend to export goods they can be produced at a lower cost and import those they can only be produced at a relatively high cost.

The study of *international finance* uses macroeconomic models to understand the domestic economy and the financial implications of its relationship with other countries. Therefore, international finance is concerned with financial flows among countries, reflecting trade in products, inward and outward foreign direct investment, and international borrowing and lending. Major areas of focus include the determinants of exchange rates, the performance of the economy, and the effectiveness of monetary and fiscal policies under different exchange rate systems.

International economics is a special field of study in economics. Because nations are sovereign each can adopt its own policies to serve its national interest or the interests of specific groups within the economy. As such, there is no international entity that can effectively govern the global economy. While there are international institutions (e.g., the **International Monetary Fund (IMF)**, the **World Bank**, the **World Trade Organization**) whose objectives include managing aspects of the global economy, sovereignty allows nations to ignore international rules that are inconsistent with national goals.

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17.2 Macroeconomic Indicators

For an organization that expands internationally, it is important that they analyze **macroeconomic performance** of their domestic economy with the economy of countries they wish to trade. This will help the company to choose a trade partner whose growth and performance aligns best with their own country which further facilitates smooth and long run trade relationships.

In trade finance, macroeconomic models highlight the relationships among economic variables such as gross domestic product (GDP), unemployment, inflation, trade balances, exchange rates, and interest rates.

- **Gross domestic product (GDP)** is known widely as an indicator to analyze macroeconomic performance. Economists generally express the size of a nation's economy as its GDP, which measures the value of the output of all goods and services produced within the country in a year. Forecasters use this indicator as a tool to measure a country's economic performance.
- **Balance of trade** reflects impacts of international trade on an economy's GDP. High exports indicate a growth in nation's GDP whereas high imports are an indication of decreased GDP. U.S. and Canada have experienced trade deficits over years whereas China produces and exports most of the world's consumable products and as such has recorded a trade surplus since 1995 (Brock, 2019).
- The **unemployment rate** helps inform financial forecasters about the expected cost of labor and the ability of employers to hire people if a firm plans to increase the production of goods or services. The unemployment rate measures the percentage of the working population in a country who would like to be working but are currently unemployed. The lower the rate, the healthier the economy and vice versa.
- **Inflation** is the rate of change of prices in the entire economy. Every quarter, financial information hubs, such as the *Wall Street Journal* (WSJ), and government agencies and regulatory bodies, such as the U.S. Treasury Department and the Federal Reserve, release estimates about expected and current inflation. This information informs policymakers how to adjust the money supply to meet particular targets.
- Financial forecasters pay close attention to current and expected **interest rates**, as they have a fundamental impact on the cost of raising money and determining the required rate of return for investment. Economists also believe that high interest rates attract investment from other countries and injects instant capital inflow in short run (Pugel, 2020).

Countries interact in two important ways: trade and investment. Trade encompasses the export and import of goods and services. Investment involves the borrowing and lending of money and the foreign ownership of property and stock within a country. Important international macroeconomic variables, then, are the **balance of payment**, which measures the difference between the total value of exports and the total value of imports, international financial flows, and the **exchange rate**, which measures the number of units of one currency that exchanges for one unit of another currency.

Chapter 18 provides details on exchange rates and trade finance.

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17.3 Balance of Payment and Its Components

Balance of payment helps in measuring the performance of any economy. It provides enough information about a country's international activities that further helps international traders to compare different national economies and select their trading partners. The balance of payments (BOP) is a record of all monetary transactions between a country and the rest of the world. This includes payments for the country's exports and imports, the sale and purchase of assets, and financial transfers. The BOP is given for a specific period of time (usually a year) and in terms of the domestic currency.

Whenever a country receives funds from a foreign source, a **credit** is recorded on the balance of payments. Sources of funds include exports, the receipt of loans or investment, and income from foreign assets. Whenever a country has an outflow of funds, such as when the country imports goods and services or when it invests in foreign assets, it is recorded as a **debit** on the balance of payments. When all components of the BOP accounts are included, they must sum to zero with no overall surplus or deficit. For example, if a country is importing more than it exports, its trade balance will be in deficit, but the shortfall will have to be counterbalanced in other ways – such as by funds earned from its foreign investments, by running down central bank reserves, or by receiving loans from other countries.

If the value of total exports from a country exceeds total imports, we say a country has a trade surplus. However, if total imports exceed total exports, then the country has a trade deficit. Of course, if exports equal imports, then the country has balanced trade.

Components of Balance of Payment

The balance of payment can be expressed as:

The current account records the flow of income from one country to another. It includes the balance of trade (net earnings on exports minus payments for imports), factor income (earnings on foreign investments minus payments made to foreign investors), and cash transfers.

The financial account records the flow of assets from one country to another. It is composed of foreign direct investment, portfolio investment, other investment, and reserve account flows.

The capital account is typically much smaller than the other two and includes miscellaneous transfers that do not affect national income. **Debt forgiveness** would affect the capital account, as would the purchase of non-financial and non-produced assets such as the rights to natural resources or patents.

The balancing item is simply an amount that accounts for any statistical errors and ensures that the total balance of payments is zero.

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17.4 Calculating the Current Account, Financial Account, and Capital Account

Current Account Calculation

The **current account** represents the sum of the balance of trade (net earnings on exports minus payments for imports), factor income (earnings on foreign investments minus payments made to foreign investors), and cash transfers. It is called the current account as it covers transactions in the “here and now” – those that don’t give rise to future claims.

The balance of trade is the difference between a nation’s exports of goods and services and its imports of goods and services. A nation has a trade deficit if its imports exceed its exports. Because the trade balance is typically the largest component of the current account, a current account surplus is usually associated with positive **net exports**. This, however, is not always the case. Secluded economies like Australia are more likely to feature income deficits larger than their trade surplus.

The net factor income records a country’s inflow of income and outflow of payments. Income refers not only to the money received from investments made abroad (note: the investments themselves are recorded in the capital account but income from investments is recorded in the current account) but also to the money sent by individuals working abroad, known as remittances, to their families back home. If the income account is negative, the country is paying more than it is taking in interest, dividends, etc.

Cash transfers take place when a certain foreign country simply provides currency to another country with nothing received as a return. Typically, such transfers are done in the form of donations, aids, or official assistance.

Normally, the current account is calculated by adding up the 4 components of current account: goods, services, income, and cash transfers.

Thus, a country’s current account can be calculated by the following formula:

$$CA = (X - M) + NY + NCT$$

Where

CA is the current account,

X and M are the export and import of goods and services respectively,

NY is net income from abroad, and

NCT is the net current transfers.

When the sum of these four components is positive, the current account has a surplus.

Financial Account Calculation

The **financial account** (also known as the capital account under some balance of payments systems) measures the net change in ownership of national assets.

When the financial account has a positive balance, we say that there is a financial account surplus. A financial account surplus means that the net ownership of a country’s assets is flowing out of a country – that is, foreign buyers are purchasing more domestic assets than domestic buyers are purchasing assets from the rest of the world. Likewise, we say that there is a financial account deficit when the financial account has a

negative balance. This occurs when domestic buyers are purchasing more foreign assets than foreign buyers are purchasing domestic assets. For example, a financial accounts deficit would exist when Country A's citizens buy \$200 million worth of real estate overseas while overseas investors purchase only \$100 million worth of real estate within Country A.

The financial account has four components:

- foreign direct investment
- portfolio investment
- other investment
- reserve account flows

Foreign direct investment (FDI) refers to long-term capital investment such as the purchase or construction of machinery, buildings, or even whole manufacturing plants. If foreigners are investing in a country, that is an inbound flow and counts as a surplus item on the financial account. If a nation's citizens are investing in foreign countries, there is an outbound flow that will count as a deficit. After the initial investment, any yearly profits not re-invested will flow in the opposite direction but will be recorded in the current account rather than the financial account.

Portfolio investment refers to the purchase of shares and bonds. It is sometimes grouped together with "other" as a short-term investment. As with FDI, the income derived from these assets is recorded in the current account; the financial account entry will be for any buying or selling of the portfolio assets in the international financial markets.

Other investments include capital flows into bank accounts or provided as loans. Large short-term flows between accounts in different nations are commonly seen when the market can take advantage of fluctuations in interest rates and/or the exchange rate between currencies. Sometimes this category can include the reserve account.

The reserve account is operated by a nation's **central bank** to buy and sell foreign currencies; it can be a source of large capital flows to counteract those originating from the market. Inbound capital flows (from sales of the account's foreign currency), especially when combined with a current account surplus, can cause a rise in value (appreciation) of a nation's currency, while outbound flows can cause a fall in value (depreciation). If a government (or, if authorized to operate independently in this area, the central bank itself) does not consider the market-driven change to its currency value to be in the nation's best interests, it can intervene. Such intervention affects the financial account. Purchases of foreign currencies, for example, will increase the deficit and vice versa.

To calculate the total surplus or deficit in the financial account, sum the net change in FDI, portfolio investment, other investment, and the reserve account.

Capital Account Calculation

The capital account acts as a sort of miscellaneous account, measuring non-produced and non-financial assets, as well as capital transfers.

There are two common definitions of the capital account in economics. The first is a broad interpretation that reflects the net change in ownership of national assets. Under the International Monetary Fund (IMF) definition, however, most of these asset flows are captured in the financial account. Instead, the capital account acts as a sort of miscellaneous account, measuring non-produced and non-financial assets, as well as capital transfers. The capital account is normally much smaller than the financial and current accounts.

Like the financial account, a deficit in the capital account means that money is flowing out of a country and

the country is accumulating foreign assets. Likewise, a surplus in the capital account means that money is flowing into a country, and the country is selling (or otherwise disposing of) non-produced, non-financial assets.

The capital account can be split into two categories: non-produced and non-financial assets and capital transfers. Non-produced and non-financial assets include things like drilling rights, patents, and trademarks. For example, if a domestic company acquires the rights to mineral resources in a foreign country, there is an outflow of money, and the domestic country acquires an asset, creating a capital account deficit.

Thus, the balance of the capital account is calculated as the sum of the surpluses or deficits of net non-produced, non-financial assets, and net capital transfers.

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17.5 Reasons for a Zero Balance

Equilibrium in the market for a country's currency implies that the balance of payments is equal to zero.

Capital Flows

Trade within a country differs in one important way from trade between countries: unless the two nations share a common currency, any trade requires that countries to go through the **foreign exchange market** to trade currency, in addition to trading goods and services. For example, imagine that buyers in France purchase oranges produced in Chile. The French buyers use the euro to make the purchase, but the Chilean orange producers must be paid with the Chilean peso. This exchange between France and Chile requires that the firms exchange euros for pesos.

In general, there are two reasons for demanding a country's currency: to purchase assets within the country and to purchase a country's exports – that is, the goods and services produced within that country. The country's currency is supplied when it is used to purchase foreign currencies. This also happens for two reasons: to purchase assets in other countries and to import goods or services from other countries.

Imagine that we are analyzing Italy's economy and its currency transactions with the rest of the world. If an American buyer wishes to purchase bonds issued by an Italian corporation, she becomes part of the world demand for euros to buy Italian assets. Adding the demand for exports to the demand for assets outside of a country, we get the total demand for a country's currency.

Likewise, a country's currency is supplied when it is used to purchase currencies in the rest of the world. Italian euros, for example, are supplied when Italian consumers or firms import goods and services from the rest of the world. Italian euros are also supplied when Italian purchasers acquire assets from other countries.

Equilibrium and Zero Balance

When a country's balance of payments is equal to zero, there is equilibrium in the market for that country's currency. Equilibrium occurs when:

We have already seen that the quantity of currency demanded is equal to the demand for exports and demand for domestic assets. The quantity of currency supplied is equal to the demand for imports and the domestic demand for foreign assets. Thus, we can rewrite the relationship:

$$\text{Exports} - \text{Imports} + \text{Foreign purchases of domestic assets} =$$

Finally, we can rearrange the above formula as:

$$\text{Exports} - \text{Imports} = \text{Foreign purchases of domestic assets} -$$

The left-hand term is net exports – the difference between the amount of goods and services a country exports and the amount that it imports. We refer to this difference as the current account. When a country exports more goods than it imports, this number is positive, and we say that the country has a current account surplus. When a country imports more than it exports this number is negative and we say that the country has a current accounts deficit.

The right-hand term is the difference between the foreign assets that people within the country purchase and the domestic assets that are purchased by foreigners. This is called the financial account. These assets include the reserve account (the foreign exchange market operations of a nation’s central bank), along with loans and investments between the country and the rest of world (but not the future regular repayments/dividends that the loans and investments yield; those are earnings and will be recorded in the current account). The financial account is also sometimes used in a narrower sense that excludes the foreign exchange operation of the central bank. When a country buys more foreign assets than other countries buy of its assets, this balance is positive and there is a financial account surplus.

If the above equation holds true, then any current account surplus must be matched by a financial account deficit, and vice versa. This holds true when a country’s currency market is in equilibrium and there are no external currency controls.

Did You Know? Canada’s Balance of Payment

Let’s look at the balance of payment accounts in Canada. **Table 17.1** shows the actual Canadian balance of payments accounts from 2016.

Table 17.1 Part A: Current Account

Current Account	Receipts (Exports)	Payments (Imports)	Balance
Goods	521.4	547.2	-25.8
Services	107.2	129.3	-22.1
Investment Income	91.5	106.3	-14.8
Transfers, etc.	13.6	18.6	-5
Balance	n/a	n/a	-67.7

Table 17.1 Part B: Financial Account

Financial Account	Foreign in Canada	Canada in Foreign	Balance
Direct Investment	41.8	85.1	-43.3
Portfolio Investment	161.3	13.8	147.5
Other investment	59.3	91	-31.7
Balance	n/a	n/a	72.5

Table 17.1 Part C: Balance of Payments

Balance of Payments	Amount
1. Current Account Balance	- 67.7
2. Financial Account Balance	72.5
3. Statistical Discrepancy	2.7
4. Official Reserves	7.4
Balance of Payments (1+2+3-4)	0

Source: Statistics Canada, CANSIM Tables 376-0101, 376-0102. **Credit:** Reused from “12.1: The balance of payments,” by Curtis and Irvine, under a CC BY-NC-SA license.

In **Table 17.1**, the payments by foreigners buying Canadian assets exceeded the payments made by Canadians buying foreign physical and financial assets. A financial account surplus was the result. The **change in official international reserves** records the increase or decrease in the Government of Canada's holdings of foreign currency balances. Because Canada maintains a flexible exchange rate, annual changes in international reserves are small. Finally, the balance is shown as the sum of accounts

(1 + 2 + 3 - 4), namely $(-67.7 + 72.5 + 2.7 - 7.4)$ nearly equals **0**.

Canada's Balance of Payment in Historical Context

Table 17.2 shows Canada's trade picture in 2020 compared with some other economies from around the world. While the Canadian economy has shown a mixed trend of trade balance in recent years, Japan, and many European nations, such as Germany, have consistently run trade surpluses. Some of the other countries listed include Brazil, the largest economy in Latin America; Nigeria, along with South Africa competing to be the largest economy in Africa; and China, India, and Korea.

The first column offers one measure of an economy's globalization: exports of goods and services as a percentage of GDP. The second column shows the trade balance as a percent of GDP. Usually, most countries have trade surpluses or deficits that are less than 5% of GDP. As you can see, Canada's current account balance is -1.8%, U.S. current account balance is -2.9% of GDP, while Germany's is 7.0% of GDP.

Table 17.2: Level and Balance of Trade in 2020 (figures as a percentage of GDP)

Source: Based on data from <http://data.worldbank.org/indicator/BN.CAB.XOKA.GD.ZS>.

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Countries	Exports of Goods and Services	Current Account Balance
United States	10.2%	-2.9%
Japan	15.5%	3.2%
Germany	43.4%	7.0%
United Kingdom	27.9%	-2.6%
Canada	29.0%	-1.8%
Sweden	44.6%	5.7%
Korea	36.4%	4.6%
Mexico	40.2%	2.4%
Brazil	16.9%	-1.8%
China	18.5%	1.9%
India	18.7%	1.2%
Nigeria	8.8%	-3.9%
World	-	0.0%

To gain a more complete picture Canada's balance of trade, visit the website to explore Canada's trade balance over past two decades. Try looking at different time ranges and their graphics.

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17.6 International Investment Position

All this background is necessary to describe a country's **international investment position (IIP)**, which measures the total value of foreign assets held by domestic residents minus the total value of domestic assets held by foreigners. It roughly corresponds to the sum of a country's trade deficits and surpluses over its entire history. Exporters and importers are always interested in knowing the IIP of their trading partners as it gives them some insights into the nation's long-term policies and its impacts on their trade relations.

If the value of a country's trade deficits over time exceeds the value of its trade surpluses, then its IIP will reflect a larger value of foreign ownership of domestic assets than domestic ownership of foreign assets and we would say the country is a net debtor. In contrast, if a country has greater trade surpluses than deficits over time, it will be a net creditor.

Let's Explore: Canada's International Investment Position

According to a report published by Bank of Canada in 2017, in recent decades, IIPs have grown faster than GDP in Canada and in other countries around the world (Bruneau, Leboeuf & Nolin, 2017). The relatively fast growth could be attributed to increased trade and financial liberalization as well the decreased cost of international investment. The growth in Canada's IIP reflects the strength of the Canadian economic and financial systems which lead to an increase in financial flows by firms and households into and from Canada.

Learn more by reading *Canada's International Investment Position: Benefits and Potential Vulnerabilities*.

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Chapter 17 Summary

LO 17.1 The Relationship Between International Economics and Trade Finance

- International economics includes the study of international trade and the study of international finance.
- International trade uses microeconomic analysis to understand why nations trade and the impacts of trade on consumers, businesses, nations, and the world.
- International finance uses macroeconomic models to understand the domestic economy and the financial implications of its linkages with other national economies.

LO 17.2 Major Macroeconomic Indicators in Trade

- In trade finance, macroeconomic models highlight the relationships among economic variables such as GDP, unemployment, inflation, trade balances, exchange rates, and interest rates.
- Economists generally express the size of a nation's economy as its GDP, which measures the value of the output of all goods and services produced within the country in a year.
- Balance of trade reflects impacts of international trade on an economy's GDP. High exports indicate a growth in nation's GDP whereas high imports are an indication of decreased GDP.
- The unemployment rate helps inform financial forecasters about the expected cost of labor and the ability of employers to hire people if a firm plans to increase the production of goods or services.
- Inflation is the rate of change of prices in the entire economy. This information informs policy makers how to adjust the money supply to meet particular targets.
- Financial forecasters pay close attention to current and expected interest rates, as they have a fundamental impact on the cost of raising money and determining the required rate of return for investment.

LO 17.3 Balance of Payment and its Components

- The balance of payments provides enough information about a country's international activities that further helps international traders to compare different national economies and select their trading partners.
- If the value of total exports from a country exceeds total imports, we say a country has a trade surplus. However, if total imports exceed total exports, then the country has a trade deficit. Of course, if exports equal imports, then the country has balanced trade.
- The balance of payments can be expressed as: $BOP =$

 - The current account records the flow of income from one country to another.
 - The financial account records the flow of assets from one country to another.
 - The capital account is typically much smaller than the other two and includes miscellaneous transfers that do not affect national income.

- The balancing item is simply an amount that accounts for any statistical errors and ensures that the total balance of payments is zero.

LO 17.4 Calculation of Current Account, Financial Account, and Capital Account

- **Calculating the Current Account**
 - The current account represents the sum of the balance of trade (net earnings on exports minus payments for imports), factor income (earnings on foreign investments minus payments made to foreign investors), and cash transfers.
 - The current account is calculated by adding up the 4 components of the current account: goods, services, income, and cash transfers.
 - When the sum of these four components is positive, the current account has a surplus.
- **Calculating the Financial Account**
 - The financial account (also known as the capital account under some balance of payments systems) measures the net change in ownership of national assets.
 - When the financial account has a positive balance, we say that there is a financial account surplus.
 - Likewise, we say that there is a financial account deficit when the financial account has a negative balance.
 - The financial account has four components: foreign direct investment, portfolio investment, other investment, and reserve account flows.
 - To calculate the total surplus or deficit in the financial account, sum the net change in FDI, portfolio investment, other investment, and the reserve account.
- **Calculating the Capital Account**
 - The capital account acts as a miscellaneous account, measuring non-produced and non-financial assets, as well as capital transfers.
 - Like the financial account, a deficit in the capital account means that money is flowing out of a country and the country is accumulating foreign assets.
 - Likewise, a surplus in the capital account means that money is flowing into a country and the country is selling (or otherwise disposing of) non-produced, non-financial assets.
 - The balance of the capital account is calculated as the sum of the surpluses or deficits of net non-produced, non-financial assets, and net capital transfers.

LO 17.5 Reasons for a Zero Balance of Payment

- Equilibrium in the market for a country's currency implies that the balance of payments is equal to zero.
- The reasons for a zero balance can be attributed as capital flows and equilibrium.
- Trade within a country differs in one important way from trade between countries: unless the two nations share a common currency, any trade requires that countries to go through the foreign exchange market to trade currency, in addition to trading goods and services.
- When a country's balance of payments is equal to zero, there is equilibrium in the market for that country's currency.

LO 17.6 International Investment Position

- A country's IIP measures the total value of foreign assets held by domestic residents minus the total value of domestic assets held by foreigners.
- It roughly corresponds to the sum of a country's trade deficits and surpluses over its entire history.
- If the value of a country's trade deficits over time exceeds the value of its trade surpluses, then its IIP will reflect a larger value of foreign ownership of domestic assets than domestic ownership of foreign assets and we would say the country is a net debtor. In contrast, if a country has greater trade surpluses than deficits over time, it will be a net creditor.

Check Your Understanding



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CHAPTER 18: EXCHANGE RATE AND TRADE FINANCE

Introduction

18.1 Exchange Rates

18.2 Appreciation and Depreciation of Currencies

18.3 Exchange Rate Systems

Summary

Chapter 18 Introduction



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Learning Objectives

After reading this chapter, you should be able to

1. Describe the basics of exchange rates.
2. Discuss the concept of currency appreciation and depreciation.

3. Explain different exchange rate systems.

Think About It!

Video: Imports, Exports and Exchange Rates

Before reading this chapter, watch this video explaining the connection between exports, imports, and exchange rates.



One or more interactive elements has been excluded from this version of the text. You can view them online here: <https://ecampusontario.pressbooks.pub/internationaltradefinancepart3/?p=203#oembed-1>

Source: CrashCourse. (2015, November 3). Imports, exports, and exchange rates: Crash course economics #15 [Video]. YouTube. <https://youtu.be/geoe-6NBy10?si=CkkLcBpniBpocQlj>

Test Yourself



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Introduction

Exchange rate is a particularly important macroeconomic indicator used in trade finance. It indicates the price of one currency expressed in terms of the other currency. In international trade, where multiple currencies can sometimes be part of one transaction, fluctuations in exchange rate highly impact profitability of key players in trade. Such fluctuations in the exchange rate are defined by the concept of currency appreciation and depreciation. Where currency appreciation defines an increase in currency value, currency depreciation indicates a decline. Trade organizations always keep in mind the exchange rate system of the target country before taking any exchange rate decisions.

18.1 Exchange Rates

Doing business across national borders requires the use of different national currencies. An international trade transaction usually involves two separate purchases. For instance, if foreigners were interested in buying Canadian products, they would likely first buy Canadian dollars and then use these Canadian dollars to pay for the Canadian products. Foreigners obtain (and dispose of) Canadian dollars in the **foreign exchange market**, where different national currencies are traded. The foreign exchange market determines the prices at which currencies exchange for each other, i.e., exchange rates.

The foreign exchange market is very large (in excess of USD5 trillion per day) and most **foreign exchange** transactions involve the U.S. dollar. USD dominates the foreign exchange market with 88.3% trade in 2019 and 88.5% trade of all foreign exchange transactions in 2022. The U.S. dollar is followed by euro and Japanese yen in 2022. **Table 18.1** shows the top 10 most traded currencies on foreign exchange markets in 2019 and 2022.

Table 18.1: Foreign Exchange Turnover

Country/Region	Currency	2019	2022
United States	USD	88.3	88.5
European Union	EUR	32.3	30.5
Japan	JPY	16.8	16.7
United Kingdom	GBP	12.8	12.9
China	CNY	4.3	7.0
Australia	AUD	6.8	6.4
Canada	CAD	5.0	6.2
Switzerland	CHF	4.9	5.2
Hong Kong	HKD	3.5	2.6

Table 18.1 indicates that exporters, importers, investors, visitors etc. mostly exchange their currencies with USD. The rate at which a currency is exchanged with another currency is known as its exchange rate. In other words, the **exchange rate** is a price — it is the price of one currency expressed in terms of units of another currency such as £1 exchanging for USD 1.50 and CAD 1 exchanging for 61 INR. Exchange rates are expressed in two ways, one being the reciprocal of the other. If the exchange value of £1 is USD1.50, the exchange value of the USD is £0.67. If a currency's exchange value is rising, this suggests demand for that currency is relatively strong. The converse is also true. The interaction of demand for and supply of a currency determine the exchange rate. When supply is equal to demand in the foreign exchange market, the **equilibrium exchange rate** is determined.

Let's Explore

To learn more about Foreign Exchange Turnover, view the *BIS Triennial Central Bank Survey: OTC Foreign Exchange Turnover in April 2022*.

Calculating Exchange Rate

The costs to companies are impacted when the prices of the raw materials they use change. Very little coffee is grown in the United States. This means that all the coffee beans that Starbucks uses in its espresso machines in Seattle, New York, Miami, and Houston were bought from suppliers outside of the United States. Brazil is the largest coffee-producing country, exporting about one-third of the world's coffee (Barros, 2019). When a company purchases raw materials from a supplier in another country, the company needs not just money but the money that is used in that country to make the purchase. Thus, the company is concerned about the exchange rate, or the price of the foreign currency.

The currency used in Brazil is called the Brazilian real. In March 2021, 5.4377 Brazilian reais could be purchased for \$1.00.¹ This will often be written in the form of

$$\text{USD } 1 = \text{BRL } 5.4377$$

BRL is an abbreviation for the Brazilian real, and USD is an abbreviation for the U.S. dollar. This price is known as a currency exchange rate, or the rate at which you can exchange one currency for another currency.

If you know the price of \$1.00 is 5.4377 Brazilian reais, you can easily find the price of Brazilian reais in U.S. dollars. Simply divide both sides of the equation by 5.4377, or the price of the U.S. dollar:

$$\begin{aligned}\text{USD } 1 &= \text{BRL } 5.4377 \\ \frac{\text{USD } 1}{5.4377} &= \frac{\text{BRL } 5.4377}{5.4377}\end{aligned}$$

If you have U.S. dollars and want to purchase Brazilian reais, it will cost you \$0.1839 for each Brazilian real you want to buy.

The foreign exchange rate changes in response to demand for and supply of the currency. In early 2020, the exchange rate was USD 1=BRL 4. In other words, \$1 purchased fewer reais in early 2020 than in it did a year later. Because you receive more reais for each dollar in 2021 than you would have a year earlier, the dollar is said to have *appreciated* relative to the Brazilian real. Likewise, because it takes more Brazilian reais to purchase \$1.00, the real is said to have *depreciated* relative to the U.S. dollar.

1. In Chapter 18, all \$ refer to USD unless otherwise noted.

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18.2 Appreciation and Depreciation of Currencies

Foreign exchange market involves multiple currencies being exchanged between multiple participants. When the prices of most goods and services change, the price “rises” or “falls.” For exchange rates, the terminology used is different.

When the exchange rate for a currency rises, so that the currency exchanges for more of other currencies, we say that it is appreciating or “strengthening.” When the exchange rate for a currency falls, so that a currency trades for less of other currencies, we say that it is *depreciating* or “weakening.”

Think About It! Foreign Exchange

Watch this video to learn more about exchange rates, appreciation and depreciation of currency and the factors that cause supply and demand to shift.

Video: Foreign Exchange



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Source: Jacob Clifford. (2012, May 10). The foreign exchange market – macro 6.3 [Video]. YouTube. <https://youtu.be/D41EuDh3epI?si=5lbuV7pvxOEePNIE>

Test Yourself



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Currency appreciation and depreciation will have a different meaning for different foreign exchange market participants. Currency appreciation may mean a profit for the exporter but a loss for the importer. Likewise, it will play differently for an investor and for a visitor. In trade finance, where buyers and sellers of currency are not always intuitively obvious, it makes sense to trace how different participants will be affected by a stronger or weaker currency. Let's brainstorm with the activity below to understand the impact of currency appreciation and depreciation on participants in the foreign exchange market.

Think About It! U.S. Dollar

Figure 18.1 summarizes the impact of a stronger U.S. dollar on six different players in the foreign exchange market.

	A Stronger U.S. Dollar	A Weaker U.S. Dollar
A U.S. exporting firm		
A foreign firm exporting to the United States		
A U.S. tourist abroad		
A foreign tourist in the United States		
A U.S. investor abroad		
A foreign investor in the United States		

Figure 18.1: Affect of Changes in the U.S. Dollar Exchange Rate. [See image description]. **Credit:** “Figure 2. How Do Exchange Rate Movements Affect Each Group?” by Lumen Learning, CC BY-SA.

Let’s think about why these different market players are happy or sad. Who is benefiting from U.S. dollar appreciation and who is losing from it?



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“Figure 18.1: Affect of Changes in the U.S. Dollar Exchange Rate” is reused from “Figure 2. How Do Exchange Rate Movements Affect Each Group?” in Module 16: Exchange Rates and International Finance: Strengthening

Image Descriptions

Figure 18.1: Affect of Changes in the U.S. Dollar Exchange Rate

The image is a chart comparing the effects of a stronger U.S. dollar versus a weaker U.S. dollar on various entities. The chart is divided into three columns. The first column lists six market players involved in international economic activities, each row containing a different entity. The middle column, titled “A Stronger U.S. Dollar,” contains a series of graphical representations of sad and happy faces for each market player. The right column, titled “A Weaker U.S. Dollar,” contains corresponding sad and happy faces. The market players and the faces are listed in the table below.

Market Player	A Stronger U.S. Dollar	A Weaker U.S. Dollar
A U.S. exporting firm	Sad face	Happy face
A foreign firm exporting to the United States	Happy face	Sad face
A U.S. tourist abroad	Happy face	Sad face
A foreign tourist in the United States	Sad face	Happy face
A U.S. investor abroad	Sad face	Happy face
A foreign investor in the United States	Happy face	Sad face

[back]

18.3 Exchange Rate Systems

Foreign exchange market plays a very important role in international trade and affects the trade finance decisions of importers and exporters. The demand for and supply of any currency and exchange rate changes help traders in deciding their payment terms. In practice, exchange rates depend on the type of exchange rate systems that countries adopt.

The International Monetary Fund (IMF), created to monitor and assist countries with international payments problems, maintains a list of currency regimes used by different countries. The list displays a wide variety of systems currently being used. The continuing existence of so much variety demonstrates that the key question, “Which is the most suitable currency system?” remains largely unanswered.

As per the International Monetary Fund,

Of the 30 countries whose exchange rate arrangement was reclassified as of April 2021, 14 countries (47 percent) were reclassified to a more flexible arrangement (compared with 7 of 15 countries, or 47 percent, during the previous reporting period); 16 countries (53 percent) were classified to a more managed arrangement (compared with 8 of 15 countries, or 53 percent, during the previous reporting period) (International Monetary Fund, 2022, p. 5).

Let's Explore

To see the complete list of country currency regimes, view Table 2 in IMF Annual Report on Exchange Arrangements and Exchange Restrictions 2021.

One of the decisions a country must make with respect to its currency is whether to fix its exchange value and try to maintain it for an extended period, or to allow its value to float or fluctuate according to market conditions. Broadly, we can distinguish three types of **exchange rate regimes**: a free-float, a managed-float, and a fixed exchange rate.

Let's consider these exchange rate systems in more detail.

Free-Floating System

In a free-floating exchange rate system, governments and central banks do not intervene in the market for foreign exchange in order to influence the exchange rate. The relationship between governments and central banks on the one hand and currency markets on the other is much the same as the typical relationship between these institutions and stock markets. Governments may regulate stock markets to prevent fraud, but stock values themselves are left to float in the market. The U.S. government, for example, does not intervene in the stock market to influence stock prices.

The concept of a completely free-floating exchange rate system is a theoretical one. In practice, all governments or central banks intervene in currency markets in an effort to influence exchange rates. Some

countries, such as the United States, intervene to only a small degree, so that the notion of a free-floating exchange rate system comes close to the exchange rate system that actually exists in the United States.

Managed Float System

Governments and central banks often seek to increase or decrease their exchange rates by buying or selling their own currencies in the foreign exchange market. The purpose of such intervention is to prevent sudden large swings in the value of a nation's currency. Exchange rates are still free to float, but government purchases and sales influence their values. When governments or central banks intervene in the foreign exchange market in this way in a floating exchange rate system, what results is a managed float.

A 2022 Bank of International Settlements survey found that \$7.5 trillion *per day* is traded on foreign exchange markets, which makes the foreign exchange market the largest market in the world economy (Bank of International Settlements, 2022).¹ In such a case, it is difficult for any one agency—even an agency the size of the U.S. government—to force significant changes in exchange rates.

Fixed Exchange Rates

In a fixed exchange rate regime, the government intervenes actively through the central bank to maintain **convertibility of their currency** into other currencies at a **fixed exchange rate**. The central bank sets an official exchange rate and intervenes in the foreign exchange market to offset the effects of fluctuations in supply and demand and maintain a constant exchange rate. For instance, In Canada the exchange rate was fixed by policy in 1960s at USD1 = CAD1.075 CAD (CAD1 was approximately USD0.925) and the Bank of Canada intervened in the foreign exchange market to maintain that rate (Curtis & Irvin, n.d.). There are several mechanisms through which fixed exchange rates may be maintained. Whatever is the system for maintaining these rates, all fixed exchange rate systems share some important features:

- **A Commodity Standard:** In a commodity standard system, countries fix the value of their respective currencies relative to a certain commodity or group of commodities. With each currency's value fixed in terms of the commodity, currencies are fixed relative to one another.
- **Fixed Exchange Rates through Intervention:** The Bretton Woods Agreement called for each currency's value to be fixed relative to other currencies. The mechanism for maintaining these rates, however, was to be intervention by governments and central banks in the currency market.

1. In Chapter 18, all \$ refer to USD unless otherwise noted.

Did You Know? How Countries Choose Between Fixed and Floating Exchange Rates

Obviously, there is not one answer for all countries, or we would not see different exchange rate regimes today. With flexible rates, the foreign exchange market sets the exchange rate, and monetary policy is available to pursue other targets. On the other hand, fixed exchange rates require central bank intervention. Monetary policy is aimed at the exchange rate. The importance a country attaches to an independent monetary policy is one very important factor in the choice of an exchange rate regime. Another is the size and volatility of the international trade sector of the economy. A flexible exchange rate provides some automatic adjustment and stabilization in times of change in net exports or net capital flows.

Let's try to understand the concept of exchange rate regime by using **Figure 18.2**. In this figure, suppose the exchange rate is fixed at er^* . There would be a free market equilibrium at **A** if the supply curve for U.S. dollars is S_1 and the demand curve for U.S. dollars is D_1 . The central bank does not need to buy or sell U.S. dollars. The market is in equilibrium and clears by itself at the fixed rate.

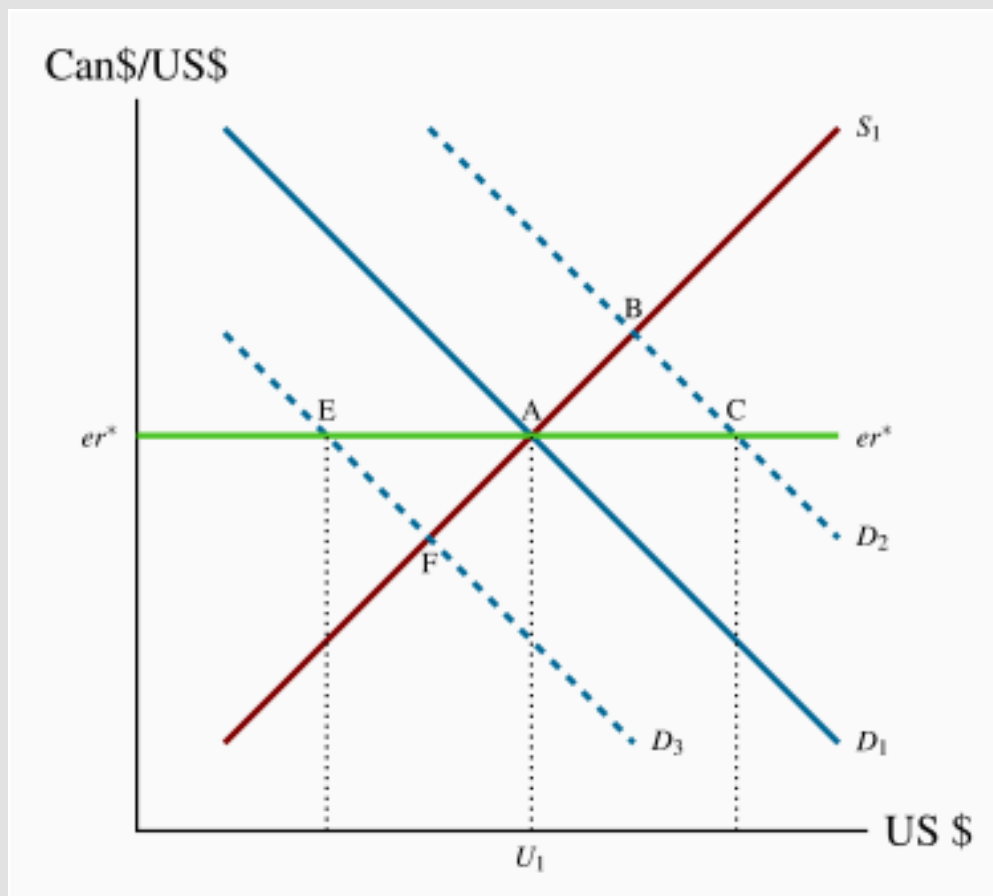


Figure 18.2: Central Bank Intervention to Fix the Exchange Rate. [See image description].
Credit: "Figure 12.4 Central bank intervention to fix the exchange rate" by D. Curtis and I. Irvine, CC BY-NC-SA.

Suppose demand for U.S. dollars shifts from D_1 to D_2 . Canadians want to spend more time in Florida to escape the long, cold Canadian winter. They need more U.S. dollars to finance their expenditures in the United States. The free-market equilibrium would be at B, and the exchange rate would rise if the Bank of Canada takes no action. However, with the exchange rate fixed by policy at $S_1 er^*$ there is an excess demand for U.S. dollars equal to AC. To peg, or set, the exchange rate, the Bank of Canada **sells** U.S. dollars from the **official exchange reserves** in the amount **AC**. The supply of U.S. dollars on the market is then the "market" supply represented by S_1 plus the amount **AC** supplied by the Bank of Canada. The payment the Bank receives in Canadian dollars is the amount ($er^* \times AC$), which reduces the monetary base by that amount. The lower monetary base pushes domestic interest rates up and attracts a larger net capital inflow. Higher interest rates also reduce domestic expenditure and the demand for imports and for foreign exchange. The exchange rate target drives the

Bank's monetary policy, which in turn changes both international capital flows and domestic income and expenditure.

What if the demand for U.S. dollars falls to D_3 ? The market equilibrium would be at F . At the exchange rate at er^* there is an excess supply of U.S. dollars EA . To defend the **currency peg**, the Bank of Canada would have to buy EA U.S. dollars, reducing the supply of U.S. dollars on the market to meet the “unofficial” demand. The Bank of Canada would have to *buy* EA U.S. dollars, reducing the supply of U.S. dollars on the market to meet the “unofficial” demand. The Bank of Canada's purchase would be added to foreign exchange reserves. The Bank would pay for these U.S. dollars by *creating more monetary base*, as in the case of an open market purchase of government securities.

In either case, maintaining a fixed exchange rate requires **central bank intervention** in the foreign currency market. The central bank's monetary policy is expansionary because it is committed to the exchange rate target. When the demand schedule is D_2 , foreign exchange reserves are running down. When the demand schedule is D_3 , foreign exchange reserves are increasing. If the demand for U.S. dollars fluctuates between D_2 and D_3 , the Bank of Canada can sustain and stabilize the exchange rate in the long run.

However, if the demand for U.S. dollars is, on average, D_2 , the foreign exchange reserves are steadily declining to support the exchange rate er^* , and the monetary base is falling as well. In this case, the Canadian dollar is overvalued at er^* ; or, in other words, er^* is too low a price for the U.S. dollar. A higher er is required for long-run equilibrium in the foreign exchange market and the balance of payments. As reserves start to run out, the government may try to borrow foreign exchange reserves from other countries and the International Monetary Fund (IMF), an international body that exists primarily to lend to countries in short-term difficulties.

At best, this is only a temporary solution. Unless the demand for U.S. dollars decreases, or the supply increases in the longer term, it is necessary to **devalue** the Canadian dollar. If a fixed exchange rate is to be maintained, the official rate must be reset at a higher domestic currency price for foreign currency.

Real Cases

For many years frequent media and political discussions of the persistent rise in China's foreign exchange holdings provide a good example of the defense of an undervalued currency. With the yuan at its current fixed rate relative to U.S. dollars and other currencies, China has a large current account surplus that is not offset by a financial account deficit. Balance of payments equilibrium requires ongoing intervention by the Chinese central bank to buy foreign exchange and add to official reserve holdings. Buying foreign exchange adds to the monetary base and money supply, raising concerns

about inflation. The Bank has responded in part with a small revaluation of the yuan and in part with an increase in the reserve requirements for Chinese banks. Neither of these adjustments has been sufficient to change the situation fundamentally and growth in official foreign exchange reserves continues.

In Europe, the euro currency system effectively fixes exchange rates among member countries. Individual member countries do not have national monetary policies. Monetary policy is set by the European Central Bank. In the years following the “Great Recession,” this has been a source of controversy because economic and fiscal conditions have differed significantly among countries. Countries trying to adjust fiscal deficits and national public debt crises have been forced into fiscal austerity without offsetting monetary policy support. In many cases the results have been deep and prolonged recessions without solving their debt problems. Greece is the poster child.

Of course, it is not necessary to adopt the extreme regimes of pure or clean floating on the one hand and perfectly fixed exchange rates on the other hand. *Dirty or managed floating* is used to offset large and rapid shifts in supply or demand schedules in the short run. The intent is to smooth the adjustment as the exchange rate is gradually allowed to find its equilibrium level in response to longer-term changes.

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Image Descriptions

Figure 18.2: Central Bank Intervention to Fix the Exchange Rate

This image is a graph depicting the exchange rate between Canadian dollars and U.S. dollars. The vertical axis is labelled "Can\$/US\$" and the horizontal axis is labelled "US \$." The graph contains several lines intersecting at various points:

- A green horizontal line at the center labelled " e^* " extends across the graph from left to right.
- Three blue lines starting from the top-left, moving down towards the bottom-right; in the middle is a solid line labelled " $D1$ ", at right is a dotted line labelled " $D2$ ", and at left is a dotted line labelled " $D3$ " (dotted), representing different demand curves.
- A solid red line starting from the bottom-left and moving up towards the top-right is labelled " $S1$ ".
- The blue demand lines intersect the red line at F, A and B and the green horizontal line at E, A, and C.
- There are also three vertical dashed lines from points E, A, and C down to the horizontal axis. The centre line is labelled " $U1$ ".

[\[back\]](#)

Chapter 18 Summary

LO 18.1 The Basics of Exchange Rate

- The foreign exchange market determines the prices at which currencies exchange for each other, i.e., exchange rates.
- The rate at which a currency is exchanged with another currency is known as its exchange rate.
- Exchange rates are expressed in two ways, one being the reciprocal of the other. If the exchange value of £1 is USD1.50, the exchange value of the USD is £0.67.
- The interaction of demand for and supply of a currency determines the exchange rate.
- When supply is equal to demand in the foreign exchange market, the equilibrium exchange rate is determined.

LO 18.2 Currency Appreciation and Depreciation

- When the exchange rate for a currency rises, so that the currency exchanges for more of other currencies, we say that it is appreciating or “strengthening.” When the exchange rate for a currency falls, so that a currency trades for less of other currencies, we say that it is depreciating or “weakening.”
- Currency appreciation and depreciation will have a different meaning for different foreign exchange market participants.
- For a U.S. firm selling abroad, a stronger U.S. dollar is a curse. Conversely, for a foreign firm selling in the U.S. economy, a stronger dollar is a blessing.
- For a U.S. tourist abroad who is exchanging U.S. dollars for foreign currency as necessary, a stronger U.S. dollar is a benefit. For foreign visitors to the United States, the opposite pattern holds true.
- A stronger dollar injures the prospects of a U.S. financial investor who has already invested money in another country. However, a stronger U.S. dollar boosts the returns of a foreign investor putting money into a U.S. account.

LO 18.3 Different Exchange Rate Systems

- One of the decisions a country must make with respect to its currency is whether to fix its exchange value and try to maintain it for an extended period, or to allow its value to float or fluctuate according to market conditions.
- Broadly, we can distinguish three types of exchange rate regimes: a free-float, a managed-float, and a fixed exchange rate.
- In a free-floating exchange rate system, governments and central banks do not participate in the market for foreign exchange.
- In a managed float system, governments and central banks seek to increase or decrease their exchange rates by buying or selling their own currencies.
- In a fixed exchange rate regime, the government intervenes actively through the central bank

to maintain the convertibility of their currency into other currencies at a fixed exchange rate.

- The central bank sets an official exchange rate and intervenes in the foreign exchange market to offset the effects of fluctuations in supply and demand and maintain a constant exchange rate.

Check Your Understanding



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CHAPTER 19: EXCHANGE RATE RISK MANAGEMENT

Introduction

19.1 Exchange Rate Fluctuations

19.2 Transaction, Translation, and Economic Exposure

19.3 Managing Currency Exposure

Summary

Chapter 19 Introduction



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Learning Objectives

After reading this chapter, you should be able to

1. Explain the impact of exchange rate fluctuations on a company's and government's decision making.
2. Describe transaction, translation, and economic exposure.
3. Discuss different ways of managing currency risk.

Think About It!

Video: Foreign Exchange Rate Risk

Before reading this chapter, watch this video highlighting the foreign exchange rate risk.



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Source: InternationalHub. (2017, December 21). *Foreign exchange rate risk*. [Video]. YouTube. <https://www.youtube.com/watch?v=i-i0NoK9scI>

Test Yourself



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Introduction

Exchange rate fluctuations can have long-term impact on a company or government's decision-

making. Trading organizations can lose or gain a large amount of their profits by a sharp fluctuation in currency values. Likewise, fluctuations in currencies adversely impact bank operations and can make a country's banking system bankrupt. There are three ways in which the impact of currency fluctuations can be understood — transaction, translation, and economic exposure. Where transaction exposure identifies the impact of a change in currency value on a business's expected receipts or expenses, translation exposure deals with the impact this change has on its financial statements. Economic exposure, on the other hand, describes the impact of currency fluctuations on the number of customers a business has or on its sales. Transaction and translation exposure are easy to predict, but economic exposure can be calculated statistically. Trade organizations use different strategies to reduce or eliminate the impact of currency fluctuations. Some of these methods include hedging, future and forward contract, natural hedging, options and swaps.

19.1 Exchange Rate Fluctuations

Exchange rate fluctuations not only impact the decision making of both big and small trade organizations but also impact the decisions taken by governments and banks. For firms that depend on export sales, or firms that rely on imported inputs to production, or even purely domestic firms that compete with firms tied into international trade, sharp movements in exchange rates can lead to dramatic changes in profits and losses.

A central bank may desire to keep exchange rates from moving too much as part of providing a stable business climate, where firms can focus on productivity and innovation, not on reacting to exchange rate fluctuations. One of the most economically destructive effects of exchange rate fluctuations can happen through the banking system. Financial institutions measure most international loans in a few large currencies, like US dollars, European euros, and Japanese yen. In countries that do not use these currencies, banks often borrow funds in the currencies of other countries, like US dollars, but then lend in their own domestic currency. This process of borrowing in a foreign currency and lending in a domestic currency can work just fine, as long as the exchange rate does not shift. But any fluctuations in currencies may adversely impact bank operations and make a country's banking system bankrupt (Moledina et al., 2014).

Therefore, understanding and managing exchange rate risk is of utmost importance to organizations as well as governments. Exchange rate risks can be classified by the different form of exposures such as transaction, translation, or economic exposure.

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19.2 Transaction, Translation, and Economic Exposure

Transaction Exposure

Transaction exposure is the risk that the value of a business's expected receipts or expenses will change as a result of a change in currency exchange rates. It is short-term to medium-term in nature (International Finance Tutorial, n.d.).

In reference to the example discussed in Chapter 18.1 Exchange Rates, if Starbucks agrees to pay a Brazilian coffee grower seven million Brazilian reais for an order of one million pounds of coffee beans, Starbucks will need to purchase Brazilian reais to pay the bill. How much it will cost Starbucks to purchase these Brazilian reais depends on the exchange rate at the time Starbucks makes the purchase. For instance, in March 2021, with an exchange rate of $\text{USD}0.1839 = \text{BRL}1$, it would have cost Starbucks $\text{BRL}7,000,000 = \text{USD}3,807,300$ to purchase the reais needed to receive the one million pounds of coffee beans.

If, however, Starbucks agreed in March to purchase the coffee beans several months later, in July, Starbucks would not have known then what the exchange rate would be when it came time to complete the transaction. Although Starbucks would have locked in a price of $\text{BRL}7,000,000$ for one million pounds of coffee beans, it would not have known what the coffee beans would cost the company in terms of U.S. dollars.

If the US dollar appreciated so that it cost less to purchase each Brazilian real in July, Starbucks would find that it was paying less than $\text{\$}1,287,300$ for the coffee beans. For example, suppose the dollar appreciated so that the exchange rate was $\text{USD}0.1800 = \text{BRL}1$ in July 2021.

Then the coffee beans would only cost Starbucks $\text{BRL}7,000,000 = \text{\$}3,889,000$.

On the other hand, if the US dollar depreciated and it cost more to purchase each Brazilian real, then Starbucks would find that its dollar cost for the coffee beans was higher than it expected. If the US dollar depreciated (and the Brazilian real appreciated) so that the exchange rate was $\text{USD}0.2000 = \text{BRL}1$ in July 2021, then the coffee beans would cost Starbucks $\text{BRL}7,000,000 = \text{\$}3,500,000$. This uncertainty regarding the dollar cost of the coffee beans Starbucks would purchase to make its lattes is an example of transaction exposure.

A global company such as Starbucks has transaction exposure not only because it is purchasing raw materials in foreign countries but also because it is selling its product and thus collecting revenue in foreign countries too. Customers in Japan, for example, spend Japanese yen when they purchase a Starbucks cappuccino, coffee mug, or bag of coffee beans. Starbucks must then convert these Japanese yen to US dollars to pay the expenses that it incurs in the United States to produce and distribute these products.

If a company is receiving yen from customers and paying expenses in dollars, the company is harmed when the yen depreciates relative to the dollar, meaning that the yen the company receives from its customers can be exchanged for fewer dollars. Conversely, when the yen appreciates, it takes fewer yen to purchase each dollar, this appreciation of the yen benefits companies with revenues in yen and expenses in dollars.

Translation Exposure

In addition to the transaction risk, if Starbucks holds assets in a foreign country, it faces **translation exposure**. Thus, translation exposure is the impact currency fluctuations have on company's consolidated statements when it has foreign subsidiaries. Translation risk is an accounting risk and is medium term to long-term in nature (International Finance Tutorial, n.d.).

Starbucks, for instance, might purchase a coffee plantation in Costa Rica for 120 million Costa Rican colones. This land is an asset for Starbucks, and as such, the value of it should appear on the company's **balance sheet**. The balance sheet for Starbucks is created using US dollar values. Thus, the value of the coffee plantation has to be translated to dollars. Because exchange rates are volatile, the dollar value of the asset will vary depending on the day on which the translation takes place. If the exchange rate is 500 colones to the dollar, then this coffee plantation is an asset with a value of \$240,000. If the Costa Rican colón depreciates to 600 colones to the dollar, then the asset has a value of only \$200,000 when translated using this exchange rate.

Although it is the same piece of land with the same productive capacity, the value of the asset, as reported on the balance sheet, falls as the Costa Rican colón depreciates. This decrease in the value of the company's assets must be offset by a decrease in the stockholders' equity for the balance sheet to balance. The loss is due simply to changes in exchange rates and not the underlying profitability of the company.

Economic/Operating Exposure

Economic exposure is the most important risk out of the three. It arises due to the impact currency fluctuations have on company's cash flows. Economic exposure is long-term and has adverse effects on company's market value (Borad, 2022).

Even a company that is not involved in international transactions can face this type of risk. Consider a company located in Mississippi that makes shirts using 100% U.S.-grown cotton. All of the shirts are made in the United States and sold to retail outlets in the United States. Thus, all of the company's expenses and revenues are in US dollars, and the company holds no assets outside of the United States.

Although this firm has no financial transactions involving international currency, it can be impacted by changes in exchange rates. Suppose the US dollar strengthens relative to the Vietnamese dong. This will allow U.S. retail outlets to purchase more Vietnamese dong, and thus more shirts from Vietnamese suppliers, for the same amount of US dollars. Because of this, the retail outlets experience a drop in the cost of procuring the Vietnamese shirts relative to the shirts produced by the firm in Mississippi. The Mississippi company will lose some of its customers to these Vietnamese producers simply because of a change in the exchange rate.

Let's Explore: Calculating Economic Exposure

It is easy to predict translation and transaction exposure, whereas economic exposure can be calculated statistically.

To learn more about how economic exposure is calculated, review the Calculating Economic Exposure section of the Exchange Rate Fluctuations page on this International Finance tutorial.

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19.3 Managing Currency Exposure

Exchange rate fluctuations is one of the very important risks trade organizations face. Once this risk is identified, it is even more important to take care of it — by finding ways to reduce its impact on company's operations and profitability. There are many ways exist to manage and mitigate currency exposure, some methods are discussed below.

Hedging

Hedging allows companies to mitigate currency risk by entering into future and forward contracts. A **future contract** is an agreement to trade an asset on some future date at a price locked in today. A company that knows that it will need Korean won later this year to purchase raw materials from a South Korean supplier, for example, can purchase a futures contract for Korean won.

While futures contracts allow companies to lock in prices today for a future commitment, these contracts are not flexible enough to meet the risk management needs of all companies. Futures contracts are standardized contracts. This means that the contracts have set sizes and maturity dates. For example, futures contracts for Korean won have a contract size of 125 million won. A company that needs 200 million won later this year would need to either purchase one futures contract hedging only a portion of its needs, or purchase two futures contracts, hedging more than it needs. Either way, the company has some currency risk that they were unable to manage.

A **forward contract** can be useful here as company will be able to meet its specific need by using it. A forward contract is simply a contractual agreement between two parties to exchange a specified amount of currencies at a future date. Let's say the company needs 200 million Korean won after 90 days. It can approach its bank saying that it will need to purchase 200 million Korean won on the 90th day. The bank will quote a **forward rate** — a rate specified today for the sale of currency on a future date. The company and its bank then can enter into a forward contract to exchange dollars for 200 million Korean won at the quoted rate on the specified future date. This contract is similar to you booking a room for three nights at \$200 per night with a hotel. You are agreeing today to show up at the hotel on a future (specified) date and pay the quoted price when you arrive. The hotel agrees to provide you the room on that specified future date and cannot change the price of the room when you arrive.

The forward contract is an individualized contract between the buyer and the seller; they are both under a contractual obligation to honor the contract. Because this contract is not standardized like the futures contract (so that it can be traded on an exchange), it can be tailored to the needs of the two parties. While the forward contract has the advantage of being fine-tuned to meet the company's needs, it has a risk, known as counterparty risk, that the futures contract does not have. The forward contract is only as good as the promise of the counterparty. If the company enters into a forward contract to purchase 200 million Korean won on March 1 from its bank and the bank goes out of business before March 1, the company will not be able to make the exchange with a nonexistent bank. The exchanges on which futures contracts are traded guard the purchaser of a futures contract from this type of risk by guaranteeing the contract.

Natural Hedges

A **natural hedge** occurs when a business can offset its risk simply through its own operations. With a natural

hedge, when a risk occurs that would decrease the value of a company, an offsetting event occurs within the firm that increases the value of the company.

As an example, consider a British-based travel agency. One of the major tours the company offers is a tour of Italy. The company arranges for transportation, lodging, meals, and sightseeing for Britishers to visit the highlights of Rome, Florence, and Venice. Because the company charges customers in British pounds but must pay the bus companies, hotels, and other service providers in Italy in euros, the travel agency faces significant transaction exposure. If the value of the British pound depreciates after the company sets the price it will charge for the tour but before it pays the Italian suppliers, the company will be harmed.

The company could create a natural hedge by offering tours of London to individuals living in the European Union. The travel agency could charge people who live in Germany, Italy, Spain, or any other country that has the euro as its currency for a travel package to London. Then the agency would pay British restaurants, tour guides, hotels, and bus companies in British pounds. This segment of the business also has currency risk. If the British pound depreciates, the company gains because the euros it collects from its EU customers will purchase more British pounds than before.

Thus, the company has created a situation in which if the British pound depreciates, the decrease in value of its tours of Italy is exactly offset by the increase in value of its tours of London. If the British pound appreciates, the opposite occurs: The company experiences a gain in its division that charges British pounds for tourists travelling to Italy and an offsetting loss in its division that charges euros for tourists travelling to London.

Options

A **financial option** gives the owner the right, but not the obligation, to purchase or sell an asset for a specified price at some future date. Options are considered **derivative** securities because the value of a derivative is derived from, or comes from, the value of another asset.

In trade finance, options have specific terminology.

- If the owner of an option decides to purchase or sell the asset according to the terms of the options contract, the owner is said to be **exercising** the option.
- The price the option holder pays if purchasing the asset or receives if selling the asset is known as the **strike price** or **exercise price**.
- The price the owner of the option paid for the option is known as the **premium**.

An option contract has an expiration date. The most common kinds of options are **American options**, which allow the holder to exercise the option at any time up to and including the expiration date. Holders of **European options** may exercise their options only on the expiration date. Both American and European options are traded worldwide, so can be confusing sometimes.

Option contracts are written for a variety of assets. The most common option contracts are options on shares of stock. Options are traded for U.S. Treasury securities, currencies, gold, and oil. There are also options on agricultural products such as wheat, soybeans, cotton, and orange juice. Thus, options can be used by financial managers to hedge many types of risk, including currency risk, interest rate risk, and the risk that arises from fluctuations in the prices of raw materials.

Options are divided into two main categories, call options and put options. A **call option** gives the owner of the option the right, but not the obligation, to buy the underlying asset. A **put option** gives the owner the right, but not the obligation, to sell the underlying asset. Call option and Put Option has a buyer as well as seller of a call. **Table 19.1** gives a summary of Option contracts and outlines the positions that the parties who enter into options contract are in.

Table 19.1: Summary of Option Contracts
 Credit: “Table 20.2 Summary of Option Contracts” in 20.3 Exchange Rates and Risk, by Julie Dahlquist & Rainford Knight. CC BY 4.0.

Party to an Option Contract	Right of the Party	Obligation of the Party	Benefit		Harm	
			When	Maximum Profit	When	Maximum Profit
Buyer of a call	To buy	n/a	Price of underlying rises	Unlimited	Price of underlying falls	Premium paid
Seller of a call	n/a	To sell	Price of underlying falls	Premium received	Price of underlying rises	Unlimited
Buyer of a put	To sell	n/a	Price of underlying falls	Strike price minus premium	Price of underlying rises	Premium paid
Seller of a put	n/a	To buy	Price of underlying rises	Premium received	Price of underlying falls	Strike price minus premium

The buyer of an option is always the one purchasing the right to do something. The seller or writer of an option is selling the right to make a decision; the seller has the obligation to fulfill the contract should the buyer of the option choose to exercise the option. The most the seller of an option can ever profit is by the premium that was paid for the option; this occurs when the option is not exercised.

Swap-based Hedging

As the name suggests, a **swap** involves two parties agreeing to swap, or exchange, something. A Swap is a financial instrument that allows two parties to exchange a series of payments in one currency for a series of payments in another currency (Mehta, 2024). Generally, the two parties, known as counterparties, are swapping obligations to make specified payment streams. Currency swaps can also help in managing Translation exposure by exchanging cash flows in different currencies over a specific time period (Danani, 2024).

Let's Explore: How Do Currency Swaps Work?

Watch this video to know more about currency swaps and how they work.



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Source: Business Standard. (2023, October 26). *What is a currency swap?* [Video]. YouTube. <https://www.youtube.com/watch?v=8JF0sTKQq0Q>

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Chapter 19 Summary

LO 19.1 Impact of Exchange Rate Fluctuations

- Exchange rate fluctuations not only impact the decision making of big/small trade organizations but also impact the decisions taken by governments and banks.
- For firms that depend on export sales, or firms that rely on imported inputs to production, or even purely domestic firms that compete with firms tied into international trade, sharp movements in exchange rates can lead to dramatic changes in profits and losses.
- A central bank may desire to keep exchange rates from moving too much as part of providing a stable business climate, where firms can focus on productivity and innovation, not on reacting to exchange rate fluctuations.
- Any fluctuations in currencies adversely impact bank operations and can make a country's banking system bankrupt.

LO 19.2 Transaction, Translation, and Economic Exposure

- Transaction risk is the risk that the value of a business's expected receipts or expenses will change as a result of a change in currency exchange rates. It is short-term to medium-term in nature.
- Translation risk is the impact currency fluctuations have on company's consolidated statements when it has foreign subsidiaries. Translation risk is an accounting risk and is medium term to long-term in nature.
- Economic Risk arises due to the impact currency fluctuations have on company's cash flows. Economic exposure is long-term and has adverse effects on company's market value.

LO 19.3 Different Ways of Managing Currency Risk

- Hedging allows companies to mitigate currency risk by entering into future and forward contracts.
 - A futures contract is an agreement to trade an asset on some future date at a price locked in today.
 - A forward contract is simply a contractual agreement between two parties to exchange a specified amount of currencies at a future date.
- A natural hedge occurs when a business can offset its risk simply through its own operations.
- A financial option gives the owner the right, but not the obligation, to purchase or sell an asset for a specified price at some future date.
 - Options are divided into two main categories: call options and put options.
 - A call option gives the owner of the option the right, but not the obligation, to buy the underlying asset.

- A put option gives the owner the right, but not the obligation, to sell the underlying asset.
- A swap is a financial instrument that allows two parties to exchange a series of payments in one currency for a series of payments in another currency.

Check Your Understanding



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CHAPTER 21: INTERNATIONAL FINANCIAL INSTITUTIONS

Introduction

21.1 The Global Financial System

21.2 Types of International Financial Institutions

21.3 Role of Canadian Banks in International Markets

21.4 Export Credit Agencies

Summary

Chapter 21 Introduction



"Financial Services" by Nick Youngson, on Pix4free.org, CC BY-SA 3.0.

Learning Objectives

After reading this chapter, you should be able to

1. Describe the global financial system and key actors in it.
2. Discuss different types of international financial institutions.
3. Discuss the role of Canadian banks in International Markets.
4. Introduce export credit agencies as international financial institutions.

Think About It!

Video: What Is a Financial Institution?

Before reading this chapter, watch this video outlining the role of financial institutions in trade finance.



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Source: Easy Peasy Finance. (2021, August 24). *What is a financial institution: A simple explanation for kids and beginners* [Video]. YouTube. <https://www.youtube.com/watch?v=uJh1MzXuyKw>

Test Yourself



An interactive H5P element has been excluded from this version of the text. You can view it online here: <https://ecampusontario.pressbooks.pub/internationaltradefinancepart3/?p=303#h5p-16>

Introduction

Financial institutions are the heart of any financial system. Especially in international trade where multiple nations are involved, the global financial system plays a major role by establishing and supporting key players such as central banks, international financial institutions and trade organizations and offering financial services that further support import and export. Where central banks play a crucial role in managing the country's economy and financial system, international financial institutions oversee such financial systems by acting as intermediaries between suppliers and demanders of funds.

Examples of international financial institutions are the World Bank, European Development Bank, International Monetary Fund, Inter-American Development Bank, Netherlands Development Finance Company FMO, African Association of Central Banks (AACB), etc. There is another category of financial institutions that has evolved over the years and is known as Export credit agencies. Every country has at least one such agency which helps exporters reduce non-payment risk by providing services such as export credit insurance, loan guarantees and direct lending services.

21.1 The Global Financial System

A **financial system** refers to a set of components and mechanisms, such as monetary policies, insurance, and banks, that allows economic transactions to occur. There are many types of financial systems that exist on different levels of society, ranging from those used to operate transactions within a company to those that facilitate international financial transactions. The absence of these systems drastically impact economies as people may not have access to credit, there would be no monetary products to exchange for goods and there would be no policies regulating complex transactions.

Since the dawn of creation, people have engaged in financial transactions of some sort. Today, financial transactions often take place on an international level within the **global financial system**. This system allows markets to exchange information and financially impact each other around the clock.

A global financial system can be defined as a system composed of financial institutions and regulators that act on an international level.

The global financial system (see **Figure 21.1**) helps economies and organizations by providing core economic functions such as facilitating trade, providing a mechanism for the pooling of resources, managing financial risks, providing price information, and providing ways for countries to transfer economic resources across borders and among different industries with ease. The financial system is a complex system that functions and changes with the economic and political climate.

The Global Financial System



Figure 21.1: The Global Financial System. [See image description]. **Credit:** "The Global Financial System" by Amy S. Glenn, CC BY-NC-SA 3.0.

Consumers, multinational corporations, individual and institutional investors, and financial intermediaries (such as banks) are the key economic actors within the global financial system.

- Central banks (such as the European Central Bank or the U.S. Federal Reserve System) undertake open market operations in their efforts to achieve monetary policy goals.
- International financial institutions such as the Bretton Woods institutions, multilateral development banks and other development finance institutions provide emergency financing to countries in crisis, provide risk mitigation tools to prospective foreign investors, and assemble capital for development finance and poverty reduction initiatives.
- Trade organizations such as the World Trade Organization, Institute of International Finance, and the World Federation of Exchanges attempt to ease trade, facilitate trade disputes and address economic affairs, promote standards, and sponsor research and statistics publications.

Did You Know? The Bank of Canada

The Bank of Canada is Canada's central bank. It was created in 1935 during the depression. The Bank

plays a crucial role in managing the Canadian economy and is very important to Canada's financial system as it regulates certain areas of chartered bank operations. The Bank is a government-owned crown corporation but is run independently of the federal government, where the Prime Minister (or anyone else in the government) does not make decisions for the Bank, nor can it instruct the Bank of Canada on how to operate. The Bank is managed by a board of governors, which consists of a governor, a deputy governor, and 12 directors appointed from different regions of the country. The Bank has four main responsibilities: regulating the financial system, designing and issuing bank notes, and managing monetary policy and funds for the federal government.

The Bank of Canada's primary mission is to oversee the nation's monetary and credit system and to support the ongoing operation of Canada's private banking system. The Bank's actions affect the interest rates banks charge businesses and consumers, help keep inflation under control, and ultimately stabilize the Canadian financial system.

Video: Bank of Canada: Count on Us

Watch this video from the Bank of Canada to learn how Canada's central bank promotes the economic welfare of all Canadians.



One or more interactive elements has been excluded from this version of the text. You can view them online here: <https://ecampusontario.pressbooks.pub/internationaltradingfinancepart3/?p=309#oembed-1>

Source: Bank of Canada – Banque du Canada. (2011, March 16). *Bank of Canada: Count on us* [Video]. YouTube. <https://www.youtube.com/watch?v=ULqvuY2penk>

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Image Descriptions

Figure 21.1: The Global Financial System

The image is a diagram illustrating components of the global financial system. It's composed of interconnected oval shapes labelled with various entities within the financial system. The ovals are arranged in an outer circle and an inner circle.

The outer circle includes, clockwise from the top right

- supervisory authorities
- accounting standard bodies
- multinational enterprises (MCE)
- institutional investors
- rating agencies
- sovereign funds
- investment banks
- international financial institutions
- central banks
- government treasuries

The inner circle includes, clockwise from the top

- currencies
- commercial banks
- financial markets
- exchange rates

[\[back\]](#)

21.2 Types of International Financial Institutions

Financial institutions are the firms and regulatory agencies that oversee our financial system. These institutions were created by the national governments of different countries to facilitate investment practices in the global economy.

Most often, financial institutions act as intermediaries between the suppliers and demanders of funds. The institutions accept savers' deposits and invest them in financial products (such as loans) that are expected to produce a return. This process, called **financial intermediation**, is shown in **Figure 21.2**.

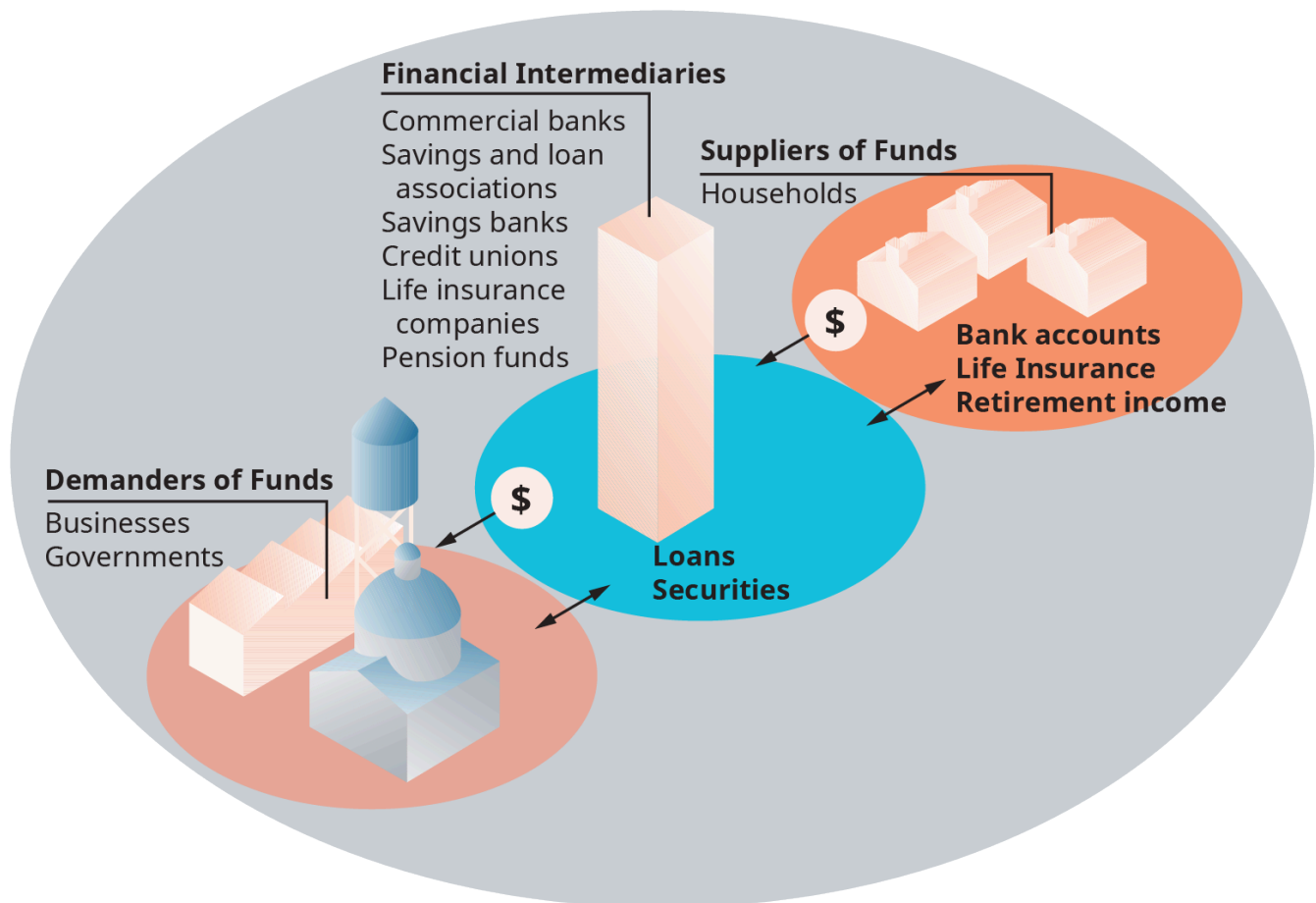


Figure 21.2: The Financial Intermediation Process. [See image description].

Credit: "Exhibit 15.5 The Financial Intermediation Process," © Rice University, OpenStax, under CC BY 4.0 license.

As shown in **Figure 21.2**, households are suppliers of funds and businesses and governments are the demanders. Financial Intermediaries act as middlemen and facilitate the movement of funds between borrowers and lenders. There are several types of International Financial Institutions (IFIs):

- **Multilateral Development Banks:** A multilateral development bank (MDB) is an institution created by a group of countries that provides financing and professional advice for the purpose of development. MDBs

have large memberships, including both developed donor countries and developing borrower countries. MDBs finance projects in the form of long-term loans at market rates, very-long-term loans (also known as credits) below market rates and through grants. Examples include The World Bank, the International Fund for Agricultural Development (IFAD), the European Development Bank, etc. The Islamic Development Bank is among the leading multilateral development banks in the world.

- **Bretton Woods Institutions:** The best-known IFIs were established after World War II to assist in the reconstruction of Europe and provide mechanisms for international cooperation in managing the global financial system. They include the International Monetary Fund, the International Finance Corporation, the International Bank of Reconstruction and Development, etc. Today, the largest IFI in the world is the European Investment Bank.
- **Regional Development Banks:** The regional development banks consist of several regional institutions that have functions similar to the World Bank group's activities but with a particular focus on a specific region. The best-known of these regional banks cover regions that roughly correspond to United Nations regional groupings, including the Inter-American Development Bank, the Asian Development Bank, the African Development Bank, the Central American Bank for Economic Integration, and the European Bank for Reconstruction and Development.
- **Bilateral Development Banks and Agencies:** A **bilateral development bank** is a financial institution set up by one individual country to finance development projects in a developing country and its emerging market, hence the term bilateral, as opposed to multilateral. For Instance, the Netherlands Development Finance Company FMO, the DEG German Investment Corporation, the French Development Agency, etc.
- **Other Regional Financial Institutions:** Financial institutions of neighbouring countries establish themselves internationally to pursue and finance activities in areas of mutual interest. Most of them are central banks, followed by development and investment banks. Some examples are the Bank of International Settlements (BIS), the European Investment Bank (EIB), the African Association of Central Banks (AACB), etc.

Did You Know? History of Financial Institutions in Canada

Financial institutions appeared in Canada in greater numbers and variety in the late 19th century. For most of the 19th century, banks in Canada were not particularly interested in deposits and not at all interested in consumer loans. Instead, they financed merchants' inventories and facilitated the international payments required by imports and exports. The shift happened gradually, and by the outbreak of the Great War, savings deposits accounted for half of all bank liabilities. This, of course, required a completely different type of banking system.

The changes wrought by corporate concentration profoundly affected the banking system and shaped the developing national capital market. Smaller regionally controlled pools of banking capital represented by the Imperial, Toronto, Dominion, and Nova Scotia banks continued to be active in both national and international money and commodity markets. **Figure 21.3** shows financial groups in Canada in 1930.

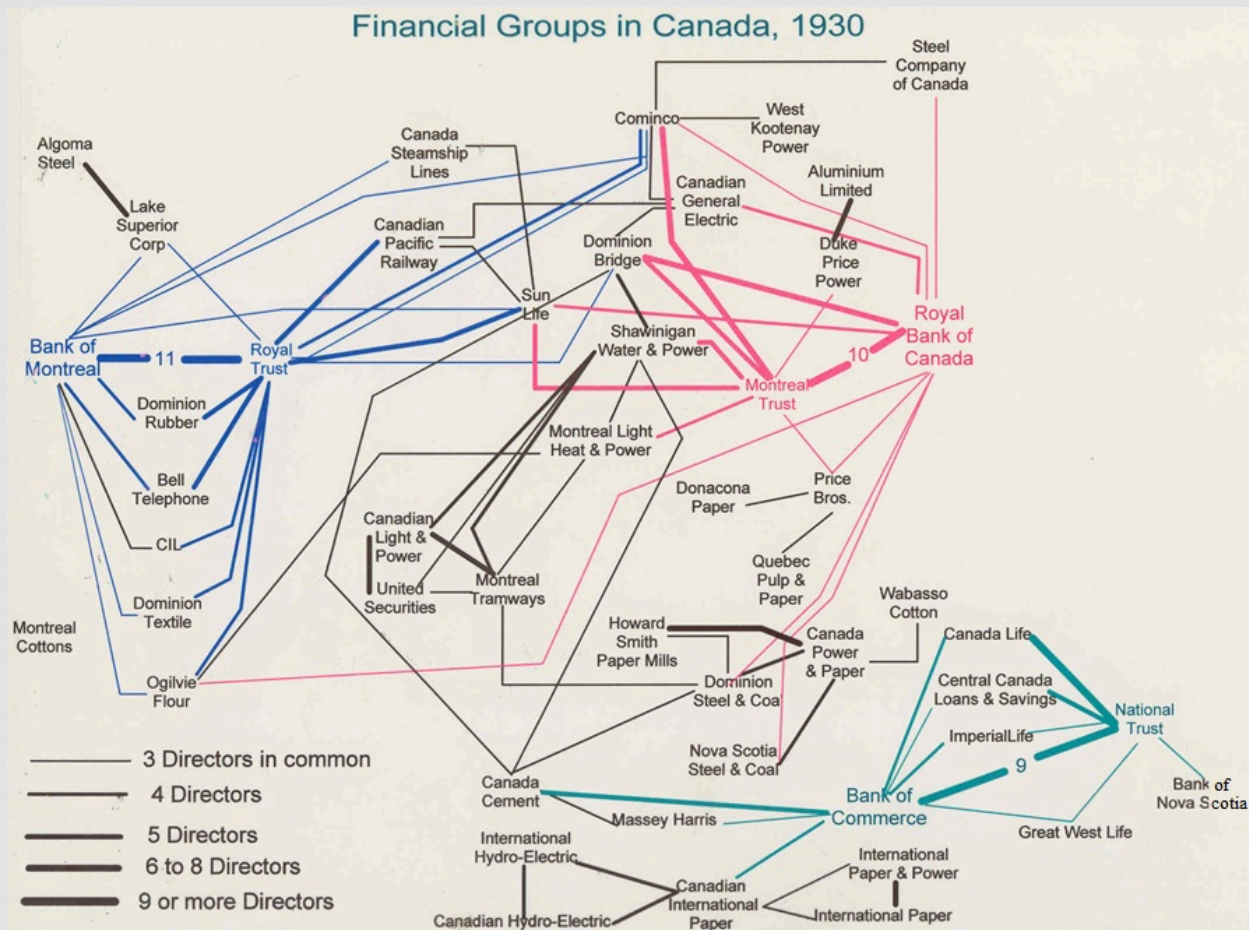


Figure 21.3: Financial Groups in Canada, 1930. [See image description]

Credit: "Figure 8.2 Directorships in common among the leading firms in Canada, 1930." Research by Gilles Piédalue, graphic by Robert C.H. Sweeny, CC BY 4.0.

In the United States, much of the regulatory structure for financial markets and institutions developed in the 1930s as a response to the stock market crash of 1929 and the subsequent Great Depression. In the United States, the desire for the safety and protection of investors and the financial industry led to the development of many of our primary regulatory agencies and financial regulations. The Securities and Exchange Commission (SEC) was formed with the passage of the Securities Act of 1933 and the Securities Exchange Act of 1934. Major bank regulations, such as the Glass-Steagall Act (1933) and the Banking Act of 1935, gave rise to government-backed bank deposit insurance and a more robust Federal Reserve Bank.

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Figure 21.2: The Financial Intermediation Process is reused from “15.3 U.S. Financial Institutions” in Introduction to Business by OpenStax – Rice University, licensed under a Creative Commons Attribution 4.0 International License, except where otherwise noted.

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- “1.1 What Is Finance?” from Principles of Finance by OpenStax – Rice University, licensed under a Creative Commons Attribution 4.0 International License, except where otherwise noted.

Image Descriptions

Figure 21.2: The Financial Intermediation Process

This image presents an infographic of the flow of funds in a financial system. In the centre, in a large blue circle, is a horizontal 3D rectangle labelled “Financial Intermediaries” intended to represent a skyscraper; listed under the label are commercial banks, savings and loan associations, savings banks, credit unions, life insurance companies, and pension funds. “Loans” and “Securities” appear below the skyscraper on the blue circle.

To the left, in a pink circle, with the label “Demanders of Funds,” there are three 3D geometric shapes representing government, farming, and industrial buildings; listed under the label are businesses and governments.

To the right, within an orange circle labelled “Suppliers of Funds,” are three smaller 3D geometric representations of houses; listed under the label is “households.” “Bank accounts,” “Life Insurance,” and “Retirement income” appear on the orange circle under the houses.

There is a dollar sign on both the blue and orange circles. Arrows show the flow of money from the suppliers to the financial intermediaries and from the financial intermediaries to the demanders. Double-sided arrows also show the connection of the financial intermediaries to the demanders via the securities and loans and to suppliers via the bank accounts, life insurance and retirement income.

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Figure 21.3: Financial Groups in Canada, 1930

The image is a network diagram illustrating the interconnectedness of various Canadian companies and financial institutions in 1930 through their boards of directors. Each bank is represented as a node with connections to various industrial businesses, including steel, coal, pulp and paper, cement, railways, and shipping, as well as electrical utilities and insurance companies. Lines, varying in thickness and colour, connect these nodes to signify shared board members. The key at the bottom left corner explains the line thickness:

thin lines indicate 3 directors in common, progressively thicker lines represent 4, 5, and 6 to 8 directors, and the thickest lines signify 9 or more directors in common.

On the upper right, the “Bank of Montreal” and “Royal Trust” and their main connections are in blue; at the right, “Royal Bank of Canada” and “Montreal Trust” and their main connections are in red; and at the lower right, “Bank of Commerce” and “National Trust” and their connections are in teal. Other lines connecting all the companies are black. The lines crisscross and overlap, creating a complex web suggesting a highly interconnected financial industry and business landscape of that era.

[back]

21.3 Role of Canadian Banks in International Markets

The financial marketplace spans the globe, with money routinely flowing across international borders. Canadian banks play an important role in global business by providing loans to foreign governments and businesses. Multinational corporations need many special banking services, such as foreign-currency exchange and funding for overseas investments. Canadian banks also offer trade-related services, such as global cash management, that help firms manage their cash flows, improve their payment efficiency, and reduce their exposure to operational risks. Sometimes consumers in other nations have a need for banking services that banks in their own countries don't provide. Therefore, large banks often look beyond their national borders for profitable banking opportunities.

Many Canadian banks have expanded into the United States. The arena that the Boston Bruins and Celtics play out of is now called the TD Garden. They have also expanded into overseas markets by opening offices in Europe, Latin America, the Caribbean, and Asia. They often provide better customer service than local banks and have access to more sources of funding.

For Canadian banks, expanding internationally can be difficult. Banks in other nations are often subject to fewer regulations than Canadian banks, making it easier for them to undercut Canadian banks on the pricing of loans and services. Some governments also protect their banks against foreign competition. For example, the Chinese government imposes high fees and limits the amount of deposits that foreign banks can accept from customers. It also controls foreign bank deposit and loan interest rates, limiting the ability of foreign banks to compete with government-owned Chinese banks.

No Canadian banks rank among the largest banks in the world. **Table 21.4** lists the 10 largest international banks as of 2024 – while JPMorgan Chase is consistently ranked as the largest bank in the world, the other top banks often change position, depending on their holdings in any given month and how their size is determined. In recent years, several Chinese banks have grown larger than other well-known banks such as BNP Paribas (France) and Mitsubishi UFJ Financial Group (Japan).

Table 21.4: The World's Largest Banks.
Source: Based on data from Jimenea, Wu, & Terris (2024), Jazib (2024), and Forbes India (2024).

Bank	Location of Headquarters
JPMorgan Chase	New York, United States
Bank of America	North Carolina, United States
Wells Fargo	California, United States
Morgan Stanley	New York, United States
Industrial and Commercial Bank of China Limited	Beijing, China
Agricultural Bank Of China	Beijing, China
China Construction Bank	Beijing, China
Bank of China	Beijing, China
HDFC Bank	Mumbai, India
HSBC	London, United Kingdom

Political and economic uncertainty in other countries can make international banking a high-risk venture. For instance, European and Asian banks were not immune to the financial crisis of 2007–2009. Several countries,

including Greece, Portugal, Spain, and Ireland, continue to rebound slowly from the near collapse of their economic and financial systems they experienced during that crisis. Financial bailouts spearheaded by the European Union and the International Monetary Fund have helped stabilize the European and global economy.

The World Bank and International Monetary Fund

Two international financial organizations are instrumental in fostering global trade. The **World Bank** offers low-interest loans to developing nations. Originally, the purpose of the loans was to help these nations build infrastructure such as roads, power plants, schools, drainage projects, and hospitals. Now, the World Bank offers loans to help developing nations relieve their debt burdens. To receive the loans, countries must pledge to lower trade barriers and aid private enterprise. In addition to making loans, the World Bank is a major source of advice and information for developing nations.

The **International Monetary Fund (IMF)** was founded in 1945, one year after the creation of the World Bank, to promote trade through financial cooperation and eliminate trade barriers in the process. The IMF makes short-term loans to member nations that are unable to meet their budgetary expenses. It operates as a lender of last resort for troubled nations. In exchange for these emergency loans, IMF lenders frequently extract significant commitments from the borrowing nations to address the problems that led to the crises. These steps may include curtailing imports or even devaluing the currency.

Some global financial problems do not have a simple solution. One option would be to pump a lot more funds into the IMF, giving it enough resources to bail out troubled countries and put them back on their feet. In effect, the IMF would be turned into a real **lender of last resort** for the world economy. The danger of counting on the IMF, though, is the “moral hazard” problem. Investors would assume that the IMF would bail them out and would, therefore, be encouraged to take bigger and bigger risks in emerging markets, leading to the possibility of even deeper financial crises in the future.

Review: The Difference between the World Bank and the IMF

Review your understanding of the differences between these two institutions by watching this video.



One or more interactive elements has been excluded from this version of the text. You can view them online here: <https://ecampusontario.pressbooks.pub/internationaltrade/finance/part3/?p=314#oembed-1>

Source: CNBC International. (2017, October). *What's the difference between the IMF and the World Bank?* | CNBC Explains [Video]. YouTube. <https://www.youtube.com/watch?v=IN3qrFA4jXc>

Let's Explore: ICC DOCDEX

Along with providing financial services to trade organizations, international institutes like International Chamber of Commerce (ICC) also help in resolving any disputes related to trade finance using a procedure called Documentary Instruments Dispute Resolution Expertise (DOCDEX).

Explore what kinds of disputes are resolved and what is the cost and methods of resolving those disputes by visiting the DOCDEX page of the ICC website.

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21.4 Export Credit Agencies

Over years, a different category of financial institutions has evolved around the world known as the export credit agency. Export credit agencies (ECAs) use public funds or a combination of public and private funds to provide loans, guarantees, and insurance in support of overseas investment and exports by domestic corporations (ESCR-Net, n.d.). ECAs were originally government agencies intended to support exporters by providing financing, risk insurance, and other guarantees (FITT, 2023). The goal was to encourage international commerce opportunities by reducing potential exporters' risk.

With their main mission of facilitating export, ECAs offer a range of financial services including credit insurance, loan guarantees and direct lending services (Financely, 2023). Most popular service among these is export credit insurance.

Review: Credit Insurance

Review your understanding of credit insurance by watching this video about the role of export credit insurance. The video was created by a private ECA called Euler Hermes, which is now Allianz Trade.



One or more interactive elements has been excluded from this version of the text. You can view them online here: <https://ecampusontario.pressbooks.pub/internationaltradefinancepart3/?p=320#oembed-1>

Source: Allianz Trade. (2014, January 20). *Understanding credit insurance with Euler Hermes [En Subs]* [Video]. YouTube. <https://www.youtube.com/watch?v=tIP0zyYXYYY>

Let's Explore: History of ECAs

To learn more about the history of ECAs, read section “3 History of ECAs” in *The Role and Importance of Export Credit the Role and Importance of Export Credit* [PDF], a research paper by Raquel Mazal Krauss (2011).

Role of ECAs: An Example from the Mining Industry

For a foreign contractor, building a coal-fired power station in a developing country entails substantial financial risks – even for prominent firms like Bilfinger, Siemens, Alstom, or ThyssenKrupp. Construction is expensive – a big power plant can easily cost over a billion euros – and requires huge investments upfront. It can take years for a contractor to get paid. The client, who may be a government-owned or private power generator, may run into financial difficulties. Political crises may halt construction.

To cut the risks for the contractors and their banks, many governments have established export credit insurance. In addition, loans from development banks support the export of mining equipment and power plants.

Developed countries support their exports generously. Between 2007 and 2014, more than \$73 billion – or over \$9 billion a year – in public finance was approved for coal.¹ Nearly half (47 percent) of the total international finance for coal came through export credit agencies in countries that are members of the Organisation for Economic Co-operation and Development (OECD). Japan, an OECD member, led the pack, with \$20 billion. China (nearly \$15 billion) was followed by two more OECD members, South Korea (over \$7 billion) and Germany (\$6.8 billion).

The largest recipient countries of coal finance by export credit agencies from 2007 to 2014 are Vietnam (more than \$4.5 billion), South Africa (almost \$4.5 billion), India (more than \$4 billion) and Australia with \$4 billion in total. Nearly one-quarter of coal funding from OECD export credit agencies went to high-income countries. In this period, the total greenhouse gas emissions related to international public finance for coal amounts to almost half a billion tonnes of CO₂ per year, or, to put this number in context, the total annual emissions of Italy.

Most of the money goes into building power plants. However, countries such as Russia, Canada and Italy use export credits mainly to finance the digging of new coal mines. Led by the United States and Japan, around \$12.9 billion have been used for this purpose from 2007 to 2013. Even though export credits were initially intended to reduce business risks in uncertain markets, they have also recently been used to develop coal mines in politically stable countries such as the United States and Australia.

Multilateral development banks also play an important role alongside the national credit agencies. Between 2007 and 2013, they supported coal projects with subsidies worth \$13.5 billion. The biggest donor was the World Bank, at \$6.5 billion; the biggest regional donor was the African Development Bank, with \$2.8 billion in support. About 90 percent of this money went to build new power plants; the rest went to mining and on modernizing older plants.

Commercial banks, whose day-to-day operations are beyond government influence, play an even bigger role than the public sources of funding. Between 2005 and 2014, financing for coal projects added up to 500 billion dollars. Together, the 20 leading banks gave 73 percent of the loans.

The member states of the OECD have divergent views on tightening environmental and social standards that they should apply when offering export credits. The biggest issue is the financing of coal projects. The United States and some other countries demand that these types of credits for coal projects be stopped – more transparency is needed in this regard. Export credit agencies seldom make their business information available to the public. Critics demand that in future, the agencies should announce promptly whom they are supporting and in what way.

1. All \$ in Chapter 21 are USD.

Did You Know? Export Credit Agencies and Human Rights

Most OECD-member countries have at least one taxpayer-funded export credit agency, often overseen by the trade, finance, or economics ministry. While promoting exports and investment is not necessarily problematic, ECAs have minimal transparency, accountability, and safeguards related to human rights, corruption, or the environment. As a result, ECAs often fund controversial projects. Financial backing is provided with taxpayer money for endeavours ranging from weapons export to extractive industry projects to infrastructure developments that have been rejected by the World Bank Group.

With minimal transparency, the Export Development Canada (EDC) supports Canada's mining companies significantly, while the UK Export Credit Guarantee Department (ECGD) is heavily invested in arms exports. ECAs, such as the U.S. Export-Import (Ex-Im), are one of the largest and most influential public international financial institutions in trade and investment today, providing over ten times more in guarantees and risk insurance for large-scale infrastructure projects than the World Bank. Many ECA-backed projects have been associated with significant human rights violations, including arbitrary arrest, use of paramilitary "security" forces, forced resettlement, inadequate consultation and compensation, violations of the right to a healthy environment, loss of livelihood and destruction of sacred and cultural sites.

While ECAs have collapsed Indigenous rights and cultural heritage sites and forced resettlement into their voluntary "environmental" guidelines, comprehensive human rights concerns remain unaddressed. Under international human rights law, states have clear obligations to respect, protect and fulfill human rights, which extend to their respective institutions, including ECAs.

In order to ensure that ECA-backed projects are not directly responsible for or complicit with human rights violations, a number of human rights advocates and ECA campaigners have begun to explore mechanisms and standards to ensure the protection of human rights in projects supported by ECAs. Potential tools or strategies may include national litigation; regional and international mechanisms, such as regional human rights courts, the ILO, OECD National Contact Points, and UN treaty bodies and Special Rapporteurs; compliance officers associated with the Canadian and Japanese ECAs; and parliamentary oversight and implementation of human rights impact assessments. Similarly, there seems to be a need to explore the content of investment agreements, particularly host-government agreements (HGAs) that include stabilization clauses and dispute mechanisms that undermine state sovereignty and the ability to protect human rights.

International Cooperation and Progressive Realization of Economic Human Rights

Export credit agencies are part of a larger system of investment and trade agreements that often threaten the ability of states to respect, protect and fulfill human rights. Under the International

Covenant on Economic, Social, and Cultural Rights, countries are obligated to “take steps, individually and through international assistance and cooperation” in order to achieve “progressively” economic, social, and cultural human rights, “without discrimination.” Corporations are the primary beneficiaries of export credit and insurance, often provided to projects of questionable feasibility on costly financing terms. This has led to massive indebtedness in many countries. According to Goldzimer (2003), over sixty percent of Nigeria’s external debt and over forty percent of the debt of the Democratic Republic of Congo is for export credits, normally with higher interest rates than World Bank or IMF loans. In turn, OECD countries often inflate their aid statistics by including the cancellation of commercial ECA debts in official aid budgets. Debt and reduced aid limit a state’s ability to fulfill all human rights, as do host-government agreements (HGAs) that include stabilization clauses that harshly penalize the creation or enforcement of laws that protect human rights and the environment.

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Chapter 21 Summary

21.1 Global Financial System and Key Actors

- A financial system refers to a set of components and mechanisms, such as monetary policies, insurance, and banks, that allows economic transactions to occur.
- A global financial system can be defined as a system composed of financial institutions and regulators that act on an international level.
- Consumers, multinational corporations, individual and institutional investors, and financial intermediaries (such as banks) are the key economic actors within the global financial system.

21.2 Types of International Financial Institutions

- Financial institutions act as intermediaries between the suppliers and demanders of funds.
- There are several types of International Financial Institutions (IFIs):
 - A multilateral development bank (MDB) is an institution created by a group of countries that provides financing and professional advice for the purpose of development.
 - The best-known IFIs were established after World War II to assist in the reconstruction of Europe and provide mechanisms for international cooperation in managing the global financial system, known as Bretton Woods Institutions.
 - The regional development banks consist of several regional institutions that have functions similar to the World Bank group's activities but with a particular focus on a specific region.
 - A bilateral development bank is a financial institution set up by one individual country to finance development projects in a developing country and its emerging market, hence the term bilateral, as opposed to multilateral.
 - Other regional financial institutions include financial institutions of neighbouring countries to pursue and finance activities in areas of mutual interest.

21.3 Role of Canadian Banks in International Markets

- Canadian banks play an important role in global business by providing loans to foreign governments and businesses.
- Canadian banks also offer trade-related services, such as global cash management, that help firms manage their cash flows, improve their payment efficiency, and reduce their exposure to operational risks.
- For Canadian banks, expanding internationally can be difficult as Banks in other nations are often subject to fewer regulations than Canadian banks, making it easier for them to undercut Canadian banks on the pricing of loans and services.

21.4 Export Credit Agencies as International Financial Institutions

- Export credit agencies (ECAs) use public funds or a combination of public and private funds to provide loans, guarantees, and insurance in support of overseas investment and exports by domestic corporations.
- With their main mission of facilitating export, ECAs offer a range of financial services including credit insurance, loan guarantees and direct lending services.
 - Between 2007 and 2014, more than \$73 billion – or over \$9 billion a year – in public finance was approved for coal. Nearly half (47 percent) of the total international finance for coal came through export credit agencies in countries that are members of the Organisation for Economic Co-operation and Development (OECD).
- While promoting exports and investment is not necessarily problematic, ECAs have minimal transparency, accountability, and safeguards related to human rights, corruption, or the environment.

Check Your Understanding



An interactive H5P element has been excluded from this version of the text. You can view it online here:

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CHAPTER 20: TRADE FINANCE INSTRUMENTS

Introduction

20.1 Introduction to Trade Finance Instruments

20.2 Open Account and Advance Payment

20.3 Documentary Collection

20.4 Documentary Credit

20.5 Factoring and Forfaiting

Summary

Chapter 20 Introduction



Photo by InvestmentZen on flickr, CC BY 4.0

Learning Objectives

After reading this chapter, you should be able to

1. Identify and describe the various types of trade finance instruments.
2. Describe the open account and advance payment methods of payment.
3. Discuss the documentary collection method of payment, including bills of exchange and endorsement.
4. Discuss the documentary credit method of payment including letters of credit.

5. Describe the factoring and forfaiting methods of payment.

Think About It!

Video: Methods of Payment

Before reading this chapter, watch this video outlining the methods of payment used in international trade.



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Source: International Trade Administration, (2022, February 10). *Methods of payment*. [Video]. YouTube. <https://www.youtube.com/watch?v=g71-qrmWUXU>

Test Yourself



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Introduction

One of the important decisions organizations make when they decide to trade is payment terms. How to pay is one major decision made by trade organizations and is supported by trade finance instruments, also called methods of payment. Four methods of payment are commonly used: open account, advance payment, documentary collection, and documentary credit.

The first two methods are used when trade parties have established relationships, trust one another and there are no/low country or political risks. The other two methods are used where exporters and importers cannot trust one another. The reasons could be that they are working together for the first time or that there are high levels of country/political risks involved in exporting or importing countries. To establish trust, banks intervene and facilitate the movement of payments and documents.

There are some other innovative methods of payment like factoring and forfaiting that help companies have easy and instant access to money, thus helping them with managing their cash flow issues. Using the appropriate method of payment reduces the exposure to commercial risk, and thus, this decision needs to be taken with due diligence by the organizations.

20.1 Introduction to Trade Finance Instruments

International Markets are more complex than local markets. Dealing locally with suppliers, parties can build trust in a short period of time, whereas, in international markets where parties operate from different parts of the world, it is very difficult to trust the counterparty on payment and performance. **Commercial risk**, discussed in Chapter 16, deals with non-payment and non-performance issues; managing this risk reduces the chances of failure in the international market. Specifically, in trade finance, organizations always struggle to determine the pattern of payment methods to allocate responsibility for financing transactions, thus knowing who would most need **liquidity** support (Ahn, 2014). Using different trade finance instruments (also referred to as methods of payment or payment methods) in different situations is one way companies can reduce this struggle and manage commercial risk present in foreign transactions.

As trade flourished after World War II, many trade finance instruments evolved over time. An exporter/seller is always concerned about getting paid in full and on time using an appropriate method of payment as it helps minimize the payment risk while also accommodating the needs of the buyer (International Trade Administration, n.d.a).

The Forum of International Trade Training explains that

an organization should select the financial instruments that best address its needs and identified risks, as well as those that respond to the underlying dynamics of a commercial contract. In general, importers and exporters must agree on terms and methods of payment based, in part, on the risks associated with planned transactions. (FITT, 2030, p. 46)

Types of Trade Finance Instruments

Finance is the backbone of any business, be it domestic/international, small/medium or large. It is even more required when companies decide to expand internationally. Historically, Trade finance is considered the oldest domain of international finance whose purpose in early ages was to support a firm's **working capital** needs, which extended to supporting trade organizations by reducing risks in long-distance trade by providing different methods of payment options (Accominotti & Ugolini, 2019).

A variety of methods of payment have evolved over time. Different studies have categorized them differently; some have divided them into pre-shipment, post-shipment and letters of credit (Ahn, 2014), but most have categorized them into basically four methods of payment: Advance Payment, Open Account, Collections and Letters of Credit (FITT, 2023, Bhogal & Trivedi, 2019). In this chapter, we will divide methods of payment as:

- open account
- advance payment/cash in advance
- documentary collections
- documentary credit

The major distinction between these methods of payment is the trust level between the importer and the exporter. If both parties can trust one another easily, they can choose advance payment or open account methods. However, if parties are working together for the first time or they operate in a highly risky environment, the appropriate methods would be documentary collection or documentary credit. There are

some other innovative methods of payments, such as factoring and forfaiting, which are used by organizations to reduce the impact of imbalanced cash flow.

On the Shipping Solutions international trade blog, Roy Becker outlines seven questions that an exporter should ask before agreeing to a payment term. Becker's questions are as follows:

- Is the relationship with the buyer new or established?
- Is the order custom-made or standard?
- Is the political situation stable or unstable?
- Is the economic situation stable or unstable?
- Are competitors offering terms?
- Is there a risk of price changes?
- Is there a need to control cash flow?

Source: Becker, R. (2018, April 30). *7 factors for determining the right method of payment for your exports*. Shipping Solutions. <https://www.shippingsolutions.com/blog/seven-factors-for-determining-the-right-method-of-payment-for-your-exports>

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20.2 Open Account and Advance Payment

Let's Explore: Methods of Payment

Watch part of this video (from 2:56 to 6:15) for an introduction to the open account and advance payment methods of payment.



One or more interactive elements has been excluded from this version of the text. You can view them online here: <https://ecampusontario.pressbooks.pub/internationaltrdefinacepart3/?p=388#oembed-1>

Source: Tradelinks Resources. (2017, May 6). *Methods of payment in international trade for export & import*. [Video]. YouTube. <https://www.youtube.com/watch?v=cIM5SdLI58g>

For exporters, any sale is a gift until they receive payment; for importers, any payment is a donation until they receive goods (Noah, 2024). Successful traders consider this when deciding the payment terms and payment methods in trade.

The **open account** method gives importers the liberty to pay once the goods have been delivered to them. No doubt, it is the safest method for an importer/buyer in terms of cash flow and cost; it is the highest-risk option for an exporter (International Trade Administration, n.d.a). Throughout the transaction, exporters will be exposed to non-payment risk as they have delivered goods and documents with an expectation of receiving payment in future, which could be 30 days, 60 days or 90 days in trade transactions. As the open account method of payment poses a high risk to the exporter, an exporter agrees to it only if they can trust the importer.

In the open account method of payment, the seller ships the goods to the buyer and then later credits the former's account in their own books with the required invoice amount only after receiving and checking the concerned shipping documents (Tutorialspoint, n.d.).

David Noah (2024) explains that open account terms can help businesses win customers in competitive

markets. He further explains that open account terms can help mitigate the risk of non-payment when used alongside other trade finance techniques:

- export working capital financing
- government-guaranteed export working capital program
- export credit insurance
- export factoring
- standby letters of credit (Noah, 2024).

Open accounts may also be offered to importers who demand to pay in their local currency using a proper foreign exchange risk hedging technique such as forwarding contracts (Noah, 2024).

Advance payment is opposite to open account. In advance payment, exporters receive most of the payment from a transaction before sending goods and documents. This way, they can support the manufacturing without taking additional credit from banks or financial institutions, but it leaves importers at high **non-performance risk**. This makes advance payment the most secure method of payment for exporters but a high-risk option for importers (Noah, 2024). As an importer has already paid, they will lose their business if exporters do not deliver goods as promised in the contract. Thus, importers/buyers only agree to this method of payment if they know and can trust the exporter.

In the advance payment method of payment, first the buyer credits the seller's account with the required invoice amount and only then does the seller ship the goods to the buyer. The amount paid could include the entire balance or a part of the entire payment paid in advance of the due date (Tutorspoint, n.d.).

According to Noah (2019, July), there are several factors to consider when deciding to use the cash-in-advance option:

- When the importer
 - is a new customer.
 - has a short operating history.
 - has unclear creditworthiness.
 - is from a country with high political and commercial risks.
- When the exporter
 - has a unique product.
 - has a rare product.
 - has a high-demand product.
 - uses credit card transactions for online business.

Did You Know? Open Account vs. Advance Payment

Consider the following scenario:

A Canadian company is manufacturing GPS pet trackers that can help locate pets if they go missing. The company wants to purchase a pet collar that can safely carry the tracker. They received bids from two companies – A and B. Both are offering the same quality products and prices in the vicinity, but their payment terms are different. Whereas Company A asks for 50% advance payment and the rest of the payment 30 days after sight, Company B offers flexible payment terms with 90 days after sight payment.

Which company would you prefer to work with as an importer?



An interactive H5P element has been excluded from this version of the text. You can view it online here:

<https://ecampusontario.pressbooks.pub/internationaltradefinancepart3/?p=388#h5p-2>

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20.3 Documentary Collection

Let's Explore: Documentary Collection

Watch this video for an introduction to the documentary collection method of payment.



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Source: International Trade Administration, (2021, April 5). *Using documentary collections with trusted foreign buyers*. [Video]. YouTube. <https://www.youtube.com/watch?v=9ezhVXkQxc>

The **documentary collection (D/C)** payment method is recommended to be used in established trade relationships in economically and politically stable markets (FITT, 2023 and International Trade Administration, n.d.b). Banks act as intermediaries between exporters and importers to facilitate the transfer of payment and documents and simplify the transaction for them.

In a documentary collection transaction, the exporter's bank (remitting bank) sends documents to the importer's bank (collecting bank) along with instructions for payments and then funds are received from the importer and remitted to the exporter through the banks in exchange for those documents (Noah, 2019, Sept). However, banks do not verify the documents being transferred from exporters to importers and do not guarantee payment, which means that if the buyer does not pay, the exporter will either have to pay or find a different supplier on an urgent basis, sell the goods at cost or dispose of them off (International Trade Administration, n.d.b).

Documentary collections are subject to a set of rules and practices called the Uniform Rules for Collections (URC), which was published by the International Chamber of Commerce (ICC) in Paris. (FITT, 2023, p. 53)

According to Noah (2019, Sept.) with D/C, there is little an exporter can do if the importer does not pay. This means that D/C should only be used when the exporter and importer already have a relationship and the importing country has a stable economy and political situation. Noah also suggests that D/C can be used if it is too risky to use an open account sale and the importer will not accept a letter of credit.

Bills of Exchange

The D/C transaction uses *bills of exchange* as a method of payment. Historically, bills of exchange have been a very popular method for financing merchandise trade. It gained even more importance when negotiating or transferring the bill between parties became legal (Accominotti & Ugolini, 2019). **Negotiation** (also called endorsement of bills of exchange) provides a provision to transfer the original creditor's claim on the debtor to a third party.

Think About It! What Is a Bill of Exchange?

According to Canada's *Bills of Exchange Act*:

16 (1) A bill of exchange is an unconditional order in writing, addressed by one person to another, signed by the person giving it, requiring the person to whom it is addressed to pay, on-demand or at a fixed or determinable future time, a sum certain in money to or to the order of a specified person or to bearer.

Scroll through the slides to review a detailed break down of this legal definition.



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<https://ecampusontario.pressbooks.pub/internationaltradefinancepart3/?p=390#h5p-21>

Download the Bills of Exchange presentation PDF.

A bill of exchange must be signed by the issuing party (exporter) and accepted by the party to whom it is addressed (importer) to be valid. **Acceptance of bills of exchange** is a formal process where in the drawee of a usance or time bill of exchange writes the words “accepted” above their name and signature across a bill (Bhagal & Trivedi, 2019). See **Figure 20.1** for samples of a bill of exchange and what it looks like after it has been accepted.

D 92 1-72

NO. 4326 SANTOS, BRAZIL, APRIL 20th 20* U.S. \$ 50,000.00 1-23
210

NINETY (90)----- DAYS AFTER SIGHT PAY TO THE ORDER OF
OURSELVES

FIFTY THOUSAND AND 00/100-----DOLLARS
Drawn under Morgan Guaranty Trust Company of New York L/C No. 89054, dated New York
April 2nd 20* covering shipment of 1,000 bags coffee.

TO
MORGAN GUARANTY TRUST COMPANY } GUARANI MENDOZA & CO.
OF NEW YORK
NEW YORK, NEW YORK

:0210-0023:

D 92 1-72

NO. 4326 SANTOS, BRAZIL, APRIL 20th 20* U.S. \$ 50,000.00

NINETY (90)----- DAYS AFTER SIGHT PAY TO THE ORDER OF
OURSELVES

FIFTY THOUSAND AND 00/100-----DOLLARS
Drawn under Morgan Guaranty Trust Company of New York L/C No. 89054, dated New York
April 2nd 20* covering shipment of 1,000 bags coffee.

TO
MORGAN GUARANTY TRUST COMPANY } **\$ 50,000 AND 00 CTS**
OF NEW YORK
NEW YORK, NEW YORK

ACCEPTED
PAYABLE AT 15 BROAD STREET, NEW YORK
MORGAN GUARANTY TRUST COMPANY
OF NEW YORK

MORGAN GUARANTY TRUST CO.
GUARANI MENDOZA & CO.

:0210-0023:

The transaction which gives rise to this instrument is the importation of COFFEE from BRAZIL to U.S.

Figure 20.1: Sample Bills of Exchange. [See image description]

Credit: Figure 19.3 - A Time Draft in Chapter 19: Nature and Form of Commercial Paper by Anonymous. CC BY-NC-SA 3.0.

Acceptance of Bills of Exchange is very important. Let's assume there are two companies. Company A issues a bill of exchange worth \$500,000 for Company B on the date they purchase goods on credit, which is June 4, 2024. However, Company B accepted the bill five days later, i.e., on June 9. Even though it is clear in this situation that Company A becomes the creditor and Company B the debtor on June 4, the debtor is not legally bound to pay until he signs the bill and makes it a bill of exchange on June 9. This is how bills of exchange work.

Types of Bills of Exchange

Bills of exchange can broadly be divided into two main categories: sight and usance or term.

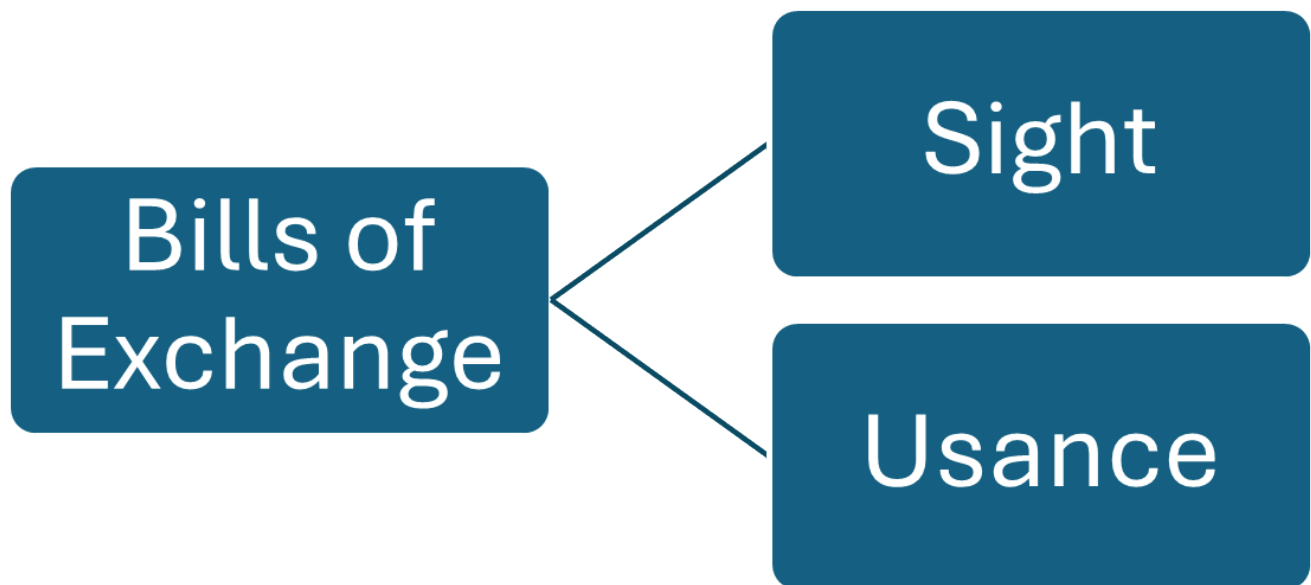


Figure 20.2: Types of Bills of Exchange.
Credit: © by Kiranjot Kaur. CC BY-NC-SA.

Sight Bills of Exchange

A sight bill of exchange requires the drawee to release the payment as soon as the bill has been seen, and thus, its acceptance is not required. If a bill of exchange is sight, banks will not release documents until and unless payment is released by the importer. This, in trade finance terminology, is known as documents against payment (D/P).

In the D/P clause, the exporter instructs their bank to release documents only and only if the importer pays as agreed upon in the sales contract.

Usance Bills of Exchange

Usance bills of exchange are the opposite of sight bills of exchange. Where in sight, payment is released immediately after seeing bills of exchange; in usance, payment is made at a future period of time and documents are released upon acceptance of bills of exchange. Thus, accepting usance bills of exchange is

mandatory for the importer. Until and unless the bill is accepted, documents will not be released by the bank. This, in trade finance terminology, is called *documents against acceptance* (D/A).

In the D/A clause, the exporter instructs their bank to release documents only and only if the importer accepts the bills of exchange and thus promises to pay at a future date.

Let's Explore: How Documentary Collection Works

Watch this video to learn more about the D/P documentary collection [4:50].



One or more interactive elements has been excluded from this version of the text. You can view them online here: <https://ecampusontario.pressbooks.pub/internationaltradefinancepart3/?p=390#oembed-2>

Source: Tradelinks Resources. (2017, May 17). *How documents against payment work in international trade*. [Video]. YouTube. <https://www.youtube.com/watch?v=1h-QQOaLxol&t=10s>

Watch this video to learn more about the D/A documentary collection [4:55].



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Source: Tradelinks Resources. (2017, May 25). *How documents against acceptance works in international trade*. [Video]. YouTube. <https://www.youtube.com/watch?v=nrY1bZp6K18&t=9s>

Endorsement of Bills of Exchange

The main advantage of bills of exchange in modern finance is *negotiability*. Negotiability means that the

document is freely and unconditionally transferable from one person to another by delivery or by delivery and endorsement. Endorsements are usually placed on the back of the instrument, as shown in **Figure 20.3**. There are many ways a bill can be endorsed, including blank, special, restrictive, and conditional.

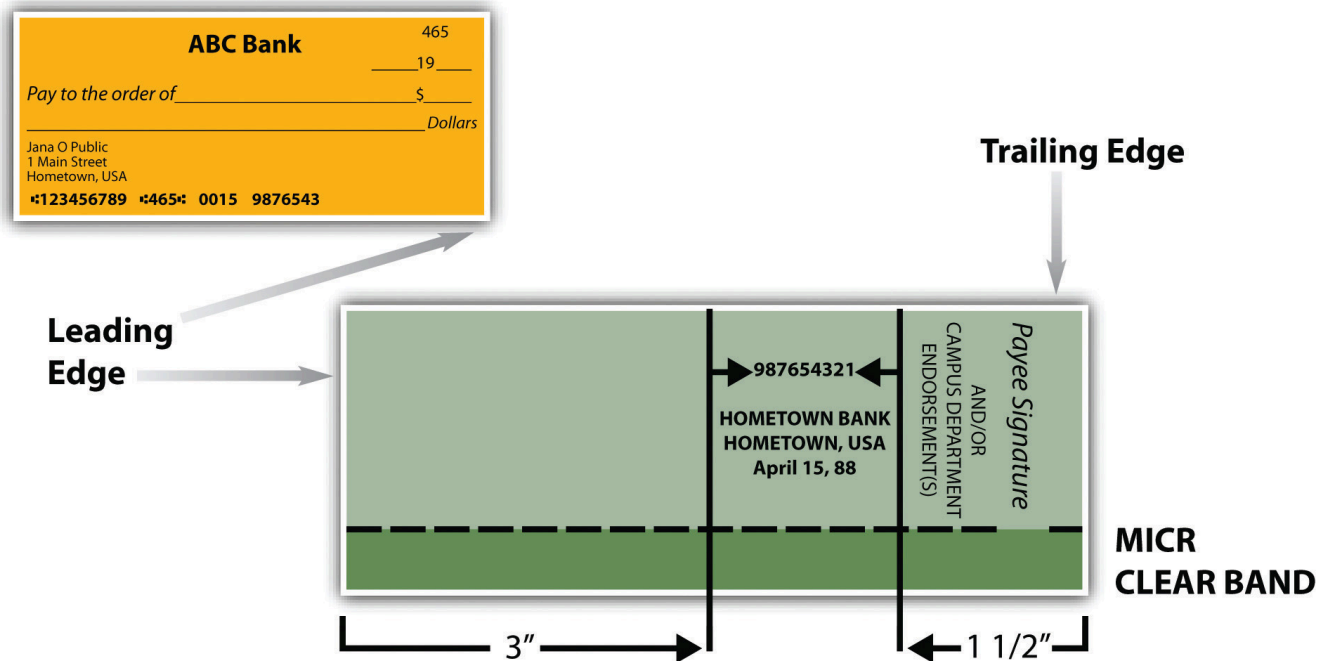


Figure 20.3: Placement of Endorsement. [See image description].

Source: Based on Sec. 704-13: Check Endorsement Procedures, Diagram of Endorsement Standard. In UC Irvine Administrative Policies & Procedures, Business and Financial Affairs, Financial Services.

Credit: Figure 20.3 Endorsement Standard in "Chapter 20: Negotiation of Commercial Paper" by Anonymous. CC BY-NC-SA 3.0.

Blank Endorsement

A blank endorsement consists of the endorser's signature alone, as shown on the left of **Figure 20.4**. A blank endorsement converts the instrument into paper, closely akin to cash. Since the endorsement does not specify to whom the instrument is to be paid, it is treated like bearer paper—assuming, of course, that the first endorser is the person to whom the instrument was payable originally. A paper with a blank endorsement may be negotiated by delivery alone until a holder converts it into a special endorsement by writing over the signature any terms consistent with the endorsement. For example, a bill endorsed by the payee (signed on the back) may be passed from one person to another and cashed in by any of them.

A blank endorsement creates conditional contract liability on the endorser: he is liable to pay if the paper is dishonoured. The blank endorser also has warranty liability toward subsequent holders.

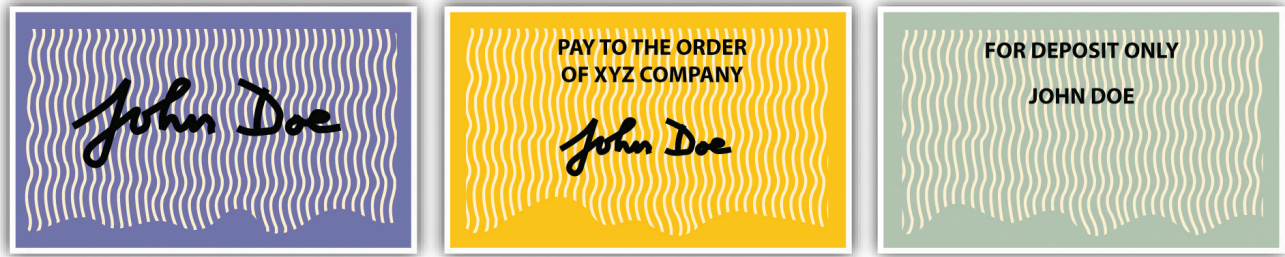


Figure 20.4: Types of Endorsement.

Credit: Figure 20.4 Forms of Endorsement in “Chapter 20: Negotiation of Commercial Paper” by Anonymous. CC BY-NC-SA 3.0.

Special Endorsement

A special endorsement, sometimes known as “endorsement in full,” names the transferee-holder. The payee of a bill can endorse it over to a third party by writing “Pay to the order of [name of the third party]” and then signing his name (see **Figure 20.4** at centre). Once specially endorsed, the bill (or other instrument) can be negotiated further only when the special endorsee adds his own signature. A holder may convert a blank endorsement into a special endorsement by writing above the signature of the endorser words of a contractual nature consistent with the character of the instrument.

The main difference between the blank and special endorsement is the endorser’s way of indicating how the instrument can be subsequently negotiated, with or without further endorsement.

Restrictive Endorsement

A restrictive endorsement attempts to limit payment to a particular person or otherwise prohibit further transfer or negotiation. Words like “Pay to the order of XYZ **only**” represent that endorsement is restrictive in nature. There are two legitimate restrictive endorsements: collection endorsements and trust endorsements.

A *collection endorsement*, such as “For deposit” or “For collection,” is effective (See Figure 20.4, at right). However, a document with a collective endorsement can be stolen and used by another person or party very easily. For instance, suppose that John Doe endorses his paycheck “For deposit only, John Doe.” A thief steals the check, endorses their name below the restrictive endorsement, and deposits the check in Last Bank, where they have an account, or cashes it. The check moves through the collection process to Second Bank and then to First Bank, which pays the check. John has the right to recover only from Last Bank, which did not properly honour the endorsement by depositing the payment in her account.

A second legitimate restrictive endorsement is an endorsement in trust, called a *trust endorsement* (sometimes agency endorsement). Trust endorsement is used when an agent or a third party manages finances for you. Trust endorsement ensures that the agent or third party works in your best interest.

Conditional Endorsement

An endorser might want to condition the negotiation of an instrument upon some event, such as “Pay Kalpna Patel if she finishes painting my house by July 15.”

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Attributions

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Figure 20.4 Forms of Endorsement reuses “Figure 20.4 Forms of Endorsement” in “Chapter 20: Negotiation of Commercial Paper” of “The Law, Corporate Finance, and Management” by Anonymous and available under a CC BY-NC-SA 3.0 license.

Image Descriptions

Figure 20.1: Sample Bills of Exchange

The image shows two copies of a rectangular financial document similar to a cheque, one above the other, on a cream-coloured background with black printed text and numbers. The document at the top is an original or unmarked example, while the document at the bottom is stamped “ACCEPTED” across it in a bold and large font, askew to the document’s text lines.

Each document has a number of fields filled with information, including reference numbers, location names, dates, monetary figures, and company names. Notably, the lower document includes additional details superimposed upon the original text, such as authorization signatures, transaction-specific details, and a large numeral indicating the sum of money involved.

Both documents feature the same serial number, “NO. 4326,” at the top left corner and a monetary amount, “U.S. \$ 50,000.00,” top right. The amounts and text emphasize the transaction of fifty thousand U.S. dollars. The terms specify “90 days after sight,” indicating a time frame for the payment. The documents are related to the Morgan Guaranty Trust Company of New York and reference a shipment of 1,000 bags of coffee.

Significant parts of the details, especially numbers, are obscured or redacted with black lines for privacy or confidentiality reasons. The overall appearance of the documents conveys a professional and formal financial transaction.

[back]

Figure 20.3: Placement of Endorsement

The image is an illustration with a graphical representation of a personal bank check and highlights specific details about its format and dimensions. To the left side of the image is a bank check, depicted with an orange background outlined with a white border. At the top left of the check is "ABC Bank," printed in bold white letters. Below that, the check features pre-printed fields, including "Pay to the order of," followed by a line for writing the recipient's name, a dollar amount box with a dollar sign, and a line for the amount in words ending with "Dollars." The lower left corner includes a smaller font section for the account holder's name and address: "Jana O Public, 1 Main Street, Hometown, USA," followed by a routing number, account number, and check number at the bottom; all contained within a sequence of symbols and numbers, ostensibly representing the MICR (Magnetic Ink Character Recognition) line used for automated processing. The check number is also written in the top right corner.

On the right side of the illustration, there is a zoomed-in section of a check depicting the bottom part where details such as the MICR line are located. The section is outlined and tinted with varying shades of green, and the words "MICR CLEAR BAND" are prominently written along the bottom right side. Arrows and labels indicate the direction of the "Leading Edge" and "Trailing Edge" of the check. Above the MICR line, the check specifies a space for the endorsement, and there's a note for "Payee Signature" aligned to the space. Measurements are indicated by arrows pointing between lines: "3" inches for the check's width and "1 1/2" inches for the MICR clear band. Other texts include the check's routing number, bank name and address, and a date stamp area marked with an example date "April 15, 88."

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20.4 Documentary Credit

Documentary credit, or letter of credit (L/C), is one of the widely used payment methods in international trade due to its secure and safe nature. Letters of credit are used when there is a lack of trust between exporters and importers and there are economic or political risks involved in trading (FITT, 2023). Like documentary collections, in letters of credit, banks act as intermediaries and ensure that exporters perform as per contract and importers pay on time.

Let's Explore: Documentary Credit

Watch this video for an introduction to the documentary credit method of payment.



One or more interactive elements has been excluded from this version of the text. You can view them online here: <https://ecampusontario.pressbooks.pub/internationaltradefinancepart3/?p=392#oembed-1>

Source: Drip Capital. (2021, June 16). *Letter of credit | Meaning and process explained in international trade*. [Video]. Youtube. <https://www.youtube.com/watch?v=tUIziJCLtZE>

Letters of credit follow the Uniform Customs and Practice for Documentary Credit (UCP) rules, which were first published by the International Chamber of Commerce in 1933. Since then, the rules have been revised, with the current version being UCP 600. The UCP rules determine how the different parties to a letter of credit are supposed to act. These rules also apply to any banking institution involved in the transaction (ABN AMRO Bank, 2007).

Let's Explore: eUCP

The UCP 600 rules have been further refined to outline the rules for electronic transactions. These supplementary rules are available online from the International Chamber of Commerce:

Unlike documentary collection, by issuing a letter of credit, the importer's bank (or the collecting bank) promises to pay the exporter in the event that the importer does not pay as agreed upon in the sales contract. This is the reason it is considered the most secure method of payment, but it is the costliest one, too, as letters of credit generate the most fees for a bank (Becker, 2018). Using the letter of credit is a perfect solution to manage commercial risk, i.e. non-payment and non-performance risk. With a letter of credit, the buyer's bank is obligated to pay the supplier's bank on behalf of the buyer once the goods are shipped (Ahn, 2014). See **Figure 20.5** for a sample letter of credit.

**MORGAN GUARANTY TRUST COMPANY
OF NEW YORK**

INTERNATIONAL BANKING DIVISION
23 WALL STREET, NEW YORK, N.Y. 10015 March 5, 20*

Smith Tool Co. Inc.
29 Bleecker Street
New York, N.Y. 10012

On all communications please refer to

NUMBER IC - 152647

Dear Sirs:

We are instructed to advise you of the establishment by
Bank of South America, Puerto Cabello, Venezuela.....
of their IRREVOCABLE Credit No. 19845.....
in your favor, for the account of John Doe, Puerto Cabello, Venezuela.....
for U.S. \$3,000.00 (THREE THOUSAND U.S. DOLLARS).....
available upon presentation to us of your drafts at sight on us, accompanied by:

Commercial Invoice in triplicate, describing the merchandise as indicated below

Consular Invoice in triplicate, all signed and stamped by the Consul of Venezuela

Negotiable Insurance Policy and/or Underwriter's Certificate, endorsed in blank, covering
marine and war risks

Full set of straight ocean steamer Bills of Lading, showing consignment to the Bank of
South America, Puerto Cabello, stamped by Venezuelan Consul and marked "Freight Prepaid,"

evidencing shipment of UNA MAQUINA DE SELLAR LATAS, C.I.F. Puerto Cabello, from United
States Port to PuertoCabello, Venezuela

Except as otherwise expressly stated herein, this credit is subject to the Uniform Customs and Practice
for Documentary Credits (1974 revision), International Chamber of Commerce Publication No. 290.

The above bank engages with you that all drafts drawn under and in compliance with
the terms of this advice will be duly honored if presented to our Commercial Credits
Department, 15 Broad Street, New York, N.Y. 10015, on or before March 31, 20* on which
date this credit expires.

We confirm the foregoing and undertake that all drafts drawn and presented in
accordance with its terms will be duly honored.

Yours very truly,

Authorized Signature

Immediately upon receipt, please examine this instrument and if its terms are not clear to
you or if you need any assistance in respect to your availment of it, we would welcome your
communicating with us. Documents should be presented promptly and not later than 3 P.M.

Figure 20.5 Sample Letter of Credit. [See image description]

Credit: Figure 23.4: A Letter of Credit in “Chapter 23.3 Wholesale Transactions and Letters of Credit” by Anonymous. CC BY-NC-SA 3.0.

Let's Explore: Parties to a Letter of Credit



An interactive H5P element has been excluded from this version of the text. You can view it online here:

<https://ecampusontario.pressbooks.pub/internationaltradefinancepart3/?p=392#h5p-3>

Types of Letters of Credit

According to Bhogal and Trivedi (2019), letters of credit can be divided broadly into two categories: clean and documentary. Both can be subdivided into sight and usance, which can be divided into revocable and irrevocable categories. Irrevocable Letters of credit can have irrevocable unconfirmed, irrevocable confirmed, and irrevocable special categories. See the **Think About It: How to Categorize Letters of Credit** for more information on these.

Think About It! How to Categorize Letters of Credit

Explore this flow chart to understand the different types of letters of credit.



An interactive H5P element has been excluded from this version of the text. You can view it

online here:

<https://ecampusontario.pressbooks.pub/internationaltradefinancepart3/?p=392#h5p-20>

Let's Explore: Sight Letters of Credit

Watch this video to learn more about how to sight letters of credit work [4:50].



One or more interactive elements has been excluded from this version of the text. You can view them online here: <https://ecampusontario.pressbooks.pub/internationaltradefinancepart3/?p=392#oembed-2>

Source: Tradelinks Resources. (2017, May 8). *How a sight letter of credit works (letter of credit)*. [Video]. YouTube. <https://www.youtube.com/watch?v=CeZ8sJanRNE>

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Attributions

Figure 20.5 Sample Letter of Credit reuses “Figure 23.4: A Letter of Credit” in “Chapter 23.3 Wholesale Transactions and Letters of Credit “ of “The Law, Corporate Finance, and Management” by Anonymous and available under a CC BY-NC-SA 3.0 license.

Image Descriptions

Figure 20.5: Sample Letter of Credit

The image is a scanned document with text content throughout. The top portion of the document features the title “MORGAN GUARANTY TRUST COMPANY OF NEW YORK” in bold capital letters with the subheading “INTERNATIONAL BANKING DIVISION” beneath it. Just below, the address “23 WALL STREET, NEW YORK, N.Y. 10015” and the date “March 5, 20__” are aligned to the left margin. The letter is addressed to Smith Tool Co. Inc. at “29 Bleecker Street, New York, N.Y. 10012.” A reference number, “IC-152647,” is indicated in the top right corner in a box that suggests all communications refer to it.

The body of the letter informs Smith Tool Co. Inc. about an irrevocable credit established by a bank in Venezuela, with details on the required supporting documents like commercial and consular invoices, insurance policy, and bills of lading for the shipment of goods, specifically “UNA MAQUINA DE SELLAR LATAS, C.I.F. Puerto Cabello,” from the United States to Puerto Cabello, Venezuela. There are signatures and instructions on the document, and the letter closes with a request to present documents by a specific date and time.

The content is formal in tone, implying a commercial transaction involving international trade. The document appears to be professionally formatted, following the style typically used in business correspondence, with clearly defined sections for addresses, references, the body of the letter, and closing signatures.

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20.5 Factoring and Forfaiting

Over the last few years, factoring and forfaiting have gained importance as one of the main sources of export financing. Factoring and forfaiting are also considered effective in managing an organization's cash flow imbalance.

Factoring is a financial transaction whereby a business sells its **accounts receivable** to a third party (called a "factor") at a discount. Factoring makes it possible for a business to convert a readily substantial portion of its accounts receivable into cash (See **Figure 20.6**). This provides the funds needed to pay suppliers and improves cash flow by accelerating the receipt of funds. Companies factor accounts when the available cash balance held by the firm is insufficient to meet current obligations and accommodate its other cash needs, such as new orders or contracts. In other industries, however, such as textiles or apparel, for example, financially sound companies factor their accounts simply because this is the historical method of finance.

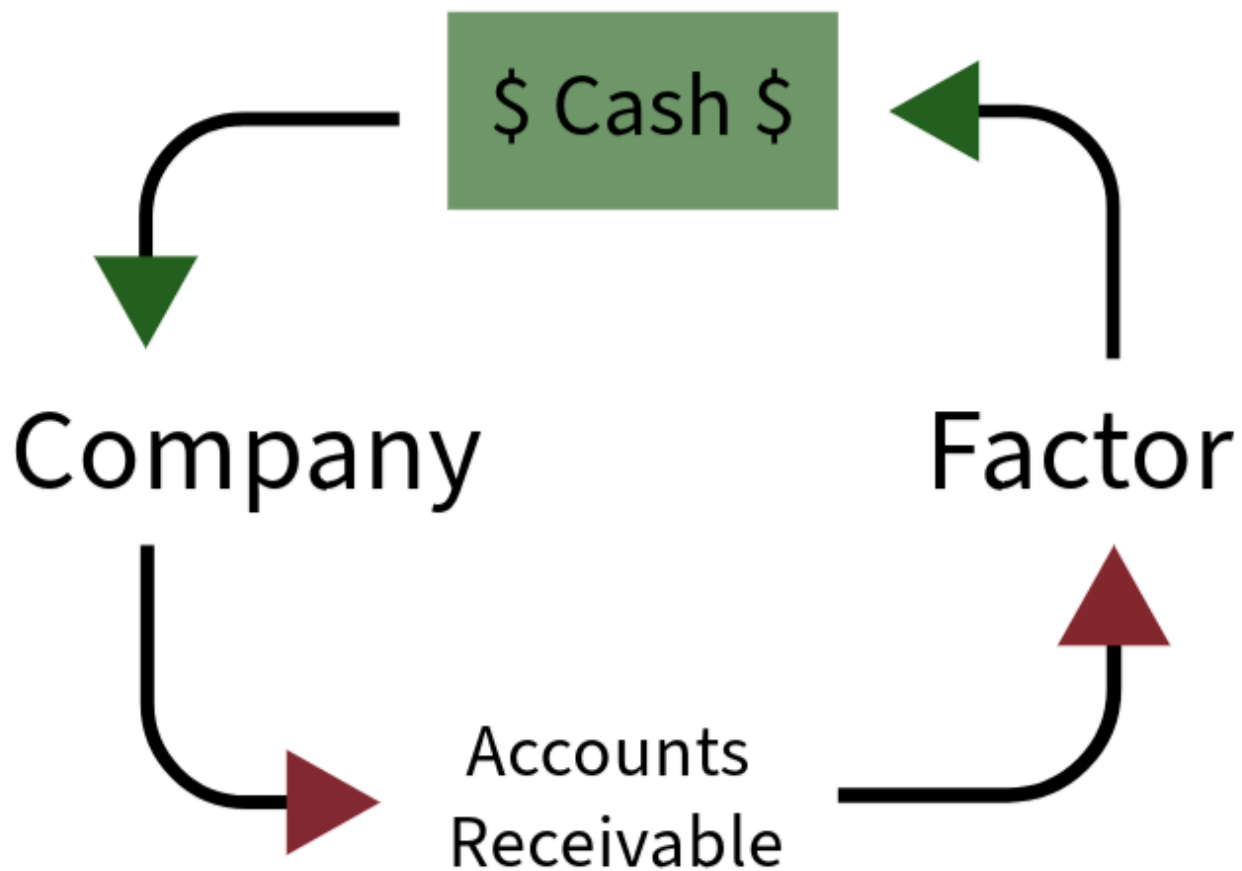


Figure 20.6: Factoring Cash Flow. [See image description]
Credit: © Conestoga College. CC BY-NC-SA.

Debt factoring is also used as a financial instrument to provide better cash flow control, especially if a company

currently has a lot of accounts receivables with different credit terms to manage. Factoring companies charge what is known as a “**factoring fee**.” The factoring fee is a percentage of the amount of receivables being factored. The rate charged by factoring companies depends on factors like:

- The industry the company is in.
- The volume of receivables to be factored.
- The quality and creditworthiness of the company’s customers.
- Days outstanding in receivables (average days outstanding).

Additionally, the factoring fee depends on whether it is recourse factoring or non-recourse factoring. Under recourse factoring, the client is not protected against the risk of bad debts. On the other hand, the factor assumes the entire credit risk under non-recourse factoring (i.e., the full amount of the invoice is paid to the client in the event of the debt becoming bad). Factoring companies usually charge a lower rate for recourse factoring than it does for non-recourse factoring. When the factor is bearing all the risk of bad debts (in the case of non-recourse factoring), a higher rate is charged to compensate for the risk. With recourse factoring, the company selling its receivables still has some liability to the factoring company if some of the receivables prove uncollectible.

Forfaiting, on the other hand, is “the purchase of a series of credit instruments such as bills of exchange, promissory notes, drafts drawn under usance (time), letters of credit or other freely negotiable instruments on a “non-recourse” basis (non-recourse means that there is no comeback on the exporter if the importer does not pay)” (Bhogal & Trivedi, 2019). The other difference between factoring and forfaiting is that factoring is a way of short-term financing, the receivables which are due within 90 days, for instance, whereas in forfaiting medium to long-term receivables are sold (Key Differences, n.d.).

Let’s Explore: Factoring vs. Forfaiting

To explore the differences between factoring and forfaiting in more detail, check out this comparison chart on the difference between factoring and forfaiting page on the Key Differences website.

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 - “Module 6: Receivables and Revenue: Factoring Accounts Receivable” by Joseph Cooke in “Financial Account” provided by Lumen Learning under CC BY 4.0.
-

Image Descriptions

Figure 20.6: Factoring Cash Flow

The image depicts a simplified circular flowchart modelling the factoring process cycle with arrows indicating the movement between the entities. Starting from a green rectangular shape with the text “\$Cash\$” representing money, a black line with an arrow extends around to the word “Company,” written in large black letters. From “Company,” another black line with an arrow points towards “Accounts Receivable” in large black letters. A line with an arrowhead extends from “Accounts Receivable” to the word “Factor.” Finally, a line with an arrow leads from “Factor” back to “\$Cash\$,” completing the cycle.

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Chapter 20 Summary

LO 20.1 Types of Trade Finance Instruments

- In trade finance, organizations always struggle to determine the pattern of payment methods to allocate responsibility for financing transactions, and thus knowing who would most need liquidity support.
- Using different trade finance instruments (also referred to as methods of payment or payment methods) in different situations is one way companies can reduce this struggle and manage commercial risk present in foreign transactions.
- Four methods of payment were discussed:
 - Open account
 - Advance payment/ cash in advance
 - Documentary collections
 - Documentary credit

LO 20.2 Open Account and Advance Payment Methods of Payment

- In the open account method of payment, the seller ships the goods to the buyer and then later credits the former's account in their own books with the required invoice amount only after receiving and checking the concerned shipping documents.
- In the advance payment method of payment, first, the buyer credits the seller's account with the required invoice amount and only then does the seller ship the goods to the buyer. The amount paid could include the entire balance or a part of the entire payment paid in advance of the due date.

LO 20.3 Documentary Collection Method of Payment

- In the documentary collection (D/C) payment method, banks act as intermediaries between the exporter and importer; the exporter's bank (remitting bank) sends documents to the importer's bank (collecting bank) along with instructions for payments, and then funds are received from the importer and remitted to the exporter through the banks in exchange for those documents.
- The documentary collection (D/C) transaction uses bills of exchange as a method of payment.
- A bill of exchange is an unconditional order in writing, addressed by one person to another, signed by the person giving it, requiring the person to whom it is addressed to pay, on-demand or at a fixed or determinable future time, a sum certain in money to or to the order of a specified person or to bearer.

LO 20.4 Documentary Credit Method of Payment

- Documentary credit, or letter of credit (L/C), is one of the widely used payment methods in international trade due to its secure and safe nature.

- By issuing a letter of credit, a buyer's bank obligates itself to pay a supplier's bank on behalf of a buyer. Once the agreement to use a letter of credit is made and the intermediate goods are shipped, the buyer's bank has to meet the obligation to pay the supplier's bank.

LO 20.5 Factoring and Forfaiting

- Factoring is a financial transaction whereby a business sells its accounts receivable to a third party (called a "factor") at a discount.
- Factoring can be with recourse or without recourse:
 - Under recourse factoring, the client is not protected against the risk of bad debts.
 - Under non-recourse factoring, the factor assumes the entire credit risk.
- Forfaiting is the purchase of a series of credit instruments such as bills of exchange, promissory notes, drafts drawn under usance (time), letters of credit or other freely negotiable instruments on a "non-recourse" basis (non-recourse means that there is no comeback on the exporter if the importer does not pay).
- Factoring is a way of short-term financing the receivables, which are due within 90 days, for instance.
- In forfaiting, medium to long-term receivables are sold.

Check Your Understanding



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Attributions

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Figure 20.3: Placement of Endorsement reuses “Figure 20.3 Endorsement Standard” in “Chapter 20: Negotiation of Commercial Paper” of “The Law, Corporate Finance, and Management” by Anonymous and available under a CC BY-NC-SA 3.0 license.

Figure 20.4 Forms of Endorsement reuses “Figure 20.4 Forms of Endorsement” in “Chapter 20: Negotiation of

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CHAPTER 22: SUSTAINABLE FINANCE

Introduction

22.1 Introduction to Sustainable Finance

22.2 Global Initiatives Towards Sustainable Finance

22.3 World Bank Toolkit for Green Financial Systems

Summary

Chapter 22 Introduction



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Learning Objectives

After reading this chapter, you should be able to

1. Introduce the concept of sustainable finance.
2. Discuss global initiatives towards sustainable finance.
3. Discuss World Bank toolkit for green financial systems.

Think About It!

Video: What Is Sustainable Finance?

Before reading this chapter, watch this video that introduces the basic idea of sustainable finance.



One or more interactive elements has been excluded from this version of the text. You can view them online here: <https://ecampusontario.pressbooks.pub/internationaltradingfinancepart3/?p=343#oembed-1>

Source: Swiss Learning Exchange. (2020, December 16). *Episode 1: What does sustainable finance mean? | Sustainable finance | SDGPlus* [Video]. YouTube. <https://www.youtube.com/watch?v=s5ZS9BuYFbQ>

Test Yourself



An interactive H5P element has been excluded from this version of the text. You can view it online here: <https://ecampusontario.pressbooks.pub/internationaltradingfinancepart3/?p=343#h5p-18>

Introduction

Businesses, now a days, not only focus on making profits but making profits sustainably. The

reason of this shift in focus is not only growing awareness of sustainability but also the pressure from customers, investors, banks and regulators to move to a more sustainable economy. In special reference to trade finance, “sustainable finance” deals with sustainable and green financial systems. There has been a lot happening around the world to shift companies’ and institutions’ focus toward environmental, social and governance (ESG) issues.

Some of the global initiatives worth mentioning would be the Paris Agreement, the United Nations Sustainable Development Goals (SDGs), and the Principles of Responsible Investment (PRI). All the signatories of these initiatives follow the standards set for achieving sustainable goals. Institutions like the World Bank are also supporting companies with certain toolkits outlining different ways to help businesses and institutions achieve their sustainability goals.

22.1 Introduction to Sustainable Finance

Traditionally, Investors (individual or corporate) have considered only two dimensions when making decisions: risk and return leading to (financial) managers working with only one goal in mind – maximizing shareholder wealth – because this is what shareholders wanted. This proposition has several advantages. First, the (financial) manager's task is simplified into just one goal: choose those projects or investments that will maximize shareholder wealth. Second, optimization across only two criteria, return and risk, allows for elegant mathematical models of how the (financial) world works.

But things are changing now. The growing awareness of sustainability has changed the landscape in which traditional investors and financial institutions used to work. "It has been stated that, because of the pressure from customers and investors, as well as regulators, banks have already begun to recognize that there are sustainability risks, and they have begun supporting the transition to a more sustainable economy through the integration of sustainability factors into their risk management models and government frameworks" (Coleton et.al., 2020).

The sustainability initiatives by financial institutions are termed *sustainable finance* or *green finance*.

Sustainable finance denotes financial systems, services and products that integrate environmental, social and governance (ESG Criteria) into business and/or investment decisions such that current social, environmental, and livelihood needs do not compromise the ability of future generations to meet their own needs.

Green finance is a narrower concept that focuses exclusively on the interface of finance with environmental issues. "Green finance" is a broad umbrella term that refers to the major shift in financial flows required to support projects that benefit the environment and society by reducing pollution or tackling climate change.

For this shift to occur, all actors, such as private banks, insurers, investors, and governments, must have strong incentives to refrain from making traditional business-as-usual investments. It also entails greening the financial sector through the practices of due diligence and risk management to ensure that green projects, or projects generally, do not harm the environment.

Let's Explore: What Is ESG Investing?

Watch this video to know about what ESG is and how it impacts an organization.



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Source: Swiss Learning Exchange. *Episode 3: What is ESG investing? | Sustainable finance | SDGPlus [Video]*. YouTube. <https://www.youtube.com/watch?v=s5ZS9BuYFbQ>

In the West, sustainable finance started out as a small, niche market dominated by religious investors who wanted their investments to reflect their religious values. However, sustainable finance is now seen as having become almost mainstream. Indeed, the sustainable finance market has experienced phenomenal growth, particularly in recent years, across all asset classes and across all regions of the world.

According to the United Nations Conference on Trade and Development (UNCTAD), in 2022, the value of the sustainable finance market was US\$5.8 trillion – an increase of 18% from the year before. UNCTAD measures the sustainable finance market as comprising funds, bonds and voluntary carbon markets. The number of sustainability funds grew from 189 funds in 2012 to 7,012 in 2022. Europe by far dominates the sustainable funds market (83% of sustainable funds under management are European). Voluntary carbon markets quadrupled in size over the 2012–2021 period. The sustainable bonds market, which is a newer market, grew 500% over the period 2017–2022.

Sustainable Investment

Sustainable investment, just like sustainable management, has many flavours and can mean different things to different people. The basic notion is that companies that are able to manage all their risks (i.e. including sustainability risks) have a competitive edge against their peers and, therefore, a higher chance of sustained business success in terms of sales and profitability. By identifying those sustainable companies, and investing in their shares (or bonds), it is expected to achieve a higher financial return – both in terms of share price development and dividends.

There are three investment philosophies commonly associated with sustainable investment:

- **Value-based investment** (often referred to as SRI, socially responsible investment or RI, responsible investment): SRI is value-based and most often applies exclusion criteria such as themes-based exclusions (e.g. arms, tobacco, alcohol, pornography) or issue-based exclusion (excluding companies with a negative human rights or environmental track record. SRI is the oldest form of sustainable investment but has remained a niche investment strategy.
- **Sustainable investment** (also referred to as ESG – environment, social, governance – investment): Sustainable investment is based on identifying sustainable investment opportunities, i.e., identifying companies that are more sustainable than their peers through a best-in-class approach. ESG research now influences investment processes in a significant number of investments, but the extent of the integration into conventional financial analysis remains limited in most cases.
- **Themes-based investment:** investment in companies or projects that capitalize on sustainability

challenges through thematic investment, e.g. in renewable energy, water (water treatment, efficiency, distribution), health, and financial inclusion (microfinance). “Clean-Tech investment” has experienced somewhat of a bubble, with low investment returns due to over-exposure in the solar PV industry that collapsed due to global overcapacities as a consequence of miss-directed subsidies.

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22.2 Global Initiatives Towards Sustainable Finance

Sustainability is becoming increasingly important to our society. However, how can organizations become more sustainable? Many initiatives have come into existence which provide a network and support for organizations that want to operate more sustainably. Some larger initiatives include:

- Paris Agreement
- United Nations Sustainable Development Goals (SDGs)
- Principles of Responsible Investment

Paris Agreement

The **Paris Agreement** is a legally binding international treaty on climate change that brings the world together to combat climate change. It was adopted by 196 Parties at COP 21 (Conference of Parties) in Paris, on December 12, 2015, and entered into force on November 4, 2016. Negotiated under the Framework Convention on Climate Change, a unit of the United Nations, it is the result of 20 years of international effort. The parties to the Agreement are sovereign states who agree to take actions to meet an ambitious goal: to hold the rise in global temperature “well below” 2 degrees Celsius, and to try for 1.5 degrees (United Nations Climate Change, n.d.b).

The main focus of the Paris Agreement is lowering greenhouse gas emissions by a system of pledge and review. Each party commits to declare a plan of climate action—its “**nationally determined contribution**” or NDC (United Nations Climate Change, n.d.a). Each NDC includes a pledge to reduce emissions by a certain amount before a target date, 2030 for most. The Agreement also requires nations to report regularly on their progress, and it lays out the accounting rules for tracking national emissions. NDCs are updated on a five-year schedule, with each update calling for steeper reductions in emissions. An update of the first NDCs occurred in 2021, with commitments beyond 2030 to be pledged in 2025.

The Agreement also covers many other aspects of a global response to the climate threat. For example, it includes provisions to strengthen efforts to adapt to a changing climate, and it sets rules and procedures for international cooperation, where countries that exceed their NDCs can sell the excess reductions to other countries to help meet their pledges (Federal Ministry for Economic Affairs and Climate Action, n.d.). Moreover, the 2015 Paris Agreement on Climate Change anchors an earlier pledge by developed countries to raise USD 100 billion per year; indeed, this is established as the “floor” from which **climate finance** should be up-scaled post-2020. The Paris Agreement states that financial flows generally must be made “consistent with a pathway towards low greenhouse gas emissions and climate-resilient development.” To this end, the public sector increasingly looks to the private sector to leverage its limited financial resources. For financial institutions, the **Paris alignment** is a process through which a financial institution aims to align its business, portfolios, and strategy with the objectives of the Paris Agreement consistent with achieving a global target of net-zero emissions by 2050.

Did You Know? Net Zero and Paris Agreement

The Paris Agreement is a globally significant agreement to limit global warming. It is important to go to the source itself to understand what the Paris Agreement states. Let's look at some of the key statements in the Paris Agreement. The preamble includes a statement about human rights, which begins with an acknowledgement "that climate change is a common concern of humankind" (United Nations, 2015, p.2).

In other words, tackling climate change is not really about saving the planet – the planet will still be here even if humans are not! Tackling climate change is about maintaining life-supporting systems for humans, their activities, and their development – humans and other species are vulnerable and dependent on the functioning and state of our natural systems, specifically our climate. Article 2 of the agreement states (p. 3):

1. This Agreement [...] aims to strengthen the global response to the threat of climate change, in the context of sustainable development and efforts to eradicate poverty, including by:
 - (a) Holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change;
 - (b) Increasing the ability to adapt to the adverse impacts of climate change and foster climate resilience and low greenhouse gas emissions development, in a manner that does not threaten food production; and
 - (c) Making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development.
2. This Agreement will be implemented to reflect equity and the principle of common but differentiated responsibilities and respective capabilities, in the light of different national circumstances.

This is a key article in the Paris Agreement. It highlights the temperature limit agreed upon, that development should integrate both adaptation and be low carbon, and that rich nations have a greater responsibility to address climate change. This last point reflects that rich countries have more capability to address climate change, but also recognizes that these nations' economic development resulted from them producing the majority of global emissions to date (we will discuss this further later in the chapter). This is what the climate negotiations at the Conference of Parties (COP) every year are about nations coming together to discuss progress, commitments, and responsibilities.

In Article 4, the agreement further states that

1. In order to achieve the long-term temperature goal set out in Article 2, Parties aim to reach global peaking of greenhouse gas emissions as soon as possible, recognizing that peaking will take longer for developing country Parties, and to undertake rapid reductions thereafter in accordance with best available science, so as to achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century, on the basis of equity, and in the context of sustainable development and efforts to eradicate poverty. (p. 4)

This article actually refers to “net zero” – the balancing of carbon sources with sinks. However, note that it is in the context of Article 2, and needs to be paired with rapid reductions. It is not possible, at this point, to create enough carbon sinks to absorb our emissions.

Download the entire Paris Agreement [PDF] from the United Nations Climate Change website.

United Nations Sustainable Development Goals (UN SDGs)

The Sustainable Development Goals (SDGs) are a set of 17 goals, with 169 targets, that are “a blueprint to achieve a better and more sustainable future for all” (United Nations, n.d.). All 193 of the world’s countries have committed to these goals, which are to be achieved by 2030.

Organizations, including financial companies, have a part to play in meeting the SDGs. The United Nations Global Compact (UNGC) was launched in 2000 to assist them to do this. The UNGC is the largest global corporate sustainability initiative and has over 23,000 signatories from 166 countries.

UNGC signatories commit to responsibility in their everyday operations, strategies and culture across four areas: human rights, labour, environment and anti-corruption. UNGC signatories are required to implement ten principles, shown in **Figure 22.1**, and communicate how they are implementing these principles in their annual or sustainability report. The UNGC also provides education and training to its signatories on how they can more effectively embed the SDGs into their businesses.

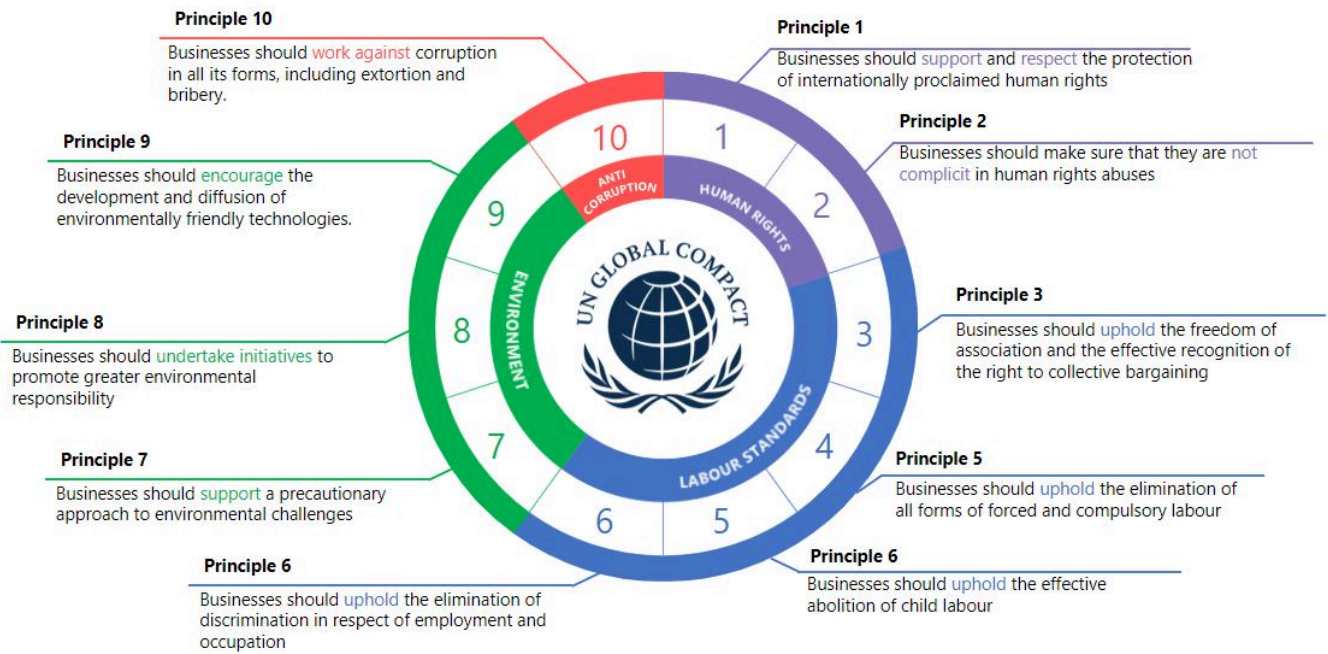


Figure 22.1 UN Global Compact's 10 principles. [See image description]

Source: Adapted from *The Ten Principles of the UN Global Compact* by the United Nations Global Compact. The logo is a trademark of the United Nations Global Compact.

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Let's Explore: UN Sustainable Development Goals



United Nations Sustainable Development Goals poster [See image description].
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To learn more about the UN Sustainable Development Goals, explore this interactive map created by Working Group: FabLabs and Sustainable Development Goals. Click on each goal to learn more, zoom-in to reveal the subgoals by clicking on the node to the right of each goal.

- [Interactive Map of the United Nations Sustainable Development Goals](#)

For a full-text version of the goals, visit the UN SDG website.

- [United Nations Sustainable Development Goals Website](#)

Principles of Responsible Investment

The United Nations-supported Principles for Responsible Investment (PRI) is another important large global sustainability initiative. The PRI was designed to help the finance industry – asset owners, investment managers and service providers – to become more sustainable by integrating ESG into investment and operating decisions.

The PRI was launched in 2006 with 46 signatories. The number of signatories has grown astronomically since

its launch, and today, there are over 5,300 global signatories. PRI signatories commit to six principles on how they will operate and invest (See **Figure 22.2**). Signatories are also required to report annually to the PRI on their progress on ESG issues. Signatories that fail to report for two years are delisted.

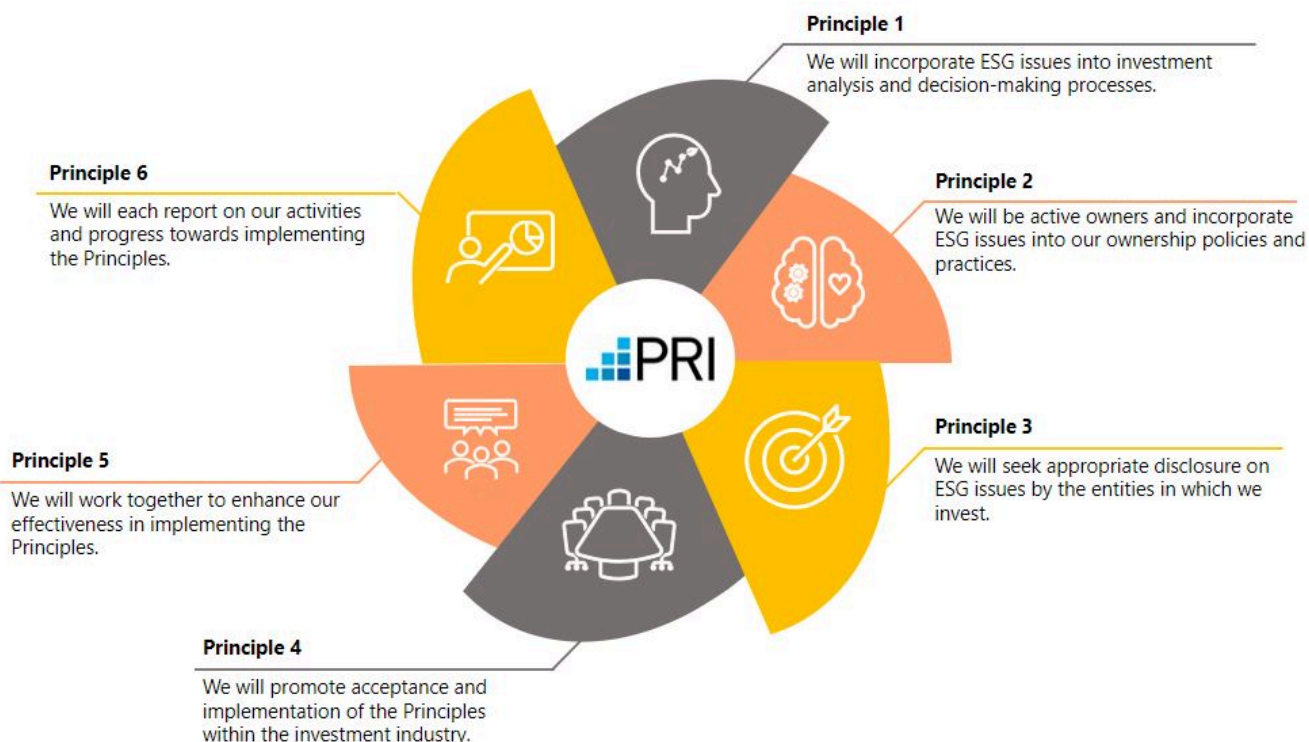


Figure 22.2: The Six Principles for Responsible Investment. [See image description]

Source: Adapted from *What are the Principles for Responsible Investment?* The PRI logo is a trademark of Principles for Responsible Investment.

Credit: "The Six Principles for Responsible Investment" in *Frameworks for Sustainable Investment* © 2024 by The University of Queensland, CC BY-NC 4.0.

The PRI also provides education and investor tools for its signatories to help them to become more sustainable. PRI conferences and workshops provide an opportunity for signatories and academics working in ESG to share knowledge, information, and networks.

In addition, the PRI facilitates collective action on ESG issues e.g., writing joint letters to companies, engaging or voting collectively on ESG issues. A recent example of a collective action coordinated by the PRI is when signatories could sign a letter addressed to Nike for reparations because their largest supplier had not paid wages to 4,500 garment workers in Cambodia and Thailand.

Other Sustainability Initiatives

Recent years have seen a proliferation of voluntary sustainability initiatives. **Table 22.1** highlights some of those larger initiatives.

Table 22.1: Sustainability Initiatives.

Source: Sustainability Initiatives in Frameworks for Sustainable Investment, © 2024 The University of Queensland, CC BY-NC 4.0

Initiative name	Summary	Number and type of signatories
Climate Action 100+	Investor-led initiative to engage with companies on how they are taking climate-related action. Launched in 2017.	Over 700 investors
Net Zero asset owner alliance	Convened by the UN. Investor-led initiative of institutional investors who commit to transitioning their portfolios to net zero emissions by 2050. Launched in September 2019.	86 asset owners, with combined worth of US\$11 trillion
Net Zero asset managers	Convened by the UN. Asset managers who support and commit to investment aligned with achieving net zero emissions by 2050. Launched in December 2020.	Over 315 signatories with US\$59 trillion in AUM
Net Zero banking alliance	Convened by the UN. Leading global banks who commit to financing climate action to meet net zero emissions by 2050. Launched in April 2021.	133 banks worth US\$74 trillion (41% of banking assets globally)
New Plastics Economy	Launched by the Ellen MacArthur Foundation and the UN Environment Programme. Targets the production, use, and reuse of plastics and works towards a circular economy for plastics. Launched in 2018.	Over 500 signatories, including corporations and governments
High ambition coalition to end plastic pollution	Intergovernmental group to end plastic use 2040. Launched in March 2022.	60 countries
Valuing water finance initiative	Investor-led group facilitated by Ceres, a sustainability NGO. Designed to engage with companies that use and pollute a large amount of water-on-water management and protect global freshwater resources. Launched in August 2022.	85 investor signatories with approximately US\$14 trillion in assets under management.
High ambition coalition for nature and people	Intergovernmental group to conserve and manage at least 30% of global land and oceans by 2030. Launched in January 2021.	115 countries

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Figure 22.1: UN Global Compact's 10 principles reuses “UNGC Ten Principles” in Frameworks for Sustainable Investment by Jacquelyn Humphrey and Saphira Rekker, from Sustainable Finance, © 2024 by The University of Queensland, licensed under a Creative Commons Attribution-NonCommercial 4.0 International License, except where otherwise noted.

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Image Descriptions

Figure 22.1: UN Global Compact's 10 principles

The image presents a thematic circular diagram titled “UN GLOBAL COMPACT” in the centre. The diagram has four concentric rings, divided into ten segments representing ten principles, covering areas like human rights, labour standards, environment, and anti-corruption. Each segment is colour-coded and labelled with its corresponding principle, ranging from 1 to 10. The innermost circle is coloured in navy blue, featuring the title and a laurel wreath emblem. Moving outward, the rings alternate in shades of green, purple, blue, and red, with white text stating the specifics of each principle. The principles are summarizing business responsibilities, such as working against corruption, supporting human rights, and encouraging environment-friendly technologies. The principles are listed as follows:

- Human Rights (Purple)
 - Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights.
 - Principle 2: Businesses should make sure that they are not complicit in human rights abuses.
- Labour Standards (Blue)
 - Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.
 - Principle 4: Businesses should uphold the elimination of all forms of forced and compulsory labour.
 - Principle 5: Businesses should uphold the effective abolition of child labour.
- Environment (Green)
 - Principle 6: Businesses should uphold the elimination of discrimination in respect of employment and occupation.
 - Principle 7: Businesses should support a precautionary approach to environmental challenges.
 - Principle 8: Businesses should undertake initiatives to promote greater environmental responsibility.
 - Principle 9: Businesses should encourage the development and diffusion of environmentally friendly technologies.
- Anti-Corruption (Red)
 - Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery.

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United Nations Sustainable Development Goals Poster

The image is a colorful infographic titled “Sustainable Development Goals.” It includes a grid of 17 small, square icons, each representing one of the United Nations Sustainable Development Goals (SDGs). The title “Sustainable Development Goals” is located at the top right, with the word “GOALS” written in blue, with the letter “O” formed by a multicoloured circle symbolizing the 17 goals.

1. Icon for “No Poverty” with a red background featuring a white graphic of a family: two adults and two children holding hands.
2. Icon for “Zero Hunger” with a dark yellow background, illustrating a white bowl with lines indicating steam.
3. Icon for “Good Health and Well-Being” with a bright green background, depicting a white heartbeat line with a heart.
4. Icon for “Quality Education” with a dark red background, showing a white open book and pencil.
5. Icon for “Gender Equality” with a dark pink background featuring a combined male and female gender symbol.
6. Icon for “Clean Water and Sanitation” with a cyan background, displaying a white glass of water with a drop.
7. Icon for “Affordable and Clean Energy” with a yellow background, illustrating a white sun with a power button in the center.
8. Icon for “Decent Work and Economic Growth” with a reddish-brown background, featuring a white graph with an upward trend.
9. Icon for “Industry, Innovation, and Infrastructure” with an orange background, showing three white connected hexagons.

10. Icon for “Reduced Inequalities” with a bright pink background, depicting four white arrows pointing inward.
11. Icon for “Sustainable Cities and Communities” with a dark orange background, showing white city buildings.
12. Icon for “Responsible Consumption and Production” with an orange background featuring a white infinity loop.
13. Icon for “Climate Action” with a green background, displaying a white eye with a globe.
14. Icon for “Life Below Water” with a blue background, showing a white fish and waves.
15. Icon for “Life on Land” with a green background, illustrating a white tree and bird.
16. Icon for “Peace, Justice, and Strong Institutions” with a dark blue background featuring a white dove with an olive branch and a gavel.
17. Icon for “Partnerships for the Goals” with a dark blue background, showing five white interconnected circles.

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Figure 22.2: The Six Principles for Responsible Investment

The image displays a circular diagram divided into six segments, each representing a principle related to investment analysis and decision-making. The diagram’s segments are colour-coded with different shades of orange, grey, and yellow. At the centre of the diagram is the “PRI” logo. Each segment has a number and a brief description of the principle it represents, along with a distinct icon that visually represents the principle’s theme. Starting at the top and moving clockwise, the principles are numbered from 1 to 6:

- Principle 1: We will incorporate ESG issues into investment analysis and decision-making processes.
- Principle 2: We will be active owners and incorporate ESG issues into our ownership policies and practices.
- Principle 3: We will seek appropriate disclosure on ESG issues by the entities in which we invest.
- Principle 4: We will promote acceptance and implementation of the Principles within the investment industry.
- Principle 5: We will work together to enhance our effectiveness in implementing the Principles.
- Principle 6: We will each report on our activities and progress towards implementing the Principles.

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22.3 World Bank Toolkit for Green Financial Systems

Despite growing recognition of the role that the financial sector could play in reaching countries' climate and environmental goals, many countries, including the World Bank's client countries, still do not have a clear picture of the actual interventions required to green the financial system. Greening the financial system can be understood in the context of both risk and opportunity. In the context of opportunity, greening the financial system refers to increasing financing flows into sectors that contribute to climate and environmental objectives. In the context of risk, greening the financial system refers to the management of climate-related and environmental financial risks.

As described in the World Bank's *Toolkits for Policymakers to Green the Financial System* (2021), the creation of stable, sound, and transparent financial sectors requires mobilizing capital towards green growth objectives. The toolkits provide a detailed and practical implementation of six different areas (toolkits) to green the financial system. These areas are:

- Strategy and coordination
- Build skills and capabilities
- Financial regulation and central bank activities
- Increasing transparency
- Green(ing) FIs
- Green financial tools and instruments

Although the 17 toolkits discussed further are presented independently to clearly present the different options available to public authorities, there are significant synergies between the toolkits. In some cases, applying different toolkits together as a package may be more effective, depending on a country's local context and priorities. For example, certain toolkits, such as those for creating a national platform on green finance or participating in national and international networks, could be a good place to start countries' green finance journey and could be considered "cross-cutting" toolkits.

Strategy and Co-ordination

Strategy and co-ordination refers to the alignment of financial sector policies, regulations, and incentives with national environmental and climate goals by:

Developing a Green Finance Roadmap for the Financial Sector

Green finance roadmaps can provide the strategic framework to enable or accelerate a country's ability to deliver on its climate and sustainable development goals while enhancing the financial sector's competitiveness and economic resilience. A roadmap can help prioritize actions and coordinate activities across different stakeholders involved, including financial and environmental policymakers at the national and regional levels, supervisors, regulators and sector participants.

Developing a National Climate Finance Strategy

The process of defining a clear and actionable climate finance strategy is instrumental in delivering scaled investment to support the implementation of national climate plans. The strategy needs to ensure that over the long term, the public and private sectors can meet the required investment to respond to a country's climate mitigation and adaptation needs. The strategy should clearly define the role of the private sector, and articulate how climate objectives can be mainstreamed into common financial sector policies and planning practices, such as through national budgeting, risk management and investment processes. The strategy should clearly articulate whether changes in financial sector regulation are needed to address financial sector market failures, such as missing or incomplete consideration and pricing of climate risks and opportunities.

Creating a National Platform or Taskforce on Green Finance

A national platform on green finance can be an important mechanism to ensure coordination between stakeholders and accelerate the growth of green finance. Countries may not have an organizational structure yet that links the key stakeholders, including the relevant ministries (e.g., environment, infrastructure, finance), central banks, financial supervisors, financial sector participants, other technical experts, or relevant external stakeholders. A platform could form a green finance program's overarching coordinating, technical or implementation body. Depending on a country's progress and objectives, this could take the form of a task force to design the basis of a country's green finance strategy (e.g., China or the UK), provide the technical and institutional support to facilitate the implementation of specific goals, or function as a platform for key stakeholder engagement and development of initiatives (e.g., Netherlands).

Build Skills and Capabilities

Organizations can enhance understanding and awareness of climate/environmental risks and opportunities by:

Participation in Green Finance-Related International Networks

A multitude of international networks can be leveraged to support countries in their efforts to meet domestic climate goals and scale up green finance. Specific objectives range from enhancing green investments in the financial sector to capacity building or coordinating across financial regulators/supervisors. These networks have proven to be powerful mechanisms for sharing knowledge and best practices, signalling policy commitments, and facilitating the joint development of international standards.

An international field of cooperative authorities has developed as countries face similar challenges to mobilize green finance and address climate and environmental risk. Joining existing networks can help kickstart domestic action on green finance. Where it is not feasible to join networks, engaging with relevant standards as they develop to ensure alignment with international best practices is important. Many international regulatory bodies have now set up dedicated green finance-related working groups or task forces. Examples include the Basel Committee on Banking Supervision, the International Association of Insurance Supervisors, the International Organization of Securities Commissions, the International Organization of Pension Supervisors and the International Accounting Standards Board.

Supporting Financial Institutions' Commitments to Align with the Paris Agreement

There is international consensus on the urgent need to align financial flows with the pathway towards carbon-neutral and climate-resilient development. Encouraging financial institutions to consider the Paris alignment of their portfolios, businesses, and strategy can help them capture the opportunities created by the low-carbon transition and manage the associated risks. Ultimately, Paris-aligned financial institutions can help fill the financing gap to meet (and raise the ambition) of a country's climate goals.

Financial Regulation and Central Bank Activities

Financial regulation and central banks focus on improving the stability and soundness of the overall financial system. Their activities act as catalysts to change the behaviour of financial institutions to accelerate the low-carbon transition. This can be achieved by:

Conducting Climate-Related and Environmental Risk Assessment

A climate risk assessment, potentially including stress testing and scenario analysis, provides a fact base for dialogue between stakeholders and supports the improvement of risk management practices. Insights into the main climate-related financial risks will help macro- and micro-prudential supervisors focus their attention on the most relevant risks, as well as provide starting points for financial institutions to improve their internal risk management (e.g., mapping the main identified risks to their specific business model and balance sheet). The scope of assessments can potentially be expanded to include other environmental and social risks, including nature-related and biodiversity risks.

Incorporating Climate-Related and Environmental Risk into Supervisory Practice

Climate-related and environmental risks can have an impact on financial stability as well as the safety and soundness of financial institutions, or on how well financial markets are functioning. The consideration of these risks is therefore relevant to the mandate of central banks, the prudential supervisor, and capital markets authorities, which play a key role in ensuring that these are integrated into its supervisory practices and financial stability monitoring. A growing number of central banks, regulators, and supervisors across the globe have issued warnings on the impact of climate and environmental risks on the stability of their financial systems, or the impact on financial markets or financial market participants.

Issuing Supervisory Guidance on Climate-Related and Environmental Financial Risk

Issuing supervisory guidance is a key component of the supervisory response and plays an important role in clarifying authorities' expectations in relation to regulated institutions' response to climate-related and

environmental risks. Setting supervisory expectations is an important mechanism to drive financial institutions to action and enhance their approaches to managing climate-related and environmental risk. Initiatives are underway in many jurisdictions to issue supervisory guidance, which tend to focus on (a combination of) several key areas: governance, strategy, risk management, scenario analysis and stress testing, and disclosure. The scope often covers different types of institutions. Banks and insurers, in particular, are often covered by the same supervisory guidance. Some may be even broader and also include asset managers, pension funds, or other institutional investors.

Exploring Greening of Central Banks' Activities

Increasing attention is being paid to the potential of greening central banks' activities and operations. While the thinking around many of these issues is still in the early stages, these are important options to consider when aligning central banks' activities with the greening of the financial system. This toolkit provides a high-level overview of several options for central banks across certain key operations, including monetary policy and portfolio management. It is important to note that many of these options are still under review by the international central banking community, including under the Network for Greening Financial System (NGFS), and may not be deemed feasible (at this stage) depending on mandates, legal environments, or other individual assessments. It should also be noted that much of the experience to date stems from advanced economies, so emerging market and developing economies should carefully consider their local context before moving forward.

Increasing Transparency

Increasing transparency leads to long-termism in the financial system. The ultimate goal here is enhancing market transparency and understanding of climate-related and environmental risks and opportunities in order to inform investment processes and facilitate communication with clients, beneficiaries and other stakeholders – with the ultimate goal of facilitating the efficient allocation of capital in the transition to a low-carbon and climate-resilient economy.

Developing and Implementing Climate-Related and Environmental Disclosure and Reporting Standards

Investors and lenders need adequate information on climate-related and environmental risks and opportunities to understand, price and manage the risk in their portfolios and operations. Climate-related and environmental financial disclosure of both financial institutions and corporations in the real economy is imperative in providing the necessary information for financial market actors to consider climate or environmental-related risks and opportunities and align their capital accordingly. These disclosures have many uses in the investment process. For example, the information disclosed can be integrated into a valuation model, used for screening, to inform thematic investments, or to measure the impact of companies and/or funds. Public disclosure will be an additional incentive for firms to step up their efforts in this space.

Developing and Adopting a National Green Taxonomy

A green taxonomy offers a uniform and harmonized way of determining what economic activities can be considered environmentally sustainable. The World Bank is developing a series of Country Climate and Development Reports, which is expected to present a typology of decarbonization and adaptation policies. This may be a useful reference in the future to inform the development of a country's green taxonomy.

It can perform a variety of functions:

- be a core building block of a country's green finance objectives;
- support financial actors in making informed decisions on environmentally friendly investments, scaling up finance for climate mitigation, adaptation and other environmental goals;
- facilitate reliable and comparable disclosures relating to sustainability risks and opportunities;
- provide a consistent starting point for standard setters and product developers; and
- enable tracking and reporting of public expenditures and/or private investments addressing specific environmental or climate goals.

A taxonomy is an important complement to actions taken by authorities to align environmental regulations and fiscal policy to support greening of the real economy. A taxonomy can further promote market integrity by reducing “greenwashing.” It also reduces fragmentation resulting from market-based initiatives and national practices which lack coherency.

Did You Know? Greenwashing

Greenwashing occurs in many different forms, and regulatory bodies are increasingly focused on ensuring that accurate information is provided – particularly in relation to climate change. For example:

The EU has developed several different requirements on what can be labelled as a sustainable or “Paris-aligned” activity or investment product.

In June 2022, the Australian Securities and Investment Commission (ASIC) released guidelines on avoiding greenwashing in sustainability products and has made action against greenwashing one of its enforcement priorities for 2023 and 2024. In 2023, ASIC sued several financial institutions for greenwashing.

In addition, international guidelines to prevent greenwashing in climate reporting have been provided by the UN Integrity Matters Report, which was focal during COP27.

Green(ing) Financial Institutions

Greening financial institutions refers to improving risk-adjusted returns of green investments, support policy reforms, and catalyze new markets for green growth.

Greening a National Development Bank or Other Domestic Public Finance Institution

As the link between domestic governments, international finance and local private sector actors, National Development Banks (NDBs) and other domestic public finance institutions occupy a key position in the green finance landscape. Even if NDBs are often small in size, these institutions can already have a major influence on the country's development and infrastructure as well as the government's climate-related plans and policies, due to their proximity to government. A much-needed additional benefit in response to the COVID19 crisis is that NDBs can play an important countercyclical role, providing credit to compensate for a temporary reduction in loans from private sector financial institutions during times of economic downturn. NDBs generally have the institutional support from governments and the understanding of local sectors needed to provide technical support and mobilize (private) investments. Therefore, instead of creating a new entity, governments could adapt existing public banks to increase and mainstream green finance within their operations. The focus may primarily be on development banks, but this could equally apply to public banks operating as infrastructure, industrial or commercial banks.

Creating a National Green Finance Entity or Green Bank

Public sector funding alone cannot meet the financing needs to achieve climate and environmental objectives. Dedicated national green finance entities or green banks can address the need for increased domestic green finance, with a specific focus on scaling up private finance. These entities could be considered as a type of public Strategic Investment Fund (SIF), providing debt or equity financing for specific green objectives.

Green Financial Tools and Instruments

Green financial tools and instruments lead to improving risk-adjusted returns of green investments, supporting policy reforms, and catalyzing new markets for green growth. There are many ways to achieve it:

Stimulating Corporate Green Bond Issuance

Standards and guidance by regulatory bodies can raise visibility and awareness of green bonds as well as guide the bond issuance process. This can include guidance on (or requirements for) definitions, management and use of bond proceeds, reporting, and incentive measures. Regulators and policymakers have several tools at their disposal to drive the development of green bond markets and stimulate domestic bond issuance.

Issuing Green Sovereign Bonds

Green bonds have the potential to provide a strong signal of a country's commitment to meeting its climate goals and green growth objectives. They could be an effective tool for governments in raising capital to finance their NDCs or sustainable projects, and there may be numerous other benefits to issuing a green sovereign bond in addition to attracting finance. For example, they can help governments support local green finance market development by raising the profile of green bonds with potential issuers. Sovereign green bonds that

have been issued in emerging markets to date have had a slightly longer maturity profile than the sovereign's conventional bond portfolio; in addition, some emerging markets have been able to further diversify their investor base through the issuance of certified green bonds, tapping into growing global investor interest in these assets.

Promoting Use and Development of Blended Finance Products for Green Finance Purposes

Given the limited availability of public/concessional finance, **blended finance** mechanisms can help a country bridge the financing gap for its green finance objectives. In situations where private investments are not commercially viable due to high risks or non-commercial returns, suitable financial structuring through blended finance can unlock private investment. Blended finance aims to attract commercial capital toward projects that benefit society while providing financial returns to investors. Blended finance can help mitigate (perceived or actual) risks or uncertainties associated with new, unproven technologies or first-of-their-kind projects by shifting the investment risk-return profile with flexible capital and favorable terms. It helps address specific investment risks and rebalance risk-reward profiles of pioneering impact investments so that they have the potential to become commercially viable over time.

Did You Know? Sustainability Linked Bonds

Sustainability-linked bonds are instruments which incentivize the borrower's achievement of ambitious, predetermined sustainability performance objectives, measured using key performance indicators. Sustainability-linked bonds are different from green bonds in that it is a "performance-linked" instrument (rather than a "use-of-proceeds" instrument), with interest rates or a refinancing mechanism tied to achieving sustainable goals. Unlike green bonds, proceeds of sustainability-linked bonds are not required to be **ringfenced**. A sustainability-linked bond is a relatively new type of instrument but is increasing in popularity as a way to align borrowers' sustainability profile with lending terms.

Let's Explore: The Green Bond Market

Watch this video to learn more about the role of green bonds in financial markets.



One or more interactive elements has been excluded from this version of the text. You can view them online here: <https://ecampusontario.pressbooks.pub/internationaltradefinancepart3/?p=358#oembed-1>

Source: CNBC. (2021, May 28). How the \$1 trillion green bond market works [Video]. YouTube. <https://www.youtube.com/watch?v=ruXLhpXvhOE>

Examples of Key Blended Finance Categories

Guarantees and Insurance

Government authorities can offer guarantees to pay an agreed-upon amount of a loan or other financial instrument in the event that the guaranteed party cannot reimburse the claims or a project otherwise fails. Guarantees are flexible instruments which can be tailored to different circumstances and types of risk. Providing tailored insurance products needed to hedge specific types of risk can provide further assurance for private investors.

Green Credit Lines

Public (finance) authorities can provide green credit lines to commercial banks, which can be on-lent to end-borrowers for low-carbon projects. Such credit lines aim to demonstrate the commercial viability of green financing as an attractive business model, thus laying the basis for a self-sustaining market for financing different types of projects, for example, sustainable energy and energy efficiency projects.

Co-Lending and Credit Enhancement

Public authorities can directly co-invest alongside a commercial bank in green projects to improve project economics. This funding can have different structures, terms and longer tenors. Taking a subordinated position or providing first-loss capital structures can further mitigate project risks and provide additional incentives for private players to step into the market.

Stimulate Origination of Green Loans or Sustainability-Linked Loan Products

The green loan market provides significant potential to scale up green finance activity. This can be a core aspect of increasing banks' involvement in the green finance market and simultaneously supporting the demand

side. The banking sector's green lending activity is often still limited and labels for green lending products are missing. A key category of green loan products is green mortgages, meaning a bank or mortgage lender offers a house buyer preferential term if they can demonstrate that the property meets (or will meet) certain environmental or energy efficiency standards. Other examples of the main categories include loans for energy efficiency improvements, renewable energy, sustainable agriculture practices, climate change adaptation or clean transportation financing.

Let's Explore: Toolkits for Policy Makers

To read more about implementation, checklist and examples of these 17 toolkits, download the World Bank publication, *Toolkits for Policymakers to Green the Financial System* [PDF].

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Chapter 22 Summary

22.1 Sustainable Finance

- The sustainability initiatives by financial institutions are known as *sustainable finance* or *green finance*.
- Sustainable Finance denotes financial systems, services and products that integrate environmental, social and governance (ESG criteria) into business and/or investment decisions such that current social, environmental, and livelihood needs do not compromise the ability of future generations to meet their own needs.
- “Green finance” is a broad umbrella term that refers to the major shift in financial flows required to support projects that benefit the environment and society by reducing pollution or tackling climate change.

22.2 Global Initiatives towards Sustainable Finance

- The Paris Agreement is a legally binding international treaty on climate change that brings the world together to combat climate change.
- The main focus of the Paris Agreement is lowering greenhouse gas emissions through a system of pledge and review. The parties to the Agreement are sovereign states who agree to take action to meet an ambitious goal: to hold the rise in global temperature “well below” 2 °C and to try for 1.5 °C.
- The Sustainable Development Goals (SDGs) are a set of 17 goals, with 169 targets, that are “a blueprint to achieve a better and more sustainable future for all.” All 193 of the world's countries have committed to these goals, which are to be achieved by 2030.
- The United Nations-supported Principles for Responsible Investment (PRI) is another important large global sustainability initiative. The PRI was designed to help the finance industry – asset owners, investment managers and service providers – to become more sustainable by integrating ESG into investment and operating decisions.
- There are some other large initiatives as well, like Climate Action 100+, Net Zero Asset Owner Alliance, Net Zero Asset Managers, etc.

23.3 The World Bank Toolkit for Green Financial Systems

- The creation of stable, sound and transparent financial sectors requires mobilizing capital towards green growth objectives. The toolkit provides a detailed and practical implementation of six different areas (toolkits) to green the financial system.
 - Strategy and coordination
 - Understanding and awareness of climate/environmental risks and opportunities
 - Financial regulation and central banks focus on improving the stability and soundness of the overall financial system

- Increasing transparency
- Greening financial institutions
- Green financial tools and instruments

Check Your Understanding



An interactive H5P element has been excluded from this version of the text. You can view it online here:
<https://ecampusontario.pressbooks.pub/internationaltrade/financepart3/?p=362#h5p-19>

References and Attributions

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Figure 22.1 UN Global Compact’s 10 principles reuses “UNGC Ten Principles” in Frameworks for Sustainable Investment by Jacquelyn Humphrey and Saphira Rekker, from Sustainable Finance, © 2024 by The University of

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Chapter Opening Photo: “green plant on brown round coins” by micheile henderson is used under the Unsplash license.

Glossary

acceptance of bills of exchange

a promise to pay the creditor when the drawee of a usance or time bill of exchange writes the words “accepted” above their name and signature across a bill

accounts receivable

sales for which a firm has not yet been paid

advance payment

payment to a seller before goods are shipped

American option

an option that the holder can exercise at any time up to and including the exercise date

balance of payment

a record of all monetary transactions between a country and the rest of the world

balance of trade

the difference between the monetary value of exports and imports in an economy over a certain period of time

balance sheet

statement that reports a company's assets, liabilities, and shareholder equity at a specific point in time

bilateral development bank

a financial institution set up by one individual country to finance development projects in a developing country and its emerging market

blended finance

the strategic use of public finance in combination with private finance and philanthropy to support sustainable development in developing countries

call option

an option that gives the owner the right, but not the obligation, to buy the asset at a specified price on some future date

central bank

the principal monetary authority of a country or monetary union; it normally regulates the supply of money, issues currency, and controls interest rates

central bank intervention

purchases or sales of foreign currency intended to manage the exchange rate

change in official international reserves

the change in the Government of Canada's foreign currency balances.

climate finance

public finance that promotes multilateral efforts to combat climate change through the UN Framework Convention on Climate Change (UNFCCC)

commercial risk

the risk of non-payment and non-performance in trade transactions

comparative advantage

the ability of one supplier to produce a good or service at lower opportunity cost than other suppliers

confirmation

specifies the responsibility of confirming bank and makes them liable to pay in case the issuing bank fails to pay

convertible currency

a national currency that can be freely exchanged for a different national currency at the prevailing exchange rate

credit

an addition to certain accounts

currency devalue (revalue)

a reduction (increase) in the international value of the domestic currency

currency peg

a policy in which a national government or central bank sets a fixed exchange rate for its currency with a foreign currency or a basket of currencies and stabilizes the exchange rate between countries

current account

a record of trade in goods, services, and transfer payments

debit

a sum of money taken out of an account

debt forgiveness

the partial or total writing down of debt owed by individuals, corporations, or nations

derivative

a security that derives its value from another asset

documentary collection

a financial transaction in which an exporter's (seller's) bank presents documents to an importer's (buyer's) bank to facilitate payment

documentary letter of credit

a legal document issued by an importer's (or buyer's) bank which promises to pay a specified amount of money when the bank receives documents from an exporter (or seller) about the shipment

economic exposure

the risk that a change in exchange rates will impact the number of customers a business has or its sales

equilibrium exchange rate

determined when supply is equal to demand in the foreign exchange market

European option

an option that the holder can exercise only on the expiration date

exchange rate

the price of one currency in terms of another currency

exchange rate regime

the policy choice that determines how foreign exchange markets operate

exercising

choosing to purchase or sell the asset underlying a held option according to the terms of the option contract

factoring

a financial transaction in which a business sells its accounts receivable at a discount to a third party, known as a factor

factoring fee

the percentage of the amount of receivables being factored which goes to the factor

financial account

the record of capital transfers and the purchases and sales of real and financial assets

financial institution

any company or firm involved in the financial system and the regulatory agencies and organizations that oversee the financial system

financial intermediation

the process in which financial institutions act as intermediaries between suppliers and demanders of funds

financial option

an agreement that gives the owner the right, but not the obligation, to purchase or sell an asset at a specified price on some future date

financial system

a set of institutions (such insurance companies and banks) and policies (such as regulations and laws) that allow economic transactions to occur

fixed exchange rate

an exchange rate set by government policy that does not change as a result of changes in market conditions

foreign direct investment

the purchasing of at least ten percent ownership in a firm in another country or the starting of a new enterprise in a foreign country

foreign exchange

the changing of currency from one country for currency from another country

foreign exchange market

the market in which people or firms use one currency to purchase another currency

forfaiting

a method of financing in which an exporter sells accounts receivables to a third party through bills of exchange, promissory notes, drafts drawn under usance (time), letters of credit in exchange for immediate cash

forward contract

a contractual agreement between two parties to exchange a specified amount of assets on a specified future date

forward rate

a rate specified today for the sale of currency on a future date

future contract

a standardized contract to trade an asset on some future date at a price locked in today

global financial system

a system composed of financial institutions and regulators that act on an international level

globalization

the trend in which buying and selling in markets have increasingly crossed national borders, especially by large companies engaging in business in multiple countries

green finance

financing of projects and initiatives that support the environment and society by reducing pollution or tackling climate change

gross domestic product (GDP)

measure of the size of total production of goods and services in an economy in a single year

hedging

taking an action to reduce exposure to a risk

inflation

a general and ongoing rise in price levels in an economy

interest rate

the percentage of an amount of money charged for its use per some period of time (often a year)

international investment position (IIP)

the total value of foreign assets held by domestic residents minus the total value of domestic assets held by foreigners

International Monetary Fund (IMF)

an international organization that promotes global economic growth, financial stability, international trade, and poverty reduction

lender of last resort

an institution, usually a country's central bank, that offers loans to banks or other eligible institutions that are experiencing financial difficulty or are considered highly risky or near collapse.

liquidity

the ease with which a security or other asset can be converted into cash without affecting its value or market price

macroeconomic performance

the behaviour of a country's output, jobs, and prices in response or comparison to changing world conditions

multilateral development bank

an institution created by a group of countries that provides financing and professional advising for the purpose of development

nationally determined contribution

a government's plan for national climate actions, including climate-related targets, policies, and measures, as per the Paris Agreement

natural hedge

when a company offsets the risk that something will decrease in value by having a company activity that would increase in value at the same time

negotiation

when a financial document is freely and unconditionally transferable from one person to another

net exports

the difference between the monetary value of exports and imports

non-payment risk

a risk that importers will not pay as per contract terms

non-performance risk

a risk that sellers will not performed as agreed upon in contract

official exchange reserves

foreign currency held by a government and managed by the central bank

open account

transfers of funds by the importer to the account of the exporter once goods have been delivered

Paris Agreement

formal agreement among 196 UN member states to address causes of climate change, adopted at the 2015 COP 21 conference in Paris, France

Paris alignment

when a financial institution aims to align its business, portfolios, and strategy with Paris Agreement objective of net-zero emissions by 2050

payment terms

defining terms of payment i.e. deciding how and when of payment

perfect capital mobility

when very small differences in expected returns cause very large international flows of funds

premium

the price a buyer of an option pays for the option contract

put option

an option that gives the owner the right, but not the obligation, to sell the underlying asset at a specified price on some future date

rate of return

the percentage change in the value of an asset over some period

ringfenced

a guarantee that funds allocated for a particular purpose will not be spent on anything else

risk

the potential for some type of loss or negative consequence

stakeholders

all the parties who participate in trade finance

strike price (exercise price)

the price an option holder pays for the underlying asset when exercising the option

sustainable finance

when financial systems, services, and products consider environmental, social, and governance criteria in business and investment decisions

swap

an agreement between two parties to exchange something, such as their obligations to make specified payment streams

transaction risk

the risk that the value of a business's expected receipts or expenses will change as a result of a change in currency exchange rates

translation risk

the risk that a change in exchange rates will impact the value of items on a company's financial statements

unemployment rate

the percentage of the working population in a country who would like to be working but are currently unemployed

working capital

the difference between current assets and current liabilities

World Bank

an international financial institution that provides loans and grants to the governments of low- and middle-income countries for the purpose of pursuing capital projects

World Trade Organization

an international organization that seeks to negotiate reductions in barriers to trade and to adjudicate complaints about violations of international trade policy; successor to the General Agreement on Tariffs and Trade (GATT)