Chapter 1

International Trade

The years since World War II have seen an unprecedented increase in international trade and a parallel improvement in the economic development of most nations. Countries that were barely able to feed their population sixty years ago are now economic powerhouses where inhabitants enjoy a modern standard of living and where many companies trade internationally. In most developing countries, political concerns have shifted from famine and abject poverty to pollution and urban gridlock, which were once the concerns of developed countries only.

international trade The sale of goods and services across international borders.

This increase in international trade was triggered by the realization that countries' economies benefit by trading with each other and that trade increases the overall well-being of the world's population. Figure 1.1 illustrates how much international trade has grown in constant dollars, and the respective shares of the twenty-seven European Union countries, the United States, Japan, China, and of the remainder of the world in international trade from 1952 until 2012.[1] Although the economic crisis of 2008-2009 had an impact on the overall volume of international trade, this decrease was temporary. As people's standards of living increase worldwide, so do their abilities to purchase a greater number of goods, and therefore so does international trade.

constant dollars Dollars adjusted for inflation so that it is possible to compare dollar values from one period to another.

Professionals in international logistics have been the main facilitators of that trade growth. They have been the managers responsible for the safe and timely deliveries of these millions of dollars worth of goods. They are responsible for:

- arranging transportation of these goods over thousands of miles
- understanding the trade-offs between the different modes of transportation available and making the correct decision
- making sure that the goods are packaged properly for their journey

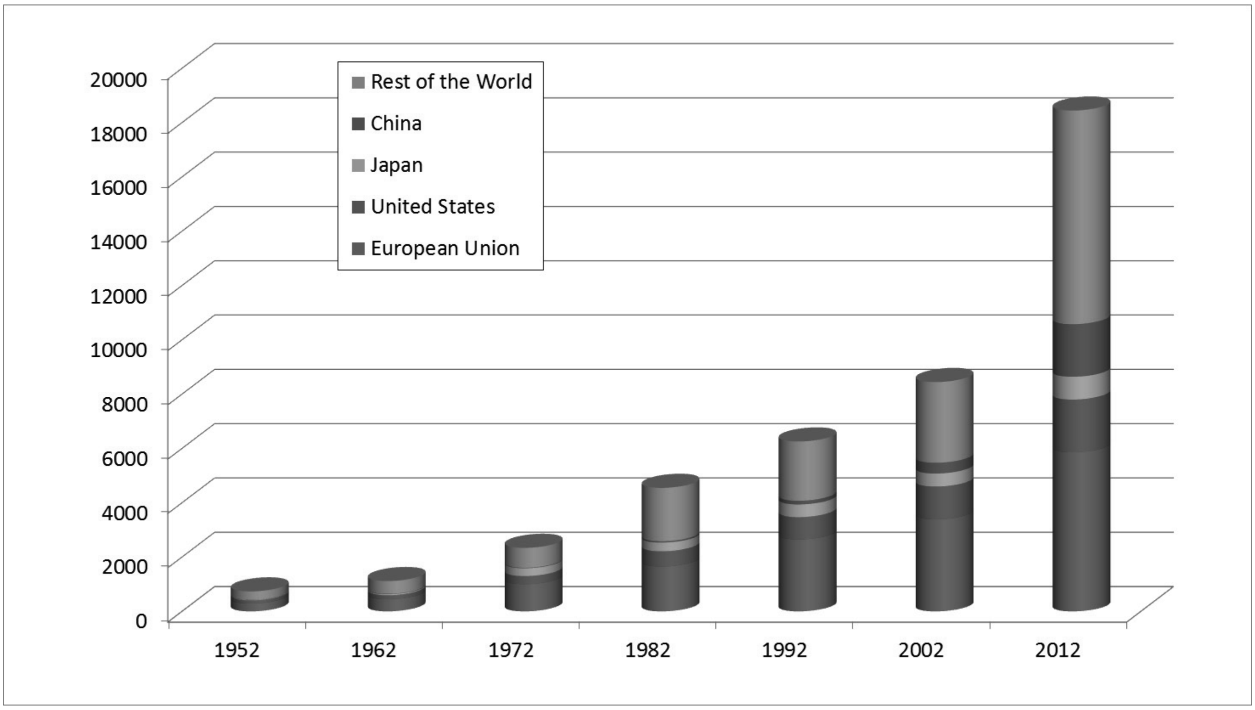

Figure 1.1: Growth in International Trade and Share of Selected Countries (in constant [2012] US$ billions)
World Trade Organization.

- understanding the risks the goods face while in transit, and insuring them appropriately
- minimizing the risks associated with international payments by selecting the right payment currency or the right hedging strategy
- making sure that the goods are accompanied by the proper documents so that they can clear Customs in the country of destination
- defining properly who, between them and their foreign counterparts, is responsible for which aspects of the voyage and which documents
- determining which method is most suitable for payment between the exporter and the importer
- following security measures designed to prevent damage to the goods while they are in transit, and following regulations imposed by the governments of importing countries and international organizations
- storing the goods in appropriate warehouses and distribution centers when they are not in transit.

While all of these responsibilities of an international logistics manager will be covered in the remainder of this textbook, this chapter gives an overview of the extent of international trade, of the economic theories of international trade and of some of the difficulties associated with conducting business in an international environment.

Figure 1.2: The maobi wood panels of the Alice Tully Theater in New York City
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The Alice Tully Theater Project

The 2008 renovation of Lincoln Center's Alice Tully Theater (see Figure 1.2) in New York City included the complete renovation of its decorative and acoustic elements. The architectural firm in charge of the renovation collaborated with an acoustic-research firm to include walls which were shaped to give the theater better acoustic characteristics. The walls were covered by panels made with a very thin wood veneer, so thin that small lights placed behind the wood could shine through it and give the theater a warm, pleasant glow when the main lights were turned off. The theater can add a light show to some of its acoustic performances.

The wood veneer used in those panels came from a single moabi tree harvested in the forests of Gabon, a country in West Africa. The tree species is endangered, so a minimal amount was used; the hundreds of plywood sheets needed for the project were created from a single log that was about one meter in diameter (about forty inches). In order to achieve this enormous yield, the log was first shipped from Gabon to Ryugasaki City, Japan, where it was cut into slices that were two tenths of a millimeter thick (eight hundredths of an inch). The wood veneer was then shipped to Miami, Florida, where it was inspected before being shipped to Salt Lake City, Utah. There it was glued to a substrate and then formed to the shapes that the acoustic engineers had designed for the theater. The resulting plywood sheets were then eventually shipped to New York City for final installation. Patrons of the Alice Tully Theater are undoubtedly enjoying these magnificent wood-veneered walls, but few of them can fathom that the wood that was used to build them had traveled more than 40,000 kilometers (25,000 miles), a distance equal to the circumference of the earth at the equator. The wood had traveled by road, rail and ocean before its final destination; all along the way, international logisticians made sure that it was transported economically, packaged properly, and that it cleared Customs and complied with international regulations without difficulty.[2,3]

1.1 International Trade Growth

current dollars
Dollars not adjusted for inflation. Their value is determined by the year they were actually received or paid.

World Trade Organization
The international organization responsible for enforcing international trade agreements and for ensuring that countries deal fairly with one another.

In current U.S. dollars (that is, not corrected for inflation), international trade in merchandise has grown 30,600 percent between 1948 and 2012[4]—that is, international trade is 307 times larger—an average annual growth rate of 9.21 percent. In constant US dollars (corrected for inflation, and expressed in 2012 dollars), the growth was 3,180 percent for the same period—that is, international trade is 32.8 times larger—an average annual growth rate of 5.51 percent.

In constant US dollars (2012 dollars), international trade in merchandise and services has almost tripled since 1992, an average annual growth rate of 5.5 percent. Tables 1-1[5], 1-2[6], and 1-3[7] on the following two pages show the World Trade Organization's data for international trade for merchandise and services for the period for which it has kept that information. The differences between exports and imports reflect the different ways in which the values of exports and imports are calculated.

The economic contraction of 2008-2009 had a substantial impact on world trade; the WTO reported that total exports decreased 22.3 percent between 2008 and 2009, from $16,140 billion to $12,542 billion. They increased 21.8 percent between 2009 and 2010 to reach $15,274 billion, but needed another year to recover completely. The total value of worldwide exports reached $18,255 billion in 2012.[8] The contraction was substantial for many countries, but it was a temporary setback in the overall growth of the worldwide economy.

The increase in international trade was triggered by a massive liberalization of international commerce following World War II and the creation of a number of international organizations designed to facilitate international commerce, as well as a significant decrease in transportation costs and transit times. During that period, a much greater consumer acceptance of things "foreign," from food to automobiles, allowed an increasing number of companies to expand their sales beyond their domestic borders.

1.2 International Trade Milestones

The development of international trade has been fostered over the years by several critical milestones, the ratification of several key international treaties, and the

International Merchandise Trade Volume in US$ billions

	Current US dollars		2011 Constant US dollars	
Year	Exports	Imports	Exports	Imports
1957	114	121	931	989
1962	143	151	1,087	1,148
1967	218	228	1,499	1,567
1972	419	433	2,301	2,378
1977	1,128	1,171	4,274	4,437
1982	1,883	1,941	4,480	4,618
1987	2,516	2,582	5,085	5,219
1992	3,766	3,881	6,163	6,351
1997	5,591	5,737	7,998	8,207
2002	6,494	6,742	8,288	8,605
2007	14,017	14,325	15,525	15,866
2012	18,323	18,567	18,323	18,567

Table 1.1: International Merchandise Trade Volume in US$ billions
World Trade Organization.

International Service Trade Volume in US$ billions

	Current US dollars		2011 Constant US dollars	
Year	Exports	Imports	Exports	Imports
1982	368	404	876	961
1987	537	544	1,085	1,099
1992	932	949	1,525	1,553
1997	1,316	1,294	1,883	1,851
2002	1,597	1,561	2,038	1,992
2007	3,420	3,174	3,788	3,515
2012	4,347	4,106	4,347	4,106

Table 1.2: International Service Trade Volume in US$ billionsWorld Trade Organization.

establishment of international organizations designed to facilitate and support international trade activities.

Total International Trade Volume in US$ billions

	Current US dollars		2011 Constant US dollars	
Year	Exports	Imports	Exports	Imports
1982	2,251	2,345	5,356	5,579
1987	3,053	3,126	6,171	6,318
1992	4,698	4,830	7,688	7,904
1997	6,907	7,031	9,881	10,058
2002	8,091	8,303	10,326	10,597
2007	17,437	17,499	19,313	19,381
2012	22,670	22,673	22,670	22,673

Table 1.3: World's Total International Trade in Merchandise and Services in US$ billions

1.2.1 The Bretton-Woods Conference

Bretton-Woods
A 1944 conference at which many of the international institutions were created.

In the last year of World War II, world leaders of the Allied nations met in July 1944 in the resort town of Bretton-Woods in New Hampshire in the United States, a conference that led to the creation of several international institutions, two of which were specifically designed to facilitate world trade:

International Monetary Fund
The international organization created in 1945 to oversee exchange rates and develop an international system of payments.

- The International Monetary Fund (IMF), created on December 27, 1945, which established an international system of payment and introduced stable currency exchange rates.
- The General Agreement on Tariffs and Trade (GATT), which through multiple negotiation periods (in Geneva [1948], Annecy [1949], Torquay [1951], Geneva [1956], the Dillon Round [1960-61], the Kennedy Round [1964-67], the Tokyo Round [1973-79], and the Uruguay Round [1986-94]), led to a decrease of duty rate from an average of over 40 percent in 1947 to an average slightly above 4 percent in 2011.[9]

General Agreement on Tariffs and Trade
An agreement between countries to lower tariffs and trade barriers.

1.2.2 The World Trade Organization

tariff
A tax collected by an importing country on the value of imported goods.

The World Trade Organization (WTO) was officially created on January 1, 1995.[10] It replaced the GATT and is the organization in charge of enforcing free trade. From 2001 to 2008, the WTO worked on the Doha Developmental Round of multilateral negotiations, whose goal is to improve trade in agricultural commodities, which is impeded by a large number of non-tariff barriers, and replete with agricultural subsidies in developed countries. The round stalled in July 2008, and no progress has been made in the discussions since then. In April 2011, Pascal Lamy, the Director-General of the WTO, urged the reconsideration of the round, but recognized that there were major remaining obstacles.[11] The main points of dissention are the agricultural subsidies that the developed countries (specifically the United States and the European Union countries) continue to grant to their farmers. The United

States and the EU want each other's subsidies to be eliminated, and the developing countries regard these subsidies as trade barriers, preventing their lower-priced commodities to compete in these developed countries' markets.

1.2.3 The Treaty of Rome

The Treaty of Rome in 1957 between Belgium, France, Germany, Italy, Luxembourg, and the Netherlands led to the eventual creation of the European Union and was emulated by countless other groups of countries that were more or less successful in designing their own common markets. The European Union expanded in 1973 (Denmark, Ireland, and the United Kingdom), in 1981 (Greece), in 1986 (Spain and Portugal), in 1995 (Austria, Finland, and Sweden), in 2004 (Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia, and Slovenia) and finally in 2007 (Bulgaria and Romania). It totals twenty-seven countries as of August 2012. The Treaty of Rome set the groundwork for the creation of the European Union, and it was extended by the Maastricht Treaty of 1992, which created the euro, and the Treaty of Lisbon in 2009, which modified the governmental processes of the European Union, specifically allowing a simple majority of states to rule, rather than the unanimity that was required originally.

Treaty of Rome
The treaty between six European countries that created the European Union.

The creation of the European Union triggered many other regional economic groups and other bilateral or multilateral agreements: most notable are the Association of South East Asian Nations (ASEAN), Mercosur, the Andean Community, and the North American Free Trade Agreement (NAFTA). A number of examples are given in Table 1.4 on page 9.

Maastricht Treaty
A 1992 Treaty between the European Union countries in which a number of standards were adopted, including a standard currency.

1.2.4 The Creation of the Euro

The euro is the European currency introduced in 1999 and put in circulation on January 1, 2002 in twelve of the fifteen countries of the European Union (Austria, Belgium, Finland, France, Germany, Greece, Italy, Ireland, Luxembourg, the Netherlands, Portugal, and Spain). The adoption of the euro was extended to the country of Slovenia in 2007, to the countries of Cyprus and Malta in 2008, to the country of Slovakia in 2009, and to Estonia in 2011.

euro
The common currency of 17 of the 27 countries of the European Union.

The euro is also the currency to which many of the remainder of the European currencies are tied; their exchange rate must remain within a certain percentage of the euro's value. Such is the case for Denmark, Latvia, and Lithuania. It has also become the currency of a number of smaller countries not part of the European Union (Andorra, Kosovo, Monaco, Montenegro, and San Marino), as well as the currency on which a number of other countries have pegged their currencies (Bosnia and Herzegovina, and the Communité Françaíse Africaine, for example). It was the first multinational effort at replacing eleven strong legacy currencies, and it has become one of the most widely-traded currencies of the world.

1.3 Largest Exporting and Importing Countries

Figures 1.4 on page 10[12] and 1.5 on page 11[13] show the fifteen largest exporting and importing countries for 2012 according to the World Trade Organization's database.

Most of these countries have liberal trading policies and multiple free-trade agreements with many of their partners, confirming that liberal trade policies en-

Figure 1.3: The European Currency since 2001, the Euro
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courage economic growth and development; more specific information about these countries' general trade policies can be found in the World Bank's "Doing Business" database.[14]

trade deficit
A situation where the total exports of a country are worth less than its total imports.

trade surplus
A situation where the total exports of a country are worth more than its total imports.

There are nevertheless substantial differences in the trade situation of the largest exporting countries. For example, three countries run a very large trade deficit; the United States, with a deficit of U.S.$ 788 billion, imports about 50 percent more than it exports. The United Kingdom imports U.S.$ 212 billion more than it exports—or 45 percent of its exports—and India imports 67 percent more than it exports, or U.S.$ 196 billion.

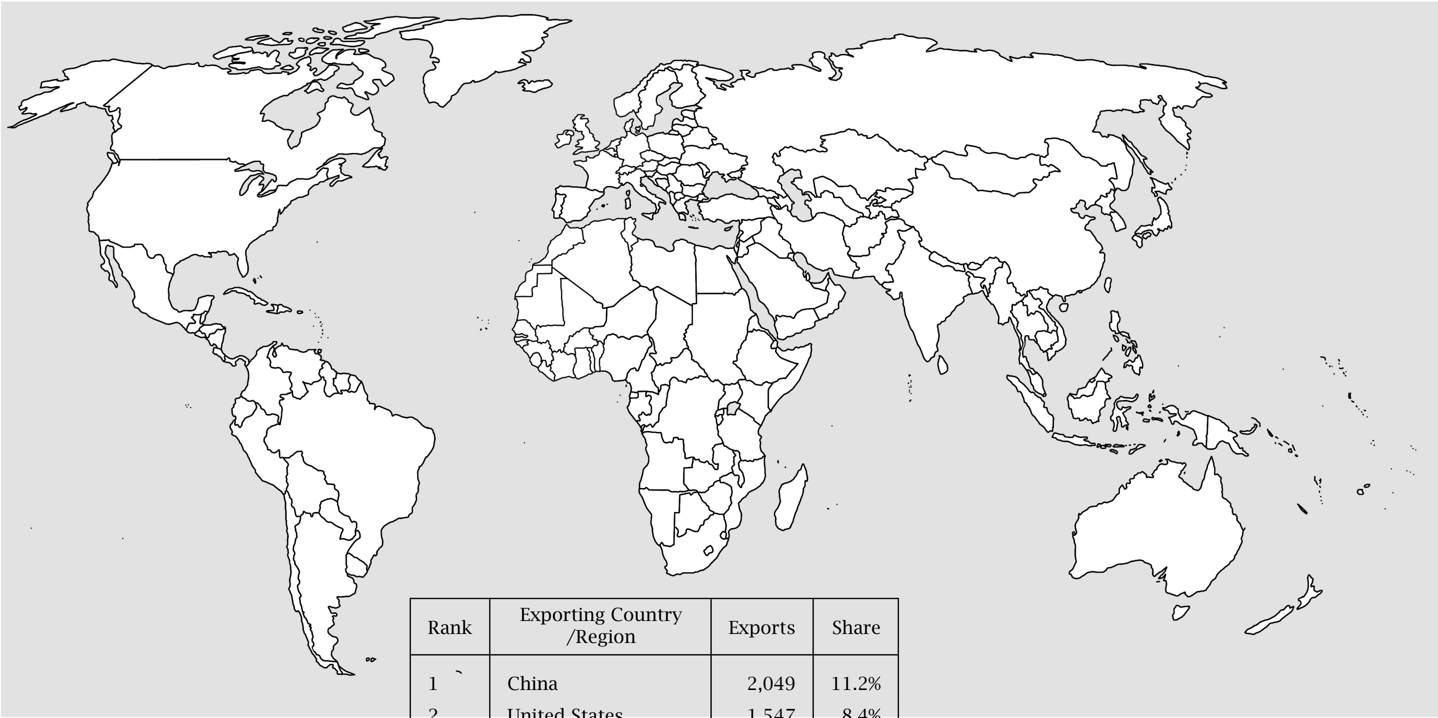
On the other end, China runs a trade surplus of U.S.$ 231 billion, importing only 89 percent of what it exports. Germany runs a trade surplus of U.S.$ 240 billion—it imports only 83 percent of what it exports. The Netherlands and Belgium also show a trade surplus with imports representing only 90 and 97 percent of their exports. Although China's surplus is due to its low manufacturing costs, Germany, the Netherlands and Belgium experience some of the highest labor costs in the world.[15]

Some countries are extremely dependent on world trade and export a very large percentage of their GDP. Belgium exports 87 percent of what it produces, the Netherlands exports 78 percent, and Germany 39 percent. In contrast, the United States export only 10 percent of its GDP and Japan exports only 14 percent. China exports 28 percent of its GDP.

Economic Trade Blocs

Economic Group	Current Membership (2012)
(1958) European Union	Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, United Kingdom.
(1960) Central American Integration System	Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panama.
(1967) ASEAN (Association of South East Asian Nations)	Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, Vietnam.
(1969) Andean Community	Bolivia, Colombia, Ecuador, Peru.
(1973) Caricom (Caribbean Community)	Antigua and Barbuda, Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago.
(1975) ECOWAS (Economic Community of Western African States)	Benin, Burkina Faso, Cape Verde, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, Togo.
(1981) Gulf Cooperation Council	Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates.
(1991) Mercosur (Southern Common Market)	Argentina, Brazil, Paraguay, Uruguay, Venezuela
(1994) NAFTA (North American Free Trade Area)	Canada, Mexico, United States.
(1994) ECOWAS (Economic Community of Central African States	Angola, Burundi, Cameroon, Central African Republic, Chad, Democratic Republic of the Congo,Republic of the Congo, Equatorial Guinea, Gabon, Rwanda, São Tomé and Príncipe.
(1996) Eurasian Economic Community	Belarus, Kazakhstan, Kyrgyzstan, Russia, Tajikistan, Uzbekistan.
(2001) East African Community	Burundi, Kenya, Rwanda, Tanzania, Uganda.
(2004) South African Customs Union	Botswana, Lesotho, Namibia, Swaziland, South Africa.

Table 1.4: Economic Trade Blocs



Rank	Exporting Country /Region	Exports	Share
1	China	2,049	11.2%
2	United States	1,547	8.4%
3	Germany	1,407	7.7%
4	Japan	799	4.4%
5	The Netherlands	656	3.6%
6	France	569	3.1%
7	Republic of Korea	548	3.0%
8	Russian Federation	529	2.9%
9	Italy	500	2.7%
10	Hong Kong, China	493	2.7%
11	United Kingdom	468	2.6%
12	Canada	455	2.5%
13	Belgium	446	2.4%
14	Singapore	408	2.2%
15	Mexico	370	2.0%
	Top fifteen exporters	11,246	61.4%
	Rest of the World	7,077	38.6%
	Total	18,323	100%

Figure 1.4: World's Largest Merchandise Exporting Countries/Regions (2012) in U.S.$ billions

World Trade Organization.