1

Trade in the Global Economy

Questions to Consider

1. Which regions of the world trade the most, and which trade the least?
2. How does international trade today differ from trade in the past?
3. How does the movement of companies and people around the world compare with the movement of goods and services?

Introduction

- In June 2015, the film *Jurassic World* had ticket sales of $512 million worldwide, which was the first time a movie earned more than $500 million in a single weekend. Of that amount 60% came from ticket sales in countries outside the United States, including $100 million in China.

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Opening weekend of Jurassic in Yichang, China

If the movie had been filmed on an island other than Hawaii and in Louisiana, the movie *Jurassic World* could also generate **international trade,** the movement of goods (such as the equipment to make movies, or any other product) or services (such as the movie itself) across borders.

Introduction

- In this book, we will study international trade in goods and services.

- We will learn the economic forces that determine:
  - What that trade looks like
  - What products are traded
  - Who trades them
  - At what quantities and prices they are traded
  - What the benefits and costs of trade are

- We will also learn about policies that governments use to shape trade patterns among countries.

1 International Trade

The Basics of World Trade

Countries buy and sell goods and services from one another constantly.

- An **export** is a product sold from one country to another.
- An **import** is a product bought by one country from another.

The Basics of World Trade

- A country's **trade balance** is the difference between its total value of exports and its total value of imports (usually including both goods and services).
- Countries that export more than they import, such as China in recent years, run a **trade surplus**.
- Whereas countries that import more than they export, such as the United States, run a **trade deficit**.
- The **bilateral trade balance** is the difference of exports and imports between two countries.

1 International Trade

The Basics of World Trade

- The U.S. bilateral trade balance with China, for example, has been a trade deficit of more than $200 billion every year between 2005 and the present.
- In 2013, the iPhone5 16GB was valued at about $227 when it was shipped from China to the United States, and it sold for about $650 in the United States.
- However, only $8 of that amount reflects the **value added** by Chinese labor used in the assembly.
- It doesn’t really make sense to count the entire $227 iPhone as a Chinese export to the United States, as is done in official trade statistics.

HEADLINES

Sum of iPhone Parts: Trade Distortion

Although the iPhone sold in the United States is assembled in China, most of its value comes from parts made in other countries.

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Two academic researchers have found that Apple Inc.'s iPhone—one of the most iconic U.S. technology products—actually added $19 billion to the U.S. trade deficit with China last year. How is this possible?

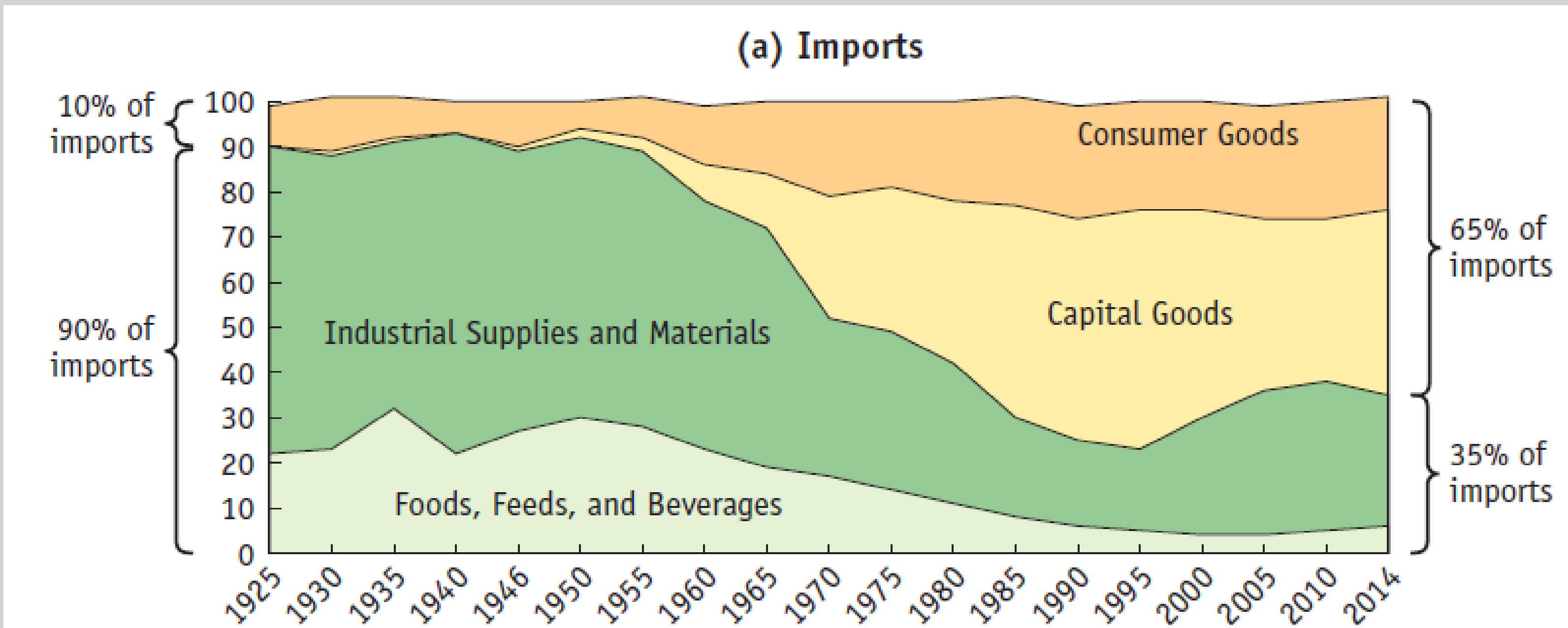
"What we call 'Made in China' is indeed assembled in China, but what makes up the commercial value of the product comes from the numerous countries that preceded its assembly in China in the global value chain," said Pascal Lamy, the director-general of the World Trade Organization

According to Lamy, if trade statistics were adjusted to reflect the actual value contributed to a product by different countries, the size of the U.S. trade deficit with China—$226.88 billion, according to U.S. figures—would be cut in half.

Application

Is Trade Today Different from the Past?

FIGURE 1-1 (a)

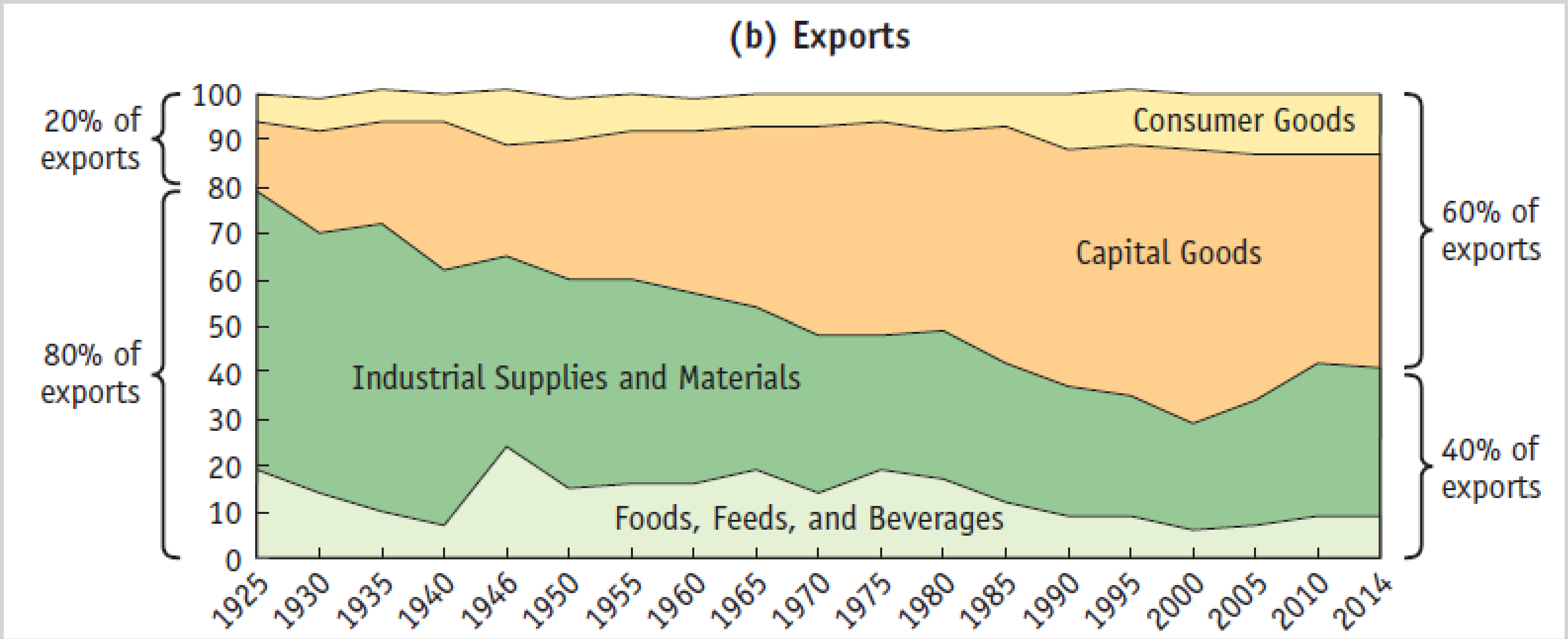


The Changing Face of U.S. Import Industries, 1925–2014 The types of goods imported by the United States has changed drastically over the past 84 years. Foods, feeds, and beverages, and industrial supplies were 90% of imports in 1925, but represented only 35% in 2014.

APPLICATION

Is Trade Today Different from the Past?

FIGURE 1-1 (b)

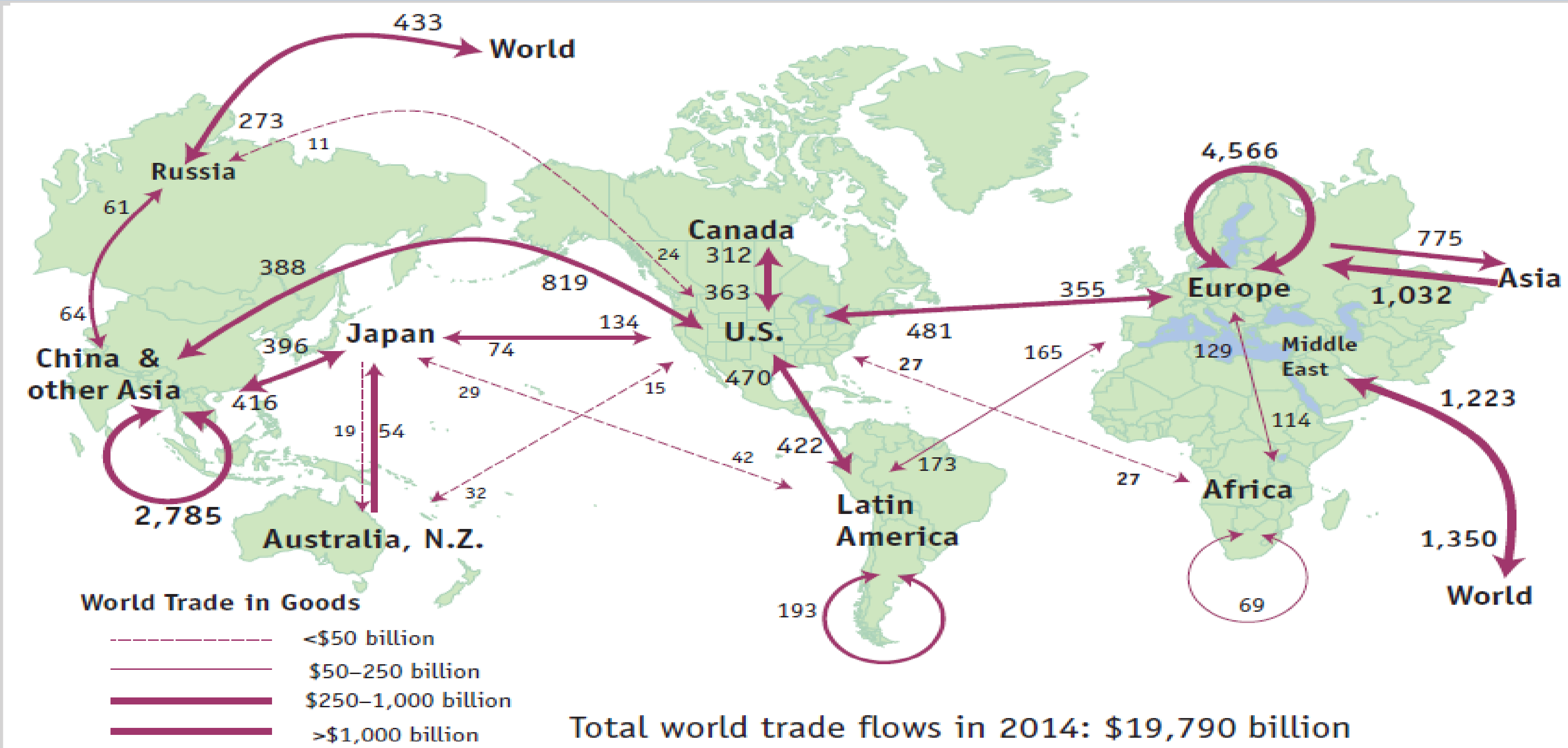


The Changing Face of U.S. Export Industries, 1925–2014 The types of goods exported by the United States has also changed drastically over the past 84 years. Capital plus consumer goods plus automobiles have increased from 20% of exports in 1925 to 60% of exports in 2014.

1 International Trade

Map of World Trade

FIGURE 1-2



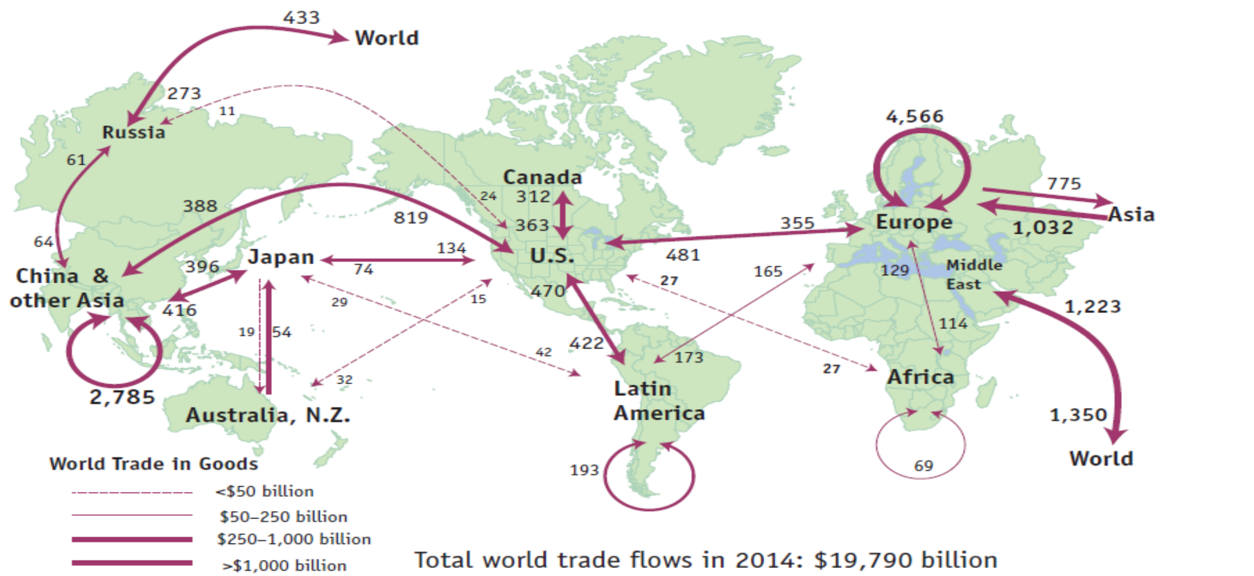
World Trade in Goods, 2014 ($ billions) This figure shows trade in merchandise goods between selected countries and regions of the world.

1 International Trade

Map of World Trade

TABLE 1-1

Shares of World Trade, Accounted for by Selected Regions, 2014



	Share of World Trade (%)		Share of World Trade (%)
Europe (internal trade)	23	Asia (exports)	35
Europe (internal) plus trade with the U.S.	27	Middle East and Russia (exports)	9
Americas (internal trade)	9	Africa (exports)	2
Europe and the Americas (exports)	52	Australia and New Zealand (exports)	1.6

Map of World Trade

European and U.S. Trade

- The largest amount of trade shown in Figure 1-2 is the flow of goods within Europe, $4.5 trillion, or 23%, of world trade!
- Trade between European countries is high because **import tariffs** (taxes on international trade) are low. Geography also plays an important role, as many European countries are close to each other.
- There are also large trade flows between the United States and Europe. The United States exported $355 billion of goods to Europe and imported $481 billion from Europe.
- This shows that a large amount of world trade occurs between countries that are similar in their levels of industrialization and great wealth.

Map of World Trade

Trade in the Americas

- There is also a large amount of trade recorded within the Americas, that is, between North America, Central America, South America, and the Caribbean.

- Trade within the Americas is about one-third of trade within Europe, and about 9% of world trade.

- The vast majority of that trade is within the North American Free Trade Area, consisting of Canada, the United States, and Mexico.

Map of World Trade

Trade with Asia

- Exports from Asia totaled about $6.8 trillion in 2014, or about one-third (35%) of world trade, as shown in Table 1-1.
- Remember that this total includes only trade in goods and omits trade in services, which is becoming increasingly important.
- India, for example, performs a wide range of services such as accounting, customer support, computer programming, and research and development tasks for firms in the United States and Europe.

1 International Trade

Map of World Trade

Other Regions

- The exports of the Middle East and Russia combined (together with countries around Russia such as Azerbaijan and Kazakhstan) total $1.7 trillion, or another 9% of world trade.

- And then there is Africa. The European nations have the closest trade links with Africa, reflecting both their proximity and the former colonial status of some African countries.

- Europe exported $114 billion and imported $129 billion from Africa in 2014.

Trade Compared with GDP

So far, we have discussed the value of trade crossing international borders.

- There is a second way that trade is often reported, as a ratio of trade to a country's **gross domestic product (GDP)**, the value of all final goods produced in a year.
- For the United States, the average value of imports and exports (for goods and services) expressed relative to GDP was 15% in 2014.
- Most other countries have a higher ratio of trade to GDP.

Trade Compared with GDP

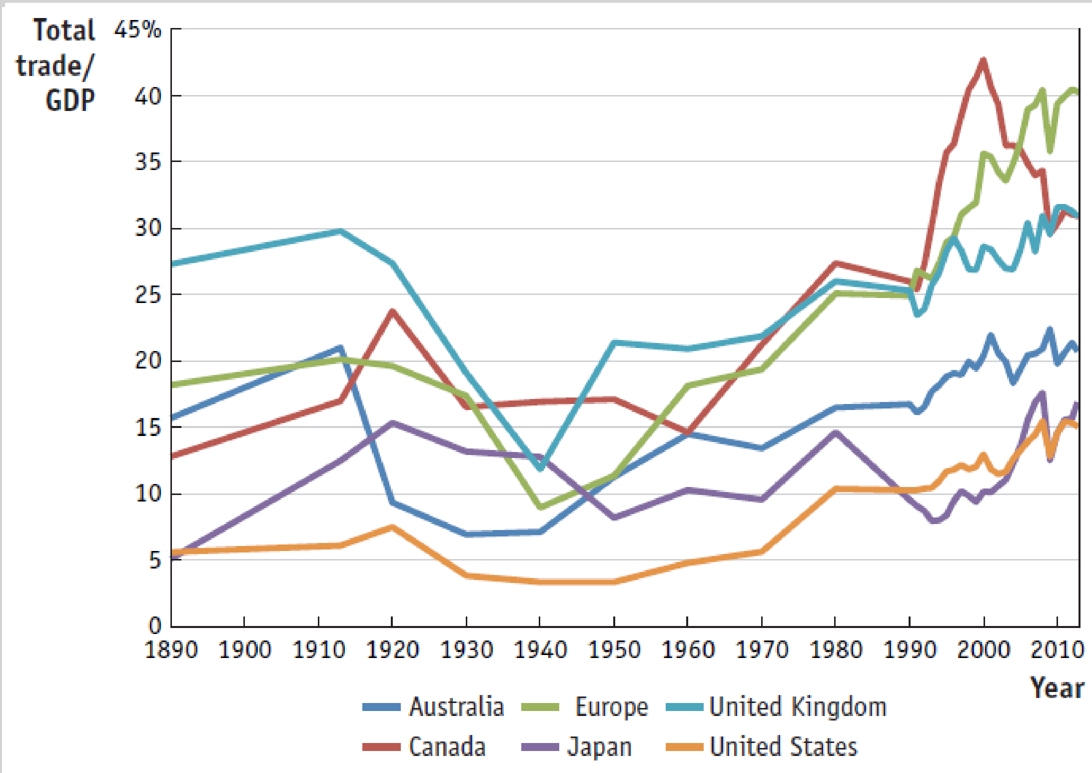
TABLE 1-2

Country	Trade/GDP (%)	GDP ($ billion)	Country	Trade/GDP (%)	GDP ($ billion)
Hong Kong, China	220	291	Pakistan	33	247
Singapore	117	308	South Africa	32	350
Thailand	88	374	Canada	32	1,787
Hungary	85	137	Spain	31	1,404
Malaysia	68	327	France	30	2,829
Switzerland	66	685	United Kingdom	29	2,942
Sweden	57	571	Italy	28	2,144
Austria	52	436	Turkey	28	800
Denmark	51	342	Venezuela	27	371
Germany	42	3,853	India	25	2,067
Russia	41	1,861	Indonesia	24	889
Mexico	39	1,283	China	21	10,360
Norway	38	500	Japan	18	4,920
Greece	34	238	United States	15	16,768
Pakistan	33	247	Argentina	15	540
			Brazil	13	2,346

Trade/GDP Ratio in 2014 This table shows the ratio of total trade to GDP for each country, where trade is calculated as (Imports + Exports)/2, including both merchandise goods and services. Countries with the highest ratios of trade to GDP tend to be small in economic size.

Barriers to Trade

FIGURE 1-3 Trade in Goods and Services Relative to GDP



This diagram shows total trade in merchandise goods and services for each country divided by GDP.

There was a considerable increase in the ratio of trade to GDP between 1890 and 1913. This trend was ended by World War I and the Great Depression.

Most of the industrial countries shown did not reach the level of trade prevailing in 1913 until the 1970s.

The term **trade barriers** refers to all factors that influence the amount of goods and services shipped across international borders.

1 International Trade

“First Golden Age” of Trade

- The period from 1890 until World War I (1914–1918) is sometimes referred to as a “golden age” of international trade.
- Those years saw dramatic improvements in transportation, such as the steamship and the railroad, that allowed for a great increase in the amount of international trade.

1 International Trade

"First Golden Age" of Trade

Interwar Period

- Signed into law in June 1930, the **Smoot–Hawley Tariff Act** raised tariffs to as high as 60% on many categories of imports.
- These tariffs were applied by the United States to protect farmers and other industries, but they backfired by causing other countries to retaliate.
- Canada retaliated by applying high tariffs of its own against the United States.
- France used **import quotas**, a limitation on the quantity of an imported good allowed into a country, to restrict imports from the United States.

1 International Trade

"First Golden Age" of Trade

Interwar Period

FIGURE 1-4

Average Worldwide Tariffs, 1860–2013 This diagram shows the world average tariff for 35 countries. The average tariff fluctuated around 15% from 1860 to 1913. After World War I, however, the average tariff rose sharply because of the Smoot-Hawley Tariff Act in the United States and the reaction by other countries, reaching 25% by 1933. Since the end of World War II, tariffs have fallen.

“Second Golden Age” of Trade

- In addition to the end of World War II and tariff reductions under the General Agreement on Tariffs and Trade, improved transportation costs contributed to the growth in trade.

- The shipping container, invented in 1956, allowed goods to be moved by ship, rail, and truck more cheaply than before.

- World trade grew steadily after 1950 in dollar terms and as a ratio to GDP. For this reason, the period after 1950 is called the “second golden age” of trade and globalization.

HEADLINES

A Sea Change in Shipping 50 Years Ago


A fully loaded container ship can carry thousands of containers.

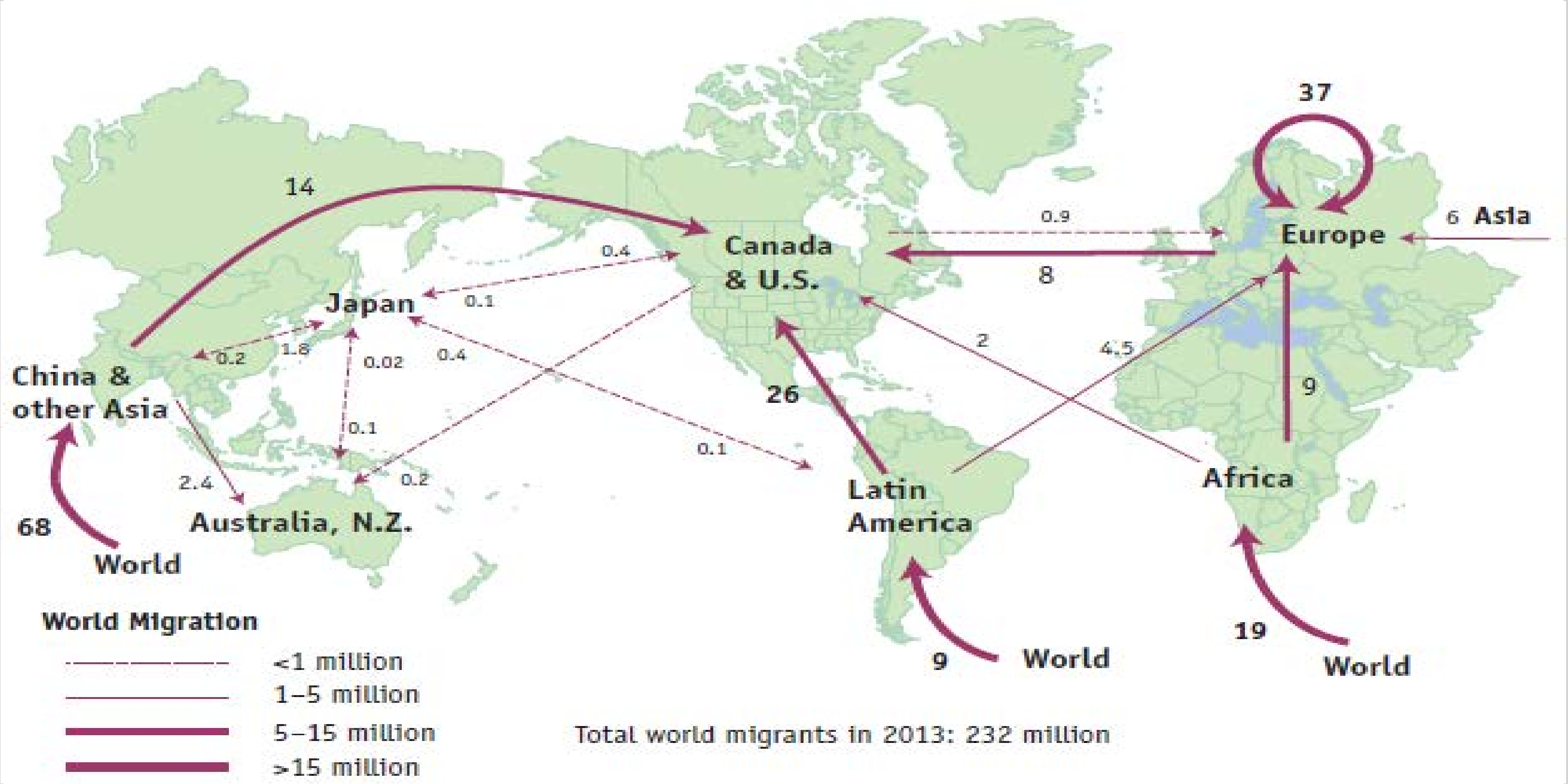
Fifty years ago Malcom McLean, an entrepreneur from North Carolina, loaded a ship with fifty-eight 35-foot containers and sailed from Newark, N.J., to Houston.

McLean was the first to design a transportation system around the packaging of cargo in huge metal boxes that could be loaded and unloaded by cranes.

Replacing break-bulk with cargo containers dramatically reduced shipping costs, reinvigorating markets and fueling the world economy.

Map of Migration

FIGURE 1-5



Foreign-Born Migrants, 2013 (millions) This figure shows the number of foreign-born migrants living in selected countries and regions of the world for 2013 in millions of people.

Map of Migration

European Immigration

- In 2013 more than one-half (60%) of the foreign-born people worldwide were living in the OECD countries, while only about one-quarter of the OECD-born people were living another country

- Prior to 2004 the European Union (EU) consisted of 15 countries in western Europe, and labor mobility was very open.

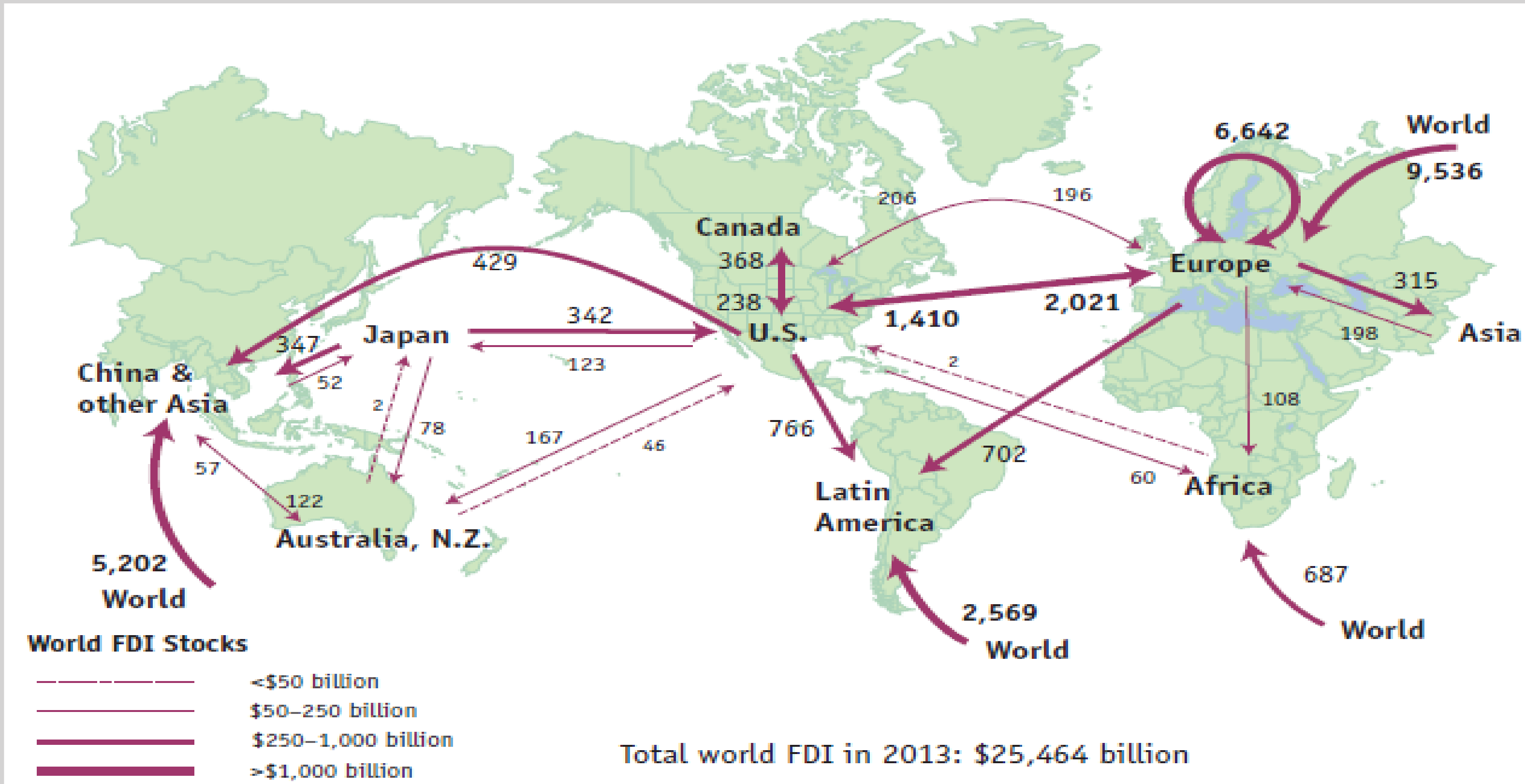
- After 10 more countries joined the EU on May 1, 2004, a large difference in per capita income and wages in these countries created a strong incentive for labor migration.

- The per capita incomes of these new countries were only about one-quarter of the average per capita incomes of those countries that were already EU members.

2 Migration and Foreign Direct Investment

Map of Foreign Direct Investment

FIGURE 1-6



Stock of Foreign Direct Investment, 2013 ($ billions) This figure shows the stock of **foreign direct investment (FDI)** between selected countries and regions of the world for 2013 in billions of dollars. The largest stocks have the heaviest lines.

Map of Foreign Direct Investment

The majority of world flows of foreign direct investment occur between industrial countries.

- In 2013 the total value of FDI stocks located in the OECD countries or owned by those countries was $20.7 trillion (80% of the total world stock of FDI).
- The FDI stock in Africa ($687 billion) is just over one-quarter of the stock in Latin America ($2.6 trillion), which in turn is about one-half of the FDI into China and other Asian countries ($5.2 trillion).
- Most of this FDI is from industrial countries, but Chinese firms have begun to acquire land in Africa and Latin America for agriculture and resource extraction

Map of Foreign Direct Investment

Horizontal FDI

The majority of foreign direct investment occurs between industrial countries, when a firm from one industrial country owns a company in another industrial country. We refer to these flows between industrial countries as **horizontal FDI**.

Vertical FDI

The other form of foreign direct investment occurs when a firm from an industrial country owns a plant in a developing country, which we call **vertical FDI**. Low wages are the principal reasons that firms shift production abroad to developing countries.

2 Migration and Foreign Direct Investment

Map of Foreign Direct Investment

European and U.S. FDI

The largest stocks of FDI are within Europe; these stocks amounted to $9.5 trillion in 2013, or more than one-third of the world total.

FDI in the Americas

Brazil and Mexico are two of the largest recipients of FDI among developing countries, after China.

FDI with Asia

China has become the largest recipient country for FDI in Asia and the fourth largest recipient of FDI in the world.

Conclusions

- Globalization means many things: the flow of goods and services across borders, the movement of people and firms, the spread of culture and ideas among countries, and the tight integration of financial markets around the world.
- Although it might seem as if such globalization is new, international trade and the integration of financial markets were also very strong in the period before World War I.
- **Migration** across countries is not as free as international trade, and all countries have restrictions on immigration.
- Foreign direct investment is largely unrestricted in industrial countries but often faces some restrictions in developing countries.

KEY POINTS

1. The trade balance of a country is the difference between the value of its exports and the value of its imports, and is determined by macroeconomic conditions in the country.

KEY POINTS

2. The type of goods being traded between countries has changed from the period before World War I, when standardized goods (raw materials and basic processed goods like steel) were predominant. Today, the majority of trade occurs in highly processed consumer and capital goods, which might cross borders several times during the manufacturing process.

KEY POINTS

3. A large portion of international trade is between industrial countries. Trade within Europe and between Europe and the United States accounts for over one-quarter of world trade.

KEY POINTS

4. Many of the trade models we study emphasize the differences between countries, but it is also possible to explain trade between countries that are similar. Similar countries will trade different varieties of goods with each other.

KEY POINTS

5. Larger countries tend to have smaller shares of trade relative to GDP because so much of their trade occurs internally. Hong Kong (China) and Singapore have ratios of trade to GDP that exceed 100%, whereas the United States' ratio of trade to GDP in 2014 was 15%.

KEY POINTS

6. The majority of world migration comes from developing countries and, when possible, the migrants prefer to enter wealthier, industrial countries.

KEY POINTS

7. International trade in goods and services acts as a substitute for migration and allows workers to improve their standard of living through working in export industries, even when they cannot migrate to earn higher incomes.

KEY POINTS

8. The majority of world flows of foreign direct investment occur between industrial countries. In 2013 more than one-third of the world flows of FDI were within Europe or between Europe and the United States, and 80% of the world flows of FDI were into or out of the OECD countries.

KEY TERMS

international trade

migration

foreign direct investment (FDI)

export

import

trade balance

trade surplus

trade deficit

bilateral trade balance

value-added

offshoring

import tariffs

gross domestic product (GDP)

trade barriers

import quotas

horizontal FDI

vertical FDI