



UNIVERSITY OF WARSAW  
**Faculty of Economic Sciences**

# Introduction to International finance. The Global Macroeconomy

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# Introduction

**If You participate in on-line course You agree that lectures will be recorded.**

1. Grading:

**1. To have a positive grade from the course you need to pass the exam 😊**

- a) An obligatory requirement to attempt the exam is a positive passing the exercises
- b) You need to have 50% point from the exam
- c) The exam will include both the theoretical and practical questions.

**2. The final grading will be calculated as follow:  $0,7 * \text{Exam} + 0,3 * \text{Exercises}$**

2. The book:

REQUIRED:

*Robert Feenstra; Alan Taylor. (2017) **International Macroeconomics***

OPTIONAL:

*P.R. Krugman, M.Obsfeld, M.J. Melitz (2017) **International Trade: Theory and Policy, Global Edition (Part 3 and 4)***

- **International macroeconomics** is devoted to the study of large-scale economic problems in interdependent economies.
  - It is **macroeconomic** because it focuses on key economy-wide variables such as exchange rates, prices, interest rates, income, wealth, and the current account.
  - It is **international** because a deeper understanding of the global economy emerges only when the interconnections among nations are fully considered.

# Introduction

- Key features of international macroeconomics:
  1. The world has many monies/currencys (*not one*).
  2. Countries are financially integrated (*not isolated*).
  3. In this context economic policy choices are made (*but not always very well*).
- This introductory briefly explains the road ahead.

# 1 Foreign Exchange: Currencies and Crises

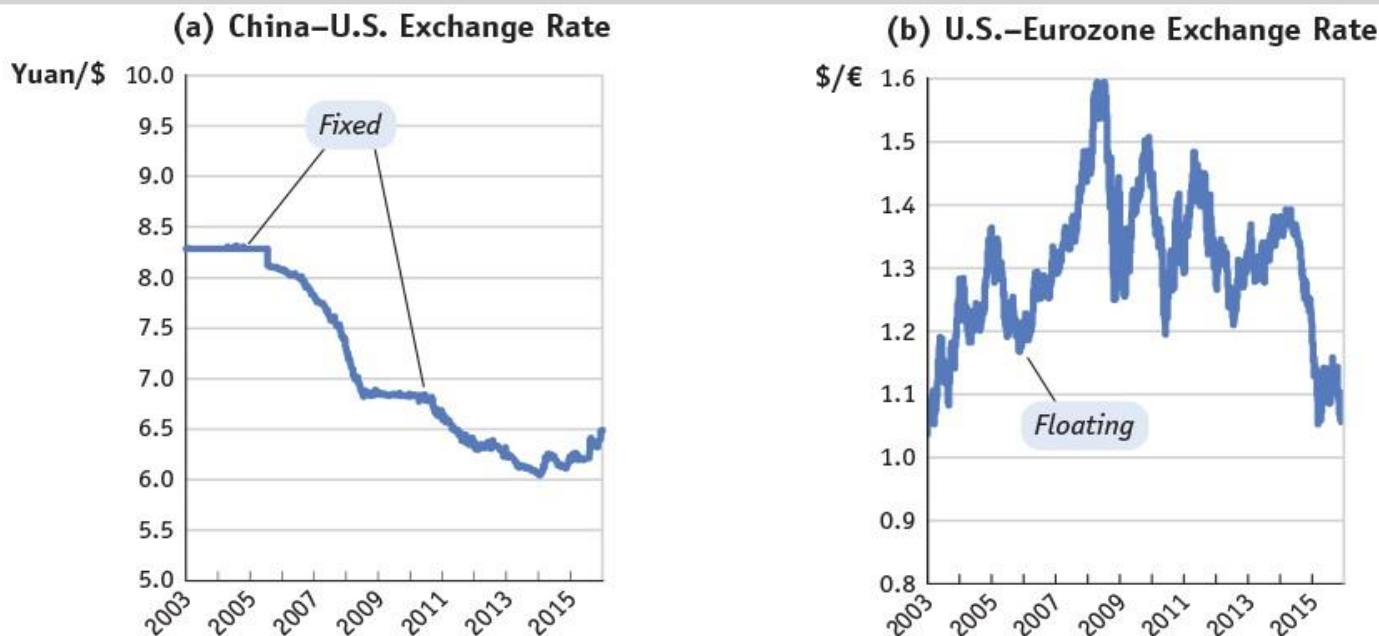
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- Countries have different currencies; therefore, a complete understanding of how a country's economy works requires that we study the exchange rate (the price of foreign currency).
- Because products and investments move across borders, fluctuations in exchange rates have significant effects on the relative prices of home and foreign:
  - Goods (such as autos and clothing)
  - Services (such as insurance and transportation)
  - Assets (such as equities and bonds)

# 1 Foreign Exchange: Currencies and Crises

## How Exchange Rates Behave

FIGURE 1-1



**Major Exchange Rates** The chart shows two key exchange rates from 2003 to 2016. The China–U.S. exchange rate varies little and would be considered a fixed exchange rate, despite a period when it followed a gradual trend. The U.S.–Eurozone exchange rate varies a lot and would be considered a floating exchange rate.

# 1 Foreign Exchange: Currencies and Crises

## How Exchange Rates Behave

Based on differences in exchange rate behavior, economists divide the world into two groups of countries: those with **fixed** (or *pegged*) **exchange rates** and those with **floating** (or *flexible*) **exchange rates**.

## Key Topics

- How are exchange rates determined?
- Why do some exchange rates fluctuate sharply in the short run, while others are almost constant?
- What explains why exchange rates rise, fall, or stay flat in the long run?



Steve Stock/Alamy



John T. Fowler/Alamy



## Why Exchange Rates Matter

Changes in exchange rates can affect an economy in two ways:

- Changing international relative prices of goods: One country's goods become more or less expensive relative to another's.
- Changing international relative prices of assets: Fluctuations in wealth can then affect firms, governments, and individuals.

## Key Topics

- How do changes in exchange rates affect international prices, the demand for goods from different countries, and hence the levels of national output?
- How do they affect the values of foreign assets, and hence change national wealth?



# 1 Foreign Exchange: Currencies and Crises

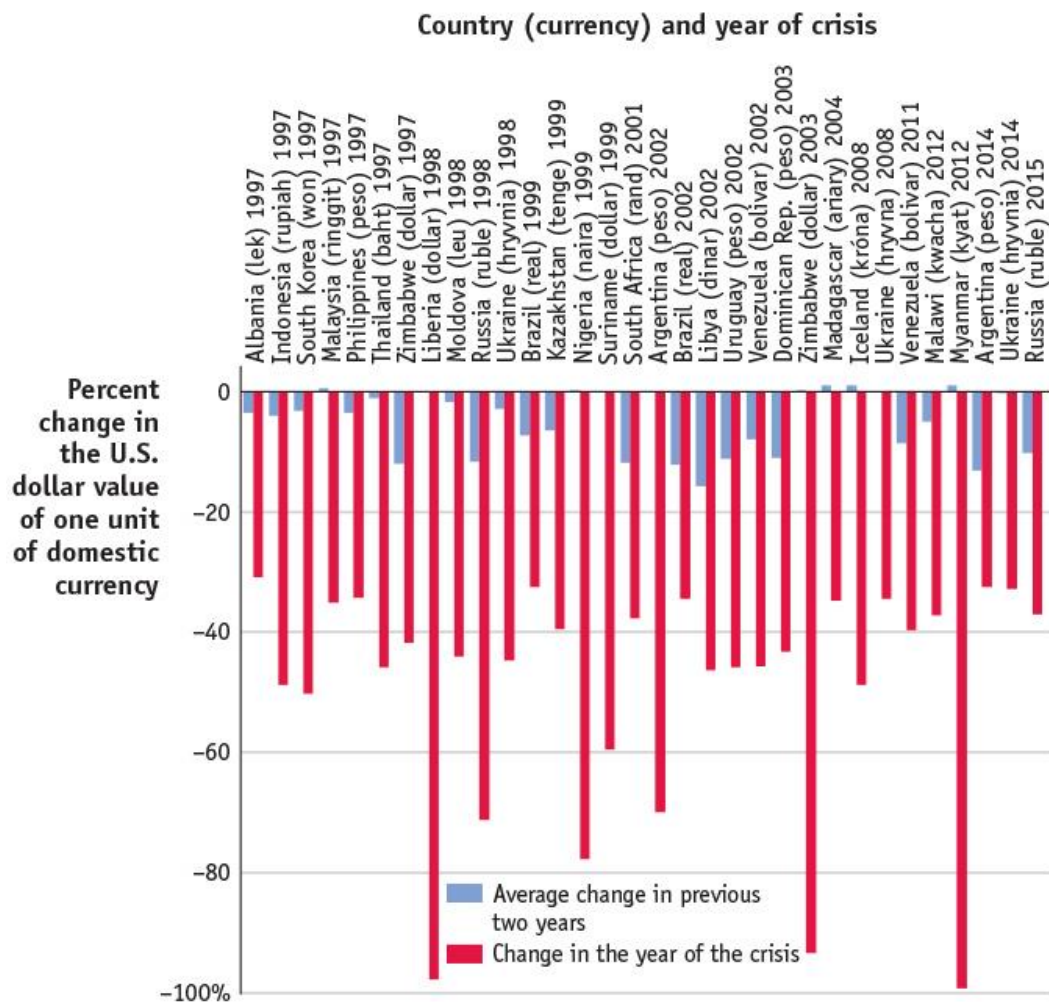
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## When Exchange Rates Misbehave

- In an **exchange rate crisis** a currency experiences a sudden and pronounced loss of value against another currency following a period in which the exchange rate had been fixed or relatively stable.
- There were more than 32 exchange rate crises in the 18-year period from 1997 to 2015.
- Quite often, e.g., Argentina in 2002, an exchange rate crisis can coincide with other types of crises: a financial crisis (bank failures) and/or a sovereign debt crisis (government default).

# 1 Foreign Exchange: Currencies and Crises

FIGURE 1-2



## Currency Crashes

The chart shows that exchange rate crises are common events. An exchange rate crisis is defined here as an event in which a currency loses more than 30% of its value in U.S. dollar terms over one year, having changed by less than 20% each of the previous two years.

# HEADLINES

## Economic Crisis in Iceland

Societies and individuals can be profoundly shaken by the issues studied in international macroeconomics.

This article was written just after the start of the severe economic crisis that engulfed Iceland in 2008, following the collapse of its exchange rate, a financial crisis, and a government fiscal crisis.

Real output per person shrank by more than 10%, and unemployment rose from 1% to 9%. Five years later a recovery was just beginning to take shape.



Protesters outside the Icelandic parliament in Reykjavik demand that the government do more to improve conditions for the recently poor.

# 1 Foreign Exchange: Currencies and Crises

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## When Exchange Rates Misbehave

- Governments in crisis may appeal for external help from international development organizations, such as the **International Monetary Fund (IMF)** or **World Bank**, or other countries.

## Key Topics

- Why do exchange rate crises occur? Are they an inevitable consequence of deeper fundamental problems in an economy or are they an avoidable result of “animal spirits” — irrational forces in financial markets?
- Why are these crises so economically and politically costly?
- What steps might be taken to prevent crises, and at what cost?

## 2 Globalization of Finance: Debts and Deficits

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Financial globalization has taken hold around the world, starting in the economically advanced countries and spreading to many emerging market countries.

### Deficits and Surpluses: The Balance of Payments

- At the national level, economic measurements such as **income**, **expenditure**, **deficit**, and **surplus** are important barometers of economic performance, and the subject of heated policy debate.
- The income measure is called *gross national disposable income*; the expenditure measure is called *gross national expenditure*. The difference between the two is a key macroeconomic aggregate called the *current account*.

## 2 Globalization of Finance: Debts and Deficits

### Deficits and Surpluses: The Balance of Payments

TABLE 1-1 (1 of 2)

Inflation Performance and the Exchange Rate Regime

**Income, Expenditure, and the Current Account** The table shows data for the United States from 1990 to 2015 in billions of U.S. dollars.

	<b>Income</b> <i>Gross National Disposable Income</i>	<b>Expenditure</b> <i>Gross National Expenditure</i>	<b>Difference</b> <i>Current Account</i>
1990	\$5,983	\$6,058	−\$75
1991	6,211	6,203	8
1992	6,529	6,574	−46
1993	6,865	6,944	−79
1994	7,287	7,401	−115
1995	7,649	7,754	−105
1996	8,083	8,197	−114
1997	8,581	8,711	−129
1998	9,047	9,252	−205
1999	9,631	9,917	−287
2000	10,257	10,661	−404
2001	10,602	10,991	−389
2002	10,953	11,404	−451

## 2 Globalization of Finance: Debts and Deficits

### Deficits and Surpluses: The Balance of Payments

TABLE 1-1 (2 of 2)

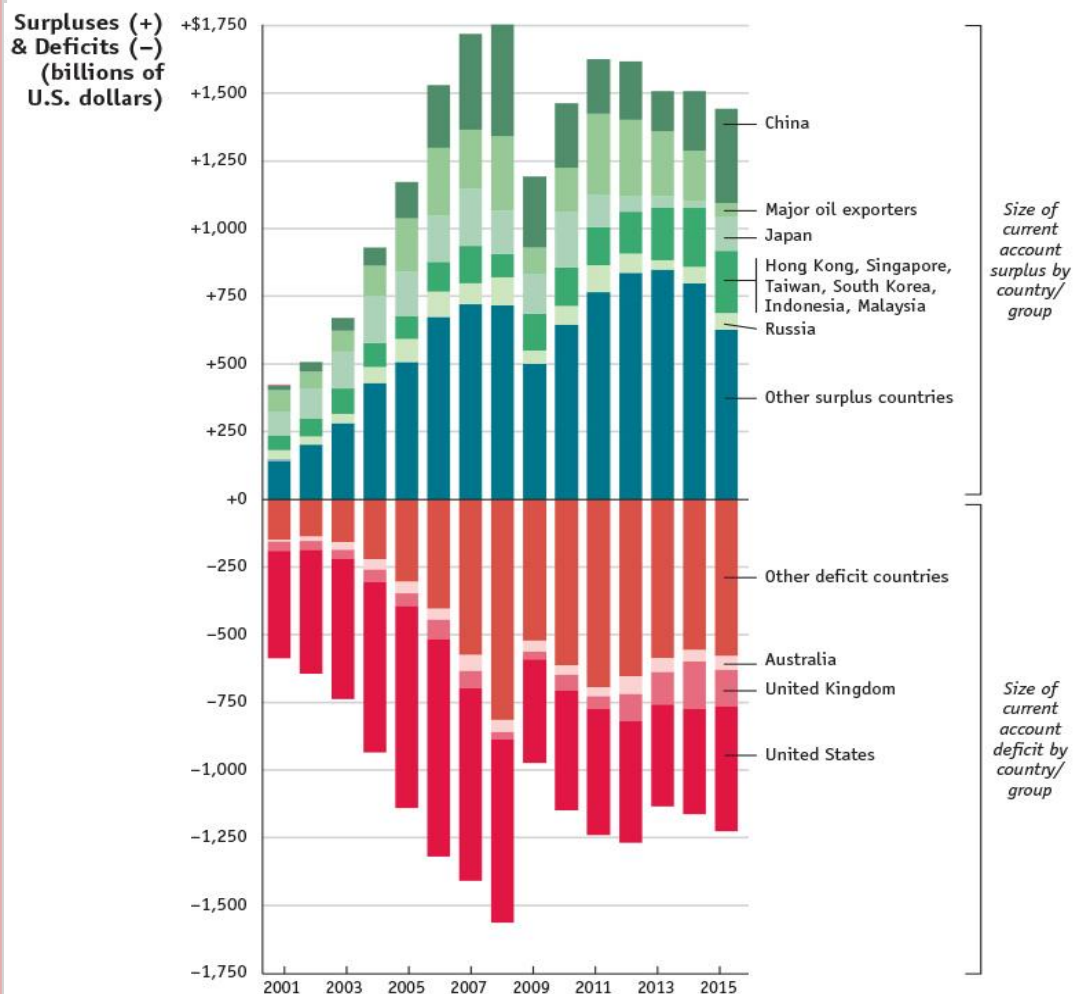
Inflation Performance and the Exchange Rate Regime (continued)

**Income, Expenditure, and the Current Account** The table shows data for the United States from 1990 to 2015 in billions of U.S. dollars. During this period, in all but one-year U.S. expenditure exceeded income, with the U.S. current account in deficit. The last (small) surplus was in 1991.

	<b>Income</b> <i>Gross National Disposable Income</i>	<b>Expenditure</b> <i>Gross National Expenditure</i>	<b>Difference</b> <i>Current Account</i>
2003	11,499	12,014	−516
2004	12,267	12,894	−627
2005	13,077	13,815	−738
2006	13,825	14,627	−802
2007	14,478	15,196	−718
2008	14,750	15,442	−692
2009	14,432	14,814	−382
2010	15,031	15,477	−446
2011	15,616	16,098	−482
2012	16,253	16,721	−468
2013	16,776	17,172	−396
2014	17,477	17,878	−401
2015	18,011	18,476	−465

## 2 Globalization of Finance: Debts and Deficits

FIGURE 1-3



### Global Imbalances

For more than a decade, the United States current account deficit has accounted for about half of all deficits globally. Major offsetting surpluses have been seen in Asia (e.g., China and Japan) and in oil-exporting countries.



## 2 Globalization of Finance: Debts and Deficits

### Deficits and Surpluses: The Balance of Payments

#### Key Topics

- How do different international economic transactions contribute to current account imbalances?
- How are these imbalances financed? How long can they persist?
- Why are some countries in surplus and others in deficit?
- What role do current account imbalances perform in a well-functioning economy?
- Why are these imbalances the focus of so much policy debate?

## 2 Globalization of Finance: Debts and Deficits

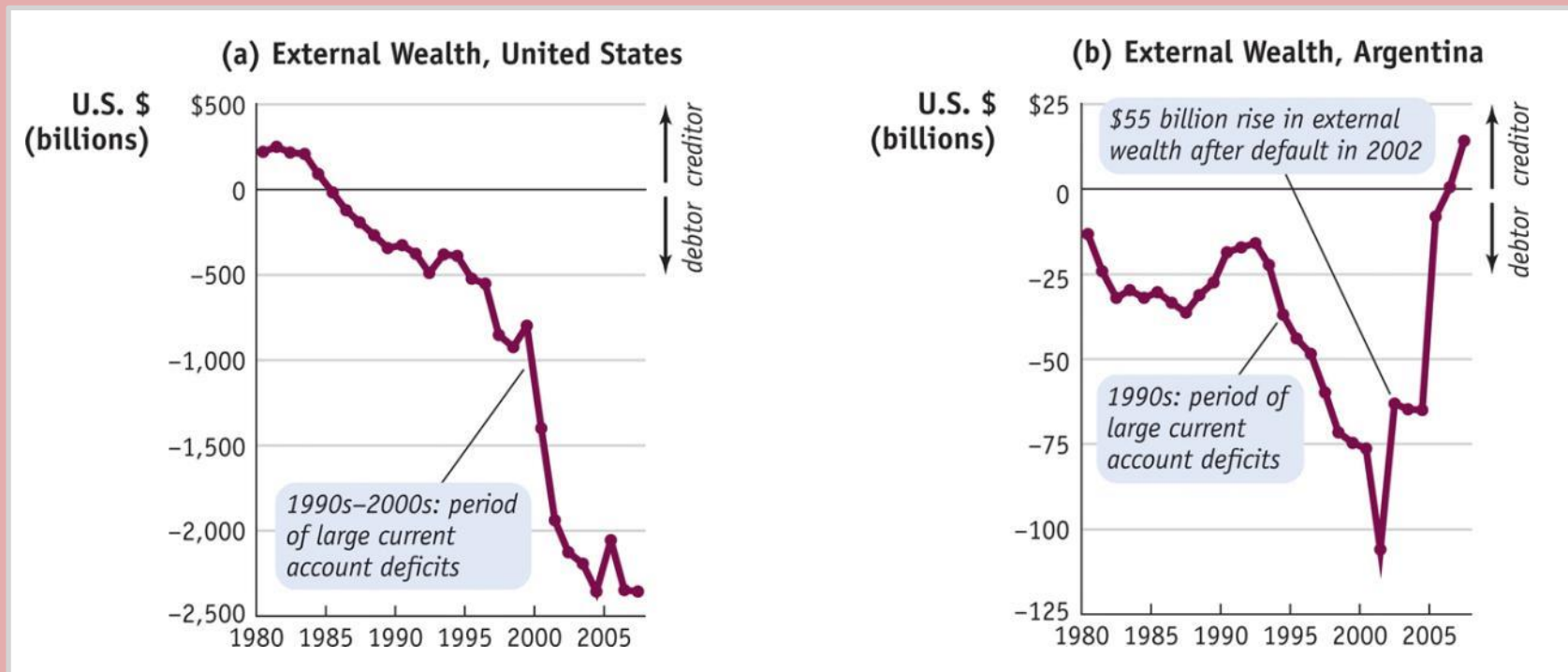
### Debtors and Creditors: External Wealth

- Total **wealth** or net worth is equal to your assets (what others owe you) minus your liabilities (what you owe others).
  - When you run a surplus and save money (buying assets or paying down debt), your total wealth, or net worth, tends to rise.
  - Similarly, when you have a deficit and borrow (taking on debt or running down savings), your wealth tends to fall.
- From an international perspective, a country's net worth is called its **external wealth** and it equals the difference between its foreign assets (what it is owed by the rest of the world) and its foreign liabilities (what it owes to the rest of the world).
- Positive external wealth makes a country a creditor nation; negative external wealth makes it a debtor nation.

## 2 Globalization of Finance: Debts and Deficits

### Debtors and Creditors: External Wealth

FIGURE 1-4



**External Wealth** A country's net credit position with the rest of the world is called external wealth. The time series charts show levels of external wealth from 1980 to 2007 for the United States in panel (a) and Argentina in panel (b). **All else equal**, deficits cause external wealth to fall; surpluses (and defaults) cause it to rise.

## 2 Globalization of Finance: Debts and Deficits

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### Debtors and Creditors: External Wealth

#### Key Topics

- What forms can a nation's external wealth take and does the composition of wealth matter?
- What explains the level of a nation's external wealth and how does it change over time?
- How important is the current account as a determinant of external wealth? How does it relate to the country's present and future economic welfare?

## 2 Globalization of Finance: Debts and Deficits

### Darlings and Deadbeats: Defaults and Other Risks

- Sovereign governments can repudiate debt without legal penalty or hurt creditors in other ways such as by taking away their assets or changing laws or regulations.
- The difference between the interest paid on a safe U.S. Treasury bond and the interest paid by on a bond issued by a nation with greater risk is called **country risk**.
  - On January 8, 2016, the *Financial Times* reported that relatively good investment-grade governments such as Poland (grade A–) carried a country risk of +1.48%, while governments with junk-bond grades such as Turkey (grade BBB–) had a country risk of 3.38%.

## 2 Globalization of Finance: Debts and Deficits

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### Darlings and Deadbeats: Defaults and Other Risks

#### Key Topics

- Why do countries default? And what happens when they do?
- What are the determinants of risk premiums?
- How do risk premiums affect macroeconomic outcomes such as output and exchange rates?

### 3 Government and Institutions: Policies and Performance

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- Government actions influence economic outcomes in many ways via decisions about exchange rates, macroeconomic policies, debt repayment, and so on.
- To gain a deeper understanding of the global macroeconomy, economists study **policies**, rules and norms, or **regimes** in which policy choices are made.
- At the broadest level, research also focuses on **institutions**, a term that refers to the overall legal, political, cultural, and social structures that influence economic and political actions.

### 3 Government and Institutions: Policies and Performance

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Three important features of the broad macroeconomic environment in the remainder of this book are:

- The rules that a government decides to apply to restrict or allow capital mobility.
- The decision that a government makes between a fixed and a floating exchange rate regime.
- The institutional foundations of economic performance, such as the quality of governance that prevails in a country.



### 3 Government and Institutions: Policies and Performance

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#### Integration and Capital Controls: The Regulation of International Finance

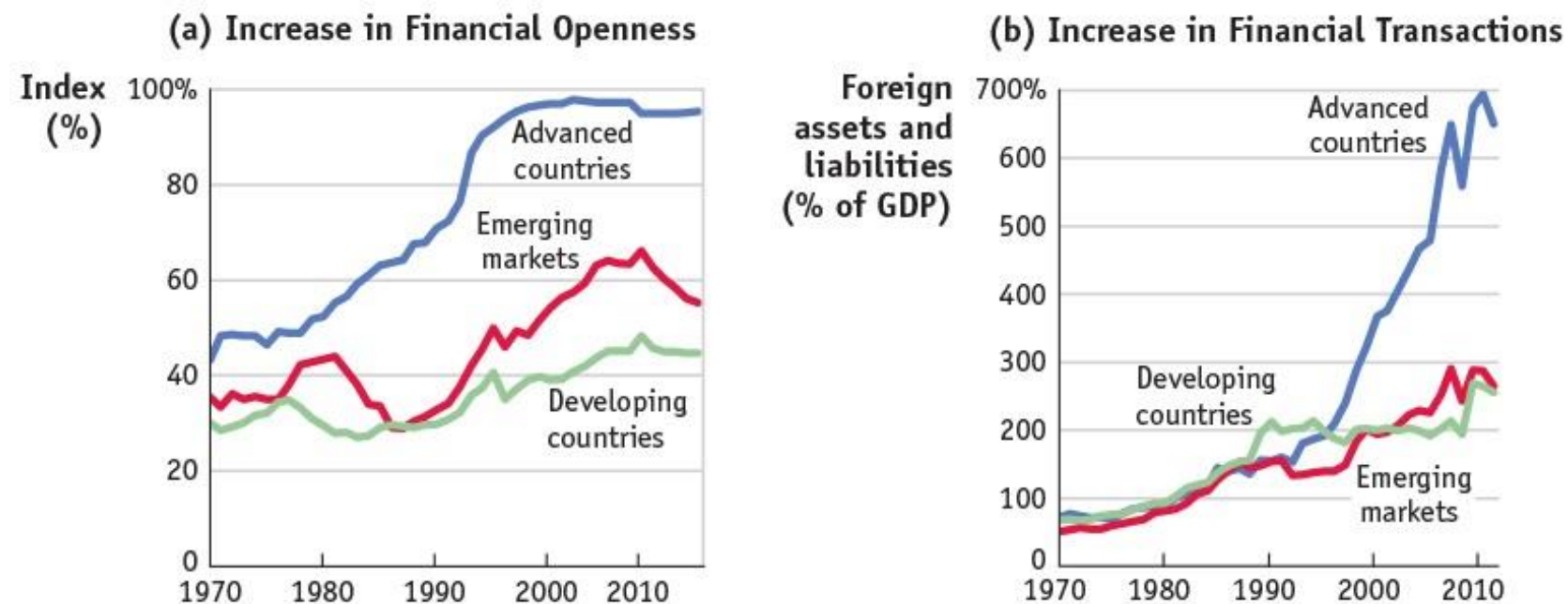
International trade has grown as trade barriers have diminished, and many nations have encouraged international capital movement by lifting restrictions on financial transactions.

Three groups of countries that will figure often in our analysis are:

- **Advanced countries**—countries with high levels of income per person that are well integrated into the global economy.
- **Emerging markets**—mainly middle-income countries that are growing and becoming more integrated into the global economy.
- **Developing countries**—mainly low-income countries that are not yet well integrated into the global economy.

### 3 Government and Institutions: Policies and Performance

FIGURE 1-5



**Financial Globalization** Since the 1970s, many restrictions on international financial transactions have been lifted, as shown by the time series chart in panel (a). The volume of transactions has also increased dramatically, as shown in panel (b). These trends have been strongest in the advanced countries, followed by the emerging markets and the developing countries.

### 3 Government and Institutions: Policies and Performance

#### Integration and Capital Controls: The Regulation of International Finance

##### Key Topics

- Why have so many countries pursued policies of financial openness?
- What are the potential economic benefits of removing capital controls and adopting such policies?
- If there are benefits, why has this policy change been so slow to occur since the 1970s?
- Are there any potential costs that offset the benefits? If so, can capital controls benefit the country that imposes them?



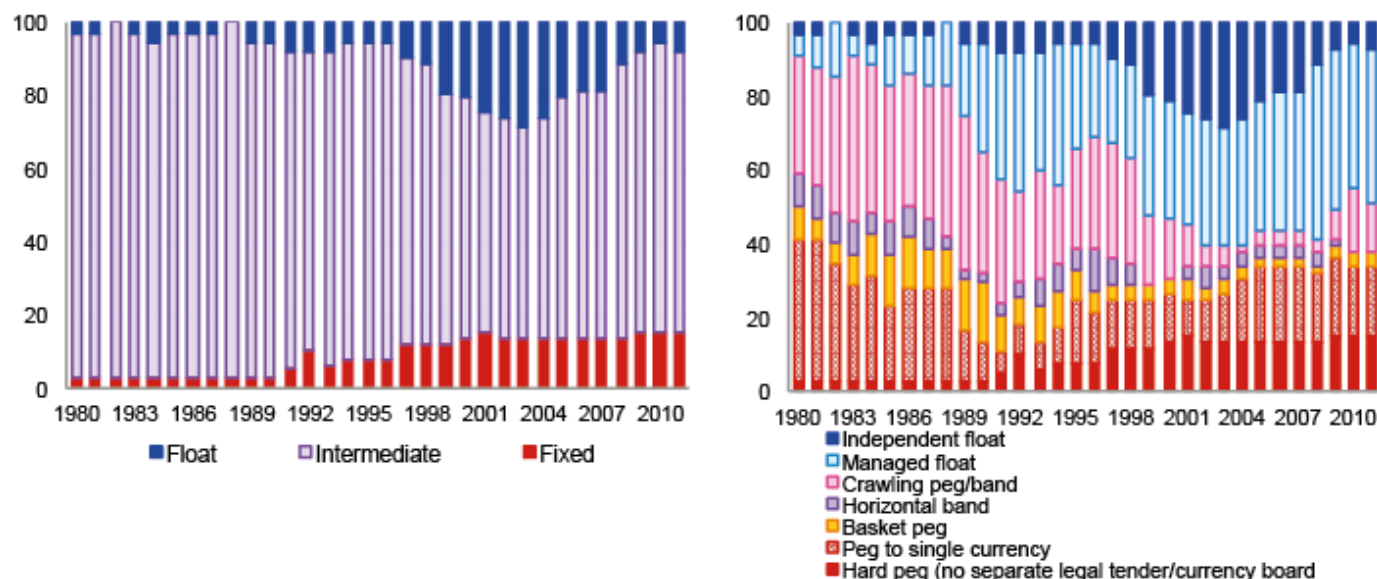
HALLDOR KOLBEINS/AFP/Getty Images

For years, Zimbabwe imposed capital controls. In theory, U.S. dollars could be traded for Zimbabwe dollars only through official channels at an official rate. On the street, the reality was different.

### 3 Government and Institutions: Policies and Performance

## Independence and Monetary Policy: The Choice of Exchange Rate Regimes

FIGURE 1-6



**Exchange Rate Regimes** The chart shows a classification of exchange rate regimes around the world using the data for the year 2010.

### 3 Government and Institutions: Policies and Performance

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#### Independence and Monetary Policy: The Choice of Exchange Rate Regimes

Despite the abundance of currencies, we also see newly emerging forms of monetary organization.

- Some groups of countries have sought to simplify their transactions through the adoption of a **common currency** with shared policy responsibility. The most notable example is the Eurozone.
- Still other countries have chosen to use currencies over which they have no policy control, as with the recent cases of **dollarization** in El Salvador and Ecuador.

### 3 Government and Institutions: Policies and Performance

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#### Independence and Monetary Policy: The Choice of Exchange Rate Regimes

##### Key Topics

- Why do so many countries insist on the “barbarism” of having their own currency (as John Stuart Mill put it)?
- Why do some countries create a common currency or adopt another nation’s currency as their own?
- Why do some countries that have kept their own currencies maintain a fixed exchange rate with another currency?
- And why do others permit their exchange rate to fluctuate, making a floating exchange rate their regime choice?

### 3 Government and Institutions: Policies and Performance

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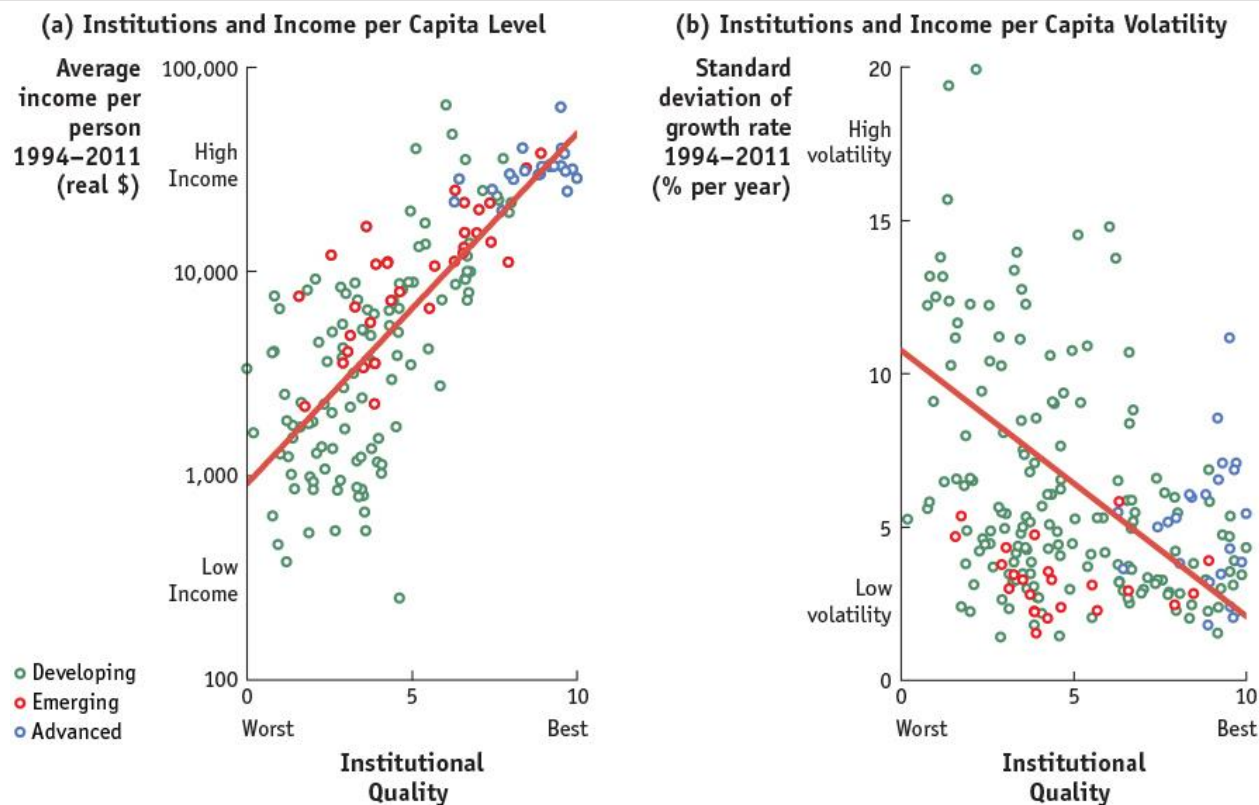
#### Institutions and Economic Performance: The Quality of Governance

The legal, political, social, cultural, ethical, and religious structures of a society set the environment for economic prosperity and stability, or poverty and instability.

- Better quality institutions are correlated with higher levels of **income per capita**.
- Better quality institutions are correlated with lower levels of **income volatility**.

### 3 Government and Institutions: Policies and Performance

FIGURE 1-7



**Institutions and Economic Performance** The scatterplots show how an index measuring the quality of a country's institutions is positively correlated with the level of income per capita as shown in panel (a) and is inversely correlated with the volatility of income per capita as shown in panel (b). In each case, the line of best fit is shown.



### 3 Government and Institutions: Policies and Performance

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#### Institutions and Economic Performance: The Quality of Governance

##### Key Topics

- Governance matters: It explains large differences between countries in their economic outcomes.
- Poor governance generally means that a country is poorer and is subject to more macroeconomic shocks. It may also be subject to more political shocks and a general inability to conduct policy in a consistent way.
- One size may not fit all, and policies that work well in a stable well-governed country may be less successful in an unstable developing country with poor governance.

## Conclusions

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Today's global macroeconomy is increasingly integrated. Therefore, to effectively study macroeconomic outcomes, we must understand the economic linkages between different countries—their currencies, their trade, and their capital flows.

Only then can we begin to understand some of the most important economic phenomena in the world today, such as:

- The fluctuations in currencies
- The causes of crises
- The determinants of global imbalances
- The problems of economic policy making
- The causes and consequences of the gap between rich and poor countries

## KEY POINTS

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1. Countries have different currencies, and the price at which these currencies trade is known as the exchange rate. In learning what determines this exchange rate and how the exchange rate is linked to the rest of the economy, we confront various questions: Why do some countries have fixed exchange rates and others floating? Why do some go from one to the other, often in response to a crisis? Why do some countries have no currency of their own?

## KEY POINTS

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2. When countries are financially integrated, it allows them to decouple their level of income from their level of expenditure; the difference between the two is the current account. An important goal is to understand what determines the current account and how the current account is linked to the rest of a nation's economy. Along the way, we learn how a country's current account affects its wealth, how its credits and debts are settled, and how the current account changes.

## KEY POINTS

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3. Countries differ in the quality of their policy choices and in the quality of the deeper institutional context in which policies are made. In studying international macroeconomic interactions and events, it is essential to understand how policy regimes and institutions affect policy choices and economic outcomes. How does quality of governance affect economic outcomes? Why might some policies, such as a fixed exchange rate, work better in some contexts than others? Do country characteristics affect the costs and benefits of financial globalization?

Thank You for your  
attention!