# Chapter 1

# A Tour of the World

## I. MOTIVATING QUESTION

### What is macroeconomics?

The chapter does not provide an explicit or formal answer. Instead, it begins with an overview of the macroeconomic crisis then moves to describe the issues of concern to macroeconomists who study the United States, Europe, and China. A working definition of macroeconomics at this point is the study of output, unemployment, and inflation, terms that will be defined precisely in Chapter 2.

## II. Why the Answer Matters

This chapter attempts to provide students an incentive to master the theoretical material that follows in the remainder of the text. The implicit promise is that the theoretical model developed in the text will allow students to make sense of the macroeconomic crisis which has impacted countries around the world.

## III. Key Tools, Concepts, and Assumptions

### 1. Tools and Concepts

Chapter 1 does not provide any analytical tools. However, it does force students to confront some basic data and introduces data sources for various regions of the world. In addition, the chapter introduces and defines briefly the concepts of **output**, **growth**, the **unemployment rate**, and the **inflation rate**. A precise definition of these terms follows in Chapter 2.

Chapter 1 mentions in passing the terms **standard of living**, **productivity and purchasing power parity**. All of these terms and concepts will be explored in later chapters in the text.

**2. Assumptions**

Implicit in the Tour of the World is the assumption that the same basic macroeconomic tools can be used to analyze economies throughout the world. It might be worth making this point explicitly. The macroeconomic framework developed in the text would be neither terribly useful, nor compelling as a theory, if it applied only to the United States, and not to the other market economies.

## IV. Summary of the Material

### 1. The Crisis

### Included in the 6th edition of the textbook is a discussion around the major macroeconomic crisis that occurred in 2008. Table 1-1 outlines the output growth rates for the world economy, the advanced economics and for the other countries separately since 2000. From 2000 to 2007 the world economy had a sustained expansion. Annual average world output growth was 3.2%, with advanced economies growing at 2.6% per year, and emerging and developing economies growing at an even faster 6.5% per year. By 2008, the world, advanced and emerging economy output growth rate began to decline marking the beginning of the macroeconomic crisis.

### Highlights of the Macroeconomic Crisis:

### U.S. Housing prices, which had doubled since 2000, started to decline in 2007.

### Mortgage loans which had been given out during the earlier expansion were of poor quality causing many borrowers to increasingly be unable to make mortgage payments.

* Declining housing prices caused the mortgage of the homes to exceed the market price of housing thus creating an incentive to default.
* Banks that mortgaged the loans often bundled, packaged and repackaged the loans into new securities and then sold them to other banks and investors. The holdings of securities, instead of mortgages by banks, created a complex understanding of the value of the asset making it impossible to appraise.
* The complexity of the value of the securities and the quality of the assets made banks reluctant to lend to each other.
* September 15, 2008, a major bank, Lehman Brothers, went bankrupt causing other banks that were also unable to borrow, and holding assets of an uncertain value to be perceived as a risk. Within weeks the whole financial system was in jeopardy.
* Figure 1-1 shows how financial crisis became an economic crisis with the evolution of the three stock price indexes (for the United States, Euro area and emerging economies) declining by the end of 2008, loosing half or more of its value by the previous peak.
* The decline in housing prices and the collapse in stock prices lead to a decline in consumption of goods and services.
* Businesses' concerns over sales and continuous decline in housing prices caused a sharp cut back on investment along a decline in the building of new homes.
* Despite strong actions by the Fed, to cut the interest rate, and the U.S. government which cut taxes and increased government spending, the demand and output continued to decline in the U.S.
* A decline in the U.S. importing goods from abroad along with U.S. banks needing repatriate funds from other countries moved a U.S. crisis into a world crisis.
* By 2009, average growth in advanced economies was -3.7%, by far the lowest annual growth rate since the Great Depression. Growth in emerging and developing economies remained positive but was nearly 4 percentage points lower than the 2000–2007 average.
* Table 1-1, shows by 2010, both advanced countries and emerging and developing economies began to turn positive, thanks to strong monetary and fiscal policies and the slow repair of the financial system.
* Figure 1-2 displays consistantly high unemployment rates for the United States and Euro area since the beginning of the crisis. The chapter discusses the factors behind the high unemployment rates and low growth of output, which are:
* Housing prices are still declining.
* Housing investment re-mains very low.
* Banks are still not in great shape, and bank lending is still tight.
* Consumers who have seen the value of their housing and their financial wealth fall are cutting consumption.
* The crisis has also led to serious fiscal problems.

### 2. The United States

In the United States, just before the crisis, the rate of growth of the economy was 2.6% which was a bit lower than the previous 20-year average, but still fairly high for an advanced country. On average, the unemployment rate and the inflation rate was lower over this period than over the period since 1980. During the crisis output did not grow in 2008 and declined by 3.5% in 2009. The economy rebounded by 2010, with growth of 3%. Unemployment increased dramatically, to nearly 10%. Inflation declined, being slightly negative in 2009 and then staying positive but low since then. The numbers of 2011 and 2012 are forecast as of fall of 2011.

The high unemployment rate along with the very large budget deficit in the United States tends to be the preeminent issues facing the United States.

Figure 1-4 shows the evolution of the U.S. federal budget surplus since 1990.

* *The 1990s* - After an increase in deficits due to the 1990–1991 recession, the rest of the decade was associated with a steady improvement in the budget, and by 1998, the budget had actually gone from deficit to surplus.
* The main reasons for the steady improvement were twofold. *First*, strong output growth for most of the decade led to strong growth of government revenues. *Second*, rules were devised and implemented to contain government spending, from the use of spending caps on some categories of spending to the requirement that any new spending program be associated with an equal increase in revenues. - (Once the budget surplus appeared Congress became willing to break its own rules and allow for more spending.)
* *The Early 2000s* - The budget deficit returned due to Bush administration convincing Congress to cut taxes with the goal of spurring growth.
* *The Crisis* - The budget deficit in 2007 was 1.7% of GDP increased to 9% of the GDP to 2010 due to:
  + Lower output growth which has led to lower government revenues.
  + A decline in Federal revenues, from 18.9% of GDP in 2007, to 16.2% of GDP in 2010.
  + Increase in Federal spending, from 20.6% in 2007, to 25.3% in 2010.
* There is an agreement that the budget deficit must be reduced but the disagreement is based upon when and how.
* *When-* Some economist argue the deficit should start now and proceed rapidly to convince people that the U.S. government will do what is needed to stabilize debt. Other, economist argue that too fast a reduction through an increase in taxes and a decrease in spending will slow down growth at time when the unemployment rate is persistently high.
* *How -* Republican s believe the deficit reduction show be achieved through a decrease in government spending. Democrats most programs are justified and the adjustment should occur through an increase in taxes.

### 2. Europe

Figure 1-5 displays a map the EU17 that uses the *Euro* as a common currency along with the 2010 output of the Euro area's output for the countries of France, Germany, Italy and Spain. Table 1-3 shows that over the 2000-2007 time period right before the crisis, the Euro Area together experienced positive but relatively low growth The Euro Area also endured low inflation and continued high unemployment. The crisis caused growth to decline to negative 4.2% by 2009 and the unemployment rate to reach 10.1% by 2010.

The issues facing the Euro area are:

* How to reduce unemployment.
* How to function effectively as a common currency area.

*How to reduce unemployment*

The debate over remedies for high unemployment in Europe is characterized by two polar views. According to the first view, high unemployment is the result of tight monetary policy by the European Central Bank. The suggested remedy is lower interest rates. According to the second view, high unemployment is a result of rigid labor market institutions, particularly with respect to worker protection. Thus, the suggested remedy is to restructure labor market institutions—in fact to model them after the institutions in the United States. The United Kingdom has followed this approach, evidently with some success in reducing the unemployment rate. Some economists, however, remain skeptical that the U.K.’s approach is the right model for Europe. These economists point out that Denmark and the Netherlands have low unemployment rates, despite providing generous social insurance for workers. The way forward, the skeptics argue, is to study the details of worker protection policies in places where such policies have been consistent with low unemployment, and to apply the lessons to other European economies.

*How to function effectively as a common currency area*

The Euro offers political and economic benefits. Politically, the adoption of a single currency provides a strong symbol of European unification after the wars of the 20th century and before. Economically, the Euro has eliminated exchange rate uncertainty among participating countries, and thus may facilitate trade and contribute to the economic development of Europe as, perhaps, the largest economic power in the world. On the other hand, the adoption of a single currency has eliminated the discretion of each country individually to use monetary policy to stimulate output and reduce unemployment. Countries that participate in the Euro have a common monetary policy, in the same way that states in the United States have a common monetary policy. This situation creates the possibility of policy conflicts when some countries are in recession and others are in an economic boom.

The chapter points to the recent policy conflicts surfing among Euro members. Highlighting the deep recessions of countries from Ireland, to Portugal, to Greece, unable to individually decreasedtheir interest rate or depreciated their currency. This has prompted some economists argue that they should drop out of the Euro. Others argue that such an exit would be both unwise, as it would give up on the other advantages of being in the Euro, and extremely disruptive, leading to even deeper problems for the country that has exited. Policy issues associated with monetary union are discussed further in Chapter 21.

### 4. China

China’s economy commands the attention of macroeconomists because of its exceptional growth over the last three decades. Since 1980, China's output has grown at roughly 10% a year. Table 1-4 shows that the crisis has had little effect on the Chinese economy. While, Chinese exports slowed down during the crisis it was nearly fully offset by a major fiscal expansion by the Chinese government. The result was sustained growth of demand and, in turn, of output.

Although official Chinese statistics are not as accurate as in richer countries, research suggests that there is no clear bias in the numbers. In other words, high growth in China is a fact, and not an artifact of poor statistics. China has achieved high growth through rapid accumulation of capital (investment rates exceeding of output) and fast technological progress. The latter achievement is in part a result of the Chinese government’s strategy of encouraging foreign firms—which are typically more productive than Chinese firms—to produce in China. The government has also encouraged joint ventures between foreign and Chinese firms. Such joint ventures allow Chinese firms to learn from more productive foreign firms.

Although China’s success seems to provide a model for other developing countries to follow, questions remain about the operational lessons to draw from China’s experience. In most other cases, the transition from central planning to a market economy has been accompanied by a large decline in output. Some argue that the slow pace of China’s transition—thirty years and still incomplete—was an important factor in China’s success. Others argue that the political control of the Communist party during the transition has enabled better protection of property rights for firms, thereby creating incentives for investment.

## V. Pedagogy

### 1. Points of Clarification

Chapter 1 mentions in passing that an annual growth rate of 10% means output will double in about 7 years. The “rule of 70” is discussed in a margin note in Chapter 10, but instructors may wish to mention it here. Also, the text does not use logarithms, although it does use graphs on logarithmic scales. Instructors who wish to use logarithms in the course can use the rule of 70 as a way to reacquaint students with the use of the natural logarithm.

### 2. Alternative Sequencing

*i. The Global Crisis.* Indeed, instructors could use the global crisis as the running example to introduce most the material. The 6th Edition features a streamlined organization where an early and continuous examination of the global crisis provides an integrated framework to think about the short, medium run, and long run.

*ii. Output, the Unemployment Rate, and the Inflation Rate.* Output, the unemployment rate, and the inflation rate are not defined precisely until Chapter 2. Some instructors may prefer to cover the definitions from Chapter 2, and possibly the discussion of why macroeconomists care about these variables, before discussing the material in this chapter.

### 3. Enlivening the Lecture

An alternative to posing the motivating question of this chapter is to ask students what they hope to learn from the course. The answers can be used to construct a description of what the course—and macroeconomics—is about. Another alternative is to begin a lecture on this chapter (and the course) by asking what the Congress should do at federal budget deficit and the debt. Students should develop alternative opinions based on illustrative newspaper quotes or student answers.

## VI. Extensions

### 1. The Rest of the World

The Tour of the World presented in this chapter focuses attention on the United States, Europe, and China. Economic events in other regions are discussed only briefly at the end of the chapter. Current economic events in some of these regions are discussed at various places throughout the text. However, instructors may wish to devote more time to these regions at the outset, especially if the course will consider the open economy.

### 2. Positive and Normative Economics, Policy Disagreements, and Methodology

Instructors may wish to distinguish between positive and normative economics and to discuss how normative perspectives can lead economists to different policy prescriptions even when they agree on the facts. Instructors may also wish to remind students of the difficulties that economists and other social scientists face because of the inability to conduct controlled experiments. A discussion of this sort was presented in Chapter 1 of the first edition of the text.

### 3. Distribution of Economic Benefits

The second edition of the text included a discussion about wage inequality in the section on the U.S. economy. In subsequent editions, including the current edition, wage inequality is discussed in Chapter 13. Instructors may wish to raise this issue in the introductory discussion of the U.S. economy.