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 takes you on an economic tour of the world and then describes the 2008 global macroeconomic crisis and other issues of concern to macroeconomists who study the United States, the Euro area, 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 various macroeconomic issues that continue to impact 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 the concepts of **output**, **growth**, the **unemployment rate**, and the **inflation rate**. A more 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 7th edition of the textbook is a discussion around the major macroeconomic crisis that occurred in 2008. Figure 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 4.5%, with advanced economies growing at 2.7% per year, and emerging and developing economies growing at an even faster 6.6% 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.
- A number of mortgage loans originated during the earlier expansion were to highrisk borrowers which were increasingly unable to make mortgage payments.
- Declining housing prices caused the mortgages to exceed the market value of the homes thus creating an incentive to default.
- Banks that originated 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, added complexity that made it impossible
 to appraise the value of these derivative financial obligations.
- 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 creating borrowing issues and asset valuation problems for other banks. Within weeks the whole financial system was in jeopardy.
- Figure 1-2 shows how the financial crisis became an economic crisis with the collapse of stock prices indicated in the three stock price indexes (for the United States, Euro area and emerging economies). By the end of 2008, stocks had lost half or more of their value from 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 reduction in investment along with a decline in the building of new homes.
- Despite strong actions by the Fed, including a cut in interest rates, and the U.S. government which cut taxes and increased government spending, both demand and output continued to decline in the U.S.

- A decline in the U.S. imports along with U.S. banks needing to repatriate funds from other countries moved a U.S. crisis into a world crisis.
- By 2009, average growth in advanced economies was -3.4%, by far the lowest annual growth rate since the Great Depression. Growth in emerging and developing economies remained positive but was 3.5 percentage points lower than the 2000–2007 average.
- Table 1-1, shows by 2010, economic growth in the U.S. was positive but still not at pre-crisis levels.
- Tables 1-1 and 1-2 show consistently high unemployment rates for the United States and Euro area since the beginning of the crisis. However, U.S. unemployment rates are beginning to improve and are down to 5.4% as of 2015.

2. The United States

In the United States, the 1990-2007 average rate of growth of the economy was 3.0%. In contrast the rate of growth during the crisis (2008-2009) was -1.5%. However, by 2015 the U.S. economy was growing at an annual rate of 2.5%. U.S. unemployment rates increased from a pre-crisis average of 5.4% to an average of 8.0% over the period 2010-2014. However, by 2015 the U.S. unemployment rate was down to 5.4% as firms began to add employees.

One of the primary economic issues facing the U.S. is the current Federal Reserve policy of extremely low interest rates which have been necessary to propel growth. Figure 1-4 shows the federal funds rates from 2000-2015 which highlights this policy. At the current time the Fed is near zero interest rate bound and cannot lower rates much to stimulate growth if deemed necessary. The low rates also push investors to take excessive risks in search of higher returns. Another macroeconomic issue is the low productivity in the U.S. Table 1-2 shows that productivity growth is significantly lower in all sectors of the economy relative to the 1990s. Slow productivity growth can decrease the real earnings power of workers and lead to an increase in income inequality. Policy makers need to change this trend.

3. The Euro Area

Figure 1-5 displays a map the EU17 that uses the *Euro* as a common currency along with the 2014 output of the Euro area's output for the countries of France, Germany, Italy and Spain. Table 1-3 shows that over the 1990-2007 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 2.0% over the 2008-2009 period while the unemployment rate averaged 11.1% over the 2010-2014 time period. Some Euro Area countries, such as Greece and Spain, continue to struggle with unemployment rates exceeding 23%, even in 2015.

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 such as generous unemployment insurance policies that reduce the incentive to find work. 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. However, skeptics point out that other countries in the Euro Area have labor markets with similar worker protections but yet have low unemployment rates. For example, Germany's 2015 unemployment rate is below 5%.

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 among Euro members. Highlighting the issue are deep recessions of countries including Ireland, Portugal, and Greece, that are unable to individually decrease their interest rates, or depreciate their currency. These problems have 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, is extremely disruptive, and could lead to even deeper problems for the country that exits. Policy issues associated with monetary union are discussed further in Chapter 20.

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. However, China's economic growth rate is falling and was only 6.8% in 2015.

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" tells us how long it takes for an amount to double in value so 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 7th 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 Federal Reserve should do with regard to interest rates. 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 income inequality in the section on the U.S. economy. In subsequent editions, including the current edition, income inequality is discussed in Chapter 13. Instructors may wish to raise this issue in the introductory discussion of the U.S. economy.