Chapter 1. A Tour of the World

What is macroeconomics? The best way to answer is not to give you a formal definition, but rather to take you on an economic tour of the world, to describe both the main economic evolutions and the issues that keep macroeconomists and macroeconomic policy makers awake at night.

At the time of this writing (the end of 2004), they are sleeping a bit better than they have in some time. After a global slowdown in economic activity in the early 2000s, the world is now in the middle of a global expansion. World output growth is close to 5%, a high growth rate by historical standards. In the United States, the recession of 2001 has given way to an expansion. In Europe, economic growth has also increased, although unemployment remains very high. Even Japan appears to be emerging from a decade–long economic slump.

My goal in this chapter is to give you a sense of these evolutions, and of the issues confronting macroeconomists today. There is no way I can take you on a full world tour, so I shall give you a sense of what is happening in the United States, the European Union, and Japan. Together, they still dominate the world economic scene, accounting for close to 3/4 of world output.

Section 1-1 looks at the United States.

Section 1-2 looks at Europe.

Section 1-3 looks at Japan.

Read the chapter as you would read an article in a newspaper. Do not worry about the exact meaning of the words, or about understanding all the arguments in detail: The words will be defined, and the arguments will be developed in later chapters. Regard it as background, intended to introduce you to the issues of macroeconomics. If you enjoy reading this chapter, you will probably enjoy reading this book. Indeed, once you have read the book, come back to this chapter; see where you stand on the issues, and judge how much progress you have made in your study of macroeconomics.

1-1 The United States

Figure 1-1. The United States. (Map of North America, with a blow-up of the United States, and the following numbers in a box: Output in 2003: \$ 11.0 trillion. Population: 293 million. Output per capita: \$37,500.)

When macroeconomists study an economy, they first look at three variables:

- *Output*—the level of production of the economy as a whole—and its rate of growth.
- The *unemployment rate*—the proportion of workers in the economy who are not employed and are looking for a job.
- The *inflation rate*—the rate at which the average price of the goods in the economy is increasing over time.

The basic numbers for the U.S. economy are given in Table 1-1. To put the current numbers in perspective, the first column gives you the average value of the rate of growth of output, the unemployment rate, and the inflation rate in the United States for the period 1960 to 2000. The second column gives you the same three numbers, but for the period 1994 to 2000. The next four columns then give you the numbers for each of the years 2001 to 2004. Because this is written at the end of 2004, the numbers for 2004 are still projections: It takes some time to get the information needed to construct output and inflation numbers, and the final numbers will not be published until the middle of 2005.

Table 1-1. Growth, Unemployment, and Inflation in the United States, 1960-2004

	1960-2000	1994-2000	2001	2002	2003	2004
	(average)	(average)				
Output growth rate	3.2	3.9	0.5	1.9	3.0	4.4
Unemployment rate	6.1	4.9	4.8	5.8	6.0	5.5
Inflation rate	3.9	1.8	2.4	1.7	1.8	2.0

Output growth rate: annual rate of growth of output (GDP). Unemployment rate: average over the year. Inflation rate: annual rate of change of the price level (GDP deflator). Source: OECD Economic Outlook Data Base.

Start with the column giving the numbers for the period 1994-2000. From an economic point of view, that period was one of the best ones in recent memory:

- The average rate of growth was 3.9% per year, substantially higher than the average growth rate since 1960.
- The average unemployment rate was 4.9%, substantially lower than the average unemployment rate since 1960.
- The average inflation rate was 1.8%, substantially lower than the average inflation rate since 1960.

By 2000, this impressive performance had led many to argue that the United States had entered a $New \ Economy$, an economy in which the

United States could forever sustain higher growth, lower unemployment, and lower inflation than in the past. These beliefs were severely shaken in 2001. Output growth declined sharply. While the growth rate remained (barely) positive for the year as a whole, it was actually negative for three out of the four quarters of the year, so economists refer to this period as the recession of 2001.

The recession triggered a strong macroeconomic policy response: The Fed (the U.S. central bank, formally known as the *Federal Reserve Board*) sharply decreased interest rates. The Bush administration sharply decreased taxes. Lower interest rates and lower taxes led to higher spending, and by 2002, the recession gave way to a recovery. As you can see from Table 1-1, output growth has steadily increased since 2001, and is projected to reach 4.4% in 2004. The unemployment rate continued to increase until 2003, but has started decreasing. Inflation remains very low. By all three measures, the U.S. economy is doing well again.

Does this mean that everything is fine? At this stage, U.S. macroeconomists worry mainly about two sets of issues:

- Was the 1990s talk about the "New Economy" all hype, or was there some substance? In particular, can the United States hope to replicate the high rates of output growth that characterized the 1994-2000 period?
- Since 2001, the U.S. budget deficit has steadily increased, reaching 4.6% of U.S. output in 2003. Should we worry about such large deficits? What are the costs likely to be?

Let me discuss both sets of issues in turn.

Has the United States entered a New Economy?

Just as the valuation of some of the dot.com companies on the Nasdaq (the stock market where shares of most high tech companies are traded), many

of the New Economy claims had no basis in fact. One claim however—that the U.S. economy has entered a period of faster technological progress and therefore we can expect higher growth in the future than in the past—is more plausible and worth examining.

Figure 1–2. Rate of Growth of Output per Worker in the United States Since 1960. (Caption: The average rate of growth of output per worker decreased in the mid 1970s. It appears to have increased again since the mid 1990s.)

The way to examine this claim is to take a long view, and plot the rate of growth of *output per worker* since 1960 in the United States. (Output per worker is also called *productivity*; the rate of growth of output per worker is called the rate of productivity growth.) This is done in Figure 1-2. A look at the figure suggests two conclusions:

- Although growth rates vary a lot from year to year, it appears that starting at some point in the 1970s, there was a decrease in the average rate of growth of output per worker. The average annual growth rate for the period 1960 to 1973 (represented by the dashed horizontal line from 1950 to 1973 in the graph) was 2.1%. The average annual growth rate for the period 1974 to 1993 (represented by the dashed horizontal line from 1974 to 1974 to 1993) was a much lower 1%.
- In the recent past however, the average rate of growth of output per worker appears to have increased again. The average annual growth rate for the period 1994 to 2004 (represented by the dashed horizontal line from 1994 to 2004) has been equal to 2.0%, so 1% higher than the 1974-1994 average, and roughly back to the 1960-1973 average.

A difference in the average growth rate of output per worker of 1% per year may not seem like much—but it is. Think of it this way: A 1% higher annual growth sustained for 20 years implies a 22% higher level of productivity at

the end of 20 years; sustained for 50 years, it implies a 64% higher level of productivity after 50 years.¹ Other things equal, an increase in productivity of 64% translates into an 64% increase in output per capita², a 64% increase in what economists call the *standard of living*—a very substantial increase.

Can we be confident that growth of output per worker will continue in the future at the same higher rate as it has since 1994? Figure 1–2 suggests caution: The rate of growth of output per worker fluctuates a lot from year to year. The high growth rates since 1994 may just be a series of "lucky" years, not to be repeated in the future. Some economists believe that it is indeed too early to tell.³ Other economists are more optimistic. They believe that the underlying rate of technological progress has indeed increased in the United States, largely as a result of the development and better use of *information technologies*, from computers to faster communication networks. If they are right, it is indeed reasonable to expect faster productivity growth, and a faster increase in the standard of living, for some time to come.

Should one worry about the U.S. budget deficit?

In 2003, the U.S. budget deficit—that is, the difference between government expenditures and government revenues—was equal to 4.6% of output, a large number by historical standards. To put this number in perspective, Figure 1-3 shows the evolution of the budget deficit, as a proportion of U.S. output, since 1990.

Figure 1-3. The U.S. Budget Deficit, 1990-2003 (Ratio to Output, in percent). (Caption: The U.S. budget has gone from large deficits in the early

^{1.} $(1.01)^{20} - 1.0 = 22\%$; $(1.01)^{50} - 1.0 = 64\%$. For a review of exponents, see Appendix 2 at the end of the book.

^{2. &}quot;per capita" means per person (In latin, capita means head)

^{3.} This discussion may remind you of the controversies about global warming. The world temperature varies a lot from year to year. We need to observe many unusually warm years to be confident we are indeed seeing a trend towards global warming.

1990s to surpluses in the late 1990s, and back to increasing deficits since 2001)

At the start of the 1990s, the U.S. budget deficit was also very high, reaching nearly 6% of output in 1992. From 1992 on however, the deficit steadily decreased. This reduction was the result of three main factors: A decrease in defense spending, made possible by the end of the Cold War; strong output growth leading to strong growth of government revenues; and a program of deficit reduction put in place by the Clinton administration, mostly in the form of tight limits on government spending. By 1998, the deficit had turned into a surplus. In 2000, the budget surplus reached nearly 2%, a turnaround of 8% of GDP since 1992.

Things turned around sharply in 2001. The recession of 2001 led to lower growth of revenues. The events of September 11, and, later, the wars in Afghanistan and in Iraq, led to an increase in security and defense spending. And deficits were made much larger by tax cuts introduced by the Bush administration in 2001 and 2002. Today, the effects of the 2001 recession on the budget are all but gone, and the increase in defense spending and the tax cuts are the two main factors behind the current deficits. While the second Bush administration has promised to cut the deficit in half by 2008, most forecasts are that, in the absence of drastic changes in defense spending or substantial tax increases, the deficits will remain large for the rest of the decade.

Some economists argue that these deficits are no great cause for concern. The tax cuts, they argue, have led to a faster and stronger recovery from the recession of 2001. And, looking forward, lower taxes are good for the economy. Lower taxes mean lower distortions, more incentives for people to work, and for firms to invest.

Most economists however are more worried. They agree that temporary deficits were justified to help the economy recover from the recession in the early 2000s. But, long lasting deficits, they argue, are another matter. Given private saving, the larger the amount of borrowing by the government, the smaller the amount left for investment. In other words, deficits lead to lower capital accumulation, and so to lower output in the future. This cost may not be very visible in the short run, but it may be very substantial in the long run.

At this stage, there seems to be little commitment on the part of the government or on the part of Congress to reduce deficits. Whether, how, and when, deficits will be reduced is one of the major issues facing the U.S. economy today.

1-2. The European Union

Figure 1–4. The European Union

(Map of Europe and the European Union. I suggest you use three different colors. One for the members of the EU25. One for the members of the EU15. One for the 12 members of the Euro area. Ideally with the borders and names of each of the 25 countries.

In the top left corner: EU25: Output in 2003: \$11.0 trillion dollars. Population: 454 million. Output per capita: \$24,200.

Then, the numbers (only) for the 5 major countries:

Germany, 2.4, 82.5, 28,900

France, 1.7, 59.5, 29,100

Italy, 1.5, 57.9, 25,100

Spain, 0.8, 40.2, 20,500

United Kingdom, 1.8, 59.6, 29,100

(for the map:

list of Euro12: Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain list of EU15. same plus Denmark, Sweden, the United Kingdom

list of EU25. E15 plus Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia, and Slovenia)

In 1957, six European countries decided to form a common European market—an economic zone where people and goods could move freely. Since then, nineteen more countries have joined, with ten of them joining in 2004. This union is now known as the European Union, or EU for short. (Until a few years ago, the official name was the European Community, or EC. You may still encounter that name.) The group of twenty five countries is known as the EU25. (I shall sometimes give numbers for the group of fifteen countries which constituted the European Union before the 2004 enlargement, a group known as the EU15.) Together, the twenty five countries form a formidable economic power: As Figure 1–4 shows, their combined output is equal to the output of the United States, and many of them have a standard of living—a level of output per capita–close to that of the United States.

Table $1-2$.	Growth,	Unemployment,	and	Inflation	in	the	European	Union,
1960-2004								

	1960-2000	1994-2000	2001	2002	2003	2004
	(average)	(average)				
Output growth rate	3.1	2.3	1.7	1.1	0.9	2.1
Unemployment rate	5.8	9.0	7.3	7.8	8.1	8.1
Inflation rate	5.4	2.0	2.3	2.6	2.2	1.9

Output growth rate: annual rate of growth of output (GDP). Unemployment rate: average over the year. Inflation rate: annual rate of change of the price level (GDP deflator). Source: OECD Economic Outlook Data Base.

The recent economic performance of the European Union is shown in Table 1-2. The numbers refer to the EU15, not the EU25; the reason is that data on growth and inflation for some of the new members are not available for some of the early years. The format of the table is the same as for the United States earlier: The first two columns give the average value of the rate of growth of output, the unemployment rate, and the inflation rate for the period 1960 to 2000, and for the period 1994 to 2000. The next four columns give numbers for each year from 2001 to 2004. Numbers for 2004 are projections.

The main conclusion to draw from the table is that the economic performance of the European Union over the last decade has been far less impressive than that of the United States over the same period:

- Average annual output growth from 1994 to 2000 was only 2.3%. This was 1.6% below the average annual growth rate in the United States over the same period, and 0.8% below the average growth rate in the European Union from 1960 to 2000. And while the European Union did not experience a recession in the early 2000s, its growth rate has remained consistently low. In 2004, the EU15 growth rate is projected to reach only 2.1%, compared to 4.4% in the United States.
- Low output growth has been accompanied by persistently high unemployment. The average unemployment rate from 1994 to 2000 was 9.0%. It has remained high since then, and, in 2004, the unemployment rate is projected to be above 8%.
- The only good news is about inflation. Inflation had been high in the 1970s and 1980s. It decreased in the 1990s, and has remained low since then. The inflation rate for 2004 is projected to be under 2%.

At this time, two issues dominate the agenda of European macroeconomists:

- The first is, not surprisingly, high unemployment. While the unemployment rate has come down from its peak reached in the mid-1990s, it is still very high. Can it be reduced further, say all the way down to the U.S. rate of unemployment? What reforms and what macro-economic policies are needed to achieve this?
- The second issue is associated with the introduction of a common currency. Since 2002, twelve EU countries have adopted a common currency, the *Euro*. After two years, many questions remain. What is the Euro doing for Europe? What macroeconomic changes has it brought? How should macroeconomic policy be conducted in this new environment?

Let me discuss both issues in turn.

How Can European Unemployment Be Reduced?

High unemployment is not a European tradition. Figure 1–5, which plots the evolution of unemployment rates in the EU15 and in the United States since 1960, shows how low the European unemployment rate was in the 1960s. At that time, the talk in the United States was about the European *unemployment miracle*; U.S. macroeconomists went to Europe in the hope of discovering the secrets of that miracle. By the late 1970s, the miracle vanished. Since the early 1980s, the unemployment rate in Europe has been much higher than the unemployment rate in the United States. Today, the unemployment rate stands at 8.1%. And in some of the larger countries of the European Union, such as France, Germany, Italy, and Spain, it is close to 10%.

Figure 1–5. Unemployment rates: Europe versus the United States; 1960-2000. (Caption. The European unemployment rate has gone from being

much lower than the U.S. unemployment rate to being much higher.)

Despite a large amount of research, there is no full agreement on the causes of high European unemployment:

- Some economists point to what they call *labor market rigidities*. Europe, they argue, suffers from too high a level of unemployment benefits, too high a minimum wage, and too high a level of worker protection. They argue that high benefits, high minimum wages, high protection are the causes of high unemployment. The solution, they conclude, is to remove these *rigidities*, to make European labor markets more like the U.S. labor market. When this is done, they argue, the European economies will soar, and unemployment will decrease.
- Other economists point out that many of these "labor market rigidities" were already in existence in the 1960s, when European unemployment was very low. They point to other factors instead, a wage explosion in the 1970s, which increased labor costs and led firms to decrease employment. They point to inadequate macroeconomic policies, in particular to high interest rates in the 1980s and 1990s. They argue that wage moderation and better macroeconomic policies can lead to a steady decrease in unemployment, without the need for dramatic reforms of the labor market.

Most economists stand somewhere in between. They believe a sustained decrease in unemployment will require a combination of some labor market reforms, wage moderation, and appropriate macroeconomic policies. This leaves open many questions: What specific labor market reforms should be implemented? How can wage moderation best be achieved? Finding the answers to these questions is one of the tasks facing European macroeconomists and policy makers today.

What Will the Euro Do for Europe?

In 1999, the European Union started the process of replacing national currencies with one common currency, called the *Euro*. Only eleven of the fifteen EU countries participated at the start; they were joined in 2001 by Greece. For the time being, the three remaining members of the EU15, Denmark, Sweden, and the United Kingdom, have decided not to join, but they may do so in the future. The ten new members do not yet meet the criteria required for admission. ⁴

The transition took place in steps. On January 1, 1999, each of the 11 countries fixed the value of its currency to the Euro. For example, a Euro was set equal to 6.56 French francs, to 166 Spanish pesetas, and so on. From 1999 to 2002, some prices were quoted both in national currency units and in Euros, but the Euro was not yet used as currency. This happened on 2002, when Euro notes and coins replaced national currencies, and the twelve countries of the Euro area have now become a *common currency* area.

What will the Euro do for Europe?

• Supporters of the Euro point first to its enormous symbolic importance. In light of the many past wars between European countries, what better proof that the page has definitely been turned than the adoption of a common currency? They also point to the economic advantages of having a common currency: no more changes in the relative price of currencies for European firms to worry about, no more need to change currency when traveling between Euro countries. Together with the removal of other obstacles to trade between European countries, which has taken place since 1957, the Euro will contribute, they argue, to the creation of a large, if not the largest, economic power in the world. There is little question that the move

^{4.} What to call the group of countries that have adopted the Euro is not settled. "Euro zone" sounds technocratic. "Euroland" reminds some of Disneyland. "Euro area" seems to be winning, and this is the expression I use in this book.

to the Euro is indeed one of the main economic events of the start of the twenty-first century.

• Others worry that the symbolism of the Euro may come with some economic costs. They point out that a common currency means a common monetary policy, and that means the same interest rate across the Euro countries. What if, they argue, one country plunges into recession while another is in the middle of an economic boom? The first country needs lower interest rates to increase spending and output; the second country needs higher interest rates to slow down its economy. If interest rates have to be the same in both countries, what will happen? Isn't there the risk that one country may remain in recession for a long time, or that the other may not be able to slow down its booming economy?

Throughout the 1990s, the question was: Should Europe adopt the Euro? That question is now moot: The Euro is here, and it is here to stay. So far, no member country has had to face a severe recession, so the system has not really been tested. The full costs and benefits of the Euro remain to be assessed.

1-3. Japan

Figure 1–6. Japan (Output in 2003. \$4.7 trillion, population 128 million, output per capita \$36,700.)

Forty years ago, Japan would not have been included in our economic tour. Its output per capita was low compared to the United States or to Europe. Things are very different today. As the first column of Table 1-3 indicates, since 1960, Japan's output has grown at an average annual growth rate of 4.7%. This is 1.5% higher than the corresponding growth rate for the United States over the same period. As you can see from Figure 1–6, Japan's output per capita is now very close to that of the United States.

Table 1-3. Growth, Unemployment, and Inflation in Japan, 1960-2004

	1960-2000	1994-2000	2001	2002	2003	2004
	(average)	(average)				
Output growth rate	4.7	1.4	0.4	-0.3	2.5	4.0
Unemployment rate	2.0	3.7	5.0	5.4	5.3	4.8
Inflation rate	5.1	-0.1	-1.5	-1.2	-2.5	-2.3

Output growth rate: annual rate of growth of output (GDP). Unemployment rate: average over the year. Inflation rate: annual rate of change of the price level (GDP deflator). Source: OECD Economic Outlook Data Base.

This is the good news. The bad news can be seen in the remaining columns. Japan's economic performance over the last decade has been nothing short of dismal:

- The average annual rate of growth of output from 1994 to 2000 was only 1.4%, This is 3.3% below the average annual growth rate since 1960. Things were even worse in 2001 and 2002, two years of practically zero growth. This long period of low and sometimes negative growth is known as the *Japanese slump*. Growth has turned higher however since 2003, bringing hopes that the slump may indeed be coming to an end.
- As a result of this long slump, the unemployment rate, which used to be very low in Japan, steadily increased. It reached 5.4% in 2002, and is now slowly declining. By U.S. and even more so by EU standards, 5.4% would appear to be a very low unemployment rate. But for

Japan, this is the highest unemployment rate ever and indicates a very depressed labor market.

• As a result of high unemployment, the inflation rate decreased and eventually turned negative in the 1990s. It has remained negative since then. In other words, Japan is experiencing *deflation*—a decrease in the average price of goods over time. You might conclude that, if inflation is bad, deflation must be good. But, as we shall see later in this book, the evidence is that deflation—as opposed to low inflation—is dangerous, so, even here, the news is not good.

Given this description of where Japan stands, you can guess the two main issues confronting Japanese macroeconomists at this point:

- What triggered the slump?
- Why did it last so long? Will the current recovery last?

Let me take both questions in turn.

What Triggered the Slump?

Until the early 1990s, the main question on macroeconomists' minds was: Why is Japan doing so well?⁵ What explains its sustained high growth rate? Is it the rapid accumulation of capital generated by a high saving rate? Is it its high level of education, which allows it to adapt foreign technologies and achieve a high rate of technological progress? Is it the internal organization of Japanese firms, which leads them to become steadily more efficient?

Now the central questions are radically different: Why did Japan do so poorly for more than a decade? What broke and how can it be fixed?

Most economists believe that the trigger for the slump of the 1990s can be found in the striking movements in Japanese stock prices from the mid-

^{5.} Just as there was talk of a "European unemployment miracle," there was talk of a "Japanese growth miracle". It would seem that being labeled a miracle is a mixed blessing: In both cases, the miracles came to abrupt ends.

1980s to the early 1990s. Figure 1–7 shows the behavior of the *Nikkei* index—an index of stock prices in the Japanese stock market—since 1980. From 1985 to 1989, the Nikkei increased from about 13,000 to 39,000; in other words, the average price of a share in the Japanese stock market tripled in less than four years. This sharp increase was followed in the early 1990s by an equally sharp decrease: In less than two years, from 1990 to 1992, the Nikkei fell from 35,000 to 16,000! Since then, the Nikkei has further decreased, although by less. At the end of 2004, it stood at 11,000.⁶

Figure 1–7. The Japanese Stock Market Index, 1980-2004. (Caption: The large increase in the index in the second half of the 1980s was followed by an equally sharp decline in the early 1990s.)

Why did the Nikkei go up and then down so much and so quickly? In general, stock prices can move for one of two reasons:

- One reason is what economists call *fundamentals*: For example, anticipations of higher profits in the future lead financial investors to be willing to pay more for shares today, so stock prices increase.
- The other reason is *speculative bubbles*, or *fads*, where investors buy stocks at high prices, hoping to resell them at higher prices in the future, whether or not justified by fundamentals.

Most observers interpret the rise and fall of the Nikkei as a speculative bubble, an excessive increase in stock prices in the 1980s, followed by a sharp decline and a return to reality in the early 1990s. They point to parallel movements in the prices of other Japanese assets, such as land or housing: Real estate prices increased in line with the Nikkei, and since 1990

^{6.} Does this remind you of what happened to the Nasdaq (the U.S. stock market where shares of high tech companies are traded)? The Nasdaq increased from 1,000 in 1996 to nearly 5,000 in 2000, only to fall back to 1,200 in 2002. Broader market indexes, such as the Dow Jones or the Standard and Poor's index, fell however by much less, so the effect on the fall of the Nasdaq on the U.S. economy was much more limited.

have declined even more than stock prices. They argue that the result of the stock market boom was a boom in demand and in output in the late 1980s, and that the result of the stock market fall was a sharp drop in demand and output in the 1990s.

How Will Japan Recover?

When it became clear that the stock market decline had triggered a recession, both monetary and fiscal policy were used to increase demand, and increase output:

- The Japanese central bank decreased interest rates to very low levels: Interest rates in Japan have remained under 1% since the mid-1990s, and are now literally equal to zero. Clearly, monetary policy cannot decrease them further.
- The Japanese government increased spending on public works, and cut taxes to stimulate spending by consumers and firms. Both increased spending and lower taxes have led to persistently large budget deficits.

Nevertheless, despite low interest rates, lower taxes and higher government spending, the slump continued throughout the 1990s. This led a number of economists to conclude that the problem could not be solved by macroeconomic policies alone, and that the Japanese economy would not grow fast again before a number of structural problems were recognized and solved. They pointed to a long list of problems with the Japanese economy, from a very inefficient retail distribution system, to political corruption.

Their argument was not fully convincing: Most of the problems they pointed to were already present earlier, when the Japanese economy was growing fast. One problem however, the state of the banking system, had clearly gotten worse and might well be an important obstacle to a recovery. With the sharp decline in growth in the 1990s, many firms which had taken bank loans found themselves unable to repay. Rather than writing off these loans, many banks prefered to hide their losses by lending more to precisely those same borrowers who could not repay the previous loans. Meanwhile, firms with good projects could not borrow. Without a healthy banking system, many economists argued, it would be difficult for Japan to return to steady growth.

Since 2002, output growth has turned positive. How much of this growth is due to improvement in the banking system, and how much is simply due to other factors, is not yet clear. On the one hand, the Japanese government has started taking steps to return the banking system to good health. It is a painful process, which requires forcing many borrowers, and a number of banks that have bad portfolios of loans, into bankruptcy, in order to make room for better banks and better borrowers. On the other hand, part of the increase in output clearly reflects other factors, for example higher Japanese exports to fast-growing China. How fast Japan can and will recover from its slump remain among the toughest questions confronting macroeconomists today.

1-4 Looking Ahead

This concludes our world tour. There are many other regions of the world we could have looked at:

• Asia (excluding Japan), which is now the fastest growing economic region in the world. Some countries, such as Singapore, South Korea, and Taiwan, have already achieved standards of living close to those of Western Europe. Still poor, but growing rapidly, are China and India. China's average output growth rate since the early 1990s has been around 8%; India's average output growth rate has been around 6%. China and India are still poor: Their output per capita is very

low relative to the countries we have looked at. But with such growth rates, and populations of 1.3 billion and 1.0 billion respectively, both countries are rapidly becoming major economic powers.

- Latin America, which went from very high to low inflation in the 1990s. Some countries, such as Chile, appear to be in good economic shape. Some, such as Argentina, are struggling. A collapse of its exchange rate and a major banking crisis led to a large decline in output in the early 2000s, from which it is only now emerging.
- Central and Eastern Europe, where most countries shifted from central planning to a market system in the early 1990s. Many economists expected this shift to a market economy to lead to a large increase in output. In most countries, the shift was characterized instead by a sharp decline in output at the start of transition. Only later did output growth become positive; in some countries, output is still below its pre-transition level.
- Africa, which has suffered decades of economic stagnation, but where some countries are now starting to grow.

There is a limit however to how much you can absorb in this first chapter. Think about the questions to which you have been exposed already:

- What determines expansions and recessions? Why did the United States have such a long expansion in the 1990s? How will the Euro affect monetary policy in Europe? Could monetary policy and fiscal policy have prevented the Japanese slump?
- What are the interactions between the stock market and economic activity? Can the poor performance of Japan in the 1990s be attributed to the sharp decline in the Japanese stock market in the early 1990s?
- Why is inflation so much lower in the 1990s than it was in previous decades? What is so bad about high inflation? What is so bad about the deflation we are now observing in Japan?

- Why is unemployment so high in Europe? How could the Japanese unemployment rate be so low for so many years?
- Why do growth rates differ so much across countries, even over long periods? Why did Japan grow so much faster than the United States and Europe for so long? Has the United States entered a New Economy, where growth will be much higher in the future?

The purpose of this book is to give you a way of thinking about these questions. As we develop the tools you need, I shall show you how to use them, by returning to these questions and showing the answers they suggest.

Focus. Gathering Macro Data

Where do the data we have examined in this chapter come from? Suppose we wanted to find the number for inflation in Germany over the past five years. Forty years ago, the answer would have been to learn German, find a library with German publications, find the page where inflation numbers were given, write them down, and plot them by hand on a clean sheet of paper. Today, improvements in the collection of data, the development of computers and electronic databases, and access to the Internet, make the task much easier.

International organizations now collect data for many countries. For the richest countries, the most useful source is the **Organization for Economic Cooperation and Development** (OECD) based in Paris. You can think of the OECD as an economic club for rich countries. The complete list of member countries includes Australia, Austria, Belgium, Canada, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands,

New Zealand, Norway, Poland, Portugal, the Slovak Republic, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States. Together, these countries account for about 70% of world output. The OECD Economic Outlook, which is published twice a year, gives basic data on inflation, unemployment, and other major variables for member countries, as well as an assessment of their recent macroeconomic performance. The data, often going back to 1960, are available on diskettes or CD-ROMS; they are on most macroeconomists' hard drives.

For countries that are not members of the OECD, information is available from other international organizations. The main world economic organization is the **International Monetary Fund** (IMF). The IMF publishes the monthly International Financial Statistics (IFS), which contains basic macroeconomic information for all IMF members. It also publishes the annual World Economic Outlook, an assessment of macroeconomic developments in various parts of the world. Although their language is sometimes stilted, both the World Economic Report and the OECD Economic Outlook are precious sources of information.

Because these publications sometimes do not contain sufficient details, you may need to turn to specific country publications. Major countries now produce remarkably clear statistical publications, often with an English translation available. In the United States, an extremely good resource is the Economic Report of the President, prepared by the Council of Economic Advisors and published annually. This report has two parts. The first is an assessment of current U.S. events and policy and is often a good read. The second is a set of data for nearly all relevant macroeconomic variables, usually for the entire post-World War II period.

A longer list of data sources, both for the United States and for the rest of the world, as well as instructions on how to access data sources through the Internet, is given in the appendix to this chapter.

Key terms

- European Union (EU),
- Organization for Economic Cooperation and Development (OECD),
- International Monetary Fund (IMF),

Further readings.

This book comes with a web page (www.prenhall.com/bookbind /pubbooks/blanchard/), which is updated regularly. For each chapter, the page offers discussions of current events, and includes relevant articles and Internet links. You can also use the page to make comments on the book, and have discussions with other readers.

The best way to follow current economic events and issues is to read *The Economist*, a weekly magazine published in England. The articles in *The Economist* are well informed, well written, witty, and opinionated. Make sure to read it regularly. (This book comes with a 12-weeks subscription to the web version of *the Economist*. Take advantage of this.)

Appendix. Where To Find the Numbers?

This appendix will help you find the numbers you are looking for, be it inflation in Malaysia last year, or consumption in the United States in 1959, or unemployment in Ireland in the 1980s.

For a Quick Look at Current Numbers

- The best source for the most recent numbers on output, unemployment, inflation, exchange rates, interest rates, and stock prices for a large number of countries is the last four pages of *The Economist*, published each week (www.economist.com). This Web site, as most of the following Web sites, contains both information available free to anyone and information available only to subscribers. The 12-week subscription to the web version of *the Economist* which comes with this book, gives you access to all the numbers and all the articles.
- A good source for recent numbers about the U.S. economy is *National Economic Trends*, published monthly by the Federal Reserve Bank of Saint Louis (www.research.stlouisfed.org/publications/net/).

For More Detail about the U.S. Economy

- For a detailed presentation of the most recent numbers, look at the Survey of Current Business, published monthly by the U.S. Department of Commerce, Bureau of Economic Analysis (www.bea.doc.gov). A user's guide to the statistics published by the Bureau of Economic Analysis is given in the Survey of Current Business, April 1996. It tells you what data are available, in what form, and at what price.
- Once a year, the *Economic Report of the President*, written by the Council of Economic Advisers and published by the U.S. Government Printing Office in Washington, gives a description of current evolutions, as well as numbers for most major macroeconomic variables,

often going back to the 1950s. (The report and the statistical tables can be found at www.access.gpo.gov/eop/)

- The authoritative source for statistics going back as far as data have been collected is *Historical Statistics of the United States, Colonial Times to 1970*, Parts 1 and 2, published by the U.S. Department of Commerce, Bureau of the Census (www.census.gov/stat_abstract/).
- The standard reference for national income accounts is National Income and Product Accounts of the United States. Volume 1, 1929-1958, and Volume 2, 1959-1994, published by the U.S. Department of Commerce, Bureau of Economic Analysis (www.bea.doc.gov).
- For data on just about everything, including economic data, a precious source is the *Statistical Abstract of the United States*, published annually by the U.S. Department of Commerce, Bureau of the Census (www.census.gov/statab/www/).

Numbers for Other Countries

The OECD, located in Paris, publishes three useful publications. The OECD includes most of the rich countries in the world. (The list was given earlier in this chapter.) (www.oecd.org)

- The first is the OECD Economic Outlook, published twice a year. In addition to describing current macroeconomic issues and evolutions, it includes a data appendix, with data for many macroeconomic variables. The data typically go back to the 1980s, and are reported consistently, both across time and across countries. A more complete data set is available in the form of a CD-ROM, which includes most important macroeconomic variables for all OECD countries, typically going back to the 1960s.
- The second is the OECD Employment Outlook, published annually. It focuses more specifically on labor-market issues and numbers.
- Occasionally, the OECD puts together current and past data, and publishes the OECD Historical Statistics. At this point in time, the

most recent is Historical Statistics, 1960-1993, published in 1995.

The main strength of the publications of the International Monetary Fund (IMF, located in Washington, D.C.) is that they cover most of the countries of the world (www.imf.org).

The IMF issues four particularly useful publications:

- The International Financial Statistics (IFS), published monthly. It has data for member countries, usually going back a few years, mostly on financial variables, but also on some aggregate variables (such as GDP, employment, and inflation). A more complete data set, going back typically to the 1960s, is available as a CD-ROM.
- The International Financial Statistics Yearbook, published annually. It has the same coverage of countries and variables as the IFS, but gives annual data for up to 30 years.
- The Government Finance Statistics Yearbook, published annually, which gives data on the budget of each country, typically going back 10 years. (Because of delays in the construction of the numbers, data for the most recent years are often unavailable.)
- The World Economic Outlook, published twice a year, describes major evolutions in the world and in specific member countries.

Historical statistics

For long-term historical statistics for the United States, the basic reference, is "Historical Statistics of the United States, Colonial Times to 1970" (www2.census.gov/prod2/statcomp/index.htm).

For long-term historical statistics for several countries, a precious data source is Angus Maddison's *Monitoring the World Economy*, 1820-1992, Development Centre Studies, OECD, Paris, 1995. This study gives data going back to 1820 for 56 countries. Two even longer and broader sources are *The World Economy*. A *Millenial Perspective*, Development Studies,

OECD, 2001, and *The World Economy: Historical Statistics*, Development Studies, OECD 2004, both also by Angus Maddison.

Current macroeconomic issues

A number of web sites offer information and commentaries about the macroeconomic issues of the day. In addition to the Economist site mentioned above, two useful sites are:

The Morgan Stanley site, with daily commentaries of macroeconomic events (www.morganstanley.com/GEFdata/ digests/latest-digest.html).

The site maintained by Nouriel Roubini, from New York University (www. stern.nyu.edu/globalmacro/) offers an extensive set of links to articles and discussions on macroeconomic issues.

Finally, if you still have not found what you were looking for, a site maintained by Bill Goffe at SUNY University (www.rfe.edu), lists not only many more data sources but sources for economic information in general, from working papers, to jokes, to jobs in economics, to blogs.











Figure 1-7. The Japanese Stock Market Index, 1980-2004