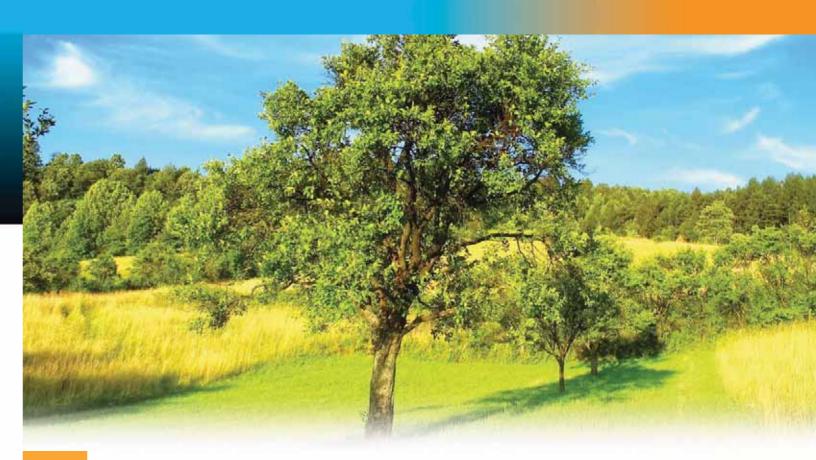
### Chapter

# Are Your Smart Choices

## **Macroeconomics** and Microeconomics



- **1.1** Explain the differences between microeconomics and macroeconomics.
- **1.2** Describe the hands-off and hands-on views on government policy and connect each to the fundamental macroeconomic question.
- **1.3** Define three key measures of macroeconomic performance, and identify good outcomes for each.
- **1.4** Identify five groups of macroeconomic players and their choices.
  - 1.5 Explain three MAPS for focusing your thinking like a macroeconomist.



#### WE ARE SHIFTING OUR GAZE from individual trees to the

whole forest. Microeconomics looks at smart choices of individual consumers and individual businesses, while macroeconomics looks at the combined market outcomes of all of those individual choices.

According to Adam Smith's invisible hand, price signals in markets create incentives so that while each individual (a micro focus on each tree) acts only in his self-interest, the unintended consequence is the production of all of the products and services we want (a healthy, arowing forest).

Macroeconomics questions how well Smith's invisible hand works in a broader context. When all the smart choices of individuals are combined, is the result the best outcome for the economy as a whole? Consider this example. During tough economic times, many people are unemployed - they can't find jobs, aren't earning incomes, and cut back on their spending. Businesses aren't selling enough because consumers aren't buying-products sit on shelves and profits are down. But if only businesses would hire the people looking for work, those new employees would earn incomes and buy the unsold products. It seems everyone (workers and businesses) could be better off, yet that doesn't happen. Why?

This is the core question for macroeconomics. Do smart choices by consumers and businesses imply that smart choices are being made for the economy as a whole? What are the implications of this question for government economic policy; for you as a consumer, a businessperson, and an investor; and for your choices as a voter? This chapter examines macroeconomics by questioning whether microeconomic lessons can be extended to the economy as a whole.



# 1.1 Reconciling Macroeconomics and Microeconomics: Is the Whole Greater Than the Sum of the Parts?

Explain the differences between microeconomics and nacroeconomics.

Economics is nicknamed "the dismal science," and 2008 and 2009 were certainly dismal years for the economies of Canada, the United States, and most countries around the globe.

#### The Great Recession and Great Depression



Ads like this one encouraged people to believe that the price of real estate would go up and up forever. You would be rich tomorrow with no risk by going into debt today. Does this make sense to you?

The story of where we were in 2009 begins with constantly rising, or inflating, housing prices in the U.S. (and Canada) between 1996 and 2006. This housing price bubble (you inflate bubbles with air; you inflate housing prices with demand) led homeowners, real estate investors, mortgage lenders (a mortgage is a loan to buy a house), and financial institutions to take bigger and bigger risks. It seemed that prices could only go up, and there was easy money to be made. Banks issued mortgages with no down payments to borrowers who really couldn't afford them (called "sub-prime" mortgages), assuming that even if a borrower couldn't make

his payments, the bank could sell the house at an ever-rising price to recover the loan. Banks and other financial institutions bundled these mortgages together and sold them to others as mortgage-backed securities. (Buyers of the securities received the mortgage payments.) These securities provided more money for mortgages, making it easier for house buyers to demand houses, which further inflated housing prices.

**The Great Recession** When housing prices began to fall, the bubble burst, and the value of all of those mortgages and securities plummeted. Investors and banks holding now almost worthless assets were forced to sell other assets to meet their obligations, and panicked selling led to the failure of banks, other financial institutions, and broadly falling asset prices. Stock market values plunged 40 percent, housing prices kept falling, and in the U.S. borrowers walked away from houses that were worth less than the mortgages they owed. Businesses went bankrupt, the Canadian auto industry was in danger of collapse, and unemployment kept rising, predicted to exceed ten percent.

The economic downturn of 2008–2009 has been nicknamed the "Great Recession" in comparison with the even more severe downturn between 1929 and 1933 called the "Great Depression." (As you will learn in Chapter 2, a recession is a milder downturn than a depression).

**The Great Depression** As bad as things appeared in 2009, they were nowhere near as dismal as the hardships people endured during the Great Depression. Triggered by a stock market crash in 1929, economic activity collapsed. By 1933, 20 percent of the Canadian and U.S. workforce was unemployed, and output of products/services fell by more than 30 percent. That meant there were 30 percent fewer products, including food, to sustain a population that kept increasing. The prices consumers paid for products/services fell by over 20 percent. (Falling prices, called deflation, are the opposite of rising prices, called inflation. We will discuss these topics in Chapter 3). While falling prices sound good to those of us used to rising prices, because of unemployment, wages were falling even faster. And falling prices for businesses are a disaster, as falling revenues mean it is harder to pay off existing debts, so there is less to invest in expanding output or improving productivity. To make things worse, there were no government programs like employment insurance, welfare, health care, or the Canada Pension Plan to cushion the blow. The effects of the Great Depression lasted over a decade. Standards of living returned to 1929 levels only in 1941 with government spending on military production for World War II.

**Government Blunders** Governments tried to counteract the downturn, but they took almost all of the wrong policy actions, making the downturn worse, not better. Britain's decision to base the value of its currency on the value of gold (the Gold Standard) raised the value of the British Pound relative to other currencies, making British exports more expensive and slowing their sales, contributing to the downturn in Britain and elsewhere. (We will discuss exchange rates between currencies in Chapter 6.) Central banks, especially the Federal Reserve in the U.S., implemented monetary policy (coming in Chapter 7) that allowed banks to fail, reduced the supply of money, and made it more difficult for consumers and businesses to restore the spending necessary to turn around the economy. Governments, faced with declining tax revenues, tried to balance their budgets and avoid deficits by reducing spending and increasing taxes (fiscal policy, coming in Chapter 8), which pushed economies further into recession. And governments, attempting to protect their domestic industries from foreign competitors during difficult business conditions, put up tariffs (taxes on imports) that caused international trade to break down, reducing the gains from trade. (We will discuss trade policy in Chapter 9.)

**Macroeconomics** These topics—business cycle bubbles and recessions; unemployment and inflation; money and the financial system; exchange rates between currencies; government fiscal, monetary, and trade policies-are all part of macroeconomics. Macroeconomics analyzes the performance of the whole Canadian economy and the global economy- the combined outcomes of all individual microeconomic choices.



Source: www.CartoonStock.com.



Unemployed men like those shown had to line up at soup kitchens for a meal during the Great Depression. Could this happen today?

Governments around the Governments around the world made disastrous economic policy decisions, causing the Great Depression to become worse and last longer than it needed to be. Macroeconomics looks at and grows out of those decisions.

macroeconomics: macroeconomics: analyzes performance of the whole Canadian economy and global economy—the combined outcomes of all individual microeconomic choices

#### What Happened to the Miracle of Markets?

Believe it or not, I hope you are feeling a bit puzzled by this discussion of macroeconomics, because it should sound very contradictory to what you learned about microeconomics.

microeconomics: analyzes choices that individuals in households, individual businesses, and governments make, and how those choices interact in markets

fallacy of composition: what is true for one is not true for all; whole is greater than the sum of the parts **Microeconomics Microeconomics** analyzes the choices made by individuals in households, individual businesses, and governments, and how those choices interact in markets. When we looked at the interaction of those choices in markets, we found (in *Economics for Life: Smart Choices for You*, Appendix D, page 487):

Markets are adept at reacting to change. Whether there are shortages, surpluses, or changes in . . . demand or supply, markets react quickly because prices create incentives for consumers and businesses to adjust their smart choices. Price signals in markets create incentives so that while each person acts only in her own self-interest, the result (coordinated through Adam Smith's invisible hand of competition) is the miracle of continuous, ever-changing production of the products/services we want.

So how does market coordination of smart choices produce outcomes like mass unemployment, falling living standards, bankruptcies, financial bubbles, and deflation or inflation?

We will spend the rest of this book finding answers to those questions, but let's start with a basic explanation about why smart microeconomic choices by individuals may not add up to smart macroeconomic outcomes.

**Fallacy of Composition** Sometimes a choice made by one person produces a different outcome from the same choice made by many people. Let's look at two examples.

Suppose an individual farmer in Saskatchewan plants more wheat than usual. Prairie weather is perfect for growing, and he harvests a big bumper crop. Because the farmer is a small producer (remember the market structure of extreme competition, where each of the many small businesses are price takers?), his increase in supply has almost no impact on the world price for wheat. The farmer's income goes up with a greater quantity and a constant price of wheat. But if *all* farmers plant more wheat, and weather is good in wheat-

> growing regions around the world, the great increase in supply drives down the world price of wheat so much that all farmers end up with less income than before.

> This is an example of the **fallacy of composition**—what is true for one (micro) is not necessarily true for all (macro). The other phrase that describes the fallacy of composition is "the whole is greater than the sum of the parts."

This farmer is harvesting a bumper crop. He hopes he will make a huge profit on such a good crop, but his profit will depend on world prices. **Paradox of Thrift** The second example is about your decision to save. If you decide to save more from your income, then your savings will increase and your spending will decrease. But if many people decide to save more and spend less, businesses experience falling sales, cut back production, and lay off workers so that incomes fall. Paradoxically, the result may be that people end up saving less, because without employment income, they have to draw down their savings rather than increase savings. Economists call this the **paradox of thrift**. Again, what is true for one is not necessarily true for all.

Another way the whole economy is greater than the sum of the parts comes from connections between input and output markets.



The serious economic downturn of 2008–2009 is dramatically changing the spending habits of American consumers. Joe Rudyck is a 21-year-old university graduate who recently purchased a new car and laptop, and used to make frequent shopping trips to the mall. While in school, he worked at two part-time jobs, took out student loans, and spent everything he earned.

Now, as the U.S. savings rate has jumped to a 15-year high, he is "living proof" that the spendspend-spend attitude of American consumers has been squashed. He now thinks before any purchase, and has stepped up his savings in case his car breaks down.



6 CHAPTER 1 ARE YOUR SMART CHOICES SMART FOR ALL?

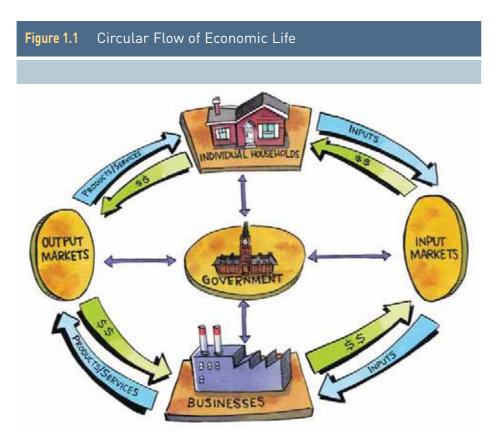
paradox of thrift: attempts to increase savings cause aggregate savings to decrease because of balling employment and incomes



- Mr. Rudyk's new savings behaviour, shared now by millions of U.S. consumers, is what we call the paradox of thrift. Saving more is prudent behaviour in hard times, but has the unintended consequences of reducing demand for products/services, causing businesses to lay off workers, and making it even harder for people to save.
- The change in U.S. savings behaviour is worrisome to Canadians because most Canadian exports are sold in the United States. A senior economist at BMP Capital Markets said, "it's very hard for Canada to dig itself out of the recession unless Americans start spending again."

Source: "End of the Spendthrift Ethos," Joe Friesen, *The Globe and Mail*, March 3, 2009.

**Connections Between Input and Output Markets** The map of the circular flow of economic life, Figure 1.1, is at the heart of the microeconomic explanation of the miracle of markets. It will play an equally important role in our study of macroeconomics. On this map, the complexity of the Canadian economy is reduced to three sets of players—households, businesses, and governments. Households and businesses interact in two sets of markets—input markets (where businesses buy from households the inputs they need to produce products/services) and output markets (where businesses sell their products/services to households). Government sets the rules of the game and can choose to interact, or not, in almost any aspect of the economy. When markets work well, self-interest and the invisible hand of competition coordinate the smart choices of households and businesses in both sets of markets.



Before we look at the macroeconomic connection between input markets and output markets, let's review the basics of the circular flow.

Input markets determine incomes. Households are sellers and businesses are buyers

**Input Markets** Good maps like Figure 1.1 help you find your way by focusing on the most important information. Let's follow the circle, beginning at the top. Individuals in households sell or rent out their labour (ability to work), capital, land, and entrepreneurial abilities to businesses. This is the blue flow on the right side of the circle, from top to bottom. In exchange, businesses pay households wages, interest, rent, and other money rewards. This is the green flow on the right side of the circle, from bottom to top. These exchanges, or trades, happen in input markets, where households are the sellers and businesses are the buyers. When Mr. Sub hires you to work at a Mr. Sub store, that interaction happens in an input market—the labour market. Input markets determine your income.

**Output Markets** Businesses (at the bottom) use those inputs to produce products/services to sell to households. This is the blue flow on the left side of the circle, from bottom to top. In exchange, households use the income they have earned in input markets to pay businesses for their purchases. This is the green flow on the left side of the circle, from top to bottom. These exchanges, or trades, happen in output markets, where households are the buyers and businesses are the sellers. These are markets where you buy your breakfast from Tim's or Second Cup, or piercings from your neighbourhood piercing parlour. Output markets determine the value of all of products/services sold.

At the end of the trip around the circle, households have the products/services they need to live, and businesses end up with the money. That sets the stage for the next trip around the circle, where businesses again buy inputs from individuals in households in exchange for income, then produce outputs that households buy—and the flow goes on.

**The Macroeconomic Connection** With our microeconomic focus, we looked at the interaction of demand and supply *in input markets alone*, and at the interaction of demand and supply *in output markets alone*.

Suppose wages in the labour market—an input market—are higher than the market-clearing wage. Workers are eager to supply a large quantity of hours. But businesses won't find it as profitable to hire workers at the higher wage, so the quantity of labour supplied is greater than the quantity of labour demanded. There is a surplus of labour. In the labour market alone, wages will fall, decreasing the quantity of labour supplied and increasing quantity demanded. These adjustments to falling wages restore the balance between demand and supply, and coordinate the smart choices of households supplying labour with the smart choices of businesses demanding labour.

Our macroeconomic focus extends this story to connect input and output markets. Falling wages mean falling incomes. If you work 40 hours per week, and your wage falls from \$15 per hour to \$10 per hour, your weekly income falls from \$600 to \$400. Ouch. So your demand for products/services decreases in output markets. With decreased demand for their products/services, businesses experience falling prices of outputs and, in turn, will want to hire fewer workers. The *connections* between the forces of demand and supply in input and output markets may impede the coordination of the smart choices of households and businesses.

**Money, Banks, and Expectations** As the stories of the Great Recession and the Great Depression show, money, banks, and expectations played major roles in the speculative bubbles that inflated, burst, and triggered the downturns. We did not focus on any of these factors while studying microeconomics. Money serves the whole economy, as do the banking system and Canada's central bank, the Bank of Canada. They will be part of our macroeconomic focus. Expectations, like believing that housing prices would continue to rise, are judgment-based and depend on the state of the whole economy.

Output markets determine the value of al products/services sold. Households are buyers and businesses are sellers.

For a discussion of how price falls to eliminate a surplus, see page 482.

#### Do Market Economies Quickly Self-Adjust or Not?

So which focus is "right?" Do markets coordinate smart individual choices to produce the miracle of the continuous, ever-changing production of the products/services we want (microeconomic focus), or do markets produce outcomes like unemployment, falling living standards, bankruptcies, financial bubbles, and deflation or inflation (macroeconomic focus)?

As you might guess, there is no single right answer to the question. Sometimes markets work well and quickly in coordinating individual choices, sometimes not. Economists call the periodic ups and downs of overall economic activity business cycles (a topic in Chapter 2). A more precise rewording of this question will guide everything we discuss in the rest of the book.

If left alone by government, do the price mechanisms of market economies adjust quickly to maintain steady growth in living standards, full employment, and stable prices?

More simply, if left alone, do markets quickly self-adjust?

Say's Law: supply creates its own demand

business cycles: ups and downs of overall economic activity

#### FOR YOUR INFORMATION

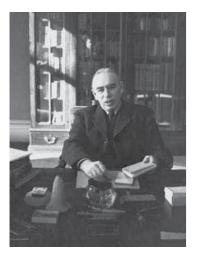
Say's most important book, Traité d'économie politique (A Treatise on Political Economy) was first published in 1803. Say, who spoke fluent English as well as French, was internationally known, and his book translated into many languages, was a best-selling university economics textbook in Europe and North America.

Ironically, Say never used the words "supply creates its own demand." That paraphrase was created by James Mill in his Commerce Defended (1808).

**Say's Law** Some economists today will answer the question "Yes" and others will say "No." Economists in 1929, at the start of the Great Depression, believed only the "Yes" answer: the microeconomic focus on the miracle of markets. The belief that market economies would always quickly self-adjust was based on work by Jean-Baptiste Say (1767-1832), a French economist and supporter of Adam Smith's views on free trade and markets. Say's Law claimed that "supply creates its own demand."

We can illustrate Say's Law using the circular flow diagram in Figure 1.1 on page 8. Starting at the top, households supply inputs to businesses in exchange for money. The only reason households sell their inputs in input markets is because they want the money to demand products/services in output markets. When households spend all of the money they have earned in input markets to buy products/services in output markets, supply does create its own demand, and the flow continues smoothly around the circle.

In the middle of the Great Depression, economists who continued to believe in Say's Law started to look pretty silly. Economic events were crying out for a better explanation of the ups and downs of business cycles, especially the "downs" of falling output and living standards, unemployment, and deflation.



Keynesian Revolution Economists' reputations were rescued by John Maynard Keynes (1883-1946). Keynes was one of the most brilliant and influential minds of the twentieth century, creating the subject of macroeconomics, representing Britain at the Versailles peace conference at the end of World War I, being a member of the literary Bloomsbury Group, and engineering the creation of the International Monetary Fund (IMF) and the post-World War II international monetary system.

John Maynard Keynes, shown here in his study, was chosen as Man-of-the-Year by Time magazine in 1965. He was chosen because his principles helped the country "avoid the violent cycles...to produce a phenomenal economic growth and to achieve remarkably stable prices."

In a famous 1936 book, The General Theory of Employment, Interest and Money, Keynes rejected Say's Law as a "special theory" that sometimes holds true but usually does not. Keynes allowed for both answers to the question of the speed of self-adjustment of market economies in his more "general theory." Given enough time, he accepted that self-adjusting mechanisms might bring market economies back to steady growth, full employment, and stable prices. But Keynes believed it could take decades, during which time there would be serious and needless human suffering. He believed proper government policy could correct the problems more quickly in the short run, which was his focus. He famously quipped, "In the long run, we are all dead."

Keynes rejected Say's Law as a general truth, and explained the Great Depression by emphasizing the roles of money, banks, and expectations in connecting input markets and output markets. Households earning incomes in input markets are paid in money. If households save the money rather than spend it, businesses will not find the demand they expect for their products/services in output markets. This is the paradox of thrift, where businesses cut back production, lay off workers, and the economy goes into a downturn.

Expectations can also interfere with the quick self-adjusting mechanisms of market economies. In the stock market bubble of 1929, or the housing price bubble of 1996–2006, people began to expect that prices would continue to rise. Expectations can be self-fulfilling, as long as most people share them. If investors expect housing prices to continue rising, they will want to buy (and then sell, or "flip") more houses to make profits, and that demand will cause housing prices to rise. But when rising prices are based only on expectations, not on economic fundamentals, a change in expectations can quickly burst a bubble. If investors start expecting prices to fall, they sell quickly to avoid losses from falling prices. That selling causes housing prices to fall, leading more people to expect prices to fall, leading to more selling, and a rapid collapse in prices. Expectations, which can shift quickly because they are guesses about an uncertain future, help explain the cycles of boom and bust in market economies.

Introducing Macroeconomics Keynes's work created the field of macroeconomics. If you had been studying economics before 1936, there were no macroeconomic textbooks like the one you are reading. Now that macroeconomics exists, let's look in the next section at modern economists' views on whether market economies quickly self-adjust or not, and the implications for government macroeconomic policy.

- 2. Use the fundamental macroeconomic question on page 10 to explain conflicts between the predictions of microeconomics and macroeconomics.
- 3. What media explanations have you seen about the recession of 2008–2009? Where do those explanations fit into the categories of fallacy of composition, connections between input and output markets, and the roles of money/banks/expectations?

The long run is a misleading guide to current affairs. In the long run we are all dead. Economists set themselves too easy, too useless a task if in tempestuous seasons they can only tell us when the storm is long past, the ocean will be flat again.

-John Maynard Keynes, 1923

"I believe myself to be writing a book on economic theory which will largely revolutionise . . . the way the world thinks about economic problems."

Keynes wrote the quote above about the General Theory in a 1935 letter to George Bernard Shaw, the playwright whose words inspired the title of this book <u>Ceonomics for Life</u>.

Refresh

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<sup>1.</sup> What is a fallacy of composition?



#### 1.2 Should Government Be Hands-Off or Hands-On? **Economics and Politics**

Describe the hands-off and hands-on views on overnment policy and connect each to the fundamental macroeconomic question.

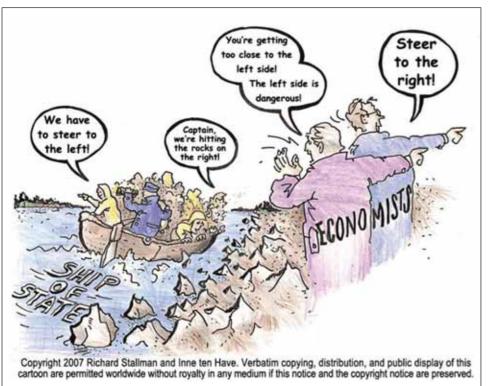
Since the time of Keynes, macroeconomics has made great gains in understanding how the economic system functions. Economists have learned from past experiences and have developed more sophisticated mathematical tools for applying and extending Keynes's insights about macroeconomic ups and downs. Economists have also developed sophisticated tools for applying and extending Say's insights, and for understanding the conditions under which markets adjust quickly and well and produce the miracle of the continuous, ever-changing production of the products/services we want. Luckily for you, since you are not trying to become an economist, you don't have to master those tools.

While economists have learned much since the Great Depression, what remains the same are disagreements among economists-as well as among politicians-about the fundamental macroeconomic question. The ideas in the debate between Say and Keynes are very much alive today.

> If left alone by government, do the price mechanisms of market economies adjust quickly to maintain steady growth in living standards, full employment, and stable prices?

#### More simply, if left alone, do markets quickly self-adjust?

Because there is no agreement on this question, you will have to decide which answers make most sense to you. The answers are important because they could make the difference between economic prosperity and recession. Your personal economic success will depend on the macroeconomic performance of the economy, and that performance is affected by government policies that will be put in place by politicians you elect. Let me outline the two major camps



among economists in terms of "Yes" and "No" answers. In describing the answers, we will extend the concepts of market failure and government failure from microeconomics.

#### Market Failure versus Government Failure

Since the Great Depression and Great Recession have clearly happened, you might think that the only reasonable answer to the question is, "No-markets fail to quickly self-adjust." Despite these debilitating business cycles, a "Yesmarkets quickly self-adjust" answer is also possible because of the importance of the initial, qualifying phrase, "If left alone by government."

Due to economies of scale or externalities, markets can fail to produce outcomes in the public interest. Government policy can improve market outcomes by acting in the public interest. But it is also possible that government may act in the interest of businesses, labour, or other interest groups. When government does not act in the public interest but is "captured" by special interest groups, economists define that as government failure.

Even when aiming for the public interest, government failure can occur because policymakers lack adequate and timely information for making good decisions. It is easy to make "honest mistakes" in choosing macroeconomic polices due to the complexity of the economy with its connections to the banking system, changeable expectations, and the global economy.

The macroeconomic consequences of government failure are policies that make economic outcomes like business cycles and unemployment worse. Government failure contributed to the severity of the Great Depression.

It is possible that the problems of business cycles or unemployment may have been caused by government failure-bad policy-not by the market economy. So even when observing the ups and downs of economic activity, the answer to the question, "If left alone, do markets quickly self-adjust?" may still be "Yes" because bad government policies have not left markets alone.

Economists often disagree. There is a joke that if you ask three economists a question, especially about macroeconomics, you will get five opinions. So in sorting economists (and politicians) into only two camps, I will simplify many differences that exist among them. The simplifications focus on the most important differences of this fundamental macroeconomic question. Let's look at the "Yes" and "No" answers, and how they connect to politics.

#### "Yes — Left Alone, Markets Quickly Self-Adjust"

Following in the footsteps of Adam Smith and Jean-Baptiste Say, one camp of economists argues that, if left alone by government, the price mechanisms of market economies adjust quickly to maintain steady growth in living standards, full employment, and stable prices.

The "Yes-Markets Quickly Self-Adjust" camp allows for some ups and downs in economic activity, and occasional unemployment and inflation, but believes those economic problems are caused by events outside the economy or by government policies. The "Yes" camp argues that markets are the most flexible way for the economy to adjust to changes, even if those adjustments take some time. These economists believe that money, banks, and expectations don't significantly affect the exchanges of physical products/services around the circular flow, or impede coordination between input and output markets. Through the invisible hand of competition, markets channel self-interest to promote efficiency and rising living standards.

government failure: government policy fails to serve the public interest

"Yes-Markets Quickly Self-Adjust" camp supports a hands-off role for government.

**Hands-Off** With the belief that markets will self-adjust (usually quickly, always in the long run), there is little role for government policy. Furthermore, this group believes that even when markets temporarily fail, government policy will likely make things worse, not better. Government failure is worse than potential market failure for this camp. It also sees government policy as a source of economic problems, not a solution to the problems. Therefore, the "Yes-Markets Quickly Self-Adjust" camp argues for a hands-off role for government.

Politicians on the right of the political spectrum-Conservatives and Libertarians—fit into this camp, supporting a hands-off role for government. They believe that, if left alone, the market economy will produce the miracle of the continuous, ever-changing production of the products/services we want, including rising standards of living, full employment, and stable prices.

#### "No—Left Alone, Markets Fail to Quickly Self-Adjust"

Following in the footsteps of John Maynard Keynes, the other camp of economists argues that, if left alone by government, the self-adjusting mechanisms of market economies can be slow and weak, so that business cycles, long periods of unemployment that reduce living standards, and rising or falling prices will recur regularly.

The "No-Markets Fail to Quickly Self-Adjust" camp believes that most economic problems are caused internally as unintended by-products of normally functioning markets. This group emphasizes the roles that money, banks, and expectations play in impeding the coordination between input and output markets. While preferring the flexibility of market economies to any other economic system, such as socialism, these economists see self-interest and greed promoting speculative bubbles that inevitably cause cycles of boom and bust.

**Hands-On** With the belief that markets on their own generate economic problems and fail to quickly self-adjust, there is an important role for government policy. These economists believe government polices generally serve the public interest. Because market failure problems will be serious, market failure is worse than potential government failure for this camp. Therefore, the "No-Markets Fail to Quickly Self-Adjust" economists argue for an essential, hands-on role for government.

Politicians on the left of the political spectrum-Federal Liberals, New Democrats, and the Bloc Québécois-fit into this camp, supporting a handson role for government. They believe that if left alone, the market economy will produce inequality in rising living standards, with considerable economic insecurity and hardship for those who do not possess skills that the market values. Government has a responsibility to maintain a social safety net to support the economic welfare of citizens left behind by markets,

especially labour markets.

#### The Fundamental Macroeconomic Question: **Comparing Camps**

Figure 1.2 is a good study device for reviewing the differences between the two camps. We will be revisiting these differences throughout the following chapters. By the time you finish this course, you should be in a position to decide which camp makes the most sense to how you see the world.

Figure 1.2 The Fundamental Macroeconomic Question				
If left alone by government, do the price mechanisms of market economies adjust quickly to maintain steady growth in living standards, full employment, and stable prices?				
Answer	Yes — Left Alone, Markets Quickly Self-Adjust	No—Left Alone, Markets Fail to Quickly Self-Adjust		
Fallacy of Composition	Macroeconomic and microeconomic outcomes the same	Macroeconomic and microeconomic outcomes different		
Origins of Business Cycles	Causes external to markets; government policy	Causes internal to markets; coordination failures between input and output markets; money, banking, expectations		
Which Failure is Worse?	Government failure	Market failure		
Role for Government	Hands-off	Hands-on		
Political Spectrum	Right — Conservative Party of Canada, Libertarian	Left — Liberal Party of Canada, New Democrats, Bloc Québécois, Green		

- 1. What is the fundamental macroeconomic guestion?
- 2. In your own words, list the key arguments for each side of the hands-off versus hands-on debate.
- 3. Ask your instructor which side of the debate she/he tends to support. From your own current experience and economic understanding, which side do you tend to support? Explain why.

"No-Markets Fail Jo Quickly Self-Adjust" camp supports a hands-on role for government.





#### 1.3 Does the Economy Measure Up? GDP, Unemployment, and Inflation

Define three key measures of macroeconomic performance, and identify good outcomes for each. By the time you finish this book, if I have done my job well you will better understand the world around you, see more clearly the connections between your personal choices and outcomes for Canada, and be able to use your knowledge to support politicians and policy proposals that you think best for your future. But right now, I'll bet your brain hurts from reading about abstract, fundamental questions about the speed of the self-adjusting properties of market economies.

So you will be relieved to hear that this section presents more basic and familiar topics-how we define and measure living standards, unemployment, and inflation-topics you see in the media all of the time.

These basic topics are our building blocks. Look again at the definition of macroeconomics, but notice the newly italicized words-macroeconomics analyzes the *performance* of the whole Canadian economy and the global economy, the combined outcomes of all individual microeconomic choices.

How do we evaluate the performance of the Canadian economy? You guessed it-by measuring the key outcomes: living standards, unemployment, and inflation.

#### Gross Domestic Product (GDP)

The most important concept for understanding your standard of living, and perhaps the most basic macroeconomic concept, is gross domestic product or **GDP**. GDP is the value of all final products and services produced annually in a country.

Look again at the circular flow diagram (reproduced in the margin). GDP measures the value of all of the products and services produced and sold in the output markets on the left side of the diagram. The outputs must be produced in Canada-domestically, not in other countries-and we measure the value produced in a calendar year. In Chapter 2 we will examine

more details about how GDP is defined (what are "final" products/services, price versus quantity changes) and measured, and explore data about what GDP has been in Canada from the Great Depression to the present.

In general, the higher the GDP, the more products and services there are to satisfy our wants. Higher levels of GDP per person mean higher living standards.

**Measure** In judging the performance of an economy, higher GDP per person is good, and lower GDP per person is bad. It is also better to have "steady growth" in GDP: continuous, yearly increases (good) rather than cyclical ups and then downs in GDP (bad).

#### Unemployment

In a market economy, to be able to buy products and services in output markets, you usually must earn income by selling something you own in input markets. For most households, that means finding a job-selling your capacity to work in labour markets to a business.

While we have it on the authority of the Beatles that "money can't buy you love," money buys everything else in a market economy, and is necessary for survival. That is why not having a job, and not earning money, is such a serious hardship.

A person is counted as **unemployed** if she is not employed *and* actively seeking work. If you are voluntarily staying at home to look after your kids, or are retired, you are not counted as unemployed. The unemployment rate is calculated as the number of people unemployed as a percentage of the total number of people both employed and unemployed. If 93 people are employed, and 7 people are not employed and seeking work, the unemployment rate is 7 percent  $(7 \div (93 + 7))$ .

In Chapter 3 we will examine more details about how unemployment is defined and measured, and explore data about unemployment in Canada.

Measure In general, a higher unemployment rate is bad (more people out of work) and a lower unemployment rate is good.

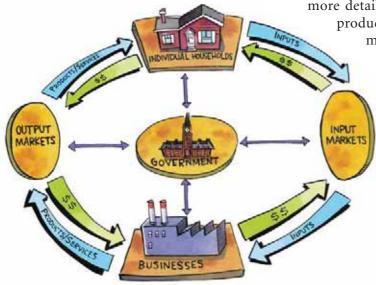
#### Inflation

In microeconomics, the price of a particular product/service rises or falls with changes in demand and supply. In macroeconomics, inflation refers to a rise in the average level of all prices in an economy. When an economy is experiencing inflation, the average price level is rising and the value of money is falling. If, on average, products that used to cost \$100 cost \$104 a year later, the inflation rate for that year is 4 percent. The flip side of inflation is a falling value of money. If products that used to cost \$100 now cost \$104, your hundred dollar bill no longer buys as much as it did last year. Money has fallen in value.

In Chapter 3 we will examine more details about how inflation is defined and measured using the Consumer Price Index, and present data about inflation in Canada.

> This worker needs millions of dollars to buy a few groceries in Zimbabwe in 2008. While this level of inflation is not common, it happens when a country's currency loses its value. If money is losing its value at this rate, how can a business price its products/services?

Gross domestic Gross domestic product (GDP): value of all final products and services produced annually in Canada



inflation: rising average prices and falling value of money

unemployed: not employed and actively seeking work





**Measure** In general, higher and unpredictable inflation rates are bad and lower and predictable inflation rates are good. Mild and steady inflation is not as serious a problem as is unemployment. But if average prices go down, that is defined as deflation—a fall in the average level of prices. This can be a serious problem, which we will discuss in Chapter 3.

These concepts of GDP, unemployment, and inflation are important performance indicators for almost every aspect of macroeconomics. As a bonus, once we can measure these key outcomes, the results will help you evaluate the fundamental claims of the two camps of economists—whether or not market economies maintain steady growth in living standards, full employment, and stable prices.



- 1. In your own words, define GDP, the unemployment rate, inflation, and deflation.
- 2. Explain how the value of your money is connected to inflation.
- Use the three measures in this section to describe what a healthy economy would look like.



#### 1.4 Can't Tell the Players without a Scorecard: Macroeconomic Players

Identify five groups of macroeconomic players and their choices. How do we connect smart individual choices from microeconomics to macroeconomic outcomes such as GDP, unemployment, and inflation? One way we will move from a single tree to the whole forest is to organize individuals into groups, based on similar choices among members of the group. We have already begun this collecting with the map of the circular flow of economic life, Figure 1.1, which groups individuals into households, businesses, and government. We used this map constantly in microeconomics (see Appendix A), and will continue to use it in macroeconomics.

But the circular flow of Figure 1.1 needs more information to adequately explain macroeconomic outcomes. The scale of a map is crucial to its usefulness. If you want to drive across Manitoba on the Trans-Canada highway, a detailed map of downtown Winnipeg will not help you much. To get the missing information needed for macroeconomics, we must add two more groups of players—banks and other countries with whom we trade.

Let's look at each of the five groups of players, whose combined choices produce macroeconomic outcomes. For each group, we'll highlight the most important choices to focus on.

#### Households as Consumers

Individuals in households supply labour and other inputs in input markets, and use the income they earn to buy products and services in output markets. For our macroeconomic map, we will focus on the choices households make about spending the money they have earned. Because of this focus on spending, we will rename this group of players as *consumers*.

**Consumer Choices** You have two major choices as a consumer. First, you can spend your money or save it. Second, you can buy Canadian-produced products/services, or buy products/services imported from other countries. With our focus on the forest instead of the trees, we will not be concerned about microeconomic choices such as whether you buy a Nokia cell phone or a Motorola, or if you eat out in a restaurant or cook dinner at home.

#### **Businesses**

Businesses hire labour and other inputs from consumers in input markets, and sell the products/services produced with those inputs in output markets. Businesses also make decisions about expanding their output by building new factories and buying new machinery. Economists call business purchases of new factories and equipment **investment spending**.

We will not be concerned about microeconomic business choices such as whether a dairy produces more milk or more cream, or whether Ford produces more cars or more trucks.

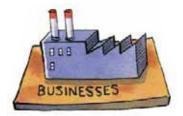
**Business Choices** Business input choices are similar to those made by consumers. They include hiring labour or not, and buying inputs domestically or importing inputs from other countries. In selling their output, businesses can choose to sell domestically or to export products/services to other countries—wherever profits are highest. And growing businesses make investment spending choices, purchasing new equipment or not—and again from domestic or foreign suppliers.

#### Government

Government, besides setting the legal rules of the game for all economic activity, can choose to interact, or not, in almost any aspect of the economy. We will use *government* to represent all levels of government—federal, provincial, and municipal. But our explanation of government choices will focus largely on the federal government, the Government of Canada.

Consumer choices are to spend or save; to buy Canadian products/services or imports

investment spending: business purchases of new factories and equipment





Government choices are: purchases of products/services; taxes and transfer payments; fiscal policy and monetary policy.

fiscal policy: changes in government changes in government purchases and taxes/transfers to achieve macroeconomic outcomes of steady growth, full employment, and stable prices



monetary policy: Bank of Canada changes interest rates and the supply of money to achieve macroeconomic outcomes of steady growth, full employment, and stable prices

**Government Choices** There are a great many possible government choices. We will focus on just two: government purchases of products/services, and government taxes and transfer payments.

When the government hires guides to work for Parks Canada (called "Visitor Experience Managers!") or contracts private construction companies to build new highways, those are purchases of services and products. Government uses tax revenues, collected from personal and corporate income taxes and from the GST (goods and services tax), to pay for purchases. Government also makes transfer payments to consumers, such as Employment Assistance for the unemployed, Old Age Security payments to seniors, and the Canada Child Tax Benefit to low-income families. Transfers are negative taxes, where the government gives you money instead of taking it away.

Government policy decisions to purposefully leave the economy alone or influence it-hands-off or hands-on-take two forms. Fiscal policy involves changes in government purchases and taxes/transfers intended to achieve the macroeconomic outcomes of steady growth, full employment, and stable prices. Monetary policy is the responsibility of the Bank of Canada, which is discussed in the next section.

#### Bank of Canada and the Banking System

The Bank of Canada, together with the system it oversees of chartered banks, credit unions, caisse populaires (in Québec), and trust and mortgage loan companies, is one new player in macroeconomics. The banking system takes deposits of money from consumers and businesses, and makes loans to consumers and businesses. The Bank of Canada is Canada's central bank, responsible for supervising the banking system, financial markets, and conducting monetary policy.

Bank of Canada and Banking System Choices The key choice for banks is whether to make loans or not. The quantity of loans made by the banking system has a large impact on macroeconomic outcomes.

The Bank of Canada chooses monetary policy, which involves changes in interest rates and the supply of money, aimed at achieving the macroeconomic outcomes of steady growth, full employment, and stable prices.

#### Rest of the World (R.O.W.)

Our main focus is on the Canadian economy. But Canada is a relatively small player in the global economy and has extensive trading relationships with many countries, especially the United States. What goes on in these



other countries has a large impact on macroeconomic outcomes here in Canada. Because of those trading relationships, it is said "When the United States sneezes, Canada catches a cold." The Great Recession in the United States meant Americans bought far fewer Canadian exports, which in turn helped push Canada into a recession.

**R.O.W. Choices** Countries in the rest of the world can choose to buy Canadian products/services (exports from Canada) and sell the products/services they produce to us (imports to Canada). There are similar choices about where to invest money. Canadians can invest money in banks and financial assets in other countries, and the R.O.W. can invest money in Canadian banks. Exchanges of exports, imports, and money all require conversions from Canadian dollars into other currencies, so these choices determine the quantity of Canadian dollars demanded. Those demands affect the value of the Canadian dollar (the topic of Chapter 6).

With this overview of the five groups of macroeconomic playersconsumers, businesses, government, the banking system, and the rest of the world-along with their key choices, we can move on to look in more detail at the economic outcomes that their choices combine to create.

- 1. List the five key macroeconomic players and the macro-related choices they can make.
- 2. Can any one of the macroeconomic players be considered more important than the others? Explain your answer.
- 3. Create a simple cause-and-effect diagram that illustrates how a decision of one macroeconomic player affects you directly.

#### **1.5** Focusing on Your Future: Living Standards, Voting, and Macroeconomics

If I haven't yet convinced you that your future success in life depends on macroeconomics, this last section should do it. What makes macroeconomics personally important for you, long beyond passing this course? Here are the top three reasons.

#### Your Economic Future

Reason number one: Your personal economic success will depend on the macroeconomic performance of the economy. The three most important performance measures are GDP, unemployment, and inflation.

**GDP** Most generally, GDP per person indicates average standards of living. The higher the GDP per person, the more products and services there are to satisfy your wants, and everyone else's, too. A higher GDP per person indicates a better living standard.

R.O.W. choices: N.O.N. choices: buying Canadian exports and selling imports to Canada; investing money in Canada, or accepting Canadian investments; demanding Canadian dollar Canadian dollars.

Refress

1.4

Explain three MAPS for focusing your thinking like a macroeconomist



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**Unemployment** Unemployment affects the odds of your finding a wellpaying job that you also enjoy. When the unemployment rate is high, jobs are hard to find, and you compete against many others eager to land the same job you are after. Employers have the upper hand in bargaining over wages and working conditions. If you are an employer hiring during periods of high unemployment, you can choose your new hire from a large pool of qualified applicants.

When the unemployment rate is low, jobs are more plentiful, and employers are the ones competing against each other for the relatively scarce workers they need. Workers get their pick among jobs, and gain an advantage in bargaining.

Unemployment tends to be inversely related (when one goes up, the other goes down) to growth in levels of GDP. As GDP goes up, unemployment goes down. When the economy is growing, measured in terms of increases in the total value of products/services produced, unemployment falls.

Inflation Inflation can affect your standard of living. If your income is not rising as fast as the prices of what you buy, your income will buy less. Similarly, inflation erodes the purchasing power of your savings-those unchanged dollars buy fewer products/services. When prices are rising, the same amount of money has lower purchasing power.

These three key macroeconomic outcomes are closely tied to your material well-being.

#### Your Vote Matters

Reason number two: As a citizen, you vote for governments that make policy decisions that influence our economy's performance-GDP, unemployment, and inflation. Those policies could make the difference between boom and bust, between steady growth in living standards and prolonged recession-in other words, your economic future. Politicians will ask you to support policies based on either a hands-off or hands-on view of the market economy. You can best make an informed choice by understanding the basics of macroeconomics and using that knowledge to come to your own conclusion on the fundamental macroeconomic question: If left alone by government, do the price mechanisms of market economies adjust quickly to maintain steady growth in living standards, full employment, and stable prices? This course (and this book) provides you with key tools you need to answer that question.

#### You Too Can Think Like a Macroeconomist

Reason number three: If you learn to think like an economist, you will be better able to understand the world around you and make smarter choices for personal success. Will the rising value of the Canadian dollar eliminate the manufacturing jobs you are training for? Based on the Bank of Canada's monetary policy, will you save money by choosing a fixed or variable interest rate mortgage? Fortunately, you don't need to be fully trained as an economist to answer these questions and think like an economist.



In microeconomics, there are three simple keys to smart individual choices (see FYI on this page and Appendix A). Macroeconomics is not about individual choices, but about the combined outcome of those choices. To think like a macroeconomist, to understand how the economy as a whole works, and how well it performs, the key is to focus on targeted aspects of the economy. The Canadian economy, with all of its complexity and its connections to the banking system, changeable expectations, and to the global economy, may appear overwhelming. My goal is to provide you with maps as guides. They will focus your attention on the most important aspects of the economy, and leave other information in the background. Just as road maps help you find your way in a strange country, the MAPS icons shown on page 24 will guide your journey through the macroeconomics forest. With these MAPS, difficult decisions about which economic policies to support and which personal choices to make, and understanding the complex world around you, will become much simpler.



For a complete explanation of the 3 Keys to Smart Choices, see Appendix A.

Hybrid map of part of Canada along the Trans-Canada Highwayuseful for trip planning.

#### FOR YOUR INFORMATION

- The Three Keys to Smart Choices for Microeconomics are:
- 1. Choose only when additional benefits are greater than additional opportunity costs.
- 2. Count only additional benefits and additional opportunity costs.
- 3. Be sure to count *all* additional benefits and costs, including *implicit costs* and externalities.



MAcroeconomics Positioning System Today, many of the best maps are digital. Google Earth, the restaurant locator on your iPod touch, or the global positioning system (GPS) in your car all help you find your way. Here is a MAcroeconomics Positioning System (MAPS) to help you find your way through the macroeconomics forest, through media reports on the economy, and through debates on the best economic policies for Canada.

There are three key MAPS.

#### MAPS 1

#### Focus on the connections between input markets and output markets for both demand and supply sides.

This connection is behind the example that opened the chapter. During tough economic times, people who are unemployed aren't earning incomes, and cut back on spending. Businesses aren't selling enough because individuals aren't buying, and profits are down. But if only businesses would hire the people looking for work, those new employees would earn incomes and buy the unsold products. It seems everyone could be better off, yet that doesn't happen.

Lack of demand in the labour market connects to lack of demand in output markets.

#### MAP52

#### Focus on the connections between Canada and the rest of the world.

This connection focuses on the fact that even when nothing has changed in Canada, events in the rest of the world can have a big impact on the Canadian economy. Increased production and competition from China can cause unemployment in Canada. A fall in the value of the Canadian dollar, which makes Canadian exports cheaper for foreigner buyers, can increase the output of Canadian export businesses, increase Canadian GDP, lead to hiring of additional workers in Canada, and cause rising prices of imported goods for Canadian consumers.

#### MAPS3

#### Focus on the connections between money/banks/expectations and the input and output markets of the circular flow.

This connection is behind the Great Recession which began in 2008. As the housing market bubble burst with changing expectations, problems in the banking sector turned into problems for society as a whole, with falling demand for products/services in output markets and rising unemployment in input markets.

Connections to Key Locations These "connections" between different aspects of the domestic and global economies are usually the key locations determining the success or breakdown of macroeconomic performance. When the economy performs well, as Say's Law predicts, these connections work well in coordinating individuals' decisions and supporting economic growth. When the economy falters, as Keynes predicts it will without government policy assistance, these connections break down and stall economic growth.

#### Moving On

These MAPS will help you think like a macroeconomist, which in turn will help you achieve personal success, and help you make better, more informed choices as a citizen.

Every time we use a specific MAPS to explain economic events, you will see an icon in the margin. Look for those icons as signposts to guide your macroeconomics journey.

MAPS 1

#### OUTPUT INPUT $\leftrightarrow$ MARKETS MARKETS



Focus on the connections between input markets and output markets for both demand and supply sides.

1. List the three key measures of macroeconomic performance. In a sentence for each, explain how understanding them could help you make better choices for your own future.

- 2. Review the three MAPS developed in this section. In your own words (point form is fine), explain what each means.
- 3. Over the next week, make a note each time you see, hear, or read about the three key measures of macroeconomic performance. Include where it occurred and to what it was referring.



MARKETS



MAPS3



MAPS 1

MARKETS

Economics does not furnish a body of settled conclusions *immediately applicable to* policy. It is a method rather than a doctrine, an apparatus of the mind, a technique of thinking which helps its possessor to draw correct conclusions.

-John Maynard Keynes

Focus on the connections between Canada and the rest of the world.

MAPS3



Focus on the connection between money/ banks/expectations and the input and output markets of the circular flow.



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Chapter

# Are Your Smart Choices Smart for 4/2

STUDY GUIDE

Macroeconomics and Microeconomics

#### CHAPTER SUMMARY

#### 1.1 RECONCILING MACROECONOMICS AND MICROECONOMICS: IS THE WHOLE GREATER THAN THE SUM OF THE PARTS?

Smart microeconomic choices by individuals may or may not add up to smart macroeconomic outcomes for the economy as a whole. The key question about the relationship between microeconomics and macroeconomics is, "If left alone, do markets quickly self-adjust?"

- The Great Recession of 2008-2009 and the Great Depression of 1929–1933 involved financial bubbles that burst, high unemployment, falling living standards, bankruptcies, as well as government policy mistakes.
- Macroeconomics analyzes the performance of the whole Canadian economy and global economy-the combined outcomes of all individual microeconomic choices.
- Microeconomics analyzes choices that individuals in households, individual businesses, and governments make, and how those choices interact in markets.
- Fallacy of composition—what is true for one is not true for all; whole is greater than the sum of the parts.
- paradox of thrift—attempts to increase savings cause aggregate savings to decrease because of falling employment and incomes.
- The circular flow diagram reduces the complexity of the Canadian economy to three sets of players-households, businesses, and governments.
  - input markets determine incomes;
  - households are sellers and businesses are buyers.
- output markets determine the value of all products/services sold; households are buyers and businesses are sellers.
- Business cycles—ups and downs of overall economic activity.

- The fundamental macroeconomic question: "If left alone by government, do the price mechanisms of market economies adjust quickly to maintain steady growth in living standards, full employment, and stable prices?"
  - "Yes" answer based on Say's Law—supply creates its own demand.
- "No" answer from John Maynard Keynes, founder of macroeconomics in 1930s.

#### 1.2 SHOULD GOVERNMENT BE HANDS-OFF OR HANDS-ON? **ECONOMICS AND POLITICS**

"If left alone, do markets quickly self-adjust?" The "Yes" and "No" camps differ on the fallacy of composition, causes of business cycles, risk of government failure versus market failure, role for government, and the political spectrum.

- Like J.B. Say and J.M. Keynes, economists and politicians today still disagree about the fundamental macroeconomic question, "If left alone by government, do the price mechanisms of market economies adjust quickly to maintain steady growth in living standards, full employment, and stable prices?"
- Market failure—market outcomes fail to serve the public interest.
- Government failure—government policy fails to serve the public interest.
- "Yes—Left Alone, Markets Quickly Self-Adjust" camp believes
  - macroeconomic and microeconomic outcomes are the same.
  - external events or government policy cause business cycles.
  - government failure is worse than market failure.
- government should be hands-off.
- "No—Left Alone, Markets Fail to Quickly Self-Adjust" camp believes
- fallacy of composition-macroeconomic and microeconomic outcomes different.
- markets cause business cycles through coordination failures, roles of money, banking, and expectations.
- market failure is worse than government failure.
- government should be hands-on.
- Politicians on the right tend to be in "Yes" camp, government as hands-off.
- Politicians on the left tend to be in "No" camp, government as hands-on.

#### **1.3** DOES THE ECONOMY MEASURE UP? **GDP, UNEMPLOYMENT, INFLATION**

The most important outcome measures of the performance of the Canadian economy are living standards (related to GDP per person), unemployment, and inflation.

- Gross domestic product (GDP)—value of all final products and services produced annually in Canada.
- You are **unemployed** if not employed and actively seeking work.
- Inflation—rising average prices and falling value of money.

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#### **1.4** CAN'T TELL THE PLAYERS WITHOUT A SCORECARD: MACROECONOMIC PLAYERS

The five groups of macroeconomic players are consumers, businesses, government, Bank of Canada and the banking system, and the rest of the world. Each group has different choices.

- Consumer choices:
- spend income or save.
- buy Canadian products/services or imports.
- Business choices:
  - investment spending-business purchases of new factories and equipment-domestically or from foreign suppliers.
  - hiring workers or not.
  - buying inputs domestically or importing.
  - selling outputs domestically or exporting.
- Government choices:
  - purchases of products/services.
  - taxes and transfer payments.
  - fiscal policy-changes in government purchases and taxes/transfers to achieve macroeconomic outcomes of steady growth, full employment, and stable prices.
- Bank of Canada and Banking System choices:
  - monetary policy—Bank of Canada changes interest rates and the supply of money to achieve macroeconomic outcomes of steady growth, full employment, and stable prices.
- making loans or not.
- Rest of World (R.O.W.) choices:
  - buying Canadian exports and selling imports to Canada.
- investing money in Canada or accepting Canadian investments.
- demanding Canadian dollars.

#### 1.5 FOCUSING ON YOUR FUTURE: LIVING STANDARDS, VOTING, AND MACROECONOMICS

Macroeconomics affects your future—GDP per person affects living standards, unemployment affects the odds of your finding a job, and inflation can reduce your living standards. Macroeconomics also informs your vote for politicians and policies influencing economic performance, and illuminates the important parts of complex economies.

- Your personal economic success depends on
  - GDP—higher GDP per person allows higher living standards.
  - unemployment—affects odds of your finding a job.
  - inflation-can reduce living standards if income not rising as fast as prices of what you buy.

- Your understanding of macroeconomics informs your vote for politicians whose economic policy choices influence economic performance and therefore your economic success.
- Thinking like a macroeconomist means focusing on targeted aspects of the economy. Three key MAPS (MAcroeconomic Positioning Systems) for finding those targets are
- MAPS1

Focus on the connection between input markets and output markets, for both demand and supply sides.

- MAPS2

Focus on connections between Canada and the rest of the world.

- MAPS3

Focus on the connections between money/banks/expectations and the input and output markets of the circular flow.

#### **TRUE/FALSE**

Circle the correct answer.

A tall man wearing an expensive suit and tinted sunglasses walks into the coffee shop where you are studying. He notices your macroeconomics textbook and says:

"I have a top secret mission for you. We've detected aliens on the Planet of Plutonomics. Some of these aliens look like Klingons from the Star Trek movies and some look like Yoda from the Star Wars movies. We need you to verify whether our findings about their economy-based on satellite images—are true or false."

Use this scenario to answer questions 1–15.

#### 1.1 RECONCILING MACRO AND MICRO

- 1. Klingon look-alikes are working in exchange for money, and paying money to purchase products and services. This evidence suggests that there are input and output markets.
- 2. Yoda look-alikes are paying taxes, and some are receiving transfer payments from the government. This evidence suggests that the government is part of the circular flow of economic life.
- 3. Every government worker on the Planet of Plutonomics is a superstar at solving microeconomic problems. Therefore, the government of the Planet of Plutonomics must be a superstar at solving macroeconomic problems.



True False

True False

True False 4. Every government worker on the Planet of Plutonomics is a superstar at solving macroeconomic problems. Therefore, the government of the Planet of Plutonomics must be a superstar at solving macroeconomic problems.

#### **1.2** HANDS-OFF OR HANDS-ON?

- 5. A study reveals that government policies on the Planet of Plutonomics were based on the special interests of female Yoda look-alikes rather than on the public interest, resulting in a high level of unemployment for men. This evidence suggests that the high unemployment level for men could have been caused by government failure.
- 6. A political party on the Planet of Plutonomics called the Laissez-Faire-Isn't-Fair Party believes that government policy can improve market outcomes by acting in the public interest. This evidence suggests that this political party prefers a hands-on approach.
- **7.** A political party on the Planet of Plutonomics called the Lazy Far Right Party believes that an invisible hand promotes efficiency and raises living standards. This evidence suggests that this political party prefers a hands-on approach.

#### **1.3** MEASURING GDP, UNEMPLOYMENT, INFLATION

- 8. The GDP per person on the Planet of Plutonomics has steadily declined in recent years. This evidence suggests that their standard of living is increasing.
- 9. The level of unemployment on the Planet of Plutonomics has steadily increased in recent years. This evidence suggests that their situation is improving.
- 10. The prices of iPods, Bridgestone tires, slimfitting jeans, Dippity-Do hair gel, piercings, and tattoos are all rising on the Planet of Plutonomics. This evidence suggests that inflation is occurring in their economy.

True False

True False

False True

True False

False

False

False

True

True

True

**1.4 MACROECONOMIC PLAYERS** 

- 11. There are lots of hot dogs on the Planet of Plutonomics, but no hot dog buns. This evidence suggests that they could benefit from exporting to and importing from the rest of the universe.
- 12. The Planet of Plutonomics does not use Canadian dollars. This evidence suggests that they would never be able to buy Canadian exports.
- 13. The Planet of Plutonomics is not using monetary policy in the current recession. This evidence suggests that their central bank will not have a role to play in helping the economy out of a financial crisis.

#### 1.5 SUCCESS, VOTING, AND MAPS

- 14. The high level of unemployment on the Planet of Plutonomics suggests that workers have the advantage in bargaining with employers.
- 15. If you were thinking of investing in the Planet of Plutonomics, the only MAPS that would be relevant to you would be MAPS2.

#### MULTIPLE CHOICE

#### Circle the correct answer.

#### **1.1** RECONCILING MACRO AND MICRO

- 1. What do the Great Depression and Great Recession have in common?
  - A) Both were great for depression.
  - **B**) Both had a stock market crash.
  - C) Both experienced a rise in prices.
- D) Both had government programs like employment insurance.
- 2. Who is to blame for inflating the housing price bubble?
  - A) Homeowners
  - **B**) Mortgage lenders
  - C) Banks and other financial institutions
  - **D**) All of the above

True	False	
True	False	
True	False	
True	False	
True	False	
		Re Nor
		Y

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- 3. During the Great Recession, all of the following indicators fell except
  - A) stock market values.
  - **B**) unemployment.
  - C) housing prices.
  - D) asset prices.
- 4. Say's Law claims that
  - A) supply is greater than demand.
  - **B**) demand is greater than supply.
  - C) supply creates its own demand.
  - D) demand creates its own supply.

#### **1.2** HANDS-OFF OR HANDS-ON?

- 5. Those favouring a government hands-off approach argue that
  - A) markets will self-adjust.
  - B) markets will quickly self-adjust.
  - C) markets will not quickly self-adjust.
  - D) markets will quickly-self adjust if left alone by government.
- 6. Which political party is most likely to support a hands-off approach by government?
- A) Liberal Party of Canada
- **B**) Conservative Party of Canada
- C) NDP
- **D**) Bloc Québécois

#### **1.3** MEASURING GDP, UNEMPLOYMENT, INFLATION

- 7. The performance of the Canadian economy is measured by the key outcome(s) of
  - A) GDP.
  - B) unemployment.
  - C) inflation.
  - **D**) All of the above
- 8. Which of the following individuals would count as unemployed?
- A) A full-time student
- **B**) An ex-student who has graduated and is looking for work
- C) An ex-student who has graduated but is not looking for work
- D) An ex-student who has graduated and is working
- 9. Inflation is a rise in the
  - A) average price level in the economy.
  - **B**) value of money.
  - C) quantity of products/services in the economy.
  - **D**) standard of living in the economy.

#### **1.4 MACROECONOMIC PLAYERS**

- 10. Purchases of new factories and equipment by businesses are called
  - A) stock investments.
  - B) investment spending.
  - C) labour costs.
  - D) exports.
- 11. Transfer payments by governments to consumers include
  - A) Employment Insurance for the unemployed.
  - **B**) Old Age Security payments to seniors.
  - C) Canadian Child Tax Benefit payments to low-income families.
  - **D**) All of the above
- 12. Monetary policy is the responsibility of the
  - A) Bank of Montreal.
  - B) Bank of Nova Scotia.
  - C) Bank of Canada.
  - D) Government of Canada.

#### 1.5 SUCCESS, VOTING, AND MAPS

- 13. The amount of unemployment in the economy matters to your personal economic success because it affects your ability to
  - A) find a job.
  - **B**) bargain for higher wages.
  - C) bargain for better working conditions.
  - **D**) All of the above
- 14. When unemployment increases,
  - A) the chance of finding a job decreases.
  - B) GDP increases.
  - C) the economy is growing.
  - **D**) All of the above
- 15. Which of the following is *not* part of the MAcroeconomics Positioning System (MAPS)?
  - A) Connection between households and consumers
  - **B**) Connection between input and output markets
  - C) Connections between Canada and the rest of the world
  - D) Connection between money/banks/expectations and input and output markets

#### SHORT ANSWER

K

Write a short answer to each question. Your answer may be in point form.

- 1. The "trees" and the "forest" can be used to distinguish microeconomics from macroeconomics.
  - A) Which "economics" looks at the trees? Which looks at the forest?
  - **B**) According to Adam Smith, how do we achieve a healthy forest?
- 2. Smart choices by people and businesses do not necessarily imply that smart choices are being made for the economy as a whole. Explain how the fallacy of composition applies to each of the following scenarios.
  - A) Producers decide to increase the output of their product or service.
  - B) Consumers decide to save more of their income.
- 3. Suppose that you're at a party when the topic of the Great Recession comes up. People are wondering what caused the recession. Luckily a balloon is nearby, which you use as a prop to demonstrate the housing price bubble and burst of the Great Recession.
  - A) Why did the housing prices balloon inflate?
  - **B**) Why did the housing prices balloon burst?
- 4. Economies around the world have been seriously affected by the financial crisis and housing market crash that began in the U.S. in 2007. By October 2008, most economies around the world were in a recession. In March 2009, the International Monetary Fund (IMF) said that global output will probably fall for the first time since the Second World War.
  - A) Explain why developments in the rest of the world really matter for Canada.
  - **B**) The World Bank expects the fastest contraction of trade since the Great Depression. Output has shrunk even faster in countries dependent on exports, particularly exports with falling world prices. Explain how this affects income for countries that rely heavily on these exports.
- 5. In October 2008, employment had reached an all-time high in Canada. Between October 2008 and October 2009, total employment declined by 400 000 jobs, while the unemployment rate rose from 6.3 percent to 8.6 percent.
  - A) Using MAPS1, explain how the job losses could be linked to the decreasing quantities of products and services produced.
  - B) Why are government transfers, like Employment Insurance, called "negative taxes"?
  - C) Are government transfers an example of fiscal or monetary policy?

- 6. The Great Recession is reopening one of the most hotly debated questions in macroeconomics-the choice between government spending (fiscal policy) and interest rate changes (monetary policy) to stimulate demand and get people back to work. Between the 1930s and the 1950s, most macroeconomists agreed that government spending increases and tax cuts were essential for avoiding deep recessions. From the 1960s until now, a more common view was that interest rate cuts by the Central Bank, which made it cheaper for businesses and consumers to borrow money and then spend it, were the best way to fight downturns.
  - A) Between the 1930s and 1950s, did macroeconomists favour fiscal or monetary policy?
  - **B**) From the 1960s until now, did most macroeconomists favour fiscal or monetary policy?
- 7. Canada's Economic Action Plan will provide about \$62 billion in stimulus over 2009 and 2010. According to estimates from the International Monetary Fund, Canada's fiscal stimulus package (as a percentage of GDP) is among the largest in the world.
- A) If modern supporters of Say's Law and Keynes were bloggers, which would be more likely to post a support message for these stimulus packages? Why?
- B) Should Canadians support stimulus packages by other countries? (Hint: use your MAPS.)
- 8. In April 2009, the Bank of Canada reduced interest rates to their lowest possible levels. The Bank of Canada believes this is the appropriate policy to move the economy back to full production capacity and to achieve price stability.
  - A) What key measures would you look at to determine if the performance of the economy improves?
  - B) In October 2009, the Bank of Canada projected that Canadian GDP (measured in quantities of products/services) will decline by 2.4 percent in 2009 and grow by 3.0 percent in 2010 and by 3.3 percent in 2011. After declines in 2009, inflation is expected to gradually return to 2 percent by the third quarter of 2011. Explain why living standards are expected to be better in 2011 than in 2009.

- 9. You can categorize macroeconomists based on whether they believe a hands-off or hands-on approach by government is needed to help the economy quickly self-adjust. If there were two Facebook groups-one hands-off and one hands-on-which of these Facebook groups would these economists likely fall in?
  - A) Milton Friedman has argued that government changes in the money supply explain all of the economy's ups and downs.
  - B) Robert Lucas Jr. has made the case that large-scale government attempts to stimulate the economy are unlikely to succeed over time.
  - C) Paul Krugman has argued for the importance of large-scale government spending to avoid a sustained depression.
  - D) The President of the United States, Barack Obama, has stated that, "There is no disagreement that we need action by our government, a recovery plan that will help to jump-start the economy."
  - E) Lawrence Summers has argued that monetary policy may be insufficient in the current situation and that further fiscal stimulus may be necessary.
  - F) The IMF's World Economic Outlook (April 2009) states that: "Monetary policy has typically played an important role in ending recessions and strengthening recoveries, although it is less effective during financial crises. Fiscal policy appears to be more reliably helpful in these episodes."

- 10. Economists in the tradition of Adam Smith and J. B. Say believe that price and wage adjustment quickly leads to full employment in the short run. Keynesians, on the other hand, argue that full employment can only be achieved in the long run, since prices and wages are "sticky" in the short run (meaning they do not quickly adjust to changes in economic conditions).
  - A) Would price and wage stickiness support a hands-on approach from government in the short run? Why or why not?
  - B) Why might businesses have difficulty reducing wages in response to unemployment?
  - C) A business may be willing to hire more workers if wages are lower. However, explain what may happen to employment if all businesses pay lower wages.
    - (Hint: think about the fallacy of composition.)

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