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PREFACE

When George Lucas was asked why he made *Star Wars*, he replied, 'It's the kind of movie I like to see, but no one seemed to be making them. So I decided to make one.' We realised that no one seemed to be writing the kind of textbook we wanted to use in our courses. So, after years of supplementing texts with fresh, lively, real-world examples from websites, newspapers, magazines and professional journals, we decided to write an economics text that delivers complete economics coverage with many real-world examples.

NEW TO THE FOURTH EDITION

The core ideas of economics remain unchanged: opportunity costs, demand and supply, comparative advantage, marginal analysis, the role of the entrepreneur in markets, aggregate demand and aggregate supply, the importance of long-run economic growth to rising living standards, and the role of economic incentives in the design of policy. What does change is the context in which lecturers and instructors present these ideas in class and the policy debates of the time. In the past few years, to take just a few examples relevant to macroeconomics, we have witnessed renewed policy debate on issues such as government debt, the impact of innovation such as robotics on growth and jobs, the slowing growth rates of developing and newly-industrialised countries, and widespread economic contractions and recessions, and debated the effectiveness of economic policies aimed at minimising the impact of these contractions and recessions. This new edition helps students understand these changing economic realities.

In this fourth edition we retain the focus of presenting economics in the context of real-world businesses and real-world policy debates that have proved effective for teaching and learning. We have made a number of important improvements, which include suggestions from lecturers currently using the text, and from reviewers. The fourth edition includes the following key changes:

- New material on the rapid growth in the use of robotics in the workplace in Chapter 1.
- New material focusing on the issues and problems when using GDP for international comparisons of living standards in Chapter 4.
- Expanded coverage on economic catch-up between poor and rich countries in Chapter 6.
- Updated coverage of economic contractions and recessions that began with the Global Financial Crisis in a number of chapters, including features in Chapters 5, 7, 12, 13 and 15.
- Updated and new discussion and case studies on money and monetary policy in Chapters 11 and 12.
- New material on the Millennium Development Goals and the Sustainable Development Goals in Chapters 6 and 14.
- Updated coverage of government debt crises in Europe in Chapters 11 and 15.
- New material on world currencies, including the management of the Chinese yuan in Chapter 14 and the survival of the euro in Chapter 15.
- More international case studies, including China, Japan, Singapore, countries in Africa, the United States and the United Kingdom.
- Updated and new chapter-opening cases for many chapters.
- A number of new and substantially revised *Making the Connection* features, with others containing updated data and information, to help students tie economic concepts to current events and policy debates.
- All new *An Inside Look* news articles and analyses, to enable students to apply economic concepts to current events and policy debates.
- Updated figures and tables, using the latest data available.
- A number of updated and new end-of-chapter questions to reflect updates to content.

THE FOUNDATION

CONTEXTUAL LEARNING AND MODERN ORGANISATION

We believe a course is a success if students can apply what they have learned in both personal and business settings and if they have developed the analytical skills to understand what they read in the media. That's why we explain economic concepts by using many real-world business and economic policy examples and applications, in both Australia and other countries, in the chapter openers, graphs, *Making the Connection* features, *An Inside Look* features and end-of-chapter problems. This approach helps students become educated consumers, voters and citizens. In addition, we also have a modern organisation and place interesting policy topics early in the book to pique student interest.

Students come to study macroeconomics with a strong interest in understanding events and developments in the economy. We try to capture that interest and develop students' economic intuition and understanding in this text. We present macroeconomics in a way that is modern and based in the real world of business and economic policy. And we believe we have achieved this presentation without making the analysis more difficult. We avoid the recent trend of using simplified versions of intermediate models, which are often more detailed and more complex than is necessary to allow students to understand the basic macroeconomic issues. Instead, we use a more realistic version of the familiar aggregate demand–aggregate supply model to analyse short-run fluctuations and monetary and fiscal policy. We also avoid the 'alternative schools of thought' approach often used to teach macroeconomics at the principles level, while providing some of this material in selected appendices for those who want to investigate further. We emphasise the many areas of macroeconomics where most economists agree, which gives students a better context for understanding those issues where disagreements have not yet been resolved. And throughout the book we present many diverse real-world business and policy situations to develop students' intuition.

The following points illustrate our approach:

- **A strong set of introductory chapters.** Our introductory chapters provide students with a solid foundation in the basics. We emphasise the key issues of scarcity, trade-offs, marginal analysis and economic efficiency. In Chapter 1 we introduce students to the economic way of thinking through the growing use by Australian businesses of offshoring to the Philippines, the rapid rise in the use of robotics in the workplace, the debate on minimum wages and the debate on immigration to Australia. Chapter 2 examines the trade-offs and marginal analysis that managers and economies have to face, presented in the context of Tesla deciding on the mix of vehicles to produce. Chapter 3 introduces demand and supply and how the market works, using the examples of demand for and supply of tablet computers, the rising demand for fitness trackers and the changing nature of demand due to population ageing, to help contextualise the issues and concepts. The macroeconomic chapters continue this approach by relating concepts, principles and models to relevant examples and current economic policy and events.
- **Early coverage of long-run topics.** We place key macroeconomic issues in their long-run context in Chapter 5, 'Economic growth, the financial system and business cycles', and Chapter 6, 'Long-run economic growth: sources and policies'. Chapter 5 puts the business cycle in the context of underlying long-run growth. In this chapter we discuss what actually happens during the phases of the business cycle. We believe this material is important if students are to have the understanding of business cycles they will need to interpret economic events, yet this material is often discussed only briefly or omitted entirely in other books. We know that many lecturers prefer to have a short-run orientation to their macroeconomic courses, with a strong emphasis on policy. Accordingly, we have structured Chapter 5 so that its discussion of long-run growth would be sufficient for instructors who want to move quickly to short-run analysis. Chapter 6 uses a simple neo-classical growth model to understand important growth issues. We apply the model to topics such as the decline of the Soviet economy, and the importance of the consistent enforcement of property rights to enable continued economic growth in China. And we challenge students with a discussion of 'Why isn't the whole world rich?'
- **A broad discussion of macro statistics.** Many students pay at least some attention to the financial news and know that the release of statistics by government departments can cause movements in share and bond

prices. A background in macroeconomic statistics helps clarify some of the policy issues encountered in later chapters. In Chapter 4, 'GDP: measuring total production, income and economic growth', Chapter 7, 'Unemployment', and Chapter 8, 'Inflation', we provide students with an understanding of the uses and potential shortcomings of the key macroeconomic statistics, without getting bogged down in the finer points of how the statistics are constructed.

- **A dynamic model of aggregate demand and aggregate supply.** We take a fresh approach to the standard aggregate demand–aggregate supply (AD–AS) model. We realise there is no good, simple alternative to using the AD–AS model when explaining movements in the price level and in real GDP. But we know that more instructors are dissatisfied with the AD–AS model than with any other aspect of the macroeconomics principles course. The key problem, of course, is that the AD–AS model is a static model that attempts to account for dynamic changes in real GDP and the price level. Our approach retains the basics of the AD–AS model, but enables it to be more accurate and useful by making it more dynamic. We emphasise two points: first, changes in the position of the short-run (upward-sloping) aggregate supply curve depend mainly on the state of expectations of the inflation rate; second, the existence of growth in the economy means that the long-run (vertical) aggregate supply curve shifts to the right every year. This 'dynamic' AD–AS model provides students with a more accurate understanding of the causes and consequences of fluctuations in real GDP and the price level. We introduce this model in Chapter 10, 'Aggregate demand and aggregate supply analysis', and use it in Chapter 12, 'Monetary policy' and Chapter 13, 'Fiscal policy'.
- **Extensive coverage of monetary policy.** Because of the central role money and monetary policy plays in the economy and in students' curiosity about business and financial news, we devote two chapters—Chapters 11 and 12—to these topics. We emphasise the way in which monetary policy is carried out in Australia through interest rate targeting (not the outdated approach of targeting the money supply that still appears in some textbooks) and the role of credit in the economy.
- **Coverage of both the demand-side and supply-side effects of fiscal policy.** Our discussion of fiscal policy in Chapter 13 carefully distinguishes between automatic stabilisers and discretionary fiscal policy. We also have significant coverage of the supply-side effects of fiscal policy.
- **A self-contained—but thorough—discussion of the Keynesian 45° line aggregate expenditure model.** The Keynesian aggregate expenditure approach (the '45° line diagram' or 'Keynesian cross') is a useful way of introducing students to the short-run relationship between spending and production. Many instructors, however, prefer to omit this material. Therefore, we use the income-expenditure approach only in Chapter 9, 'Aggregate expenditure and output in the short run'. The discussion of monetary policy and fiscal policy in later chapters uses only the dynamic AD–AS model, making it possible to omit the material in Chapter 9.
- **Extensive international coverage.** We include two chapters devoted to international topics: Chapter 14, 'Macroeconomics in an open economy', and Chapter 15, 'The international financial system'. Having a good understanding of the international trading and financial systems is essential to an understanding of the macroeconomy and to satisfying students' curiosity about the economic world around them. In addition to the material in our two international chapters, we weave international comparisons into the narrative of several chapters, including our discussions of unemployment, inflation, central banking and government debt.
- **Flexible chapter organisation.** Because we realise that there are a variety of approaches to teaching principles of macroeconomics, we have structured our chapters for maximum flexibility. For example, our discussion of long-run economic growth in Chapter 5 makes it possible for instructors to omit the more thorough discussion of these issues in Chapter 6. Our discussion of the Keynesian 45° line model is confined to Chapter 9, so that instructors who do not use this approach can proceed directly to aggregate demand–aggregate supply analysis in Chapter 10. While we devote two chapters to money and monetary policy, the first of these—Chapter 11—is a self-contained discussion focusing on the role of money and the creation of money. So instructors may safely omit the material in Chapter 11 if they choose to. Finally, instructors may choose to omit the material in the two international chapters (Chapters 14 and 15) or cover just Chapter 14, 'Macroeconomics in an open economy'. Please refer to the flexibility chart on page xxv to help you select the chapters and order best suited to your course needs.

SPECIAL FEATURES

A REAL-WORLD, HANDS-ON APPROACH TO LEARNING ECONOMICS

OPENING CASES AND AN INSIDE LOOK NEWS ARTICLES

Each chapter-opening case provides a real-world context for learning, sparks students' interest in economics, and helps to unify the chapter. The opening case describes real situations facing actual companies and countries. The company or economic issue is integrated into the narrative, graphs and pedagogical features in the chapter. For example, we look at companies such as Tesla, Google, Apple, Bayer, JB Hi-Fi, Wesfarmers, Hills, David Jones and Harvey Norman.

CHAPTER 6

LONG-RUN ECONOMIC GROWTH: SOURCES AND POLICIES

LEARNING OBJECTIVES

After studying this chapter you should be able to:

1. Describe the global trends in economic growth.
2. Use the economic growth model to explain why economic growth rates differ between countries.
3. Discuss the fluctuations in productivity growth in Australia.
4. Explain economic catch-up and discuss why many poor countries have not experienced rapid economic growth.

GOOGLE'S DILEMMA IN CHINA

Google's dilemma in China is a two-page feature that shows students how to apply the concepts of a chapter to the analysis of a news article. It includes text from a news article and a graph showing economic growth rates.

Here are a few examples of chapter opening cases:

- Google's dilemma in China (Chapter 6).
- Why is the unemployment rate important to Wesfarmers? (Chapter 7).
- How JB Hi-Fi survived the economic cycle (Chapter 10).
- Can Greece function without banks? (Chapter 11).
- Australian universities experience crunch from high dollar (Chapter 14).

An Inside Look is a two-page feature that shows students how to apply the concepts of a chapter to the analysis of a news article. Articles are from sources such as *The Sydney Morning Herald*, *The Age*, *The Australian Financial Review*, *The Conversation*, and sometimes overseas news articles. The An Inside Look feature presents analysis of the article, a graph(s) and critical thinking questions.

AN INSIDE LOOK

How Australia has come out on top in this currency war

KEY POINTS IN THE ARTICLE

The article discusses Australia's economic performance and its position in a global currency war. It includes a graph showing the Australian dollar's value from 1980 to 2010.

FIGURE 1 The Australian dollar's value from 1980 to 2010

Here are some examples of the articles featured in An Inside Look:

- 'Youth unemployment: The Sydney hotspots', *The Sydney Morning Herald* (Chapter 7).
- 'Housing boom lifts Harvey Norman's profits', *The Sydney Morning Herald* (Chapter 10).
- 'Japan cabinet approves \$175b fiscal boost', *News.com.au* (Chapter 13).
- 'Brexit tipped to push \$A higher, RBA to cut rate', *The Age* (Chapter 14).

ECONOMICS IN YOUR LIFE

After the chapter-opening real-world case, we have added a personal dimension to the chapter opener, with a feature titled *Economics in Your Life*, which asks students to consider how economics affects their own lives. This feature piques the interest of students and emphasises the connection between the material they are learning and their own experiences.

to block watches of roadside signs, such as the 1998 pro-democracy demonstration in Tiananmen Square.

In late 2009, however, with some of Google's most important intellectual property in jeopardy, the Chinese government effectively forced Google to shut down its services in China. Google decided it would no longer cooperate with the Chinese government's internet censorship policies and instead to continue to provide its services to the rest of the world.

By 2010, Google's revenues in China had fallen to less than \$1 billion. For business in China, there was an estimated 700 million potential Chinese consumers for Google. Also, China's annual income per hour in doing business has become increasingly globalized with the Internet opening a huge role in business and therefore in economic growth.

Google's problems highlight one of the problems of China in recent years: very rapid economic growth resulting in the erosion of government regulations that slow that growth. Throughout the first half of the twentieth century, China was ranked by wealth and size. From the time the Communist Party seized control of China in 1949 until the late 1970s, the government controlled production and the country experienced very little economic growth. Mao Zedong, the Communist Party leader, died in 1976, and his son, Deng Xiaoping, took over as leader of the Party. Deng Xiaoping moved China away from a centrally planned economy to a more market-oriented economy. Starting in the 1980s, the government set market-oriented economic policies, gradually the rate of economic growth rose. However, the best estimates available indicate that GDP per capita grew at an average annual rate of 8.5 percent between 1972 and 1979. Between 1979 and 1995, real GDP per capita rose at a rate of 5.2 percent per year. The average rate of increase was 7.5 percent per year between 1996 and 2010, before slowing to between 7 and 8 percent in the three years that followed. These rapid growth rates have transformed the Chinese economy and GDP per capita today is 10 times higher than it was 30 years ago.

But, as the experience of Google has shown, China is not a democracy, and the Chinese government has failed to fully establish the rule of law, particularly with respect to the protection of intellectual property rights. This is a problem for the long-term progress of the Chinese economy because, without the rule of law, entrepreneurs cannot afford the rule in the market system of bringing together the factors of production—labor, capital, natural resources and entrepreneurial ability—to produce goods and services.

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At the end of the chapter, we use the chapter concepts to answer the questions posed at the beginning of the chapter.

HAS THE RISE OF CHINA AFFECTED YOUR JOB OPPORTUNITIES?

As the beginning of the chapter we asked whether your job opportunities in your own country have been affected by the rapid economic growth experienced by China. How does rapid growth in China affect your country? Do you think the current high-growth, high-speed Chinese economy is truly a success? We will address how the current high-growth, high-speed Chinese economy is truly a success.

It is important to work this issue in business or any development activity without causing concern. Remember that China's rapid economic growth has not caused any major economic problems in the United States. However, the rapid growth in China has caused some economic problems in the United States. The United States has seen a decline in the number of jobs available in the United States. This is due to the fact that the United States has a high unemployment rate. The United States has a high unemployment rate because of the rapid growth in China. The rapid growth in China has caused some economic problems in the United States. The United States has a high unemployment rate because of the rapid growth in China. The rapid growth in China has caused some economic problems in the United States. The United States has a high unemployment rate because of the rapid growth in China.

CONCLUSION

For most of the twentieth century, most people have had to struggle to survive. Although there have been substantial advances in science and technology, the world has not become a more prosperous place. The world has not become a more prosperous place because of the rapid growth in China. The rapid growth in China has caused some economic problems in the United States. The United States has a high unemployment rate because of the rapid growth in China. The rapid growth in China has caused some economic problems in the United States. The United States has a high unemployment rate because of the rapid growth in China.

The following are examples of the topics we cover in the *Economics in Your Life* feature:

- Has the rise of China affected your job opportunities? (Chapter 6).
- Should you change your career plans if you graduate during a recession? (Chapter 7).
- What would you do with \$500? (Chapter 13).
- The Australian dollar and your new car price (Chapter 14).

MAKING THE CONNECTION

In each chapter, *Making the Connection* features present relevant, stimulating and provocative cases from various countries, including applications to businesses and other significant world economic events or policy issues. These features link the concepts and models covered in the chapter with a real-world application.

Here are some examples of the *Making the Connection* features:

- Is income all that matters? (Chapter 6).
- Does technological change create unemployment? (Chapter 10).
- Are bitcoins money? (Chapter 11).
- Greece and Germany: diverse economies, common currency (Chapter 15).

Making the Connection What explains the economic failure of the Soviet Union?

The economic growth model can help explain one of the most striking events of the twentieth century: the economic collapse of the Soviet Union. The Soviet Union was formed in the late 1920s following the communist revolution of 1917. Under communist rule, the Soviet Union was a centrally planned economy, where the government owned and controlled all major means of production and distribution. In the 1950s, the Soviet Union was the leader of the Eastern Bloc, a group of countries in Eastern Europe that followed the Soviet Union's lead. The Soviet Union was a major power in the world, and its economic growth was a major focus of its policy. However, the Soviet Union's economic growth was not sustainable. The Soviet Union's economy was based on a centrally planned system, which was inefficient and led to a decline in living standards. The Soviet Union's economic failure was a major event in the world's history.

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SOLVED PROBLEMS

Many students have great difficulty handling applied economics problems. We help students overcome this hurdle by including worked-out problems tied to select chapter learning objectives and the associated quantitative information. Our goals are to keep students focused on the main ideas of each chapter and to give students a model of how to solve an economic problem by breaking it down step by step. Additional exercises in the end-of-chapter material are tied to every *Solved Problem*.

commodity representing the general level of GDP, then, holding all other factors constant, a depreciation in the domestic currency should increase net exports, which will increase the rate of growth of aggregate demand and real GDP.

SOLVED PROBLEM 14.2 THE EFFECT OF CHANGING EXCHANGE RATES ON THE PRICES OF IMPORTS

In June 2014, the average price of goods and services imported into Australia from the United States was consistently less than the average price of goods and services using that month's value in Germany. Furthermore, over the decade from January 2004 to January 2014, the exchange rate between the Australian dollar and the US dollar changed from an average of approximately 0.65 US dollars to 0.92 US dollars (US\$1 equals 0.65 Australian dollars in 2004 and US\$1 equals 0.92 Australian dollars in 2014).

1. In 2014, what was the value of the Australian dollar (expressed as a percentage of the US dollar) relative to February and June 2004?
2. What was the Australian price of goods and services of imports from the United States equal to net exports in 2004 relative to 2014? How would net exports have changed?

Solving the problem

STEP 1: Review the chapter material. This problem is about changes in the value of a currency, so you may want to review the section on movements in the exchange rate and exchange rate equilibrium, which begins on page 394.

STEP 2: Explain whether the value of the Australian dollar (expressed as a percentage of the US dollar) has risen or fallen. To know that the Australian dollar has risen or fallen, we need to know the relative price of the two currencies, and we can determine this by comparing the value of the Australian dollar to the value of the US dollar. In 2004, the average price of goods and services imported into Australia from the United States was consistently less than the average price of goods and services using that month's value in Germany. Furthermore, over the decade from January 2004 to January 2014, the exchange rate between the Australian dollar and the US dollar changed from an average of approximately 0.65 US dollars to 0.92 US dollars (US\$1 equals 0.65 Australian dollars in 2004 and US\$1 equals 0.92 Australian dollars in 2014). This means that the value of the Australian dollar has risen relative to the US dollar.

STEP 3: Explain whether the Australian price of goods and services of imports from the United States was higher or lower in 2014 relative to 2004 (as a percentage of net exports). The change in the exchange rate between the Australian dollar and the US dollar in 2004 and 2014 was substantial. In 2004, one Australian dollar was worth about 15 per cent of one US dollar (0.65 US dollars = 1 Australian dollar). In 2014, one Australian dollar was worth about 25 per cent of one US dollar (0.92 US dollars = 1 Australian dollar). This means that the value of the Australian dollar has risen relative to the US dollar.

For more information, see related problem 1.4 on page 407 at the end of this chapter.

The real exchange rate

We have seen that an important factor in determining the amount of exports and imports between countries is the relative price of each country's goods. The relative price of two countries' goods is determined by two factors: the relative price in the two countries, and the nominal exchange rate between the two countries' currencies. Businesses combine these two factors to find the real exchange rate. The **real exchange rate** is the price of domestic goods and services in terms of foreign goods and services. Recall that the price level is a measure of the average price of goods and services in a country. We can use the real exchange rate to compare the price level in one country to the price level in another country.

$$\text{Real exchange rate} = \text{nominal exchange rate} \times \frac{\text{foreign price level}}{\text{domestic price level}}$$

Notice that changes in the real exchange rate reflect both changes in the nominal exchange rate and changes in the relative price level. For example, suppose that the exchange rate

CHAPTER 14 INTERNATIONAL TRADE IN OPEN ECONOMY 407

one that would have always up to the current account—they must have been spent on investments in Australia or on goods or services from the United States. This would have been added to foreign holdings of dollars. Changes in foreign holdings of dollars are known as **financial account transactions**. Foreign investments in Australia or additions to foreign holdings of dollars both show up as positive entries in the Australian financial account.

Therefore, a current account deficit must be made up by a **capital and financial account surplus**. In other words, the balance of payments equal to zero. Similarly, a country that runs a current account surplus, such as China, in Japan, must run a capital and financial account deficit to equal the value of its current account surplus. In other words, a country that runs a capital and financial account deficit, or if a country's current account deficit is less than its capital and financial account surplus, then it must have been financed by net exports.

DON'T LET THIS HAPPEN TO YOU

Don't confuse the balance of trade, the current account balance and the balance of payments. The balance of trade is the difference between exports and imports. The current account balance is the difference between exports and imports plus net income from abroad. The balance of payments is the sum of the current account balance and the financial account balance. The current account balance is the difference between exports and imports plus net income from abroad. The balance of payments is the sum of the current account balance and the financial account balance. The current account balance is the difference between exports and imports plus net income from abroad. The balance of payments is the sum of the current account balance and the financial account balance.

SOLVED PROBLEM 14.1 UNDERSTANDING THE ARITHMETIC OF OPEN ECONOMIES

Suppose that a country's current account is in deficit. What does this tell you about the country's financial account? Explain your answer. What does this tell you about the country's balance of payments? Explain your answer.

DON'T LET THIS HAPPEN TO YOU

We know from many years of teaching which concepts students find most difficult. Each chapter contains a box feature called *Don't Let This Happen to You* which alerts students to the most common pitfalls in that chapter's material. We follow up with a related question in the end-of-chapter *Problems and Applications* section.

GRAPHS AND SUMMARY TABLES

Graphs are an indispensable part of principles of economics courses but are a major stumbling block for many students. Every chapter includes end-of-chapter problems that require students to draw, read and interpret graphs. Interactive graphing exercises can be found on the book's supporting MyLab™ Economics website. We use four devices to help students read and interpret graphs:

1. Detailed captions
2. Boxed notes
3. Colour-coded curves
4. Summary tables with graphs.

FIGURE 14.4 Balance on goods and services, Australia, 1960–2014

Individuals buy goods, services and shares in Australia, and also run their businesses in Australia. The balance of trade and the balance of payments are the sum of these two flows. The balance of trade is the difference between exports and imports. The balance of payments is the sum of the current account balance and the financial account balance. The current account balance is the difference between exports and imports plus net income from abroad. The balance of payments is the sum of the current account balance and the financial account balance.

TABLE 14.1 Balance of payments, Australia, 2010–2014

	2010	2011
Current account		
Exports of goods	110,000	110,000
Imports of goods	(100,000)	(100,000)
Exports of services	10,000	10,000
Imports of services	(10,000)	(10,000)
Net income from abroad	10,000	10,000
Current account balance	20,000	20,000
Financial account		
Direct investment in Australia	(10,000)	(10,000)
Direct investment abroad	10,000	10,000
Portfolio investment	10,000	10,000
Reserve assets	10,000	10,000
Other financial account	0	0
Financial account balance	(20,000)	(20,000)
Balance of payments		
Current account balance	20,000	20,000
Financial account balance	(20,000)	(20,000)
Balance of payments	0	0

EDUCATOR RESOURCES

A suite of resources are provided to assist with delivery of the text, as well as to support teaching and learning. These resources are downloadable from the Pearson website: www.pearson.com.au/9781488612527.

SOLUTIONS MANUAL

The Solutions Manual provides educators with answers to all of the end-of-chapter questions and problems in the textbook.

TEST BANK

Available in Word® format, the Test Bank provides educators with a wealth of accuracy-verified testing material for homework and quizzing. Revised to match the 4th edition, each Test Bank chapter offers a wide variety of multiple-choice and short-answer questions, ordered by key topics.

POWERPOINT LECTURE SLIDES

A comprehensive set of PowerPoint slides can be used by educators for class presentations or by students for lecture preview or review. They include key figures and tables, as well as a summary of key concepts and examples from the text.

MyLab Economics for Hubbard/Garnett/Lewis/O'Brien Macroeconomics, 4th edition

A guided tour for students and educators

Auto-generated tests and assignments

Each MyLab™ comes with preloaded assignments, all of which are automatically graded and include selected end-of-chapter questions and problems from the textbook.

2.1 Production Possibility Frontiers and Opportunity Costs

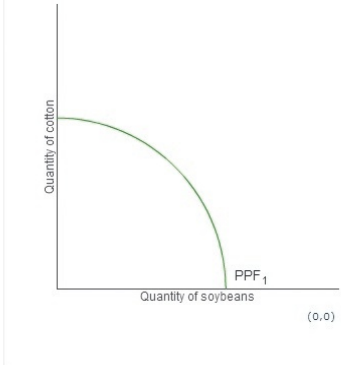
End of Chapter 1.4b
1 correct | 1 of 21 complete

Consider the production possibility frontier that shows the trade-off between the production of cotton and the production of soybeans depicted in the figure to the right.

Suppose that genetic modification makes cotton resistant to insects, allowing yields to increase.

Use the three-point curved line drawing tool to show the effect of this technological change by drawing a new production possibility frontier. Properly label this curve...

Carefully follow the instructions above, and only draw the required objects.



Click the graph, choose a tool in the palette and follow the instructions to create your graph.

All parts showing

Clear All Check Answer Close

Unlimited practice

Many Study Plan and Instructor-assigned exercises contain algorithms to ensure students get as much practice as they need.

As students work through Study Plan or Homework exercises, instant feedback and tutorial resources guide them towards understanding.

1.A Appendix: Using Graphs and Formulas

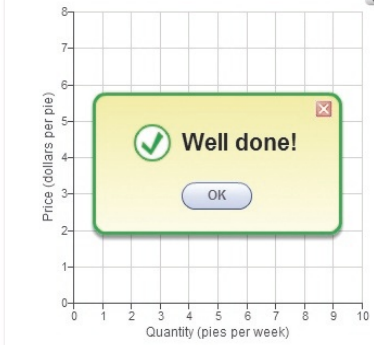
End of Chapter 1A.1
0 correct | 0 of 20 complete

The following table gives the relationship between the price of custard pies and the number of pies Jacob buys per week.

Price (\$ per pie)	Quantity of pies	Week
\$3.00	7	July 2
2.00	8	July 9
5.00	5	July 16
6.00	4	July 23
1.00	9	July 30
4.00	6	August 6

a. Is the relationship between the price of pies and the number of pies Jacob buys a positive relationship or a negative relationship?

A. Positive relationship B. Negative relationship



Click to select your answer, then click Check Answer.

3 parts remaining

Clear All Check Answer Close

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1.A Help Me Solve This

Concept: Pie Chart

0 correct | 0 of 20 complete

The pie chart to the right illustrates hypothetical data for the market share for the percentage of the U.S. Motor Vehicle Industry Market Share is %. (Enter your answer in the box below.)

Figure 1A.1

Category	Market Share (%)
Big Three	47.2%
Japanese firms	35.5%
Korean firms	8.6%
European firms	8.9%

Enter your answer in the box below.

All parts showing

Close

Learning resources

To further reinforce understanding, Study Plan and Homework problems link to additional learning resources.

- Step-by-step Guided Solutions
- Graphing Tool
- eText linked to sections for all Study Plan questions

Study Plan

You have earned **0** of **164** mastery points (MP).

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Practice these sections and then take a Quiz Me to prove mastery and earn more points.

What to work on next

0.1 Tutorial Examples for Students Practice Quiz Me **0 of 1 MP**

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1.2 The Economic Problem That Every Society Must Solve Practice Quiz Me **0 of 1 MP**

1.3 Economic Models Practice Quiz Me **0 of 1 MP**

1.4 Microeconomics and Macroeconomics Practice Quiz Me **0 of 1 MP**

Study plan

A Study Plan is generated from each student's results on quizzes and tests. Students can clearly see which topics they have mastered and, more importantly, which ones they need to work on.

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Digital Interactives

Digital Interactives help students to learn core economic concepts in an engaging and experiential way. Digital Interactives topics are delivered as scenarios that require students to do tasks and answer questions. Each Digital Interactives scenario is broken into a series of graduated levels that become more challenging as the student progresses through the scenario.

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