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Macroeconomics charles jones 4th edition solutions pdf

Slides, problems and metrics If you click in a link clic and you get the message object not found, this means that the link is still not activated 1. Introduction to Macroeconomics Theoretical Sessions: September 17 (16.00-17.30) and September 19 (13.00-14.30) Slide readings: Chapter 1 of the textbook: Charles I. Jones (2013). Macroeconomics, Third Edition, W. W. Norton & Company, N.Y.Problems set Solutions here Practical session: September 20 In this session, we will basically do three things: (i) look at Exercise 3 (but with another functionality to work with data, called FRED, check out here), and solve Exercises 6 and 7. Note that Exercise 5 is already resolved at the end of this chapter. 2. Measurement of Macroeconomics Theoretical sessions: 24 September (16.00-17.30), 26 September (13.00-14.30) Slidereadings: Chapter 2 of the textbook: Charles I. Jones (2013). Macroeconomics, Third Edition, W. W. Norton & Company, N.Y. For the specific edition of the price indices, it is better to read the section Nominal and Real GDP and Price Level in Chapter 2 of the following textbook: Stephen Williamson (2013). Macroeconomics, Fifth Edition, Pearson Editors. Ny. Click here for this section (4th edition) 3. An overview of the theoretical sessions of long-term economic growth: 1 October (16.00-17.30) and 3 October (13.00-14.30) slides The appendix is only for the curious student who wants to know why growth rates have these special characteristics. Not required for the evaluation process. Readings: Chapter 3 of the textbook: Charles I. Jones (2013). Macroeconomics, Third Edition, W. W. Norton & Company, N.Y. Practical sessions: October 4 problems set In this session we will discuss exercises 2 + 7 + 9 + 10 and 11 of Chapter 3 4. The Labour Market, Wages, and Unemployment Theoretical sessions: 8 October (16.00-17.30) and 10 October (13.00-14.30) Slides Readings: Chapter 7 of the lehrbook: Charles I. Jones (2013). Macroeconomics, Third Edition, W. W. Norton & Company, N.Y. Practical Sessions: October 11 Problems set In this session we will discuss exercises 2 + 3 + 5 + 6 + 8 of Chapter 7 solutions here 5. Inflation Theoretical sessions: 15 October (16.00-17.30) and 17 October (13.00-14.30) Slides Readings: Chapter 8 of the textbook: Charles I. Jones (2013). Macroeconomics, Third Edition, W. W. Norton & Company, N.Y. Practical Sessions: October 18 Problems set In this session we will discuss exercises 1 + 3 + 4 + 6 + 7 + (8 removed) from chapter 86. An introduction to short-term theoretical sessions: 22 October (16.00-17.30) and 24 October Slides Readings: Chapter 9 of the textbook: Charles I. Jones (2013). Macroeconomics, Third Edition, W. W. Norton & Company, N.Y. Practical Sessions: October 25 Problems Fixed In this session we will practice exercises 3 + 4 + 5 + 7 of Chapter 9 solutions Exercise 7 here---Teste intercalar : Midterm Test Sample here Solutions here Solutions 2017 Solutions Midterm Test 2017 Midterm Test 2018 Solutions Midterm 2018 Este teste ser dia 13 Novembro, 9:30-11.30h, Audit rio B104. The half-time test includes all materials discussed from Week 1 to 6---7. The Great Recession: a First Look Theoretical sessions: 29 October (16.-17.30) and 31 October (11.00-12.30) Slides Readings: Chapter 10 of the lehrbook: Charles I. Jones (2013). Macroeconomics, Third Edition, W. W. Norton & Company, N.Y. Practical session: November 4 (11.00-12.30) the 11.00-12.30 In this session we will put exercises 1 + 3 + 4 of chapter 10problems New problem number 2 + Excel record 1 + Excel record 2New problem number 3 (about) 8. The IS Curve Theoretical Sessions: November 5 (4-5.30) and November 7 (13.00-14.30) Slides Readings: Chapter 11 of the textbook: Charles I. Jones (2013). Macroeconomics, Third Edition, W. W. Norton & Company, N.Y. Practical Sessions: November 8 In this session we will discuss exercises 1 + 3 + 7 + 8 + 9 of Chapter 11 problems + Detailed solutions to problems 7 + 8 + 9 9. Monetary policy and phillips Curve Theoretical sessions: 12 November (16.00-17.30) and 14 November (13.00-14.30) Slides Readings: Chapter 12 of the textbook: Charles I. Jones (2013). Macroeconomics, Third Edition, W. W. Norton & Company, N.Y. Practical Sessions: November 15 In this session we will discuss exercises 1 +2 + 3 + 5 + 6 + 8 + 11 of Chapter 12 Problems set Detailed solutions for exercises 8 + 11 here10. Stabilization and the AD-AS Framework Theoretical Sessions: 19 November (16.00-17.30) and 21 November (13.00-14.30) Slide readings: Chapter 13 of the textbook: Charles I. Jones (2013). Macroeconomics, Third Edition, W. W. Norton & Company, N.Y. Practical sessions: November 22 In this session we will discuss the exercises 1 +3 + 5 + 6 + 7 + 8 of Chapter 13. Problems set + solutions here Also pay special attention to the exercises 9 and 13, which are solved at the end of this chapter. 11. Great Recession and short-term model theoretical sessions: 26 November (16.00-17.30) and 28 December (13.00-14.30)Slides Readings: Chapter 14 of the textbook: Charles I. Jones (2013). Macroeconomics, Third Edition, W. W. Norton & Company, N.Y. Practical sessions: 29. November In this session we will only set exercises 1 + 3 of chapter 14 (the Othser are difficult to work in the classes) problems + Excel file (Taylor rule)12. Exchange rates and Internacional Finance Theoretical sessions: December 3 (13.00-14.30) and December 5 (13.00-14.30) Readings: Chapter 20 of the textbook: Charles I. Jones (2013). Macroeconomics, Third Edition, W. W. Norton & Company, N.Y. Practical Sessions: December 6 In this session we will set the exercises 1 + 2 + 3 +5 + 6 + 7 of Chapter 20 problems ...+ (New) solutions here --- Final Test --or -- Exam Este teste ser no dia ---- 2020, ---h.Final test example here solutions here testing example hereSolutions here Test January 2018 solutions here test January 2018 solutions here Final test January 2019 solutions here exam January 2019 solutions here The final test above covers all materials discussed from week 7 to week 12. Addresses those who followed the continuous evaluation regime. The test includes all materials discussed from week 1 to week 12 above. Aimed at those who did not follow the continuous evaluation regime.--- END OF COURSE MATERIALS 20.00 x 150.00 Solution Manual for Macroeconomics, 4th Edition, Charles I. Jones, ISBN-10: 0393603768, ISBN-13: 9780393603767, ISBN: 978-0-393-60248-7, ISBN: 9780393602487 This is not an original TEXT BOOK (or test bank or original eBook). You buy the solution manual. A solution manual is step-by-step solutions for the end of chapter questions in the textbook. The Solution Guide provides the complete detailed answers to each question in the textbook at the end of the chapter. Please download the example of your confidential. All orders are secure, secure and confidential. Part 1 — Preparatory work 1) Introduction to macroeconomics 2) Measurement of macroeconomics Part 2 — The long term 3) An overview of long-term economic growth 4) A production model 5) The solow growth model 6) Growth and ideas 7) Labour market, wages and unemployment 8) Inflation Part 3 — The short term 9) An introduction to the short term 10) The Great Recession : A first look 11) The IS curve 12) Policy and the Phillips Curve 13) Stabilisation Policy and AS/AD Framework 14) The Great Recession and the Short Run Model 15) DSGE Models: The Limit of Economic Research Part 4 — Applications and Microfoundations 16) Consumption 17) Investments 18) Government and Macroeconomics 19) International Trade 20) Exchange Rates and International Finance21) Parting Macroeconomics8 EditionISBN: 9780 3 993926385MACROECONOMICS5 EditionISBN: 9780393417326MACROECONOMICS5 EditionISBN: 9780393417340Macroeconomics4 EditionISBN: 97803602487Macroeconomics (Fourth Edition)4 EditionISBN: 9780393615340 1. INSTRUCTOR'S CHARLES I. Jones Macroeconomics THIRD EDITION Anthony Laramie BOSTON COLLEGE, MERRIMACK COLLEGE Garett Jones GEORGE MASON UNIVERSITY B W • W • NORTON & COMPANY • NEW YORK • LONDON Macroeconomics 3rd Edition Jones Solutions Manual Full Download: This example only, Download all chapters at: alibabadownload.com 2nd W. W. Norton & Company has been independent since its inception in 1923 When William Warder Norton and Mary D. Herter Norton first published lectures at the People's Institute, the Department of Adult Education of New York's Coo-per-Union. The company soon expanded its program beyond the institute and published books by famous academics from Amer ica and abroad. By the middle of the century, the two main pillars of Norton's publishing program - textbooks and college texts - were firmly established. In the 1950s, the Norton family transferred control of the company to their employees, and today, with four hundred and a comparable number of commercial, college, and professional titles published each year, The Norton & Company is the largest and oldest publishing house, 100% owned by its employees. Printed in the United States of America. Associate Media Editor: Carson Russell Production Manager: Eric Pier-Hocking Composition: Westchester Publishing Services Manufacture: Sterling Pierce ISBN 978-0-393-93679-7 W. W. Norton & Company, Inc. 500 Fifth Avenue, New York, N.Y. 10110-0017 wwnorton.com W. W. Norton & Company Ltd. Castle House, 75/76 Wells Street, London W1T 3QT 1 2 3 4 5 6 7 8 9 0 3. 5. 1 Our students learn and learn. Most students who have recently had a basic course and are comfortable with a small algebra should be able to cope with Chapters 1 through 14 in one semester. How much time you spend on these chapters, whether or not you omit reporting on one of these chapters, and the nature and level of qualification of your students will affect your reporting on the later chapters. If you also want to leave room for a few supplemen tary articles, a non-technical book or a large empirical or two, then you may need to easily think about some of the maths in the growth and labour market models that are closed in themselves and do not reappear immediately later in the semester. See later chapters of this guide for information. This third edition of the book offers an innovative chapter on dynamic stochastic general equilibrium models (DSGE). This chapter provides a bridge between long-term economic growth and short-term economic fluctuations and fits well into Part 3 of the textbook to remind us of the links between long-term and short-term time. I would prescribe that you take the time in the semester to include chapter 15 as a keystone in a semester course. ONE-QUARTER COURSE OR ONE-SEMESTER COURSE WITH MANY OUTSIDE READINGS AND PROJECTS Chapters 1-4 (introduction through the fundamentals of growth and productivity), 8-11 and 15 (inflation, business cycles and DGSE models) and two of the following chapters: Chapter 5, 6.1-6.3 and 7 or 12-14 and 18-20. TWO-QUARTER COURSE OR TWO-SEMESTER COURSE The entire book – a quarter on long-term growth, labour markets, inflation, consumption and investment (chapter CHAPTER This is a conventional first textbook chapter: it defines mac- roeconomics, it mentions a few interesting topics, it says what a model is, and it sets out the separation of the book in Long Run, Short Run and Applications. It's a pretty short chapter with few surprises, so instead of summarising it, Instead I'll talk a little bit about what makes this book different, and a few different ways, like use it in your course. WHAT DOES THIS BOOK DIFFERENT It provides solid long-term growth coverage – including endogenous growth – while dramatically simplifying the New Keynesian cycle, and making it easier to all this without calculation. Chad shows how long-term macroeconomic growth models have evolved and how optimising the model's assumptions can lead to new and interesting insights and policy conclusions. In addition, Chad is able to easily derive a short-term model from the long-term model, thus linking short-term and long-term economic analyses. By streamlining coverage while communicating surprisingly solid micro-finds, Chad's text offers you a solid opportunity to spend more time on intelligent, model-driven policy discussions about growth and business cycles. HOW THIS TEXTBOOK CONVENTIONAL ONE-SEMESTER CLASS In this age of assessment, we are always aware of what we teach, how we teach it, who our students are, what CHAPTER 1 introduction to macroeconomics 6. 2 | Chapter 1 Each chapter in this guide also includes a sample lecture that you can use, written on a topic that students typically have a difficult time with. Finally, each chapter of this manual also contains some case studies, which are often based on Chad's own case studies. In the case studies, I provide some additional facts or theories that could help to flesh out a lecture or provoke a discussion in the classroom. I hope you find this manual useful to get the most out of Charles Jones' macroeconomics. SAMPLE LECTURE: GIVING YOU ALL THE ANSWERS UP FRONT The economic competence of our students is of great concern to the business profession. Do our students really have an understanding of the subject or do they simply borrow an understanding of the course? One of my educational goals is to ensure as much as possible that students have an understanding of economics. To this end, I shall begin the introductory class with a series of unfolding questions. I begin with the most fundamental question: what is economics? The better students respond with the textbook definition, which is given in principles, which is fine. But then I ask the question: Would your brother or sister, friend or parent be subject to this answer? Most students answer no. Locker after the late great Robert Heilbroner, I will say that economy is the study of business (and I will get a laugh) and students will relax. But that forces the question: what is the economy? And we go into different definitions, and we work to the point, according to Heilbroner, that the economy is a series of social institutions/relationships that have been developed to trade goods and to produce and distribute. Then we pull apart this definition (to produce – to turn nature into something useful; to distribute – to decide who gets what; the goods and the bad – things that are literally good and/or bad.) So the next question is: Why study economics? Because of the economic problem. What economic problem? Scarcity. What is scarcity? Not enough resources or goods to meet needs and desires. Meet. causes scarcity? Resource constraints inherit in nature and in the process of social interaction, which generate desires and desires for goods. Again, via modified healing broners, How does a society, regardless of space and time, encounter scarcity? People need to be made to work more if they want to work less; People must be encouraged to consume less if they want to consume more; technology (production art) must be modified/improved. Which economic system is used by most of the world today to cope with scarcity? Students will say capitalism or markets. What are markets? Markets are the process by which buyers and sellers interact to determine prices and quantities. What are the two approaches we have for studying markets? microeconomics, the study of the individual parts of the economy and macroeconomics, the study of the economy as a whole 1-8, 16 and 17); a quarter on short-term economic cycles, the Great Recession, monetary policy, the Phillips curve, the fiscal cal policy, the overall model for supply and total supply, DSGE models, international trade, exchange rate exchange rates and international financing (Chapter9-15, 18-21) – with enough time for an additional book per quarter and a few articles and data projects. This would be a great way to teach this course.

CHAPTERS THAT MUST, I include this list because teachers often want to know if they can omit a chapter without omitting facts or theories that come back in later chapters. These chapters are based on previous chapters, but none is used directly in later chapters: 6 growth and ideas, The last growth chapter 7 The labour market, wages and unemployment 15 Dynamic Stochastic General Equilibrium (DSGE) Models 16 Consumption 17 Investments 18 Government and macroeconomics 19 International trade 20 Exchange rates and international finances 21 farewell thoughts In particular, the chapter International Trade (19) is indepen- Dent of the foreign exchange chapter (20), so that you can choose only one or the other according to your needs. For mathematical-averse students, Chapter 5 (Solov) can be omitted if necessary, while important parts of Chapter 6 (Growth and Ideas) can be dealt with without difficulty (Sections 6.1 to 6.3). This means that teachers can still teach the economics of ideas (a largely mathematically free subject), but can avoid the mathematics of the Solow model. HOW THIS INSTRUCTION MANUAL Chad offers excellent summaries at the end of each chap- ter, and the student study guide performs the same function. This manual does something else: it is designed to help you innovative textbook to do a better job. In this guide, I study each chapter from start to finish and discuss how to address topics that are often annoying to students – for example, the so-low steady state that makes sense of the three methods of measuring GDP, or how to measure GDP. Equation really means. In addition, I sometimes recommend that you organize your lecture differently from the text – some topics just go along very well when you're up there on the chalkboard. I always try to point out which topics you can certainly gloss over or omit, and I often mention one or two illustrations that could make your lectures a bit more relevant. 7. Introduction to macroeconomic | 3 Insurance companies and brokerage houses were insol-vent because their assets proved insufficient to cover their liabilities; and a chain of bankruptcies threatened the strength and stability of the United States and the global economy. Before the financial crisis, the price of crude oil rose from less than 70 dollars in August 2007 to more than 140 dollars in July 2008. Two of the three major U.S. automakers were on the verge of bankruptcy. The Federal Reserve and the US Treasury have taken unprecedented steps to save the financial sector and automakers. A stimulus package was passed that included tax credits for first home buyers, cash for Clunk-Er, tax cuts, and funding of so-called shovel-ready projects (to name a few). The stimulus program, coupled with the war on terrorism and the economic downturn, increased the federal government's budget deficit from about '160 billion in 2007 to about '460 billion in 2008, more than USD 1.4 trillion in 2009, and nearly USD 1.3 trillion in 2011. In addition, despite the bailouts and the stimulus, we have seen that the money supply (M2) increased by 8 percent in 2009, 2.5 percent in 2010, 7.3 percent in 2011 and 8.5 percent in 2012. The risk of a global recession remains. Even from this writing, the recovery is slow and fragile, and the debate about austerity versus stimulus continues to rage (see John Cassidy, The Reinhart and Rog-off Controversy: A Summing Up, The New Yorker, available at . This experience has taken the profession of business from projects and is currently prompting us to reassess what we think about the functioning of the economy. In this course, we will spend the first half of the semester talking about why some countries are richer than others, and why the average person lives so much better today than someone a hundred years ago. Such issues would hardly have been mentioned a generation ago, but with the advent of globalization, the spread of markets around the world, and a new concern about global growth prospects, a new focus has emerged in the economy. In the second of the semester, we will talk about eco-nomic failures and booms, which economists often call the business cycle or economic fluctuations. The aim of the book is to provide a framework for understanding nature, the causes and solutions to short-term and long-term fluctuations. A One the economic cycle section would have been almost the whole course. At the time, many Macroecon omists thought they could control the overall level of GDP from year to year. That is certainly what the textbooks taught at the time. Back then, we spent the semester talking about how we can control demand for goods and services in the economy. At the time, we thought we could actually control things. Today's macroeconomics are all about humiliating macroeconomists – me and my colleagues. We will learn that the Federal Reserve can have an impact on the average inflation rate. There is an increase in factors focusing on factors such as economic growth, economic fluctuations, unemployment, inflation and international economic relations. Microeconomics is rooted in Adam Smith's writing in An Inquiry into the Nature and Causes of the Wealth of Nations (1776) Smith showed that markets promote order and stability by allowing individuals to freely express their self-interest through markets, and that expressing self-interest promotes social good. (Most students will be familiar with the invisible hand, but will not be familiar with its strong political implications.) Of course, if Smith is right, then markets, as a set of institutions, become a set of goods that promote social welfare. Well, what about macroeconomics? Where did it come from? The origins of macroeconomics can be traced back to the Great Devaluation, the writings of John Maynard Keynes, world war ii, and the Employment Act of 1946. If anything, macroeconomics was the result of market failures, as the Great Depression shows. To illustrate market failure, Keynes invoked deceptions of composition in arguing how the paradox of austerity (that wage deflation can stabilize a labor market in isolation, but wage deflation in the economy as a whole will do little to reduce unemployment and actually destabilize the economy). Keynes's ideas were too revolutionary to gain acceptance, but World War II taught the generation of my parents that government coordination of the economy to ensure high levels of spending and the national defense of the United States ended the Great Depression. The generation of the Second World War, which wanted to eliminate future unemployment, had the Employment Act of 1946 passed. According to this legislation, the government should pursue a policy to maximise employment, production and to promote them. In addition, the Economic Advisers' Council and the Joint Economic Committee were set up to advise the President and the Congress on the economic sector. As a result, macroeconomics, together with microeconomics, became part of any basic economic curriculum. Although there is little disagreement about how to teach microeconomic, the tension remains how to teach macroeconomics. In particular, there are conflicts over whether to emphasise in the long term or in the short term. Chad's textbook gives you the flexibility to emphasize either concept or both. Today, the US economy continues to recover from the Great Recession – the biggest recession since the Great Depression. It is clear that the focus in politics has shifted to a short period of time, but long-term concerns remain. The unemployment rate rose from 4.6 percent in 2007 to 5.8 percent in 2008, then to more than 10 percent in 2009, and was 7.3 percent in October 2013 (nearly two percentage points above the Natu-Ral unemployment rate). While financial markets have largely recovered, the Dow Jones Industrial stock index, along with many other stock indexes, is still fresh in a few weeks; Property prices in many markets plummeted; Record numbers of bankruptcies and foreclosures were recorded; Banks, 8. 4 | Chapter 1 to risk these 1.5 per cent ups and downs for your consumer spending? Lucas went for some estimates and found that the average pro-son would be willing to pay about 0.06 percent a year for such insurance. For a person earning USD 50,000 a year, it would cost USD 30 per year to guarantee a steady growth in your standard of living. Even considering that it is difficult to buy goods when you lose your job – you may not be able to borrow the money to put food on the table – he noted that in the United States, unemployment insurance benefits are generally good enough that the average person still does not want to pay much for insurance to get rid of their consumption risk. This suggests that modern unemployment insurance is already a pretty good insurance policy. Probably the average poor person in the United States would pay more than 30 dollars a year for this type of insurance. For poorer people, every dollar counts more. But Lucas tried to find an average estimate of how much the typical American would pay to get rid of business cycles. And he just couldn't find a way to make that number look big. Economists David Romer and Lawrence Ball1 believe Lucas misses the point altogether. They think that the big cost of economic fluctuations is not the fact that you can't go to restaurants as often during a recession; it's that you may not have a job. They have some estimates based on what they think the average person is like and they find that eco-nomic fluctuations have a much higher cost than Lucas believes. You They agree that the average person isn't hit the consuming side during a recession, but they think that people really don't like to go in and out of the workforce. They note that people would rather work a constant 40-hour week than work 45 hours, with some arbitrary redundancies thrown. Were. And, of course, surveys and common sense show that people hate being unemployed. Over the course of 50 years, the business profession has evolved from the idea that business cycles could be tamed (Samuelson and the Keynesians) to the ideas of Lucas and others that markets regulate themselves, and that government intervention has bad or zero effects. Given current events, you will be challenged throughout this course with questions about what should be done to end recessions and reduce unemployment. A nice review of the current debate can be found in the aforementioned New Yorker article. QUESTIONS 1-3 CHECK. Based on personal preferences. 4. Ingredients: inputs, the model itself and outputs. We can name these exogenous variables, equations or words and 1. Laurence Ball and David Romer, Real Rigidities and the Non- neutrality of Money, Review of Economic Studies, Vol. 57, No. 2, (April 1990), pp. At the same time, we will see that the Federal Reserve has only a limited impact on reducing the unemployment rate in old age – the proportion of workers who cannot find work. (The Federal Reserve may be able to bring the unemployment rate below a national rate, but it risks high inflation without lowering the unemployment rate in the long run.) One point to take with you from the semester is this: the Fed Reserve might be able to smooth the bumps on the road – emphasis on power – but it cannot make the journey faster. For the average American to live better in the long run, we need to focus on something other than interest rate policy. That is why, in the first half of the semester, we will spend quite a lot of time on the supply side of the economy: the supply of people willing to work, the supply of machinery, equipment and natural resources, and the provision of useful, practical ideas. Economists tend to think that if you have a good supply of these four things – people, machines, natural resources and ideas – then in a market economy, these inputs are usually combined to create outputs that we really want, such as cars and movies and doctor appointments and books and vacation and food. When you talk about the supply side in the first half of the semester, the hope is that if you vote or if you serve in government, you will remember that people's lives don't depend on whether there's a demand for goods – as you learned in principle or in conversation with your friends, people's demands are basically unlimited. The main problem of economics is Scarcity – and the miracle of long-term economic growth is that most of the things people want are a little less scarce each year. CASE STUDY: HOW MUCH WOULD YOU PAY TO GET RID OF RECESSIONS? In view of the fact that The US economy has just emerged from the so-called Great Recession and is perhaps on the verge of another recession, the question of Nobel laureate Robert Lucas: How much would you pay to get rid of recessions? remains apropos. Lucas' answer to that question was: not much. As well described in After the Blowup by John Cassidy (The New Yorker, January 11, 2010), Lucas won the Nobel Prize, in part because he reinvented the idea that markets regulate themselves. So Lucas's answer is not surprising. Lucas noted that consumer spending – the part of our income that we use to buy happiness – is not really changing for the Aver Age person from year to year. For the average person, it fluctuates by only about 1.5 percent from year to year (apart from that, this is the standard deviation of real consumption). There is a strong annual upward trend of about 2 percent, but around this trend there is a small wobble, on average about 1.5 percent per year. How much would you personally be willing to pay for an insurance policy that promised that you would never have 9. Introduction to Macroeconomics | 5 salary. (Of course, this could simply collapse to balance labor supply and balance pay without losing much interest.) (c) w* = ( ) ( ) (1 +) L* = (. w*) Now could be a good time to check the meaning of the associative rule — students often forget the importance of parentheses in algebra. d) Wages increase and the quantity of balance of labour increases. This is exactly what we expect: the labor supply increased exogenously, and the workers were willing to work the same hours at a lower wage. In balance, companies decided to hire more workers at a new, lower wage. e) This is an increase in demand: the quantity and wages of labour will both increase in equilibrium. Wages are rising a little, to which the workers respond by delivering more work. 7. a) QD = demand for computers = F(P,) is exogenous and captures consumers' understanding of how computers are used. QS = Supply of computers = G(P,) is exogenous and captures manufacturing skills of the computer industry. In the balance QS = QD = Q*, so this model is really two equations and two variables. If the demand and supply functions are straight lines, then there must be a unique solution. b) QD = demand for classical music = F(P,) is exogenous and captures consumer interest in classical music. QS = supply of classical music = G(P,) is exogenous and captures the technology for restoring and cleaning old classical music recordings. c) QD = Demand for Dollars F(P,) is exogenous and captures domestic and foreign beliefs about the relative security of the dollar against the yen, the euro and the pound. QS = supply of dollars = G(P,) is exogenous and covers the currency supply of the Federal Reserve. endogenous endogenous Or. The best short sum of the power of the models is Robert Lucas's speech What Economists Do. It is widely available on the web. This is perhaps his best line: I'm not sure if you'll take this as a confession or boast, but we're basically storytellers, creators of make-faith economies. Lucas explains that if you want to be a matter-of-fact person who understands how the world works, you have to be creative and imaginative. EXERCISE 1-2. Based on personal preferences. 3. a) Of www.stanford.edu/~chadj/snapshots.pdf: Ethiopia: 1.6 percent India: 8.4 percent Mexico: 28.9 percent Japan: 76 percent (b) Botswana's per capita growth rate between 1960 and 2010 was around 5.33 percent. China's per capita growth rate was between 4.62 and 6.02 percent, depending on which version of the data is used in the snapshot file provided by Chad. (c) Population, largest to smallest population: USA (310.2 million), Indonesia (243 million), Brazil (201.1 million), Bangladesh (156.1 million), Nigeria (152.2 million), Russia (139.4 million). (d) Government purchases are higher in poor countries, while capital expenditure is higher in rich countries. (e) Although there are many exceptions, it seems that the money in poorer countries has less value per unit compared to rich countries. This is mainly because some poor countries have a history of high inflation, so that a unit of their currency is worth very little compared to the dollar. High flames are rare in rich countries and much more common in poor countries. 4. Based on personal preferences. 5. This is a work-related exercise. Please read the text for the solution. 6. a) - tells us how the amount of work delivered reacts to wages. Informally, she tells us how sensitive workers are to wages when deciding how much they want to work. (b) This is the same as in 5: quantity of work delivered, quantity of required work, balance of work offered and the 10. 6 renounced it. In this chapter, you want you to look for ways to emphasize how many bad opportunities there are to count economic activities—this will let students know that you're not just working out the obvious. In addition, you may want to point out that the system of national accounts contains a number of accounting identities – statements that are true by definition. These definitions are important for asking questions and finding answers. For example, if we define output as C+ I + G + NX, we will ask how C, I, G, and NX have changed to change output. If, on the other hand, we define expenditure as the speed of money (M × V), then we will ask, the amount of money and the speed to change the expenditure. Definitions are an essential part of economic theory. The national accounts offer many definitions of questions. A useful useful comes from medicine. How can we determine whether a person is healthy? Doctors have set themselves on a few key variables for summarizing human health: body temperature, blood pressure, heart rate, and respiratory rate. In particular, the first two signs of life could be measured in different ways – so the doctors had to determine the best way to measure body temperature and blood pressure. Over the centuries, many different vital signs have been put forward as key to measuring health, but only these four passed the test. Even today, many doctors are pushing for a fifth or sixth sign of life – oxygen levels in the blood, pupil size, emotional distress, pain – but the profession as a whole resists these efforts. Also on GDP, we are always tinkering with ways to improve the GDP measure. We remind students of their limitations: we also look at other figures, but we keep coming back to GDP because it's one of the decisive signs for the country's economic health. GDP is also the most explainable sign of life – no different from blood pressure in this respect – so we spend an entire chapter explaining it. CHAPTER OVERVIEW By and large, it is a traditional chapter On What is Gross Domestic Product (GDP)?. Jones goes through production, spending, and income approaches, emphasizing that the labor share in the United States is roughly constant (good to note, as it helps to justify the Cobb Douglas production function, which later plays an important role). There is a particularly clear discussion on how to combine GDP figures between countries; Even if you don't plan to address international issues in your course, this is probably worth mentioning, because cross-border GDP is so central to the chapters of economic growth (and many students have the intuition that prices vary from country to country). Interest rates and the unemployment rate are shifted to later chapters, so you can focus your energies on an intellectual triumph that we economists usually take for granted: the definition of GDP. 2.1 Introducing Chad begins by emphasizing how difficult it is to measure an economy. What should we include? What should we omit? How can we combine things that are completely dissimilar – car production and employment in grocery stores and resale of houses and again and again – into a number that tells us what is happening? Simon Kuznets found a reasonable way to do this and was awarded the Nobel Prize in 1971 economics, mainly for creating the definition of GDP that we use today. Economists and citizens take GDP for granted – but it really is one of the great intellectual contributions to the economy. What have we ever done without them? Bad macropolitics: This is what we CHAPTER 2 Measurement of Macroeconomics 11. Measurement of Macroeconomics | 7 It should be recalled that, by and large, GDP using accounting intuition. Students are often confused by the rhetoric of the Macroecon omists. Here is an example. Macroeconomists often use the terms real income, output, and GDP interchangeably. Since the value of production, as realized by sales, is distributed in the form of different incomes, production, GDP, and income are identical. THE EXPENDITURE APPROACH TO GDP Here we run through C, I, G and NX as if in principles. Fortunately, Chad places less emphasis on the small details of the four categories and instead focuses on how these shares have changed over time – and by emphasizing time series, it gives students stylized facts for macroeconomic theory. In one case, he begins a theoretical explanation immedi- ately. He points to the rise in US consumption, pointing out that this may reflect the fact that it has been easier for average consumers to borrow in recent decades. The increase in today's share of consumption could be due alternately to an expected increase in future revenues. A few points that may be worth mentioning: • It is always worth highlighting the difference between government purchases (measured by GDP) and government spending (which is important to the media, and which is important for many fiscal issues, but is not a formal category of GDP). As Chad notes, Social Security, Medicare, and interest on debt are not included in G. These are transfer payments, and in practice most Social Security and Medicare payments are used to buy C, consumer goods, and services. • It is worth noting that the composition of expenditure is sensitive to the point at which the economy is during the business cycle. During the current economic downturn, we see a decline in the share of investment in GDP as consumption and the share of government purchases increase. It's also worth emphasising what NX really does: it makes sure we count everything exactly once. For example.B all purchases of consumer goods are made within the United States and not all the production of consumer goods within the United States. For example, part of the C in GDP is really produced in Germany or China or Canada – and if our final measure of GDP will really measure US production, we need to subtract that to ensure that it does not appear in our final figure. So when an American buys a Chinese TV worth 400 US dollars in the local appliance house, he appears twice on the right side of the national income identity: as +400 in C and again as DOLLAR in NX. In this way, we ensure that the majority of televisions produced abroad do not appear in US gross domestic product. 2.2 Measuring the state of the economy Let's start with Chad's formulation of GDP: gross domestic product is defined as the market value of the end products and services produced in an economy over a period of time. that the this definition, which can be highlighted, is market value, final, produced and services. By emphasizing market value, we stress that GDP in a currency such as dollar val and other things is not added up to measure the country's production. By emphasizing definitively, I stress that one key to measuring GDP at close to measurement is to avoid double counting. I like to use examples where common sense conflicts with the approach of Kuznets, as in the example presentation below. By highlighting produced, I stress that GDP does not include the sale of used goods (such as houses and cars) and not purely financial transactions (such as buying shares or moving money between bank accounts). Moreover, GDP is a river. A river is an economic variable measured by time, such as.B how much income was earned or spent last week. By contrast, economic variables measured at a time are called stocks. These variables are found in our balance sheets (our assets, liabilities and assets). How much money you hold is a question about an economic stock. By highlighting services, I stress that a large part of economic activity in the United States is not about doing things – it is about providing valuable services. If we omit the ambiguous housing services sector of GDP, the remaining service items – transportation, medical care, tourism, and others – add up to about '3.5 trillion, about a quarter of our USD 13 trillion. Consumer services have the largest category of consumer spending in the United States, just over two-thirds of total consumer spending. In short, consumer services account for almost half (about 47 percent) of GDP. PRODUCTION = EXPENDITURE = INCOME A clear example of homers and margins running a farm makes it clear that if you measure correctly, there are three equivalent methods to measure GDP. You can remind stu- dents that this is the same circular flow idea that they have seen in principles: they can take the pulse of the economy when the prod-ucts flow to the end users, when the revenues go to companies or when the revenues go to the workers, owners and lenders of the company. It may be worth stressing that Chad's profits are what principles texts often refer to as accounting gains. They are different from economic gains, which do not come into play at all when measuring GDP you remember that the difference between accountant and enerther ends is the opportunity cost of the time of the entrepreneur and the capital of the investor). 8/12 | Chapter 2 is a good example of how everything is locally produced and then sold in a local store). The economic sense says something else: measure the size of the local economy by summing up the value creation of each local company. To do this, you must reduce the cost of Outputs and inputs of the company and then simply sum all values of the outputs while subtracting the sum of all the values of the inputs. WHAT IS INCLUDED IN GDP AND WHAT IS NOT? Of course, we need to explain the limits of GDP – Chad's discussion differs from many, pointing to recent research showing that health is more important than measured in GDP, while environmental degradation probably counts for very little. You could also highlight the importance of leisure as a good, which is excluded from GDP. In this third edition of the textbook, Chad provides a case study in which the well-being of a country is linked to consumption (government and personal) per person, life expectancy, leisure time and consumption inequality. The resulting measure of welfare is in contrast to relative GDP per capita. The country-by-country comparison yields two important results. First, in developed countries such as northern Europe, welfare increases relative to GDP per capita compared to: (1) more government consumption, (2) more leisure time, (3) higher life expectancy, and (4) less consumption inequality. Second, in poorer countries, relative welfare decreases relative to relative GDP per capita for the opposite reasons. Chad's case study complements and delivers similar results to the Human Devel- opment Index of the United Nations Development Programme (available at /hdi). 2.3 Measuring changes over time Now we come to the distinction between nominal and real GDP. In section 2.3.1, Jones goes through a simple example of apples and computers and provides what you really need to cover: nominal GDP and real GDP. In sections 2.3.2, 2.3.3 and 2.3.5, it goes through the different types of price indices – Laspeyres, Paasche and chain weighted. If you want to avoid these price index details, it's simple: just cover 2.3.1 to teach the old standby of Real GDP in Year X Prices. Then use the basic equation at the beginning of 2.3.1 (nominal GDP = real GDP × price level) to lower the price level. From here, go directly to 2.3.4 and to the inflation definition, which is probably at your hat anyway. Chain weighting never reappears, apart from a clinging reference between 2.3 and 2.4. The surprise is that C, I, G and NX reflect all purchases from different groups, but they are defined to add up to U.S. production. THE INCOME APPROACH TO GDP This section provides just enough information for students to learn that the labor force is relatively stable over time in the United States. The only point I want is that the two forms of operating income (net operating surplus and depreciation) are actually an item: income that goes to the owners of capital, which we might call the gross operating surplus of enterprises. that the Article is assumed (i.e. scientifically built) based on assumptions about the decline of the US capital stock. And why is there an article called indirect corporate taxes when so many other forms of taxes – especially income taxes – don't show up here? The simple answer is probably the right one: it is because the creators of national accounts follow accounting methods. From an accounting point of view, the answer to who pays a sales tax? Empirically ambiguous: In the typical case, the customer pays the tax because it comes on the bill, but in reality the entrepreneur sends the proceeds to the government. By summarizing these ambiguous taxes, we reduce the ambiguity of the other income categories. THE PRODUCTION APPROACH TO GDP Once again this gives them another chance to emphasize the importance of counting everything exactly once. With the production method, you have only two options: 1. Either measure only end goods and services, or 2. Measure only the value added at each production stage as a good step from company to company to end user. Why bother with (2)? For an economist (or businessman) trying to figure out which industries are most productive, it's useful to know which industries are most valuable to their inputs. In Chad, you could use the value-added method to answer the question: Where does most of the value of a car come from – the raw materials or the assembly of these materials? In the diamond jewelry industry, the answer might be very different (if the raw material is diamonds). I often stress that when measuring the size of a local economy, common sense and economic sense are likely to conflict. Common sense says: Measure the size of the local economy by adding up the turnover of all local businesses. But that would involve massive double counting – think of all the products sold from one local company to the next before they reach their end user (farm products are 13. Measuring macroeconomics | 9 For practical reasons, the (another) by noting that the same goods and services are often cheaper in the poorest countries – haircuts are a classic example. The Big Mac Index of the Econo Nebula is also worth mentioning, as stu-dents can quickly grasp this idea. So, on paper, while the world's richest countries appear 100 times richer than the world's poorest countries, the real difference is closer to 30 times richer. This is still a massive difference that is willing to explain – and that is the subject of the next chapters. Final thoughts Only as a reminder there are two popular themes that Chad (mercily) leaves out of this chapter in order to escape us from the economic anatomy and economic models that are the strength of our field. These are the consumer- index and how price indices measure quality changes. Chad will report on the former later in Chapter 8, while this guide provides some reporting on quality changes when this chapter is discussed. You can mention these topics at some point in class to let students know that you are coming back to them: • The basket method of the consumer price index differs from the other price indices covered in this chapter. (The CPI is used to index tax brackets and social tax payments so that it has political relevance.) • It is difficult to measure quality changes over time (key in a world of the new economy). The Census Bureau's hedonic price indices for computers and Alan Green's speech on the falling real price of cataract sur-gery come to mind. Finally, students may be interested in knowing that national accounts provide a wealth of useful definitions that can be used as a starting point for analyzing key issues such as the cause of the national budget deficit and the role of the national budget deficit in exploiting national savings and gross savings. SAMPLE LECTURE: PRODUCTION, EXPENDITURE, AND INCOME IN A TRUCK ECONOMY In this presentation, you can combine all three GDP measurement methods in a simple economy with good output. Since I note that most of the misunderstandings and most of the findings in the national accounts come from the method of production/value creation, we will use the example of Chad for the production of fonts. Consider the economy of Pickupia. The only two companies in Pickupia produce steel (SteelCo) and trucks (TruckCo). Chad's coverage of the three types of price indices is pretty clear and short, so if you want to cover it, it should not take more than half an hour in class. 2.4 Comparing economic performance between countries Students often have a strong intuition that prices vary from country to country, and since cross-border GDP comparisons will play a major role in the next four chapters, it may be worth it while spending a little time on this section. There is a particular point that I would like to make with the most stu- dents, and that is the meaning of the final equation in this section: real Chinese GDP in US prices = (US price level/ Chinese price level) × Chinese nominal GDP The easiest way to make this equation meaningful is to first convert the nominal gdp of China from yuan to dollar. The students can then see, given the exchange rate, how much these many trillions of yuan in dollars are worth. you can point out that goods cost less in China than in the United States, and therefore these dollars buy more goods than they would have bought in the United States. When these dollars buy more goods, real GDP in China will rise. This real Chinese GDP in US dollars can then be easily found by Chinese nominal dollar GDP through the ratio of Chinese price level to us price level (multiplication of INal-dollar-GDP by the ratio of the US price level to the Chinese price level). The main benefit here should be that if prices in China are lower than in the United States, real Chinese GDP is higher than China's nominal GDP. Compare the actual, uncorrected, right-of-the-site U.S. prices (in dollars) for certain goods and services with actual, uncorrected, legal-off-the-site Chinese prices (in yuan) for the same goods and services. Convert these yuan prices to dollars at the actual, uncorrected nominal dollar/yuan exchange rate, and you have a healthy measure of where prices are higher. Add a large budget and doz- ens of well-meaning bureaucrats, and you have the United Nations International Comparisons Program. If goods and services cost less in China than in the United States (in fact, they do after converting yuan into dollars), this means that the price level in China is lower than in the United States. While China's nominal GDP may look relatively small at 5.8 trillion dollars (if converted into dollars), China's real GDP is relatively high at 10.8 trillion dollars. Finding out why the same goods and services are more or less expensive in some countries than in others is a task normally left to the international economy, so I will not even try to make a quick statement here. Chad closes this section (and 14.10 | Chapter 2 Emphasize how different this common sense response is. If I wanted a reasonable answer to how much is produced in this economy, I would add steelCos 100 in sales plus TruckCos 500 in sales to get my answer: 600. The sensible answer – what you would get if you only interviewed both companies and added their answers – turns out to be completely wrong, because it counts the steel twice. Making sure you count everything exactly once is the key to a good accounting system – and that's harder to do than you might think. CASE STUDY: CAPITAL GAINS —WHY AREN'T THEY PART OF GDP? If you buy a share from Microsoft for 100 dollars and then sell it a year later for 150 dollars, common sense tells you that you have earned 50 dollars. The increase of 50 dollars is called a capital gain. Sim- ilarly, if you bought a house for 100,000 dollars and sell it two years later for 125,000 dollars that 25,000 dollars safe feels like income for you - it's money that you can spend as if you have a 25,000 dollars had received at work. But economists' measure of GDP does not include capital gains at all – so we have a case of economists versus comonensense. If we focus on the income approach of GDP, we include labour income, capital income, and some adjustments. Capital gains sound very much like capital gains, so why are capital gains not counted as part of capital gains? The short answer is that capital gains are capital gains be part of the capital return, since capital gains (or losses) merely reflect a change in the future profitability of an asset. For example, a share price could rise because people believe that their company will make more profits in the future. And if these people are right, these future gains will appear in future GDP. Of course, stock prices rise and fall for many reasons, and in a asset pricing course you can cover this theme. But the main point is: an increase in the price of a house, a painting, or the collection of machines and workers we call Microsoft does not reflect production of the current year. And remember that GDP is about this year's production. Capital gains are not part of the national income standard, but many capital gains are still taxed by state and federal income taxes. CASE STUDY: ROBERT HALL AND INTANGIBLE CAPITAL According to some economists – most prominently Robert Hall1 from Stanford – the previous case study is complete 1. Robert E. Hall, The Stock Market and Capital Accumulation, Ameri- can Economic Review, Volume 9, No. 5, (December 2001), pp. 1185-1202. SteelCo TruckCo Wages 70 Wages 250 Sales tax 0 Sales tax 30 Costs of inputs 0 Costs of inputs 100 + Profit 30 + Profit 120 Total Steel Sales 100 Total Truck Sales 500 There are four different customers for TruckCo Trucks: Pickupia consumers buy 200 DOLLARS worth of trucks for sonal use. Pickupia's companies buy trucks worth 100 U.S. dollars to transport products and workers. Pickupia's government buys trucks worth 150 U.S. dollars to transport products and workers. Foreign countries buy trucks worth 50 dollars for unknown reasons. Pickupia consumers also import other goods and services worth 100 US dollars from abroad. This is a complete description of the Pickupia economy. Let us now draw up the GDP measures on the basis of expenditure, income and production methods. Expenditure: GDP = C + I + G + Total Exports - Total Imports GDP = (200 on lorries + 100 on imports) + 100 + 150 + 50 x 100 on imports = 500 There is no trick here — just a reminder that C includes all purchases from domestic consumers, regardless of whether these goods are produced here or abroad. Income: Total wages: 320 Total sales tax (an indirect tax): 30 Total profits: 150 Total income = 320 + 30 + 150 (assuming that there is no write-down of capital) = 500 (This 64 percent wage share is close to the actual U.S. value, which for many students who suspect that the vast majority of people are GDP gains could be a surprise.) Production: Value added from SteelCo: Somehow they get their raw heart for free, so that their value added is fair: cost of sales = 100 - 0 = 100 Value added from TruckCo: Turnover - Input costs = 500 - 100 = 400 total domestic products = value added of all companies in the economy = 100 + 400 = 500 15. Measurement of macroeconomics | 11 1st John Wallis Wallis Nobel laureate Douglass North esti- mate that transactions costs, that is, expenses for negotiating and enforcing contracts, rose from a quarter of national income in 1870 to more than half of national income in 1970 (cited in McCloskey and Klamer, 1995).2 Transaction costs include legal fees, the cost of the legal system, the largest part of the cost of managing the country's banking and financial systems. , accountants, clerks who make liabilities and claims, locks on doors, security personnel and almost anything else that allows you (1) to keep your property, (2) feel enough confidence to transfer your property to someone else, or (3) get ownership from someone else. Transaction costs are not only part of G: As the list above shows, many private sector purchases are involved, so they are also displayed in C, I, and NX. According to Wallis and North, about half of GDP is spent just so that we can interact and interact. 2. McCloskey and Klamer go further: they estimate how much of GDP is devoted to sweet talk to convince. Even when a person provides information, work isn't just about providing raw data, it's about selling the audience on the data. Why should I listen to you? That is the question that is answered by conviction. The importance of conviction was determined by the father of the economy itself. Adam Smith noted in his Lectures on Jurisprudence: Everyone practices oratorio over others all their lives (cited in McCloskey and Klamer). By and large, McCloskey and Klamer want to count all human communications that are not about providing information (e.B. phone operators or fellow professors) or commands (such as much of the work of police officers and CEOs). They include lawyers, actors and members of the clergy; they account for three quarters of the work of salespeople, therapists and labour supervisors; and half of the work of police officers, technical writers and nurses. Her crude Esti mate is the title of her paper: a quarter of GDP is persuasive. CHECK QUESTIONS 1-4. These essentially sum up the whole chapter, so I will not answer them. 2. Donald McCloskey and Arjo Klamer, One Quarter of GDP Is Persua- sion, American Economic Review, Vol. 85, No. 2, (May 1995), pp. 191-95. John Joseph Wallis and Douglass North, Measuring the Transaction Sector in the American Economy, 1870-1970, in S. L. Engerman and R. E. Gallman, Eds., Long-Term Factors in American Economic Growth (Chicago: University of Chicago Press , 1986). wrong for economically important reasons. Hall shows that under some fairly strict (including that a company's share price does not reflect future monopoly gains or changes in time preference), changes in share price Changes in the size of the country's entire capital stock. This would mean that an increase in the share price must reflect company-specific investments, while the price declines must reflect the decline of past investments. But it is clear that stock prices change too often and too much to reflect changes in the physical amount of corporate capital – roughly measured by the I-part of GDP – so Hall argues that many changes in the share price must reflect changes in the country's intangible capital stock. Intangible capital could include a company's ability to develop new ideas, its organizational form, its ability to motivate employees to work hard, and many other things a company can do today to help it produce more out-put in the future. After all, what capital goods do, isn't it? What we call capital goods are only products that we create today in order to benefit on the road. Perhaps we can think of intangible investments as services that we are creating today to reap benefits in the future. In Hall's view, the rise in the stock market in the late 1990s reflected the market's presumption that modern technology would allow companies to create much more production in the future with very few workers – something that, in a nutshell, sounds pretty much like the new economy. Since the NASDAQ (a technology-heavy stock market index) slumped by 75 percent between 2000 and 2003, the big question, of course, is: Where did all this intangible capital go? Were hundreds of billions of intangible capital somehow destroyed? There is a great literature on intangible capital, also known as organizational capital. In the future, economists could find a coherent, practical way to include these important forms of investment in the I part of GDP. If Hall's view is merited, the closely measured GDP should include a portion of the capital gains. If these improved measures are even half as volatile as the stock market, then GDP is much more volatile than we currently think. CASE STUDY: ONE QUARTER OF GDP IS PERSUASION As we have seen before, services account for about a quarter of US GDP. This means that a lot of economic activity is not about doing things, but about interacting with other people. There are two other ways to slice GDP that could be of interest: 16.12 | Chapter 2 This is not accurate, as Chad notes, but it is good enough for our purposes. This implies: growth of nominal GDP - real GDP growth = inflation rate what we need to do is add in our three definitions of real GDP growth, and we will have our three answers: Paasche: 14.8 percent - 6.9 percent = 7.9 percent Laspeyres: 14.8 percent - 6.8 percent = 8 percent chaining: 14.8 percent - 6.85 percent = 7.95 percent 6. a) Without relative price differences Price differences India's economy is 11.9 percent of the size of the U.S. economy (78.9 trillion/45.7) / 14.5 trillion). (b) Taking into account the relative price differences, India's economy is 32.3 percent, or about one-third the size of the U.S. economy (11.9 percent/0.368). (c) The figures vary because many consumer goods – food, haircuts, doctor visits – are very cheap in India when measured in US dollars. This is a true ally in poor countries. As we'll see in Chapter 14, if we look at The Economist's Big Mac Index, the same McDonald's hamburger is much cheaper in poor countries than in rich countries when comparing prices in US dollars. Wages, rents, and taxes cost less in poor countries, making it cheaper to produce a hamburger or a haircut, or even a visit to the doctor. This means that while India is a very poor country, india's economy is not one-tenth the size of the US economy. It's closer to a third. 7. (a) 37.7 percent (b) 30.3 percent (c) The numbers differ because many goods are more expensive in Japan than in the United States. 8. (a) If fewer people have a home, the average person must be worse off when it comes to home ownership – after all, people must now share their homes or live in less desirable places. People will work to rebuild things they've had before. This is a loss, not an advantage. It is likely that if there had been no earthquake, most of the people who are rebuilding these lost houses would have been able to build something new and valuable, rather than rebuilding something old and valuable. (b) Measured GDP is likely to rise – people will want to work hard and quickly to rebuild homes, or they will pay a heavy price for other workers to rebuild their homes. These wages for workers and the purchase of materials (which are probably mainly wages for other workers) are all reflected in GDP. EXERCISES 1. This is a work-hard exercise. Please read the text for the solution. 2. (a) GDP increases by 2 million dollars (final selling price of computers). (b) GDP increases of 6,000 US dollars (capital gains – an increase in the price of an asset such as a house, a car or a painting – are not part of GDP, as the asset was not generated this year. They are also not part of national income). (c) no impact. This is a government transfer payment, not a government purchase of a good or service. If the government hired the unemployed and paid them to dig trenches or to c++ per gram, then wages count as a government purchase. (d) no impact. I'm going to raise 50 million dollars, but NX is falling by 50 million dollars, so the two effects are erupting and have no impact on GDP. e) US GDP increases by USD 50 million: NX increases by USD 50 million. (Moreover, for the same reason, this has no impact on European GDP as in Part d).) f) GDP rises by 25,000 US dollars: NX decreases by 100,000 US dollars, but C increases The store added a value of 25,000 US dollars to the US economy, so that it is reflected in GDP. 3. Real GDP in 2020 in 2018 prices: 5,950; 19 percent growth between 2019 and 2020. Real GDP in 2018 in 2010 prices: 6,500. Real GDP in chained prices, measured by 2020: 6,483. (Note: the production of apples and computers has not changed between 2018 and 2019, so the average of the zero growth rates of Paasche and Laspeyres is still zero.) 4. 2016 2017 Percent Change 2016-2017 Quantity of Oranges 100 105 5 Quantity Boomerangs 20 22 10 Price of Oranges (Dollars) 1 1.10 10 Price of Boomerangs (Dollars) 3 3.1 0 3.33 Nominal GDP 160 183.7 14.8 Real GDP in '16 prices 160 171 6.9 Real GDP in '17 prices 172 183.7 6.8 Real GDP in linked prices, 171.9 183.7 6.85 Here, GDP growth shows only a tiny difference between the different methods. 5. We use chad's abbreviation from section 2.3.4: Growth of nominal GDP = price level growth (including inflation) + real GDP growth 17. Measurement of the macro-economy | 13 the suit, as it must replace its window. So he would have created new jobs in the suit industry, but now he will not get this new and valuable suit. Instead, he will spend his scarce dollars to replace something old and valuable. So our earthquake is like the broken window: workers who could have created something new must replace something instead. It would have been better for the citizens if the earthquake had not occurred. This question illustrates a famous parable in economics, the error of the broken window. 3 If a person breaks a shop window, the shopkeeper must pay for the repair of that window. If we look only at the direct effect, we will only find that the person who broke the window has created new jobs in the window industry. That's true, but what we don't see is that if the window hadn't broken, the shopkeeper would have bought a new suit later this week. Now he doesn't get 3. Henry Hazlitt, Economics in One Lesson, Chapters 1 and 2. Macroeconomics 3rd Edition Jones Solutions Manual Full Download: This example downloads all chapters at: alibabadownload.com alibabadownload.com