#### Chapter 1: Open economy - Wikipedia

"Simply put, Open Economy Macroeconomics is a masterpiece. It provides a unique mix of empirical foundations, theoretical analysis, and quantitative examination on all the essential topics in this rich and complex field.

Outside of macroeconomic theory, these topics are also important to all economic agents including workers, consumers, and producers. Output and income[edit] National output is the total amount of everything a country produces in a given period of time. Everything that is produced and sold generates an equal amount of income. The total output of the economy is measured GDP per person. Output can be measured or it can be viewed from the production side and measured as the total value of final goods and services or the sum of all value added in the economy. Economists interested in long-run increases in output study economic growth. Advances in technology, accumulation of machinery and other capital, and better education and human capital are all factors that lead to increased economic output over time. However, output does not always increase consistently over time. Business cycles can cause short-term drops in output called recessions. Economists look for macroeconomic policies that prevent economies from slipping into recessions and that lead to faster long-term growth. The relationship demonstrates cyclical unemployment. Economic growth leads to a lower unemployment rate. The amount of unemployment in an economy is measured by the unemployment rate, i. The unemployment rate in the labor force only includes workers actively looking for jobs. People who are retired, pursuing education, or discouraged from seeking work by a lack of job prospects are excluded. Unemployment can be generally broken down into several types that are related to different causes. Classical unemployment theory suggests that unemployment occurs when wages are too high for employers to be willing to hire more workers. According to these more recent theories, unemployment results from reduced demand for the goods and services produced through labor and suggest that only in markets where profit margins are very low, and in which the market will not bear a price increase of product or service, will higher wages result in unemployment. Consistent with classical unemployment theory, frictional unemployment occurs when appropriate job vacancies exist for a worker, but the length of time needed to search for and find the job leads to a period of unemployment. Structural unemployment is similar to frictional unemployment as both reflect the problem of matching workers with job vacancies, but structural unemployment also covers the time needed to acquire new skills in addition to the short-term search process. Over the long run, the two series show a close relationship. A general price increase across the entire economy is called inflation. When prices decrease, there is deflation. Economists measure these changes in prices with price indexes. Inflation can occur when an economy becomes overheated and grows too quickly. Similarly, a declining economy can lead to deflation. Raising interest rates or reducing the supply of money in an economy will reduce inflation. Inflation can lead to increased uncertainty and other negative consequences. Deflation can lower economic output. Central bankers try to stabilize prices to protect economies from the negative consequences of price changes. Changes in price level may be the result of several factors. The quantity theory of money holds that changes in price level are directly related to changes in the money supply. Most economists believe that this relationship explains long-run changes in the price level. For example, a decrease in demand due to a recession can lead to lower price levels and deflation. A negative supply shock, such as an oil crisis, lowers aggregate supply and can cause inflation. The AD-AS model has become the standard textbook model for explaining the macroeconomy. The ADâ€"AS diagram can model a variety of macroeconomic phenomena, including inflation. Changes in the non-price level factors or determinants cause changes in aggregate demand and shifts of the entire aggregate demand AD curve. When demand for goods exceeds supply there is an inflationary gap where demand-pull inflation occurs and the AD curve shifts upward to a higher price level. When the economy faces higher costs, cost-push inflation occurs and the AS curve shifts upward to higher price levels. The ISâ€"LM model represents all the combinations of interest rates and output that ensure the equilibrium in the goods and money markets. The Solow model assumes that labor and capital are used at constant rates without the fluctuations in unemployment and capital utilization commonly seen in business cycles. An increase in the savings rate leads to a temporary increase as the

economy creates more capital, which adds to output. However, eventually the depreciation rate will limit the expansion of capital: Both forms of policy are used to stabilize the economy, which can mean boosting the economy to the level of GDP consistent with full employment. Monetary policy Central banks implement monetary policy by controlling the money supply through several mechanisms. Typically, central banks take action by issuing money to buy bonds or other assets, which boosts the supply of money and lowers interest rates, or, in the case of contractionary monetary policy, banks sell bonds and take money out of circulation. Usually policy is not implemented by directly targeting the supply of money. Central banks continuously shift the money supply to maintain a targeted fixed interest rate. Some of them allow the interest rate to fluctuate and focus on targeting inflation rates instead. Central banks generally try to achieve high output without letting loose monetary policy that create large amounts of inflation. Conventional monetary policy can be ineffective in situations such as a liquidity trap. When interest rates and inflation are near zero, the central bank cannot loosen monetary policy through conventional means. An example of intervention strategy under different conditions Central banks can use unconventional monetary policy such as quantitative easing to help increase output. Instead of buying government bonds, central banks can implement quantitative easing by buying not only government bonds, but also other assets such as corporate bonds, stocks, and other securities. This allows lower interest rates for a broader class of assets beyond government bonds. In another example of unconventional monetary policy, the United States Federal Reserve recently made an attempt at such a policy with Operation Twist. Unable to lower current interest rates, the Federal Reserve lowered long-term interest rates by buying long-term bonds and selling short-term bonds to create a flat yield curve. Examples of such tools are expenditure, taxes, debt. For example, if the economy is producing less than potential output, government spending can be used to employ idle resources and boost output. Government spending does not have to make up for the entire output gap. There is a multiplier effect that boosts the impact of government spending. For instance, when the government pays for a bridge, the project not only adds the value of the bridge to output, but also allows the bridge workers to increase their consumption and investment, which helps to close the output gap. The effects of fiscal policy can be limited by crowding out. When the government takes on spending projects, it limits the amount of resources available for the private sector to use. Crowding out occurs when government spending simply replaces private sector output instead of adding additional output to the economy. Crowding out also occurs when government spending raises interest rates, which limits investment. Defenders of fiscal stimulus argue that crowding out is not a concern when the economy is depressed, plenty of resources are left idle, and interest rates are low. Automatic stabilizers do not suffer from the policy lags of discretionary fiscal policy. Automatic stabilizers use conventional fiscal mechanisms but take effect as soon as the economy takes a downturn: Comparison[edit] Economists usually favor monetary over fiscal policy because it has two major advantages. First, monetary policy is generally implemented by independent central banks instead of the political institutions that control fiscal policy. Independent central banks are less likely to make decisions based on political motives. Central banks can quickly make and implement decisions while discretionary fiscal policy may take time to pass and even longer to carry out.

#### Chapter 2: The Fed - Open Economy Macroeconomics

4 Harcourt, Inc. items and derived items copyright © by Harcourt, Inc. Variables that Influence Net Foreign Investment The real interest rates being paid on.

Basic Concepts When reading the chapter, here are some aspects to consider: Mankiw begins the chapter with the claim that international trade can make everyone better off. Using comparative static analysis, we can see that a country fully adjusted to a situation with international trade has more options than one without international trade. It compares the situations purely in terms of available goods and services. It says nothing about the differing types of work involved, environmental impacts of those patterns of production, differences in economic, political or strategic vulnerability, how the gains may be spread who gains and who loses, or the adjustment process moving to a situation with international trade and the time and cost of this adjustment. The reason for this judgment is that behind the whole industrial process lies the acceptance of the Newtonian outlook, the acceptance of the world of modern science and technologyâ€|[I]t appears to be the case that the larger psychological, social, technological, and institutional changes required for a take-off are such as to make it unlikely that there will be a true lapsing back. The deeper fundamentals required for an effective take-off appear sufficiently powerful to make growth an ongoing process, on long term; and, in the ruthless arena of world power, a slackening of effort, stagnation, or a drawing back have brought danger from those abroad who persisted and moved relatively ahead. Mankiw gives a simplified representation of current transactions. In reality there are more than just exports and imports of goods and services to consider. This refers to income earned from labour, capital and so on that is earning money in other countries. We are obtaining income from these, and overseas factors of production employed within our own country earn income which then goes overseas. An important component of this is remittances. These are highly significant for many Pacific Island countries, for example, and also for the Philippines, which has many workers earning money in other countries. These are payments made in one direction without services going in the reverse direction. For example, there are people who worked in one country and then retired to another, but still receive their pensions. You should note the structure given in Mankiw when, for example, talking about determinants of exports and determinants of imports. He tends to take a fairly informal approach to these matters. For exam preparation, it would help for you to try to formalise it. You could consider exports as a function of the bullet-pointed variables, and similarly for imports. You could also consider in which way quantities of exports and imports would vary as those determining variables change. There are also some useful points about the importance of deficits or surpluses and the implications that they have for capital movements. In general with Mankiw, it is worth identifying when he is describing a model and determining the assumptions on which the model is based. Economics commonly presents material by starting with a simple model with the assumptions clearly stated. Findings are then derived on the basis of that defined structure, after which the assumptions can be relaxed to make increasingly complex models. This will become particularly significant by the time you move to the next chapter, which is developing these aspects further. There you have models and assumptions that are often hidden within the text. You should search for the assumptions. They are very important for determining the structure and the nature of the relationships and they should not be forgotten. The models do not refer to the real world directly, although they may have relevance for the real world. We also see the determinants of capital flows. These could be treated in the same way as determinants of exports and imports. The flows are a function of these variables. Consider in which way the values would change as the variables change. Note that overall, if we assume away the possibility of reserves of foreign currency, the balance of payments will always balance. There is a market and, with freely floating exchange rates, the market will be at equilibrium. Demand will equal supply. Demand is for current and capital purposes, and supply comes from current and capital purposes also. Consequently overall current and capital transactions will balance. If there is a surplus on one account, it will be balanced by a deficit on the other. A surplus on current account, for example, will be balanced by an equal reverse flow on the capital account. On real and nominal exchange rates, it can help to think of the formula for the real exchange rate as

being the nominal exchange rate multiplied by the ratio of domestic to foreign price levels. This is not exactly as Mankiw interprets it despite his equation in section 2b, because the price levels are in relation to base years, so there is a scaling factor if the base years are not the same. For simplicity, just remember the formula and bear in mind that, if prices stay constant and the nominal exchange rate changes, there is a change in relative price of goods and hence a change in the real exchange rate. Alternatively, if the nominal exchange rate stays constant and one or other of the price levels changes then again, there is a change in the real exchange rate. So a change in the real exchange rate is determined by a combination of nominal exchange rate movements and relative price level movements. If you want to see what I mean by a scaling factor, read on: A price index gives the current cost of the indexed basket of goods divided by the base year cost of that basket. Mankiw describes the formula as if the second term is not there. We should also note that the two baskets used to construct the price indices are not the same. Where Mankiw talks about the effect of changes in the real exchange rate on exports and imports, note that he is describing changes in volumes of exports and imports. This does not tell us directly what is happening to levels of expenditure on these. Consequently, we cannot immediately determine the response he suggests in terms of the effect on net exports. Investigation of such issues should be reserved to more advanced courses, however. The concept of purchasing power parity is based on a particular perspective, emphasising exchange rates being determined solely on the basis of i demand and supply of goods and services, and ii essentially costless transactions. If all goods could be traded, there are no transport costs and no goods are perishable so they can all be transported from one place to another, and various other assumptions, then with perfect information we might find prices being equalised over all markets for the same good. However, this is not what we observe in the real world. Also currency movements occur for other purposes, and they can also have an impact on exchange rate. So we have a highly simplified perspective under the concept of purchasing power parity and the so-called law of one price. This is not so much a law as a conjecture as to something that might happen in a simplified world. The hyperinflation example in Figure 3 may look plausible, but it could be that the relationship is so clear because of the extremes of the change in price level. With hyperinflation neither people within a country nor are people in other countries are likely to want their currency. We would therefore expect to see the observed effects both on the price level and on the exchange rate. In general, however, there may be a large number of different determinants of both inflation and exchange rates, and so the relationship between the two may be somewhat more confused. Basic problems of the capitalist economy, New York: Urizen Books Rostow, W.

#### Chapter 3: Syllabus for ECON Master Course

An open economy is an economy in which there are economic activities between the domestic community and outside. People and even businesses can trade in goods and services with other people and businesses in the international community, and funds can flow as investments across the border.

Economic models [edit ] The basic model [edit ] In a closed economy, all output is sold domestically, and expenditure is divided into three components: In an open economy, some output is sold domestically and some is exported to be sold abroad. Cd, consumption of domestic goods and services, Id, investment in domestic goods and services, Gd, government purchases of domestic goods and services, X, exports of domestic goods and services. The fourth term, X, is foreign spending on domestic goods and services the value of exports. We substitute these three equations into the identity above: Since the value of total imports is a part of domestic spending and it is not a part of domestic output, it is subtracted from the total output. Closed economy countries can increase its wealth only by accumulating new capital. If output exceeds domestic spending s, we export the difference: If output falls short of domestic spending, we import the difference: Another name for net exports is the trade balance, as it tells us the difference between imports and exports from being equal. Net capital outflow is equal to the amount that domestic residents are lending abroad minus the amount that foreigners are lending to home country. If the net capital outflow is negative, the economy is experiencing a capital inflow: The national income accounts identity shows that net capital outflow always equals the trade balance. In this case, since our exports are higher than our imports, we are net lenders in world financial markets. In this case, we are importing more goods than we are exporting. And hence we are net borrowers in the world markets. Capital mobility and world interest rates[edit] In case of a small open economy, perfect capital mobility is often assumed. By "small" it is understood that an economy has very small share in the world markets. Things that happen within the economy are thus assumed to have a negligible effect on interest rate. By perfect capital mobility, it is often meant that residents of a country have full access to goods and services and specifically financial markets of the world. This means that people in this small open economy will never borrow at more than rate r in the small open economy. Because of the popularity of the small open economy model, it is often said that, the interest rates in a small open economy are determined by the world markets. The world interest rate is determined in another way, and often economists choose to model this through an equilibrium between world interest and world savings.

#### Chapter 4: Macroeconomics - Wikipedia

by Martin Uribe and Stephanie Schmitt-Grohe Princeton University Press, Online Materials By Chapter (slides, code, data, etc.) Chapter 1:Business-Cycle Facts Around the World.

Homework may also include both a written assignment and a multiple choice lesson activity. Each exam is worth a different number of points. The two midterm exams and the final exam will be administered through Canvas. For each exam, there will be a two-day window in which you may take the exam. Once you open an exam, you will have 2 hours to complete and submit it. You will be required to solve problems and illustrate ideas using graphs. Exams may include all reading assignments, online lectures notes and content of video lectures. University Policies Academic Integrity Penn State defines academic integrity as the pursuit of scholarly activity in an open, honest and responsible manner. Dishonesty of any kind will not be tolerated in this course. Dishonesty includes, but is not limited to, cheating, plagiarizing, fabricating information or citations, facilitating acts of academic dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used without informing the instructor, or tampering with the academic work of other students. For further information, please read University Faculty Senate Policy at http: Every Penn State campus has an office for students with disabilities. The Student Disability Resources website provides contact information for every Penn State campus at http: For further information, please visit the Student Disability Resources website at http: In order to receive consideration for reasonable accommodations, you must contact the appropriate disability services office at the campus where you are officially enrolled, participate in an intake interview, and provide documentation described at http: Please share this letter with your instructors and discuss the accommodations with them as early in your courses as possible. You must follow this process for every semester that you request accommodations. Students may request assistance from CAPS regarding a variety of common mental health issues, including anxiety, depression, relationship difficulties, and stress. This appointment will include a one-on-one session that can be conducted via telephone, teleconference Skype, FaceTime, etc. Students enrolled at the World Campus are also encouraged to visit its Mental Health Services page at http: These services are for non-emergencies only. If you or someone you know is experiencing a crisis situation, please call your local crisis center or Nondiscrimination Penn State is committed to equal access to programs, facilities, admission and employment for all persons. It is the policy of the University to maintain an environment free of harassment and free of discrimination against any person because of age, race, color, ancestry, national origin, religion, creed, service in the uniformed services as defined in state and federal law, veteran status, sex, sexual orientation, marital or family status, pregnancy, pregnancy-related conditions, physical or mental disability, gender, perceived gender, gender identity, genetic information or political ideas. For further information, please visit the Affirmative Action Office website at https: Reporting a Bias Incident Penn State takes great pride to foster a diverse and inclusive environment for students, faculty, and staff. Acts of intolerance, discrimination, or harassment due to age, ancestry, color, disability, gender, gender identity, national origin, race, religious belief, sexual orientation, or veteran status are not tolerated and can be reported through Educational Equity via the Report Bias webpage at http: TEACH Act The materials on the course website are only for the use of students enrolled in this course for purposes associated with this course and may not be retained or further disseminated. University Emergency Procedure In the event of a University-wide emergency, the course may be subject to changes. In addition, there may be revisions to grading policies and the Calendar, including assignments and their due dates. In the event of a University-wide emergency, please refer to the Canvas website at https: For more general information about the emergency situation, please refer to the Penn State website at https: To register with PSUAlert, a service designed to alert the Penn State community when situations arise that affect the ability of a campus to function normally, please go to the PSU Alert website at https: Subscribers can receive alerts by text message to cell phones, and also can elect to have alerts sent to an email address. Syllabus Subject to Change The class will likely adhere to the information outlined in this Syllabus and the Calendar, but adjustments may be made based on what actually transpires during the

semester. Remaining in the course after reading this Syllabus will signal that you accept the possibility of changes and responsibility for being aware of them. The syllabus page shows a table-oriented view of the course schedule, and the basics of course grading. You can add any other comments, notes, or thoughts you have about the course structure, course policies or anything else. To add some comments, click the "Edit" link at the top.