

# THE UNIVERSITY OF SYDNEY

## ECOS2002 (INTERMEDIATE MACROECONOMICS)

### LIST OF FINAL EXAM CONCEPTS

WEEKS 5 – 13

TOPICS 4 – 8

WEEK	TOPIC	
5	4	The AS-AD Model
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7	5	Inflation and Employment: The Phillips Curve
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9	6	Economic Growth
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11	7	Consumption and Investment
12	8	Open Economy Macroeconomics
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## WEEK 8 – TOPIC 5 (INFLATION AND UNEMPLOYMENT: THE PHILLIPS CURVE)

CONCEPT	DEFINITION
<b>Disinflation Policy</b>	<ul style="list-style-type: none"> <li>- A temporary slowing of the pace of price inflation</li> <li>- Instances when the inflation rate has been reduced marginally over the short term</li> </ul>
<b>Rational Expectations Theory</b>	<ul style="list-style-type: none"> <li>- People make choices based on their rational outlook, available information and past experiences</li> <li>- Current expectations in an economy are equivalent to what people think the future state of the economy will become</li> <li>- Contrasts with the idea that government policy influences people's decisions</li> </ul>
<b>Hysteresis</b>	<ul style="list-style-type: none"> <li>- The notion that a disinflation policy conducted by a central bank leads to permanently higher rate of unemployment</li> </ul>
<b>NAIRU</b>	<ul style="list-style-type: none"> <li>- The non-accelerating inflation rate of unemployment</li> <li>- Also referred to as the long-run Phillips curve</li> <li>- The specific level of unemployment that is evident in an economy that does not cause inflation to rise up</li> <li>- Often represents equilibrium between the state of the economy and the labour market</li> </ul>
<b>Monetary Policy and Inflation Targets</b>	<ul style="list-style-type: none"> <li>- The comparative advantage of monetary policy lies in containing inflation rather than stimulating activity and employment</li> <li>- Affording central banks independence enhances the credibility of a monetary policy</li> <li>- An inflation target also gives policy more credibility to influence inflationary expectations and reduce adjustment costs</li> </ul>
<b>Social Cost of Disinflation</b>	<ul style="list-style-type: none"> <li>- The trade-off of the higher accumulated unemployment rate required to achieve the reduction in the inflation rate</li> <li>- Reflected by the slope along the expectations-augmented Phillips curve</li> </ul>
<b>Point-Year of Excess Unemployment</b>	<ul style="list-style-type: none"> <li>- Difference between the actual and natural unemployment rate of one percentage point for one year</li> </ul>
<b>Sacrifice Ratio</b>	<ul style="list-style-type: none"> <li>- Number of point-years of excess unemployment needed to achieve a decrease in inflation of 1%</li> </ul>
<b>Okun's Law</b>	<ul style="list-style-type: none"> <li>- The relationship between growth in output and changes in the unemployment rate over time</li> <li>- Shows the benchmark growth rate necessary to maintain a constant rate of unemployment</li> </ul>
<b>Interest-Rate Setting Monetary Policy</b>	<ul style="list-style-type: none"> <li>- The main policy instrument of central banks in the conduct of monetary policy is but the short-term interest rate for liquid funds</li> <li>- By altering the 'cash rate', the central bank can then directly affect the general level of interest rates</li> </ul>
<b>Nominal VS Real Interest Rates</b>	<ul style="list-style-type: none"> <li>- While central banks can directly influence nominal interest rates, the effectiveness of their monetary policy relies on them being able to influence real rates of interest</li> <li>- The real rate of interest is the return on a financial asset after discounting the nominal rate of interest by the expected inflation rate</li> <li>- Real rate measures purchasing power of the nominal return on a financial asset</li> </ul>
<b>Fisher Hypothesis</b>	<ul style="list-style-type: none"> <li>- In the long run, the nominal rate of interest will be influenced by, and tend to move in sympathy with the inflation rate</li> </ul>

## WEEKS 12 & 13 – TOPIC 8 (OPEN ECONOMY MACROECONOMICS)

CONCEPT	DEFINITION
<b>Openness of an Economy</b>	<ul style="list-style-type: none"> <li>- Openness in trade: Extent of free trade restrictions such as tariffs, quotas, subsidies</li> <li>- Openness in financial markets: Extent of capital controls on the external flow of portfolio capital and restrictions on foreign ownership of assets</li> <li>- Openness in factor markets: Ability of firms to choose where to locate productions, and workers to choose where they work</li> </ul>
<b>Australia's Openness to Trade</b>	<ul style="list-style-type: none"> <li>- Growth in exports and imports since 1900s</li> <li>- Main exports: Agricultural and mining commodities</li> <li>- Main imports: Manufactures</li> <li>- Australia is sensitive to world commodity prices</li> </ul>
<b>Tradable Goods</b>	<ul style="list-style-type: none"> <li>- Another measure of openness is the proportion of aggregate output which is composed of tradable goods</li> <li>- Goods that compete with foreign goods in either domestic/foreign markets</li> <li>- Larger economies → Large size of domestic markets → Greater diversity of goods produced → Larger proportion of tradable goods</li> </ul>
<b>Openness in Financial Markets</b>	<ul style="list-style-type: none"> <li>- The ability of portfolio capital to flow internationally across national jurisdictions</li> <li>- Capital flows involve the purchase and sale of foreign currency assets by domestic residents, and the purchase and sale of domestic assets by foreign residents</li> <li>- Allowed financial investors to diversify their portfolio internationally – to hold both domestic and foreign assets and speculate on foreign interest rate movements</li> <li>- Allows countries to run trade surpluses and deficits</li> </ul>
<b>Indicators of Financial Market Openness</b>	<ul style="list-style-type: none"> <li>- Most foreign-exchange transactions have little to do with trade, but involve purchases and sales of financial assets between dealers and brokers</li> <li>- E.g. The Australian foreign exchange market was the 7<sup>th</sup> largest in the world</li> <li>- E.g. The volume of transactions in foreign exchange markets has increase 4x since the early 2000s</li> </ul>
<b>Balance of Payments</b>	<ul style="list-style-type: none"> <li>- Current account surplus: Sum of net payments in the current account balance (+)</li> <li>- Current account deficit: Sum of net payments in the current account balance (–)</li> <li>- Capital account surplus: Foreign holdings of Australian assets &gt; Australian holdings of foreign assets</li> <li>- Capital account deficits: Foreign holdings of Australian assets &lt; Australian holdings of foreign assets</li> <li>- Current account surplus = Capital account deficit</li> <li>- Current account deficit = Capital account surplus</li> </ul>
<b>Real Exchange Rates</b>	<ul style="list-style-type: none"> <li>- The relative price of domestic products to foreign products expressed in a common currency</li> <li>- A nation's international competitiveness is measured by the real exchange rate</li> </ul>
<b>Bilateral and Multilateral Exchange Rates</b>	<ul style="list-style-type: none"> <li>- Bilateral: Exchange rates between 2 countries</li> <li>- Multilateral: Exchange rates between several trading countries</li> <li>- E.g. To measure the average price of Australian goods relative to the average price of goods of Australia's trading partners, we use the Australian share of import and export trade with each country as the weight for that country, or the multilateral real Australian exchange rate</li> </ul>
<b>International Portfolio Choice and Open Interest Parity</b>	<ul style="list-style-type: none"> <li>- E.g. Expected returns from holding one-year Australian or US bonds</li> <li>- If both US and Australian bonds are to be held and only expected returns matter, they must have the same expected rate of return, so the arbitrage relation must hold</li> </ul>
<b>Arbitrage and Open Interest Parity</b>	<ul style="list-style-type: none"> <li>- Arbitrage is the simultaneous purchase and sale of an asset to profit from an imbalance in the price</li> <li>- It is a trade that profits by exploiting the price differences of identical or similar financial instruments on different markets or in different forms</li> <li>- Based on the expectations hypothesis, open interest parity is established by arbitrage in the international financial markets</li> </ul>

<b>Open Interest Parity</b>	<ul style="list-style-type: none"> <li>- A systematic relationship between the interest rates of different currency designated assets, incorporating exchange rate expectations</li> <li>- Represents an equilibrium in the international financial market in which portfolio wealth holders are indifferent between holding domestic and foreign currency assets, based on their expectation of the future exchange rate</li> </ul>
<b>Mundell-Fleming Model: Perfect Portfolio Capital Mobility</b>	<ul style="list-style-type: none"> <li>- A major assumption of the Mundell-Fleming open economy IS-LM model is that there is perfect mobility of portfolio capital internationally</li> <li>- If there is any difference in expected rates of return on different currency-designated financial assets, an enormous volume of capital will flow from the relatively lower to the higher return asset</li> <li>- Perfect capital mobility: Flexible exchange rate is determined by capital flows explained by factors which determine relative expected returns between countries</li> <li>- For any country, an important factor will be monetary policy which sets rates of interest on domestic-currency assets in relation to given foreign rates</li> </ul>
<b>Monetary Policy and the Exchange Rate</b>	<ul style="list-style-type: none"> <li>- Domestic monetary policy contraction: Increases Australian interest rates → Increases demand for Australian bonds</li> <li>- Resulting net capital inflow causes the \$A to appreciate</li> <li>- Generates the expected larger depreciation (or smaller appreciation) of the \$A consistent with open interest parity</li> <li>- Foreign monetary policy contraction: Increases foreign interest rates → Increases demand for foreign bonds</li> <li>- Resulting net capital outflow causes the \$A to depreciate</li> <li>- Generates the expected larger appreciation (or smaller depreciation) of the \$A consistent with open interest parity</li> <li>- If the market's expectation of the future value of the \$A increases (decreases), this will increase (decrease) the demand for Australian bonds and the \$A appreciates (depreciates) immediately</li> </ul>
<b>Marshall-Lerner Condition</b>	<ul style="list-style-type: none"> <li>- Assumption of the M-F model is that a depreciation (appreciation) in the nominal exchange rate, leads to an increase (decrease) in net exports in the short run</li> <li>- This assumption relies on the Marshall-Lerner condition operating in the short run</li> <li>- M-L condition: The sum of the price elasticity of demand for exports and the price elasticity of demand for imports is greater than 1</li> <li>- <math>\downarrow \epsilon = \uparrow NX_0</math></li> </ul>
<b>Mundell-Fleming IS-LM Model: Flexible Exchange Rate</b>	<ul style="list-style-type: none"> <li>- Since the exchange rate is determined by portfolio capital flows, monetary policy, by affecting the interest rate has:</li> <li>- A direct effect on domestic expenditure in the economy, given by <math>A(i)</math></li> <li>- An indirect effect through the exchange rate on net exports, <math>N X_0(E)</math></li> </ul>
<b>Fixed Exchange Rate Regime</b>	<ul style="list-style-type: none"> <li>- The central bank fixes or pegs the exchange rate</li> <li>- E.g. Some countries peg their exchange rate to the US dollar / major currencies / basket of currencies with the weights reflecting the composition of their trade</li> <li>- With a fixed exchange rate, policymakers lose a measure of control over their internal monetary conditions are monetary policy</li> <li>- Under conditions of perfect capital flow, the interest rate is fixed to, and determined by the rate set by the dominant country</li> </ul>
<b>External Balance Effects on Monetary Conditions with a Fixed Exchange Rate</b>	<ul style="list-style-type: none"> <li>- Excess demand for FX (= Excess supply of \$A)</li> <li>- Balance of payments deficit</li> <li>- Rundown of FX reserves</li> <li>- Reduction in liquid reserves and money supply</li> <li>- Tends to raise interest rates (via monetary policy)</li> <li>- Excess supply of FX (= Excess demand for \$A)</li> <li>- Balance of payments surplus</li> <li>- Accumulation of FX reserves</li> <li>- Increase in liquid reserves and money supply</li> <li>- Tends to lower interest rates (via monetary policy)</li> </ul>

<b>Fixed Exchange Rates</b>	<ul style="list-style-type: none"> <li>- Fixed exchange rates are only viable when there are controls on capital flows, especially short-term capital movements, which also gives some independence to monetary policy</li> <li>- Any monetary policy independence depends on a country running external surpluses with large FX reserves</li> <li>- Without such regulatory controls, short-term capital flows can destabilise the exchange rate by affecting liquidity through speculative activity, upsetting the conduct of monetary policy</li> <li>- As shown in M-F model with perfect capital mobility, a country has no monetary policy independence (i.e. open interest parity) under a fixed exchange rate. This also constrains fiscal policy</li> <li>- Open capital markets are not compatible with fixed rates and provides the main reason why floating rates have been adopted</li> </ul>
<b>Optimal Currency Areas</b>	<ul style="list-style-type: none"> <li>- The conception of an optimal area for a common currency has been largely based on two conditions being satisfied: <ul style="list-style-type: none"> <li>– The countries experience similar shocks; thus, can choose roughly the same monetary policy</li> <li>– Countries have high factor mobility, which help countries to adjust to shocks</li> </ul> </li> <li>- E.g. A Shock to the US economy</li> <li>- Capital and labour emigrates to other regions where there is growth</li> <li>- Another condition overlooked, but exposed by the Euro-zone crisis, is that there needs to be (1) a fiscal system of transferring income between regions to assist structural adjustment; (2) a central government agency administering fiscal policy to generate domestic demand growth; and (3) monetary policy which can support fiscal policy, especially when an event or shock causes public debt to explode</li> </ul>
<b>The Euro-Zone</b>	<ul style="list-style-type: none"> <li>- The major benefit of a common Euro currency is the lower transaction costs of trade, especially for trade between members of the Euro-zone</li> <li>- While there is capital mobility in the Euro-zone there is certainly not labour mobility other than for highly skilled workers</li> <li>- Moreover, given the considerable economic diversity of the Euro-zone, it is not clear that sharing the same monetary policy is ideal, especially if it also constrains member nation's fiscal policy options</li> <li>- The ongoing Euro-zone 'sovereign debt' crisis shows: <ul style="list-style-type: none"> <li>– It is necessary to have an internal fiscal transfer system within the currency area to deal with its intra-country imbalances</li> <li>– If government debt is not 'common' then there can be difficulties with monetary policy supporting fiscal policy in crises</li> <li>– Coordination of national fiscal policy or institutionalize a common policy</li> </ul> </li> </ul>