Macroeconomic Aims and Issues: CT1 Notes

Economic Growth

- Requires rightward shifts of both AS and AD curves

Actual Growth

- Increase in national output actually produced, measured by % increase of GDP
- Rightward shift of AD = increase in real NY more than proportionately with multiplier effect
- Movement of a point towards the PPC curve (more capital and consumer goods produced)
- Increase in AS due to decreased COP = downward shift of AS = increase in real NY

Potential Growth

- Increase in productive capacity of the economy
- Due to increase in quantity/quality of resources, improvement in technology -> increased efficiency with which these resources are used
- Shift of AS to the right OR outward shift of the PPC (full employment level of NY increases)

Consequences of Economic Growth:

Benefits:

- Higher Current and Future SOL
    - When real GDP increases assuming population size is constant, more final goods and services are produced and made available for consumption (mSOL improves)
    - As NY increases, savings increases and MPS will increase -> increased supply of loanable funds causing interest rates to fall = greater incentive for firms to invest and allow potential capacity of economy to increase -> potential growth achieves higher future/current SOL
    - Higher income = affordable better healthcare and increase life expectancy = non-mSOL
- Easier to redistribute income and help the poor
    - Rise in NY generates increases in tax revenues and assuming progressive taxation, workers fall into higher income tax brackets = redistribute to poor through transfer payments to alleviate poverty and reduce income disparity
- Decreased demand deficient unemployment
    - More goods and services demanded = greater derived demand for labour = reduce cyclical unemployment = reduce social problems (crime and alienation)

Costs:

- Inequality of Income Distribution
    - Rich benefit more from economic growth since savings enable capital accumulation = rewards and dividends of increased prosperity not shared fairly = adverse impact on well-being and health + reduce social cohesion + increase inequality of opportunity
- Environmental Costs
    - Growth creates artificial needs and consumers buy things which they have no intrinsic need for
    - Fancy packaging and throw away society syndrome = waste that threatens ecological system
    - Finite quantity of resources are rapidly depleted + traffic congestion + lead poisoning
- Overheating Economy (Demand Pull Inflation)
    - AD rises excessively as economy approaches full employment = inflationary pressures

Causes of Weak/Negative Economic Growth

Demand Factors:

- Explanation
    - Rate of increase of AD interrelated with rate of economic growth
    - AD must keep pace with AS to absorb extra goods produced if not inputs will lie idle
    - Factors that affect AD components and hence level of AD must be considered
- Low Rate of Investment
    - Lack of investor confidence dependent on expectations

    - High interest rates (invest only if expected rate of return > interest rate)
    - Lack of available investment funds to expand capital stock (rise in ratio of capital to labour = capital deepening which increases productivity of labour): growth slows when higher proportion of resources devoted to produce consumer goods over capital goods
    - Need for high savings rate to fund investment if FDI unavailable BUT
        - Undeveloped country: low income = needs not satisfied = consumption of necessities = low savings rate = low rate of investment
        - Developed country: decreased interest rate OR erosion in virtue of saving OR ease of obtaining unsecured credit OR increased levels of social security OR high income tax = low savings rate = low rate of investment
- <u>External Shocks</u>
    - Global recession = fall in exports = decreasing AD = slow rate of growth as firms cut production and reduce hiring of FOP such as labour
- <u>Political Situation</u>
    - Proper law enforcement lowers business cost + reduce uncertainty from loss of property = encourage savings and investment from locals and foreigners
    - Corruption can also hinder economic growth as politicians siphon away benefits

Supply Factors:

- <u>Lack of Natural Resources</u>
    - Natural resources limit how much economies can grow
    - BUT entrepreneurship, skilled labour and capital needed to exploit available resources
- <u>Lack of Labour/Human Capital</u>
    - Human capital: knowledge and skills workers acquire through education, training, experience
    - Human capital increases ability to produce G&S = more productivity = quality of labour force
    - Short Run: education and training reduces labour force but LR: labour productivity enhanced
- <u>Lack of technological advancement</u>
    - This involves discovery of new knowledge through R&D to increase output
    - Cuts the average cost of production + opens up new investment opportunities
    - BUT rates of growth depends on success of R&D (which also has high costs)

Consequences of Weak Economic Growth

- Unemployment and Lost Output
    - Firms produce less (recession is a decline in real GDP) = employ fewer workers = lose real goods and services otherwise produced + demand deficient unemployment
- Lower Savings and Consumption
    - Households consume less if not working + negative level of savings (spend more than they make)
    - Decreased consumption and investment (decreased funds due to low savings rate)
- Lower Investment and Long Term Growth
    - Low investor confidence = fall in investment = lost output in future

<u>Inflation</u>

Introduction:

- Definition: sustained increase in GPL over time (% change in CPI)
- If on average prices are rising then inflation occurs (even if prices of some goods are falling)
- Mild – Galloping – Hyper Inflation (from good to disturbing levels of inflation)
- Disinflation = falling level of inflation (slower price increase)
- Deflation = falling prices OR negative inflation
- Stagflation: rising prices coupled with no/negligible GDP growth
- Anticipated Inflation: can accurate predict inflation + protect themselves (workers ask for more wages, households demand higher nominal interest rates for savings)

- Unanticipated Inflation: hard to predict inflation rate, make errors in forecast = ill effects

Causes of Inflation

Demand Pull Inflation:

- Persistent rises in aggregate demand + booming economy
- Keynesian: increased AD due to increase in consumer expenditure/investment/gov. expenditure
- Monetarists: due to increase in money supply = spending of surplus money = increase AD
- Increase in prices due to AD depends on level of spare capacity
- When economy approaches full employment = resources become scarce = competition for resources cause firms to bid up factor prices = higher inflationary pressure

Cost Push Inflation

- Rising production costs during periods of low unemployment = upward shift of AS
- GPL rises = spending falls due to wealth, interest rate, international substitution effects

Forms of Cost Push Inflation

- Wage Push Inflation
  - Increased wages = increased COP = shift AS upwards = shortage at prevailing price = pass on higher COP to consumers due to higher prices
  - Powerful trade unions can obtain wage increases > increase in labour productivity (claim that economy is at full employment + skill shortage) = much higher COP and prices
- Increase in FOP prices
- Import Induced Inflation
  - Supply shortage of imported raw materials/finished products OR weaker value of currency = higher import prices = increase cost of producing G&S = AS shifts upwards
- Profit Push Inflation
  - Employers with market power push higher costs to consumers by raising prices to seize opportunity of increasing profit margins (especially when demand is price inelastic where price increase leads to less than proportionate fall in quantity demanded)
- Tax Push Inflation
  - Increase GST = increase in factor prices = increase in COP = fall in AS
- Structural Inflation
  - Due to immobility of labour, general supply is not responsive to general demand SINCE certain FOP are not available = slow movement of resources into expanding sectors

Inflationary Spirals

- Demand pull and cost push occurs together
- Initial cost push = Government expands AD to offset increase in unemployment = further increase in GPL but with decreased unemployment

Benefits of Low and Stable Inflation

- Promotes actual economic growth
  - Households expect prices to rise slowly = incentive to buy now = autonomous C + increased AD
  - Firms expect sales to rise = increase level of investment = increased AD
  - + MULTIPLIER effect = actual growth + fall in demand deficient unemployment
- Promotes investment – potential economic growth
  - Households certain about value of savings = more savings = increase supply of loanable funds = fall in interest rate = increased investment from MEI Theory
  - Increased investor confidence (can better calculate profitability of investments)
  - Greater rightward shift in AS = potential growth
- International competitiveness and improved BOP
  - Low domestic inflation relative to other countries = more price competitive exports = export revenue rises (assuming demand for exports is price elastic)
  - Households switch to domestically produced import substitutes = fall in import expenditure

- Economic agents can protect themselves
  - Banks can vary nominal interest rate while savers can put funds in financial instruments offering nominal interest rate equal to expected inflation rate
  - Workers can negotiate for automatic wage hikes as GPL increases = purchasing power maintain

Costs of High and Unstable Inflation

- Fall in SOL
  - Lowered purchasing power of money = fall in ability to buy G&S = deteriorate mSOL
  - Households may hoard consumer goods since prices are expected to rise = rightward shift of AD = aggravate existing inflationary pressures
- Hindering economic growth by uncertainty
  - Inflation increases COP and creates uncertainty = firms less willing to take risks associated with investment = investment falls
  - If inflation is cost push = COP will rise + loss of investor confidence = less foreign investment
  - Increase in interest rate = cut back on consumer spending = fall in AD = slower growth
  - Since purchasing power deteriorates, consumers save less which fund future investment = interest rate will increase = more costly to borrow = investment falls = slower PG
  - Consumers engage in speculative activity = fuel unsustainable increase in prices = bubble
  - Businesses hoard materials and finished products = intensify inflationary pressure
- Deteriorating BOP and currency depreciation
  - Domestic inflation > inflation in other countries = worsen export competitiveness = fall in export revenue assuming exports are price elastic
  - Imports are relatively cheaper than domestic substitutes = increase import expenditure
  - Fall in exports = fall in demand for currency + greater demand for foreign currency due to increased imports = depreciation
- Misallocation of Resources
  - Difficult to distinguish between changes in the price of an item vs changes in GPL
  - Producer could mistake rise in GPL for rise in the price of its product = devote more resources = misallocation and lead to slower growth of economy
- Worsening Income Distribution
  - Fixed Income Earners (pensioners) vs Variable Income Earners (producers and businessmen)
  - Strong Trade Union vs Weak Trade Union (hurt more by inflation)
  - Debtors vs Creditors (disadvantaged)
  - Holders of financial assets (fluctuate with GPL) vs real assets (homes/gold)
- Shoe Leather and Menu Costs
  - Shoe-leather cost: opportunity cost of time and effort wasted as people counteract inflation by minimizing their holdings of cash (frequent trip to banks/ATM)
  - Menu cost: resources used in revision and reprinting of price lists = increased COP = AS shifts upwards = aggravate cost push inflation
- Wage Price Spiral
  - Firms raise prices to cover costs + workers demand pay increases
  - People do not save money + may even resort to barter

Deflation

Causes

- Fall in AD (fall in domestic consumption or fall in foreign demand for exports)

Consequences

- Holding back on consumption spending as prices expected to fall further
- Lower profit margins for businesses = more cyclical unemployment = fall in potential growth
- Real burden of debts increase: decreased consumer confidence and less willing to spend
- Real cost of borrowing increases = real interest rates rise if nominal interest rates remain the same

Unemployment:

Introduction:

- Definition: people who are available for work and active seeking work but cannot find jobs
- Full employment: level of employment resulting from the efficient use of labour force after allowance is made for the natural rate of unemployment due to imperfect information, dynamic changes and structural conditions of the economy

Causes of Unemployment:

- Frictional Unemployment
  - Workers search for suitable jobs and firms for suitable worker (due to imperfect information)
  - Jobs are constantly created and destroyed, workers continually enter and leave the workforce
- Structural Unemployment
    - Change in economic structure results in occupational immobility of labour
    - Geographical immobility of labour (people are unable and unwilling to move)
  - Changes in Demand
    - Long term demand falls due to change in taste, invention of substitutes, cheaper imports = decrease in production = fall in demand of labour
    - Retrenched workers cannot find work although vacancies exist due to mismatch in skills
  - Changes in Supply
    - Exhaustion of mineral deposits and high wage costs
- Demand-deficient Unemployment
  - Due to economic recession (fall in AD and GDP) = unable to sell output = cut back on production = cut back on derived demand of labour = unemployment
- Seasonal Unemployment
  - Seasonal fluctuations in business activity (agriculture and tourism)

Consequences of Unemployment:

- Output Loss to Economy
  - Waste of scarce resources = loss of potential output for the economy
  - Producing on a point within the PPC
  - Persistent recession = unemployed may be deskilled and demoralized = hysteresis (unemployment even when demand deficiency no longer exists) = reduced productive capacity
- Negative Impact on Government Budget
  - Unemployed do not pay income tax = loss of tax revenue
  - Higher expenditure on unemployment benefits in welfare system = cost to society
- Increase in Social Problems
  - Higher incidence of deviant behaviour (theft, alcoholism, drug abuse, suicides)
  - Reduces ability to save for retirement + lose motivation to seek jobs = fall in mSOL
  - Exacerbation of income inequality = polarization between rich and poor

Balance of Payments

Causes of Current Account Deficit

- Cyclical Factors
  - Fall in national income of trading partners
    - Loss in income and consumer confidence of trading partner = decreased demand for exports assuming positive YED value (normal goods) = export revenue < import expenditure = deficit
  - Rise in prices of goods and services in Singapore
    - Rise in prices of our goods = exports relatively more expensive = fall in export quantity (assume demand price elastic with available substitutes)

        - Imports are relatively cheaper = import expenditure rises = possible deficit
- Structural Factors
    - Demand for exports/imports change due to shifts in comparative advantage, change in taste and preferences, distribution of income, availability of competitive goods, change in technology
    - Slow to adapt to changes = deficit if country cannot reallocate resources
- Exchange Rate
    - Appreciation of exchange rate = exports are more expensive = fall in export revenue
    - Imports are relatively cheaper = increased import expenditure
    - Extent of change depends on PEDx and PEDm (if PEDx + PEDm > 1, even if each is less than one, an appreciation will worsen the value of net exports)
- Government Policies
    - Increased protectionism by trade partners
    - Industrialization/economic development = require capital goods which are imported = deficit
- Terms of Trade
    - Rate at which country exchanges exports for imports (ratio of price exports: price imports)
- Random Factors (war or natural disaster that destroys infrastructure)

Causes of Capital + Financial Account Deficit

- Expected Rate of Return
    - If expected rate of return falls relative to other countries = fall in profitability of investments = more capital outflow + less capital inflow through FDI = net outflow of FDI
- Relative Interest Rates
    - Fall in domestic interest rate = short term capital outflow = deficit in financial account
    - Speculators withdraw money from country and deposit in other countries (better returns)
- Expected Movement in Exchange Rate
    - Expectation of depreciation = destabilizing speculation and capital flight (by purchasing foreign currency with domestic currency) = net capital outflow
- Exchange Control Regulations
    - Remove restriction on amount of currency flowing overseas = outflow of capital as investors diversify and invest overseas = deficit

Effects of Exchange Rate System on BOP Position

- Freely Floating Exchange Rate (forces of demand and supply/no intervention)
    - BOP surplus or deficit automatically eliminated by adjusting exchange rate = temporary only
    - Credit = demand (inflow) and debit = supply (outflow)
    - Exchange rate: demand for currency = supply
- Fixed Exchange Rate (intervention)
    - Keep exchange rate fixed above free market = buy domestic currency, sell foreign currency
    - BOP deficit = exchange rate is above free market equilibrium = sell foreign currency = fall in national reserves = reduced ability to ward off speculative attack + impeded economic growth
    - BOP surplus = exchange rate below market equilibrium = increase foreign reserves = greater confidence in in economy to ward off speculative attacks BUT prompt retaliation (protectionism)

Consequences of Persistent BOP Deficit

Current Account

- Increased External Debt -> Loan Repayment Problem
    - In fixed exchange rate, BOP deficit financed through sale of paper/physical assets OR borrowing from IMF = incurred external debt = increasing share of domestic income paid to service debt
    - Lesser funds available for domestic C and I + might default on loan (affect confidence levels)
- Fall in National Output and Employment

- Fall in net export revenue = reduce AD = more than proportionate fall in NY = hire less FOP such as labour = increase cyclical unemployment
- Dampen demand pull inflationary pressure
    - Reduced level of AD = dampen demand pull inflation = ensure price stability

Capital/Financial Account

- Persistent deficit caused by redirection of investment away from domestic economy = fall in employment of workers = adversely affect potential growth

Consequences of Persistent BOP Surplus

Current

- Economic growth, employment opportunities, SOL
    - Net export revenue increases AD + assuming below full employment = more than proportionate increase in real NY via multiplier effect = actual growth and less cyclical unemployment
- Inflation
    - If economy is at/near full employment (lack of spare capacity) = demand pull inflation
- Retaliation
    - Deficit countries resort to import controls = detrimental to world trade
- Dutch Disease Effect
    - Increase in revenues from export of resources = BOP surplus = appreciation of currency under floating exchange rate = exports are more expensive = manufacturing sector less competitive

Capital/Financial

- FDI increased AD and creates actual growth + creates jobs to reduce unemployment
- Beneficial in the long run (due to better quality capital goods) = enhance productive capacity = PG