

The Circular Flow of Income: AS Derivation

Firm's Instructions and Record Sheet

1. All players operate as either a firm or a household operating in the circular flow of income in an economy. You are playing the role of a firm. Black chips represent factors of production (such as labour), red chips represent money, and white chips represent output (or goods and services). **Each firm starts the first round with 1 red chip only.** Each household starts each round with 3 black chips. Firms use red chip money to purchase labour from households. They then convert their resources (black chips) into output (white chips) and households use their newly accrued money (red chips) to purchase them.
2. In each round, there will be a series of stages. The first stage allows the labour market to operate, whilst the second stage allows the operation of the goods market.

Stage 1 – the labour market: Firms and households negotiate in the trading pit, determining wage rates and the quantity of labour bought and sold. Workers must determine the number of hours they wish to work (the opportunity cost of which is lost leisure time). The market is competitive, and workers can choose which employer they wish to work for.

Stage 2 – manufacturing: Firms convert labour into goods. Each black chip of labour is converted into 4 white chips of goods. Firms should now record on the table below the number of white chips they have manufactured. Households enjoy some utility for black chips they have not sold (i.e. leisure time) and will get 1 white chip for every black chip retained.

Stage 3 – the goods market: Firms and households negotiate in the trading pit, determining quantity of goods bought and sold. The market is competitive, and workers can choose which firm they wish to buy from. At the end of trading, households should record in the table below how many white chips they have.

Record the Equilibrium price level.

Stage 4 – resetting the game. The black chips are reset as per the original levels. The red chips carry over to the next round. **In every additional round, the economy will now receive an injection (say Investment) of one red chip per firm. This represents AD shifting to the R. Plot the effect of shifting AD on the price level on the economy (should derive AS!)**

3. The objective of the game is to manufacture as many white chips as possible through the game. Red chips (money) will have no value when the simulation ends, i.e. you can't eat your money!

Round no.	1 Wage (Red chips for each black)	2 Quantity of black chips bought	TOTAL WHITE CHIPS MANUFACTURED	3 Price (Red chips for each white)	4 Quantity of white chips sold
1					
2					
3					
4					
5					
6					
7					
8					
	Total number of white chips manufactured in all periods				