National Income

The money value of all goods and services in a country by the participation in the production process in a country in a particular year. is known as National Income (NI).

GNP => The money value of all goods and services by nationals of a country by the participation in the production process in a year.

GDP => The money value of goods and services in a geographical boundary of a country by the participation in the production process in a year.

In a closed economy,

GNP = GDP

In a open economy,

$$GNP = GDP + (X - M)$$

So, $(X - M) > 0$

then $GNP > GDP$

when $(X - M) < 0$

$\Rightarrow$ $GNP < GDP$

The national income identity $\Rightarrow$

$$C + I + G + (X - M) = Y$$

$$C + S + T + Rf = Y.$$

Therefore, we can write,

$$C + I + G + (X - M) \equiv Y \equiv C + S + T +$$

where,

C $\Rightarrow$ Agg. Consumption expenditure

I $\Rightarrow$ Investment expenditure

G $\Rightarrow$ Govt. expenditure

S $\Rightarrow$ Saving expenditure

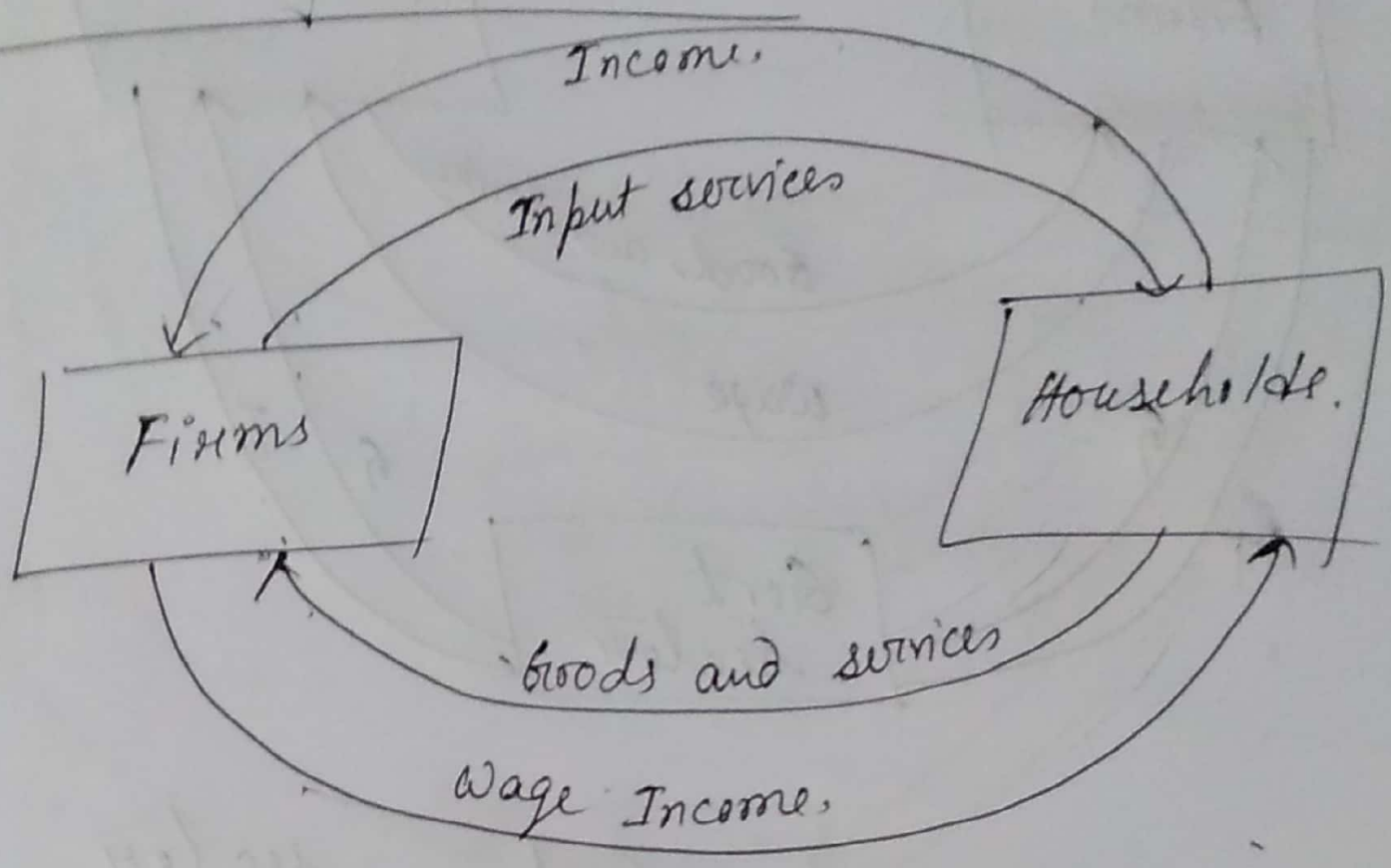
T $\Rightarrow$ Tax

X → Export

M → Import

Rf → Net foreign transfer from abroad.

In a closed economy



This is circular flow of income when there is no govt sector and external sector.

$$Y = C + I$$

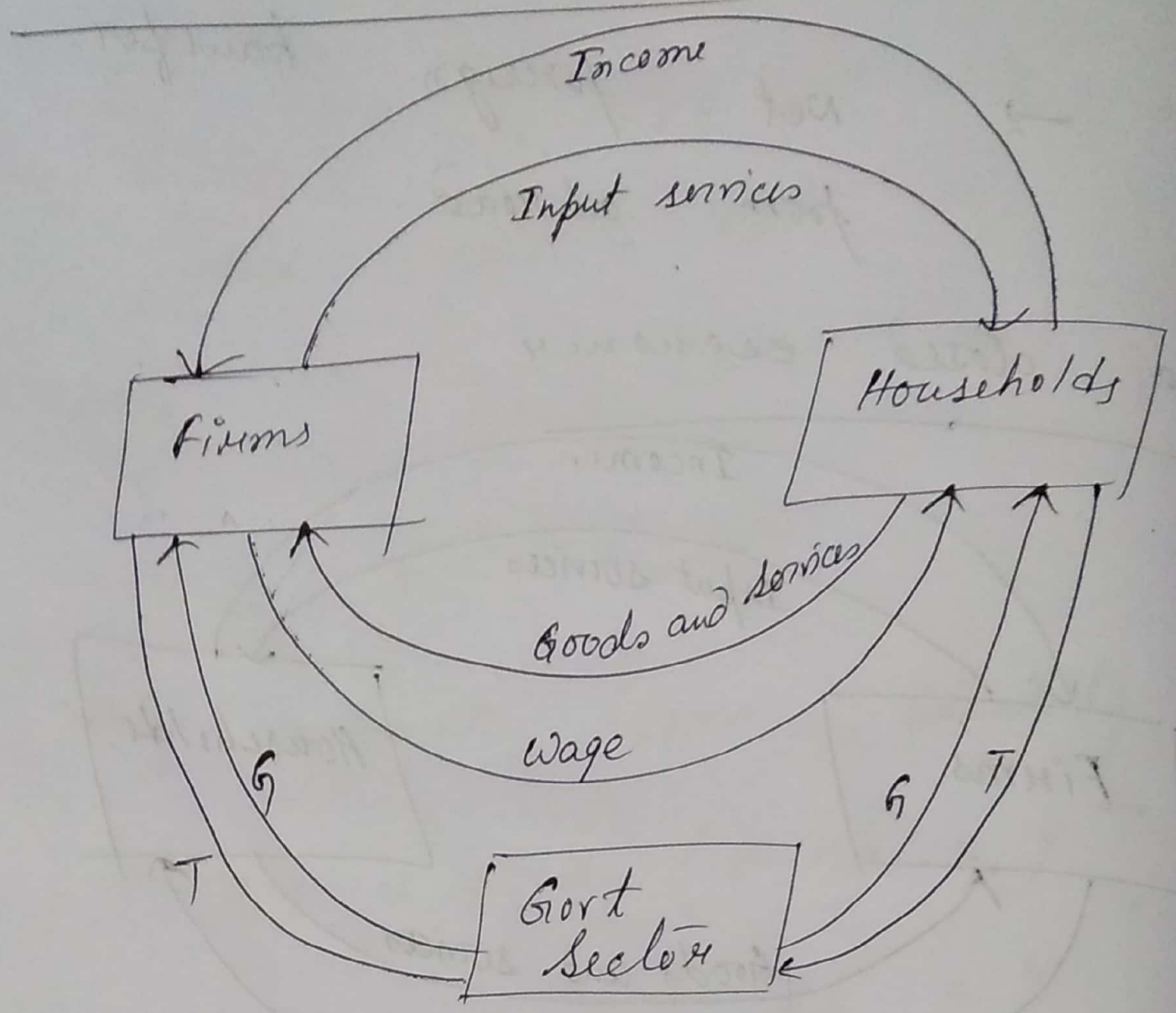
$$Y = C + S.$$

The equilibrium condition is,

$$C + I \equiv Y \equiv C + S$$

$$\Rightarrow \boxed{I = S}$$

Circular flow model with Govt sector



When there is Govt sector,

$$Y = C + I + G$$

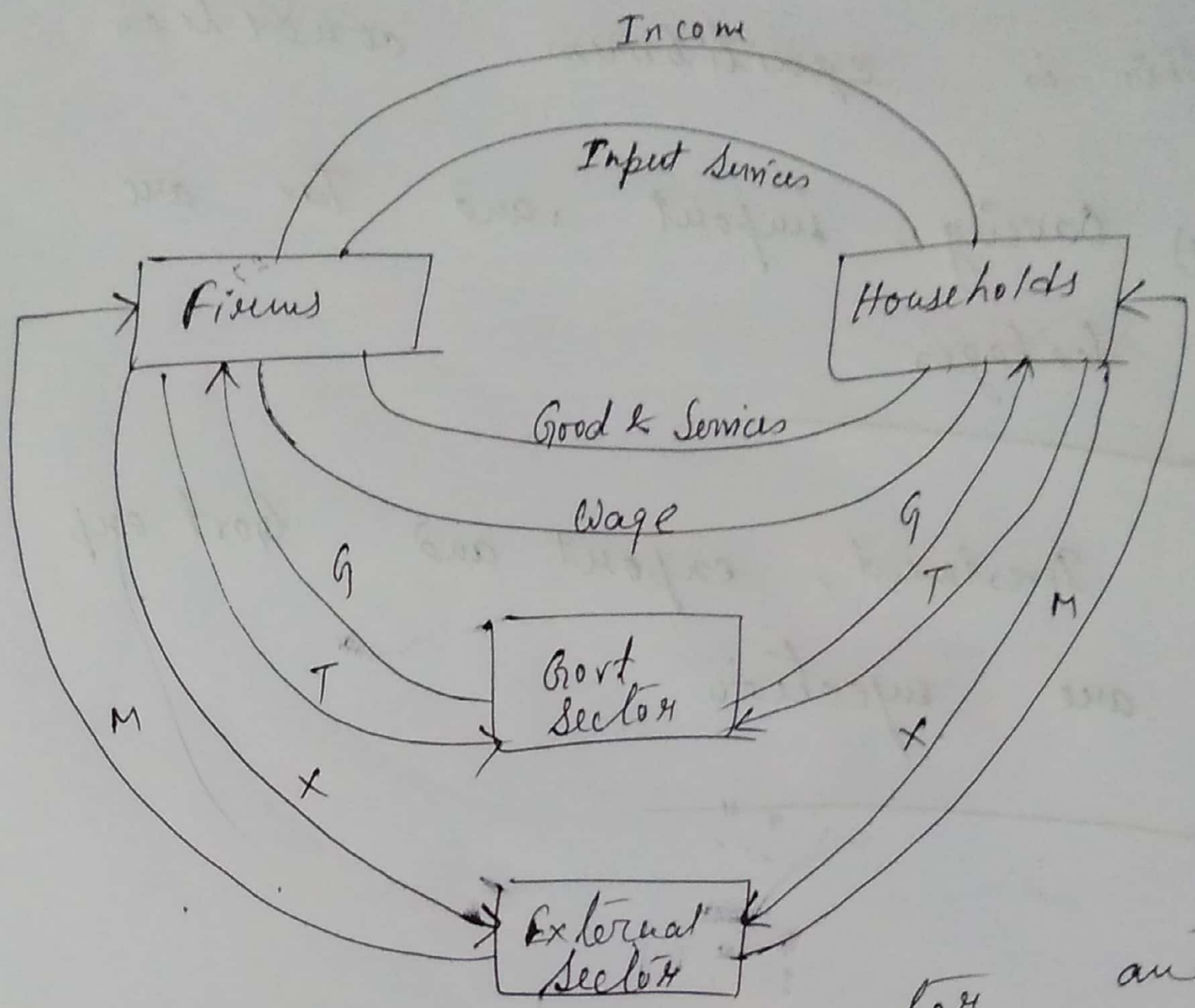
$$Y = C + S + T$$

$$\therefore \quad C + I + G = Y = C + S + T$$

$$\Rightarrow \quad I + G = S + T$$

$$\Rightarrow \quad \boxed{I = S} \quad \text{if} \quad G = T.$$

Circular flow model with Govt sector and external sector.



When there is Govt sector and external sector,

$$Y = C + I + G + (X - M)$$

$$Y = C + S + T + Rf$$

when $X - M = 0$ ✓

$Rf = 0$ ✓

$G = T$ ✓

Then

$$S = I$$

This is equilibrium condition

(1) Saving, import, and Tax are leakages.

(2) Investment, export and Govt exp are injection