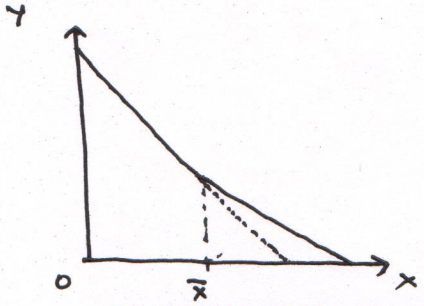
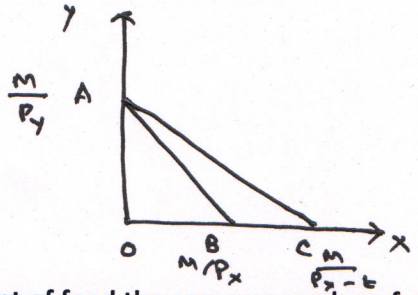
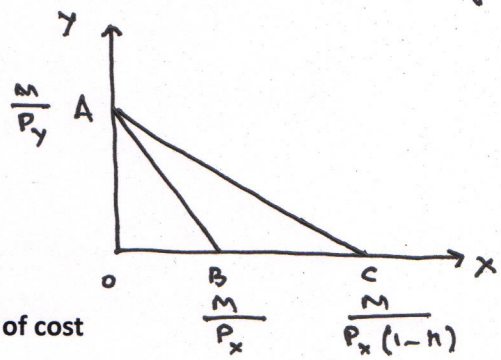
Kinked budget line



Unit Subsidy



Ad-valorem Subsidy

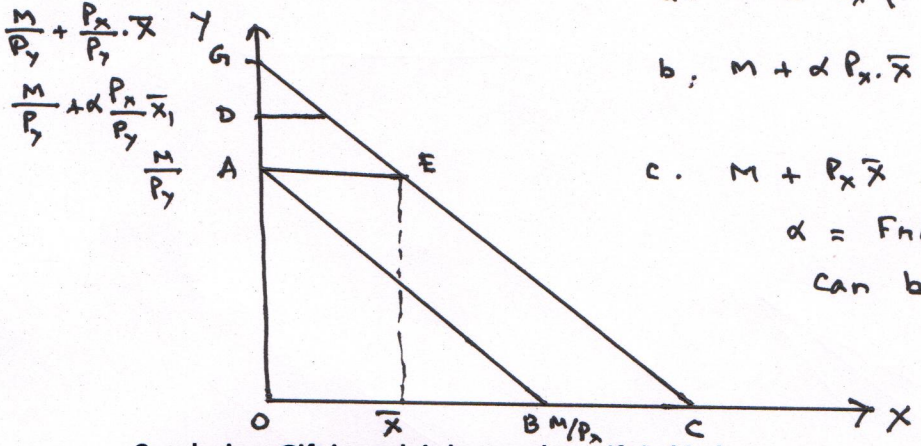


Food coupons(X) is the amount of food the cosumer can buy, free of cost

a.No part of food coupons can be sold

b.Fraction of food coupon can be sold

c.Entire Food coupon can be sold



$\bar{x}$ = Amount of food that can be purchased by food coupons.

a. $M = P_x(x - \bar{x}) + P_y.Y.$

b. $M + \alpha P_x.\bar{x} = P_x\{x - (1-\alpha)\} + P_y Y.$

c. $M + P_x\bar{x} = P_x x + P_y.Y.$

α = Fraction of food coupon that can be sold.

Conclusion: Gift in cash is better than gift in kind.

Consumer choice.The commoditiy bundles that will be chosen ,will depend on consumer's subjective preference over different bundles .preference depends only on bundles selected and not on absolute prices and income. Consumer can rank the commodity bundles according to preference.

Strict preference , Indifference and weak preference. The relations are themselves related.

$(x_1, x_2) \succ (y_1, y_2)$ ..... Strictly preference.

$(x_1, x_2) \sim (y_1, y_2)$ ..... Indifference.

$(x_1, x_2) \succeq (y_1, y_2)$ ..... weakly preferd.

1) If $(x_1, x_2) \succeq (y_1, y_2)$ and $(y_1, y_2) \succeq (x_1, x_2) \Rightarrow (x_1, x_2) \sim (y_1, y_2)$

2) If $(x_1, x_2) \succeq (y_1, y_2)$ but $(x_1, x_2) \sim (y_1, y_2)$ is not the case.
$\Rightarrow (x_1, x_2) \succ (y_1, y_2)$

3) If $(x_1, x_2) \succeq (y_1, y_2)$ and $(x_1, x_2) \succ (y_1, y_2)$ is not the case
$\Rightarrow (x_1, x_2) \sim (y_1, y_2)$.