

Econ 3012

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Part I

Budget (2.1-2.7)

1 Bundles

Bundle: $x = (x_1, x_2)$

Example: *Ice Cream Bowls*. x_1 is the amount of vanilla. x_2 is the amount of chocolate.

(1, 1) one scoop of each flavor.

(2, 2) two scoops of each flavor.

(0.28, 100) a lot of chocolate and a little vanilla.

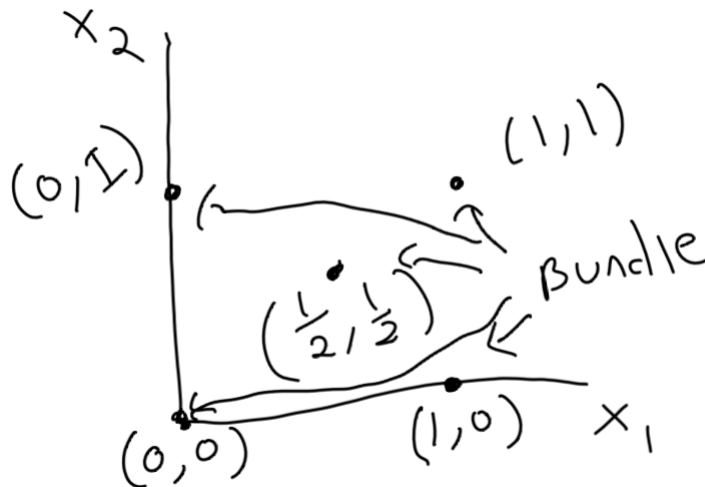


Figure 1: Bundles on Cartesian Plane.

2 Feasible Set

The Feasible Set: X is the “feasible” set of bundles.

The feasible set is the universe of bundles that might be relevant in a model.

The feasible set defines the scope of a model.

3 Budget Set

Budget Set: B

The budget set is the set of bundles *available* to a particular consumer.

The budget set must be a subset of the feasible set. In set notation: $B \subseteq X$

3.1 Budget Sets from Prices and Income

Prices: p_1, p_2 : Price of good 1 and price of good 2.

Cost of a bundle: $p_1x_1 + p_2x_2$.

Income: m .

Budget set: $B : \mathbf{x} \in X \text{ s.t. } x_1p_1 + x_2p_2 \leq m$

In non-math language, this says the budget set is the set of bundles such that the price of the bundle is less than income.

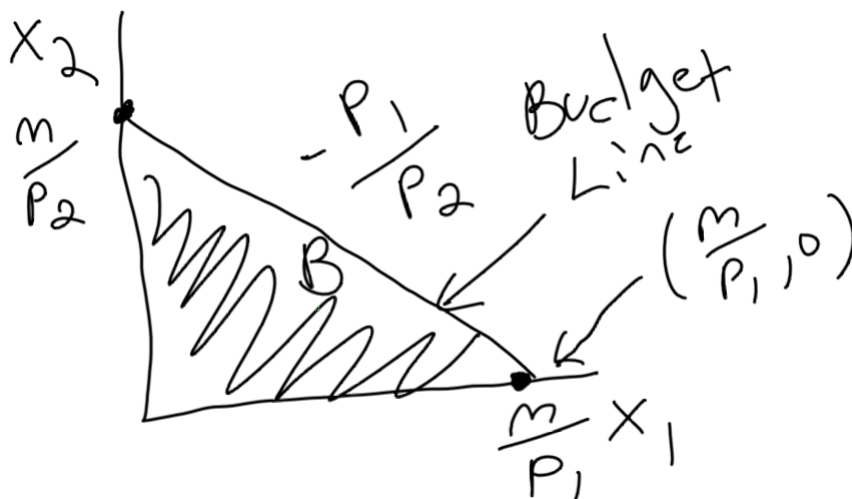


Figure 2: Graphical Representation of the Budget Set

