ECON 3012

GREG LEO

Part 1. 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.

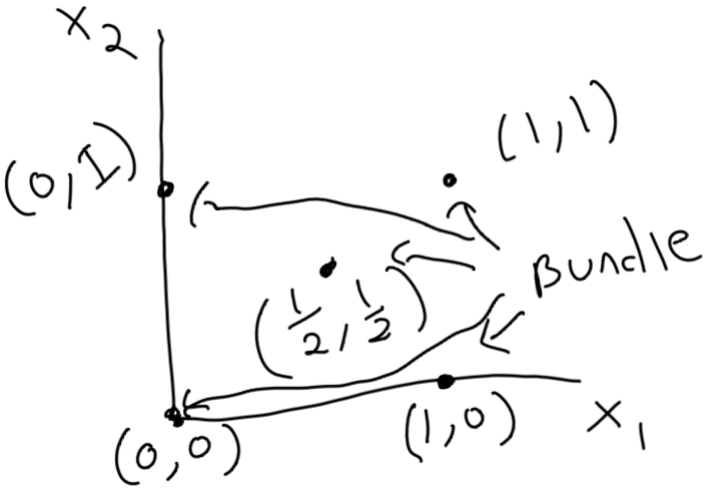

FIGURE 1.1. Bundles on Cartesian Plane.

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: $B = \{x | x \in X \,\&\, x_1p_1 + x_2p_2 \leq m\}$.

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.

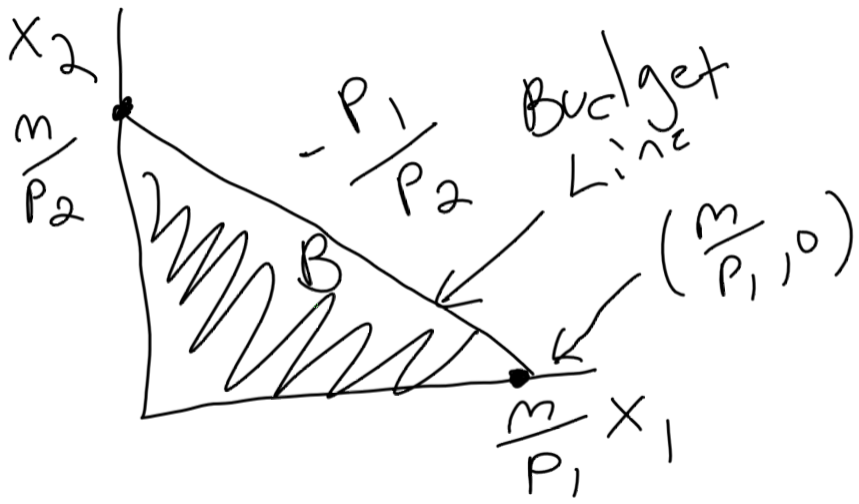

Figure 3.1. Graphical Representation of the Budget Set