УДК 330.567.28=111 Stud. A.S. Ovchinnikova
Scientific supervisor lecturer, A.A. Sanko (Department of ICC&TT (Intercultural Communication and Technical Translation, BSTU)

THE MODEL OF BUDGET CONSTRAINT. BUDGET LINE

The purpose of the article is to highlight the features of the budget line and its properties. The object of study is budget line.

Budget constrain is the restriction in the selection of the consumer from a combination of two products, determined by the income of the consumer as well as the price of the goods. The budget constrain can be presented as s graph that looks like straight line.

This is called the budget line graph.

A – the first good

B – the second good

Each point of the budget line is a combination of two products (goods) that the consumer can purchase for a limited budget. The set of all possible combinations of the two commodities a consumer can afford to buy with his given income and price in the market is known as a budget set. The two major properties of a Budget Line are as follows:

Budget Line slopes Downward: The slope of a budget line is negative. It means that as more of one good is bought by reducing some units of the other good, the slope of the budget line goes downwards.

Budget Line is a Straight Line: We know that the slope of the Budget Line is represented by the Price Ratio, which is constant throughout; therefore, the Budget Line is a straight line.

This equation shows the property of the budget line:

$$P_A Q_A + P_B Q_B = R$$, R – consumer budget

Price ratio of two goods shows the inclination of the budget line. The Slope of a Budget Line is denoted by the Market Rate of Exchange or MRE. Market Rate of Exchange is the rate at which one good is sacrificed in the market in order to obtain one additional unit of other good. Also, the slope of a budget line or MRE is equal to the Price Ratio of two goods. A shift in the budget line can occur for two reasons: a change in consumer income or a change in the prices of goods. When the consumer's income increases, for example, by 2 times, the line on the graph will change its position relative to the origin of coordinates, but the slope will remain the same. The same thing happens when the buyer's income decreases: the budget line is moved in parallel closer to the origin of coordinates [1].

If the price of one of the goods falls and income remains unchanged, the angle between the budget line and the axis of this product will increase; if the price increases, the angle will decrease. But when the price of both

goods increases or, conversely, decreases by N times, the line on the graph moves parallel closer or further from the origin of coordinates.

Also, an increase in prices by 2 times will be equivalent to a decrease in the buyer's income by 2 times. For example, let's say your budget is $60. You are going to buy tulips and peonies. The price of peonies is 4 dollars, and tulips are 2 dollars. You can either spend the entire amount on peonies, and then you will get 15 of them [=$60/4]. Or you can spend the entire amount on tulips, then the bouquet will have 30 flowers. The number of tulips is represented along the horizontal X-axis, and the number of peonies is represented along the vertical Y-axis. We now have two points on the budget line (0;15) and (30;0).

An attainable combination is any combination of two products that can be purchased using a given income. All items on or below the budget line are achievable. An unattainable combination is any combination of two products that cannot be purchased using a given income. All items above the budget line are unattainable [2].

LITERATURE

1. Electronic educational and methodological complex for the academic discipline "Fundamentals of Economics", 2002.

2. Baranovsky, S. I. Microeconomics: educational method. manual for university students studying economics. specialist. / S. I. Baranovsky. - Minsk: BSTU, 2007. – p.88

УДК 004.056

Student V.V. Ugorenko

Scientific supervisor, V.Y. Dokurno (Department of ICC&TT (Intercultural Communication and Technical Translation, BSTU)

CYBERSECURITY 2024-2025: TRENDS AND FORECASTS

In our digital age, cybersecurity has become a vital aspect of daily life. I chose this topic for my report due to its critical importance. Each year, cyber threats escalate, posing risks to organizations and individuals alike. My aim is to highlight current cybersecurity issues and challenges, providing practical tips to safeguard data and systems. I believe that raising awareness of online threats and prevention methods is crucial for digital security, and I am committed to sharing this knowledge with others.

In light of this, let's take a look at some of the most significant trends in cybersecurity that are expected in 2024:

1. Generative artificial intelligence and email security

AI technology is causing problems for organizations. Bad actors use it for sneakier phishing scams, sometimes pretending to be important peo-