Resources (or Factors of Production) Are Scarce

The scarcity concept just described arises from the existence of scarce resources, or simply resources, for short. Resources can be defined as the inputs used in the production of those things that we desire. When resources are productive, they are typically called factors of production. Indeed, some economists use the terms resources and factors of production synonymously. The total quantity, or stock, of resources that an economy has determines what that economy can produce. Every economy has, in varying degrees, vast amounts of different resources, or factors of production. Factors of production can be classified in many ways. One common classification scheme distinguishes natural, human, and manufactured resources.

NATURAL RESOURCES = LAND AND MINERAL DEPOSITS

Basically, land with its inherent mineral deposits is the natural resource we think of most often. The original fertility of land is also a natural resource. Some land can grow phenomenal amounts of crops without any addition of fertilizer; other land is incapable of growing anything in its natural state. Today, some economists contend that natural resources are often the least important factors of production in an economy. They believe that what is more important is the transformation of existing natural resources into what is truly usable by humans. That transformation requires the other types of resources—labor and capital.

HUMAN RESOURCES = LABOR

In order to produce the things we desire, a human resource must be used. That human resource consists of the productive contributions of labor made by individuals who work—for example, steelworkers, ballet dancers, and professional baseball players. The contribution of labor to the production process can be increased. Whenever potential workers obtain schooling and training and Whenever actual workers obtain new skills, labor’s contribution to productive output will increase.

Traditionally, discussion of the factors of production leads naturally to discussion of the distribution of wealth among those factors. However, labor’s contribution to productive output has been increasing steadily for two centuries, while wages have tended to fall. You’d think that might be worth mentioning here—but this text obscures, whenever possible, any logical connection between production and distribution.
Why is the “fourth factor” emphasized like this? It gives the impression that entrepreneurship is superior to the other three. That connotation is reinforced in the text: entrepreneurship is a special kind of human resource; those who do it are bold, dashing risk-takers, without whom “no large-scale business organizations could operate.” Who says there is no romance in economics?

Although there is a huge difference in emphasis, no clear reason is offered for why these characteristics distinguish entrepreneurship from labor. Nevertheless, laborers are said to receive wages; entrepreneurs receive profits. But if labor involves both doing and thinking, as we are told above, then why the separation? Why isn’t entrepreneurship just the “thinking” part of labor?

Here is a clue to the difference. The paragraph on labor above mentions production five times. Labor produces the wealth that makes the economy go. Odd, then, that the entrepreneur’s task is “to think of things that could lead to a monetary benefit.” Could it be that some of these monetary benefits do not come from production? One very important example of that is the location value of land—which, as we saw, this text has carefully excised from the definition of land as a factor of production!

“Entrepreneur”, from the American Heritage Dictionary: “One who organizes, operates, and assumes risk for business ventures.” It’s from the Old French, “to undertake,” from Latin inter, between, and prendre, “to take.” The Indo-European root is ghend, “to take or seize.”

MANUFACTURED RESOURCES = CAPITAL

When labor is applied to land to grow corn, for example, something else is used. Usually it is a plow or a tractor. That is to say, land and labor are combined with manufactured resources in order to produce the things that we desire. These manufactured resources are called capital, which consists of machines, buildings, and tools. Additionally, capital consists of improvements to natural resources, such as irrigation ditches.

There is, in effect, a fourth type of input used in production. It is a special type of human resource; it consists of entrepreneurial ability, or entrepreneurship. Entrepreneurship is associated with the founding of new businesses or the introduction of new products and new techniques. But it means more than that: it also encompasses taking risks (possibly losing large sums of wealth on new ventures), inventing new methods of doing common things, and generally experimenting with any type of new thinking that could lead to a monetary benefit.

Without entrepreneurship, virtually no large-scale business organizations could operate. Clearly, entrepreneurship as a human resource is scarce: not everyone is willing to take risks or has the ability for successful business decision making.

We see the classification of resources in Exhibit 1-1.

EXHIBIT 1-1
RESOURCE CLASSIFICATION. We can arbitrarily classify resources, or factors of production, into those that are natural, human, and manufactured. We have denoted specific names within those three classifications.

<table>
<thead>
<tr>
<th>Natural Resources</th>
<th>Human Resources</th>
<th>Manufactured Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land</td>
<td>Labor and Entrepreneur</td>
<td>Capital</td>
</tr>
</tbody>
</table>

1 Improvements to human resources are also possible, of course. When this occurs, we say that human capital has been improved.