Comparative Introductory Microeconomics

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Chapter 1 Economy and Economics

Learning outcomes

By the end of this chapter you should be able to

a. Explain the factors of production and how changes in these factors of production influence economic growth and employment.

b. Explain the different schools of thought in an elementary way.

c. Compare and contrast the different schools of thought.

d. Critique neoclassical theory that we shall cover in the rest of the course using elementary understanding of the other schools of thought

1.0 Introduction

Perhaps, as a newcomer to the study of economics, the most pressing questions in your mind are: what is economics? And when we are studying economics, what are we studying really? Related to these questions are even bigger questions: What is an economy? How does an economy come about? How do we study such a big and unsearchable creature as the economy? Is there one way of understanding the economy? In this course, I will try to broaden your grasp of economics. I will from time to time part ways with current tradition in economics as presented in current textbooks. I have chosen to develop a pluralist course for introductory economics which should help you see economics for what it is and develop a deep passion for it.

One more question you might have in mind relates to the title of this pamphlet: Comparative Introductory Economics. What is being compared? There exist many ways of doing economics and they do not often agree. They differ in terms of the things they study in the economy,
how they study them and the assumptions they make about the economy. The level of reality they incorporate also varies considerably. In this course I will introduce you, in a comparative manner, to Classical Economics, Austrian Economics, Institutional Economics, and Neoclassical Economics. Think of it this way. A child who is fed an unbalanced diet, is likely to suffer from malnutrition. A balanced diet is important for the development of the whole person. Similarly, you can easily suffer from academic malnutrition if we feed you one way of doing economics to the neglect of other equally important ways of doing economics. You will not develop fully as an economics student. It is my hope that in the future I will broaden the scope of schools of thought covered in this introductory course.

So, what is an economy? Greek philosophers likened an economy to a household. They further defined to “economise” to mean household management. A household has different players in it and several sub-relationships that give it the character of a household. There are rules that govern the household: they define what can/cannot, may/may not and must/must not be done. But there are many more unwritten rules – rooted in culture, religion and traditions – that are just part of us as human beings. All these rules – written or not – define how we interact and determine how costly it would be to carry out our intentions in economic interactions.

The idea of managing a household suggests that some central authority within the household carries out the management just as government does in an economy. It also suggests that there are finite resources that must be used wisely (i.e. managed, economised) to satisfy the needs of household members: shelter, food, clothing, etc. Household members also have wants – e.g. desire for fashion, good music, expensive phones and cars – which are unlimited, but the resources required to satisfy

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1 Household becomes a figure of the economy in this case.
2 It was Aristotle.
them are limited. To manage (economise), then, is to prioritise with the view to getting the best outcome out of the little resources we have.

The idea that wants are unlimited and resources are limited leads to the central economic problem called scarcity. All resources that command a positive economic value are generally scarce. Nowadays even some gifts of nature that we often consider to be unlimited are now scarce. For example, clean air is now a scarce natural resource, with some places in China already selling clean air (see Photo 1.1). What we observe in Photo 1.1 is that even gifts of nature that we often think are not scarce are fast becoming scarce because of the impact of economic activities on nature. More on this later.

Likening an economy to a household hides the complex features that make an economy what it really is. Rather, an economy is a complex adaptive social system that has self-organising and purposefully organised subsystems. By complex, we mean that the economy is made up of so many interactions of different agents and subsystems that create the patterns of economic activity, order, continuity and change that we observe. These are often very difficult to explain fully.
By adaptive, we mean that the economy is always evolving (changing) and is never stationary. This idea of an economy being adaptive and ever changing undermines the dominant approach to economics called equilibrium (neoclassical) economics. Equilibrium means at rest, but the economy is never at rest. It is more out of rest than it is in rest at any point in time.

By defining an economy as a social system, we are intending to approach its analysis as a process. By social system, we also declare from the very beginning that an economy is about studying real human behaviour, not assumed human behaviour. Alfred Marshall put forward the idea that

“the main concern of economics is thus with human beings who are impelled, for good and evil, to change and progress . . . [T]he central idea of economics . . . must be that of living force and movement” (Davenport & Marshall, 1935).

Notice the key elements: human beings, progress, change and living force. Examples of good are curiosity, enterprise, desire to excel in service; examples of evil include greed as we witnessed it in corporate/national scandals such as Steinhoff saga, Life Esidimeni tragedy, KPMG auditing frauds, VBS bank heist saga and the state capture saga.

The series of human actions and choices invite responses from other human beings and the ‘moves and responses’ they provoke create what we call adaptation. The process of adapting in that mass of interactions is the source of the energies that drive the process of economic change (i.e. change means growth). Since interactions are ever taking place, it is more beneficial to think of the economy as ever changing and not as attaining a state of equilibrium.

A system is said to be self-organising if it does not require purposeful human design to exist. Some examples of such self-organising systems include bid-or-buy online market, crypto currency markets, language, Uber transport services, taxi industry, saloons, parallel foreign currency markets, farm produce markets etc. A self-organising system emerges

Look at nature. An ecosystem is so complex, but the complexity comes from interactions of different organisms. We cannot understand the ecosystem by looking at one species because the species are never identical.
through the process of interaction of human beings each pursuing their own self-interest without intending any design (Hayek, 1952; Smith, 1976). The sum of those individual interactions gives us a whole economy whose patterns, behaviour, features etc. cannot be understood or explained by looking at the behaviour of one agent. In other words, the whole economy is much more complex than its parts and we cannot reduce the study of the whole economy to the study of an individual unit by assuming that individual units are identical as one way of doing economics often does.

To study an economy or to do economics becomes quite difficult if one is to consider the breath of views from different schools of economic thought. In this course we focus on three schools: Classical, Austrian, neoclassical and institutional.

1.1. Common concepts in different ways of doing economics

Wants, Needs, Necessities, Luxuries, Preferences

Every human being needs some basic things to survive. These include shelter, food and clothes. These are so basic to life that you can’t live without them. They are called necessities. Necessities satisfy human needs.

Wants are of a higher order. These can be thought of as non-necessaries of life because we can live without them. Most often, wants speak to the desire to live a certain lifestyle. To meet a certain status in society that some people we consider our class tend to have. Let’s take the example of a cell phone. Communication in this digital world has become a human need. All I need is a very simple phone that can call and receive calls as well as send and receive messages. Such a phone is a necessity. But the moment I now say I want an iPhone, or some expensive Galaxy??? then it is about status (i.e. luxury) not really a necessity. I want to be seen to be in the same social class as some people I envy in my society. So then, wants are very extensive and unlimited, but needs are limited.

Think about the female shoe that is selling for USD 17 million which was showcased on CNN in November 2018. It is a typical luxury good. You can live without it.
The idea that we want something better than another means that we have preferences. Preferences are borne out of our tastes. Tastes for fashion, music, food, etc. are all shaped by culture, societal rules, religion, and peers. In large part, these cultural, societal rules, and religions as well as peer influence explain our behaviour as consumers.

Means

Another important aspect we must consider is means. You are familiar with the saying: “If wishes were horses beggars would ride”. Wants and needs remain pipe dreams unless we can fulfil them. The economic ability to satisfy these needs and wants is what we call effective demand. To fulfil them, we need resources (e.g., money earned from labour, social welfare payments, owning land, owning capital, or from running businesses). These resources are what we call means. These means, as you can perceive, are limited in nature. We can never have enough money considering the vast ocean of wants that we have.

Scarcity

Human beings have so many things they need for survival and want for luxury, but these together are unlimited. To fulfil them, they need resources such as individual budgets from a salary or income from some source. The budget tells us the total amount of resource available for spending. Each of the needs and wants is satisfied by a good or service that must be bought in the market (although some can be self-produced at home). The multiple of the price and quantity of the good/service to be consumed tells us how much will be spent. If we do the same for all goods/services which an individual needs and wants to consume and sum them, we get their potential total expenditure. Often, this potential expenditure value will be far in excess of the budget. But everyone must live within their own means. Put more generally, we don’t have enough land in the economy. We do not have enough oceans. We do not have enough factories. We do not have enough skilled labour. All these resources are in limited supply when compared to the things we want to do with them. That is the problem of scarcity.
Choice

Since the wants of an individual exceed the economic ability to satisfy them, the process of prioritising and elimination begins. Do I really need to buy an iPhone? Do I really need to buy a huge, very huge, plasma tv? Do I really need to buy another car? Do I really need to buy that very expensive whisky? After arranging all these good, services and uses of time in the order of their importance, choices must be made. The process of choosing comes with sacrifices. Many choices are mutually exclusive i.e. you can get one but not both because the budget no longer permits. The sacrifices are called trade-offs. A trade off simply means, to have one thing, you must give up something: you can’t have both.

Cost (or specifically, Opportunity cost)

The concept of cost literally means how much (in VALUE terms) you must sacrifice to get what you want. If you are hot and want an ice cream, you must give up R10 to get an ice cream cone. But that is not all. The R10 could have been used for something else valuable e.g. saved into the bank to earn interest. So, when we think about the cost of an ice cream, we think about the actual amount of money we paid for it plus the opportunity to earn interest income that we sacrificed. If the R10 could earn R1 in interest per day, then the cost of the ice cream cone is actually R11 (i.e. R10 cash price + R1 interest income sacrificed).

Another example. You work for Rhodes University as a student librarian. You are paid on an hourly basis. The value of the hour of library work is R45 and you work for 4 hours a day. This means per day you earn 4 x R45 = R180. One working day your friends are going to the beach. They invite you to join them and you successful apply for an unpaid off. You each contribute R50 for fuel so that your friend who owns a car can drive you to Port Alfred. At the beach each one spends R150 on food and drinks. To the non-economic mind, the trip to the beach cost you R200 (i.e. fuel cost + food/drinks cost) each, but to an economic mind the beach trip cost
you, the student librarian, R380 (i.e. fuel cost, food/drinks cost and the value of 4 hours of paid work lost).

Opportunity cost is often defined as the VALUE of the next best alternative sacrificed. In the beach trip example, the next best alternative to going to the beach is working 4 hours in the library. The value of four hours of work is R45 \times 4 = R180. That is the opportunity cost of spending 4 hours at the beach. However, this is incomplete analysis because the R50 for fuel also has an alternative use and so is the R150 for food/drinks. Thus, to know the cost of a decision we add together direct cost (explicit cost) and implicit cost. Direct cost is what involves cash movement e.g. fuel contribution and food/drinks expenditure. The definition of opportunity cost is actually talking about the implicit/hidden cost of a decision. An implicit cost does not involve actual use of cash or a resource, but it is a real cost in the sense that it is an opportunity we could have exploited for our welfare enhancement. We can therefore state more precisely that all costs in economics are opportunity costs and they are the sum of direct and hidden costs.

**Prices**

In economics, price has a very precise meaning. A price is a ratio of exchange. It tells us how much of one good we must give up getting a quantity of another good. So, if I am selling apples and you are selling a carrot cake, we can exchange the two goods provided we have a mutual interest. I will ask you how many apples I must give you to get the small carrot cake. If you say, 9 apples, then the relative price of a small carrot cake is 9 apples. Put differently, the relative price of an apple is one ninth of a small carrot cake. Now suppose the market price of an apple is R3 and that of a small carrot cake is R27. We can arrive at the relative price of a carrot cake by dividing the price of the small carrot cake by the price of an apple (i.e. R27/R3 = 9). Put simply, it means that each carrot cake fetches 9 apples as its price in the market.

Since there are millions of goods and services in the economy, there are also millions of relative prices and all these prices together form a system
called the price system. This price system sends signals/information about relative scarcities of goods to everyone concerned about them. The price system summarises all the knowledge that exists in the economy about a good, its alternative uses, the value/profitability of those alternative uses, the scarcity of the good etc. The movements in the relative prices are precisely telling us which goods have become scarcer relative to others.

Put differently also, if you are selling small carrot cakes and I have cash, we can still exchange. Money is a good. So, you will tell me you are selling small carrot cake at R27 and I will part with a quantity of money to get one carrot cake. So R27 is a relative price. i.e. R27 per one small carrot cake. It is a ratio of exchange.

*Value (utility, profit)*

The concept of value refers to what we *perceive* to be the benefit of consuming or selling a good/service. Notice that I used the word perceive because value is subjective, which means it is personal. It cannot be measured in the same way we measure distance or volume. Why do I say that? When you consume ice cream on a very hot day, you cannot measure the actual amount of satisfaction. You cannot put a definite number to it. So, whatever you say about your level of satisfaction is subjective. Similarly, by virtue of profits being calculated from the difference between sales (an objective measure) and total costs (made up of direct costs and hidden costs), it is subjective. Profit is subjective precisely because of hidden costs which are subjective in nature. Profit is the value that entrepreneurs get from selling goods. Utility is the satisfaction a consumer gets from eating or drinking a good. However, some schools of thought, as we shall see later, assume that value is objective.

### 1.2. Unit of analysis in economics

Different schools of thought have different units of analysis when they analyse an economy. Some say the individual (which includes natural
individuals, a household, and legal individuals like firms) is the correct unit of analysis. This means that economics is about studying individuals and their choices, tastes, behaviour and preferences.

Other schools of thought claim that the correct unit of analysis is the transaction. A transaction is an exchange of rights in the market place. In this case a transaction has three features: conflict, mutuality and order. Two parties to a transaction have opposing interests, which is why they can exchange in the first place. A consumer wants to pay a low price. A seller wants to be paid a high price for the same good. That is what conflict means. This leads to bargaining in the market. The idea of mutuality or dependence means that no transaction takes place in the market if there is no “willing buyer” and “willing seller”. The seller needs me to make profit. I need the seller to satisfy my tastes. So, we dependent on each other. Lastly, the idea of order means that the law is there to enforce our respective rights in the transaction, i.e. courts bring order by applying the law to commercial disputes.

Another school argues that the correct unit of analysis is the institution. We should study institutions because they determine transaction costs and individual behaviour. They help us study the role of power in society which is manifested through institutions such as property rights, culture, religion etc. Institutions determine the allocation of resources. They define opportunity sets for us. They condition our opportunities and opportunity costs.

I personally think that there is a hierarchy of units of analysis. The transaction being the smallest unit of analysis. The individual being the second level. The institution being the third level. An industry/sector being the fourth level. And the whole economy as the fifth level.

1.3. What resources does an economy have?

From the idea of economy as a social system and economising as prioritising the use of resources to get the ‘best’ outcomes, we need to understand the variety of resources society has. What are those resources
that a society owns? Well, Table 1.1 presents the traditional four factors and a more nuanced set of factors. All these factors are scarce. They are assumed to earn some rewards for their contribution to production. Land is rewarded with rent. Rent is paid to landowners. Labour is rewarded with wages and salaries. Capital, in the traditional sense, is rewarded with interest. In the modern sense we can see that manufactured capital, which is often bought with loans, must pay back the loan through its output. So, what remains of its share of total income after it has paid the interest on the loan is its return. Entrepreneurs are rewarded with profits for taking risks and for their creativity, and profits are what remains after land, labour and capital have been paid.

Table 1.1: Factors of production

<table>
<thead>
<tr>
<th>Traditional factors of production</th>
<th>Alternative view on factors of production</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Land</strong></td>
<td><strong>Biosphere</strong></td>
</tr>
<tr>
<td>• Land</td>
<td>• Land, oceans, atmosphere, minerals, biodiversity</td>
</tr>
<tr>
<td><strong>Labour</strong></td>
<td>Labour</td>
</tr>
<tr>
<td><strong>Capital</strong></td>
<td><strong>Capital</strong></td>
</tr>
<tr>
<td>• Manufactured capital</td>
<td>• Natural capital (= biosphere)</td>
</tr>
<tr>
<td>• Manufactured capital</td>
<td>• Human capital (Knowledge)</td>
</tr>
<tr>
<td>• Natural capital (= biosphere)</td>
<td>• Financial capital</td>
</tr>
<tr>
<td>• Social capital (human relations)</td>
<td>• Social capital (human relations)</td>
</tr>
<tr>
<td>• Manufactured capital</td>
<td>• Manufactured capital</td>
</tr>
<tr>
<td><strong>Entrepreneurship</strong></td>
<td><strong>Entrepreneurship</strong></td>
</tr>
<tr>
<td>• Risk taking</td>
<td>• Risk taking</td>
</tr>
<tr>
<td>• Talent</td>
<td>• Talent</td>
</tr>
<tr>
<td>• Creativity</td>
<td>• Creativity</td>
</tr>
<tr>
<td><strong>Technology</strong></td>
<td><strong>Technology</strong></td>
</tr>
<tr>
<td>• Knowledge and ideas with commercial value that are generated by human capital</td>
<td></td>
</tr>
<tr>
<td><strong>Institutions</strong></td>
<td><strong>Institutions</strong></td>
</tr>
<tr>
<td>• Property rights, permits, licences, copyrights, patents, laws, regulations, policies and cultural institutions (where our social capital comes from)</td>
<td></td>
</tr>
</tbody>
</table>

The alternative view in Table 1.1, shows that the four factors of production overlap. Obviously, institutions and technology are not rewarded directly. Good institutions reduce the cost of transacting, which should increase the rewards to the other four factors of production. Bad institutions increase the cost of transacting which should reduce the rewards to the other four factors of production. Technology can have two distinct effects. Firstly, it can enhance the productivity of labour, which

I am using the word institutions in a more technical sense i.e. rules, customs, traditions, culture. I don’t mean organisations.
means its reward would be reflected in wages. But, technology, secondly, can enhance productivity of capital, rather than labour, with the result that the reward to technology is reflected in interest income. Even more interesting is the idea that entrepreneurship, by its nature, is about risk taking, managing uncertainties, creativity, invention and discovery. This means that it is possible for the reward to technology to be found in profits. As the economy grows, the size of the cake grows and so do the rewards to factors of production, but the rate at which these rewards grow differ significantly.

Table 1.1 emphasises technology because economic theory predicts that over a long period of time, only technology will be the driver of growth (Romer, 1998). You might, by now, have heard talk of the 4th Industrial Revolution, which entails the use of robots, artificial intelligence in general, to do things that human beings have been doing in the workplace and home (Schwab, 2017). We already use artificial intelligence on many of our smart phones, emails, social media, computers, laundry machines etc. Technological change, itself a product of the creativity of human minds, can take place where creators are protected from idea theft and this is where institutions come in e.g. property rights, copyrights, and licences. They provide incentives for creators of new products and processes of production to benefit from their hard work.

1.3.1. Biosphere as a factor of production

The biosphere includes land, water, and the atmosphere. We grow food on land. We wear clothes which come from the land. We get electricity from land, water, wind, oceans and the sun. We mine minerals from land. We draw water, both ground and surface, from the land. Trees provide us with oxygen and absorb much of the carbon our production activities produce. As a student of economics, you have, by now, probably heard of bigger societal problems such as climate change, biodiversity losses and several natural disasters that arise because of the human footprint (human impact) on nature. Classical economists, especially David Ricardo, emphasised that the productive powers of the earth could not
be destroyed (Ricardo, 1891), but we now know better. They can be destroyed. The human footprint is everywhere and has had enduring negative effects. Of course, other classical economists like Thomas Malthus, believed that it was possible for the human population to exceed the capacity of nature to provide for our basic needs. Malthus’ views reflect what is called Classical Limits to Growth. The idea of the limits to growth is that nature has a productive carrying capacity, and it will become a major constraint to growth once that productive carrying capacity is reached.

The human footprint is seen through population growth, urbanisation, transport and communication development, agricultural development and industrialisation. Consider Figures 1.1 and 1.2 which demonstrate the destruction of forests, which are a crucial economic resource because they absorb carbon from our economic activities. Carbon is among many gases that economic activities emit into the atmosphere and these gases build up and over time lead to global warming and abrupt changes in climate. This problem leads to natural disasters of unpredictable sizes and impacts on the economy.

![Figure 1.1: Destruction of the Amazon, the greatest global carbon sink](Image)

*Figure 1.1: Destruction of the Amazon, the greatest global carbon sink*
Figures 1.3 and 1.4 and Table 1.2 demonstrate that consumption decisions and production decisions have effects on the environment and the two social systems (firms and households) reinforce each other’s behaviour. How? The link lies in how firms shape consumer tastes and those tastes support existing products and existing production systems. This is a positive feedback mechanism.

What impression do you get from Figure 1.2? How is Africa doing compared to other continents? What effects would such changes in tree canopy have on the economy? What could be driving these forest cover changes?

**Figure 1.2: Global Changes in tree canopy cover 1982-2016 (1000 km²)**

Figures 1.3 and 1.4 and Table 1.2 demonstrate that consumption decisions and production decisions have effects on the environment and the two social systems (firms and households) reinforce each other’s behaviour. How? The link lies in how firms shape consumer tastes and those tastes support existing products and existing production systems. This is a positive feedback mechanism.

**Figure 1.3: Frequency natural disasters, 1998-2017**

**Table 1.2: Effect of selected agricultural activities on the environment**
Figure 1.4: Food diet footprints on nature, carbon emission per consumer, using USA data

If you reflect on your consumption patterns and tastes, where would you locate yourself?

Note: All estimates based on average food production emissions for the US. Footprints include emissions from supply chain losses, consumer waste and consumption. Each of the four example diets is based on 2,600 kcal of food consumed per day, which in the US equates to around 3,900 kcal of supplied food.

Sources: ERS/USDA, various LCA and EIO-LCA data
Figure 1.5: Global costs of climate change over time

The number of extreme events has doubled since 1990. As we can see from Figure 1.5, the costs of the destruction of the biosphere are staggering. What they imply is that the productivity of nature gradually declines. This gradual decline in the productivity of nature, is what classical economists regarded as the limits to growth.

The limits to growth are a demonstration of a concept that classical economists used frequently in explaining the economy’s behaviour over time. The concept is called Diminishing Returns. However, they used this concept in a dynamic sense unlike the way it is used in neoclassical economics (Sowell, 2006). They called it historical diminishing returns.

The concept was implicit or explicit in every classical explanation of the economy. For example, in David Ricardo’s theory of rent, which showed that economic rent to land declined as one moved from more arable to less arable land. Economic rent means income earned over and above one’s opportunity cost of keeping that land in the current line of economic activity. Historical diminishing returns were also used to explain why the share of profits in total income declined over time.
Thomas Malthus’s population theory also was governed by historical diminishing returns. He argued that population grew at a faster rate than the rate at which food production grew, largely because less and less suitable land is brought into food production as population expands. He ignored the role of technology e.g. agricultural revolution in discovering fertilisers, genetically modified organism etc., which would prevent his doomsday prediction. While technology comes to our aid e.g. through genetic modification of organisms to increases food productivity per land area and aquaculture to provide fish that oceans can no longer supply sufficiently, it seems that Thomas Malthus’ views, and, indeed, the Classical Limits to Growth view, are catching up with us.

(Wissler, 1924: 317) vividly foresaw and described the effects of these large disruptions of nature and I quote him at length:

“It is thus clear that man is by inheritance a disturber of nature. As his social organization increases, his power of disturbance grows by leaps and bounds. Nor is conservation a modern idea. There is every reason to believe that agriculture and domestication were taken up as conservation projects. Man has always lived by his wits, by his ability to adapt himself to his food supply, or rather to manipulate it; but whenever sure of his food, he takes up the exploitation of one or more of the other natural resources and goes through the same kind of an evolution. Perhaps, when the new Bible of Science is written, one may read of man as the prodigal son of Mother Nature, flouting for a time her admonition and her wisdom, spending his heritage in riotous living; but at last reduced to the husks upon a barren waste of his own making, he crawls back to his Old Mother's fire-side and listens obediently to the story of a certain wise man whose name was Ecology”.

1.3.2. Labour and population growth

As a convention, labour consists of skilled, semi-skilled and unskilled people in society. People supply their human power and skills in exchange for wages. Wages are a relative price. People decide how many
hours/days to work, which we call labour supply. Labour is produced through human pro-creation. As population grows, labour supply is likely to grow. Africa and Asia have labour as one of their most abundant resources, judging by the increase in the size of the youth population (see Figures 1.6 and 1.7).

Many developed countries are experiencing labour shortages as their population is ageing. Thus, they actively attract young educated people from developing countries to become part of their labour force. This has left many developing countries scarred by a problem called brain haemorrhage, i.e., the loss of good brains to developed countries. However, it is generally believed that as fertility rates increase, productivity decreases which leads to lower income per capita (see Figure 1.8). High fertility rates mean that few women can participate actively in labour markets and also imply that what is increasing, if we assume education away for a moment, is unskilled labour. But this also confirms Thomas Malthus’s classical limits to growth argument based on population dynamics.
1.3.3. Entrepreneurship

The Figure 1.9 makes clear the idea that entrepreneurship as a factor of production is the source of new commercial ideas, new products, and new ways of producing. Entrepreneurs discover and invent. When we claim that they are rewarded for taking risk, what are we saying? To innovate means to come up with something new and different from what is existing currently. There is a risk that the innovation might fail or might not be received well in the market. The process of industrial learning, which leads to innovation, is also a trial-and-error process which has huge risks of failure (Khan & Sundaram, 2000). There is also the risk that competitors might come up with something better before one’s new
product/process has sold enough to pay back the funds invested in the innovation process.

Since innovation involves use of knowledge that is dispersed in so many minds in society, entrepreneurs are knowledge discoverers, knowledge users and knowledge converters into new products. They discover this knowledge through the process of competition and respond to the newly discovered knowledge with new products and processes (Hayek, 1945; Snow, 2002). In this sense, entrepreneurs never rest, they are experimenting with new things, with product improvement and process improvement. It is this constant process of innovation that ensures that the economy is never in equilibrium contrary to what equilibrium (neoclassical) economics tries to make us believe.
1.3.4. Technology

What is technology? Technology is the stock or fund of productive ideas and knowledge that society possesses. By productive knowledge, we are referring to knowledge that has commercial value. It is important to note that not all knowledge immediately has commercial value but may have great economic value in the near or distant future as those who apply it to products and processes succeed in using it.

Where does this fund of knowledge come from? From basic research that our higher education organisations carry out and other thinktanks involved in research and application of knowledge to products and processes. But this knowledge also exists in machines and tools that we currently have. Innovation ordinarily means improving something that is existing, hence tools and machines can be improved e.g. from typewriters to computers, from radios used by the police to cell phones, from landline phones to cell phones, from diesel/petrol powered cars to electric cars. Innovation can be seen in improved/new products, improved/new ways of producing goods and services, and improved/new ways of organising processes.

Classical economists believed that every economy had positively disruptive forces that moved it from lower levels of performance to higher levels performance over time. This disruption was code-named Schumpeterian creative destruction process, named after Joseph Schumpeter, an Austrian economist, who showed that innovation was a constantly happening process (Schumpeter, 2006; Schumpeter, 2013). This creative destruction process is what prevents an economy from ever attaining an equilibrium. From this standpoint it means that an economics that talks about equilibrium is quite irrelevant for the real world.

There is one critical input into technology and that is human capital (see Table 1.1). Human capital is the sum of intellectual capabilities, skills and knowledge that human beings embody. This fund of knowledge, thus, exists in manufactured capital and in human beings who have acquired
higher levels of education to be critical and creative thinkers. Therefore, investing in higher education is a very important public policy issue in any country. Society is moving towards being a knowledge society or knowledge economy whereby we are going past the idea of being able to read and write only but also towards levels of higher thinking abilities that are important for productive knowledge creation and for manipulating knowledge into new ways of doing things and new products.

The 4th industrial revolution – the first being steam engine revolution, the second being electricity revolution, the third being information and communication technologies revolution – is bringing together the human, the biological, the physical and the spiritual to change the way we do things and who we are in a major way (Schwab, 2017). Let’s now look at what the 4th industrial revolution entails for us. I have lined up a series of charts and pictures to give you the variety of ways through which technological change will impact the production process and society in general.

Table 1.3 reveals very important information about what makes other countries more technologically advanced in their production processes than others. The policies of the country on investment in quality education and human capital accumulation play a central role. Investment in research and development is also important. Labour market institutions – i.e. labour laws and regulations, trade unions, bargaining councils, flexibility of labour markets etc – are important as well.

The aspect of “connectedness” is perhaps the most important (Table 1.3). Many nations now have what is called a national system of innovation, which is a network (i.e. connections) of universities, businesses, state enterprises and government that is involved in creating new products, processes and systems by creating knowledge and applying it. We see that developed countries generally are more involved in creation and adoption of artificial intelligence than developing countries are. The implication is that developed economies grow faster than developing
ones because of these new sources of growth. Remember that I said earlier that in the long run only technology (which includes innovation) drives growth. South Africa has a national system of innovation which was founded through the White Paper on Science and Technology of 1997.

Table 1.3: Leaders and laggards in artificial intelligence (AI) adoption

Varying conditions among countries imply different degrees of AI adoption and absorption, and therefore economic impact.

<table>
<thead>
<tr>
<th>Readiness areas</th>
<th>AI-related</th>
<th>Enablers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AI investment</td>
<td>AI research activities</td>
</tr>
<tr>
<td>China</td>
<td></td>
<td></td>
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<tr>
<td>United States</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Israel</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td></td>
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<tr>
<td>Sweden</td>
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<tr>
<td>India</td>
<td>n/a</td>
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<tr>
<td>Spain</td>
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<tr>
<td>Greece</td>
<td>n/a</td>
<td></td>
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<tr>
<td>Tunisia</td>
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</tbody>
</table>

1 For the threshold, we calculated a global average and then measured standard deviation. If countries are generally one standard deviation above the average, we categorized them as “above” and one standard deviation below average as “below”; we categorized the rest as being “within.” For certain dimensions where values for leading countries are far higher than the average, we lowered the threshold to show relative differences clearly.

2 The score is calculated based on a weighted average of each area that can have a different degree of impact on GDP growth per their elasticity.

NOTE: The contents of this table are indicative. Countries in each group are listed in alphabetical order.

Figure 1.10: Projected growth in the use of industrial robots (example of process innovation in production)

Figure 1.10 and Photo 1.3 are examples of what I called processes and organisational innovation earlier on. Here what we see is that in industry
most activities become automated where robots control the production process. They are programmed, and they can do all that a human being used to do. In a sense we are entering another phase of mass production, but this time the technology increases rewards to capital more than to labour. Now imagine a farmer running a farm in which he/she no longer needs people to tend the cattle or to operate farm machinery etc. Now he/she communicates a signal to cows and they do what he/she says. Now he only needs drones to survey fields for the presence of weeds. This means that farm labour is being eliminated here.

Figure 1.11 exemplifies process and product innovation, but this time in the area of marketing of goods and services. These were perceptions of business people who were surveyed. What we see is that technology can affect nearly every aspect of business from production to marketing and will also affect consumers from purchase to disposal.
Figure 1.12 is a typical example of product innovation: from fossil fuel powered cars to clean energy powered cars. Here innovation is driven by competition to address, profitably, the global problem of climate change. Emission of carbon and other greenhouse gases from cars is well established. So, moving away from petrol/diesel cars to electric cars will significantly reduce carbon emissions. China’s performance in electric vehicle production surpasses that of the entire European continent, and the US as well as East Asian economic powerhouses like Japan and South Korea combined. South Africa also produced its own electric vehicle, but the actual process of producing it was conducted in the USA. The South African electric car travels for about 400km before its battery runs flat. Once flat, you recharge it as you do your laptop or phone. It was developed by a 25-year old entrepreneur. Listen to the SAFM radio panel discussion on the 4th industrial revolution.
Figure 1.13: Expected effect of artificial intelligence on labour productivity (i.e. is it labour productivity enhancing?)

Figure 1.13 links with my earlier discussion on the contribution of technology to labour productivity and wages. As you can see countries, that by the criteria in Table 1.3 are ready for AI, will experience increased labour productivity due to AI but also greater job losses due to AI. What this graph shows is that the fewer who remain relevant at work will become super-productive that one person does the work that used to be carried out by, say, hundreds of workers. The global increase in labour productivity lies between 0.8% and 1.4%, but job losses due to AI average 15% of total human hours of work.

Lastly, Figure 1.14 provides forecasts of different aspects of artificial intelligence that will be on demand. The extent of demand is demonstrated by the expected sales. As you can see, the sales run into billions of dollars for artificial intelligence in stock exchange trading systems, image reading softwares which many tablets and phones now have, and cyber security artificial intelligence services, among others.
1.3.5. Economic effects of institutions and institutional change

As I indicated in Table 1.1, institutions are ignored by neoclassical economics, but they have tremendous influence on economic performance of a country. Consider how institutions create labour market inefficiencies, unemployment and underemployment of labour, in this case of the female component of labour (see Figure 1.15). Many countries have restrictions (i.e. regulations/rules) preventing women from participating in some economic activities.
The challenge here is that a skilled female labour force participant ends up doing work that is below her skill capacity. This creates a problem of hidden unemployment (see Figure 1.18). She looks like she is working but she is underutilising her true productive potential because she is not assigned to the correct job. The correct job is the one she is barred from having. Just imagine, nearly 3 billion women have no freedom of choice of a job. You will recall that I said institutions can reduce or increase the
cost of transacting in the market. Here is an example of institutions increasing transaction costs of female participation in the labour market.

Figure 1.16 tells us that labour market institutions that cause gender related inefficiencies take much longer to remove. Western European, Latin American and sub-Saharan democracies will take just about a generation to eliminate these institutions, defining a generation as 40 years. The US and Canada will take at least 3.5 generations to remove these economic gender gaps. Notice in North Africa and the Middle East, because of religious beliefs, it will take nearly 15 generations to undo these institutions. The idea that institutions are defiant to change or rather change slowly is called institutional path dependence. It is a very important economic process that institutional economics explores at length, but which neoclassical economics ignores completely.

Figure 1.16: Institutions that cause gender related inefficiencies take much longer to remove.

Recall that I said religion is an informal institution, but it can be a formal institution where, for example, Muslim Shariah law governs business and politics. Most Middle and far east religions have a strong patriarchy element. Patriarchy means male dominance. Notice, that I am not criticizing any religion, but I am explaining facts in Figures 1.15 and 1.16.

Figure 1.17: Opening economies to female participation in labour markets increases economic development

Source: Global Gender Report, 2017, World Economic Forum

Figure 1.17 demonstrates that elimination of discriminatory institutions identified in Figures 1.15 and 1.16, would increase economic development significantly. The hypothesis is that there is a positive relationship between gender emancipation and economic development. This makes sense since females are at least 52% of world population.
I deliberately chose just one type of institutions – labour market institutions – to illustrate the point why we should include institutions in our study of economics because they directly contribute to unemployment, underemployment, hidden unemployment and inefficiencies, if badly designed (see Figure 1.18). I could have used property rights, for example. Putting all the pieces together, we see that many countries have institutional systems that create unsustainability, instability, and under-development (See Figure 1.18). So, why should we study economics comparatively?

1.4. Why study economics comparatively?

In recent years since the global financial crisis of late 2007 to about 2010, students at major universities such as Harvard University in the USA, Cambridge University and University of Manchester in the UK as well as students in Chile protested what they described as the narrowness of economics curriculum. Doing economics in a comparative manner is my attempt to move towards addressing that need. I assume that even if you did not march in protest in the streets of Manchester, of Cambridge and of Massachusetts, you probably have every interest in getting an economics education that equips you for the world of work and for
complex problems of society. As a small beginning, I consider only four schools: Classical Economics, Austrian economics, Institutional economics and Neoclassical economics. I will shortly define these schools.

Perhaps, you have heard of people like Adam Smith, David Ricardo and Thomas Malthus, among others. I have already mentioned some of them earlier. These are the founding fathers of economics, as it were, although economics existed well before they contributed their thinking. The economics that these people practised is what we call classical economics.

A different generation from founding fathers, beginning with the 19th century, gave us what has now become known as neoclassical economics. The word “neo” means “new”, which means neoclassical economics should mean new classical economics, but as you shall see, neoclassical economics is not new classical economics. The word “neo” has no meaning at all in that name. Austrian economics might better be called neoclassical economics, if the word neo is to be given any real meaning. But, for now, we shall not do the renaming. We have no authority to rename schools of thought.

Institutional economics, on the other hand, has Original and New Institutional economics. Unfortunately, new (neo) institutional economics is far more a mirror of neoclassical economics than it is of its original institutional economics. This is because Douglass North, one of the originators of New Institutional Economics, argued that their school of thought sought to improve neoclassical economics and not to replace it (North, 1990). In other words, they accept the foundations of neoclassical economics and add the issue of institutions, transaction costs and a modified assumption on human knowledge into the theory. Transaction costs are costs incurred in trying to use markets to carry out our economic decisions (Coase, 1960) e.g. costs of searching for better prices and quality or deals. But here is why we should study economics comparatively.
1.4.1. Differences in method and substance of economic theory

a. Neoclassical economics

Neoclassical microeconomic theory focuses on relative prices which are taken to be the substance (content) of economic theory. Neoclassical theory is sometimes called price theory. Its chief focus is on how prices are determined, and how they provide signals to economic agents on what is most profitable to do or what is most satisfying to consume. In the process of playing its coordinative role, the price system leads to efficient outcomes.

The chief motivation among pioneers of neoclassical economics was to make economics look like hard sciences, especially physics. Consequently, physics concepts found their way into economics e.g. efficiency, equilibrium, statics etc (Edgeworth, 1925; Jevons & Jevons, 1957; Mirowski, 1992). The motivation was to make economics logically precise to give deterministic answers to economic questions. We say a solution is deterministic if it is simple and exact. It is exact and there is no possibility of any other solution besides it. It is a unique solution. To achieve unique solutions, neoclassical economics makes lots of simplifying assumptions that do not correspond to the actual behavior of economic agents and the economy. More on this later.

The appearance of logic, uniqueness of solutions and hard science came at a high price of sacrificing the substance of economic theory for the method of analysing the economy. The method became more important than the substance. Consequently, neoclassical economics “has been useful neither for prediction nor for explanation” (Simpson, 2013: 1). This charge against neoclassical theory arises from the fact that the “importance of real world phenomena that cannot be accommodated within the structure of static equilibrium analysis is frequently overlooked or downplayed” (Simpson, 2013: 1-2). Neoclassical economists have been blamed for providing misleading economic advice to politicians that created problems such as the global financial crisis of
2007-2010. As (Simpson, 2013: 2) puts it, “It is difficult to separate these policy failures [like the global financial crisis] from the conventional equilibrium [neoclassical] theory on which they were based”.

By centring relative prices in economic analysis, neoclassical theory tends to speak more to efficiency in the allocation of economic resources at a point in time. Analysis that focuses at a point in time is called static analysis; it rules out forces of change. But, what kinds of assumptions does neoclassical theory make?

Firstly, it assumes that the economy or a market is static. To say something is static, as I have briefly defined in the previous paragraph, is to assume that it is in equilibrium. It has no tendency to change from what it is right now. This static-ness comes from neoclassicists’ fiction of the existence of equilibrium. The analysis focuses on one point in time. Sometimes you will hear neoclassical economists speaking about dynamic analysis, but such analysis is often carried between two points in time e.g. period 1 and period 2. The journey travelled by the economy from period 1 to period 2 is not explained in any detail. What this actually means is that the adjustment process from one period to the next is assumed to be (1) costless and (2) instantaneous (automatic). Neoclassical economic theory, thus, does not account for the evolutionary forces shaping the economy over a long period of time. To put the charge more forcefully, the outcome of resource allocation is established before the analysis of how it comes about has been done, which will never be done anyway.

Secondly, neoclassical economics assumes that costs of exchange in the market are zero. There are no real costs incurred in every market transaction. However, as you shall see, Ronald H. Coase demonstrated beyond doubt that there were real, non-zero, costs of exchange in addition to the pure price of a good that economic agents faced in using the market.

Thirdly, neoclassical economics assumes that we can understand the economy by analysing the representative individual. It assumes that
individuals are identical. Therefore, studying one of them, the representative individual, is enough for us to know every one of them. This ignores the interdependence of different individuals in the market and how their decisions shape, and are shaped by, those of others. The behavioural interdependence of economic agents (producers and consumers, producers and producers as well as consumers and consumers) means that the idea of understanding the whole by looking at the representative individual is erroneous and misleading.

The underlying logic in representative agent modelling is that preferences of individuals are independent, i.e. they cannot be influenced by actions and preferences of others. But we have just said that individual decisions, preferences and choices are interdependent. Think about how your friends determine what you buy. Think about how you buy things because you want to keep up with your social class or your neighbours. Think about the influence of your parents or siblings on what you prefer. Think about the effect of institutions such as religion and culture that shape our preferences. They define choice constraints on us by imposing on us the moral sanction of shame or disapproval if we are deviant, don’t they?

Fourthly, neoclassical theory assumes, for equilibrium to exist, that full information about technology, preferences, resources, and prices is available to all economic agents. The assumption is that in existence is only one global stock of knowledge which is taken as given. What neoclassical theory does not explain to us is how exactly each one of these individuals comes to possess all the knowledge. According to (Hayek, 1945), and indeed classical economists, the fundamental problem in economic organisation is how to distribute/communicate bits and pieces of knowledge scattered in different minds to all market participants so that the decisions they make are welfare-enhancing and growth-enhancing. This argument arises in the context that commercial knowledge, both existing and new, is constantly being discovered and produced during the competitive process and it is that knowledge that is driving economic change.
The notion of equilibrium assumes that “the data for the different individuals are fully adjusted to each other, while the problem which requires explanation is the nature of the process by which the data are thus adjusted” (Hayek, 1980: 94). The irony in neoclassical analysis is that it specifies conditions for equilibrium that already include the conclusion it wants to make. Yet, it does not explain to us how the conditions entailing equilibrium come about. The assumption of perfect knowledge is the one that guarantees equilibrium. So, by assuming that individuals possess perfect knowledge of the decision context, neoclassical theory has already assumed existence of equilibrium. See below.

Fifthly, neoclassical economics assumes that economic agents behave rationally. To say someone is rational is to claim that, given the knowledge they possess, they make consistent and well calculated decisions, i.e. consistent and calculated use of the knowledge. And remember, neoclassical theory assumes agents possess full knowledge in an economic decision making context. The outcome of such consistent and calculated decisions is efficiency. You do not need to be a psychologist to tell that this is patently false. As people, we are plagued by cognitive biases, which undermine the capacity of our brains to process all information before us in a consistent way every time. The breakdown of this consistency aspect of the assumption of neoclassical economic theory is a breakdown in the explanatory power of the theory.

In the final analysis, we conclude that neoclassical economics omits so many important issues that make it a weak and narrow way of doing economics. It leaves out institutions. It ignores the role of social factors that undermine independence of individual preferences and consistency in the processing of information. It ignores political factors. It ignores the role of power in shaping an economy. It marginalises the role of technology by assuming that it is given, when in fact technology should be the substance of economic theory as non-neoclassicists have shown. More on this later. It leaves out transaction costs by assuming that using markets is costless, i.e. it assumes automatic adjustment and so no cost
attached to it. It ignores the historical context of a market economy under consideration. It takes a very narrow view of human nature, which also means it has little to offer in explaining human interactions.

Neoclassical economists almost always respond to these criticisms in three ways. Firstly, they claim that a market economy behaves “as if” assumptions of price theory are true. Secondly, it doesn’t matter if assumptions are unrealistic because the focus of economic theory is not explanation but prediction. This line of reasoning has its origin in Milton Friedman’s argument that as long as predictions are reasonably accurate, we can assume that our theory is fine (Friedman, 1953). Thirdly, evolutionary process will weed out bad outcomes and strengthen good ones, leading to a state of equilibrium. So, the assumption is that economic evolution ends at some stage when equilibrium is achieved.

b. New Institutional economics (NIE)

There are many new institutional economists who have contributed to the programme of improving neoclassical economics. At the first year level, I will restrict myself to the founding father, Ronald H. Coase and, in a scanty manner, to Douglass C. North and to Oliver Williamson. In the early 1930s, Ronald Coase made a major contribution to economics, which has become the foundation of what we call New Institutional Economics. He noted that microeconomics, as we have it in our neoclassical textbooks, assumes that the market system is a costless mechanism to use in effecting economic exchanges between any two individuals, between any two firms, and between individuals and firms.

Coase noted that there were costs obvious enough in every transaction, which economists neglected in economic analysis. These costs he called Transaction Costs (Coase, 1937). A transaction is an exchange of property rights in the market. A property right is a state-protected legal interest in the present and future stream of income that comes from using a resource. Transaction costs are costs involved in exchanging rights which include search costs, information costs, contract design costs, contract enforcement costs, contract monitoring costs and dispute resolution
costs etc. The theoretical extension that Coase made was going to fundamentally “transform the structure of microeconomics” (Coase, 1992: 717). And he, thus, edged us to “study the world of positive transaction costs”. But why?

A world of positive transaction costs, unlike the zero transaction cost world of neoclassical economics, will require a legal system to be in place. The economics we currently have in many textbooks is silent about the legal foundations of the economy (Commons, 1924). I shall explore this further in Chapter Two when looking at the foundations of Classical economics that neoclassical economics missed or deliberately ignored. When you go to the market to buy a car, a computer, open an investment account, or open an account with Foscini what you will be doing when you are there is exchanging rights. Neoclassical economics assumes that what is traded in markets are goods and services, but what you exchange in markets are legal rights to carry out certain actions, which include consumption, production, and polluting etc. But where do these rights come from? The legal system. Suddenly, you begin to see that there is no complete economic theory if we take as given the legal system. The legal system gives us “an appropriate system of property rights” and enforcement mechanisms such as courts (Coase, 1992: 718).

The question Ronald Coase had in mind, which puzzled him in economics, was: Why do firms exist if the price system exhaustively coordinates the economy as economic theory maintains (Coase, 1937)? Firms also coordinate economic activities administratively through decisions of boards and executive management. The coexistence of administrative coordination through the firms and market coordination through the price system was a puzzle he found worth explaining.

Coase noted that all new institutions that emerged over time emerged because they were meant to reduce transaction costs (Coase, 1937). For example, before money was introduced, people used to exchange goods for goods (i.e. barter trade). Let’s try to explore the kinds of costs involved
in performing one barter transaction. Costs of searching for someone with the goods you want who is also searching for the goods you possess that you want to exchange. Transport costs as you carry the goods around in search of a potential barter trade deal. The costs of having an arbitrator who decides the value of your goods relative to the ones you want to buy so that a mutually beneficial trade takes place etc. Transaction costs of using the market under barter trade were huge. As a result, an institution called money was introduced to reduce transaction costs of trade. Now, all you need is carry money around in search of the goods you like in the market.

In a similar way, entrepreneurs establish firms because sometimes it is more expensive to source production inputs from markets. It may be necessary for the entrepreneur to produce them themselves. So, we see that firms emerge as an alternative coordination mechanism that engages in rationing transactions i.e. administrative coordination. An entrepreneur chooses to establish a firm to produce from within when it is more expensive to source from the market (Williamson, 1992). On the other hand, when it is cheaper to source from the market, an entrepreneur will not establish a firm.

Do we have examples? Let's reflect on labour markets first. Firms buy labour services which they use to produce goods. Traditionally, firms employed people directly and sometimes trained people from within preparing them for higher responsibilities. Nowadays, firms rely on labour brokers i.e. they do not employ labour directly from the labour market, but they outsource labour services from labour brokers. They are avoiding expenses such as medical expenses contribution, pension contributions and compliance with other regulatory requirements of labour laws. In all this, we see that labour brokers have emerged to reduce transaction costs of employing people for their corporate clients.

Another example, which explains why firms have many subsidiaries in different sectors is that firms can supply themselves with raw materials. We see this with milling companies, sugar producing firms etc. So, what
we see is that the size of transaction costs of using markets determines whether firms will exist or not. And markets may be costlier in some cases than doing it from within the firm. (Coase, 1992: 716) maintained that “in a competitive system there would be an optimum of planning since a firm, that little planned society, could only continue to exist if it performed its coordination function at a lower cost than would be incurred if it were achieved by means of market transactions”. Business people practically consider transaction costs in addition to market prices when making decisions.

The weakness of neoclassical theory, in Coase’s view, is its

“concentration on the determination of prices [which] has led to a narrowing of focus which has had as a result the neglect of other aspects of the economic system.... [It] seems as though economists conceive of their subject as being concerned only with the pricing system and anything outside this is considered as no part of their business” (Coase, 1992: 714).

This quotation says that economic theorists have been doing microeconomics with the conviction that it is largely about price and output determination. By neglecting institutional arrangements that “govern the process of exchange” (Coase, 1992: 714) such as contracts and firms, neoclassical economics cannot explain what happens between the purchase of factors of production in factor markets (e.g. labour markets, land markets, capital markets, raw material markets) and the sale of final output in consumer markets. This remains a black box in neoclassical economics (Coase, 1992).

Coase argues that neoclassical economists are analysing an imaginary economy because “what is studied is a system which lives in the minds of economists but not on earth. I have called the result “blackboard economics”. The firm and the market appear by name, but they lack any substance” (Coase, 1992: 714). This is a serious criticism: firms and markets in neoclassical economics are meaningless or vague shadows. Coase, thus, argued for inclusion of institutional factors in neoclassical
economic theory. This call was also made by his co-architect of new institutional economics, Douglass C. North. We see that Coase and his colleagues did not find neoclassical economics necessarily questionable on anything else other than that it neglected institutional factors and made a strong assumption of rationality.

In another critique of neoclassical economic theory, Coase reveals what new institutional economic theory is all about.

“The objection essentially is that the [neoclassical] theory floats in the air. It is as if one studied the circulation of the blood without having a body. Firms have no substance. Markets exist without laws and therefore without any clear specification of what is bought and sold. What distinguishes the modern institutional economists is not that they speak about institutions ... nor that they have introduced a new economic theory, although they may have modified the existing theory in various ways, but that they use standard economic theory to analyse the working of these institutions and to discover the part they play in the operation of the economy” (Coase, 1984: 230).

The blood is the market/price system that neoclassical economics is more concerned about, but the body are the institutional factors without which markets cannot function. Markets only exist because there are property rights established by law or custom. These property rights enable a person to exclude those whom she wants to exclude by charging a price for whatever she is selling, which she has a right over. Those who don’t want to pay, cannot have access to the good or service. This means that profits depend on property rights being in place. If there are no property rights, it cannot be possible to exclude people from enjoying the service. They can still enjoy the service while avoiding payment of the price, which would cause losses.

The institutional factors in this case, therefore, include property rights, contracts, permits, licences, regulations and laws as well as business customs. Notice, the markets, individuals, households and firms we
analyse in neoclassical economics have no legal foundation. But Coase is saying economic theory is only complete if the legal foundations are explicitly included in the theory. As such, without institutional arrangements, neoclassical economic theory is a “very incomplete theory” (Coase, 1992: 714).

Coase, however, admits that the method of new institutional economic analysis is the same as that of neoclassical economic analysis with the improvement that institutional factors are the object of analysis. This point is also put forward by Douglass North who says that

“the new institutional economics builds on, modifies, and extends neo-classical theory to permit it to come to grips and deal with an entire range of issues heretofore beyond its ken. What it retains and builds on is the fundamental assumption of scarcity and hence competition – the basis of the choice theoretic approach that underlies microeconomics. What it abandons is instrumental rationality – the assumption of the neo-classical economics that has made it an institution-free theory” (North, 1992: 3).

He sets the argument clearly here in terms of what New Institutional Economics is all about – building on, modifying and extending neoclassical theory. It does so by including all those elements of the economy neoclassical theory neglects i.e. institutions and transaction costs. The fundamental economic problem of scarcity remains a cornerstone of NIE. The NIE also maintains the concept of neoclassical competition which, according to (Hayek, 1945; Snow, 2002) is an empty concept because competition is defined in neoclassical economics under conditions of economic agents who possess perfect knowledge about every decision making context and process. Whereas in classical and Austrian economics, competition is about discovering knowledge, in neoclassical economics knowledge is assumed to be possessed in full before competition begins. There is nothing to discover. So, what is competition for in this theory? Nothing! It is an empty concept. As such, NIE also maintains the empty concept of neoclassical competition. Of course, we can see that NIE assumes that scarcity is the cause of
competition, but classical and Austrian economists claim that relative scarcity of resources, goods and services is part of the knowledge that must be discovered through competition.

The NIE assumes that economic agents have BOUNDED RATIONALITY, which means that they have cognitive biases that prevent them from consistently and calculatingly use knowledge before them. They have knowledge gaps. This is a worthy improvement to theory. The NIE has been criticised for committing “to the theoretical project of explaining the emergence of institutions in terms of the interactions of given individuals alone, starting from an institution-free ‘state of nature’” (Hodgson, 2002: xxi). This means that the NIE does not explain the individual (his/her tastes and preferences and habits of thought). It assumes them to be fixed (i.e. given). Since it does not explain the cultural basis of the individual, it claims to be institutional analysis, but it is in fact starting from an institution-free scenario.

c. Classical economics

Classical economics focuses on three principal issues in theorising the economy. Firstly, the substance (or content) of economic theory is growth and not relative prices. Growth, to classical economists, means the change in the annual output produced by a country or a firm from year to year. If output increases between any two years, we have positive growth. If it decreases between any two years, we have economic decline (negative growth).

Secondly, classical economics theorised the economy as a process which means they theorised the economy as continuously changing. At the time Adam Smith wrote his book, The Wealth of Nations in the 1770s, the United Kingdom was dominated by monopolies that were created by the royal family. His conviction was that an economy ought to be, and indeed
was, a market organised processes characterised by self-organisation and unplanned change.³

**Photo 1.3: Example of a self-organising and unplanned system**

³ "It is difficult for us to picture to ourselves the life of a man living in a house built with monopoly bricks, with windows (if any) of monopoly glass; heated by monopoly coal... burning in a grate made of monopoly iron. His walls were lined with monopoly tapestries...." (The Century of Revolution, 1603-1714 (Hill, 2002: 32-33)).

**In what seems to be apparent chaos, there is order. Several markets are functioning here. There might be laws designating where public transport terminuses and informal markets should be, but the markets remain self-organising.**

**Photo 1.4: A complex self-organising human system in a typical African city**

Thirdly, as we have already seen, they placed social relationships (human to human) interactions and human nature at the heart of economic
theory. This last point is very important because out of a complex understanding of human nature that Adam Smith and his colleagues had put forward, neoclassical economics picked one attribute of human nature called self-interest and built its entire theory around it (Blaug, 1997; Samuels, 2011). Leaving other attributes of human nature necessarily made neoclassical theory narrow.

In fact, the three pillars of classical economic theory are legal rules (institutions), ethical rules (culture, religion and human nature e.g. fear, greed, curiosity, and pride), market system (process, spontaneous, self-organising order) (Samuels, 2011). We can observe that NIE and Classical economics agree on focusing legal rules and the market system itself. The difference is that NIE fails to take a deeper approach to studying human nature i.e. the ethical dimension.

It is also important to note that classical economists did not distinguish between microeconomics and macroeconomics (Simpson, 2013). Some have tried to infer that they did, but they did not (Sowell, 2006).

According to (Sowell, 2006), classical analysis was largely long run analysis in which the law of diminishing returns was a workhorse for theorising wages and profits and classical limits to growth. For example, Malthusian theory, which we can modify by incorporating problems of climate change and urbanisation, shows the problem of population growth exceeding food production growth. What did classicists mean by diminishing returns? [1] agricultural output increased at a diminishing rate as more and more marginal/inferior (less arable) land was brought under cultivation [2] applying equal incremental amounts of a variable input to a fixed input resulted in output eventually diminishing (closest to modern concept in neoclassical economics, e.g. Chapter 6 of Janse van Rensburg) [3] HISTORICALLY, applying equal incremental proportions of labour and capital simultaneously to a fixed size of arable land resulted in output increasing at a diminishing rate (this was the backbone of the entire classical system and the policies it pronounced)
The law of diminishing return was used by classicists as an explanatory tool of both production and distribution. The laws of production and the laws of distribution were underpinned by the law of diminishing returns. Although the sphere of production was a technological system and what happened there was a physical process, the sphere of distribution was about who gets what from the collective produce of society. This latter part was determined by social institutions (laws and customs), which in themselves were influenced by the ruling elite and those who controlled the land in particular. Thus, there was a consensus that three laws were operative in the sphere of distribution

- the law of rising wages over time because of the law of diminishing returns
- the law of rising rent over time because of the law of diminishing returns
- the law of declining profit because of diminishing returns i.e. profit was a residual. So once 1 and 2 are established, 3 necessarily follows.

**For Sir Henry George, the law of rising rent was due to increasing value of land due to economic development, but both wages and profit declined as landlords too much of the surplus value (George, 2006).**

### d. Austrian economics

In this section I will summarise important principles of Austrian Economics. Austrian Economics is a brand of economics that started at the University of Vienna, with Carl Menger as the pioneer. It was further developed by Ludwig von Mises and August Friedrich von Hayek. So, what are the distinguishing features of Austrian Economics?

As a way of introducing key principles, I begin by a brief statement of the central beliefs of this way of doing economics. Austrian economists firmly believe that the economic outcomes we observe are determined by economic decisions, and these decisions are, by nature, highly personal and unpredictable (Hayek, 1980). By virtue of all decisions being highly personal, it means that economic value of objects/goods or services does not exist in things. Rather value of things exists in the minds of people
who value those things. Since no one, but the individual him/herself, has
intimate knowledge of their own values, tastes and preferences, value is
highly subjective (Hayek, 1980; Von Mises, 1960; Von Mises, 1999). This
is what Austrian economists call subjectivism. We cannot measure what
is going on in human minds in the same way that scientists measure
objects in nature. Human action is highly complex and not always
repeatable. More on this later.

Logically, the reason why we exchange (trade) goods/services and money
is because we value things differently. For example, if I value a pizza more
than cash, I will exchange cash for the pizza. But the pizza inn owner
values cash more than the pizza and so s/he exchanges the pizza for cash.
If we do not value things differently, there cannot be any trade taking
place.

Austrian economists believe that markets play a central role of
coordinating the economy by directing economic resources and goods to
their most valuable uses. They also believe that the institution of private
property is a critical foundation for a market economy to function
effectively. Alongside this view, Austrian economists also argue that
government intervention and control distort the very complex and
intricate market process (Butler, 2010; Hayek, 1980; Von Mises, 1999).
Government intervention disrupts the structure of relative prices. The
outcome is perverse results. I now turn to the principles.

Firstly, economics is a study of individuals since economics is all about
choice and individuals are the ones who can make choices. Carl Menger
put forward the idea that ‘man himself is the beginning and the end of
every economy’. This means that economics is about studying human
choices. They are the core content of economic theory. Those choices give
us the economy we observe. Choice arises from the fact that we, as
individuals, are faced with the problem of scarcity. We must make
choices and, in the process, sacrifice alternatives. Choices result in trade-
offs which imply that we incur opportunity costs for every decision we
make.
Economic decisions do not always involve money. Deciding to study for a test tonight rather than attend a music concert with friends is an economic decision. The resource involved there is time. Deciding to attend an arts festival show rather than buy clothes is an economic decision that involves alternative uses of money. So, to Austrian economists, a collective is incapable of making choice since it does not have a mind or a peculiar life of its own. Government may decide things through elections, but the actual voting is made by individuals not society as a collective. From this, it is clear that the chief role of economics is to comprehend and explain human choices and their consequences.

Secondly, economics is all about people in choice, which means that it is about what they prefer, value and intend to do, and what they believe about the world. Preferences, value and intentions are highly personal (subjective), individual feelings, which we cannot observe and measure and, so, cannot predict. However, we EXPLAIN rather than PREDICT human choices. Since we are also human beings with preferences, tastes, feelings, intentions and beliefs, we can develop explanations of human choices although we cannot measure the processes going on in the human mind. Economics is not comparable to natural sciences such as physics and chemistry. A natural scientist looks at mere objects in nature that are pushed around by forces external to them. The objects lack a mind of their own and thus their actions are repeatable with great exactness. This means that the nature and behaviour of objects in nature are observable, measurable and predictable.

Thirdly, the economic value of goods/services in economics rests on human values. Value is not a quality found in goods/services because none of the goods/services we demand has a constant quantity of usefulness or satisfaction it yields. Usefulness of a good/service and, so, the satisfaction it yields, and the value assigned to it are all contextual and subjective (Butler, 2010). We know this because the same good/service has different value to the same person, and to different people, at different times and different places. The value of the thing depends on how useful it is to them for the time being. We also know that
people’s tastes, preferences, wants and values change from time to time. So, value is never fixed.

Consider this. A person who is walking into town on a very hot day might be craving for ice cream. The value they place on it is very high because there is a human need to quench thirst. But a few moments later after they have had their large ice cream cone, if we ask them to value ice cream, they are most likely to place a lower value to it because their need has been satisfied to a considerable extent. More importantly, two different people walking into Steers to find something to cool themselves down will have to choose between an ice cream cone and a bottle of water. One will go for water, another for ice cream cone. The value to them of the two items is different. Same need but different ways of satisfying it are chosen in the same decision making context. Value is indeed subjective.

So, how are value and opportunity cost related? Since we face scarcity all the time, we make choices, which means we weigh up the implications of competing decisions. But, when we weigh up decisions, we finally must act on one of them (the choice we make). The choice comes with sacrifices – we must give up something to get what we want. This is opportunity cost. This cost can be in money terms, in terms of time or goods or happiness etc. What we observe here is that opportunity cost is also highly subjective just as is value. In fact, opportunity cost is another way of talking about the value of things. We can understand the value of a thing by the sacrifice we make to get it. Put simply, we are weighing up the value of what we get against the value of what we surrender to get it. This is a highly personal decision. Different people will have different values of what they get relative to what they surrender for the same good/service. Some will make a choice opposite to ours. The great message from Austrian thinkers is that every decision, whether made by individual human beings or individual firms, is highly subjective.

Fourth, prices play a significant role of helping us to maximise value and minimise opportunity cost. Even if a large ice cream cone sells for R10,
that does not mean its value, to me, is equal to R10. The subjective value I place on the large ice cream cone might be significantly higher than R10 on a very hot day. The value that Steers places on the large ice cream cone is different from the value I place on the same cone. Therefore, Steers and I are willing to exchange ice cream for money and money for ice cream. The value I place on ice cream is higher than the value Steers places on it. Hence, I am willing to give up R10 (something of a lesser value to me) to get ice cream (something of a greater value to me) and Steers is willing to give up ice cream (something of a lesser value to it) to get R10 (something of a greater value to it). Value is highly personal (subjective).

So, why have prices? Prices tells us the quantity of one good that people are willing to accept in exchange for a quantity of another good. For example, Steers is willing to accept a quantity of money (R10) for the quantity of ice cream (LARGE ice cream cone). The opposite, in my case as a consumer, is true. We can say prices tell us the current rates of exchange between different goods. Because we are comparing the quantity of one good to another, we call these rates of exchange relative prices as we have already established.

So, what role do prices play then? They “act to co-ordinate the separate actions of different people in the same way as subjective values help the individual to co-ordinate the parts of his plan” (Hayek, 1980: 85). For example, if the price of ice cream goes up (i.e. the quantity of cash needed to have the same large ice cream cone), we are immediately directed by the signal sent by the relative price to not frequently buy ice cream and SWITCH our spending to other things we value more/better. As we switch our expenditure to other valuable things, producers of those NOW more valuable things will produce more of them to meet the increasing demand.

Relative prices summarise the relative scarcity of things and the different values people place on goods. This leads people to reconsider their choices and change them appropriately. So, we can say the price system is a “mechanism for communicating information if we want to

Rates of exchange or rates of equivalence are also called marginal rates of substitution or relative prices.
understand its real function – a function which, of course, it fulfils less perfectly as prices grow more rigid” (Hayek, 1980: 86). We can further use a metaphor to describe the price system as a “kind of machinery for registering change, or a system of telecommunications which enables individual producers to watch merely the movement of a few pointers” (Hayek, 1980: 87). We do not need to know every specific detail of what is causing the price change but knowing that the price has changed already communicates information about changing relative scarcities of the good or the inputs used to make it. As a criticism to neoclassical economics, (Hayek, 1980: 87) claimed that

“I fear that our theoretical habits of ... [assuming] more or less perfect knowledge on the part of almost everyone has made us somewhat blind to the true function of the price mechanism and led us to apply rather misleading standards of judging efficiency”.

It is bad economics to assume that individuals possess complete or perfect knowledge of their decision making context. The price system provides them with the information: that is its role. Prices are not dumb.

Fifth, competition is a process of discovery (Hayek, 1980). Markets are never perfect, but their imperfection is far better than the imperfection of government planning and intervention. It is the imperfection of markets that makes them function better. How so? Imperfections in the market are indications of existing, but unexploited, economic opportunities. Such unexploited opportunities indicate profit opportunities. The more watchful participants will respond to the imperfections by providing new products, improved products, new processes of production, new technologies etc. You might even have heard that people buy low and sell high, a process called arbitrage. This means people watch for price differences between two places of the same good and buy the good from the cheaper location and sell it in the more expensive location. The result is that the seller makes profit and prices will end up being equalised across locations. The attraction of profit makes people to be on the lookout for such opportunities (imperfections)
and to innovate so as to capture them. This is what, if you remember, we called entrepreneurship. The greater the opportunities, the greater the profit to be made especially if competitors are slow to follow suit. This means that the process of competition is a process of discovering information about new opportunities, the result of which is new and better products and production technologies or processes. Thus, “competition is an ongoing process of entrepreneurial exploration from which we all gain as better and cheaper ways of satisfying our wants are discovered” (Butler, 2010: 15).

Sixth, private ownership of the means of production is essential for a market economy to function effectively and efficiently. Property rights allow us to exclude others and to enjoy something exclusively to ourselves. This also means that we might have a value placed on it different from the value others who want it but don’t own it might be placing on it. On this basis, we can dispose of (sell, exchange, trade) the thing to get things others own which we want but don’t own yet. In other words, property rights give us the right to use, the right to manage, the right to exclude and the right to sell what we own whenever we want to. If there are no property rights, there are no markets. Property rights enable us to exclude those who don’t want to pay for the service we offer (i.e. they do not value what we are offering so much so that they think it must be free). Property rights enable us to trade with those who really value what we offer just as a we value what they offer. Thus, we can say that if there are no property rights, there is no price system. When there is no price system, then so much information about local conditions and time is not available to economic agents. The information discovery process has broken down. This means that individuals might make decisions that are not the best possible.

Seventh, all production decisions are complex balancing acts. Producers make goods and sell them to consumers. All production is time-consuming and involves a web of intermediate steps that must be brought together in just the right way. Because a small change in time or place (e.g. input price change, wage increases, etc) or a change in demand
(e.g. better competing products) can pose significant real risk of loss to a producer. We therefore see that producers are faced with so much risk (and perhaps uncertainty) which is why they are searching for information to manage the size of the risk. They must be rewarded for taking this risk.

Eight, actions have unintended good/bad collective consequences. Many individual actions end up having important good collective effects. Adam Smith argued that while people pursue their individual self-interests, they unintendedly promote the collective good. He said it is as if they are driven by the invisible hand to promote the collective good in the course of pursuing their individual good. What Adam Smith really means is that so many unplanned systems and processes such as markets have had the effect of making society better off as interactions of individuals produce better unplanned outcomes for society. Billions of individual exchanges across the world have created the price system. Individual cultural transactions have given birth to language, which we value so much in communication. Individual actions, differences and arbitrations have created common law for us. Thus, people have coincidentally and unconsciously created something that works well.

Ninth, government interventions always distort the smooth functioning of the price system. Since government is big, its actions can be felt, and they can disrupt the structure of relative prices. Individuals however are so small relative to the market that their individual actions amount to no noticeable change and, so, do not disrupt the structure of relative prices. Examples of government interventions that are often criticised include minimum wage laws, fixed exchange rates, price controls on basic commodities. The outcome of these interventions are distortions that generate perverse outcomes.

e. Original Institutional economics

There were several scholars who founded original institutional economics – Thorstein B. Veblen, Wesley C. Mitchell and John R. Commons. This school also shares a lot in common with Classical
economics, except that it takes institutions and technology as the substance (content) of economic theory. It uses Charles Darwin’s evolutionary principles to explain evolution of social institutions, technology and the economy in general. That is, it differs from neoclassical economics which uses principles of physics to study the economy. Original Institutional economics approaches an economy as a *living system*, which justifies use of biological principles as a system of explaining the economy over time. However, we must be careful to note that the “prevailing view among institutional and evolutionary economists is that socio-economic systems are governed by principles that are not entirely reducible to those pertaining to the natural world” (Hodgson, 2002: xxi), emphasis mine). The idea is that while we borrow biological metaphors to explain the economy, we must appreciate the limits of such metaphors.

What did Charles Darwin teach? He taught that species evolved over time. Natural and artificial selection mechanisms determined which species survived and which became extinct. So, we understand that he taught the survival of the fittest. This Darwinian system had three important things we need to understand: interactors, replicators and survivors (the fittest that emerge in the process) (Hodgson & Knudsen, 2010). Interaction is a mirror emerge of the processes of competition and cooperation. While cooperating, competing and preying on each other, species discovered new ways of surviving, of overcoming competition, and of preserving their own kind. Thus, competition and cooperation are about knowledge discovery. The processes of competition and cooperation are information transmission processes and what is being transmitted are what we call replicators (genes) i.e. that which reproduces the species so that it survives into the distant future times.

In social settings, interactors can be firms, shops, tribes etc that compete in the market. You have seen some firms closing shop because they are

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4 John R Commons had a different type of institutional economics which could be called legal-economic theory. He sought to explain the legal foundations of capitalism and find ways of making capitalism more reasonable and progressive (Commons, 1924).
lossmakers (they are unfit) and you have seen others becoming bigger and bigger over time, others innovating, re-inventing themselves through technology and other swallowing others like sharks swallow small fish. As firms compete, they transmit information about the best routines, practices, business customs, norms and standards that they operate with. Less successful players copy or learn from more successful firms. So, in the final analysis we observe that certain business routines, practices, customs, cultures, norms and standards survive while others become extinct. These routines, practices, customs, cultures, norms and standards are like social genes which contain information that sustains success, growth, good functioning and reproduction of an organisation. Enough of Darwin’s ideas. So, what is the point of original institutionalists? I will focus mostly on Veblen at this first year level. John R. Commons is far more complex if you have no knowledge of law.

Thorstein Veblen began his new economic theory program by asking the question: “Why is economics not an evolutionary science?” (Veblen, 1898). What would an evolutionary science look like? He argues: “Any evolutionary science ... is a close-knit body of theory. It is a theory of a process, of an unfolding sequence” (Veblen, 1898: 375). The economic life process or historical causal processes are the substance of economics. This means that economic theory must be a cause-effect analysis. This means that we must proceed by observing economic causes (factors that explain) and effects (outcomes that are explained). If you look closely, you observe that Veblen says economic theory must be an explanation of a process not a static condition (i.e. not an equilibrium). The economy is an ‘unfolding sequence i.e. evolving’ system. There is no such thing as an equilibrium. In this, Veblen agrees with Classical and Austrian economists.

To demonstrate Veblen’s agenda for new economic theory, I quote his finest lines in the founding paper:

“The economic life history of the individual is a cumulative process of adaptation of means to ends that cumulatively change
as the process goes on, both the agent and his environment being at any point the outcome of the past process.... All economic change is a change in the economic community – a change in the community’s methods of turning material things to account. The change is always in the last resort a change in habits of thought.... [Economic interest] affects the cultural structure at all points, so that all institutions may be said to be in some measure economic institutions.... From what has been said it appears that an evolutionary economics must be the theory of a process of cultural growth as determined by the economic interest, a theory of a cumulative sequence of economic institutions stated in terms of the process itself” (Veblen, 1898: 391-393) emphasis mine.

Let’s unpack this bunch of statements carefully. We can extract at least nine elements.

i. Economic theory includes historical aspects of the individual or community. See his argument about past processes affecting the present of the community and the individual. This means that the individual and society cannot be taken as given. Individuals are instituted beings, they are “social and encultured individuals” (Hodgson, 2002: xxii). Preferences, tastes and intentions are all influenced by history and culture. History matters and economic theory, just as all social institutions like markets, must be historically and geographically specific (Hodgson, 2002). This prevents us from falling into the trap of developing universal theories which claim to explain an issue everywhere and every time, and are narrow, shallow and divorced from reality. All explanation happens in historical time, which is what classical economists were also doing (Simpson, 2013; Sowell, 2006). This makes sense if one considers that economics is not about predicting future behaviour of human beings and communities, but to explain their behavioural actions that have already unfolded or are currently unfolding.
ii. Economic theory explains the cumulative process of adaptation: remember, we defined an economy as an adaptive social system. Now see, Veblen has a similar view here. When we say change is cumulative, we are claiming that the past influences the present and the present influences the future. This is evolutionary thinking. That is social Darwinism.

iii. The individual and his/her environment are both changed by the cumulative causal process. The idea that they adapt means they change. But as Wissler (1924) explained, when humankind’s social organisation becomes more sophisticated, they begin to alter their environment as they adapt. These are Darwinian principles. How? The process of individual (business) adaptation is the interaction process with other individuals (businesses) and with the social and natural environment through which customs, habits, practices and routines are shared. As the social and natural environment change, some individuals (businesses) are eliminated, others survive because they adapted appropriately. In short, the social and natural environment changes the individual and the individual changes the social and natural environment (Hodgson, 2002). Thus, economic theory must have multiple levels of analyses (Hodgson, 2002). This overcomes weaknesses of NIE, Neoclassical and Austrian economics that explain social changes through individual actions, without observing that the social structures change the individual as well (Hodgson, 2002).

iv. Economic theory must explain technological change – as individuals (businesses) adapt to environmental changes, they develop new ways of producing (methods of turning material). Remember our discussions about artificial intelligence and other technological responses to natural environmental challenges. So, the process of adaptation is a technological change process which economic theory must explain if it is to be economic theory at all.

v. Change in the stock of knowledge or change in habits of thought – the challenges we face in society due to social problems and environmental problems force us to create new knowledge
(technology and/or innovation). When that new knowledge begins to take hold on society, we have a change in habits of thought. The laws of society are changed to reflect the new habits of thought. Production methods change to reflect the change in habits of thought. Individuals (businesses) also change considering this change in habits of thought.

vi. Economic interest drives change – now, this is a very important point. What is this Veblen speaks of? Economic interest is another way of saying entrepreneurship. You recall we mentioned under factors of production that entrepreneurship is the driver of change through taking risk, innovation and discovery and use of knowledge through the competitive process (Hayek, 1980). As you can see in his argument, cultural change is driven by economic interest. Economic institutions change because of economic interest.

vii. Power as a framework for economic analysis – the idea that economic interest drives change implies that power is a central concept in analysing economic change (Dugger, 1980; Hayden, 2006). There would be a struggle between the technological system which drives growth and the institutional system which tries to lock society in the current state of affairs. This friction would lead to two processes of economic change: path dependent change and path determinant change. The former means that the economic system is changing very slowly because forces that prefer the existing state of affairs block change. The latter means that the technological system if prevailing and is disrupting the current state of affairs leading to faster change. Austrian and classical economists, and much more neoclassical economists, did not directly use power as a framework for economic analysis.

viii. Economic theory must study social institutions (culture, religion, beliefs, traditions, customs, norms, myths, beliefs, values) because all of them have economic effects. Remember Figures 1.15 and 1.16 which showed the effects of religion and other patriarchal beliefs
on labour market inefficiencies that we observe in underemployment or unemployment of female labour.

ix. Evolutionary economic theory is a theory of the process of cultural growth because of what we just said about all social institutions being economic institutions in (vii). *Now, entrepreneurship (economic interest) through technological change (new methods of production) drives cultural change (cultural growth) which is another way of saying societal adaptation takes place.* In the final analysis cultural growth just means economic institutions have changed. As such, economic theory is a theory of institutional change.

What we observe from Veblen’s outline of evolutionary economic theory is that his vision is a broader one beyond the reach of neoclassical economics and new institutional economics. His theory is, in my view, very much aligned to Classical economics, and to some extent Austrian economics, although because of his focus on cultural growth his vision is even much broader (Hodgson, 2002). But the reason why Veblen focuses on cultural growth is that he understands that human nature is very complex and for us to develop an economic theory that explains the cultural process, we need a complex view of humankind. Remember neoclassical theory and new institutional economic theory only focus on self-interest. Classicists had a broader view of human nature, which was rooted in culture.
### 1.4.2. Summary

<table>
<thead>
<tr>
<th>Substance (content) of economic theory</th>
<th>Classical Economics</th>
<th>Austrian Economics</th>
<th>Original Institutional Economics</th>
<th>Neoclassical Economics</th>
<th>New Institutional Economics</th>
</tr>
</thead>
<tbody>
<tr>
<td>-Long run growth</td>
<td>-Human choices and their consequences</td>
<td>-Institutional change e.g. cultural growth</td>
<td>-Relative prices</td>
<td>-Transaction costs</td>
<td></td>
</tr>
<tr>
<td>-human nature</td>
<td>-human nature</td>
<td>-human nature</td>
<td>-efficiency</td>
<td>-Institutional change</td>
<td></td>
</tr>
<tr>
<td>-Social institutions (moral &amp; legal rules)</td>
<td>-knowledge generation and use in economic organisation</td>
<td>-technological change</td>
<td>-equilibrium (stasis)</td>
<td>-relative prices</td>
<td></td>
</tr>
<tr>
<td>-Spontaneous change</td>
<td>-some social institutions (property rights)</td>
<td>-learning (knowledge generation and use)</td>
<td>-human nature (assumed, not real, and very limited view)</td>
<td>-efficiency</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-spontaneous change</td>
<td>-spontaneous and non-spontaneous change</td>
<td></td>
<td>-equilibrium, with some elements of dynamism</td>
<td></td>
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</tbody>
</table>

| Nature of economy                     | -Self-organising; Evolutionary, Dynamic | -Self-organising; Evolutionary, Dynamic | -Self-organising; Purposefully organised; Evolutionary; Dynamic | -Static, equilibrium | -Static, equilibrium, but with some elements of evolutionary dynamism |

<p>| Assumptions if any                    | -humans have imperfect knowledge | -humans have imperfect knowledge | -humans are culturally bounded/regulated and so have imperfect knowledge | -humans have perfect knowledge (i.e. this underpins existence of equilibrium) | -humans have imperfect knowledge |
|                                       | -humans have limited rationality |                                  |                                  |                              | -humans have bounded rationality (thus, |</p>
<table>
<thead>
<tr>
<th>Economic Interactions</th>
<th>Markets are Imperfect</th>
<th>Government Intervention is Distortionary and Bad for the Economy</th>
<th>Individuals are Fully Rational (thus, Preferences are Consistent)</th>
<th>Economics and Markets are Static</th>
<th>Transaction Costs are Zero</th>
<th>Individuals are Identical (thus, Preferences are Independent)</th>
<th>Tastes and Preferences are Given</th>
<th>Technology is Given</th>
<th>Institutions are Given</th>
<th>Preferences are Not Fully Consistent</th>
<th>Individuals are Identical (thus, Preferences are Independent)</th>
<th>Tastes and Preferences are Given</th>
<th>Technology Changes because of the Need to Reduce Transaction Costs</th>
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<td>Technology Changes because of the Need to Reduce Transaction Costs</td>
</tr>
</tbody>
</table>

Method of analysis or explanatory framework, metaphoric framework

- Methodological Individualism & Methodological Collectivism
- Normative Analysis
  - Processual, Evolutionary (i.e. biological metaphors)

- Methodological Individualism
  - Choice Theoretic
  - Processual, Evolutionary (i.e. biological metaphors)

- Positive (Objective) Analysis

- Positive (Objective) Analysis
- Mathematical, Statistical, Econometric, Case Studies (i.e. Physical)
<table>
<thead>
<tr>
<th>Unit of analysis</th>
<th>Extent of reality included in the theory</th>
</tr>
</thead>
<tbody>
<tr>
<td>-individual</td>
<td>-full inclusion of reality (i.e. fewer assumptions made and are realistic)</td>
</tr>
<tr>
<td>-social system</td>
<td>-Full inclusion of reality (i.e. fewer assumptions made and are realistic)</td>
</tr>
<tr>
<td></td>
<td>-Full inclusion of reality (i.e. fewer assumptions made and are realistic)</td>
</tr>
<tr>
<td></td>
<td>No reality included (i.e. because assumptions needed for mathematical modelling to work, displace reality in the theory)</td>
</tr>
<tr>
<td></td>
<td>Partial inclusion of reality (to the extent that quite significant assumptions of neoclassical economic theory are maintained)</td>
</tr>
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</table>
References


