

4. The interest rate: an aspect of human action

In a previous article I explained how prices are a result of human action. Interest rates are an aspect of human action too. The height of the interest rate depends on the time preference of people. Every person has a different time preference. But, every person naturally prefers a certain amount of money now compared to the same amount in the future. If someone has to give up a certain amount now, this person will require a higher amount in the future.

The ratio between the future and present amount is the interest rate. This interest rate is a compensation for giving up a certain amount of money now. It is a compensation for time forgone. The more a person prefers to own money now, the higher the interest rate this person requires by way of compensation.

Where supply and demand of all time preferences meet, a market interest rate develops. The Swedish economist Knut Wicksel¹ used the term 'natural interest rate' for the first time. Mises was much inspired and spoke about the 'originary interest rate'. In the following, I will speak of the natural real interest rate.

Interest rate and the Production Structure

Money is just one specific economic good, providing a certain service to the owner. The concept of time preference applies to all economic goods and services. Every person naturally prefers a good now compared to the same good in the future. If a lower market interest rate has come about in a society, this society has a preference for consuming more in the future compared to if the market interest rate were higher. Society as a whole is then prepared to make more time and money available for purposes of investing into a better future.

The only way to achieve a better future is by investing in 'the economy', more specifically, by investing in the production structure. The production structure consists of the various phases of production, from mining and refining raw materials, to manufacturing and production to distributing and selling the products in the final stage to the consumers. This structure exists for goods and services. The development of a production structure is a dynamic process, following the ever changing preferences of consumers.

There are many ways to producing these goods and services, with many combinations of labour, raw materials and various ways of applying new technologies. Entrepreneurs and producers who have best figured out how to deliver the products to their clients, will stand to benefit the most. They are bound by the product and services preferences of consumers and by the time preferences of the people in society. As Mises would say, the consumer is sovereign.

An economy adjusting to an older population

The market interest rate that results from the time preferences of society, is determining the depth and the shape of the production structure. Suppose there is a society without any confidence in the future. They are convinced the end of times is near, for whatever reason. This society sees no purpose to investing in the future, with a view to consuming more in the future.

¹ Interest & Prices, Knut Wicksel, 1898

For these people the future does not matter much. If someone in this society could be convinced to save and to invest, this person would require an extremely high interest rate, by way of compensation. If there is hardly any money for investing, the production structure will shrink. People in this society do not care about a shrinking production structure though. They are almost completely living in the present. Their market interest rate is very high, their savings are very low and the production structure becomes very shallow and small. The production structure has shaped itself to the requirements of this society.

Along similar lines, when people grow older, their market interest rate will normally speaking have the tendency to go up. Older people have less concern with investing in the far away future. With people growing older and consequently maybe a society that is shrinking, there is less need to invest with a view to consuming more in the future. Obviously, older people will be concerned about their children and grandchildren and for sure are very willing to invest in their future. By and large though, when people grow older, the time has come for them to benefit from investments done in the past.

Consuming more in this case does not necessarily mean literally to consume more goods and services than in the past. It means allowing to keep on living a good quality live without the need to work. Retirees are consuming leisure. The proceeds of past investments, maybe as part of a pension plan, are used to outsource work to other people in society. Instead of saving and investing, people in such society will prefer to consume more now. With less money offered on the market, driven by society's higher time preference, the lower supply of money results in a higher interest rate. The production structure will consequently not be expanded.

An economy adjusting to a younger or expanding population

Similarly, when society is getting younger on average, the market interest rate will normally speaking have the tendency to go down. Younger people have an interest in investing in the far away future when they will probably still be there, but maybe not able or willing to work anymore. Please note that it is fair to say this is true from a certain age onwards. Young children probably are completely living in the present with no interest in the future yet. For young people the interest and possibility comes when for instance when they get a job and are able and willing to start saving for later.

If in a society the interest rate is going down, this means that people on average prefer to spend a bit less money now in order to consume more later. This sounds counter intuitive. How can you spend more money later, if the interest rate is lower and hence if the return of your investments are lower? Part of the answer is that people are willing to save money now, with a view to consuming more in the future, instead of having just more money available in the future. You do not consume your Euro plus interest in the future, you consume what you can buy for this Euro plus interest. It is not only about the nominal value of the Euro, it is about the real value, taking into account price declines and product quality improvements.

The other part of the answer is that this society in total will save more and is hence able to invest more. Because more money is invested, the production structure has expanded and is able to produce more goods and services in the future. Consuming more in the future can but does not need to literally mean consuming more physical units. It means to reap the benefits of current

investments, allowing the people in society to keep on living a good quality life in the future. These investments will need to be done in a sustainable manner by definition. The whole purpose is to improve the quality of life and to sustain society. It can mean producing and consuming a similar amount of goods but at higher quality, and it can mean the same amount of exactly the same goods, but without air pollution or without any loss of biodiversity. It can mean the same amount of goods, but produced in half the time, so more time can be spent on leisure. Consuming more in the future can imply a higher GDP number, but this may not necessarily be the case. It is not the GDP number that concerns people in society, what is important to them is to improve their real situation.

A society without a growth in the money supply

Interest rates are not naturally an invention of banks. In first instance the free market interest rate is a reflection of the time preferences of people in society. This interest rate gets translated into the shape of the production structure and hence helps to shape our economy and our society. The interest rate best reflects people's time preferences if the money supply is not changed involuntarily. In our economies however, interest rates are heavily distorted by central bank monetary policies. As a result, the production structure gets distorted and the economy is not in line anymore with the preferences of people in society.

In next articles I will expand on how interest rates and prices together shape society in real terms before discussing the consequences of manipulating interest rates and prices by central bank monetary policies.