

## The concept of capital before and after industrial revolution: Islamic versus market economy

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**Abstract:** The concept of capital and ownership of capital in market economy and Islamic economy is different. Also the role that capital is expected to play in the economy is different in two economic systems. One of the key elements in creation of the capital (capital formation) is interest rate. In Islam interest is strictly forbidden. This paper reviews the concept of capital and the process of capital formation both before and after industrial revelation. In that context it also looks at the function of interest rate during the time of Prophet Mohammed and the present time.

**Key words:** capital; capital formation; holy Qur'an; industrial revelations; interest rates; Islamic economics; market economics; ownership of capital; ribba

### 1. Introduction

To be able to approach the concept of capital in Islam, we should first look at the different meanings and functions of capital in its historical framework, then compare it to the writings of the Qur'an. There are two different ways of explaining the role of capital through the writings in the Qur'an. One would be the ad verbatim interpretation of the wording themselves, we would leave this procedure to the Islamic scholars. The other is to look at the possible intentions of the Prophet Mohamed transposed into modern conditions. To proceed in this direction we will need to explain the modern economic environment and compare the traditional Islamic approach to our times.

Since the time period of the Prophet Mohamed, a lengthy and elaborate process has taken place, better known as the "Industrial Revolution." The revolution, which began simultaneously in different countries around 1850-1890 and is still going on today, has completely changed the economic concept of capital and the understanding of its functions. Although misinterpretations are rampant regarding the consequences of the revolution, most historians and economists agree about the concept of capital: Without it we would not have the standard of living that exists today.

### 2. Capital and the industrial revolution

According to Keynes (1936, p. 135), the role that capital played before and after the industrial revolution is completely different. Before the industrial revolution the concept of capital was limited mostly to land. The economic social pattern of five social groups, the warriors (military), the clergy (priests), the landowners (mostly aristocrats), the farmers (mostly serfs, debentures and slaves) and the merchants (craftsmen and traders) would

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define their level of income. The mobility of a group member to another group was extremely limited if not impossible. Economically the warriors and the priests had a very limited direct impact on capital formation. As for the merchants, the group was extremely small, their field of occupation was very limited and their level of productivity was very low, hence their low capital creation. There is only a finite number of blacksmiths, tailors and goldsmiths (bankers) a village requires.

The two main players of this economic system were the landowners and the farmers. The farmers would only generate or receive enough income for their survival. On one hand, farmers that owned small plots of land were dependent on large landowners for protection, irrigation, acquisition of grain and tools of production, even the sale of their crops that could not generate noticeable capital. On the other hand, their productivity relied on their strength and the number of children they had, which eventually created a problem of land-capital to labor ratio. This further diminished the productivity and did not leave a place for capital formation or the accumulation of it in the long run. Capital creation in this group was practically zero.

The only group that could generate capital was the aristocrats (wealthy landowners), but they also faced a dilemma. Although they could generate noticeable capital by starving their workers, there was still very little surplus generated above the survival level because of the low productivity of labor. In the long run, this was self-destructive because it slowly eliminated the tools of production, also known as the labor force (Adam Smith, Book II, Chapter 3). It ultimately diminished the productivity of the land because it changed the labor to land ratio by increasing the price or cost of labor. Even though they could feed and preserve the labor force, due to the low productivity, there would be virtually no surplus generated and hence no capital created. The landowner was forced to choose a point between these two extremes, and the wrong choice would result in political change, revolution, and destruction; Hence despotism became the only tool to warrant stability.

This situation has changed since the antiquity and the middle-ages but in minimal ways. The equation has largely stayed the same. Therefore force, fear and coercion have been the rules of economic success. Continually, one group, one tribe, one race, one religion will control the overall society at the expense of all others.

Moreover, in Europe for example, except in the few city-states such as Venice or the Hansa Stadt (Hamburg, Hanover, and Stuttgart) for the rest, the largest proportion of their economies was agricultural. Based on the ownership of land, labor was used as servitude (serfs) or debenture. A verbal or assumed (traditional) agreement would establish the relationship between landlord and serfs. This agreement made labor responsible for the physical production and the landlords for purveying the required tools, maintenance and if necessary any expansion, in other words, responsible for the capital endowment. In turn the landlord would use his allocated return from production to maintain the necessary capital to fulfill the above-mentioned requirements by selling his share of the production to other social groups. It is obvious that in such system there is no need to borrow or lend, hence the inexistence of a large capital market. Only a minimal portion of the population owned a small amount of capital as we understand it today. These were the artisans and the merchants, representing less than one percent of the population. In turn, the need for capital of these two independent groups was very limited. One can easily imagine the small amount of capital a merchant, a blacksmith, a tailor, or a mason would need in those days.

On the other hand, the mobility between social strata was practically nonexistent if not prohibited. One was born into a cast and would remain most likely in the same cast except occasionally in times of war when some serfs would be used as soldiers. Even then, by the end of the conflict they would most likely rejoin their previous cast. Therefore there was reduced mobility of people from one social group to another. In turn, this significantly limited the growth of the merchant and artisan group, which would not require a larger capital availability or

capital creation.

Even the renaissance period that revolutionized many things, from knowledge and art to technology, did not do much in the overall economic environment. Perhaps some changes were made in proportion to the size of different groups. For instance, in some parts of Europe, merchants became more abundant, and the number of priests shrank, but not much was done as far as the main equation of capital/labor. This was because the only capital was land, and land was not expandable and largely confined to inheritance.

### **3. The role of interest rate**

In the overall economic system, under these conditions, the concept of an interest rate as we understand it today especially regarding the capital formation was irrelevant. It followed that the components of the interest rate (such as yield, risk and inflation) also became irrelevant as well. In fact during this time interest rate had very limited application mainly used for lending and borrowing (Adam Smith, Book II, Chapter 5). Since laborers could not afford to save if they were not able to work, they would not be able to survive unless they raised money in another temporary form. At that time there were only two options available. First, through charity, relatives helped relatives and neighbors helped neighbors. The second way to raise money was through lending, either with or without interest. No-interest loans were usually in small amounts and for short terms. For the larger or longer term loans, lenders charged relatively high interest rates due to the higher risk. Where borrowers were unable to repay the interest or principle by the date due, lenders would then charge additional fees and increase the interest rate. As a result, it was common to see families that had lost everything they had and were destroyed financially.

Due to these reasons, interest rates were forbidden by both Judaism and Christianity, unless the borrower was a nonbeliever. In fact, in early 300 BC the first general counsel of the Christian Church passed a canon forbidding even charging interest to the nonbeliever. "If thou lend money to any of my people that are poor by thee, thou shalt not be to him as a usurer" (Exodus 22.5).

This was the environment in which the Prophet Mohamed announced the words of the Qur'an. In the Holy Qur'an, interest (riba) is unambiguously condemned and forbidden (Chapter II, Verses 275-276 and 278; Chapter III, Verses 130-131). Therefore, in Islamic countries governed by Islamic law, interest can neither be charged nor received. Again this rejection of interest arises mainly from a concern that no one may extract gain out of the inherent risks of the human condition at another's cost.

It is also important to note that Islam wasn't just another religion. In Islam, God is the creator and owner of wealth, and there is no divorce of scientific inquiry from the fundamental spiritual base. In Islam, property is a trust; It is entrusted to human beings to be used not only to ensure their living and enjoyment, but also to bear witness to God's benevolence by exalting his message and his spreading good: God is the creator and owner of wealth and people are the vice-regents of God; However, people can pursue and use wealth in the form of a trusteeship from God (Qur'an 20:6). The proposed relationship between laborer and landlord, as well as a new definition of ownership would have a major impact on the formation of capital in the Islamic countries governed under Islamic law.

Islamic economics, therefore, deals with a wide range of issues, encompass social and economic behavior of all individuals. In other words, Islamic economics presents an Islamic viewpoint on the human economic situation, having social justice as its cornerstone. Its root, according to Akram Khan (1991, p. 248), "goes deep into Islam's vision of human nature."

There are other but similar definitions of Islamic economics. For example, Zaman (1984, pp.51-53) stated that: "Islamic economics is the knowledge and application of injunctions and rules of the Shari'ha (Islamic jurisprudence) that prevent injustice in the acquisition and disposal of material resources in order to provide satisfaction to human beings and enable them to perform their obligations to Allah (God) and society."

"Islam is a way of life," asserted Reilly and Zanganeh (1990, p. 28), "this is important because it dismisses separation of ethics, economics, politics, sociology, religion, etc. All aspects of life are interrelated. One cannot separate a company's president or a country's president from the environment that he/she has been fostered in and is living in." Distribution of income, therefore, cannot be based only upon the participation of factors of production in economic activities. In Islamic economics, income is also distributed through "Zakat."

#### **4. The modern interpretation of the industrial revolution**

For most people the industrial revolution was the introduction of machinery in production. It has also been claimed as the use of non-human energy as a means of production, such as steam, electricity, nuclear power etc. The real revolution for the economist was the continuous creation of capital by mass, in other words, by the labor force. Furthermore, the capital generated was a flow and not a stock as land or any other kind of stagnant wealth or a commodity. This happened through the production of income surplus. Up to the end of the 19th century, this process was very slow due to the unbalance between the demand and supply of labor where the supply of labor was much larger than its demand, hence the writings of Hegel and Marx.

Since the beginning of the 20th century, the balance has been slowly reestablished and the creation of "flow" capital has increased at a geometric rate. This new type of capital was created through the surplus of income generated by a larger increase in demand for labor than the supply of it. This was due to a more abundant use of machinery as well as the mass production of manufactured goods. While the use of machinery increased the productivity of labor, mass production also required a larger market. Both of these converged into an increase of wages. Once the levels of wages increased, the level of income increased. Since the labor force was not at a level of subsistence anymore their income generated a surplus, which was called savings. These savings soon found its way to the banks where it aggregated and was sent back to the industries and entrepreneurs to buy more (or better) machinery (and technology). In turn, this improved the productivity of labor and further increased income, savings and created capital. In other words, in modern times capital is not the ownership by a few of some kind of factor of production (wealth-stock), but rather the aggregate of all the small income surpluses (savings) generated continuously by the mass of workers with different levels of income.

Furthermore the creation of capital by recycling the surplus into loans that recombined with labor generated higher productivity and a higher profit. This became part of the capital flow, generating more capital through the banking system and improving further the productivity of labor. As we noticed, the creation of a surplus of income for the labor force further increased the capital flow. Naturally interest plays a very significant role in this process (Keynes, Chapter 13), which is completely different than the one that existed during the time of the Prophet Mohamed. This reinvestment process has nothing to do with the usurer's loans of that time.

This process of generating capital benefits the workers as much as the entrepreneur/capitalist who orchestrated the possibility for everyone to receive a proportional benefit from the increase in productivity in the form of an income surplus. This increased the standard of living and allowed laborers to benefit from their labor or capital, directly or indirectly. That gain to all persists as long as the demand and supply of labor was at

equilibrium. As long as there is full employment, excluding of course structural and frictional unemployment that was a necessary condition in order to maintain the productivity of capital, productivity of capital is at its maximum. For the entrepreneur/capitalist, capital generates profit and therefore capital has a price. That price is the interest or the dividend that must be paid, just like the purchase of any good in the market. He is willing to pay the specific price because without capital, his skills of entrepreneurship would be unrewarded and wasted. Again, this has nothing to do with the usurer's requirements of compensation.

With regard to the labor, since he has sacrificed a portion of his possible income by saving it, he needed to be compensated in some way, such as an interest or a dividend. Without such compensation, there would be no incentive to save (Friedman, Chapter 1, p. 18). The worker that has sacrificed the pleasure of consuming by saving has to be monetarily compensated for it. It follows that we can say the essence of the industrial revolution was the process by which the mass of the labor force saved a portion of their income for later use. This created the new type of capital, known as a flow, for which they were rewarded. This reward had to be meaningful in terms of risk. If the worker did not want to take a risk, the return would be something tangible that was adjusted for inflation (a real rate of interest plus an inflation premium). This is what the free rate of interest is. Again, this has nothing to do with a usurer loan sharking some poor soul.

However, there are still some Islamic scholars who continue to insist that interest rate in any form is not acceptable and should be forbidden. They argue that uncertainty is inherent in any business enterprise, irrespective of time/space dimensions. The operating result of the enterprise cannot be foreseen, and the occurrence of profit or loss and their magnitude cannot be fully determined in advance. It is, therefore, a sheer injustice if the party providing money capital is guaranteed a fixed and pre-determined return, while the party providing enterprise is made to bear the uncertainty all alone. On the other hand, a fixed interest rate can also be unjust to the lender of money, in case the entrepreneur using this money earns a profit out of proportion to what he pays by way of interest. Among them are Choudhury and Azizur Rahman (1986, p. 62) who argued that the interest rate is a prefixed amount or a percentage set solely on the basis of a speculative, rather than an actual, cost of capital. Therefore it is neither a function of the capital in use nor the labor input in production. Another example is Abbasi and Holman (1989, p. 14), who stated that "riba is sometimes defined as "excessive" interest, but Muslim scholars today almost universally hold it to mean all interest."

## 5. Conclusion

Capital creation benefits everyone and, more often than not, the labor force. But capital can only be created if there is an incentive, which is the return, the profit, or the interest rate. If the interest rate is prohibited, the capital formation disappears and the mass (the labor force) suffers the most. The concept and role of interest rates in the economy as well as capital formation were both different before and after industrial revolution. This is especially true during the time of the Prophet Mohammad, when interest rates had no real economic value and were used mainly as a means of accumulating wealth by a few individuals at the expense of society. As a result, both charging and receiving interest rates were forbidden by the Qur'an. Therefore, it seems necessary for Islamic scholars to further study this modern function of interest rates and how it can be properly applied to an Islamic economy. Using the same application under different and misleading terms cannot be helpful in promoting an Islamic economy and fostering economic prosperity for all Muslims around the world.

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