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## MONOPOLY EXPLOITATION AND RENT-SEEKING AS AN INEVITABILITY OF CAPITAL CONCENTRATION



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### ABSTRACT

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The primary focus of this research is on the genesis of companies as the dominant assumption of their behavior, from perfect to deviant. The phenomenon of extraction of monopoly rents and its extremely negative effects on social welfare, such as rent-seeking, is assumed by the authors to be conditioned by the genesis of companies, and therefore, describes the nature of their activities and survival in the market. The paper attempts to interpret the relationship between the problems of inefficient production in monopoly markets as a necessity and inevitability caused by the genesis of monopoly companies. Furthermore, the paper synthesizes classical economic analysis of profit maximization in monopoly markets and the negative consequences that arise from it, with the Marxist analysis of the genesis of capitalistic companies. Regardless of the type of ownership profit maximization and competition represent a common denominator for both economic directions. The main thesis of the paper is that the free competition is a generator of capital accumulation, concentration and centralization as well as the most powerful tool for the eliminating market competitors. However, the competition battle does not stop with the market monopolization. It continues at higher levels of production and capital concentration, within and outside the limits of domestic market, whilst the goal becomes a tool – capital to capital, with a tendency for further accumulation of all its negative consequences and connotations. Accordingly, the regulation of imperfect markets is becoming a necessity, thus the dialectical approach to regulation is proposed for various industries through principles and legal solutions for industries which respect specific characteristics of each market and the historical timing of the application of regulation.

**Contribution/ Originality:** This study is one of very few studies which have investigated the social costs of monopoly and welfare loss due to monopoly power, the causes of this phenomenon and problem solving mechanisms. The paper contributes in finding that monopoly exploitation and rent-seeking behavior are conditioned by the genesis of the corporation.

### 1. INTRODUCTION

This paper focuses on the genesis of an enterprise as a dominant assumption of entrepreneurial behaviour, from perfect to deviant forms. The main assumption underlying the authors' thinking is that the extraction of monopoly

rent and its extremely negative effect on the socio-economic structure (as evident in the example of rent-seeking) is determined by the genesis of an enterprise and deeply rooted within its structure when it comes to the way it operates to survive in the market. Based on the initial findings of this research, two hypotheses have been formulated:

H1: Rent-seeking, as a culmination of deviant form of entrepreneurial behaviour, caused by the enterprises' market power, is the necessary consequence of concentration of capital.

H2: If rent-seeking is a constant that derives from the process of concentration of capital, then monopoly regulation is the necessary causal reaction.

The hypotheses have provided the research context in which the above assumptions about development and functioning of enterprises in today's turbulent economic circumstances may be confirmed or disapproved. The emphasis is placed on the social costs of monopoly and welfare loss due to monopoly power, the causes of that phenomenon and the mechanisms of solving the problem.

## 2. GENESIS OF AN ENTERPRISE IN CAPITALISM

Global economic reality is determined by different market forms. Economists pay serious attention to perfect competition because it is relatively easy to understand the market in which it rules. However, modern market economy recognizes other forms of competition, among which the monopoly is essentially an anathema to perfect competition. It can be assumed that all markets have evolved from the perfect competition framework and that their genesis is viewed just in their transformation, leading to new market conditions. Modern economists should deal with this idea and stop observing economic phenomena exclusively from the point of view of perfect competition.

Free competition experienced its biggest boom in the period between 1860 and 1870, when monopolies were in their early development (Lenjin, 1916). After the 1873 crisis that shook liberal capitalism, the rapid development of monopolies was still seen as a transitional phenomenon. Only after the crisis that occurred in 1900-1903, monopolies became the dominant power in capitalist society. During the second half of the 19th and early 20th century, the capitalism of free competition grew into imperialism – the monopoly capitalism stage (Bakić, 1974). Monopolies did not develop uniformly in all branches of capitalist production, neither in all capitalist countries. Such process is the result of unequal development of the concentration of production and capital. The higher the concentration of capital is closely tied with the higher degree of monopoly, and vice versa. In the first half of the 20th century, cartels emerged in the international market and state monopoly turned into global monopoly or imperialism as its further stage (Vidaković, 1978). If foreign activities of the former national monopolies may be considered as an extension of their domestic operations, with new competitors in the increased market, an increasing phase of monopolization in further market development on a global scale can be assumed. The question is whether every subsequent crisis of the 21st century, as the last one which occurred in 2007, will crush even a greater number of small and medium-sized competitors, and whether oligopolies will evolve into monopolies in the future.

### 2.1. Genesis of a Monopoly and its Exclusive Rights

Starting from Marshall's classical theory of enterprises and profit maximization as the basic economic category and fundamental assumption about entrepreneurial behaviour, it is clear that a monopolist applies the golden profit maximization rule:  $MC=MR$ . It is equally evident that this describes the best combination of product quantity and price for a monopoly enterprise in its goal of achieving maximum profit, not considering other implications of this choice. Indeed, the monopolist can draw an above-average (extra) profit out of it at least for some period of time. However, it is clear that production also exists at the higher level of output, but it does not bring the same profit as at the point of equilibrium. So, the question is, what about the rest of the unused capacity of a monopoly enterprise? This question opens up another even more important issue of efficiency in monopoly production. The answers to

these questions are very complex. In some industry branches, production in such conditions can be justified (for example in the case of natural monopolies), while in others it cannot. In any case, it should be regulated by relevant state institutions. In fact, any reduction in output with the objective to earn extra profits is likely to contribute to an enterprise, but it is contrary to the basic principles of economics and its significance for society.

A study on market structure opens up a fundamental question: why does monopoly emergence even occur? One of the main reasons is complete control over production resources, the so-called input monopoly (Salvatore, 2003). When speaking about a country and its resource wealth, the wealth that belongs to all of its citizens, the concept of institutional monopoly comes to the forefront and gains double significance. In other words, on top of earning monopoly profits which derive from its market power, an enterprise can gain profit by exploiting a national strategic resource which belongs to all the citizens of a country. Therefore, monopoly can be characterized as both input as well as institutional. Further, monopoly power can derive from franchise or license when a specific enterprise is the only supplier of a commodity, where new enterprises are barred from entry (Prager, 1993). Monopoly on a market segment can derive from government consumption as well, when the state becomes the buyer-consumer of significant part of production, because government's demand represents a large, safe and lucrative market (Milenković and Lebel, 1964). Patent is perhaps the most acceptable form of monopoly (Gallini and Scotchmer, 2002). Under patent law, an enterprise that is the patent holder can protect certain production process, product or technology developed through its own innovation to ensure prosperity for future operation and improvement of production (Frank, 2003). In contrast to legal monopoly, economic and/or technological monopoly result from large series production and decreasing costs for each subsequent product unit (Prager, 1993). Eliminating competitors one by one, based on cost efficiency, a specific enterprise remains the only in the market. Such superiority does not result from legal monopoly, but from the economies of scale which, as the phenomenon, describes the nature of natural monopolies (Nicholson and Snyder, 2008). These assumptions are reasonable and a truly effective solution in such circumstances. Also, economies of scale represent a key form of production in developed economies. It must always be kept in mind that modern businesses, such as transnational corporations, operate precisely on these principles (Svetličić, 1986). Production processes in such monopolies are based on the economies of scale and developed technology and, although there are no formal legal barriers to it, new competitors are prevented from entry in the market because they require large investments.

## 2.2. Rationality in Oligopoly Behaviour

Due to a large scope of issues associated with oligopoly, a deeper analysis will not be done, but its basic features will be pointed out, among which is a high degree of concentration of capital as its most important determinant. In developed forms of this market structure often only two or three enterprises with a high production potential or large service network exist which gives them enormous power in the market. A small number of competitors makes operating easier and encourages them to find as much agreement as possible (Bakić, 1974). This allows associated oligopolies to coordinate their activities in the market and agree on output, prices, and other issues. Considering the criterion of rationality and branch profit maximization, as well as negative implications of price war, it is logical to assume that rivalry among the biggest market players eventually outgrows into certain forms of coordination such as tacit gentlemen's agreements or just formal agreements (Rupčić and Frajman, 2013). Various informal agreements already reveal that rivalry is disappearing due to a high degree of concentration of capital within a specific enterprise, which makes opposing to its business policy useless. However, competition among enterprises in an oligopoly completely disappears by concluding a formal agreement, and some authors are right when they call such markets monopolized (Dragičević, 1965). According to classical economics, cartel is considered as a formal oligopolistic agreement. On the other hand, according to Marxian economics, cartels together with trusts, unions and concerns belong to monopolized markets (Milenković and Lebel, 1964). Such organization appears to the

outside world as a single supplier of products or services, acting in the interests of all its members. The result is a multiplant monopolist or a single manufacturer with a few subsidiaries.

### 3. SOCIAL COSTS OF MONOPOLY POWER AND THE EMERGENCE OF RENT-SEEKING

The following pages will deal with the consequences of monopoly power by describing the social costs of monopoly power and the phenomenon of company demand for monopoly rents.

#### 3.1. Inefficiency of Monopoly

Since the time of Adam Smith, economists have been dealing with problems of monopoly. It is not rare to find statements that strongly advise against monopoly. Looking from the point of view of fairness, many economists believe that large profits earned by a monopoly firm assume money earned in a dishonest manner, or in other words, that such profit does not come from entrepreneurship and work, but from a monopoly market marked with a closed access and barriers. In addition, economists point out that monopolists are functioning at a level of production where the average cost of production is higher than the minimum. This is known as technical inefficiency in which price exceeds marginal cost, and it is also known as allocative inefficiency. Such model of production is not in accordance with the basic principles of economy - efficient use of limited resources. The technical and allocative inefficiency indicate social costs of monopoly.

It is indisputable that a monopolist, with respect to a perfect competitor, produces a smaller amount of product and sells it at a higher price to achieve higher profits. For this reason, consumer's gain is lower in monopoly than in perfect competition. Overall changes in consumer and producer surplus ultimately imply the social welfare loss and indicate the need for regulation in line with the aggregate cost of loss of gain (surplus) on both sides (Landes, 1983). Even if the monopolist's profit is taxed and redistributed to consumers, inefficiency would still exist due to lower production with respect to competition. Therefore, welfare loss is actually the social cost of inefficiency.

#### 3.2. Theoretical Determinants of Rent-Seeking

Rent-seeking is an economic phenomenon that can be defined as spending money for socially unproductive purposes to obtain, maintain or use monopoly power (Carlton and Perloff, 2005). This concept was first introduced by the economist Anne Krueger at the beginning of the 1970s. Krueger noted that monopolists spend significant resources to maintain their privileges, either through lobbying political elites or corruption in civil service to create legislation that would prevent new competitors from entering into an industry, whilst allowing monopolies to maintain monopoly position in a market (Krueger, 1974). In this sense, rent-seeking activities may involve undertaking various measures to avoid antitrust supervision or legislation (Jula and Buneci, 2013).

An almost identical observation, but without referring to the phenomenon of rent-seeking, was presented by the American lawyer and economist Gordon Tullock in the mid-1960s (Tullock, 1967). Tullock based his research on developed countries, while Krueger analysed the problem of rent-seeking in the context of protectionism in developing countries, primarily in Asia and Africa where domestic producers have monopoly power granted by the government by putting barriers to foreign trade. Therefore, Krueger found a good theoretical basis to assert that free trade is the way to fight corruption and lobbying which may lead to a significant loss of welfare in developing countries (Grgurić, 2010). Krueger emphasized the fact that, in the developing countries, the government interferes in all spheres of society (including economy) but not through transparent and predefined rules, but rather autocratically. That leads to the corruption of public officials in order to remain at the mercy of the state. In other words, there is an evident connection between corruption, the lack of stable legislation and weak property rights. Solution to the problem, according to Krueger, is liberalization and withdrawal of the state from regulating its economy, with implementation of regulatory tools from the Western countries.

Harvard economist Dani Rodrik criticizes the IMF's way of fighting corruption and rent-seeking (Grgurić, 2010). Krueger noted that in the developing countries, legislation does not work in the proper manner which has an extremely negative impact on economic growth and development, and suggested that these countries should follow the institutions of countries with effective legal system. However, critic Rodrik pointed out that a simple model in which developing countries just copy the reforms of developed countries is not the best model of development (Rodrik, 2014). For example, East Asian Tigers economies succeeded to catch up with the United States and Europe because they had found their own economic path of development. In other words, according to the dialectical approach, each country and each area is a separate economic entity and each must be approached as an individual case since a universal recipe does not exist. Although Krueger used the scientific method to define the concept of rent-seeking on the issue of developing countries that emerged as one of the most vivid example of this phenomenon, the author's research methodology could be questioned. If Krueger used the historical materialism methodology, she would have reached the same conclusion by investigating the genesis of capitalism. There is a whole era - mercantilism marked by similar entrepreneurial activities in the history of capitalism. The era of mercantilism involves retailers lobbying for preferential positions and protection, but it is still viewed as the cornerstone of capitalism development. The impact of this idea can be seen in the works of Alexander Hamilton and Friedrich List who advocated protection of the economy of the US and Prussia (still disunited in that period) by using protectionist measures against growing economic expansion of the United Kingdom (Pertot, 1967). Moreover, it is impossible to find a developed country which hasn't tried to protect the interests of its economy with any kind of measures throughout its history. The above implies that both underdeveloped countries and developing countries copy legislation of the Western countries, although sometimes with a lag of a few centuries. The question which arises is whether leading companies and monopolies in the developed countries really need the protection of the most influential lobbies in achieving and maintaining monopoly position such as that enjoyed by enterprises in developing countries. Indeed, the leading companies in the Western capitalist countries do not need state protection because they already passed through that stage in their development process. Another question is how much investment in production facilities would be required to allow any new enterprise to compete with today's economic giants. Considering that the developed countries, together with international financial institutions, tend to insist on market liberalization in the developing countries, it can be argued that is a new advanced and perfidious form of favouring large-scale companies of the developed countries. It seems that rent-seeking through lobbying at the state level in order to enjoy a privileged position is outdated. Leading market players no longer need protection of the government. What they need are new markets to conquer. It is, therefore, clear that lobbying to protect the company's interests has also evolved in something new, and that nowadays it may assume various economic forms and recipes such as the Washington Consensus which, like Krueger, support liberalization. Reasons to justify such audacious conclusions can also be found in the work entitled „Ekonomska kriza i kriza ekonomske znanosti“ (eng. The Economic Crisis and the Crisis of Economic Science) by a reputable economist Dragoljub Stojanov (Stojanov, 2012).

#### **4. CONCENTRATION AND CENTRALIZATION OF CAPITAL AS PILLARS OF MARKET POWER**

Furthermore, the paper provides an insight into the genesis of market power based on Marxist analysis of the law of concentration of capital that describes the actual process of acquiring market dominance. The paper then examines the impact of market power on entrepreneurial behaviour.

##### **4.1. Pitfalls of Capital Accumulation and Concentration**

Capital accumulation is the first stage in the development process of a capitalist enterprise. Moreover, each individual capital holding represents (in a greater or a smaller degree) a certain concentration of means of

production and labour. Accumulation of capital increases the concentration of capital. In other words, a growing mass of means of production and labour becomes concentrated in the hands of an individual capitalist.

In free-market competition a capitalist is forced to improve its means of production and labour in accordance with scientific and technological progress. Indeed, while this type of competition existed, capitalism gave its best results (Lavčević, 1953). However, free competition assumed two aspects. The original form of competition that involved knowledge and creative work with many competitors creating and improving production, as well as the society, encouraged a healthy competitive spirit that marked the brightest period in the history of capitalist mode of production and broke the shackles of feudalism. On the other hand, along with the healthy innovation competition, another type of competition was developed. Marked by capital accumulation, a ruthless, predatory form of competition on which the concentration of capital is based emerged. The process of capital accumulation involves successive transformation of surplus-value generated by production into additional capital stock. Retained surplus-value is converted into additional production form of capital. Thus, the accumulation of capital leads to the concentration of capital and to the acquiring of new capital. Consequently, enterprises are becoming bigger and bigger which activates the laws of economies of scale.

It follows that any delay in production process development could ruin or destroy an individual capitalist that cannot compete against large companies. Even though it requires significant funding, implementing new technologies and knowledge in production processes, is the key to success. Therefore, what we call the beginning of the competition is often the end of it. In fact, it is inevitable that, while seeking to improve their production process, small capitalists lose the battle against large companies as they hold more capital.

#### 4.2. Models and Implications of the Centralization of Capital

In addition to the described process of the increase in the capital through the accumulation and the capitalization of surplus value, the process of merging or pooling of active capital holdings should be considered. The process of concentration of existing capital holdings, independent of the accumulation, is the centralization of capital. The centralization of capital is essentially the process of leaving individual autonomy in which individual capitalists become absorbed into or annexed to the large companies (Lavčević, 1953). The concept put into economic practice actually assumes merging of many small companies into much larger ones. The new company has an increased market share and enhances the chances of survival in the market (Salvatore, 2003).

The centralization of capital may also be achieved in another way: The biggest capitalists destroy small-scale capitalists. Capital holdings that used to be held by small-scale capitalists become concentrated in the hands of the biggest capitalists implicating the process of consolidation of a company and its market share again. However, this time not in the form of merger but acquisition. In this sense, free competition is the most efficient tool of the centralization of capital. Those with higher productivity, which is reflected in lower market prices, will win. The large companies tend to achieve a far higher productivity (production of large quantities leads to reduction in production costs per unit of product), while smaller companies struggle to survive and are being swallowed by larger businesses. This is where the phenomenon of economies of scale shows through. Economy of scale is the basic concept of production in big monopolies, not only in a natural monopoly, but in any other form of large series production. This implies the expropriation of small-scale capital by large-scale capital. This leads to the concentration of capital holdings in the hands of the biggest capitalists enabling even larger series production.

Another technique of the centralization of capital is the formation of joint-stock companies by pooling of capital from independent capitalist (Salvatore, 2003). This model of the centralization of capital is far smoother and less painful method for small-scale capitalists that thus become co-owners of large-scale capitalist enterprises. Although capital accumulation and concentration initially caused a drop in the number of small-scale capitalists, and an emergence as well as an increase in the number of joint-stock companies, further competition reduced the number of joint-stock companies within industry branches, leading to the increasing concentration and centralization of

capital. Historical drop or decrease in the number of joint-stock companies was the result of the competitive struggle that accompanied the concentration and centralization of capital resulting in a situation in which only a few companies are managing an industry branch. The tendency to leading position actually describes the nature of monopoly enterprises that implement the same strategy at a global scale when the national market becomes too small. History has shown that national monopolies, when they begin to operate globally, tend to gain international monopoly if that is possible. This is due to the very nature of predatory competition, because if one company quits, the second one will instead try to take over the first one's production and market. Also, monopoly must constantly increase its capital; it is in its nature.

In the process of the centralization of capital, loan has an important role. For large-scale capitalist enterprises, it is much easier to get approved for loans and that is the reason they have a better starting position. Big loans enable companies to expand production and develop technological process of production which further increases competitiveness of large-scale enterprises. Consequently, the capitalist society production becomes concentrated in the hands of a smaller number of capitalists.

The centralization of capital requires further accumulation of capital, and the process of formation of the biggest capitalist companies goes on. This leads to an increase in capital both in quantitative term and qualitative term where the capital changes in its organic composition. In other words, fixed or constant or long-term capital increases more rapidly than variable or current or short-term capital. These qualitative changes involving technical and organic composition of capital are the result of numerous technical inventions and their applications that lead to rapid expansion of capitalist production and an abrupt ascent of the productive forces of society, the development of new branches in industry and revolutionizing the production process in other industries.

#### **4.3. Risk of Value Realization and Market Competition of Large Companies**

Considered from the economic point of view, the process of concentration and centralization of capital reflects in constant increase of capital in terms of its organic composition. This means that fixed capital increases more rapidly than variable one. New technical achievements and their applications in production process cause changes in the composition of the existing capital, where fixed capital increases. The increase in the organic composition of the capital results in a decrease of the average profit rate. The fixed capital value is gradually transferred onto the new product, the part of which (transferred value) gradually returns in money form. The higher the capital value assumes higher (longer) capital turnover rate, resulting in more difficulties involving value realization. There is a possibility that the capital is transferred into another industry branch that could bring higher profits, but only after the realization of the existing value that is materialized in the means of production. This often means that the capital remains tied to industries that bring less profit. The reasons for the emergence of conglomerates and concerns show up through this period of concentration and centralization of capital. These structures are, therefore, also included in monopolies when speaking of the Marxian economics. It should be mentioned that there is a natural relationship between fixed and variable assets, which depends on the type and nature of industry. However, the average of the developed countries is 40% versus 60% in favour of variable assets, giving this issue an even greater significance.

There is no doubt that the value can be realized but with a risk of capitalists losing a part of the capital in this process. This implies changes in the competition for capital relating to investments. In industries with a high organic composition of capital, a great deal of capital is tied to in the form of fixed capital. These branches of industry are marked with a high degree of the concentration of capital among the few biggest companies that have achieved the leading position due to extensive production. An enormous mass of capital has been invested in such companies. The capital by its nature is difficult and slow to transfer from one branch to another. In other words, such large companies make competition difficult, having in mind that the capital competition means free transfer of capital from one branch to another. Under such conditions, competitive struggle among the large companies



becomes very risky. Considering the size of the invested capital and the level of equipment in means of production, as well as the economic power, the biggest companies are generally equal. If there is any difference which could create a certain competitive advantage that might help a business to differentiate from others, with the development of capitalism, the differences are diminishing. The competition among these giant companies is no longer a struggle between large and small-scale companies or companies with high and low organic composition of capital. It is a struggle between equals that is not taking a long time to be ended, and the consequences of which are borne equally by all participants. Competitive struggle among these companies can have a very disruptive effect (Lavčević, 1953). As stakes become higher, competition (as a mechanism) becomes increasingly weak. It vanishes because, as such, it carries enormous risk in which no one engages lightly. The next natural move is partnership and coordination.

#### 4.4. Imperfections of Monopoly Production and Market Weakness

When elaborating on how capital behaves in free-market competition, it can be concluded that capital tends to become increasingly concentrated and centralized, resulting in the concentration of power and the increased levels of production and output. The increase in production necessarily leads to the increase in supply, but at the same time, there is no increase in the market absorption rate which may result in problems related to placement of goods indicating crisis of overproduction. Disproportion between production (supply) and consumption (demand) has a destructive effect on the overall economy.

Furthermore, due to a high organic composition of capital, profit rate falls below the average. Large-scale companies can operate with a smaller rate of profit still attracting bigger mass of profits than small-scale businesses with higher profit margins. Therefore, during the crisis, the biggest companies reduce prices and profits to destroy smaller competitors that cannot resist price competition, and achieve market dominance.

Considering how profit is maximized in a monopoly market and the necessity of increasing the mass of profits that arises from the monopoly enterprise development process, the volume of production or supply should decrease in the long term to avoid further technical and allocative inefficiency. Overproduction will eventually be replaced by underproduction, shortage of goods and high market prices; going from one crisis to another, which confirms that the monopoly market is imperfect.

Furthermore, the tendency of the profit rate to decrease requires acquiring capital investment to increase the mass of profit, which results in further concentration of production and capital. In this aspect of the crisis, a goal becomes the means. Big capital has the tendency to create an even bigger capital. It is difficult to conclude with certainty whether the phenomenon is the tendency or the necessity structured into capital in free-market competition. In any case, during each crisis a growing number of competitors disappear, and their number is likely to decrease further during another crisis that is expected to occur another overproduction appears. In this way, the process of capitalism development at a certain stage necessarily leads to monopoly, only each time with bigger monopolies and fewer competitors.

### 5. EVOLUTION OF MONOPOLY REGULATION: SMITH-KEYNES-TIROLE

This section discusses regulation of imperfect market situations and market entities, as well as suppressing negative externalities arising therefrom. While classical economists believe in the efficiency of the self-regulating market economy, arguing that economic turbulence is a temporary state of imbalance which quickly finds its equilibrium, neoclassical economists have gone a step further and offer a critical reflection on market mechanisms (Greenwald and Stiglitz, 1987). In this respect, regulation is an alternative to neoclassic economy and market self-regulation. Due to the complexity of the problem, the theory of regulation, in addition to economic logic, must incorporate related sciences such as history, sociology, political science, and philosophy (Boyer and Sailard, 2002). It is, therefore, necessary to study economy from a broader perspective when considering economic interventionism.

### 5.1. Philosophical Analysis: Invisible Hand vs. Regulation

It is impossible to write any economic paper without mentioning the founder of the science of economics, Adam Smith whose unique perspective encouraged the separation of economics from philosophy into a separate and autonomous scientific discipline with its sub-disciplines. His unique vision of the economic issues of that time initiated the scientific revolution in economics, and helped to catalyse the social revolution that gradually transformed society of Smith's era from late feudalism into modern industrial age. The *laissez-faire* principle, which led the classical economy, was revolutionary. Marx and Engels, as creators of quite a contrary economic orientation, agreed with the thesis that capitalism, as a new form of business, had more impact on the development of productive forces than any socio-economic system before (Marx and Engels, 1974). Although Marx's contemporaries agreed on the necessity of combating monopoly, it should be noted that they had not underestimated the role of free-market competition. Aware of the complexity of problems of imperfect market and its regulation, seeking to achieve positive effects of market mechanisms, the contemporary supporters of Marxism such as Dragičević argue that it is necessary, wherever it is possible, to implement the mechanisms of competition (Dragičević, 1977). It might even be argued that Dragičević's position on the positive effects of the liberalization of international trade does not differ at all from Krueger's position. However, Marx and his contemporaries were skeptical towards perfections of the market mechanisms because, unlike the followers of the classical economic paradigm, the Marxists did not idealize the market. Moreover, in many attempts of the socialist countries to apply Marx's ideas in practice, it seems that a skeptical attitude towards the market prevailed, and such situation in which economy is completely government-controlled caused the creation of state monopolies and inefficient bureaucracy.

By analysing both economic points of views, several issues impose. If the market is a mechanism that can function independently without negative externalities and whether the regulation is always the best solution, which is the best way to implement it? Secondly, if Adam Smith lived in today's economic conditions, would he still believe in infallibility of the *invisible hand*? Having in mind that Smith was a visionary and a revolutionary of his time, as well as a philosopher aware of the unstoppable force of change, one might assume that, very likely, he would have changed his point of view. Long ago, the Greek philosopher Heraclitus said that *no man ever steps in the same river twice* (Vejnović, 1968) and the Croatian poet Peter Preradović confirmed that *the only constant in this world is a change*. Accordingly, philosophy often implies that nothing is too perfect to last forever and forever remain the same. So today, from a philosophical perspective, Smith's *invisible hand* becomes questioned and is considered that it may have functioned only in the context of the time in which the author contemplated about it.

The concept sustainability should also be discussed from a sociological perspective. Insisting that the society is built up on an old idea modified to a certain extent, gives it a title of static, the same as it was at the end of feudalism. Resisting to changes in society is a wasted effort, and is likely to result in drastic consequences when the inevitable change occurs. For this reason, fundamental concepts and principles of classical economics, particularly those insisting on the self-regulation, should be re-examined. This is supported by causes of all major economic crises. One of the answers to a great economic crisis of 1929 was the famous Glass-Steagall Act, which separated commercial and investment banking. It was established in 1933 and repealed in 1999, which indicated deregulation of the financial system that took up half of the 2000s. The period of deregulation or self-regulation, according to Smith's *invisible hand*, can be considered as a total failure of the classical economic paradigm (Cerović *et al.*, 2017) and had a direct impact on the collapse of financial markets in 2008/2009. However, it could also be questioned if regulation is the best solution. When implementing regulation, it is necessary to bear in mind that society is a dynamic organism with its own special entities, and then consider how to approach such a complex mechanism in terms of regulation.

### 5.2. Keynes on Regulation: The Laissez-Faire Principle and Interventionism

English economist John M. Keynes was the first to step out from the school of classical economists with the criticism of the market mechanisms and its idealisation. Economic history between the two world wars was marked by turbulent economic disturbances which culminated in a major economic crisis in the period of 1929-1933. Three years after the end of the Great Depression, the book entitled “The General Theory of Employment, Interest and Money” which was generally considered Keynes’ magnum opus was published. Although brought up in the spirit of neoclassical economic doctrine, the son of J. N. Keynes who was a disciple of the great Marshall, Keynes junior resolutely resisted traditional economic principles. Given the focus of research and time of emergence, many economists consider Keynes’ work to be a relevant guideline for anti-crisis economic policy that re-gained importance after the last economic crisis of 2007/2008 (Skidelsky, 2009). Although the novelty brought by the *General Theory* was state interventionism, what really made Keynes so special is that he neither idealized nor denied the concept of market. This logic implies the conclusion that the market is there for a reason, but it should be optimised. The focus of Keynes' research was the aggregate demand and its stimulation using state intervention through higher employment rates and routing savings and investment. As market economy leads to inequalities between individuals, according to Keynes, the state must play the role of a mediator to alleviate the inequality through fiscal and monetary policies. In this way, the state becomes the regulator to prevent revolution that might be caused by great poverty in society (Dragičević, 1977) and also the emergence of ideologies which completely negate the market and democracy such as Nazism or Fascism (Skidelsky, 2009). Such way of thinking that revealed a tendency of correcting market functioning, but at the same time left enough space for independency of economic entities and accepting socio-economic issues and problems as they are, brought down the dogma of market self-regulation and implemented practical principles of state intervention in economic science.

### 5.3. Tirole: Dialectics of Regulation

Historically, monopoly regulation began with creating the first antitrust laws. The first antitrust legislation was passed in the United States, nevertheless the States are always associated with the *laissez faire* principle of liberal economic paradigm. Since 1890 and the Sherman-Clayton's Act, a series of antitrust laws were passed in the US to protect the public interest against concentrated economic power and, consequently, the abuse of monopolies and inefficiencies that come with it Salvatore (2003). The fear of monopoly size and power appeared in the late 19th century when many companies began to merge, forming trusts and cartels. For this reason, the US justice system had developed guidelines for purpose of interpreting the antitrust laws on merger ban of competing companies (Frank, 2003). These laws, although having some problems with their implementation in practice, can still be treated as the basis of practical monopoly regulation.

Considering that monopolies tend to produce less than what is required by society, at prices well above marginal cost, those in charge of economic policy should play the mediator role. Governments and their regulatory agencies can respond in several ways. The first way is to encourage competition in monopolized sectors, especially in production of essential goods ( $|E_d| < 1$ ). Certain economic measures can be undertaken to reduce the difference between market price and marginal cost of monopoly. Moreover, government may turn private monopolies into public enterprises, or support the *laissez faire* principle allowing the market to self-regulate. If the last entry implies a valid economic policy, the question then arises as to what caused the major financial crisis of 2007/2008? In the opinion of Jean Tirole, Nobel Prize winner for economics in 2014, the causes of the last economic crisis primarily lie in poorly executed regulation in the US and Europe, which encouraged business entities to take big risks.

Contrary to liberal economists and in favour of Tirole's observations and conclusions in terms of importance and justification of regulation, history has shown that crisis occur whenever classic and neoclassic ideas become mainstream in response to market problems. Per Tirole, the need for regulation arises from protection against systemic risk that in the banking sector manifests as spillover effect of risk among banks, followed by industries,

various forms of business subjects and markets, which was seen in the last major economic crisis (Cerović *et al.*, 2017).

Tirole's approach of regulation has really refreshed the economic perception of this problem. For Tirole, general theories of regulation are of the utmost importance in eliminating negative consequences for society arising from market power. However, in practice, regulation must be approached considering specifics of an entity and should involve dialectics (Economic Sciences Prize Committee of the Royal Swedish Academy of Sciences – RSAofS, 2014). In support of the above conclusions, Lenin's thoughts and vision of the revolution and revolutionary changes are interesting in a dialectical way, as explained by the Croatian philosopher Predrag Vranicki: *There is no dogmatism, no patterns, but constantly insisting on dialectical approach. Lenin does not argue just one form or just one path of revolution, but calls progressive forces to make a deep analysis of each specific historical moment to be able to take appropriate revolutionary actions based on the general thesis of Marxism* (Vranicki, 1978). Tirole as well acknowledges the general theory of regulation, however, he points out that it is not possible to apply the same established regulation patterns, but encourages creating specific mechanisms, techniques and forms of regulation, considering that each economic entity is specific, as is the historical moment in which it is approached. Among various models of regulation, the elementary Laffont-Tirole's regulation model must be highlighted. It approaches regulation as the principal-agent problem. In the principal-agent relationship, government is the principal (regulator) and company executives are the agent. It is important to note that this model does not foresee any restriction in regulation mechanism, except for limitations caused by asymmetry of information and the willingness of firms to cooperate. More about the model can be found in the work entitled *Using cost observation to regulate firms* (Laffont and Tirole, 1986).

When elaborating on regulation, most often it comes to natural monopoly. The question then arises as to what about regulation of transnational corporations? In today's modern era, these economic entities are the major players in the global market, and it looks like they steer clear of regulatory provisions. Considering that transnational corporations, as natural monopolies, operate in the markets that are marked by a high degree of concentration of production, one might even argue that these corporations have oligopolized the global market. Pharmaceutical, automotive and aviation industries represent markets which have been divided among the few biggest players have the tendency of further concentration through merger. In addition, the basic feature underlying these market players is the economies of scale. From the facts considered several questions arise; whether such corporations are subject to regulations, and how to implement them; whether it is even possible to put such corporations under any kind of control, considering they are the main holders of investment projects for which many countries, particularly those less developed, compete in various ways, such as through mechanism of tax competition. Even the countries of the European Union, which are highly developed, often find themselves in a position to compete to reduce tax rates to attract investment or retain existing capital within its borders. Such a dispersed business of transnational corporations around the world makes us think about under which and whose legislation could it be possible to regulate such corporations.

## 6. CONCLUSION

Considering the key assumption that monopoly is motivated by profit maximization, leads to questioning whether an enterprise will use its market power to achieve maximum profit. This can be answered with another question: why do monopolies use rent-seeking to maintain their market position if not to exploit monopoly position in the market. If equilibrium of a production in monopoly means technical and allocative inefficiency that can impose significant costs on the society, or social welfare loss, then what about Adam Smith's *invisible hand*? It seems that Adam Smith's *invisible hand* does not work here. However, one must keep in mind that Smith's time was the dawn of capitalism when all market actors were small-scale firms and the *invisible hand* principle really worked for them. On the other hand, during the enterprise development process, the accumulation of capital stimulated by free-market competition was likely to play a key role in transforming an enterprise from competitive to monopoly.

During this process the enterprise developed on the paradigm of constant profit maximization as the necessary condition for survival in the market, including monopoly exploitation and rent-seeking as its basic tools. It may look like the market is a jungle where the law of the jungle applies - only the fit survive.

In the genesis of an enterprise, the process of capital accumulation involves the concentration and centralization of capital as the key determinants of its enlargement. Dealing with a large amount of capital can be described as a necessity that arises from the law of economies of scale, consequently leading to rapid development and expansion of capitalist production and the creation of monopolies. It can be concluded that the cause of all these phenomena is free-market competition, and the inevitable consequences of it are the monopoly exploitation and rent-seeking.

On the other hand, profit maximization implies monopoly regulation to protect other members of society. There are many techniques and mechanisms of regulation that should be adapted to a specific industry and put in a historical, geopolitical and socio-economic context. However, neither the regulation mechanisms, nor market mechanisms should be idealized because both categories are human creations. Considering the Latin proverb *Errare humanum est* (to err is human) and having in mind that each of the afore-mentioned concepts involve human individuals and their decisions, logic dictates it is naive to think that no errors occur. It is, therefore, the duty of economists, like Tirole to improve both, theories of regulation and positive market aspects, considering existing circumstances and time.

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