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Market Failures and Economic Regulation

Las Fallas de Mercado y la Regulación Económica

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ABSTRACT: A country's economic dream is to build ideal markets where suppliers and demanders honestly and efficiently meet their needs with fair and balanced prices.

However, in reality, these types of markets are almost nil, since, with the existence of Information asymmetries, the perspective changes and from ideal markets, it changes to markets with failures, since when there are gaps in data, figures, and others, the participants in these markets do not synchronize with their parts. Consequently, there is no perfection in their transactions, and therefore, their activity and performance would not reach the most convenient standards in the commercialization of their goods or services since their decisions will not be the most optimal. With market failures, the State, through its control bodies, creates market rules and applies regulatory norms to appeal to any type of failure committed in the market.

KEYWORDS: Legal system, economic theory, market failure, regulation.

RESUMEN: El sueño económico de un país, es lograr construir mercados ideales, donde los oferentes y demandantes de manera honesta y eficiente satisfagan sus necesidades con precios justos y equilibrados, sin embargo, la realidad de cumplir con este tipo de mercado ideal es muy difícil, ya que con la existencia de asimetrías de información, la perspectiva sobre los mercados ideales cambia dando como resultado a los mercados con fallas, por la presencia de datos vacíos, cifras alteradas, entre otros, los partícipes de estos mercados no sincronizan con sus partes y como secuela de esto no existe perfección en sus transacciones y por ende su actividad y desempeño no alcanzaría los estándares más convenientes en la comercialización de sus bienes o servicios ya que sus decisiones no serán las "óptimas". Con la existencia de fallas en los mercados, el Estado por medio de sus órganos de control crea reglas de mercado y aplica normas regulatorias, para aplacar cualquier tipo de falla que se sete cometiendo en el mercado.

PALABRAS CLAVE: Sistema jurídico, teoría económica, fallos del mercado, regulación.

JEL CODE: K, K0

INTRODUCTION

As a theoretical approach to building models aimed at facilitating analysis and economic governance, abstractions have been proposed to capture the main characteristics of social scenarios to contribute to the process of "social optimization". This type of engineering and social constructivism exercise, for example, can be used to evaluate specific moments such as *commercial* and *economic exchange* and, in a critical sense, to reflect on how to make them happen as efficiently as possible. It can lead to the study of the optimal allocation of resources, inspired by the objective of satisfying human needs and contribute to the theoretical construction of an ideal market, where supply and demand are "proportional", and no waste is generated.

Furthermore, reflecting on this ideal market lucubration will imply that the information necessary to carry out economic exchanges is freely accessible. In other words, there should be no exclusion, to the extent that both the consumer and the producer "possess" the exact quantities and possibilities of acquiring or sharing information and that the market process itself is responsible for self-regulation to reach what is known as the "equilibrium price".

However, all these characterizations and assertions of a perfect context of exchange or price system, without defects, are based on ideas that could also be considered unrealistic. Therefore, in the following lines, we will allude to other concepts

such as the failures in the market (market failures) and ideas that inform the recipe book of regulations or state intervention either of a reactive type, proactive or interventionist.

It aims to promote "good practices" and a suitable environment for socio-economic interaction and the generation of incentives or disincentives for market agents in a dynamic context of permanent change and adjustment.

1. MARKET FAILURES AND ECONOMIC REGULATION

When referring to the market, it is necessary to explain the relationship between law and economics and how these disciplines influence the market and its dynamics. When referring to the law, understood as a mechanism that generates agreements, compliance and coercive mandates within a given territory. It alludes to the fact that it also manifests itself through negotiation, processes of conflict resolution generated by some conflict of interests (public or private). Among the participating economic agents, whether in the purchase or sale of a good or service, the law is primarily based on the premise of self-composition (collaborative and cooperative alternative) and heater composition ("confronted" agents who were unable to reach an agreement among themselves).

Concerning "economic law" or "market law", its scope lies in the use of the understanding of the mechanisms of the facts to promote economic activity, and in turn also as a control entity, regulating activities of consumption, distribution, planning, creation, among others, of the wealth existing in society.

On the other hand, an example of the relationship between law and economics is what happens with market failures, which cause the market not to function optimally and,

consequently, give rise to the introduction of "regulations" to prevent significant adverse effects. In short, law and economics are two indispensable sciences in managing the market, which is visibly linked to each other, maintaining a solid interaction.

Proof of this can be found in the Constitution of the Republic of Ecuador in the section referring to economic exchanges and fair trade, which establishes the role of the State in commercial activities:

> Art. 335.- The State shall regulate, control and intervene, when necessary, in economic exchanges and transactions; and shall sanction exploitation, usury, hoarding, simulation, speculative intermediation of goods and services, as well as any form of prejudice to economic rights and public and collective goods.
>
> The State will define a pricing policy to protect national production and establish sanction mechanisms to prevent any private monopoly or oligopoly practice or abuse of market dominance and other unfair competition practices. (CRE, 2008, art. 335)

Furthermore, the economic activity of a market is closely subject to the correct performance of all the economic actors involved in commercial transactions. However, when these actors are not efficient or honest or do not have precise information, the consequences will be negative and will influence the costs of transferring ownership of a good or service.

Therefore, the so-called "market failures" or lack of harmony among market agents or economic operators affect their ability to achieve profits and prevent the "level playing field" understood as an implicit circumstance that falls on them.

In addition, it introduces disincentives and even uncertainty, potentially violating the (property) rights of those who act following the parameters established in the legal system.

Based on the above, market failures are usually defined as "situations in which the market fails to achieve efficiency because the individual behaviour of each person trying to maximize his or her benefits than the assumption of the best outcome in social terms" (Vidaurre, 2020).

2. CHARACTERIZING THE MARKET

Article 5 of the Organic Law for the Regulation and Control of Market Power (LORCPM) provides that the determination of the market will consider the particular characteristics of the sellers and buyers participating in such a market. Competitors in a market must be comparable, for which purpose the characteristics of the sales area, the set of goods offered, the type of intermediation, and the differentiation with other distribution or sales channels of the same product will be considered. (LORCPM, 2011). This "normative" and legal economic consideration forces us to bring up the following topics.

2.1 Market Structure

"An organized and established market directly influences the behaviour of its economic agents, who will determine the price and quantity of goods or services that will be traded." (Westreicher, 2019). This structure comprises four fundamental elements: supply, demand, price and marketing of a product.

Supply. - It is defined as "the set of offers made in the market for goods and services for sale. The supply curve

captures the location of the points corresponding to the quantities offered of a particular good or service at different prices." (Marshall, 2017)

The purpose of supply in a market is to make goods or services available in a given period and at a price established by the economic environment. The competition between different suppliers in the same territory must occur in an environment of free participation. The only determining factor for consumers to choose one or another supplier is fair treatment, represented by a fair price, unbeatable quality, and optimum service.

Demand. - It is the overall market value that expresses consumers' purchasing intentions. The demand curve shows the quantity of a specific good that consumers or society are willing to buy to function the price of the good and disposable income. (Marshall, 2017)

For Laura Fisher de la Vega (2011), demand is "the quantity of a product consumers are willing to buy at the market price". In addition:

> The prices of goods or services in the market depend directly on the demand variants, i.e. the higher the consumption, the higher the production and therefore the higher the economic performance. On the contrary, the lower the consumption, the lower the production and the lower the profit. (n. p.)

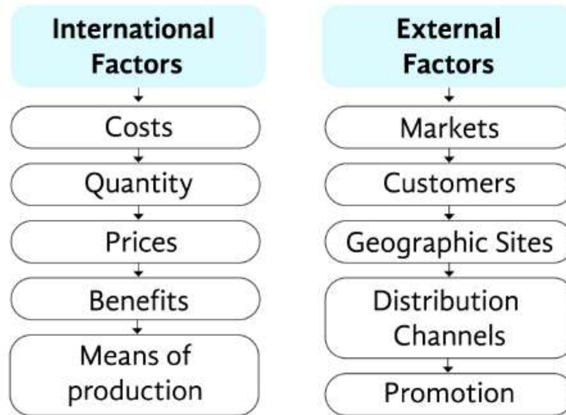
Price. - It is defined as "the quantitative estimate that is made on a product and that, translated into monetary units, expresses the consumer's acceptance or not of the set of attributes of said product, based on its capacity to satisfy needs" (Muniz, 2021).

On the other hand, Raquel Valera (2019) makes some remarks regarding price:

> It determines the cost that a product or service has in the market so that in order to consume such goods and services, it will be necessary to pay that selling price and determine the prices of products or services destined to the market for its commercialization. Several factors must be taken into account. Among these, we have the cost of production, fixed costs, variable costs and profit percentages. (n. p.)

When the customer buys a product in the market, the product's price already includes all the costs and benefits invested in its production, thus being called the selling price. The price of a good or service for manufacturers or producers is a decisive factor for decision making focused on their income since raising the price of a given product will generate dividends, but the demand will fall. Otherwise, by lowering the price of a good, its demand will grow and its benefits in the same way. In economies in crisis almost constantly and insignificant percentage, the sales tend to fall, and therefore the price is an important variable that will be defined according to the parameters established in each company.

Graph No. 1: Factors influencing price fixing



Source: Gonzales (2014, n. p.)

Own Elaboration

As shown in Graph No. 1, the prices set for a given good or service depend directly on the company's internal and external activities to position its product in the market with high-quality standards to generate demand thus obtain higher profits.

2.2. On the marketing of a product

A given good or service marketing is regulated by a chain of activities that facilitate its movement from the manufacturer to the customer, including a series of adjustments directly linked to promotion, diffusion, distribution, product projection, mobilization, and storage. "The marketing of a product or service focuses on marketing, which consists of putting a product on sale, giving it the necessary commercial conditions for its sale and providing it with the distribution channels to reach the final public" (Caurin, 2018, n. p.).

> Every company dedicated to the commercialization of its products or services in a market must have clear and objective strategies for the best use of the opportunities presented for sale, thus managing a series of approaches whose challenges are palpable at the time of the adaptation of a good or service in the market and whose durability is protected by innovative methodologies. (Muñiz, 2021, n. p.)

Finally, one of the essential objectives to develop high-level commercialization in commercial companies lies essentially in the human talent since it depends on this that the commercial department contributes with ideas, strategies, possible solutions to problems presented, and many skills so that the good or service is placed in competitive standards and thus continue with the commercialization chain.

2.3. On Market definition

The market is defined as “places where there are, on the one hand, sellers who offer their goods in exchange for money and, on the other hand, buyers who contribute their money to obtain those goods. There is, therefore, a supply and a demand. What is paid is the price” (Sampedro, 2020, n. p.).

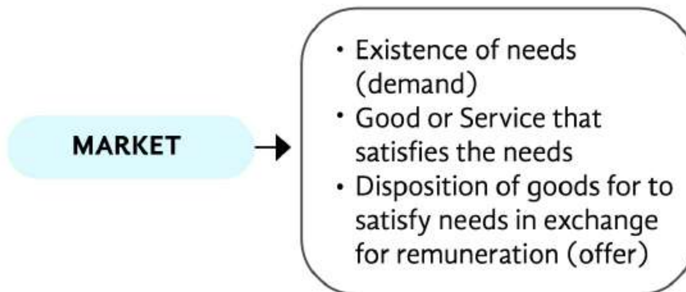
According to the Royal Spanish Academy Dictionary, the market is defined as a set of activities carried out freely by economic agents without the public authorities’ intervention.

From the perspective of economics, the market is “the place where suppliers and demanders meet, and it is there where the prices of goods and services are determined through the behaviour of supply and demand” (Fisher, 2011, p. 58).

On the other hand, it is considered that "The purpose of the market study is to determine the number of goods and services coming from the new production unit that, under certain conditions of price and quantity, the community would be willing to acquire to satisfy its needs" (Miranda, 2012, n. p.).

The market (see Graph No. 2) comprises two consumers: actual consumers, who buy your products or services regularly, and potential consumers who could probably be interested in an offer.

Graph No. 2: The Market



Source: Fisher (2011, n. p.).

Own Elaboration

A market originates when there is a need or lack of a good or service, and it is here where the capacity of producers to offer suitable products that comply with the characteristics established according to the consumption habits of the demand and with accessible prices intervenes. Thus, fulfilling a harmonic satisfaction between beneficiaries and suppliers, it is worth mentioning that the clients' acquisition is exclusively for their consumption and not commercialising them.

The indicator that positions a market to be competitive against its adversaries is to externalize information records, which will be the key for the actors involved in the commercial negotiations of goods or services. Then, making clear and concise decisions with optimal marketing strategies, allowing them to position themselves with high-quality standards and whose effort is reflected in their economic environment.

The main objective in a market economy is to achieve the highest levels of performance, but when this for some reason presents shortcomings, it is said that there are market failures.

From the point of view of the typical customer, the markets are distributed in four essential groups. The first is related to the demand market and is nothing more than obtaining the good or service intended solely for personal consumption. A second concerns the supply or producer market, which is the one that transforms the raw materials to obtain the final product and can market it. The third is related to the reseller market, which acquires the good through a sale from the initial producer and resells it at higher costs, obtaining a profit; and the last refers to the state market, which is responsible for acquiring goods to provide services to its government departments and for works in the community (Fisher, 2011).

Economic science, through the construction of models, has made it possible to differentiate between two types of market: the perfect market, which is the utopian construction of an exchange space that has reached maximum efficiency, and the real market, which is the actual and practical situation of economic exchanges.

2.4 Market typologies

a. Idealized or perfect market

The idealized market is:

> Where no participant can individually influence prices or quantities, it is also assumed that everyone is fully informed of what is offered or demanded at available prices. Under these conditions, any buyer can choose with certainty what suits him best and at the best price available. Therefore, it is claimed that the consumer is the king of the situation and that the market gives him the freedom of choice. (Sampedro, 2020, n. p.)

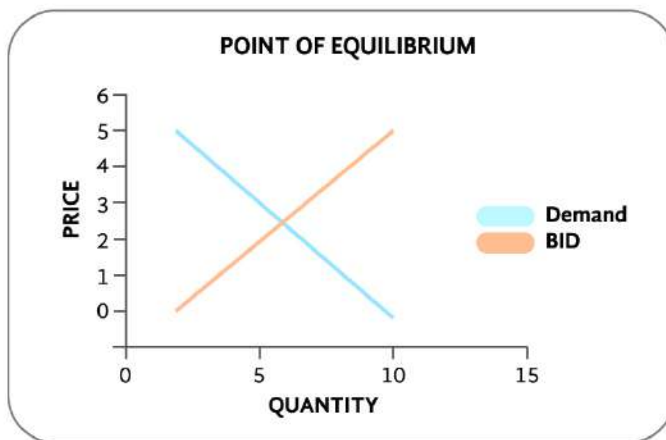
For Gregory Mankiw (2012), author of the book "Principles of Economics", a market is "a group of buyers and sellers of a given good or service. The buyers jointly determine the demand for the product, and the sellers" (n. p.).

The fact that there is perfect competition means that each competitor does not have power in the market, i.e. does not influence the optimal functioning of the market (Durán, Quirós & Rojas, 2009).

It is a market where suppliers and demanders share clear and essential information, so that the transfer of ownership of a good is homogeneous, producing an economic scenario, without overpricing, with free competition, with similar products, with no barriers to entry and exit, without unfair competition, with similar conditions for potential competitors and thus, promoting an ideal balance between all the actors involved in this marketing process.

In other words, it is a place where everyone can access in the same way and the same amount of information, which will facilitate the making of reasoned decisions, and this means that those who want to produce a good and those who want to acquire it have access to the data, which consequently will allow them to interact in the market. On the other hand, the ideal market is a space that regulates itself, i.e. the quantity of the product demanded and the product offered to reach a certain point of exchange, known as the equilibrium price, without the intervention of any factor that alters this result.

Graph No. 3: Idealized market - the break-even point



Own Elaboration

As shown in Graph No. 3, the quantity demanded coincides with the quantity supplied of the same good or service, generating the equilibrium point or equilibrium price, which (as mentioned above) results from the self-regulation of the perfect market.

b. Real Market

> It comprises a group of people who need a good or service, who possess the necessary financial means to cover it and are interested in acquiring it. The primary objective of the real market has always been the exchange of goods at a realistic market price, determined by the combination of supply and demand. (García, 2014, n. p.)

Based on this, the real market is understood as space where situations do not happen as ideally planned due to many factors known as market failures. One of them is that there is much hidden information. In addition, it is noted that not everyone has the same access to information and that people do not process it in the same way. Therefore, producers and consumers are not usually in a position of the equality of conditions, but someone will always know more than others. This means that there cannot be parity between demand and supply, thus generating an imbalance that does not reach an equilibrium price, as in the ideal market.

This situation triggers phenomena such as waste or scarcity. In the first case, there is more supply than is consumed, and there is excess production, and in the second case, supply does not meet demand, so there are unsatisfied needs. This is why the real market is not self-regulating; it needs the intervention of a regulating entity to operate in the best possible way.

Graph No. 4: Market Failures - Actual Market

Own Elaboration

Graph No. 4 shows that the lack of information directly affects the demand with products or services that are scarce for use and the supply with excess production, causing waste in their sales and directly generating an impact on the price, clearly detecting a market with failures.

Segmentation of a real market. “Market segmentation is a process by which a group of homogeneous buyers is identified, i.e., the market is divided into several segments according to the different purchasing desires and requirements of consumers” (Fisher, 2011, p. 61).

The need to segment a market lies in classifying consumers according to their consumption preferences, and with these guidelines, manufacturers will be able to target consumers by facilitating transparent and strategic processes safely. Proper market segmentation requires effective measures to match goods and services perfectly to the needs of each individual.

c. Types of market segmentation

There are four types of segmentation in the market, and these are:

I. Geographic segmentation divides the market into geographic units, such as nations, states, regions, provinces, cities or neighbourhoods that influence consumers. The company can operate in one or several areas; it can also operate in all of them, but paying attention to local variations. In that way, it can adjust marketing programs to the needs and desires of local groups of customers in trade areas, neighbourhoods, and even individual stores. (Kotler & Lane Keller, 2012, p. 214)

II. Behavioural market segmentation is one of the leading market division techniques. These four market segmentation techniques represent the fundamental tools to support a good marketing and communication plan in distributing products and services. (Argudo, 2017)

III. In demographic segmentation, the market is divided by age, family size, family life cycle, gender, income, occupation, education level, religion, race, generation, nationality and social class. One of the reasons why demographic variables are so popular among marketers is that they are often associated with consumer needs and wants. (Kotler & Lane Keller, 2012, p. 216)

IV. Psychographic segmentation is effective, and when associated with other segmentation criteria (geographic, behavioural, demographic, among others), it becomes an essential tool for the correct adaptation of the marketing mix (price, place, promotion and product) to the target audience, i.e., it allows the company to position its product more coherently in the market. (Ciribeli & Miquelito, 2015).

c. Imperfect competition

It is a market situation in which sellers or companies competing in the market have some control over price because they offer differentiated products and limit supply. In addition, there is incomplete market information and emotional buying behaviour in this type of market, so companies use the promotion to inform, persuade or remind their target market of the characteristics and benefits of their products (Thompson, 2005).

This phenomenon produces:

a) Low degree of concentration of companies: The number of companies that form this type of market is reduced, contrary to what occurs in a market of perfect competition (Jiménez, 2012).

b) Sellers influence price: In most cases, sellers significantly influence price, thus contradicting the spirit of the free market advocated by Adam Smith with his metaphor of the “invisible hand” (Jimenez, 2012).

c) Product differentiation: Companies in this type of market are perceived as different by the consumer. Characteristics such as design, use or usefulness are different from one product to another (Jiménez, 2012).

d) There is incomplete information in the market: Buyers and sellers have different information about the product. Cases of asymmetric information in which the seller has much more information about

the product than the buyer are expected in this type of market. (Jiménez, 2012)

e) High prices and low production levels: This is because sellers can control the price of their products to some extent, which results in a decrease in demand. (Jiménez, 2012)

f) Existence of high barriers to market entry: The main barriers to entry that prevent or hinder the entry of new companies into the market are cost advantages, product differentiation and the high capital investments required to enter the market. (Jiménez, 2012)

In other words, there is an imbalance between demand and supply, so the market cannot regulate itself. In a scenario of imperfect competition, some situations can be distinguished that, based on the amount of supply or demand, trigger consequences such as monopoly and monopsony, which are extremes that directly affect the price of market products (see Graph No. 5).

A monopoly is defined as “a market that has only one seller, but many buyers” (Pindyck & Rubinfeld, 2009, p. 395). Market failure occurs when there is a single supplier in the market that, through opportunism, in terms of supposed efficiency, seeks to maximize its price, i.e. it has total control of the market section to which it belongs and can impose the price it considers best on the goods it produces.

To obtain more profits, the monopolist must first investigate the types of demand existing in the market since this information is essential for the company to make financial decisions and thus decide on the quantity it will produce and

sell. In other words, the monopolistic company determines the price and quantity it will sell. (Pindyck & Rubinfeld, 2009)

A Monopsony “is a market that has many sellers, but only one buyer” (Pindyck & Rubinfeld, 2009, p. 395). That is, it is a single person, the consuming or demanding party; however, variants such as duopsony and oligopsony, which are small groups of buyers, can also be found; these together cause prices to fall to a minimum value and consequently the supply must produce more to offset the cost of production. “When there is only one buyer, monopsony power influences the product’s price by allowing the buyer to purchase the good at a lower price than in a competitive market”. (Pindyck & Rubinfeld, 2009).

Another failure is an oligopoly, which is understood as a “market in which only a few firms are competing with each other, and the entry of new firms is impossible”. (Pindyck & Rubinfeld, 2009, p. 507).

> In specific oligopolistic factories, firms collaborate, but in others, they do not, becoming rivals, even if this means lower profits. To understand why it is necessary to know how these industries manage their production and pricing decisions. The measures are complex since each company must act with planned methodologies, and when it makes a decision, it must deduce the likely reactions of its rivals always to be one step ahead of them. In oligopolistic markets, economic performance is very high because there are barriers to entry for new companies forced to give up because of barriers to entry. (Pindyck & Rubinfeld, 2009, n. p.)

On the other hand, another flaw is the oligopsony, which refers to "a type of market where there are few demanders, although there may be a large number of bidders. Therefore, control and power over prices and transaction conditions reside with the buyers" (Cabello, 2016, n. p.). The dominance identifies this type of market failure it has over the market, and its profits are enormous. These companies have policies of reciprocal dependence with the same economic purpose.

Graph No. 5: Type of market failures - Imperfect Competition

Own Elaboration

For a more detailed example, Table 1 shows some situations of imperfect competition and the degree of control they exert on price:

Table No. 1: Market structures and degree of price control

Market Structure	Number of Bidders	Degree of control exercised over the price.	Example
Monopoly	One Bidder	Complete Control	Drinking-Water Service
Oligopoly	Few Bidders	Exercises little control	Vehicle Manufacturing

Monopsony	Single Claimant	Complete Control	Public Works
Oligopsony	Few Claimants	Exercises little control	Large Distributors

Source: Fuenmayor (2017, n. p.)

Own Elaboration

Monopoly power causes the costs of a good to be higher and the quantity produced to be lower; in the case of monopsony power, the buyer's capacity will influence the price of the good so that it will be lower than that which would be in force in a market.

c.1 On Commercial Regulation

This is done to prevent this imbalance between demand and supply from significantly harming the price of the goods offered and prevent fraudulent or evil faith actions that could harm the proper development of the market.

Two solutions are proposed to avoid this situation: the first is to set the price as if it were in perfect competition, which means that the price is in equilibrium. Graph No. 6 shows this:

Graph No. 6: Price in perfect competition

Own Elaboration

The second solution proposed is to set a price proportional to the total cost of production; however, the long-term problem is that the producer, seeing himself with a fixed income, may lower the quality of the goods he offers to maximize his profits.

c.2 On the Regulatory Framework

The application of norms and rules established in the Constitution is of vital importance since they are created to avoid unfair and restrictive practices, distorted data and others that may affect healthy competition and transparency in the economic activities of the market.

These control measures are typified in the Constitution of the Republic of Ecuador (2008) approved in 2008, where it states "That, Article 304 paragraph 6 of the Constitution establishes that trade policy will aim to prevent monopolistic and oligopolistic practices, particularly in the private sector, and others that affect the functioning of markets" (art. 304.6). It should also be noted that in 2011, the National Assembly enacted the Organic Law of Regulation and Control of Market Power (LORCPM), and in 2012, the Superintendence of Control of Market Power (SCPM) was created as a control entity to regulate and sanction all those economic agents that are not aligned under the law.

c.3 Asymmetric Information Considerations

Information asymmetry (see Graph No. 7) constitutes a market failure because it contributes to an unequal state among market players. This occurs when one party has more knowledge than the other regarding the good or service to be exchanged in a negotiation. Without information, the decisions

to be made are imprecise and can benefit or detriment an agent in the transaction.

In the context of an "economy with asymmetric information, the more informed agents displace the less informed ones in the market" (Perrotiní, 2002, n. p.).

When the asymmetry of information originates in the negotiation of a good or service, tacitly, the market equilibrium disappears, and the negotiator with more information is placed in a privileged situation causing the other negotiating party to be in a vulnerable situation generating erroneous decisions and thus placing itself in inefficient situations in the market (McGraw-Hill, 2019).

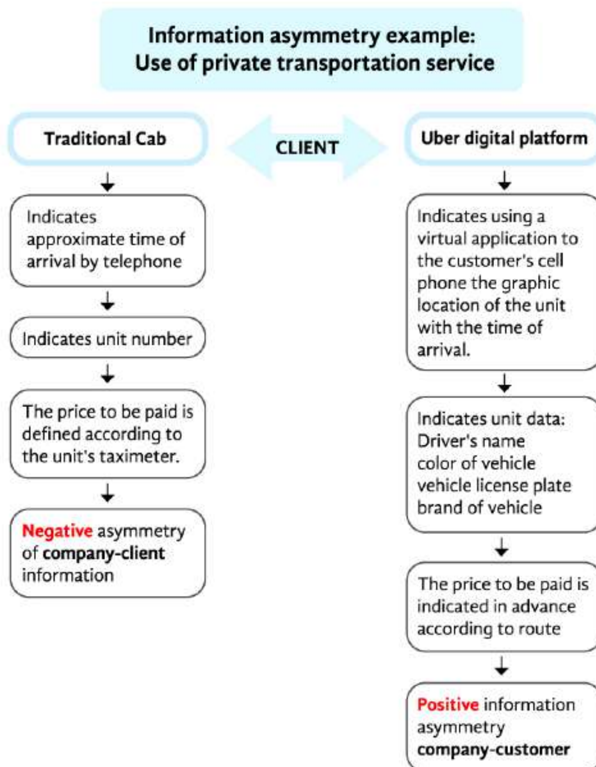
Asymmetric information leads to market failure since it induces the buyer to be at a disadvantage without knowing it, acquiring a good or service of dubious quality at high prices, so this dishonesty should be sanctioned in the regulations of the Organic Law of Regulation and Control of Market Power (LORCPM).

One of the causes that give rise to the appearance of information asymmetry in the market is the poor allocation of the few information resources among the economic participants, which restricts the companies without this tool to function better, causing this inefficiency to become an economic problem since decision making will be complex and, in some cases, erroneous.

The failure of information is frequent, and its effect acts as a limiting factor in the exercise of goods or services, generating conflict and discouraging suppliers and demanders from participating in the market.

> A market with few buyers and few sellers is sometimes called a thin market. Conversely, a market with many buyers and sellers is called a dense market. When imperfect information is severe, and buyers and sellers are discouraged from participating, markets can become extremely thin as a relatively small number of buyers and sellers attempt to communicate enough information for them to agree on a price. (Gonzales, 2020, n. p.)

Figure No. 7: Information asymmetry - practical example



Own Elaboration

Information asymmetry also results in the following problems:

a. Adverse Selection. - The quality of a good or service depends directly on the asymmetry of information. When one of the participants in the transaction has clear and concise information and does not share it with the other party or provides distorted information, tacitly both parties are affected, since their production levels will not be optimal and with the risk that these goods or services do not offer the quality offered or worse still cannot even be exchanged.

In an economy with asymmetric information Akerlof (1970) (The economics of asymmetric information: micro-foundations of imperfect competition) "the more informed agents (borrowers, sellers in second-hand markets) crowd out the less informed agents in the market, and, as a result, the "bad" product crowds out the "good" product" (n. p.). Akerlof extended the famous Gresham's Law to the case where agents cannot distinguish between the high-quality sound and the low quality good due to the presence of asymmetric information"; the assumptions of his model are:

- **i.** The offer of an indivisible good that is presented in two qualities, the low quality good and the high quality good;
- **ii.** The offer is made in fixed proportions, and respectively;
- **iii.** consumers cannot recognize a priori the qualitative differences of the product due to "private" or "hidden" information held by the seller;

iv. In the absence of market regulation, the same dual quality good (high and low) will be traded in only one market, and consumers will not be able to identify this qualitative duality, giving rise to the phenomenon of adverse selection.

In a scenario where the conditions of information asymmetry give rise to a problem of adverse asymmetry, the seller of a high-quality product should not simply tell his customers but demonstrate it, and a clear sign of this is the so-called manufacturing guarantees of a good or service.

This failure in the market of adverse asymmetry harms everyone, both buyers who, in good faith, acquire products thinking that they are of good quality and that only in their consumption will prove otherwise; as well as sellers who will get bad publicity and who knows even complaints about misleading advertising and deception. The different guarantees existing in a market are a reflection of the quality of each of its products.

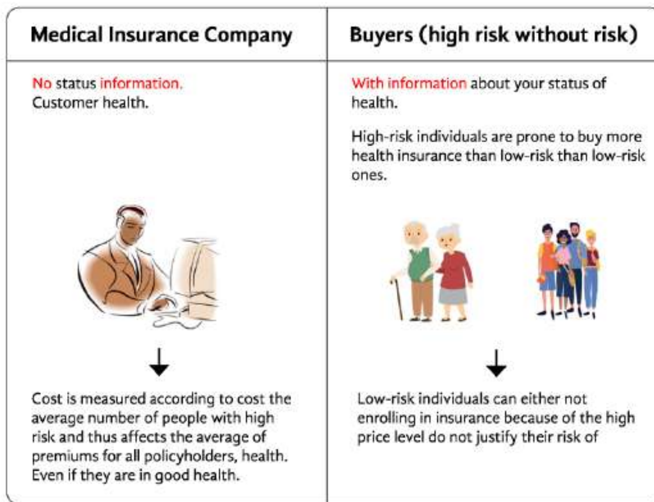
One of the solutions to this market failure is the one developed by the governmental entity, by issuing within the constitution the so-called Organic Law of Regulation and Control of Market Power (LORCPM), which protects the interests of buyers, sellers, customers, suppliers, consumers, users, distributors and other actors that are part of the market, through mechanisms that guarantee a free competition system avoiding and sanctioning bad commercial practices if necessary, and thus having efficient, transparent, competitive, productive, technological and fair markets. (Constitution of the Republic of Ecuador, 2008)

Within the guidelines for the application of the conducts contained in the Organic Law of Regulation and Control of Market Power (LORCPM) (2020), we find article 1, which determines:

> The purpose of this Law is to avoid, prevent, correct, eliminate and sanction the abuse of economic operators with market power; the prevention, prohibition and sanction of collusive agreements and other restrictive practices; the control and regulation of economic concentration operations; and the prevention, prohibition and sanction of unfair practices, seeking market efficiency, fair trade and the general welfare of consumers and users, for the establishment of a social, supportive and sustainable economic system. (art. 1)

This phenomenon can be better understood from the following example (see Graph No. 8):

Graph No. 8: Information asymmetry - adverse selection



Own Elaboration

b. Moral hazard. - Ex post in terms of exchange decision. Moral hazard is a problem derived from the asymmetry of information (see Graph No. 9 and Graph No. 10), where one of the parties generates its benefit without considering that the other party cannot observe it or be aware of its movements.

For Krugman (2017) “moral hazard refers to any situation in which one person decides how much risk to take, while another person bears the cost of things going wrong” (n. p.)

For another author, moral hazard is:

> The incentive of a person A to use more resources than he would otherwise have used, because he knows, or thinks he knows, that some other B will provide some or all of those resources. What is important is that this occurs against B’s will and that B is unable to approve of this appropriation immediately. (Hülsmann, 2008, n. p.)

This type of market failure occurs because the economic agents participating in a transaction are uninformed about the reality of some consequence given by one of the parties. This asymmetry of information operates in activities generally in insurance contracts, in auditing companies, in banking entities towards their clients, among others.

Graph No. 9: Market Failure - Moral Risk

Source: Guido (2008, n. p.)

Own Elaboration

As can be observed, moral risk arises once a contract has been accepted, with all its terms and conditions. The contractor, due to some adversity in the environment of the contracted agent, cannot verify whether such calamity occurred due to imprudence or not of the contractor, so the contractor claims its rights established in the signed document, thus obtaining a favourable situation with the execution of such agreement, which the contractor omitted information or distorted it.

Finally, asymmetric information leads to a moral hazard caused by the scarcity of informative data due to the concealment of information for convenience, as detected in confirmed cases in the market.

According to Rodriguez (2013), market failures corresponding to information asymmetry influence the behaviour of economic agents since it allows them to decide which action to take is the most appropriate for their commercial benefit within a business market, implying short-term consequences that will only generate situations of inefficiency and loss of consumer welfare.

The existence of asymmetric information justifies an immediate intervention to correct or mitigate its effects. Therefore, a market must correct itself with regulatory strategies and radical approaches to mitigate information asymmetry.

This problem must be overcome through natural incentives and strategies by all the intervening agents in the economy, who suffer from market failures due to the lack of information reflected in their productive activities.

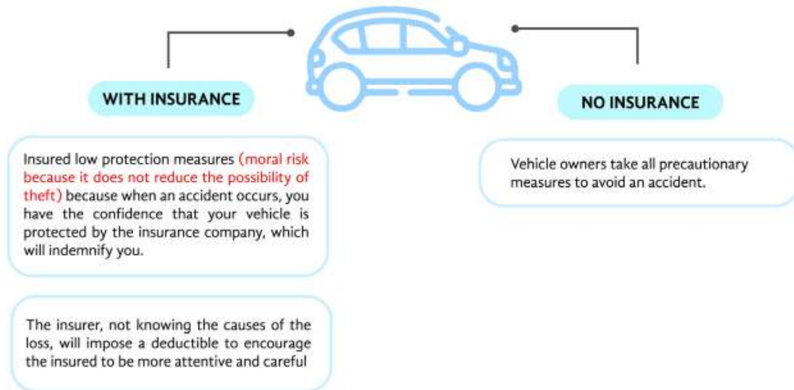
A direct measure to stop the lack of information in current times is that digital technology, which develops, notifies and transmits information instantaneously and at a low cost.

Concerning manufacturers of high and low-quality products, another natural incentive mechanism in the face of lack of information is to offer guarantees to consumers, reducing the uncertainty they have at the time of acquiring a good or service and whose reward will influence the price, obviously the manufacturers of dubious quality will have little encouraging scenarios before their adversary. This incentive is significant even in monopolistic markets.

Chain advertising is another natural tool that facilitates the marketing of a product, and this occurs when satisfied consumers recommend the product to their relatives and these to the rest.

Other sources of information acquired innately are provided by retailers as they comment on their work practices to other consumers. Moreover, finally, we find the digital information, which, through computers, tablets, and cell phones, provides us with all kinds of valuable content across borders and with basic costs for its use.

Figure No. 10: Example of the type of market failure - Information asymmetry - moral hazard



Source: Rodriguez (2013, n. p.)

Own Elaboration

It is necessary to take into account for improving information asymmetry, measures based on regulatory standards, which should include standardization of parameters, in order to manage information more accurately, as well as to improve reputation concerning market research and supply and demand behaviours in order to interact in an honest manner and with efficient results.

Finally, it is pointed out that information asymmetry is a market failure caused by the lack of regulation since it is the interaction between the legal system and the economic reality.

c.4 “Externalities” considerations

> By definition, an externality is an overflow, and it is a positive impact (in which case we speak of “external” benefits) or a negative impact (“external” costs) on another party not directly involved in an economic transaction. In such cases, prices do not reflect the total costs or benefits of producing or consuming a product or service. Consequently, producers and consumers in a market do not bear all the costs or reap all the benefits of economic activity. (Bou, 2009, n. p.)

There is a cost or benefit to a third agent outside the interaction with the market. For example, during the production or manufacture of the product or good, side effects occur that were not planned within the cost of production and are assumed by agents who are not involved in the exchange.

According to Bou (2009), externalities in an economic market are made visible by the excessive production of a product whose purpose is to satisfy demand.

The internal costs that a manufacturer generates for the elaboration of a particular good or service for society’s consumption are retributed in its profit. However, external costs are generated during the transformation of raw materials to the final product because they affect third parties. From the producer’s point of view, they do not have any interference in the productive phase, and these costs are called contamination, destruction, pollution, originating the so-called negative externalities (Bou, 2009, n. p.). These costs are shown in Graph No. 11.

The economy shows that with the appearance of negative externalities, disastrous results are generated from the social point of view since the most harmed are not even aware of this situation. In other words, businesspeople pollute the air with the production of certain products. Their machinery generates the emission of gases that contact nature cause an environmental impact, and the surrounding people unknowingly inhale. Moreover, it is here where the State must apply corrective measures for these cases and charge monetarily for the negative impacts caused. (Bou, 2009)

As opposed to negative ones, positive externalities provide many benefits, as is the case of pollination, which generates benefits in the development of plants and these, in turn, produce fruit and the honey nectar produced by the bees. These activities help clean the environment and regenerate it, so they should be encouraged with economic support to promote this activity.

The existence of externalities creates an essential flaw in the operation of a market by creating diseconomies, which provide incorrect signals to companies and consumers and result in inefficient prices and goods. (Bou, 2009)

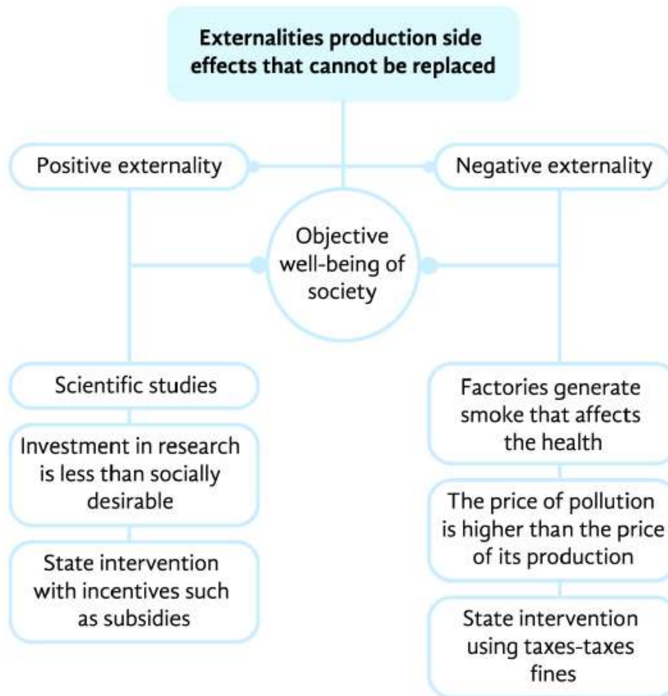
Faced with this problem of market failure, the central government should focus on applying a tax (negative externality) and a subsidy (positive externality) to mitigate some of the damage caused to the environment and reward the benefits caused to it. (Bou, 2009)

It should be clarified that judicially, the problem to be solved is the negative externalities that, whether premeditated or not, are not part of the production costs of the causers; and, consequently, these are assumed by society, so mechanisms

must be established to rectify these costs through penalties, fines, fees, taxes, among others.

With externalities, the premise of the perfect market is broken precisely because of the cost of the damage caused, and it is necessary to be aware of the damage caused to third parties so that this behaviour can be minimized through behavioural terms to achieve market equilibrium.

Graph No. 11: Example of the type of market failures – externalities



Own Elaboration

c.5 Public Property Considerations

Public goods are those that do not have a rivalry, which "means that the consumption of such good or service by one person does not reduce the amount available to others" (Tansini, 2003), nor exclusion, which implies that "it is impossible or prohibitive to prevent people who do not pay for such good or service from using it" (Tansini, 2003). To contribute to the definition of "public goods," we can paraphrase the author Alberto Benegas-Lynch (1998), who states that public goods produce effects for subjects that do not participate in an economic transaction, equivalent to generating externalities that cannot be internalized.

The doctrine recognizes two types of public goods: pure public goods and impure public goods. Now, what are pure public goods? A public good is pure when it is of total enjoyment, that is, when it exhibits no rivalry or exclusion in its use by the citizens, a clear example is street lighting, since everyone uses it and its use by one subject does not represent an impediment or detriment to the use of another (it can be enjoyed at the same time and without exception). On the other hand, impure public goods are those that have degrees of non-rivalry or joint consumption, but not absolutely; they are rivals, but the exclusion of their consumption is not efficient or is impossible, and they are not rivals, but it is possible to exclude people from their consumption (Filgueira & Lo Vuolo, 2020).

Another part of the doctrine affirms that any good and service continuously varies within the spectrum between public and private classic absolute constructions (exemplified in Figure 1). Since "strictly speaking there would be no goods and services, no matter how rivalrous or excludable they may

be, that do not generate some public externalities" (Filgueira & Lo Vuolo, 2020). For example, a perfume, which although it can only be used by the person who acquired it (through an economic exchange), can be perceived (and enjoyed or not) by all those who are in its periphery, or a tree, the exclusive property of the person on whose land it is located, which provides shade to the neighbouring house.

Graph No. 12: Characteristics of public and private assets

Own Elaboration

Other attributions of public goods are presented by the author Pimiento (2019), who states that:

> To simplify the legal regime of public property (...) it should be noted that: a) all public property (fiscal and public use) is imprescriptible; b) public use property and fiscal property destined to the provision of public service, provided by a decentralized entity or its concessionaire, are unseizable; and c) public use property and fiscal property determined by the constituent of the legislator are inalienable. (n. p.)

It is also necessary to cite the definition of public goods (or national goods) in the Ecuadorian civil code:

> Art. 604.- National assets are those whose domain belongs to the Nation as a whole. If, in addition, their use belongs to all the inhabitants of the Nation, such as streets, squares, bridges and roads, the adjacent sea and its beaches, they are called national goods of public use or public goods. Likewise, the perpetual snow-capped mountains and the areas of territory located more than 4,500 meters above sea level. The national goods whose use does not belong to the inhabitants are called State goods or fiscal goods" (CC, 2005, art 604).

In the perspective of the perfect market model, which implies property rights transactions for the satisfaction of needs, public goods represent a market failure. According to Bagattin (2018) and as a result of the non-rivalry of these goods, they produce the phenomenon above;

> For a price equal to zero that maximizes social benefit, there will be no provision under a market scheme unless the producer could obtain resources by alternative means to the sale of the good or service in the market. On the other hand, if the marginal cost is zero, any favourable price implies a reduction in efficiency and the additional need to implement some form of exclusion. (emphasis added) (n. p.)

Adding to this phenomenon the inability of these goods to be excluded, it is unlikely that there will be private participation in this type of market.

On the other hand, according to Benegas-Lynch (1998), the public nature of public goods (redundancy aside) implies the existence of "free-riders", i.e., individuals who benefit from the externalities (generally positive) of such goods without

having been part of a transaction. This implies an economic waste since the good, service or externality was not enhanced or maximized.

Now, it is pertinent to delve into the concept of "free riders", these are subjects within a group that grants a certain degree of anonymity and, upon receipt of a benefit, do not contribute to remedying production costs. This behaviour responds to a limited rational behaviour of satisfaction of individual interests or, in the words of Bagattin (2018):

> For the group of individuals when they contribute to sustaining the cost of the public good whose provision places all of them in a situation of greater welfare than in the case where it is not provided, but it will be the most profitable condition for each rational individual to obtain the benefits by leaving others to assume the costs. (emphasis added) (n. p.)

The solution to the problem of public goods is directly related to technological evolution since it provides producers with methods to generate rivalry and exclusion over goods and thus profit from their production. This gradual privatization of goods can be exemplified in the encryption of frequencies (for telephone, television and radio services) limiting access to them. It is also directly related to the development of research methods that identify non-internalized externalities.

From the legal perspective, state interventionism is proposed (and justified), i.e., that the State (in the absence of private providers) should provide these goods and services in exchange for taxes. In this way, there would no longer be "free-riders" (unless tax obligations are not complied with, legally sanctioned), and the costs of services and goods would

be covered. Alternatively, the State could incentivize the production of these goods through the exchange of taxes for the investment in public facilities and other related types of infrastructure.

In Ecuador, direct State intervention has a constitutional hierarchy, as it is enshrined in the following articles of the Constitution of Ecuador (2008): "Art. 285.- The specific objectives of the fiscal policy shall be as follows: 1. The financing of services, investment and public goods (...)" (art. 285).

> Art. 315.- The State shall constitute public enterprises for the management of strategic sectors, the provision of public services, the sustainable use of natural resources or public goods and the development of other economic activities. (CRE, 2008, art. 315)

This normative solution is currently applied to regulate the failure of public goods, but this does not mean that it is not subject to criticism. Benegas-Lynch (1998) questions the coercion applied by this type of regulation because from an economic perspective. The consumer is forced to pay for a good or service that he may or may not use. For example, a blind person does not benefit from public lighting, but part of his taxes will cover the costs of this service.

Other authors claim that public goods regulation policies do not "work according to Walrasian general equilibrium models" (Filgueira & Lo Vuolo, 2020) and that it would be unreasonable to try to create regulation policies based on this system, as it would result in many public goods and services not having a place in this perfect market model.

CONCLUSIONS

By way of synthesis, it is possible to affirm that Economics and Law are closely related. For:

> The Law, when it is put into operation, takes the basic social relationship (whether economic, political, family, among others,) [...] to inscribe it in public and general sphere of Law" (Ost, 2017).] to inscribe it in public and general sphere of Law. (Ost, 2017, n. p.)

In other words, Law adopts (generally in the normative legal system) situations of public interest and grants them legal consequences, which in turn creates obligations, which are enforceable and with non-compliance punishable by the state power; in other words, the function of Law is to regulate (with general, public and binding rules) interpersonal relationships, among which are economic exchanges.

Moreover, it can be argued that law plays a particular role within the market, and that is to facilitate its organization, regulation (of economic failures) and coordination. Therefore, it promotes rules that seek to model the behaviour of market actors so that the "real market" develops as close as possible to the "ideal market", i.e., so that the market is as efficient as possible. Furthermore, an exercise of social engineering is promoted where the efficiency of these rules (norms) will have its foundations in a system of incentives and disincentives, which "use" the desire to maximize the benefit (or otherwise minimize the loss) so that the agent (according to his limited rationality) is prone to make decisions according to ends in harmony with the legal system.

It should be noted that the market is a space in which human interactions take place, the purpose of which is the satisfaction of needs through the transaction of goods and services (which in the end constitutes an exchange of property rights). Also, in which there are constantly conflicting interests since the subject prioritizes his or her benefit over the common good. It is because of this individualistic eagerness inherent to the human being that straightforward rules are necessary.

On the other hand, market failures are products of reality in which the real market disagrees with the perfect market paradigm. These are a) information asymmetry, which arises from the factual inequality between agents in terms of their capacity to acquire and process information; b) non-internalized externalities, which third parties must assume; c) public goods, which despite being necessary, violate the logic pursued by the ideal market; and d) imperfect competition, which in short means that the parties are not on equal terms, resulting in price manipulation by the dominant participant. However, although the paradigm of the perfect market is helpful in approximate an ought to be, it is merely referential and cannot be used as a tool to justify irrational collective action. Social engineering has limits and requires that these limits be set to avoid overlapping “state failures” when attempting to correct “market failures”.

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