

# THE THEORY OF IMPERFECT COMPETITION: A REVIEW OF THE POST-KEYNESIAN CONTRIBUTION

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**Resumo:** De acordo com a teoria pós-Keynesiana, cada planta da firma é construída em uma escala menor do que a escala ótima. Então, segundo esta escola, o custo médio de longo-prazo pode diminuir e gerar uma situação de retornos crescentes de escala, situação que não estava devidamente explicitada na teoria microeconômica tradicional formulada por Marshall. A escola pós-Keynesiana ficou conhecida por sua persistente crítica à teoria da concorrência perfeita, crítica essa que promoveu o surgimento da teoria da concorrência imperfeita. O artigo apresenta os principais pontos criticados e discutidos pelos autores pós-keynesianos, bem como, as suas contribuições para o desenvolvimento da teoria da concorrência imperfeita.

**Palavras-chave:** Concorrência perfeita. Concorrência imperfeita. Teoria microeconômica pós-keynesiana.

**Abstract:** Post-Keynesian authors stated that each plant is built on a scale lower than the optimum one. After that, the long-run average cost can decrease and lead to a situation of increasing returns, such condition was not clearly stated in the traditional microeconomic theory enlightened by Marshall. The post-Keynesian school has been known by its persistent criticism of the theory of perfect competition, so the criticism promoted the birth of the theory of imperfect competition. The paper presents the main points criticized and discussed by the post-Keynesian authors, as well as their contributions for the development of the theory of imperfect competition.

**Key words:** Perfect Competition, Imperfect Competition, and post-Keynesian microeconomics theory.

**Jel Classification:** D01, Microeconomic behavior: underlying principles. L11, Production, pricing, and market structure. Size distribution of firms.

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## 1 Introduction

Piero Sraffa, in 1926, wrote the article "*The Laws of Returns under Competitive Conditions*", considered the cornerstone of the post-

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Keynesian microeconomics. Sraffa verified that firms operating under perfect competition must be subject to decreasing returns of scale and that increasing returns would only exist on the presence of monopoly. Later on, many post-Keynesian authors such as Joan Robinson, Lord Kahn, Nicholas Kaldor, Roy Harrod contributed to the history of the theory of imperfect competition. Robinson (1934) was so excited about the gain conquered by Sraffa that she wrote: “he was not himself completely aware of the freedom that he was winning for us”.

The foundation of the theory of imperfect competition is the existence of structures that destabilize the market mechanism, like monopolies and oligopolies, creating a network that obstructs competition from newcomers. Thus, when there is no free-entry the power to setup prices concentrates on the hands of few firms.

The objective of the article is to provide a review of the post-Keynesian contribution concerned to the theory of imperfect competition. The first section presents a brief review of the post-Keynesian thought. The second section provides a discussion about the concept of increasing returns and how it is defined and related to imperfect competition. In the third section, it presents how the notion of normal profits works out under perfect competition. The fourth section presents how firms take decision and what are the relevant aspects that guarantee the market power.

## **2 The foundations of the post-Keynesian thought**

The historical foundation of the post-Keynesian economics begins with Keynes and his contemporaries and colleagues, the first generation. The second generation of post-Keynesians is defined by those economists that were influenced by reading the *General Theory of Employment, Interest and Money*, and they studied under, or were stimulated by, some first generation post-Keynesians.

A lot of debate arose about what Keynes intended in the *General Theory* and what his challenge to orthodoxy actually was. Even though these subjects remain a matter of discussion, most economists agree that the *General Theory* starts the serious study of macroeconomics. It detailed the factors that determine the levels of output and employment in a given economy; it explained how and why economies might experience low levels of output and high levels of unemployment for long periods; and it provided a structure for developing economic policies that would result in a better economic performance (Richard and Pressman, 2001).

The post-Keynesian tradition was also influenced by the work of Michal Kalecki. Independently of Keynes, Kalecki wrote a theory of the business cycle elucidating the relevance of demand. However, not like

Keynes, Kalecki assumed differing degrees of competition between firms, and he transmitted his analysis in terms of classes and economic sectors. Investment spending is driven by expectations, which runs the economy, but changing expectations generated potential instabilities. Different from neoclassical theory, the degree of monopoly determines how firms set prices, and thus the distribution of income between wages and profits (Richard and Pressman, 2001).

Following Keynes and Kalecki appeared the work of Piero Sraffa, Roy Harrod, Lord Kahn, Joan Robinson and Nicholas Kaldor. Robinson stressed the role of history as opposed to equilibrium in doing economic analysis. For Robinson, the notion of stability, intrinsic in equilibrium analysis, was unacceptable for a discipline like economics that deals with growing and changing. She also explained that the real world was not like the world of perfect competition portrayed in economic textbooks. Rather, according to Robinson (1933), most industries embrace large firms exercising extensive market power (Richard and Pressman, 2001).

Richard and Pressman (2001) points out that post-Keynesians pride themselves on being realistic rather than abstract, and they search for understanding the problems facing real world economies. They figured out that people actually behave by following rules, developing habits, seeing what others do, as well as businessmen follow what Keynes called their “animal spirits” rather than rationality. Intuition and educated conjecture are necessary to decide whether, where, and how to expand the firm. For the reason that problems differ and individual motivations differ, post-Keynesians use different approaches and techniques, depending on the situation.

### **3 The theories of perfect and imperfect competition: the role of the economies of scale**

By the end of the nineteenth century, two market forms dominated the discussion of economic analysis: monopoly and perfect competition. The former assumes a single firm with exclusive power over its output and the market, resulting in profits that are superior than profits in any other market form. In contrast, the latter assumes a large number of sellers of a homogeneous good, where each individual firm has no control over its price. Free entry and exit of firms ensures that long-run profits are normal.

Perfect competition was well developed to illustrate that in some sense it is optimal and in fact represents the end-state. Consequently, it meant that competition between buyers and sellers was completed, and neither party can increase utility or profits. Transformation occurs only if independent variables change, but the situation becomes how fast and

under what circumstances the new equilibrium will be accomplished. Competition might not actually direct to a peaceful state because market forces distinguish profit and utility maximizing behavior with an equilibrium situation that can be, from a social viewpoint, sub-optimal (Steven and Heijdra, 2004).

The groundwork of the theory of perfect competition starts with a very good description of available goods. An economic good is characterized by its material properties, the state of nature and time in which it is available, etc. Consumers act rationally and they have perfect information about all goods' properties, defining preferences over bundles of goods. Consumers are the owners of the firms, and firms are endowed with production possibility sets. A paradigm of market organization is then established, such that all agents are price takers. Consumers maximize their utility constrained by their income (which stems from their endowment and their ownership of firms), so it gives rise to demand functions. Firms maximize profits over their technological possibilities, giving rise to supply functions. A competitive equilibrium is a set of prices, with connected demands and supplies, such that all the markets clear (Tirole, 1997).

A key property of competitive equilibrium is that each good is sold at marginal cost, and a producer would raise profit by increasing production of the good if its price goes above marginal cost. Conversely, if he produced the good at all, he would reduce production if the marginal cost of one more unit of the good is higher than the price. Thus, a consumer sees a price that is socially the "right one", internalizing the cost of producing this extra unit. This is part of the perception following the Pareto optimality of competitive equilibrium (Tirole, 1997).

The traditional neoclassical view of the firm is based on three pillars. The first is the theory of perfect competition, a nucleus around which the analysis of other market forms has developed. The second is the argument that the long run is nothing more than the sum of many short periods, so that the firm maximizes profit in the long run if and only if it manages to maximize it period by period. The third is the conception of the firm as a 'technological black box' which produces an output by combining inputs bought on the market with the specific resources of the firm. Thus, the problem of the firm's economic performance is treated as one of an optimal combination of factors, while ignoring every organizational and institutional dimension (Screpanti and Zamagni, 1993, p. 372).

This state of affairs is reflected in Alfred Marshall's *Principles of Economics*, in which he presented the existence of a hybrid form in between perfect competition and monopoly. Marshall was not interested in imperfect market forms because he concluded that the large majority of cases that occurs in practice are nothing but mixtures and hybrids of these two. He advanced on the theory of perfect competition motivated

by the conviction on the symmetry between the forces of demand and supply. However, the most conspicuous of all conditions is the price-taking behavior. Although it was easy to exhibit markets that seemed to be reasonably described by this assumption (agricultural markets), most markets are served by a small number of firms with non-negligible market power.

Marshall was aware that other market forms were not basic mixtures of perfect competition and monopoly. In the second half of the nineteenth century, the special nature of imperfect markets were available to him in the form of the duopoly models developed by Cournot, Bertrand and Edgeworth. The analysis of Cournot in 1838 was particularly vital for him, as it delivered him the tools to analyze market forms in the first place. The difficulty with these models was that outcomes relied heavily on special assumptions. Even though Marshall did not build up his own theory of imperfect competition, he was aware of the so-called 'special markets' (Steven and Heijdra, 2004).

Perfect competition dominated the analysis during this time and other market forms were considered 'imperfect'. However, in perfect competition, where each seller or buyer has no power on market prices, there is no longer a room for individual competition, and forces leading to industry growth are absent. The difficulty was then to reconcile the theory of the market and that of the individual firm.

Simple observation of reality often contradicted the conclusions about supply and demand analysis because diminishing returns for the individual firm were not an obstacle to expand production. In addition, average costs were diminishing at the point where firms stop growing. The causalities bothered Marshall, as decreasing average cost curves were unable to coexist with perfect competition. Marshall tried to solve this by introducing diminishing returns for the individual firm, and external economies for the whole industry. The introduction of external economies of scale at the industry level ensured that the competitive equilibrium could be rescued.

The key point is that external economies of scale form an interdependence between supply curves; the combined supply of all firms diminish industry costs and ensures that the combination of lower prices and higher supply can be in equilibrium. External economies of scale are well suited with industry equilibrium, because an increase in demand will raise the price for individual firms, as the marginal cost curve of each firm is upward sloping and each firm is operating at the minimum of its average cost curve. The price increase might stimulate new firms to come in to trade, dropping average costs and raising joint supply. Simultaneously with internal economies of scale, market equilibrium is not possible as each individual firm can always undercut its rival (Steven and Heijdra, 2004).

Marshall pointed out that external economies might well be encountered in practice depending on the wide-ranging characteristics of an industry and the environment of the industry, like the localization of an industry. However, his analysis of external economies created an additional problem, because he considered that internal economies of scale were at least as important as external economies. In the presence of internal economies of scale the growth of an industry would be beneficial to largest firms, creating monopolies, and in consequence changing the competitive forces within such an industry (Steven and Heijdra, 2004).

Marshall set up the concept of 'representative firm' to explain the internal economies of scale. Assuming the existence of the representative firm, perfect competition and internal economies of scale possibly will be made consistent. Again, in this case, strategic interaction between firms has been assumed away because firms are by assumption 'representative' for the whole industry. Moreover, the consistency problems in Marshall's analysis of the market were not solved even by the representative firm. Marshall's famous period analysis assumed that in the long run the supply curve was a straight line. And this means that in the long run the volume of production of an individual firm is indeterminate (Steven and Heijdra, 2004).

Post-Keynesian authors began deciphering the code of the mainstream microeconomics through a meticulous analysis of the theory of perfect competition because they were unsatisfied with Marshall's resistance to run off that theory. The first contribution was given by Sraffa (1926). He observed that perfect competition is characterized by organized exchange and homogeneity of the products. In addition, in perfect competition the demand is infinitely elastic because always the marginal cost of production is, in equilibrium, identical to the price.

Robinson (1934) stated that perfect competition, in mainstream economics, involves rational behavior on the part of buyers and sellers, full knowledge, nonexistence of frictions, static conditions, perfect mobility and perfect divisibility of factors of production. Nevertheless, she defines perfect competition in a way that embraces all the assumptions previously exposed, so perfect competition means a situation in which the demand for the output of an individual seller is perfectly elastic.

In the ideal of *laissez-faire*, written by several classical authors, the law of diminishing returns played a crucial role to understand the problem of rent, so raising the exploitation of less fertile lands have a tendency to reduce the marginal returns per unit of input. Sraffa (1926) concluded that if perfect competition exists than the commodity can be considered as a homogenous good and under that concept is possible to establish the role of diminishing returns. Here we have a cut-off point, mainstream economics assumes diminishing returns because they take for granted that the economy has uncountable small firms that face ho-

mogeneous products and without sufficient power over the industry supply. However, post-Keynesian economics considers commodities as containing properties much more complex than just simple agricultural goods. They consider commodity as a collection of diverse articles, ranging from foodstuff to ironware. Consequently, they developed the idea of product differentiation to understand the control of the industry supply by a single firm and there might be the case for increasing returns of scale and, as a result, imperfect competition.

Kaldor (1935) pointed out the role of perfect divisibility assumed by mainstream economics to support the theory of perfect competition. He points out that when mainstream economics assumes perfect divisibility and, by definition, economies of scale are completely absent, perfect competition will be established because of the autonomy of the market forces.

According to Sraffa (1926), mainstream economics does not make clear the role of increasing returns as it does explain the role of diminishing returns. The framework relates increasing returns to the division of labor. It did not develop the role of increasing returns as being a mechanism that happens when the size of the firm rises. Differently, mainstream economics accepts as true that the modification is promoted by internal division of labor, so it occurs only in the local structure of the firms. The importance of external economies was increasingly emphasized as the advantage derived by individual producers from the growth, not of their own individual undertaking, but of the industry in its aggregate.

The result was that in the original laws of returns the general idea of a functional connection between cost and quantity produced was not given a conspicuous place; it appears in fact, to have been present in the minds of the classical economists much less prominently than was the connection between demand and demand price (Sraffa, 1926, p. 537).

In mainstream economics, firms tend to have their plants constructed on a scale in which, regard the technical considerations and the supply price, is the one capable of producing most cheaply. However, post-Keynesian economics points out that plants and firms may be inter-related or a firm may include a number of plants, or a number of firms utilize a single plant. Thus, sources of production in perfect competition cannot be subject to the optimum size autonomously of the state of demand. It follows that no increase of output will give an appreciable influence on price; the firm is free to raise its plant to the scale at which it can produce most cheaply.

Short-period variations in demand are met by variations in the extent to which fixed means are exploited. Long-period variations in demand are met by an increase or diminution in the number of sources of supply. Each source of supply

tends to have its fixed means of an optimum size independently of the state of demand (Harrod, 1934, p. 443).

The time adjustment is not considered by mainstream economics as a mechanism to explain how diminishing returns operate. In opposition, post-Keynesian economics points out that in the short-run the constraint of the firm is the size of plant, so the capital is holding constant and the use of more factors of production tends to present diminishing returns. However, in the long run the time adjustment is long enough to promote a reconfiguration of the size of the plant, so firms tend to have increasing returns of scale because of the reduction in the long-run average cost, envelope curve.

Reductions in cost connected with an increase in a firm's scale of production, arising from internal economies or from the possibility of disturbing the overhead charges over a larger number of product units, must be put aside as being incompatible with competitive conditions (Sraffa, 1926, p. 540).

Sraffa (1926) concluded that to fully understand microeconomics it is necessary to leave aside perfect competition and move towards the opposite direction, monopoly and oligopoly. In monopoly and oligopoly, the power between the supply and demand is not equal, and the competitive effect is not transmitted such as in perfect competition because firms have the market power to delineate the price that the product will be sold.

#### **4 Normal profits in a context of perfect competition**

In any one industry, profits are normal when they are the same as profits in other industries. Normal profits are simply the profits that prevail when there is no tendency for the number of firms in the industry to alter. As soon as profits are supernormal, new producers will come in until profits are condensed to normal profits. Thus, when profits are more than normal firms enter and profits decline; if profits remain more than normal, new firms will arrive until profits are reduced to normal and there will exist no incentive for one novel firm to go in.

The Robinson-Chamberlin doctrine asserted that, although existing firms could meet the rise in demand at lower cost, yet, because they would continue for the time to charge prices giving supernormal profit, new producers would come in until profit was reduced to "normal," and the excess capacity in this sense would then be as great as it had been before the rise in demand. Thus in the long run this rise would not cause an abatement of costs and prices (Harrod, 1972, pg.396).

Robinson (1934) explained that in a long-period supply curve the dynamic adjustment appears as a process of reaching equilibrium, then the existence of two levels of profits considers 'time' as the key variable. It

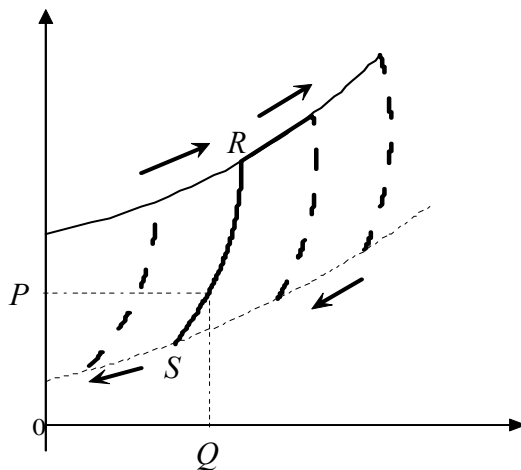


must be conceded that a persistent gap between supernormal and normal profits is likely to occur, so that in fact the process of adjustment is likely to be found in many industries where the market is imperfect. Furthermore, the continuation of the gap depends on the cost to reallocate from one industry to another, and it may occur when competition is perfect. Moreover, competition may be imperfect when there are no costs of movement, such as the case of special licenses to operate in an industry. Finally, the level of profits that will bring new comers into an industry is usually higher than the level that is just sufficient to retain existing enterprise.

A gap between the upper level of reward, necessary to tempt new resources into an industry, and the lower level, necessary to drive old resources out, will exist wherever there is cost of movement between one trade and another, and the double level of normal profits is merely one example of a phenomenon which may affect every factor of production equally (Robinson, 1934, p.108).

The figure 1 has two supply curves, the lower one applies only for expansions of the industry, and the upper one applies only for contractions. The supply curves are determined, under perfect competition, by the marginal cost curves of a given number of firms. Robinson (1934) stated that each point on the upper curve is joined to a point on the lower curve at which the number of firms is the same. This new curve is called as 'quasi-long-period supply curve'.

Figure 1 – Normal Profit's Dynamic



Source: Robinson (1934)

Starting from a position in which price is  $OP$  and output  $OQ$ , and considering an expansion of demand, so the supply price climbs up the quasi-long-period supply curve to  $R$ . It proceeds for further increases of demand along the upper long-period supply curve to the right. After that, in perfect competition, new firms come into the industry increasing the supply (the supply curve shifts to the right), reducing the price level.

The quasi-long-period position does depend on history. There is a continuous series of quasi-long-period curves, and the actual curve depends on the number of firms in existence at the moment, as far as the familiar short-period curve depends upon the quantity of fixed plant in the industry Robinson (1934).

The adjustment on the region of normal profits is based on how the supply price and the output react, and both depend largely upon the past behavior of the industry. On the one hand, if fewer firms had happened to enter in the period of high profits, the actual price of a given output would be higher. On the other hand, if more firms had entered the actual price would be lower Robinson (1934).

Another force that shifts the supply curve happens when discontinuous changes in the number of fresh entrepreneurs (each in front of imperfect knowledge of the others' action) come into the trade. Through this new competition, actual profits are heavily reduced to a level below the one that attracts new comers, but they are not sufficiently low to run out any existing firms. The industry will continue at this inflated size, and it will be in equilibrium in the sense that no new enterprise tends to enter or old enterprise to leave Robinson (1934).

It is true that a high level of normal profits will often be found where competition is imperfect. The fact that an old-established firm enjoys "good will" has the effect both of giving it a hold upon the market which enables it to influence the price of the commodity which it sells and of increasing the cost of entry new rivals. And the powerful firm which uses the methods of "unfair competition" to strangle rivals is highly unlikely to be selling in a perfect market. But this association of high normal profits (not abnormally high profits) with imperfect competition is a purely empirical one." (Robinson, 1934, p. 107).

Finally, perfect competition is a situation in which a particular seller does not control price and in which a single seller cannot make more than normal profit. According to Harrod (1934), the entry of new firms into an industry must be difficult when it is operating under imperfect competition, so the problem of normal profits is not considered because there are mechanisms that provide supernormal profits. The next section presents the background of the theory of imperfect competition written by post-Keynesian authors.

## 5 Marketing expenses, product differentiation, and increasing returns of scale

The preliminary point about the theory of imperfect competition is that individual firms are frequently confronted with a downward sloping demand curve. The possibility of a particular firm being confronted by a downward sloping demand curve (absolute monopoly) was recognized by economic theory before the post-Keynesian contribution. However, the twisting point are the aspects related to market power, such as marketing expenses (form of advertising, commercial travelers, and facilities to customers), product differentiation, and increasing returns of scale.

Sraffa (1926) pointed out that a small firm is held in equilibrium by being subject to increasing marketing expenses. According to Harrod (1931), marketing expenses are all costs involved to invade the competitor's territory, including transportation costs. The marginal cost rises when output increases, but it depends on the strength of the demand in a given area. Thus, a small firm to increase its market share must raise marketing expenses, a situation that is absent in the theory of perfect competition.

Supplementary, when the product is not fully standardized or the market is not organized, producers may have difficulty in marketing increments of produce. A small firm can move beyond that difficulty in two ways: by lowering the price or by increasing marketing expenses, so it cannot sell a larger quantity of goods without reducing its price, or without having to face increasing marketing expenses. Those circumstances are directly related to the notion of imperfect competition.

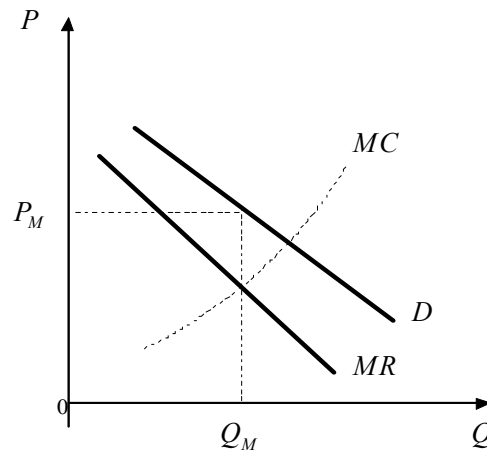
[...] this necessity of reducing prices in order to sell a larger quantity of one's own product is only an aspect of the usual descending demand curve, with the difference that instead of concerning the whole of a commodity, whatever its origin, it relates only to goods produced by a particular firm; and the marketing expenses necessary for the extension of the market are merely costly efforts (in the form of advertising, commercial travelers, facilities to customers, etc.) to increase the willingness of the market to buy from it-that is, to raise the demand curve artificially (Sraffa, 1926, p. 543).

According to Harrod (1931), the marginal competitive marketing costs can be represented as a function of the output of the individual firm. However, he points out that it appears that marketing costs do not depend only on the output level, so if the rise on the demand is evenly diffused over the whole market, firms should be able to maintain their frontiers without increase the marketing effort. A higher competitive marketing cost is the price to march into the neighbor's territory. If no movement in either direction occurs, no rise in this cost per unit at the margin should occur. However, all firms will be producing more in the new equilibrium.

Harrod (1931) brought an important analysis about the total costs been a function of the demand and marketing expenses. He points out that, in mainstream economics, supply and demand are independent of each other. On the new view, every demand has its own suitable supply schedule. To establish equilibrium after a change on the former, the latter also must be changed. The regular graphical representation of the supply curve is no longer possible. Any given supply curve of the old category is only valid while the demand remains the same. To draw a unique supply curve to be valid for all states of demand, it is necessary to use three dimensions. Cost becomes a function of two independent variables (quantity of output and state of demand) and, consequently, the traditional analysis breaks-down.

The conventional concept of monopoly was the main part of the field of production outside that of perfect competition, so it was recognized that the monopolist's position was never absolute and the elasticity of the demand for his product was always greater than zero. Harrod (1934) reveals that if products are absolutely homogeneous and marketed by organized exchange is likely to perfect competition to reign. If differences of design and detail are possible, each producer may be defined as a monopolist of his own goods, but subject to the reaction of his rivals. The degree of monopoly may be measured by the similarities of commodities.

Figure 2 - The traditional analysis of monopoly



Source: adapted from Harrod (1934)

The notation in the figure 2 is given as such:  $MC$  is the marginal cost,  $D$  is the demand,  $MR$  is the marginal revenue,  $Q$  is quantity, and  $P$  is the price. Harrod (1934) stated that the volume of output (figure 2) is

determined by the intersection between the marginal revenue curve, derived from the demand curve, and the marginal cost, but the price  $P_M$  is defined by the demand curve.

According to Robinson (1933), the demand curve imposes upon the seller a price problem for his product comparatively to the horizontal one from the perfect competition. However, the monopolist decision about the price and the output depends upon the elasticity of the curve and upon its position relative to the cost curve for his product. In that circumstance, profits may be bigger, perhaps by increasing the price and selling less, perhaps by reducing it and selling more. The position and elasticity of the demand curve for the product of any one seller depend in large part upon the availability of competing products and prices that are asked for them.

The crucial difference between perfect and imperfect competition is related to price and output, so when an individual firm faces an infinite elastic demand for its product the price that will be charged is lower than the price under imperfect competition. Furthermore, the mechanism that embraces the idea of market power involves a trade-off between the price charged and the output supplied, so the firm that enjoys some kind of market power will tend to use the quantity supplied as a variable to control and establish its price level.

Consumers are willing to buy more goods if the price level is lower than the one determined under monopoly, but the conditions of imperfect competition imposes restrictions over the market mechanism to bring in more firms to compete and to reduce the price level. Firms invest in product differentiation to avoid the competition of new entrants, so the volume of sales is based upon the method in which his product differs from competitors' product. Differently, under perfect competition, a producer may shift from one sector to another, but the volume of sales never depends, as under imperfect competition, upon product differentiation. The producer, in perfect competition, is always a part of the market in which many others are producing the identical good. The sales may vary over a wide range without changing the price, so they may be as large or as small as he pleases without the necessity of altering his product (Robinson, 1933).

The differentiation is an important aspect but its variation may refer to the quality of the product – technical changes, new designs, or better materials; it may mean a new package or container; it may mean more prompt or courteous service, a different location (Robinson, 1933).

If economies of scale is totally absent when the demand rises the inflow of new producers will continue, leading to a continuous reduction in the output of existing producers and a continuous increase in the elasticities of their demand until the latter becomes infinite and prices will equal average cost. There the movement will stop. However, each firm

will have reduced his output to such an extent that he has completely lost his hold over the market (Kaldor, 1935).

The role of the economies of scope is demonstrated by Kaldor (1935) as a mechanism that reinforces imperfect competition. Thus, if there is not a sufficiently great demand to produce one product on an optimal scale, the producer may still utilize his plant fully by producing two or more products, rather than building a smaller, sub-optimal plant or leaving his existing plant under-employed. According to Kahn (1935), the size of a firm depends on two sets of factors: a) the technical conditions of production, as expressed by its cost curve; and b) the degree of imperfection of competition, as expressed by the demand curve for its product.

The question about market integration can be analyzed using the explanation of Harrod (1931), so the firms, in order to maintain their market power, may require a license from some controlling authority, or the existing firms may be so strong that they are able to repel new competition employing a price war. They may even resort to violence to prevent fresh rivals from appearing on the industry. In such cases, no level of high profits will be sufficiently enough to tempt new firms into the trade, and the supply of enterprise to that trade is perfectly inelastic at the existing amount. For such industry, any level of profits is normal and the term ceases to have a valid application.

The meaning of entrepreneurs is presented by Robinson (1934) and Kahn (1935), so in a world in which all entrepreneurs are alike there would be a uniform rate of profit in all industries in the long period. In the real world entrepreneurship is no more homogenous than land in the real world. It is socially desirable to reroute entrepreneurs from industries in which the firms are naturally larger than the average for industry as a whole, and to attract them into industries where firm are naturally below the average in size. Where the firms are already naturally large under conditions of laissez-faire it is in the interests of society that they should be yet larger; where they are already naturally small it is interest of society that should be yet smaller. Consequently, trades which require unusual personal ability or special qualifications, such as the power to command a large amount of capital for the initial investment, will tend to have a high level of profits; trades which are easy to enter will have a lower level.

## **6 Conclusion**

Post-Keynesians reinforce realism rather than abstraction, challenging economic theory in a quest for understanding the problems facing real world economies. 'Animal spirit' is inherent in businessman activities, individuals follow rules, develop habits, learn from what others do,

so 'animal spirits' stands in opposition to rationality. To decide whether, where, and how to expand the firm the requirement is the use of intuition and educated conjecture. It must be clear that for the reason that problems vary and individual motivations diverge, post-Keynesians employ singular approaches and techniques, depending on the situation.

Post-Keynesians explained that the real world was not like the world of perfect competition portrayed in economic textbooks. Rather, most industries embrace large firms exercising extensive market power. The crucial difference between perfect and imperfect competition is related to price and output, so when an individual firm faces an infinite elastic demand for its product the price that will be charged is lower than the price under imperfect competition. Furthermore, the mechanism that embraces the idea of market power involves a trade-off between the price charged and the output supplied, so the firm that enjoys some kind of market power will tend to use the quantity supplied as a variable to control and establish its price level.

Consumers are willing to buy more goods if the price level is lower than the one determined under monopoly, but the conditions of imperfect competition imposes restrictions over the market mechanism to bring in more firms to compete and to reduce the price level. Firms invest in product differentiation to avoid the competition of new entrants, so the volume of sales is based upon the method in which his product differs from competitors' product. Entrepreneurs are crucial because to make decisions firms require unusual personal ability or special qualifications, such as the power to command a large amount of capital for the initial investment, will tend to have a high level of profits.

Marketing expenses are necessary for the extension of the market and are merely costly efforts (in the form of advertising, commercial travelers, facilities to customers, etc.) to increase the willingness of the market to buy from it-that is, to raise the demand curve artificially. Nowadays, we cannot imagine big companies without advertisement. The launch of a new product, or even holding the sales status of existing goods, requires a considerable spending in advertisement. The suggestion of the paper is to rescue the Post-Keynesian contribution, so a reorientation towards a more realistic and dynamic approach about micro-economic issues.

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