PRICE FOCUS

An Austrian approach to the theory of the Firm

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Demarcation problem

Theories of the Firm and economics share a common factor, considering that the firm covers the sphere not covered by the market, i.e., they presuppose that prices correspond to the market and not the company. We believe the following quotations will be sufficient to prove this:

Ronald Coase, considered the father of the Theory of the Firm (TF), established a framework for justifying the firm with his famous concern, expressed in his most famous work, *The Nature of the Firm* (Coase 1937): (1)

> (p.387)…in economic theory we find that the allocation of factors of production between different uses is determined by the price mechanism…Yet in the real world, we find that there are many areas where this does not apply…
> (p.388) Outside the firm, price movements direct production, which is co-ordinated through a series of exchange transactions on the market. Within a firm, these market transactions are eliminated and in place of the complicated market structure with exchange transactions is substituted the entrepreneur-co-ordinator**,** who directs production. .. Yet, having regard to the fact that if production is regulated by price movements, production could be carried on without any organization at all, well might we ask, why is there any organization?… why is such organization necessary? Why are there these "islands of conscious power"?
> This co-ordination of the various factors of production is, however, normally carried out without the intervention of the price mechanism. As is evident, the amount of "vertical" integration, involving as it does the supersession of the price mechanism…
> (p.389) It can, I think, be assumed that the distinguishing mark of the firm is the supersession of the price mechanism…
> In view of the fact that while economists treat the price mechanism as a co-ordinating instrument, they also admit the co-ordinating function of the "entrepreneur," it is surely important to enquire why co-ordination is the work of the price mechanism in one case and of the entrepreneur in another. The purpose of this paper is to bridge what appears to be a gap in economic theory between the assumption (made for some purposes) that resources are allocated by means of the price mechanism and the assumption (made for other purposes) that this allocation is dependent on the entrepreneur-co-ordinator.

Evidently Coase's concern was, and is, the essence of TF: i.e., for TF the firm exists where the price mechanism *does not act*, only as an external framework, and it organizes what the market price system cannot organize:

Let us see a paragraph from Foss Nikolai J.: *Austrian Economics and the Theory of the Firm* (2)

> (p.10) Coase did not challenge this sort of price-theory [(*)]; instead, he simply grafted onto price theory a second theory, namely a theory of transaction costs. It is transaction costs that explain, as it were, the institutional overlay of production. Production costs determine technical (substitution) choices, but transaction costs determine which stages of the productive process are assigned to the institution of the price system and which to the institution of the firm.
> [(*)] *Refers to the theory of subjective value (our)*.

The term *grafted* was never more appropriate, and this work will denounce it as ad hoc, incorrect, and unnecessary.

Let us see a paragraph from Richard Langlois - *Capabilities and the Theory of the Firm* - Department of Economics The University of Connecticut - FIRST DRAFT - December 1994 - Paper for the colloquium in honor of G. B. Richardson, January 4-6, 1995, St. John's College, Oxford. [(3)]

> (p.5) In 1937, Ronald Coase enquired into the nature of the firm and observed that, in the world of price theory, firms have no reason to exist. According to the textbook, the decentralized price system is the ideal structure for carrying out economic coordination. Why then do we observe some transactions to be removed from the price system to the interior of organizations called firms? The answer, Coase reasoned, must be that there is a "cost to using the price system." Thus was born the idea of transaction costs… It is transaction costs that explain, as it were, the institutional overlay of production.

Precisely, this work will solve this serious *demarcation problem* between the market and the company, that Langlois refers as the term of overlap", a grey zone that he clearly expresses with his expression "as a manner of speech".

Ludwig von Mises, with his concrete declamation of "the impossibility of economic calculus in socialism" shows us the same demarcation reality —in economics: prices in the market *yes,* in the firm *no*. Every planner needs prices (the short-lived experiment in the USSR was oriented by the prices generated in occidental markets).

Summarizing: seen *from* the firm *towards* the market (Coase, Foss, Langlois – *TF)* and *from* the market *towards* the firm (Mises – *Economics*), theories of the firm and economics agree that *prices yes* in the market, *prices no* in the firm.

The Concept of Company

Based on the *Theory of Decision-Making* (TD), from where derive the Curve of *Knowledge* (CK) and the Curve of *Ignorance* (CI) [(4)], deriving in turn in the *Curve of Human Evolution* (CHE) [(5)], we know that the state of human fallibility is what promotes the action to obtain the *result* that will allow to respond to the need implied by that state.

We can deduce from here that the desired result of human action is a profit, since it seeks a solution to a problem in the epistemological sense of Popper and Mises.

Thus, within the framework of the proposed CHE, we develop a brief logical-deductive reasoning to reach a concept of the firm based on these foundations. Starting from the "accepted" laws of economics of supply (*S*) and demand (*D*), the sphere in which CHE reigns in the economy, we can infer that the company is: *an organized action to supply*. This brief and concise concept includes both the work of Robinson Crusoe and that of the big corporations.

The central feature of the concept proposed here derives from the simple summation of *human action* + *organization* [6] + *economy*. In other words, it is the concept of human action that tends to satisfy needs in an organizational framework referred to the sphere of the economy, i.e., supply of scarce goods.

Considering that referring to *S* implies providing a *profit* —producing a (scarce) *good* destined to satisfy a need—, we can refine our concept and say the company is: *organized action for obtaining a profit.* And supposing that an organization implies action, we can summarize saying simply the company is an:

"For profit Organization"

It is important to stress that profit is synonymous with economic good, so we understand we are speaking of the company that is organized action for obtaining economic goods.

Summarizing [7]: profit is the reason for the existence of the company, and need is the reason for the existence of profit, ergo, profits satisfy needs.

Causality from the **MARKET**

Need → *Profit* → Company

Causality from the **COMPANY**

Company → *Profit* → Need

We can conclude this section presenting the "*axiom of profit*": *there is profit only if a need is satisfied*. [8] Seen from the well established spheres of *market* and *firm,* if there is no *profit* both causal chains ire broken.

The company as an economic good

Given the concept of economic good —a good that satisfies a need based on its scarcity—, a company is the quintessential economic good, it is the *economic-goods-producing machine*, it is the "mother-womb of economic goods".

As an economic good, there is no inconvenience in considering the company as an economic good composed of other economic goods. In the same manner we accept that an economic goods has many components to which the final price it generates in exchange is "imputed" [9] we must adopt the same criterion for a company. There is no reason to develop a “specific” *economic* theory for companies, considering that their analysis is part of the theory of prices and input.

Those that are familiar with TF will already be questioning the scientific value of something as simple as what we have stated here, which is the reason we will go over the central postulates developed by TF up to the present time. Here it is necessary to remember an essential component of TD that leads us to CHE, *objective knowledge*, and its use as a *primary* production factor in the economy. Let us see the summary of the principles that lead us to CHE: (10)

> **The *subjective value* and the *objective knowledge*, of which it is a function, are the evolutionary links between individuals and society.**

From where we deduce the following for economics:

> **Objective knowledge, being both necessary and scarce, is a primary productive factor.**

Based on this we can say objective Popperian knowledge, that is an external tool to man and for the profit of humankind in the solution of its problems, is fully applicable to economics, we need only add the category of scarce —which is the origin of property rights. Economic knowledge is objective and scarce, that is why it is an economic good and has a price. If economic knowledge were not objective it could satisfy the need of others, it could not be supply.

This is the way to include knowledge in economics, in the same way that physics included metaphysics in its environment.(11) I.e., the world of ideas, of knowledge, of metaphysics, of meta-economics, is as much a tool as a hammer or a lathe, that produce for the use of others. Given CHE, we can say the primary resource man recognizes in other living beings is knowledge, which is already present in the action of using a stick to bring fruit down from a tree and rubbing stones together to generate fire.

It is of great importance to include epistemology in all the areas of knowledge, specially its products represented by TD, CK, CI and its derivate, CHE, in so far as they are metaphysical-philosophical-epistemological tools as real as bread,(12) that can be used in each area of knowledge, with their specific elements.

The company and (its) price

As long as we consider a company an economic good, by the *price axiom* and its *permanent positivity* (13) then:

$$p_c > 0$$

Where p_c is the market price of companies' patrimony (e.g.: its value in Wall Street). Then the study of the company implies studying the behavior of its price, including the extreme case of $p_c = 0$, which implies the disappearance of the company as an economic good, since with no economic price there is no economic good.

In this framework we can speak of the profit or loss for the *owner* —by the axiom of *economic good-owner* (14) the result of variations of the price of an economic good only has meaning if it is assigned to its owner, not the good itself— of an economic good (*eg*) in the time-period *n* (result always implies a period of timed), with expression

$$R\ [eg_{c(t-n)}] = p_{c(t-n)} - p_{c(t-o)} = \Delta p_{c(t-n)}$$

Where $R\ [eg_{c(t-n)}]$ is the *result for the owner (R)derived from the variations of the price of the economic good company* (eg_c) *in the period n;* $p_{c(t-n)}$ is the price of the economic good company at the end of the period *n*, and $p_{c(t-o)}$ is the price of the economic good company at the beginning of period *n*. Which comes together in the simple expression $\Delta p_{c(t-n)}$, that summarizes the profit or loss generated for the owner by the economic good with the variations of its price in time.

Expressing the economic result in terms of economic theory —*prices*— ratifies and *applies* in a categorical and simple way the theory of subjective value (TSV), in so far as it refers economic calculus to their majesty, prices, and not to costs, an aspect that still interferes in the history of economic thought.

It is pertinent to alert that the prices of an *eg* allow the use of the potential of *input theory* to remunerate-assign-input the relative participation of the *eg* that compose the "final" economic good.

If we continue developing this simple equation, we reach a very useful expression for company economic calculus:

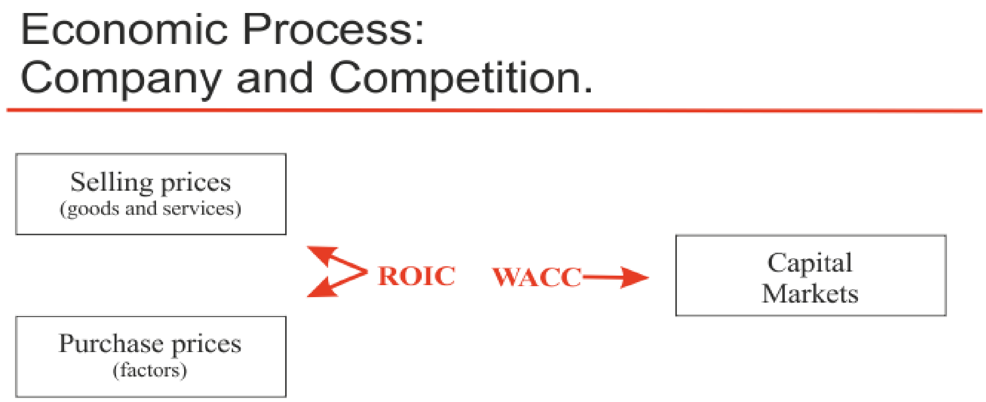
$$r = \%\Delta p_{ct-n} = [(p_{ct-n} - p_{ct-o})/p_{ct-o}]\ 100$$

Equation that expresses the result (r) as a percentage function of the original price of the eg_c. This is adequate insofar as it refers to the result in *temporal-percentage* terms from the present to the future. The *temporal-percentage* essence of r necessarily leads us to compare it with i —the price of economic time according to TET—, which allows us to apply another economic concept of fundamental transcendence, the *opportunity cost*.

It is important to stress that our *profit*, insofar as it considers variations of p_c in time as such, leads us to read differently the traditional approach to the company-competition economic process (see graph 1). (15)

Given that our profit offers a universal view insofar as it refers to all prices —it is always obtained as a differential of prices in time of "all" economic goods—, ROIC appears as a calculus tool that ponders the "technical" production function in *prices*, thus obtaining the *economic production function*. On the other hand, WACC fulfills the interest function (i) in the *opportunity cost* we have mentioned.

Graph 1



Price Focus

Coming back to the *Demarcation Problem*, the TF proposed here —which we will call *price focus (PF)*— clearly determines the spheres of the company and the market. Insofar as in *PF* the company is seen in the environment of *O* and the market is the *ordered summation D + O*, it is not pertinent to establish the space of the company as the sphere in which prices do not apply. The *ordered summation* is something commonly forgotten, and it is the essence of economic analysis, if there is no demand there is no supply; non-exchanged stock *also* are part of stock demand —the concept of total demand or complete demand of TET.

Thus we are in the sphere of *economic theory* when we refer to *prices* (derived from supply and demand), and in the sphere of the *theory of the firm* when we refer to supply. What appears clear then is that economic theory must focus on the economy (prices) and the theory of the firm on the *organization* of supply, that we have summarized in the concept of *organization for profit.* We can expect this "consistent" demarcation criterion to solve the question so that each discipline will focus on its specific area.

Now we sift-value *PF* with three issues that worry TF:

Origins of the company: any sphere that can generate $r- i > 0$ is the cause for the birth of companies.

Size of companies: any sphere that can generate $r - i > 0$ is cause for expansion, preservation or contraction of the company, and $r - i < 0$ (or zero) will induce the disappearance of the economic good company.

Internal organization: is dependent on the *economic production function* —the productive function expressed in prices— that allows the generation of $r - i > 0$.

We should not be surprised by this simple and forceful way of approaching the three central issues of TF, since their non-observance breaks the chain of causality *Need* → <u>*Profit*</u> → *Company*, as it breaks the *link* that connects the need (demand) and the company that satisfies it (supply), and it also breaks the causality *Company* → <u>*Profit*</u> → *Need*. On the other hand these answers explain the real world (Wall Street prices as indicators of *profits*, birth, and evolution of companies).

Demarcation limit of the company: here we find Coase's "island", insofar as we refer to the territory of the company, relative to the rest that does not belong to it.
In this manner, all the *eg* (assets) of a company, be they its own property or belonging to third parties that cede them for their use (diverse types of contracts), define its "territory", its limit, in the same manner as a border separates countries, a demarcation from which they communicates with other nations.
In this manner, the concept of company of *PF* includes those that posses common-specific assets, be they mono-products/multi-products; with vertical-horizontal organization; centralized-decentralized; uni-personal/multi-personal; etc. I.e., the demarcation deriving from *PF* includes all the cases proposed in TF to explain the origin, size and organization of companies.

ROIC and *WACC*: from this we derive that *PF* is a true synthesis of *a priori* calculus of *a posteriori anticipated results* , based on market data, generated on TSV. Thus, *PF* avoids the classic circularity *costs* ↔ *prices* that underlies theoretically the concept of ROIC (income minus costs instead of inputting the price), very useful for economic calculus, which has no meaning without prices. I.e., *PF* allows us to apply *input theory* with clarity based on market prices, and not carry out an analysis from the point of view of costs to determine prices.

Thus, *PF* is in complete sync with TSV given that the process derives from market prices towards the company, in line with the task of the businessman that "discovers needs in the market" and then calculates if will obtain profits offering goods, determining the origin, size and organization of the company.

***Price Focus* as an evolution of the Theory of the Firm**

Now we will present the views developed in TF and a brief comment on *PF*:

Neo-classic economics: from here *PF* takes the "idea" of maximizing function. *PF* rejects all determinisms: the idea of perfect competition; reference frameworks outside the company as given data (price and production function); classical adjustment where costs equal prices and therefore $p_c = 0$, insofar as this implies a deterministic views that there will be a world without *profits*, not that any company can disappear ($p_c = 0$); etc. We can summarize saying that while neo-classical "firm" theory did not reject the objective value theory, *PF* is pure subjective value theory.

Transaction costs: derives from the pioneer work of Ronald Coase in TF, establishing that the existence and evolution of the company is based on extra-company transaction cost comparison *versus* the costs of intra-company transactions. Therefore the concept of economic efficiency, through marginalism, allow us to opt for either transaction. *PF* is in line with Mises criterion that the greater or lesser outsource of companies is bases on *the organization of supply*.

Opportunism: since in every action implies the goal of a profit, it is evident that *PF* is in line with the Austrian perspective, and not with the idea of selfishness implicit in this concept.

The Nexus of Contracts: insofar as there are explicit and implicit contracts in every exchange —within and without the company—, *PF* does not consider this a sufficient argument to establish the existence for the company. On the contrary, once the company is established the contracts appear, to safeguard rights. I.e., the "c*ausality" firm → contracts* in *PF* is the inverse from this theory, where contracts delimitate the presence of the firm. The causality of *PF is not the essence of the "spontaneous order", the origin of Mengerian money, etc.*

Considering the "moral risk" involved in this theory, we refer to what was said on *Opportunism.*

Principal-agent: delegation is not exclusive of the company as a "society". TD already showed the process of delegation in decision making arises as a necessity in all kinds of human societies, since it is impossible to master the infinity involved in knowledge. (16)

PF, in tune with the real world, rejects the Berle-Means doctrine (1932), since it implies a kind of "classical adjustment by management", instead of strangulation through the elimination of profits. On the other hand, with the fundamentals established by Mises — one of the few economists that has shown he understand accounting, assigning it a preponderant role in economic calculus and in business administration— relative to the what accounting achieved in company management, (17) plus the appearance of strategic planning and the arrival of information technology, we believe that apocalyptic prediction becomes difficult to sustain.

Coordination: *PF* considers this approach as demarcating the sphere of the company, since coordination just like prices is present within and without the company.

Specific assets: demarcation in *PF* does not determine the specificity of assets. Possessing a specific asset undoubtedly influences the *economic* production function, considering if it is or is not convenient to a specific economic good (totally or partially). In other words, establishing which is the most efficient organization for a specific supply (degree of verticality, horizontality, delegation, etc.) corresponds to the strategic analysis of the competitive advantages.

In reference to monopoly, linked to this section, *PF* shares Kirzner's analysis (18) in what he agrees with Mises, that monopoly is an issue that "worries" in relation to the appearance of extra market interventions. I.e., the possession of a "specific asset" is a tool of competitive differentiation, not of theoretical demarcation.

Concerning the concept of quasi-rent, that is often derived from this theory, in *PF t*he concept of profit is sufficient.

Property rights: referring to property rights is in line with the axiom *ge-owner* defined by TET, which is the economic basis for *PF.* Paraphrasing Nicolai J. Foss (19) : "Market Process Economics and the Theory of the Firm" (p.4) :

> …. What is essentially different is only the allocation of property rights…

According to *PF* the company needs the presence of the owner of economic goods, which will allow it to maximize in competition ($r - i$). It is not appropriate to speak of *dissociating* the company profit of property from the goods that are components of a "composite" economic good, this goes against the theory of input and the axiom *ge-owner.* The profit always belongs to an owner, no to a (composite) *economic good.*

Limited Rationality: introduced by Herbert Simon, insofar as it refers to the impossibility of reaching a perfect process of information and prognosis, and similar aspects, is in line with the universality of human fallibility on which *PF* is based.

Incomplete contracts and Incentives Conflict: sic *Limited Rationality*.

Information process: sic *Limited Rationality*.

Capabilities and evolution: sic *Limited Rationality*. We add that spacio-temporally there can be no asset-capability-evolution identical to another. In *PF* —as knowledge, capacity, specific asset, common asset, etc. — everything belongs to the sphere of the organization of resources by supply.

Knowledge Based: insofar as this theory presents itself as confronting resources and knowledge, this implies not considering knowledge as a resource (even more, "the" resource), it is contradiction with the basic tenets of *PF*. We reiterate that knowledge is a meta-resource (metaphysics, meta-economics, etc.) including discovery, invention and innovation. I.e., a routine is similar to an orange tree that bears fruit if it is taken care of.

Insofar as the company is seen as a cognitive entity, it is evident it applies CHE, derived from the Pooper-Menger, Mises-Hayek evolutionary-epistemological theory of knowledge.

In *PF* it is not pertinent to refer to "the no observable" since it implies not considering knowledge (ideas) derived from reasoning and human imagination as real because "it cannot be observed" —it is like denying the reality of alertness, Mickey Mouse, epistemology and philosophy.

Summary: it is evident that the broad content of each one of the theories here extremely constrained, justifies a more extensive work with the participation of an academic in TF, to be able to deploy everything *PF* can contribute.

Price Focus* as the proposal of an *Austrian Theory of the Firm

To the effect of judging the Austrian fundamentals that allowed us to produce the proposal of *PF*, we present the following aspects:

Spontaneous order: CHE, the basis for *PF*, allows us to obviate the concepts of spontaneous order and invisible hand. Not because they are contradictory, but because it includes and explains them (they are no longer intuitive) in a simpler form and says more. In other words, everything referring to knowledge (division, fallibility, dispersion, delegation, etc.) is not exclusive of the market.

PF clearly states that the concepts of *spontaneous order* (market) and *anticipated order* (the firm) cannot be contradictory since they belong to different spheres, *but* they have a *biunivocal relation*. The sphere of the firm derives from unsatisfied needs in the market, the typical economic good-need relation, and being a company an economic good, this shows its clear biunivocal dependence of demand (market).

Disperse knowledge and economic planning according to F. A. Hayek [20]: The Use of Knowledge in Society (1948) Individualism and Economic Order. Chicago: University of Chicago Press. Originally published by The American Economic Review, Vol. 35, No. 4 (1945):

> …The various ways in which the knowledge on which people base their plans is communicated to them is the crucial problem for any theory explaining the economic

> process, and the problem of what is the best way of utilizing knowledge initially dispersed among all the people…
> The answer to this question is closely connected with that other question which arises here, that of *who* is to do the planning. It is about this question that all the dispute about "economic planning" centers. This is not a dispute about whether planning is to be done or not. It is a dispute as to whether planning is to be done centrally, by one authority for the whole economic system, or is to be divided among many individuals….
> …It is, perhaps, worth stressing that economic problems arise always and only in consequence of change….

Here we only need to mention that neither disperse knowledge, nor planning, nor change, are exclusive of economics, they belong to universal epistemology, that we believe is well represented by CHE, with a strong Hayekian content, especially in CK.

Uncertainty (expensive concept in TF): it is present in *PF* as part of fallible man, a basic tenet of occidental philosophy, indeterminism. We need to remember here the difference between probability and uncertainty.

Alertness: insofar as it is the discovery of *economic human fallibility* it is included the epistemological universality of CHE, the base for *PF*. And *PF* is not circumscribed to the action of discovering errors or defects, except if you consider human fallibility as an error.
This gives rise to the concern relative to the term fallibility no implying that *everything is within the terrain of economics, or economics is the study of fallibility*. Whatever the posture, we believe Carl Popper would give a positive answer.
Here it is pertinent to reiterate the concept of the Popperian of *previous theoretical charge* in reference to the state of “enterprise alertness” to discover business opportunities, does not differ from the state of alertness of the tennis player, the hunter, etc. I.e., each one is “alert” to events-cases of fallibility of the sphere of action present in his *previous theoretical charge* —here it is economic activity.

Company-businessman: we can say *PF* dispels all doubts relative to the border-limit between the company and the Austrian discoverer-entrepreneur. We say *PF* eliminates the grey zone, since the *businessman receives the profits* $(r - i > 0)$.
In *PF discovery* is part of assets —just like knowledge and any other production factor—, which can be incorporated into the company as assets, with use rights, the same as contract work, etc. If it is *contributed* as capital, the owner of the same will have stock in the new company, i.e., he will exercise property rights in the result due to the variations of price in time of the economic good company ($r - i > 0$). In short, the owner of the meta-economic good discovery —equivalent to knowledge or “metaphysical” theories in physics— is part of the company as an owner or not (external contract).
Thus *PF* establishes with precision the limits between the three spheres involved in the company. Insofar as the company is an economic good with its corresponding price, this implies demarcation: *legal* (property rights), *accounting* (capital or net assets) and *economic* (p_c), with the same criterion, i.e.: *property* ≡ *capital* ≡ p_c. (21)

The company and capital markets: in this respect *PF* clearly establishes that the capital market is where p_c appears, ie. the market where the economic good company is bought and sold. Thus the rest of the operations included in the so called capital market (finance), should be called credit or financial market, never capital market. This simple reflection avoids a new discussion on agent-owner and company-businessman.

Strategic planning (developed starting in 1950): as *a company organizational methodology*, it constitutes a typical tool to obtain knowledge, for supply, just like steel or fabric. It is very useful in the corporate world, since it allows us to analyze the *eg-company* from its feasibility at birth and continuing with its evolution.
In strategic planning there is the maxim: "in a company you can only make two types of errors: *compass and organization*". A concept we can extend to human action in general, and it allows us to stress the following aspects that put strategic planning and *PF* in sync:

1) Error implies fallibility that leads to action.
2) Strategic planning seeks to avoid those errors in the company, therefore its function is strictly organizational (on the supply side).
3) Avoiding the compass error implies "discovering a business that will produce profits". The compass is the alertness that allows us to discover the presence of a profit ($r - i > 0$).
4) Avoiding the organizational error implies adopting the (*possible*) maximizing *economic* production function.
5) From the previous points we clearly deduce that strategic planning operates with the same demarcation criterion of the company and the market as *PF*. I.e., the company is supply in the market, counting on strategic planning, accounting, technology, etc., where everything is knowledge organized to obtain a profit.

Thus, strategic planning is not only based on the basic tenet of *PF*, but also on those of the modern Austrian School (considering as such the school that includes TET).
Robert Jacobson's posture, [(22)] referring to the rebuttal of the critique of strategic planning for taking decisions based on the probability of occurrence of possible courses of action, is in line with TET's defense of the use of mathematics, probabilistic, statistics, in the sphere of *economic calculus*. [(23)]

Input: in consonance with TSV, *PF* does not remunerate factors, instead it inputs the price of an *eg*, and the *eg*-company is no exception. Remunerating factors implies not recognizing *TSV*, nor input theory, [(24)] nor Rothbard's implicit costs.[(25)]

Competition: given the origin of *PF*, anything that interferes with prices originated in free competition is in contradiction with this view. Thus the great attention dedicated to the subject of the *impossibility-difficulty of calculating in capitalism with the twin asymmetries.*[(26)]
One of the moist notorious differences between the Austrian view of TET and traditional Austrian Economics (AE) is found here: TET stresses the damage that monetary-financial manipulations produce in the price system,[(27)] instead of the manipulation of the monetary rate of interest, as in the economic cycles theory of traditional AE. This is a terrain in which it shares the same fundamentals —dichotomy of the theory of interest initiated by Böhm-

Bawerk and Wicksell (28) that distances it from Menger— with Keynesians and quantitativist-monetarists, with which it supposedly dissents.
In short, referring to competition, both the Austrian position of TET and traditional AE, we can say clearly: ***competition, <u>that is what it is all about</u>***. (29)

Economic calculus

Continuing with this idea, it is necessary to refer to this issue installed by Mises. This is why we dedicate a special section to it, as could not be otherwise in Focus on *Prices*.

Since price is information for calculus, evidently it becomes one of the main triggers that allow us to propose *PF*. A trigger that was already present, with the ***<u>theoretical observation</u>*** we made when presenting TET for the first time, (30) and that here becomes the center and spirit of *PF*.

From another point of view, given the concept of company deriving from *PF* —*organization for profit*—, every organization needs to calculate the feasibility of the occurrence of the awaited profit-result. Mises reflection, the father of this concept, is memorable:

> Eliminating economic calculation, rational action becomes impossible… The paradox of "planning" is that, since it makes economic calculus impossible, it does not allow you to plan. (31)

The "extension" of Mises *enormous* concept that implies the *impossibility of calculation in socialism* allowed TET to establish it as paragon with the ***difficulty*** *of calculation in capitalism with irregular monetary-financial systems arising from the twin asymmetries.*

Economic cycles: The *Theory of Interest* and the *Theory of Currency* (of TET) are the origin of later developments of the "currency theorem" (CT), the "equivalence axiom" ($i_c \equiv p_c$), and the "equality axiom" ($i_c = p_c$). Developments that clearly show that monetary-financial systems with the twin asymmetries are the real origin of the "cyclical" problems of capitalism. In other words, capitalism suffers crisis, it does not generate them. Crisis that derive from said monetary financial irregular systems, because they alter the price system, including among them i_c and p_c , where the first is interest expressed in currency and the last is the price of currency, not of "other" economic goods.
We can say Mises did not see the *theory of interest* (of the TET), nor the *theory of currency* and their axioms of equivalence and equality, *all which became known with TET at the beginning of the twenty-first century. We stress this because if he had known it evidently would have extended his "crucial" economic concept, the impossibility of calculation in socialism, with the difficulty of calculation in capitalism* with irregular monetary-financial systems. (32)
As TET stresses, traditional Austrian cycle theory, has the same basis as the Keynesian-quantitativist-monetarist theory of indirect transmission mechanism, though expressing differences in the interpretation of the origin, consequences and treatment of cycles, but they do not denounce the *anti-capitalist and totalitarian essence of monetary financial institutions deriving from the theoretical dichotomies*, as TET would do at the beginning of twenty-first century. (33)

We wish to mention the work of Peter Klein, being one of the few that referring to TF stressed the relevance of *economic calculus* introduced by Mises.

Naïve-Savvy: TET considers unnecessary to develop a theory of firms based on the naïve and savvy approach. The savvy businessman does business based on state monetary-financial interventions, and does not escape the case of control or price fixing. Fixing the maximum price of monetary interest is distinctive because it is the price of economic time, *the only production factor necessary in obtaining all economic goods, i.e., it is necessarily a part in the formation of all prices*. In turn, the naïve-savvy analysis is valid from the Keynesian, monetary-quantitativist and traditional Austrian approaches, since all of them are based on Bawerkian-Wicksellian dichotomies of interest.
If we wish to denounce the savvy businessmen, evidently the ***symbol of savvy entrepreneurship*** in our time is that conformed by the State-Banks-Stock-exchange, denounced by TET. (34) In other word, TET denounces the idea of "too big to fall" as a *negative inevitable externality*.

Derivations of *Price Focus*

The *PF* presented here allows us to say the following:

- The universality of CHE, sustained by *PF*, is Austrian insofar as it proposes a world of change, uncertainty and disequilibrium.
  PF clearly tells us that without fallibility there would be no action (entrepreneur) motivating a superior result (profit), as Mises clearly stated (Human Action) and Popper turned into an epistemology with his triad of human evolution.
- *PF* rejects the neoclassical vice or fatalism implicit in the maximize that ends up with no profits (classical adjustment).
- CHE is an Austrian model very adequate for evaluating the role of knowledge (generation) and learning (not ignoring what is known) en *unbalanced* markets, that generate the birth, evolution and death of companies.
- *PF*, insofar as it is based on CHE, includes AE in referring not only to the ignorance of what no-one knows —stressed by many Austrians—, but also the ignorance of what others know, the case of local information of spacio-temporal circumstance by Hayek.
- Information as flow and stock deriving from CHE, (35) is in total agreement with Lachmann's approach on information. CHE would also ratify Lachmann in reference to the result of an action having balancing and unbalancing effects. (36) Finally if maximizing is unbalancing, *PF* also agrees with Lachmann's "constant" unbalance.
- CHE can be considered as the corroboration of Israel Kirzner's concept (1992): "[…] *knowledge is not perfect, but neither is ignorance necessarily invincible*".(37)
- It is prudent to say that the combination of *PF*, CHE and strategic planning can condense an Austrian model for the firm. This in reference to the fact that the level of "abstraction" assigned to AE would not allow it model. This would be akin to "making what cannot be seen observable". (38)
- *PF* clarifies that the greatest crime against "welfare economics" —a terminological redundancy— is related with interfering in competition (price controls, tariffs, taxing

profits, etc.). The totalitarian interference of the monetary-financial system denounced by TET is the worst crime.

- *PF* stresses that the "social marketing" of companies implies ignorance of economic theory or an unfounded guilt complex.
- *PF* includes all the components of the tool box to elaborate an Austrian theory of the firm, according to Nicolai Foss (1992). (39)
- *PF* contemplates the three states of the firm described by Austrian authors: origin-expansion-organization. (40)
- *PF* incorporates the sphere of TF into the Popperian approach —rescued by Hayek in the informal or tacit rules in the company— of *The open society and its enemies*, insofar as informal structures appear naturally in reduced groups (the Popperian tribe, and the divisions of a big company in Hayek) and the validity of formal structures in broader groups (open societies and big companies). I.e., as the population grows norms must be imposed.
- It frees us from the unnecessary dispute in economic theory of balance *versus* unbalance. This is so insofar as all *profits* have their origin implicit in a permanent stat of dissatisfaction (moving disequilibrium). This reasoning is in line with the concept of Hayekian equilibrium that refers to the *balanced action* that is in line with an objective. Once the action has been carried out and the results obtained, there is a new state of fallibility, either because once obtained the objectives have changed or others have appeared.
- It frees us from the unnecessary discussion of the maximizing man (yes or no), since all human action is maximizing insofar as it aspires to attain the best possible state, the *highest profit*, according to the temporal and spacial circumstances. It is important to consider that the maximizing attitude must univocally refer as all action to the subjective state of the actor, which will allow a comparison of his achievements with those of his peers.

  An *ex post* analysis clearly shows that from the *ex ante* state it is wrong to think it was possible to obtain something better. The possibility of something better might have been thought of, but the last decision included feasibility of occurrence, and circumstances that led to the *ex post* result.
- *PF* also clarifies that it is not pertinent to develop "alternative" theories from the point of view of market, company or State "flaws-non flaws", since flaws are part of the human essence (fallibility). "Fallible maximizing human action" must be considered as *primitive epistemological term*. Fallible man does not admit any scenario of perfect information, a "no fault" market-State-company-etc. Fallibility implies flaws and vice-versa.
- The precise demarcation of *PF* would tell us it is inappropriate to say that economic theory has neglected the study of the firm, possibly it would be more correct to refer to the "progress" of theory of the firm —"theory of the organization of profit".
- *PF* contemplates *much more* than the two construction blocks that according to Peter Klein (41), should be included in Austrian firm theory: 1) Entrepreneur and 2) Economic Calculus.
- *PF* considers the two approaches from which Austrians try to refute socialism: "Mises "impossibility of economic calculus" and the "impossibility of complete knowledge"

(disperse, scarce and fallible in TET) posed by Hayek and Robbins in their debates with socialists.

- CHE presents the subject of knowledge as the center of the evolution of social institutions, not only economic institutions, disagreeing with Kirzner's view.[(42)] Insofar as it derives from CHE, *PF* includes knowledge, both in the economics and TF, as another production factor (in traditional jargon).

  CHE clearly expresses that man learns and generates social institutions —among them, economic institutions— to the point that they share common problems. I.e., man is sociable by necessity, then shared needs are the objective that appears as a common denominator for the existence of a society, within the framework of human fallibility and competition with goals that are different from those of other societies.
- If we limit the study of the evolution of human society to the sphere of companies, we can clearly see that CHE can be fully applied.

Conclusion

We can say that delimitation offered by *PF* allows us to avoid the idea of collision in economics and in the theory of the firm, insofar as they belong to different spheres univocally related.

We can say therefore that *PF* summarizes economic thought on the firm insofar as it makes the idea of a maximizing economic production function compatible with the framework of human fallibility. In other words, it is the synthesis of Austrian human action motivated by profit (to go beyond the current state) derived from its natural state of fallibility. Therefore the neo classic error was not in the idea of maximizing, but in its *technological deterministic* content. Determinism that underlies the theory of objective value from which it could never separate itself and that seems to underlie ROIC.

Possibly the synthesis that derives from *PF* could be summarized saying the objective-profit of the company is fulfilling a **"function of *a priori* maximizing *economic* production"** [(43)], with no reductionist pretension, merely as a way of expressing the issue.

Buenos Aires, November 2012

Notes

(1) For Spanish version.
(2) For Spanish version.
(3) For Spanish version.
(4) Note 33 in Hayek: *The theory of complex phenomena:*

> K. R. Popper, "On the Source of Knowledge and Ignorance", *Proceedings of the British Academy*, 46, 1960, p. 69. See also Warren Weaver, "A Scientist Ponders Faith, Saturday Review, January 3, 1959: "First, then, which— science or religion— is really gaining in its assault on the totality of the unsolved? As science learns one answer, it is characteristically true that it also learns several new questions. It is as though science were working in a great forest of ignorance, making an ever larger circular clearing within which, not to insist on the pun, things are clear. The cleared circle is ever expanding— there is continuous progress in clearing away further ignorance. But as that circle becomes larger and larger, the circumference of contact with ignorance also gets longer and longer. Science learns more and more. But there is an ultimate sense in which it does not gain; for the volume of the appreciated but not understood keeps getting larger. We keep, in science, getting a more and more sophisticated view of our essential ignorance".

(5) See The Curve of Human Evolution and its continuation in the Bondone web page.

(6) The use of the word organization in our concept of the firm is in line with the concept of *organization* versus *order*, that Ionnides Stavros analyzes –*The firm: Order or organization (Towards an Austrian perspective of the company)*-, when referring to Hayek's distinction of these two terms. Nevertheless, we stress that our posture here, as shall be seen, stresses that the norms or orders can be abstract, tacit and specific, or not, and are pertinent both for the market and the firm –which is the reason why differentiating aspects for the firm and the market are not considered here.
(7) For Spanish version.
(8) Mises in *Bureaucracy* says:

> *(p.13 Spanish version)* There are two systems for organizing Society, i.e., the peaceful cooperation among men: the bureaucratic organization and the organization based on profit.
> (p. 87-88) *Under a market society the profit motive is the directing principle. Under government control it is regimentation. There is no third possibility left. To a man not driven by the impulse to make money on the market some code must say what to do and how.*
> *(p. 88-90) In the economic sphere the right to acquire and to own property is not a privilege. It is the principle that safeguards the best satisfaction of the wants of the consumers. He who is eager to earn, to acquire, and to hold wealth is under the necessity of serving the consumers. The profit motive is the means of making the public supreme.*
> *Profit is the reward for the best fulfillment of some voluntarily assumed duties. It is the instrument that makes the masse~ supreme. The common man is the customer for whom the captains of industry and all their aides are working.*

> *The revolt of narrow-minded experts is one of the powerful forces pushing toward general bureaucratization.*
> *But the only question is: Who, should run the country? The voters or the bureaucrats?*
>
> *Every half-wit can use a whip and force other people to obey. But it requires brains and diligence to serve the public.*
> *He who is unfit to serve his fellow citizens wants to rule them.*

Evidently the concept of the firm we have adopted is in line with Mises. Especially if we consider this question pertinent: "is an organization *not* based on profit feasible? Giving an affirmative answer is like saying there are "parties" that no one pays for.

(9) Theory of input that allows a displacement of the concept of cost of the classic objective value theory towards the point of view of "applying" the final price for goods to their components.

(10) For a complete explanation see *Curve of Human Evolution (CHE) – Continuation* at Bondone web page.

(11) See more in Popper's *Quantum Theory* and the *Schism* in *Physics*

(12) A personal anecdote is meaningful here: when I was speaking with students of economics and said the subjective value theory was a scientific advancement, a student that clearly believed in the classic approach of the objective value theory, said: well that is a philosophical point of view. And I answered: "If that is so, then let's talk about philosophy". And then remained silent…
We believe the following quotation from Hayek. In the *Theory of Complex Phenomena*

> *(p. 124 Spanish version) What we must get rid of is the naïve superstition that the world must be so organized that it is possible by direct observation to discover simple regularities between all phenomena and that this is a necessary presupposition for the application of the scientific model. What we have by now discovered about the organization of many complex structures should be sufficient to teach us that there is no reason to expect this, and that if we want to get ahead in these fields our aims will have to be somewhat different from what they are in the fields of simple phenomena*. [(40)]

(13) See axiom of the positivity of prices ($p > 0$), and its permanent nature in the case of the price of time ($i > 0$), at Bondone web page (interest theory, currency theory, etc.).

(14) Owner axiom: *there is no economic good without an owner nor an owner without an economic good*. See more in Bondone web page.

(15) Copied from Class Nº 8 of Professor Dr. Juan Sebastián Landoni, of his class at the Economic PhD course of the Swiss Management Center: *Theory of the Firm*.

(16) Of the *necessity* of delegation of decision making by man in society, see the Curve of Human Evolution (TD) at Bondone web page.

(17) We recommend reading *chapter 2*: *Bureaucratic Management* in Mises, Bureaucracy. Also all references in Human Action. Also Rothbard on the subject.

(18) See *chapter I*, of Kirzner's *Competencia y Empresarialidad*.

(19) Our own translation of Foss Nicolai J. in Foss, Nicolai J.: "Market Process Economics and the Theory of the Firm" (p.4): …What is essentially different is only the allocation of property rights…

(20) For Spanish version.

(21) See in *Theory of Economic Relativity* – Chapter XIII *WEALTH* (economic-accounting) *OF AN ECONOMIC AGENT*, by Bondone, Carlos A., the proposal of a new way of presenting statements, separating present from future economic goods.

(22) See more in Jacobson Robert: THE "AUSTRIAN" SCHOOL OF STRATEGY – University of Washington –Academy of Management Review – 1992, Vol. 17, Nº 4, 782-807.

(23) We can attest to the enormous *profit* of using strategic planning in the corporate world. Since we have specialized in it, it allowed us to transform small companies from the interior of Argentina into national leaders. We always say it is easy to compete against a company that does not use strategic planning.

(24) See *Input of the value of economic goods* in *chapter IV* of *The Theory of Economic Relativity* by Bondone.

(25) Rothbard Murray extends the concept of the impossibility of calculus in socialism to the case of a company big enough to become the only producer and user of the good it produces. Here we only reiterate the theoretical objection —central to PF presented here— of the impossibility of calculus in socialism established by TET.

(26) Asymmetry in terms of TET, that means recognizing cancellation powers (similar to a cash exchange or a cancelation of debt) to paper currency and a bank check denominated in paper currency. See more in *Currency Theory* at Bondone web page.

(27) Full explanation in *Currency Theory* (Currency theorem and its equality and equivalence axioms) at Bondone web page.

(28) Full explanation in *Interest Theory* at Bondone web page.

(29) As Professor Dr. Landoni Juan Sebastián says (class Nº 8 in PhD course) *"maybe competition should be canonized and not the businessman*")

(30) Theoretical objection that led to establish that prices always existed as long as their was a division of labour, therefore, it exists within the company too. Se *Economic Calculus* in *chapter VI* of *the Theory of Economic Relativity* by Bondone.

(31) Mises in Human Action.

(32) One of the central arguments of the theory of cycles that derives from TET, and that differences this theory from traditional AE, insofar as the first stresses price theory versus interest in the second, deriving forms their different interest and currency theories. See complete explanation in *Interest Theory* and *Currency Theory* at Bondone web page.

(33) Although this reasoning appears clear in TET's interest and currency theory, it will be the central issue for an upcoming work.

(34) Complete explanation in TET's *Currency Theory* and *Interest Theory* at Bondone web page.

(35) While *knowledge stock* (world three in Popper) is represented by the α area of CHE, and the *flow* or generation of knowledge is represented by the knowledge curve (derived from the α area. See Curve of Human Evolution at Bondone web page)

(36) See Figure 8 and its explanation in *Curve of Human Evolution – Continuation* at Bondone web page.

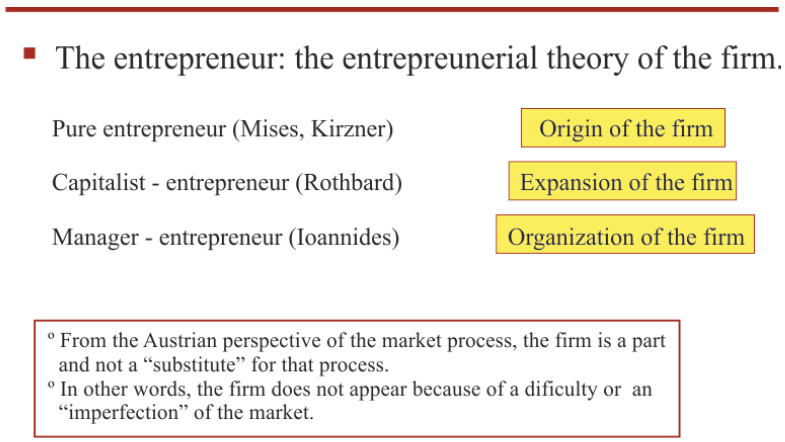
(37) Copied from class Nº 8 by Professor Dr. Landoni Juan Sebastián in the PhD Course of the Swiss Management Center: *Theory of the Firm*

(38) Hayek says in *Complex Phenomena* published by MacMillan Publishing Co. Inc. (1964):

> But as in *many fields* this will be for the present, or forever, all the *theoretical knowledge* we can reach, it will nevertheless *extend the range* of the possible advance of scientific knowledge.
> The advance of science will thus have to proceed in two different directions: while it is certainly desirable to make our theories as falsifiable as possible, we must also push forward into fields where, as we advance, the degree of falsifiability necessarily decreases. This is the price we have to pay for an advance into the field of complex phenomena (Hayek [1964] 1967, p. 29).

(39) See Foss, Nicolai: "The Theory of the Firm: The Austrians as Precursors and Critics of Contemporary Theory", *Review of Austrian Economics* Vol 7, nº 1 (1994).

(40) Copied from class Nº 8 by Professor Dr. Landoni Juan Sebastián in the PhD Course of the Swiss Management Center: *Theory of the Firm*



(41) Klein Peter in *Entrepreneurship and Corporate Governance — The Quarterly Journal of Austrian Economics* vol. 2, no. 2 (Summer 1999): 19–42.

(42) The central focus of Kirzner’s work (1992): “Knowledge Problems and their Solutions: Some Relevant Distinctions”, *The Meaning of Market Process*. Londres: Routledge, 1990.Where Kirzner presents case (B) of non-appliance of spontaneous order to explain the evolution of *other* social institutions where there is the possibility of “business profit”.

(43) Relative to maximizing, these paragraphs from Mises Human Action are eloquent:

> (p. 473 Spanish version) …The market process is an interaction of men deliberately striving after the best possible removal of dissatisfaction…
> Ownership of the means of production is not a privilege, but a social liability.
> Capitalists and landowners are compelled to employ their property for the best possible satisfaction of the consumers.

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