

DIFFERENT LEGISLATIONS REGARDING OPAs

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ABSTRACT

An analysis was made of the effect of the Tender Offer Law in Chile, and of the related situation of five countries with a more developed market than the Chilean one, reaching the conclusion that in order to successfully implement a Tender Offer Law it is necessary to bear in mind that the problem is not solved by establishing standards that regulate transactions, but by creating instances that contribute to a more dynamic and efficient market. In addition,

there should exist a balance between protection of the minority stockholder and competition for corporate control.

Finally, we can conclude that there is evidence that the Tender Offer Law has depressed the Stock Exchange.

KEYWORDS

Tender Offer, Tender Offer Law and Tender Offer System Law.

Classification: A

JEL classification: G34

INTRODUCTION

After 1995, foreign investors have carried out transactions in the Chilean market in order to acquire control over important local companies, thus generating a large amount of Tender Offers (IPOs). The legislation prior to Law 19,705 of December 20th 2000, that regulated the Stock Exchange were the Market and Securities Law (18,045) and the Stock Company Law (18,046), which contained scarce juridical rulings regarding Tender Offers. We will refer to different events occurred in Chile, such as A) the take-over of the Chispas stock (that grouped Almendro, Luz, Chispa Uno, Chispa Dos, Luz y Fuerza stock) by Endesa España, B) the sale of Terra, CTC Chile's Internet subsidiary to Telefónica España, and C) the case of Campos Chilenos. We are also going to refer to important international studies such as the Zingales and Laporte report. All the above generated the need to establish a legislative framework for regulating Tender Offers.

The objective of this piece of research is to analyse the Tender offer Law in Chile in order to reply to the following queries: What is the effect of the Tender Offer Law on the Chilean Stock Exchange? What effect does the Tender Offer Law have on minority stockholders? What is its effect on the dynamics and efficiency of the market? and What is the effect of the Tender Offer Law on stock turnover? This paper is divided into seven sections. Section I contains the methodology applied in the study. Section II will analyse Tender Offer laws in countries with more

developed markets than ours. Section III will explain the reasons for the need to legislate on the subject in Chile. Section IV will analyse the Tender Offer legislation in Chile. Section V will refer to the Chilean Stock Exchange. Section VI will show the effects of the Tender Offer Law on the Chilean Stock Exchange, and finally, Section VII contains our conclusions on the subject.

Section I. Methodology Applied

In order to be able to analyse the Tender Offer Law in a country in which Tender Offers started in 1995, and which were finally subjected to legislative order on 20/12/2000, it is fundamental to understand and compare the systems applied in countries with markets that are more developed than our own. Five countries were chosen. France and Spain that have highly regulated systems and on the other hand, the United States and the United Kingdom, that have more liberal legislations on the matter. We will also analyse Germany, in its capacity as a deregulated country. We will also analyse the markets, because an adequate analysis of different legislations requires an awareness of the fact that each system must be designed according to the requirements of the financial and capital market it will regulate.

The common and most significant parameters were established In order to analyse the four regulated countries are A) Origin of the Legislation, B) Market History, C) Triggers for announcing a Tender Offer, D) Obligatory Offer, E) Information to be provided, F) Duration of an Offer, G) Partial Offers, H) Withdraw-

al Rights, I) Price, J) Squeeze Out,¹ and K) Conclusions.

The principal hypothesis in this study is:

1. The Chilean Tender Offer Law has depressed the Chilean Stock Exchange.

The secondary hypotheses are:

1. The Chilean Tender Offer Law has triggered the closure of corporations, and very few openings of new companies in the Stock Exchange.
2. The Chilean Tender Offer Law has triggered a decrease of stock turnover² in Chile.

Section II. International Legislations

In order to adequately understand the motivations and the need to regulate Public Tender Offers, it is necessary to understand how these transactions are regulated in countries with more developed markets than our own, and compare them with what the situation in Chile.

There are highly regulated and lesser regulated systems in the world. We will analyse different systems, principally those applied in countries like the USA, the UK, France and Spain.

On the other hand, we will analyse the situation in Germany, a deregulated country, but one that has ex-

tremely high standards of Corporate Governance.

An adequate analysis of the different legislations involved, requires an awareness of the fact that each system must be designed according to the requirements of the financial and capital markets it will regulate. We must be aware of certain factors, such as concentration of ownership and the benefits provided by control.

1. Obligatory and Total Tender Offer Systems: The first of the existing options is the establishment of an obligatory system of total Tender Offers, a system that makes sure that all stockholders can sell the totality of their stock in the target company.³ This prevents the possibility of remaining as a minority stockholder in the acquired company, in such a position that the controllers would be unable to externalise costs. The outcome of this would be that (in order to acquire the target company) the potential acquirer would have to pay a price that would reflect the real value of the corporation at the time of the transaction.

The obligatory and total system has the disadvantage of making acquisition costs considerably higher, as the tender offer always involves an offer to acquire 100% of the equity stock, which discourages the corporate control market, reducing the level of demand. In spite of the reduction of demand generated by this system, it

1. The possibility of a stockholder who has come to own a high percentage of shares in a given company, being able to acquire the rest, at a price that is generally fixed by a qualified accountant.
2. This indicator is the result of the division between the amount traded and the stock exchange equity during a year.
3. Fernández-Armesto, Juan. op.cit. p. 45.

has the advantage of permitting that economically efficient administrators are the only operators allowed to launch Tender Offers. On the other hand, obligatory and total Tender Offers tend to avoid those acquisitions that are aimed at generating profits by exploiting minority stockholders.

Two examples are mentioned; the British System and the French System, which have the following characteristics:

1.1 The British System:^{4,5} The system that regulates Tender Offers has the following characteristics:

- A) **Origin of the legislation:** The system is regulated by the 1985 Companies Act and by the City Code on Takeover and Mergers, issued by the Panel on Takeover and Mergers.
- B) **Market History:** The British securities market is very liquid, and company ownership structures tend to be dispersed,⁶ although not as much as the US markets. The markets are extremely liquid.
- C) **Triggers for Informing a Tender Offer.**
 - I) On acquiring a percentage of over 3% of the equity capital of a company
 - II) Any variation over 1% of the stock, after having acquired 3 or more per cent of the company.

D) **Obligatory Offer:** The obligatory offer is established in The City Code Rule 9.1, which states the following for an obligatory offer:

- I) When 30% or more of the corporate votes are reached.
- II) When a stockholder owns at least 30% but less than 50% of the stock, he/she should announce a Tender Offer every time his/her participation increases by 1% over a 12-month period.

E) **Information to be provided:**

In the British System, a Tender Offer must provide the following information: Name of the acquirer, Name of the Target Company, Number of shares or percentage of shares to be acquired. In addition, an affidavit stating the invalidity of the offer if the total stock that accepted the tender offer is less than 1% of the votes in the company, The offerer can establish a minimum number of shares to accept the offer, the participation of the offerer in the corporation and the period during which the offer will be in effect.

F) **Duration of the Offer:** The offer must have a duration of at least 21 days, and in those cases in which the offer is modified, it should be extended for at least 14 days. In the case that the stock obtained is less than 50% of the

4. The law that regulates the British system is the "City Code on Take-overs and Mergers".

5. Berger, Richard (1996) "A comparative Analysis of Takeover Regulation in the European Community", Harvard Press, 1996. pp. 56-62.

6. See Mayer. "Firm Control and inaugural", Said Business School, University of Oxford, February 1999.

target company's voting stock, 60 days from the opening of the offer, the offer will expire and will not be able to be renewed before a year has elapsed.

- G) **Partial Offers:** The entire offer must cover the totality of the remaining shares. Partial Tender Offers will only be accepted with the consent of the Panel on Takeover and Mergers.
- H) **Right to Withdraw:** Up to 21 days after the closing of the offer.
- I) **Price:** Cannot be lower than the price paid by the offerer for target company shares in the preceding three months. If offerer acquired over 10% of the voting stock in the 12 months prior to the offer, the offer should include the best price.
- J) **Squeeze Out:** When the majority stockholder has 90% or more of the voting stock.
- K) **Conclusions:** This system is explained by the fact that the British market is extremely reluctant to accept the existence and operation of corporations with a controlling stockholder. This is based on the fact that once control has been gained, there is a non-liquidity problem in the target company shares, which might damage the position of the stockholders who are unable to sell. The establishment of the obliga-

tion to launch total Tender Offers, gives all stockholders the possibility to disinvest without having to apportion.⁷ Another explanation of this regulation lies in the fact that the British market has the largest amount of mergers and takeovers in the European scene, and that it is relatively dispersed and liquid, which has allowed the current system to succeed in spite of the kind of regulation applied.

France is another country that has chosen this system.⁸ The French copied the British system in the sense of establishing obligatory Tender Offers, but the rule had another justification. It was based on the principle of equal treatment among stockholders, in the sense that the premium paid by the acquirer should be proportionally distributed among all of the stockholders.⁹

1.2 The French System: The system that regulates Tender Offers has the following features:

- A) **Origin of the legislation:** The system is ruled by Law N^o 351 of August 2nd 1989, by the regulations of the Securities Exchange and by the regulations of the Stock Exchange Operations Commission.
- B) **Market History:** The French securities market seems to be more similar to the Chilean market,¹⁰ where there are few partic-

7. Fernández-Armesto, Juan. op.cit. pp. 41 and 42.

8. Lkaw of August 2nd 1989, ruling the security and transparency of the financial market.

9. Fernández-Armesto, Juan, op. cit. p. 42.

10. LaPorta, R., Lopez de Silanes, F.A., (1999) Corporate Ownership Around the World. Journal of Finance Economics 11, pp. 471-517.

ipants. Concentrated ownership structure.

The French market is highly regulated, and with an active participation of state organisations.

C) Triggers for Announcing a Tender Offer:

- I) The legislation Establishes the obligation of informing of stock acquisition when these purchases are in excess of 5%, 10%, 20%, 33%, 50% or 75% of the stock of a company that trades its shares in the stock exchange.
- II) In the case of acquisitions of more than 5% of the capital stock, a statement must be issued giving the acquirer's objectives over the next 12 months.
- D) **Obligatory Offer:** In the case that an acquisition involves over 33.3% of a company's stock, the Tender Offer must be made for the total stock.
- E) **Information to be provided:** The report must include information on the acquirer's intention of continuing to acquire company stock, on acquirer's intention of gaining control over the company, and of acquirers' desire to be appointed members of the administration board, board of directors or Inspection Board.
- F) **Duration of an Offer:** Minimum 25 days, maximum 35 days.

G) **Partial Offers:** Obligatory and voluntary tender offers must be made for the totality of the company shares.

H) **Right to Withdraw:** During the effective period of the Tender Offer.

I) **Price:** When company control is the aim, the offerer is obliged to acquire all the shares at the same price as the price offered by the controlling block.

J) **Squeeze Out:** The owners of 95% of the company stock are allowed to acquire the totality of the stock. The price will be established by independent qualified accountants.

K) **Conclusions:** Owing to its high degree of regulation, the French system has made takeover transactions more expensive. Concentrated ownership structures still predominate in France, and this has resulted in a less liquid market than the US or UK markets.

2. Obligatory and Partial Tender Offers: The second of the existing positions is the system composed by obligatory and partial Tender Offers, according to which offers may be made to acquire a minimum percentage—as established in the corresponding regulations— of the shares issued by the target company, depending on the percentage of participation aimed at by the acquirer.

This system on its own does not protect minority stockholders¹¹ from the

11. It requires a good parallel system of corporate governance.

possibility of cost externalisation. When target company stockholders are unable to sell the totality of their stock, given the apportionment system, they are forced to remain as minority stockholders, losing share liquidity and running the risk of being exploited by the controllers.

We will now look at the Spanish system, which has the following features:

2.1 Spanish System¹² The system that regulates Tender Offers has the following characteristics.

- A) **Origin of the Legislation:** Tender Offers for share acquisition and sale are regulated by Law N° 24 of the Securities Market and by the regulations of the Stock Exchange Operations Commission.
- B) **Market History:** The market has a more concentrated ownership than that of the US and UK.
- C) **Triggers to Announce a Tender Offer:** The petition to announce a Tender Offer is presented in an explicative document submitted to the national securities market commission.
- D) **Obligatory Tender Offer:**
 - D) **If**, on acquiring or recovering over 50% of the voting stock of a company, the acquirer wishes to change the company by-laws, the acquirer should previously announce a Tender Offer to the company's remaining voting stockholders.

II) When the aim is to acquire 25% or more of the company's equity stock, the offer should be made for the number of shares that represent a minimum of 10% of the capital of the affected company.

III) When the acquirer has over 25% but under 50% of the company's equity capital, and wishes to increase that participation in at least 6% over a period of 12 months, the offer should be made for shares that represent at least 10% of the capital of the affected company.

IV) When the aim is to reach a participation of 50% or more of the company's equity capital, the offer should be made for a number of shares that will enable the acquirer to obtain at least 75% of the capital of the affected company.

V) If the share participation of a given stockholder exceeds the participation percentages established in II), III) and IV), the partner involved cannot acquire more shares than those specified in those items.

VI) When a corporation goes from open to closed, and the Securities Market Commission considers that the minority stockholders were harmed, the corporation is obliged to make a Tender Offer to all the stockholders that did not approve the closure of the corporation.

12. This system is regulated by Law N° 24 of the Securities Market and by regulations of the Stock Exchange Operations Commission.

- E) **Information to be provided:** When a Tender Offer is required, the Spanish system requires the submission of an explicative brochure which gives a detailed description of the operation planned.
- F) **Duration of an Offer:** The period of acceptance will be established by the offerer, and will be no shorter than a month or longer than two months. The offer may be extended with the authorisation of the Securities Market Commission.
- G) **Partial Offers:** Partial Offers are allowed.
- H) **Right to Withdraw:** Once the offer has been accepted, there is no possibility of refusing it. The only possibility to recant would be the existence of a new competing Tender Offer with better conditions.
- I) **Price:** The price of the offer cannot be lower to the teoretical book value of the corporation, to its liquid value, or to the mean market value of its shares during the six months prior to the application for exclusion, regardless of the number of sessions the trading required. The previous counter-offer price (in the understanding that there had been a tender offer over the past year), is valid as from the date of the agreement of application for exclusion.
- J) **Squeeze Out:** Not contemplated.

K) **Conclusions:** This system does not on its own protect minority stockholders from cost externalisation. When target company stockholders are unable to sell the totality of their stock, given the apportionment system, they are forced to remain as minority stockholders, losing share liquidity and running the risk of being exploited by the controllers.

Nonetheless, the Spanish legislation contains various cases in which a Tender Offer is obligatory.

3. Voluntary Tender Offer System: As opposed to the other systems, in the case of wishing to acquire a determined level of stock participation, (voluntary Tender Offers),¹³ this system does not establish minimum percentages to be acquired.

An example of this is the US system.

3.1 The US System:¹⁴ Before 1968, Tender Offers were ruled by the Securities Exchange Act and were not regulated. During this period, a common tactic to acquire companies was to announce an offer in the Wall Street Journal, specifying nothing but the percentage the acquirer wished to purchase and the price offered.

The Williams Act was approved in 1968, and added sections 13 (d)-(e) and 14 (d)-(e) and (f) to the 1934 Securities Exchange Act.¹⁵

The system that regulates US Tender Offers has the following features:

13. Parallel to this, a good corporate governance system is required.

14. At a federal level, it is regulated by the 1968 Williams Act that modified the 1934 Securities Exchange Act, incorporating sections 13(d)-(e) and 14(d)-(e) and (f).

15. Soderquist D, Larry. Op. Cit. - 360

A) **Origins of the Legislation:** At a federal level, it is regulated by the Williams Act of 1968, which modified the 1934 Securities Exchange Act, incorporating sections 13(d)-(e) and 14(d)-(e) and (f).

B) **Market History:** This is the largest market in the world for Tender Offer operations. The main factors that explain this are a capital market with a very dispersed stock ownership, high liquidity levels and important secondary markets.

Detailed and exhaustive regulation

C) **Triggers for announcing a Tender Offer.**

I) When over 5% of any kind of share is purchased from an open corporation, the Securities and Exchange Commission (SEC) should be informed of this operation. This information should also reach the relevant stock exchanges and the issuers of the stock, within a period of ten days following the operation.

II) When a person who owns 5% or over of a company's capital stock acquires more than 2% of the stock over a period of less than 12 months.

D) **Obligatory Offer:** No obligation of this kind exists under any type of circumstance.

E) **Information to be provided:** The following information should be provided: Exact number of shares acquired, identification of acquirer, his/her commercial data and information regarding crimi-

nal causes. In addition, the origin of the funds used in the acquisition. Detail of loans contracted and any other contract related to the acquisition. Number of shares held. Detailed description of the purpose of the acquirer on purchasing the shares, including plans regarding an eventual control operation, mergers or sale of a large part of the assets of the corporation. An affidavit should also be issued if the acquisition was made for exclusive investment purposes, and a detailed report regarding the relationship existing between the acquirer and the target company.

F) **Duration of an Offer:** The minimum period is 25 days and the maximum period, 35 days.

G) **Partial Offers:** Partial offers are allowed.

H) **Right to Withdrawal:** During the effective period of the Tender Offer.

I) **Price:** If, during the effective period of the offer, the offerer increases the price he/she is willing to pay, he/she should pay this new price to all the stockholders that accepted the offer.

J) **Squeeze Out:** Within the state regulations, most states allow the possibility of a squeeze out. In Delaware, in the case that a majority stockholder has over 85% of the corporate shares, he/she has the faculty to oblige the remaining stockholders to sell their stocks to the majority stockholder. This is a squeeze out, and to fix sale price, minority stockholders may resort to valuations.

K) **Conclusions:** At first sight, this system would appear to contribute to the exploitation of minority stockholders, in the sense that it allows the purchase of the minimum participation required to reach corporate control, because — in spite of the apportionment system— a large percentage of stockholders are forced to remain in the corporation as minority holders.

But, regardless of its formal characteristics, this system has shown that it works well.

This is based on the high level of control applied on those corporations that operate in the US stock exchanges, via the SEC,¹⁶ which reduces the possibility of abuse on the part of controlling holders. On the other hand, the characteristics of the US securities markets have contributed to protect minority stockholders. These markets are highly developed and liquid, and include the operations of corporations with property schemes that are generally dispersed, which has generated a corporate control market that is both active and efficient.

Finally, it is necessary to mention that a voluntary Tender Offer system, such as the one that exists in the U.S.A to protect minority stockholders, is practically unfeasible in countries that do not have structural characteristics that are similar to those that exist in this market.

4. Deregulated Tender Offer System:¹⁷ Countries such as Germany have opted for a non regulated Ten-

der Offer system, but in order to compensate for this, they have established high standards of corporate governance in order to avoid possible abuse on the part of controlling holders.

Germany chose an alternative system for protecting the interests of minority stockholders, based on a severe regulation of corporate governments, which tends to reduce the probability of exploitation. These regulations are based on the assumption that acquirers will manage the acquired corporation in their own benefit, which will have a patrimonial effect on minority stockholders. This has led to the establishment of different protection standards such as a system that compensates minority stockholders that decide to remain in the corporation or to indemnify them in cash or in stocks or certificates if they wish to sell their corresponding participation.

The deregulated Tender Offer system responds to the characteristics of the German securities markets, which, together with most of their European counterparts, have a high ownership concentration and are not very liquid, so that the establishment of a Tender Offer system would supposedly go against the already scarce activity presented by the corporate control market.

In spite of the above systems, the “Übernahmekodex” or “Tender Offer Code” was approved on July 14th 1995. This Code was created by the “**Boresensachvertandigenkommission**”, the organisation in charge

16. The Securities and Exchange Commission controls and regulates US securities markets.

17. see German Aktiengesetz Regulertions.

of controlling the German securities markets. This code establishes the recommendations for the contents of a Tender Offer announcement, the obligation of stating that the offerer will obey the regulations established by the code, in order to fulfil his operation. This code regulates both voluntary Tender Offers, with regulations similar to those existing in the United States, and in the case of Obligatory Offers, its Section 16 establishes the obligation of announcing a total Tender Offer in the case of acquiring control of a target company. The same section states the moment in which a corporation has been controlled by an offer. We can state that this code establishes a system that is a mixture of the English and the US systems. As regards the English system, the *Übernahmekodex* has not gained the required support within the German market for a simple recommendation to become support. In this sense, its use has not become generalised, so that the German Tender Offer system continues to be to a great extent deregulated.

Section III. Need to Legislate in Chile

After 1995, foreign investors have operated in Chile with the aim of gaining control over large Chilean companies. The legislation prior to Law 19,705 contained very few references regarding tender Offers or IPOs.

Different events that occurred in our stockholding operations led authorities, regulatory bodies and the Stock Exchange to address the Tender Of-

fer issue, which lacked a legal system regarding a systematic, institutional and organic treatment of these offers.

In 1997, an event shattered public opinion, when Endesa España started to try to take over Chispas (Almendro, Luz, Chispa Uno, Chispa Dos, Lus y Fuerza) shares. In this operation, the corporate capital comprised different series of shares and when a detail of the operation was given out, information showed that a specific share series was offered a greater economic value, in addition to other benefits that were not available to other series. The following were the more polemic elements of the offer:¹⁸

I) The only stockholders that were able to take part in the Tender Offer were the stockholders of the Chispas corporations registered as at May 30th 1997, which is to say, nine weeks prior to the announcement of the purchase.

What would have been the reason to exclude from the offer those who acquired Chispas stock after that date?

II) Endesa España paid three different prices for the tender offer, establishing a difference not only according to series but also according to type of stockholder. Even though, in the latter case, they all had assets with equal rights, holders of Series B stock (ex executive) were offered 200,000 per share, which is ninety one per thousand per cent more

18. Maqueira, Carlos (2000). "Evolución de la OPAS en Chile y su regulación". *Rev. Economía y Administración*, número 137. Universidad de Chile., pp. 30-38.

than the price paid to general stockholders. At the same time, the latter received an average price that was 18.2% lower than that offered to workers, directors and former workers that owned this kind of stock. In this way, 37 % of the total amount that Endesa España invested in order to acquire Chispa stock, was paid to Series B stockholders, who had 0.06% of the capital stock.

The questions regarding the efficiency of local legislation to protect stockholder interests was also reinforced by the subsequent sale of assets between related parties, such as the sale of the Internet, Terra Chile affiliate, of Telefónica CTC to Telefónica España, as was the case of Campos Chilenos.

These events are explained by the fact that in those days, the legislation in force did not regulate the duration of the offer, the possibility of extension, the price to be paid, the right of the stockholders that accepted the offer to withdraw shares during the effective period of the offer and the conditions under which the offer became nil. This is explained because the laws that regulated the Stock Exchange, namely Securities and Market Law 18,045 and Closed Corporations Law 18,046 provided very little regulation regarding this type of operations although it was finely tuned and regulated in countries such as Spain and France.

The executive provided the arguments of University of Chicago's Professor Zingales to modify the law. Prof Zingales stated "As the control value of a company is nothing but the current value of the private benefits of the owner of the controlling stock, the difference in this magnitude depends on the degree of protection given to the minority stockholders of each country."¹⁹

Studies carried out on the way that the legal structure of markets and the protection offered to minority stockholders affects corporate ownership structure shows the need to improve the accounting system of a company in order to give the market greater transparency and to improve the judicial system. La Porta's²⁰ studies analyse the laws that protect corporate stockholders, the origins of the laws and the tools existing to fulfil the regulations established in 49 countries. The result of these studies concludes that Chile has work pending regarding the efficiency of the judicial system and the laws that regulate securities transactions in the Stock Exchange. Mention is also made of the need to improve the accounting standards to be provided by the companies, and the need to professionalise in-company decision making, independently from personal relationships. In comparison with countries with similar per capita incomes, the above mentioned factors

19. Zingales, L. ("000). "Por qué vale la pena tener el control de la empresa". Published in N° 6 Mastering Management pp. 1-4.

20. La Porta, R, Lopez de Silanes F.A. (1999), Corporate Ownership Around the World. Journal of Financial Economics II, pp 472-527.

are below par. As Chile is a small country with limited resources, this differentiation needs efficiency and transparency.

Foreign experiences and the contributions of foreign specialists lead us to conclude that the operations of the open market have been severely questioned in Chile, especially as regards the lack of protection to minority stockholders in operations that involve corporate ownership. A stockholder may obtain important benefits from corporate control operations. But the potential costs associated to a deficient legislation can be even greater.

Section IV. Chilean Tender Offer Law

1.1 The Chilean System:²¹ The system that regulates Chilean Tender Offers has the following characteristics.

- A) **Origin of the Legislation:** Regulated by Law 19,705 of December 20th 2000.
- B) **Market History:** The market has a high ownership concentration and its share turnover²² is low: 6.89%. This is equivalent to stating that in a year a mere 6.89% of the companies operating in the stock exchange change owners.
- C) **Triggers for Announcing a Tender Offer:** When the aim is to obtain control of a corporation submitted to the control of the Superintendency.

D) **Obligatory Offer:** An Offer is obligatory when:

- I) It enables a person to take over control of a company.
- II) Every acquisition that obtains the ownership of 30% or over of the stock of a given company should be subjected to a Tender Offer.
- III) When after a share acquisition, a given person controls two thirds or over two thirds of the voting stock of a company, this person is obliged to make a Tender Offer for 100% of the Company stock.
- IV) When a person who aims to acquire control of a company that controls another company, and makes a Tender Offer for these shares that represents 75% or more of their consolidated assets, this person must make a tender offer to the stockholders of the latter company in accordance with the regulations established in this Section. The above, should include an amount that is not lower than the percentage that enables this person to gain control.
- V) In the following 12 month period, the new controlling stockholder will only be able to acquire more than 3% of the stock by means of a Tender Offer and the price to be paid must have a minimum value equivalent to the control take-

21. Regulated by Law 19.705 of December 20th 2000.

22. Value calculated with Santiago Stock Exchange - Annual Report (2002) data.

over price. But in the case that the acquisition is undertaken in a stock exchange and in apportionment operation for the rest of the stockholders, a larger percentage of the stock may be acquired without the need to submit a Tender Offer.

E) Information to be Provided:

The following information should be provided: Financial, juridical and business description of the offerer. Minimum number of shares or percentage of shares required for a successful offer. Price and payment conditions. Duration of the offer. Method by which the offerer will finance the payment of the stock at the end of the offer. Finally the conditions or events that might produce the revocation of the offer and other general regulations issued by the superintendency.

F) Duration of an Offer: The duration of an offer cannot be less than 20 days or more than 30 days. An offer can be extended for a maximum period of 15 days and a minimum period of 5 days.

G) Partial Offers: Partial offers are allowed, with the possibility of apportionment, provided that the number of shares that accepted the offer is greater than the number of shares that the offerer offered to acquire.

H) Right to Withdraw: Stockholders that have relinquished their shares may totally or partially withdraw them for the duration of the offer or of its extension.

I) Price: Control Premiums are related to a price that is substantially higher than the market price,

which will be fixed annually by the Superintendency of Securities and Insurance by means of a general regulation based on a percentage that cannot go below 10% or over 15% of the market price of a share. By market price we understand the average weighted share price during the 90 day Stock Exchange price prior to the Tender Offer without taking into consideration the last 30 days.

J) Squeeze Out: This is not considered.

K) Conclusions: The most important conclusions are:

The establishment of the obligation to make a Tender Offer for all the remaining company stock when 2/3 of ownership has been reached has the aim of giving the minority stockholder a way out when his/her titles and stocks fall because they are divergent with those of the controlling holder. It is important to bear in mind that 2/3 provides sufficient quorum to make a variety of corporate changes. On the other hand it is also true that this might be the equivalent of forcing companies out of the exchange, reducing market liquidity and reducing diversification possibilities for investors. The Tender Offer law has not made the Chilean Stock Exchange more attractive for the companies that look for financing nor for investors, as a total of 37 companies have closed between 2000 and 2002 and a single additional company has registered with the Stock Exchange.

A balanced Tender Offer law should tend to reduce conflicts of interest between minority holders and controllers, but it should also promote

competition for corporate control in such a way that it works in such a way that it provides maximum benefits to all its stockholders. The Chilean Tender Offer law contains this first element, but it tends to discourage current controllers from selling their property.

Section V. The Chilean Stock Market

In Chile there are 246 companies that operate in the Santiago Stock Exchange, of which 20 have different share series. Of these 20, 17 have dual shares, 2 have three series of shares and one has four series of shares.

The Chilean Stock Exchange has a high concentration of share ownership which increased in the 1990s- In 1990 the three major stockholders had an average of 51.19% of the ownership of companies registered in the stock exchange (the majority shareholder had 39.29%), in 1998 the three majority stockholders had 64.37% of share property, and the majority shareholder had 49.81%, in circumstances that the first shareholder to own over 50% of the stock can easily control the corporation, unless there are pre-eminent control shares or special quorum shares.

The main corporations traded in the Stock Exchange are connected to family interests or investment groups. In 1998, these economic group companies owned 76.04% of the Stock Exchange, while 62% of the corporations traded in the Stock Exchange belong to an economic group.²³

As the Chilean Stock Exchange is concentrated mainly in Chile, it is important to see the high market concentration of the ten most traded shares in Chile.

On the other hand it is also interesting to see the 10 shares that have a higher stock exchange value. The following table and graph show their evolution over the past 10 years. (See table and graph page 40)

In the year 2002, the 10 most traded shares corresponded to 6 sectors that had a greater trade presence. Electric Power Generation and Distribution (Colbún, Endesa and Enersis), Banks (Bansander and Corpbanca), Telecommunications (CTC-A and Entel), Forestry (Copec), retail (D&S), and Public Services (Aguas-A). It is important to point out that the 10 most traded companies correspond to 62% of the market and that 236 companies correspond to the 38% of the remaining shares. On the other hand, the 4 most traded shares correspond to 36% of the market total.

Section VI. Effect of the Tender Offer Law on the Chilean Stock Market

In 1997 there was an event that had a strong impact on Chilean public opinion, this was the fact that Endesa España was trying to control the Chispas Stock (formed by Almerndro, Luz, Chispa uno, Chispa dos, Lus y Fuerza). In that operation the capital of the target companies was made up by different share series, and when information regarding the ne-

23. Majluf N., Abarca N., Rodriguez D., Fuentes L (1998)., "Governance and Ownership Structure in Chilean Economic Groups", Revista Abente Vol. 1 pp 111-139.

gotiations was given out, the public was told that a series of shares was offered a higher economic value and other benefits that were not offered to the other share series. In this company there was no restriction regarding the amount of shares required to have a determined number of votes, or the reason for which Chispas, with 0.06% of the stock chose 4 of the 9 company directors. This was Endesa España's most questioned company Tender Offer and was one of the most important triggers for creating the Tender Offer Law in Chile. Nonetheless, the only issue that was legislated vis-à-vis the different share series was to restrict their duration to a period of five years, although they could be extended for a further period by an Extraordinary Stockholders' Meeting, requiring the vote of two thirds of the total shares issued (These five years are unlimitedly renewable)- But it establishes no restriction for the share percentages required to have a determined number of votes.

The Tender Offer Bill contemplated the elimination of the possibility of issuing shares with different series, as a way of avoiding the pre-eminence of one share series over the company and of preventing the possibility that it received a larger control premium than other shares. After an analysis and review of important studies such as the Crossman and Hart paper,²⁴ it was argued that the existence of corporations with a separation between economic and political rights does not

imply the expropriation of income from minority voters. They also conclude that there is no certainty regarding the convenience of preventing share series from obtaining more efficient ownership structures. Finally, it was decided not to eliminate share series. Nonetheless, we believe that it is important to modify the Tender Offer law and to establish a restriction between the percentage of shares required to have a determined number of votes. Not to do so would give way to situations similar to the Chispas issue we have just mentioned.

On the other hand, it is important to observe that in Chile stock ownership turnover, which we call share rotation, is low,

This indicator is the result of the division between the amount traded and the stock exchange patrimony over a year.

The following graphs illustrate market evolution since 2000, when the Tender Offer Law came into effect. We can see how the amounts traded and the stock exchange patrimony have fallen as a result of the fact that the Tender Offer law obliges offerers to make Tender Offers for the entire stock in a company. This is due to the fact that as 2/3 or more of the property has been acquired, it encourages a greater ownership concentration, reducing competition for control and making other companies leave the stock exchange, thus reducing competition for control.

24. Crossman, S. and Hart, O (1988). One Share One Vote and the Market for Corporate Control. *Journal of Financial Economics* 20. pp. 175-200

The above has 3 negative consequences:

- A) Decrease of amounts traded (See graph 2 page 41)
- B) Decrease of stock exchange patriomy (See. graph 3 page 41)
- C) Decrease in ownership turnover (See. graph 4 page 42).

The Tender Offer Law has not made the Chilean Stock Exchange more attractive for the companies that search for financing or for investors. Between 2000 and 2002, 37 companies have been created and a single company has registered in the Stock Exchange.

Graph 5 shows that this law has encouraged the closure of various corporations over the last few years. 22 stock corporations closed in 2000, 11 did so in 2001, and 4 companies closed in 2002, with a single new company registering with the Stock Exchange.

A single company has registered in the stock exchange since the year 2000 (..See graph 5 page 42)

In spite of protecting minority stockholders, the Tender Offer law in Chile has not made the Chilean Stock Exchange more attractive for companies looking for financing or investors. The creation of an efficient market should not be based on the creation of regulations that make it more rigid and less dynamic. The protection of minority stockholders can be attained by a balanced Tender Offer Law that

protects minority stockholders and makes the Chilean Stock Exchange more attractive for the companies that look for financing or investors, encouraging competition for control. In order to do this, Chile requires a law that is more flexible, together with high standards in terms of Corporate Governance.²⁵

Section VII. Conclusions

In order to understand and analyse the Chilean Tender Offer Law, it is fundamental to make an analysis of the Tender Offer legislations applied in more developed markets. Spain and France have extremely strict regulations regarding take-over and tender offers, with ownership structures that are more concentrated than those that prevail in the U.S.A. or England.

As regards the U.S.A and the United Kingdom, the most important regulatory issue to be applied is that the information given out to the market should be as complete as possible. There is no better mechanism for solving market problems than its own specific strengths.

On the other hand, Germany has a deregulated system, with extremely high standards of Corporate Governance.

We can conclude that the legislation should bear in mind ownership structure, market efficiency, the market development of a country in which regulatory measures are established

25. Establishes in the economy the regulations and standards that will rule the behaviour of controlling stockholders, corporate directors and administrators, and defines their obligations and commitments vis-à-vis external investors (non controlling stockholders and creditors).

and the Corporate Governance standards of the country.

The basic problem is not solved with the establishment of standards for regulating transactions but with the establishment of paths towards a more dynamic and efficient market.

On analysing the Chilean Tender Offer Law and its effect on the Stock Exchange, a comparison between 31/12/2000 and 31/12/2002 has led us to identify the following effects that have occurred since the creation of the Tender Offer Law:

- A) Stock exchange transactions fell from 6,149 (MMUS\$) to 3,439 (MMUS\$), i.e. a fall of 44%.
- B) The stock exchange patrimony falls from 59,770 (MMUS\$) to 49,869 (MMUS\$), i.e. a fall of 17%.

On analysing stock rotation, which is amounts traded/stock patrimony, this percentage gives us the percentage of corporate stock ownership that changes owners. When comparing 31/12/2000 with 31/12/2002 stock turnover ranged from 10.29% to 6.89%, which represents a reduction of 33%. (In the U.S.A. stock rotation reaches approximately 90%). In Chile, it was low in 2000, with 10.29%, and with the creation of the Tender Offer Law fell to 6.89%, which is extremely low. On the other hand, since the Tender Offer Law was passed in Chile, 37 corporations have left the stock exchange, while a single new company has registered, which has resulted in a decrease of the stock exchange patrimony and a fall in stock exchange transactions.

The conclusion is that in a developing country such as Chile, the capi-

tal market requires encouragement, which is obtained with an efficient market. And an efficient market does not need standards that render it more rigid and discourage its dynamism; what it does need is the creation of institutions that flexibilise market operations and competition for corporate control. Minority stockholders can be protected with a dynamic and efficient corporate control market, with few regulations and high standards of Corporate Governance. The Chilean Tender Offer Law has made offers more expensive because it "obliges" the distribution of the controlling interest price among all the interested stockholders. This may make efficient purchasers uninterested in announcing a Tender Offer, because it is too expensive, and this obviously goes to the detriment of all stockholders.

Another conclusion is that Chile requires an efficient and dynamic market, and this calls for laws that render the market more flexible in order to stimulate a depressed market that requires more stock exchange transactions. It is also necessary to stimulate a larger number of corporations to feel attracted by the Stock Exchange and to prevent abandonment. This would increase stock exchange capitalisation and greater diversification.

The recommendation would be to modify the Tender Offer Law, eliminating the obligation of carrying out total Tender Offers, which in other countries might be positive, but which is not the case in Chile. In Chile, the regulation that forces the acquisition of 100% of a given stock package when 2/3 of the stock own-

ership is reached, generates clear incentives to turn an open stock company into a closed corporation, making companies abandon the stock exchange. On the other hand, even though this law protects minority stock holders, it is not encouraging competition for corporate control, and a balanced law must bear these two fact in mind. What Chile requires is more dispersed ownership and an incentive in terms of competition for control, so that there are more companies entering the market than leaving it. Chile should eliminate the obligatory nature of total Tender Offers and maintain voluntary and Partial Tender Offers. This would make

the market more flexible, together with improving Corporate Governance standards, thus protecting minority stockholders and increasing the dynamism of the market.

Finally, we can conclude that there is evidence that in Chile the Tender Offer Law has depressed the Stock Exchange. Proof of this is the fact that 37 corporations have closed and a single company has joined the Stock Exchange after the law came into force. On the other hand, the reduction of the volumes trades has resulted in a reduction of stock turnover. This proves both the primary and secondary hypotheses of this paper.

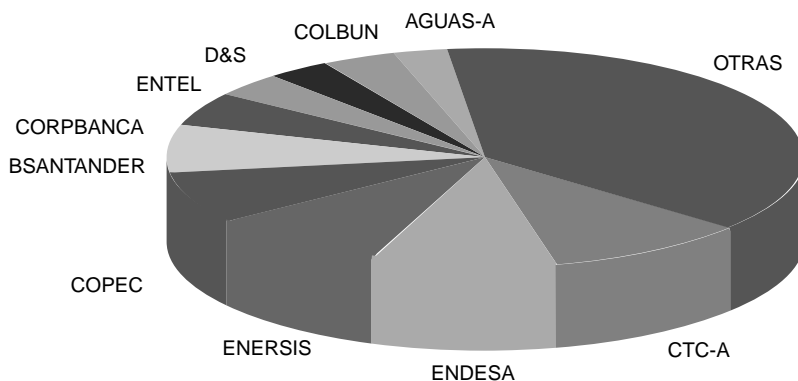
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Table 1. Concentration of the Chilean Stock Exchange

Concept	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
The 10 shares with Higher Stock Value	48%	47%	41%	41%	42%	43%	43%	40%	41%	44%
The 10 most traded shares	55%	63%	58	55%	60%	62%	77%	68%	61%	62%

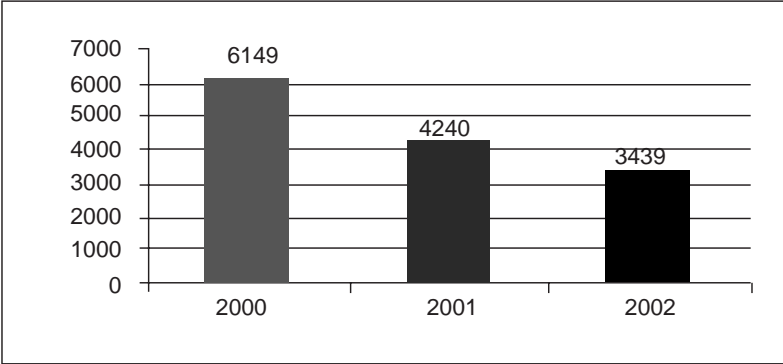
Source: Santiago Stock Exchange.

Graph 1. The 10 most traded Corporations



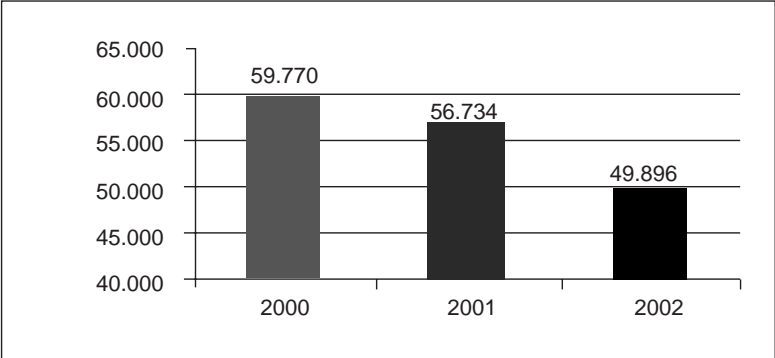
Source: Santiago Stock Exchange.

Graph 2: Amounts Traded (MMUS\$)



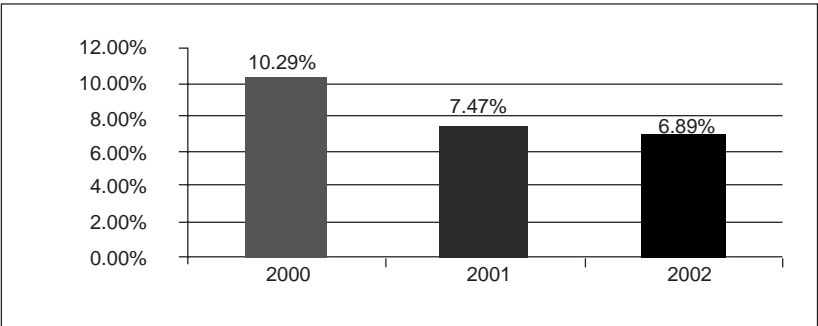
Source: Santiago Stock Exchange

Graph 3. Stock Exchange Patrimony (MMUS\$)



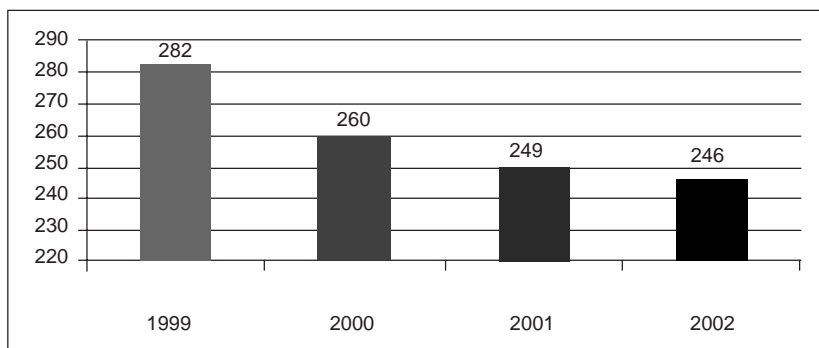
Source: Santiago Stock Exchange

Graph 4. Stock Rotation



Source: Santiago Stock Exchange

Graph 5. Number of companies listed




Source: Santiago Stock Exchange

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MODELOS PARA EL ANÁLISIS Y DIAGNÓSTICO DE EQUIPOS DE TRABAJO¹

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ABSTRACT

In this paper several models for the operation analysis and diagnosis of teams are presented. These models will be quite helpful to determine the effectiveness of the performance of the team and also for the design stages of a new one.

Three types of models are described. The Hackman's model, the traditional and the 3P, 3C models. The models will very useful to improve team performance, or to enhance its development, once the conditions impeding its operation are well understood.

KEY WORDS

Teams, high performance teams, team diagnosis and development, team modeling.

RESUMEN

En este artículo presentaremos varios modelos para el análisis de la operación de los equipos de trabajo que ayudan a conocer el estado de efectividad con que está trabajando el equipo, con el fin de contribuir a conseguir las condiciones para una operación que eleve su productividad.

1. *Trabajo en equipo para el cambio organizacional*. Notas de clase del curso de Equipos de alto desempeño. Universidad Icesi. Departamento de Administración. 2004.
2. *Trabajo en equipo y equipo de trabajo*. Libro de texto en preparación. Universidad Icesi. Cali, 2004.

El primer modelo que presentaremos es el de Hackman. Posteriormente nos centraremos en el denominado tradicional y finalmente en el modelo de las 3P y 3 C.

El primer modelo determina las condiciones necesarias para satisfacer ciertas condiciones de efectividad, el segundo se centra en tres factores generales que determinan la produc-

tividad y el rendimiento y el tercer modelo considera los factores claves para la operación de equipos exitosos.

PALABRAS CLAVES:

Equipos, equipos de alto desempeño, diagnóstico y desarrollo de equipos, modelamiento de equipos.

Clasificación: A

EL MODELO DE HACKMAN

Richard Hackman en su libro *Leading Teams*, presenta un modelo para el desarrollo de equipos de alto desempeño.

Después de investigar el desempeño de numerosos equipos de tipo autónomo que prestan el servicio de atención de pasajeros en dos aerolíneas diferentes, una internacional y otra nacional, utilizando dos esquemas distintos en cada una desde el punto de vista de su autonomía, concluye presentando un modelo que puede utilizarse para mantener los equipos en niveles consistentes y similares de desempeño.

El modelo comienza definiendo primero los criterios de efectividad de un equipo y posteriormente determinando las condiciones que inciden en dicha efectividad.

EFFECTIVIDAD DE UN EQUIPO DE TRABAJO

La pregunta que se debe resolver primero es si es posible mantener alta creatividad, agilidad y aprendizaje y simultáneamente conseguir niveles razonables de consistencia, control y alineamiento con los objetivos organizacionales.

Los mejores equipos de trabajo siempre sirven bien a sus clientes, pero cada vez se vuelven unidades de trabajo más capaces con el tiempo, a medida que sus miembros ganan experiencia y descubren nuevas y mejores formas para trabajar juntos. Al mismo tiempo, estos equipos proporcionan espacios en los cuales cada miembro en forma individual puede encontrar en su trabajo de equipo una buena dosis de aprendizaje y satisfacción personal.

De esta forma, podemos decir que un equipo de trabajo es efectivo en la medida que satisfaga los siguientes tres criterios:

1. Genera un producto o servicio aceptable para sus clientes.
2. El equipo aumenta con el tiempo su capacidad.
3. Cada uno de sus miembros aprende en forma individual.

Servicio aceptable al cliente. El resultado productivo de un equipo (esto es, su producto servicio o decisión) cumple o excede los estándares de calidad, cantidad y oportunidad de entrega de los clientes del equipo (las personas que reciben, revisan o usan los resultados de éste).

Crecimiento como equipo. El proceso social que utiliza el equipo para realizar su trabajo aumenta la capacidad de sus miembros para trabajar juntos interdependientemente en el futuro.

Aprendizaje individual de sus miembros. La experiencia de equipo contribuye al aprendizaje y bienestar de sus miembros individualmente considerados.

CREACIÓN DE CONDICIONES PARA EFFECTIVIDAD

Una vez que se han determinado los criterios para la efectividad, es necesario explorar las cinco condiciones que los líderes deben adoptar para aumentar las posibilidades de que un equipo, logre y sostenga con el tiempo un alto estándar en los criterios discutidos.

Específicamente, la posibilidad de efectividad se incrementa cuando el equipo cumple tres condiciones es-

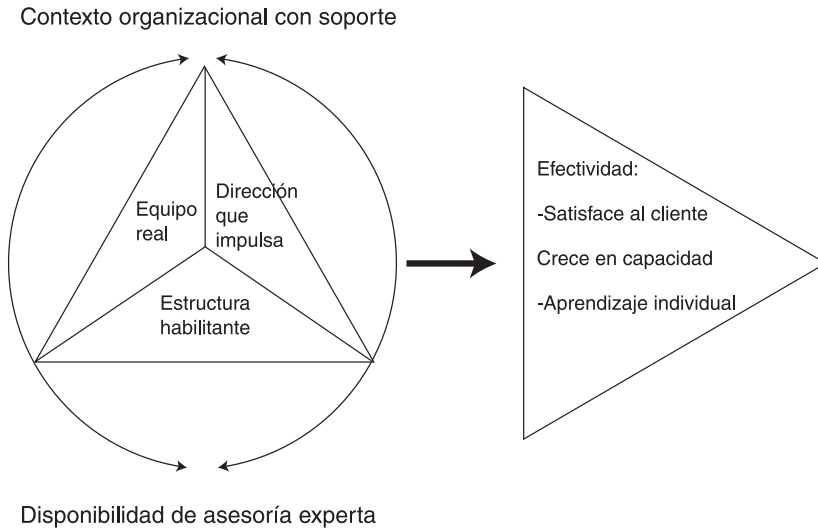
estructurales de diseño y dos accesorias que ayudan a cosechar los beneficios de un buen diseño.

CONDICIONES DE DISEÑO

1. Un equipo real en vez de un equipo de nombre.

2. Una dirección que impulsa su trabajo.
3. Una estructura que posibilita; facilita en lugar de impedir su trabajo.

Figura 1. Modelo de equipo de Hackman



CONDICIONES ACCESORIAS

1. Un contexto organizacional que brinde soporte.
2. Disponibilidad de asesoría (“couching”) experta en trabajo de equipo.

EQUIPO REAL

Los equipos reales en las organizaciones se caracterizan por cuatro rasgos fundamentales:

1. Disponen de una tarea bien definida.
2. Tienen límites claros.
3. Posen una autoridad totalmente

delimitada para manejar sus propios procesos de trabajo.

4. Sus miembros permanecen estables durante períodos razonables.

En el punto correspondiente a la tarea es necesario que quede claro la importancia de definir si el grupo requerido es un grupo en sí, un individuo o un equipo. En una gran mayoría de casos no existe claridad al respecto.

Los límites específicamente se refieren a que se haga distinción de quiénes pertenecen al equipo y quiénes no. Parece simple, pero este hecho puede traer confusiones y evitar que

el trabajo de equipo se realice y que los miembros se sientan responsables por las tareas.

La autoridad debe ser la requerida para que el equipo pueda tomar las decisiones necesarias en forma crea-

tiva y ágil, manteniendo la consistencia con los objetivos.

Esta autoridad puede fluctuar en un rango amplio como lo podemos observar en la Tabla 1, dependiendo del tipo de equipo que se forme.

Tabla 1. Matriz de autoridad. Cuatro niveles de autogestión de un equipo.

Asumen la dirección total				X
Diseñan el equipo y su contexto organizacional	Responsabilidad de la Gerencia		X	X
Monitorean y manejan el progreso y los procesos de trabajo	Responsabilidad del equipo	X	X	X
Ejecutan la tarea del equipo	X	X	X	X
	Dirigidos por un Gerente	Autogestionados	Autodiseñados	Autogobernados

Los equipos cuyos límites son tan indefinidos que es imposible saber quiénes están y quiénes no están en ellos, sabemos que tienen dificultades. En igual forma, aquellos equipos cuyos miembros permanecen estables por períodos razonables se desempeñan mejor que aquellos cuyos miembros rotan constantemente.

DIRECCIÓN QUE IMPULSA SU TRABAJO

La efectividad de los equipos, particularmente los autoadministrados, es

imposible sin la dirección de una persona con autoridad que determine el trabajo del equipo.

El fijar una dirección sobre las aspiraciones del desempeño tiene beneficios múltiples: energiza a los miembros del equipo, orienta su atención y acción y compromete sus talentos.

Para cosechar los beneficios de una dirección que impulse al equipo a lograr su propósito esta dirección debe ser retante, clara y consecuente. Las palabras solas no son suficientes.

Tabla 2. Beneficios de una buena dirección.

Atributos	Funciones	Beneficios.
Retante	Energiza	Aumenta la motivación.
Clara	Orienta	Alinea la estrategia de desempeño con los propósitos.
Consecuente	Compromete	Impulsa la utilización plena de los conocimientos y habilidades.

Una dirección que impulsa al equipo es una condición clave para la efectividad de él, pero, ¿qué debe especificarse cuando se fija una dirección? ¿La dirección se debe enfocar sola-

mente en el propósito central, o también debe incluir los medios para lograrlo?, o por el contrario, ¿se debe hacer énfasis en los medios sobre el supuesto de que si el equipo se des-

envuelve bien los buenos resultados vendrán como consecuencia?

La respuesta a estos interrogantes se consigna en la Figura 2, aclarando

que aquellos que han experimentado con el trabajo en equipo recomiendan enfatizar los fines y no los medios para conseguir los resultados.

Figura 2. Enfatizar los fines, no los medios.

		¿Especifica fines?	
		No	Sí
¿Especifica	No	Anarquía	Autogestionado. Trabajo centrado en metas.
¿Medios?	Sí	Peor de todos	Desperdicio del recurso y el talento humanos.

BALANCE EN LA DIRECCIÓN

Diversos aspectos que se mencionan a continuación deben balancearse para lograr el mejor desempeño de los equipos:

1. Claridad de propósitos versus información detallada.
2. Aspiraciones modestas versus aspiraciones retantes.
3. Líder versus seguidor.

ESTRUCTURA HABILITANTE

Tres aspectos se deben tener en cuenta en esta sección:

1. Diseño del trabajo que el equipo debe realizar.

2. Las normas centrales de conducta que deben guiar y restringir el comportamiento del equipo.
3. La composición del equipo (tamaño, habilidades, diversidad, etc.)

Diseño del trabajo

En cuanto al diseño del trabajo, el modelo que se recomienda es igual al que se utiliza para el diseño del trabajo individual. El criterio que se sigue es el que las tareas que se realizan y los estados psicológicos que de ellas se derivan deben conducir a una motivación interna por el trabajo. Esta situación se resume en la Tabla 3.

Tabla 3. Características de un trabajo que se traducen en motivación interna por él.

Características de la tarea	Estados psicológicos	Resultados
Variedad de habilidades		
Identidad de la tarea	Experimenta significado	Motivación
Significado de la tarea		
Autonomía	Experimenta responsabilidad	Interna
Retroalimentación del trabajo	Conocimiento de los resultados	

Normas Centrales de Conducta

Las normas especifican los comportamientos aceptables y los que son inaceptables por el grupo. El comportamiento que se determina apropiado se refuerza y el que es visto inapropiado se sanciona.

Las normas que el equipo desarrolla son importantes por muchos aspectos: reducen la tensión, suavizan los conflictos e imponen orden. No obstante, hay un grupo de normas que no son fácilmente desarrolladas por los equipos. A éstas las denominamos normas centrales y en muchas ocasiones es función de los líderes velar por su desarrollo. Son ellas:

1. Los miembros deben tomar parte activa respecto al entorno en que operan, ajustando sus estrategias de desempeño en forma apropiada.
2. Los límites de comportamiento dentro del cual el equipo opera deben demarcarse bien, identificando las cosas que siempre deben hacer y aquellas que deben evitar.

Composición de un equipo

La composición tiene que ver con el número, las habilidades interpersonales, las habilidades para la solución del problema o el logro de la tarea y son factores que deben escogerse de acuerdo con las situaciones que se presentan. Sabemos que los mejores equipos operan con un número relativamente pequeño de integrantes, que la diversidad tiene aspectos positivos y negativos y que las habilidades propias para lograr el cumplimiento del propósito son indispensables.

También se requiere un buen nivel de habilidades interpersonales para la interacción.

LAS CONDICIONES ACCESORIAS

Son dos las condiciones accesorias:

1. La existencia de un contexto organizacional que brinde soporte al equipo
2. La disponibilidad de asesoramiento experto.

Elaboremos un poco sobre ello a continuación y consideremos cada una de estas condiciones.

Contexto organizacional

En esta condición se deben incluir el sistema de evaluación y recompensas, la existencia de sistemas de información, el sistema educativo y los recursos materiales y las relaciones intergrupales.

El sistema de evaluación y recompensas debe orientarse para que los miembros de un equipo sean responsables, tanto individual como colectivamente. La evaluación orientada al individuo y el sistema de recompensas tradicionales deben modificarse para tomar en consideración el desempeño del equipo.

Las evaluaciones individuales, los salarios fijos, los incentivos individuales no son compatibles con el desarrollo de equipos altamente efectivos. Por tanto, además de estos incentivos tradicionales, los líderes tienen que considerar las evaluaciones basadas en el desempeño colectivo, la participación en las ganancias que provengan del trabajo común, los incentivos a los grupos pequeños y otras consideraciones creativas en este sistema, que refuercen el esfuerzo y compromiso de los equipos.

Los sistemas de información deben proporcionar todos los datos que se

requieran para que el equipo pueda ejecutar correctamente su trabajo. La disponibilidad de una buena información es bastante difícil en algunas organizaciones por muchas razones. Una de ellas es que la organización prefiere tener en manos de unos pocos la información estratégica que pueda afectar su competitividad. La otra razón que hace difícil la disponibilidad de información es el hecho de que quienes la generan no usan la misma terminología. Es decir, los técnicos se expresan de una manera y los que la requieren entienden otra. La otra dificultad es que la información es supremamente densa y es difícil en ciertos momentos encontrar la parte que en realidad es útil para la situación que está considerando el equipo.

El otro gran obstáculo mayor es que la información es una forma de poder y algunos líderes y ejecutivos tratan de retenerla para su beneficio. Para tratar de aliviar algunos de estos obstáculos la organización debe disponer de algún especialista que se encargue de proporcionar la información apropiada para que los equipos operen en los formatos que sean adecuados para ellos. La retención de información privilegiada es algo que debe resolver la alta dirección de la empresa.

El sistema educativo de la organización debe proporcionar el entrenamiento y la asistencia técnica adecuadas para que los equipos funcionen efectivamente, particularmente tratando de desarrollar las habilidades de aquellos miembros que tienen todas las capacidades requeridas para lograr los objetivos.

La disponibilidad de asistencia en entrenamiento y en educación es

mucho más factible en las empresas que la disponibilidad de información. Los miembros de los equipos de trabajo necesitan conocer más y diferentes cosas que lo que las personas individualmente requieren para completar sus trabajos. No hay ninguna razón para que no se efectúe el análisis de tareas para los equipos y que el entrenamiento se realice basado en estos análisis. Es necesario que a quien se encarga de proporcionar el soporte educativo en la organización sea consciente de estas necesidades.

Las recursos materiales tales como los equipos, un presupuesto adecuado, el tiempo suficiente del personal de apoyo y los espacios físicos, parecen cosas triviales en comparación con los otros aspectos que hemos mencionado. No obstante, existen casos de equipos que cumplen satisfactoriamente todos los requisitos del modelo y que por no disponer de los recursos adecuados no pueden obtener los resultados que se han propuesto.

Una de las cosas que no es posible hacer es insertar equipos en organizaciones sin pensar que ello puede alterar el contexto organizacional existente. Al hacer esto se pueden alterar los comportamientos o preferencias de otros grupos dentro de la organización, lo cual puede llevar a que se presenten problemas. Esta situación es más posible en empresas que tienen estructuras funcionales en donde se pueden generar conflictos cuando un grupo de trabajo o su líder tratan de obtener recursos o respaldo de otro grupo que no está dispuesto a ofrecerlo. A medida que cada grupo expresa más claramente sus posiciones, el conflicto generado se recrudece y puede ser difícil de arreglar.

Para manejar estas situaciones se requieren de los líderes habilidades interpersonales y políticas sofisticadas, persistencia y gran creatividad.. Los que poseen estas cualidades pueden negociar con sus compañeros y superiores condiciones que se ajusten a las necesidades de unos y de otros, que faciliten la operación de los equipos existentes y de los recién creados.

Disponibilidad de asesoramiento experto

El asesoramiento tiene que ver con los procesos grupales, interactuando con un equipo, con el fin de ayudar a sus miembros a conseguir los resultados que se proponen.

El asesoramiento puede centrarse en cualquier aspecto de las interacciones del equipo que esté impidiendo a sus miembros la capacidad para trabajar juntos y que pueda fortalecer el funcionamiento del mismo.

Se han identificado tres aspectos de la interacción que pueden apalancar efectivamente el buen desempeño colectivo. En primer lugar, se destaca el *esfuerzo* que ellos deben dedicar a su trabajo colectivo, qué tan adecuados son para la tarea y la situación; *las estrategias de desempeño* que emplean para desarrollar el trabajo y cuál es el nivel de *conocimientos y habilidades* que aplican a su trabajo.

Todo equipo en sus procesos de interacción experimenta unas “pérdidas de proceso” las cuales son ineficiencias que le impiden al grupo obtener el máximo teórico en su desempeño, pero también existen unas “ganancias de proceso” que se presentan cuando los miembros interactúan de tal forma que refuerzan su esfuerzo colectivo. Cuando ello sucede el equi-

po ha creado nuevos recursos internos que puede utilizar en sus trabajo, capacidades que no existían antes. Estas pérdidas y ganancias de proceso se presentan en cada uno de los tres aspectos de la interacción.

En cuanto al aspecto del esfuerzo se refiere, la pérdida de proceso más importante es la del *haraganeo* social, aquella situación que exhiben los miembros de presentar un rendimiento menor esperando que otros hagan el mayor esfuerzo. Este problema tiene raíces motivacionales y el líder debe encontrar estrategias para superarlo.

Por otra parte, las ganancias de proceso se obtienen del desarrollo de un verdadero espíritu de equipo que hace que sus miembros se comprometan con los objetivos y la tarea haciendo que ningún obstáculo que se presente parezca insalvable.

Las estrategias de desempeño también pueden conducir a pérdidas de procesos que en algunos casos pueden ser fatales. En este sentido muchos equipos desarrollan rutinas que les impulsan a desarrollar procesos de trabajo en forma automática, sin tener en cuenta que alguna condición en el proceso puede haber cambiado. Esta situación puede conducir a errores fatales y costosos. Por otra parte, un equipo puede desarrollar estrategias novedosas y creativas sobre algo que nadie había pensado para obtener ganancias significativas en sus procesos.

En el uso de conocimientos y habilidades los equipos pueden experimentar pérdidas de proceso significativas por el uso inadecuado de las habilidades de sus miembros. En algunos

equipos existe la tendencia a asignar las tareas por el estatus o la posición de la persona, o por la posición de autoridad que tengan sus miembros, desconociendo así las habilidades que pueden tener otros miembros del equipo.

Algunos equipos obtienen ganancias significativas de proceso en habilidades y conocimientos cuando logran desarrollar la confianza en las capacidades de los demás.

La ganancia de proceso por los conocimientos y habilidades se presenta cuando los miembros del equipo desarrollan un patrón de interacción que favorece el aprendizaje de cada uno con los otros, incrementando así la base total del conocimiento disponible para aplicarlo a la tarea. El método de entrenamiento cruzado, utilizado con bastante frecuencia en los equipos autoadministrados, es un buen ejemplo de este comportamiento, que se desarrolla más a medida que se presentan más actividades informales que tienen que ver con el intercambio de conocimiento, expertismo y experiencia entre sus integrantes.

EL MODELO TRADICIONAL

Tres son los factores que se consideran clave en este modelo y que determinan el desempeño y productividad de los equipos de trabajo. Estos factores son:

1. Los miembros que lo componen.
2. El equipo en sí.
3. El contexto organizacional.

Estos tres factores marcan la diferencia entre el rendimiento de un equipo cuando se compara con otro. En el

entorno de los equipos deportivos, por ejemplo, si no se dispone de un núcleo de jugadores con las habilidades y destrezas necesarias para enfrentar una competencia, será bastante difícil obtener resultados satisfactorios.

Pero la disponibilidad adecuada de excelentes jugadores no garantiza el éxito del equipo. Es necesario que ellos operen en forma coordinada, respondan a una estrategia de juego y se integren y comprendan bien dentro del campo de juego. En otras palabras, si los equipos no operan como un mecanismo articulado, por mejores que sean sus individualidades no podrán conseguir los resultados propuestos.

Aun es posible que si comparamos dos equipos, uno con un conjunto de jugadores individualmente excepcionales pero cuyo comportamiento colectivo es deficiente, con uno que dispone de algunos buenos jugadores pero que colectivamente hacen las cosas muy bien, el segundo equipo tiene grandes posibilidades de superar al primero.

Por otra parte, un equipo deportivo puede tener excelentes jugadores que funcionen bien colectivamente, pero que no encuentran un buen respaldo de su organización, o sus fanáticos no los respaldan, o sus condiciones económicas no son satisfactorias y el rendimiento colectivo no se estimula; este equipo puede tener un bajo rendimiento como consecuencia de la influencia de un contexto organizacional inadecuado.

Al igual que en los equipos deportivos, los equipos que se conforman en las organizaciones presentan proble-

mas similares en su operación cuando algunos de los elementos que inciden en cada uno de los tres componentes que determinan su productividad no operan satisfactoriamente.

Examinemos algunos de los elementos que influyen en dicha productividad para cada uno de sus factores determinantes.

Los miembros individualmente. En este aspecto se consideran importantes las habilidades de cada uno de ellos en lo concerniente a la tarea, las habilidades interpersonales y aquellas que son necesarias para la toma de decisiones y para la solución de los problemas. También se requiere un buen balance en cada uno de sus miembros, así como su complementariedad.

En este aspecto vale la pena mencionar el papel que juegan las preferencias individuales de acuerdo con las tipologías descritas por Myers y Briggs. Cada persona se acomoda a determinadas preferencias que hacen que ella se incline por el desarrollo de actividades particulares que a otros no les pueden interesar.

El equipo mismo. En esta parte se consideran importantes las normas, los roles, el desarrollo de la cohesividad, la responsabilidad mutua y el tamaño del equipo.

Las normas se establecen poco a poco, durante el trabajo del día a día y se dictan los comportamientos a seguir que son compartidos por los miembros del equipo. De alguna manera ellas moldean el comportamiento de las personas e indican cuáles son los comportamientos aceptados o rechazados por el grupo.

Los roles determinan las tareas que las personas deben realizar, así como también sus actuaciones dentro del grupo, que de una manera u otra pueden ayudar a mejorar el desempeño colectivo o que en algunas ocasiones lo pueden diezmar. Hay roles facilitadores, en donde las personas se orientan a mantener la armonía del grupo, así como también hay roles auto-orientados que llevan al conflicto, pues las personas que los asumen buscan reconocimiento personal o la imposición de sus ideas.

La cohesividad juega un papel fundamental pues es la fuerza que mantiene unido al grupo y que lo lleva a desarrollar el verdadero espíritu de equipo. La cohesividad unida al desarrollo de unas normas claras conlleva a una elevada productividad y cumplimiento de los objetivos. La cohesividad y el tamaño están relacionados, ya que es bien sabido que los equipos altamente cohesivos están conformados por grupos pequeños de personas.

La responsabilidad mutua es el sentido de que en un equipo “somos todos para uno y uno para todos”. Es la creencia de que los resultados no se pueden obtener solos, que sólo el equipo puede ganar y que si alguno de sus miembros falla por alguna circunstancia, otro de ellos debe estar listo para asumir su papel.

El contexto organizacional. Un equipo de trabajo puede estar estructurado con excelentes personas que están bien coordinadas, conocen claramente su tarea, han desarrollado normas claras y se respaldan muy bien los unos a los otros. No obstante, el ambiente que los rodea no es favorable para la consecución de los objeti-

vos. La organización puede que no aporte los recursos físicos y financieros que se requieren, o no dispone del personal de soporte que facilite las tareas de sus miembros, o la cultura organizacional no privilegia el trabajo en equipo y favorece más bien las contribuciones individuales. Con estas circunstancias es difícil que los equipos puedan conseguir los mejores resultados en las metas propuestas.

Los tres factores expuestos aquí son de importancia fundamental para el desarrollo de equipos de alto rendimiento. Para realizar un diagnóstico de un equipo según este modelo, uno debe observar su actuación y determinar posteriormente en cuál o en cuáles de estos tres factores se debe intervenir con el fin de mejorar su desempeño. Por otra parte, si el equipo está en gestación, este modelo permite fijar las directrices para desarrollarlo haciendo énfasis en los factores más críticos que deben considerarse en su desempeño.

EL MODELO 3PY 3C

Este modelo considera los seis factores clave que determinan la productividad y el desempeño de los equipos de trabajo. Estos factores son los siguientes:

1. El propósito
2. El proceso
3. La participación
4. La confianza
5. La comunicación
6. El compromiso

El *propósito* implica tener definidas claramente las metas y los objetivos y es un factor fundamental para la

operación efectiva de un equipo de trabajo. El propósito le brinda al equipo identidad pues le permite diferenciarse de otros y define la pertenencia. También proporciona orientación, pues le permite conocer hacia dónde se dirige y lo mantiene enfocado en ciertas metas críticas, evitando que se desvíe considerablemente de su curso. Sin un propósito claro el equipo básicamente no existe.

Por consiguiente, cuando al formar un equipo o cuando busquemos aumentar la productividad de uno existente, es fundamental tener muy definido el propósito o determinar si este es bien claro, antes de considerar cualquier otro factor.

El *proceso* significa tener procedimientos bien definidos para tomar decisiones, resolver problemas y cumplir con las tareas asignadas. Con un proceso bien definido el equipo puede cumplir sus metas, tomar decisiones acertadas, planificar y organizar bien el trabajo y resolver sistemáticamente sus problemas. Un proceso claro brinda orden y consistencia.

Al observar un equipo o al formar uno nuevo, debe prestarse atención a los procesos de trabajo, pues no sólo se requiere tener bien definidas las metas y los objetivos sino también tener bien clara la forma de lograrlas.

La *participación* permite utilizar las habilidades y capacidades individuales para ayudar al equipo a tener éxito. Mediante la participación, el equipo se beneficia de los talentos y habilidades de todos sus miembros, se valoran las diferencias individuales apreciando la forma en que cada uno, de acuerdo con sus preferencias, puede contribuir al logro de los objetivos,

se alienta la contribución de cada uno para lograr cumplir con el propósito.

Debe tenerse en cuenta que cada persona opera en un mundo diferente al de los demás y que la contribución de cada uno es valiosa en cada momento. Se debe evitar el monopolio de la participación, evitando que aquellos que no tienen altos grados de extroversión, no puedan participar y realizar sus aportes valiosos.

Es necesario observar la operación de un equipo y determinar qué tan bien se comportan sus líderes en la promoción de la mejor participación de sus miembros.

La *confianza* nos permite contar con seguridad con los demás en el cumplimiento de las responsabilidades individuales. Implica conocer las habilidades y destrezas de cada uno para poderlas utilizar al máximo en el momento oportuno.

Un alto nivel de confianza permite que un equipo pueda asumir riesgos, pueda animarse a probar nuevas ideas y tome mayor iniciativa en las actividades que se requieren para llevar a feliz término el propósito.

Este es un factor importante que debe observarse si se cumple en un equipo ya establecido o que debe desarrollarse en uno del cual se espere un alto desempeño.

La comunicación es la facilidad con que los miembros pueden expresarse clara y honestamente con los demás, sin la presencia o el temor por agen-

das escondidas, sin pensar que lo que dicen puede utilizarse en su contra.

La comunicación estimula la cooperación mutua, promueve el mejoramiento permanente y ayuda a prevenir y a resolver conflictos.

Debe observarse qué tan adecuada es la comunicación en un equipo y tomar las medidas para mejorarla.

El *compromiso* es el deseo de aceptar responsabilidades y de llevarlas a cabo oportunamente.

Mediante el compromiso se desarrolla la credibilidad en el equipo y en sus metas, ayuda a estimular el sentimiento de que el equipo es el dueño de una situación, solución o sistema y contribuye a su sentido de identidad.

El compromiso se debe observar en los miembros de un equipo dado, determinar si su nivel es adecuado y tomar las medidas para elevarlo en el caso que sea necesario.

CONCLUSIONES

En este artículo se han presentado tres modelos para el diagnóstico y desarrollo de los equipos de trabajo. Cada uno de ellos considera los factores que influyen en su productividad y desempeño.

Se requiere observar por algún tiempo la operación del equipo y tomar las medidas para mejorar sus desempeño. Es necesario tener en cuenta alguno de estos modelos cuando se trate de conformar equipos, o cuando se requiera mejorar el desempeño de los existentes.

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LA CONVENCIÓN DE LAS NACIONES UNIDAS SOBRE LOS CONTRATOS DE COMPRAVENTA INTERNACIONAL DE MERCADERÍAS

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SUMMARY

The most important treaty regarding foreign commerce came into force in Colombia since 1st august 2002. From that moment, the contracts of international sales of goods related to place of business located in Colombian territory become regulated by the Viena Convention of 1980, which implies the need of knowing, examining and analyze its scope of application, its regulatory particularities, its influence, reach, possibilities, advantages and effects. The following text initiates the reader in these matters from a legal point of view and in a easy understanding language.

KEY WORDS

Viena Convention of 1980, international, contract, sales, place of business, offer, acceptance, deliver, price, fundamental breach of contract.

RESUMEN

El convenio internacional más importante en asuntos de comercio exterior entró en vigor en Colombia a partir del 1º de agosto de 2002. Desde ese momento los contratos de compraventas internacionales de mercaderías vinculados a establecimientos localizados en territorio colombiano se rigen por la Convención de Viena de 1980, lo cual impone la necesidad de conocer, examinar y analizar su ám-

bito de aplicación, sus particularidades regulatorias, su influjo, alcance, posibilidades, ventajas y efectos. El presente artículo introduce al lector en estos aspectos bajo una perspectiva jurídica y en un lenguaje de fácil comprensión.

PALABRAS CLAVES

Convención de Viena de 1980, internacional, contrato, compraventa, establecimiento, oferta, aceptación, entrega, precio, incumplimiento esencial.

Clasificación: C

I. NOTAS INTRODUCTORIAS

Veintidós años después de su celebración, Colombia adhirió a la Convención de las Naciones Unidas sobre los contratos de compraventa internacional de mercaderías.

Este acontecimiento es de tal significación en el mundo jurídico y de los negocios, que las normas civiles y comerciales que usualmente regulan los contratos de compraventa dejan de regir cuando ese contrato es internacional, aplicándose en su lugar la Convención, a menos que en dicho contrato se acuerde su inaplicación.

Por ello, en primera instancia, se pondrá una visión global del proceso de integración de la Convención al ordenamiento jurídico colombiano y, en segundo término, se abordará la Convención, desde sus antecedentes hasta resaltar algunos aspectos de su texto, tales como su ámbito de aplicación, su carácter internacional y uniformizador, la formación del contrato de compraventa, donde se conjugan las ofertas, las aceptaciones y las contraofertas, el contenido obligatorio sinalagmático y las particularidades del incumplimiento contractual y sus efectos.

II. LA INTEGRACIÓN DE LA CONVENCIÓN AL DERECHO COLOMBIANO

En el Congreso de la República entre 1995 y 1999 se surtió el proceso que culminó con la expedición de la Ley

518 del 4 de agosto de 1999 aprobatoria de la Convención de las Naciones Unidas sobre los contratos de compraventa internacional de mercaderías.¹

Posteriormente, de conformidad con el trámite correspondiente, la Corte Constitucional declaró la exequibilidad de la Convención y de su ley aprobatoria.²

Finalmente, el Gobierno Nacional expidió el decreto 2826 del 21 de diciembre de 2001, por medio del cual se promulgó la Convención, determinando que su entrada en vigencia para Colombia se iniciaba el 1º de agosto de 2002; vale decir, que a partir de esa fecha ella se integró al Derecho interno colombiano.

III. LINEAMIENTOS GENERALES ACERCA DE LA CONVENCIÓN DE LAS NACIONES UNIDAS SOBRE LOS CONTRATOS DE COMPRAVENTA INTERNACIONAL DE MERCADERÍAS

A. Antecedentes

La Convención tiene su origen remoto en la gestión inicial del Instituto Internacional para la Unificación del Derecho Privado (UNIDROIT). Así mismo, en las convenciones de La Haya de 1964 relativas a una ley uniforme sobre la formación de contratos para la venta internacional de mercaderías y a una ley uniforme sobre la venta internacional de mercaderías.

1. En relación con el proceso de aprobación de la Convención en Colombia, Vid. Cabrera Orjuela, María Clara & Galán Barrera, Diego Ricardo. *Comentarios a la Ley 518 del 4 de agosto de 1999, aprobatoria de la Convención de las Naciones Unidas sobre los contratos de compraventa internacional de mercaderías.* (<http://www.cisg.law.pace.edu/cisg/biblio/cabrera-galan.html>)

2. Sentencia C-529/2000 de fecha 10 de mayo de 2000.

En 1978 la Comisión de las Naciones Unidas sobre el Derecho Mercantil Internacional (Cnudmi o Uncitral)³ completó la revisión de dos proyectos elaborados por los juristas más destacados del planeta y los fundió en el proyecto de Convención sobre contratos de compraventa internacional de mercaderías. A su turno, la Asamblea General de las Naciones Unidas convocó en Viena una conferencia diplomática para estudiarlo. El proyecto fue examinado durante cinco semanas por más de sesenta naciones e importantes organizaciones internacionales, las cuales el 11 de abril de 1980 le impartieron por unanimidad su aceptación.⁴

La Convención fue redactada en las seis lenguas oficiales de la ONU⁵ y a la fecha la han ratificado o adherido sesenta y dos Estados.

B. Estructura

La Convención consta de un preámbulo y cuatro partes, algunas subdivididas en capítulos, los cuales a su vez se encuentran en algunos casos subdivididos en secciones, agrupando en su conjunto un total de 101 artículos.

C. Contenido

1. *Ámbito de aplicación y disposiciones generales*

a) *Ámbito temporal de aplicación*

La Convención, no obstante haber sido firmada el 11 de abril de 1980, solamente vino a entrar en vigor internacionalmente a partir del 1o. de enero de 1988. En relación con Colombia, que se adhirió con posterioridad, su vigencia comenzó a partir del 1o. de agosto de 2002.

b) *Ámbito espacial de aplicación*

La Convención condiciona su aplicación a que los establecimientos de las partes se encuentren localizados en estados diferentes. Si esos estados son contratantes, la aplicación será directa. Si uno de tales estados no es contratante o, incluso, ambos no son contratantes, pero en virtud de las normas de Derecho internacional privado que correspondan se remite a la ley de un Estado contratante se aplicará indirectamente la Convención.⁷

c) *Ámbito material de aplicación*

El "...*ámbito objetivo o material de aplicación...*"⁸ de la Convención lo configuran los contratos de compraventa de mercaderías, a pesar de que en ella no se definen los términos compraventa ni mercaderías.

Tal indeterminación permitiría asimilar a compraventa una variedad de negocios jurídicos de índole internacional, tales como los contratos llave en mano o el leasing internacional.

3. United Nations Commission for International Trade Law.

4. Vid. Honnold, op. cit., p. 78.

5. Árabe, chino, inglés, francés, ruso y español.

6. Vid. Galán Barrera, Diego Ricardo. *El ámbito de aplicación en la convención de las Naciones Unidas sobre los contratos de compraventa internacional de mercaderías*. En: Revista Jurídica del Perú, Año LII, No. 40, noviembre 2002, Trujillo, Editora Normas Legales S.A.C., p. LIX.

7. Ibid, p. LXII.

8. Vid. Fernández de la Gándara, Luis & Calvo Caravaca, Alfonso-Luis. *Derecho Mercantil Internacional*, Madrid: Tecnos, 1995, p. 566. Vid. Galán Barrera, op. cit., p. LXIX.

La Convención igualmente prevé que los contratos de suministro de mercaderías que hayan de ser manufacturadas o producidas se considerarán como contratos de compraventa,⁹ lo mismo que los contratos mixtos en los que la parte principal de las obligaciones de la parte que proporciona las mercaderías no radique en suministrar mano de obra o prestar otros servicios.¹⁰

d) *Internacionalidad de las compraventas*

La Convención solamente se aplica a contratos de compraventa que estén vinculados a transacciones de carácter internacional. Las transacciones internas se encuentran excluidas de su regulación.

Para ello la Convención decidió adoptar un criterio objetivo al señalar que el carácter internacional de la transacción lo determina, con exclusividad, el hecho de que los establecimientos de las partes, comprador y vendedor, se encuentren localizados en diferentes estados,¹¹ sin que la nacionalidad¹² de los contratantes o la del mismo contrato influya en esa calificación.

Es irrelevante, para los efectos de aplicación de la Convención, que el

carácter del contrato, o el carácter de las propias partes, sea civil o comercial.¹³

e) *Noción de establecimiento*

A pesar de que la Convención tampoco define el concepto de establecimiento,¹⁴ según criterio unánime de la doctrina, se afirma que por él se entiende el lugar permanente y habitual donde el contratante desarrolla sus negocios.¹⁵ No se considera como establecimiento la residencia temporal de un contratante durante el tiempo en el cual se verifique la negociación.

Ahora bien, ante la presencia de establecimientos múltiples, la Convención establece que se tendrá por tal el que guarde la relación más estrecha con el contrato y su cumplimiento, habida cuenta de las circunstancias conocidas o previstas por las partes en cualquier momento antes o en el momento de la celebración del contrato.¹⁶

Los establecimientos de las partes, en todo caso, como ya se expresó, deben estar localizados en Estados distintos, circunstancia de la cual aquéllas deben ser conscientes, ya sea porque ello se derive del contrato, o de los tratos habidos entre ellas, o de cual-

9. Artículo 3 numeral 1 de la Convención.

10. Según se desprende del artículo 3 numeral 2 de la Convención.

11. Artículo 1 numeral 1 de la Convención. Vid. Galán Barrera, op. cit., pág. LXII.

12. Artículo 1 numeral 3 de la Convención.

13. Artículo 1 numeral 3 de la Convención.

14. Vid. Garro, Alejandro Miguel & Zuppi, Alberto Luis. *Compraventa Internacional de Mercaderías. Convención de Viena de 1980*, Buenos Aires: La Rocca, 1990, p. 88-89.

15. Vid. Honnold, op. cit., p. 103. El autor lo define como "...un lugar permanente y regular para tramitar negocios generales...".

16. Artículo 10 de la Convención.

quier tipo de información que se hayan revelado en cualquier instante previo a la celebración del contrato o incluso en el mismo momento de su celebración.¹⁷

Finalmente, para que se aplique directamente la Convención, los estados en donde se encuentren ubicados los establecimientos de las partes deben ser Contratantes¹⁸ o que encontrándose dichos establecimientos en estados no contratantes, las normas de Derecho Internacional Privado prevean que se aplique la ley de un estado contratante.¹⁹

f) *Reserva en su aplicación*

Al momento de firmarla, ratificarla, aceptarla, aprobarla o de adherirse a ella, los estados contratantes pueden reservarse la aplicación de la Convención en su parte II (Formación del Contrato) o en su parte III (Compra-venta de Mercaderías).²⁰ En el mismo sentido, los Estados plurilegislativos pueden hacer la salvedad de aplicación de la misma a una o varias de sus unidades territoriales²¹ así como los que participen de una codificación regional que regule idénticas materias.²²

También, según lo dispone el artículo 95, es permitido a los estados formular una reserva en relación con el contenido del artículo 1 numeral 1 letra b) sobre la aplicación indirecta de la Convención.

g) *Carácter dispositivo*

La Convención tiene carácter dispositivo, o sea que ella puede dejar de aplicarse de manera total o parcial si las partes del respectivo contrato internacional así lo estipulan o si los usos que ellas empleen tienen un alcance normativo distinto de lo previsto en la propia Convención.

h) *Asuntos a los que no se aplica la Convención*

1. Compraventas a consumidores.
2. Compraventas en subastas o judiciales.
3. Compraventas por razón de la naturaleza del objeto del contrato.
4. Compraventas de valores mobiliarios, título, dinero, buques y aeronaves.
5. Los contratos de suministro de mercaderías que han de ser manufacturadas o producidas, en los que la parte que las encarga asume la obligación de proporcionar una parte sustancial de los materiales necesarios para esa manufactura o producción.
6. Los contratos en los que la parte principal de las obligaciones de la parte que proporciona las mercaderías consiste en sumi-

17. Artículo 1 numeral 2 de la Convención.

18. Letra a) del numeral 1º del artículo 1 de la Convención. *Vid.* Galán Barrera, op. cit., pág. LXXIII.

19. Letra b) del numeral 1º del artículo 1 de la Convención. *Vid.* Galán Barrera, op. cit., pág. LXXIV.

20. Artículo 92 de la Convención.

21. Artículo 93 de la Convención.

22. Artículo 94 de la Convención.

nistrar mano de obra o prestar otros servicios.

7. La responsabilidad del vendedor por la muerte o lesiones corporales causadas a una persona por las mercaderías vendidas.
8. La validez del contrato ni la de ninguna de sus estipulaciones ni la de cualquier uso ni los efectos que el contrato pueda producir sobre la propiedad de las mercaderías, salvo disposición expresa en contrario de la Convención.

i) *Principios de interpretación de sus normas*

Para la interpretación de la Convención “...se tendrán en cuenta su carácter internacional y la necesidad de promover la uniformidad en su aplicación y de asegurar la observancia de la buena fe en el comercio internacional...”²³

En cuanto hace al cubrimiento e integración de las lagunas de su texto, la Convención dispone²⁴ que tales cuestiones “...se dirimirán de conformidad con los principios generales...” en los que ella se basa, aspecto respecto del cual la doctrina internacional y los laudos arbitrales internacio-

nales se han encargado de analizar con suficiencia.

El artículo 8 de la Convención establece algunas disposiciones relativas a las declaraciones y otros actos de las partes, en cuanto que deben interpretarse, en primer término, de conformidad con su intención²⁵ o, de no ser ello posible, “...conforme al sentido que les habría dado una persona razonable de la misma condición que la otra parte...”²⁶

2. **Formación del contrato**²⁷

La Convención aborda este tema en la Parte II artículos 14 a 24, regulando lo concerniente a la oferta, la aceptación y al perfeccionamiento del contrato.

a) *La oferta*

Es la propuesta²⁸ de celebrar un contrato, dirigida a una o varias personas determinadas, en la medida en que sea suficientemente precisa e indique la intención del oferente de quedar obligado en caso de aceptación. Una propuesta será suficientemente precisa si indica las mercaderías y, expresa o tácitamente, señala el precio o prevé un medio para determinarlos.²⁹ Así pues, se distinguen los elementos siguientes:

23. Artículo 7 numeral 1 de la Convención.

24. Artículo 7 numeral 2 de la Convención.

25. Artículo 8 numeral 1 de la Convención.

26. Artículo 8 numeral 2 de la Convención.

27. En relación con el tema de la formación del contrato vid. Perales Viscasillas, María del Pilar. *La Formación del Contrato en la compraventa internacional de mercaderías*, Valencia: Tirant lo Blanch, 1996.

28. En el Derecho comercial colombiano (artículo 845 del Código de Comercio) propuesta y oferta son expresiones sinónimas. En la Convención de Viena de 1980, ellas se diferencian claramente, toda vez que una propuesta puede o no llegar a ser una oferta, en la medida en que reúna los requisitos correspondientes.

29. Artículo 14 numeral 1 de la Convención.

1. La determinación del sujeto o sujetos a los cuales se dirige.
2. La precisión de la oferta.
3. La intención del oferente de quedar vinculado si existe aceptación.

La Convención prevé el principio de revocabilidad de la oferta, en sentido contrario a como acontece en Colombia.³⁰ En tal virtud, la oferta puede ser revocada con anterioridad al momento en que se perfeccione el contrato, es decir, cuando la indicación de la aceptación llega al oferente.³¹

La Convención consagra una serie de excepciones en relación con la irrevocabilidad de la oferta:

1. La oferta será irrevocable si tiene un plazo fijo para su aceptación.³²
2. Existe irrevocabilidad en el evento en que el destinatario de la oferta considere que esta es irrevocable y que ha actuado basándose en ella.³³

b. *La aceptación*

Es la manifestación de voluntad que perfecciona el contrato,³⁴ exigiéndose los siguientes elementos:

1. Declaración o acto del destinatario.
2. Cumplimiento del plazo para manifestar la aceptación.

c) *El perfeccionamiento del contrato*

El contrato se perfecciona cuando el oferente efectivamente recibe la aceptación de la oferta, excepto si en virtud de los términos de la oferta o de las prácticas que las partes hayan establecido entre ellas, el destinatario de la oferta la ha aceptado al momento en que realiza actos ejecutorios del mismo.

3. *Obligaciones de las partes*

a) *Obligaciones del vendedor*

Las principales obligaciones del vendedor se encuentran consagradas en el Capítulo II de la Parte III de la Convención, en los artículos 30 a 44.

Según lo previsto en el artículo 30 de la Convención, las principales obligaciones del vendedor son entregar las mercancías, transmitir su propiedad y entregar los documentos.

1. Obligación de entregar las mercancías.

Esta obligación hace referencia a que el vendedor debe poner las mercaderías a disposición del comprador o del transportador, según sea el caso.

Para que dicha entrega surta efectos es necesario que se realice dentro de ciertas circunstancias de lugar y tiempo, así:

a) *Circunstancias de lugar*

La regla general reza que se deben "...poner las mercaderías a disposición del comprador en el lugar donde

30. El artículo 846 del Código de Comercio destaca la irrevocabilidad de la oferta o propuesta.

31. Artículo 23 de la Convención.

32. Artículo 16 numeral 2 letra a) de la Convención. *Vid.* Garro & Zuppi, op. cit., p. 104.

33. Artículo 16 numeral 2 letra a) de la Convención.

34. Artículo 18 de la Convención.

*el vendedor tenga su establecimiento en el momento de la celebración del contrato...*³⁵

Para los casos particulares de entrega, la Convención establece:

1. En el caso de mercancías que tienen que ser transportadas, estas deben entregarse al primer porteador.³⁶
2. Para las mercancías indeterminadas, de un género determinado o de una cosa futura, el lugar de entrega será aquél en donde dichas mercancías serán especificadas, manufacturadas o producidas.³⁷

b) *Circunstancias de tiempo*

La obligación de entrega de la mercancía se puede producir en los siguientes momentos:

1. En una fecha determinada establecida por las partes.
2. Dentro de un plazo expreso.
3. Dentro de un plazo tácito.

La consagración del concepto subjetivo del plazo razonable³⁸ cuando se trata del plazo tácito, le otorga a las partes una herramienta flexible para el cumplimiento de sus obligaciones haciendo posible que se produzcan plazos de entrega breves y rigurosos en relación con ciertas mercaderías como lo serían los productos perece-

deros o las materias primas, y estableciendo plazos mucho más amplios para los productos manufacturados.³⁹

2. Obligaciones adicionales en la entrega.

El artículo 32 de la Convención consagra unas obligaciones adicionales en la entrega, que son:

- a) Especificación de mercaderías por parte del vendedor.
- b) Envío de aviso de expedición al comprador.
- c) Realización de los contratos de transporte necesarios cuando la mercancía deba ser trasladada, poniéndolas en manos del porteador.
- d) Entrega de documentos.
- e) Contratar un seguro de transporte, si a ello estuviere obligado, o, para efectos de la contratación de ese seguro por parte del comprador, proporcionar toda la información de que disponga.

3. Transmitir la propiedad de las mercancías.

El artículo 30 de la Convención le impone al vendedor la obligación de transmitir la propiedad de la cosa y en el artículo 35 le asigna la obligación de entregar la mercancía de conformidad⁴⁰ con la calidad y cantidad

35. Artículo 31 letra c) de la Convención.

36. Artículo 31 letra a) de la Convención.

37. *Vid.* Garro & Zuppi, op. cit., p. 148.

38. Artículo 33 letra c) de la Convención.

39. Garro & Zuppi, op. cit., p. 152.

40. *Vid.* Morales Moreno, Antonio Manuel. *Comentario al artículo 35 de la Convención de Viena* En: Díez-Picazo y Ponce de León, Luis. *La Compraventa Internacional de Mercaderías. Comentario de la Convención de Viena*. Madrid: Civitas, 1998, p. 287, quien señala que "...La conformidad consiste en la adecuación material de las mercaderías con las que el vendedor pretende cumplir a las exigencias del contrato y de la propia Convención...".

pactada en el contrato y que, de igual manera, el transporte de la misma se haga en la forma especificada.

La conformidad a que se refiere el citado artículo no es exclusivamente material sino que también tiene que haber una conformidad jurídica.

a) *Conformidad material*⁴¹

Esta es la más evidente de todas por cuanto se vincula con el estado físico y real de la cosa. En este punto es necesario diferenciar dos tipos de incumplimiento en la entrega de la mercancía:

1. Defectos en la entrega, o sea cuando se trate de una entrega parcial.⁴²
2. Vicios de la cosa entregada, vale decir los vicios ocultos de las mercaderías.⁴³

b) *Conformidad jurídica*

Hace referencia a que la mercancía no se encuentre subordinada al ejercicio de derechos por parte de terceros, a menos que medie autorización y voluntad del comprador para aceptarla con esas restricciones. Por lo tanto, al vendedor se le exige el saneamiento de la evicción que se llegare a presentar.

Así mismo, la Convención establece obligaciones relacionadas con los derechos de autor y copyright,⁴⁴ en

cuanto que el vendedor se compromete a entregar las mercancías libres de todo derecho o pretensión de terceros a ese respecto.

4. Transmisión del riesgo.

Los artículos 66 a 70 de la Convención se ocupan de la transmisión del riesgo⁴⁵ del vendedor al comprador.

De esta forma el articulado prevé que en el caso en que las mercaderías se deterioren o se pierdan una vez transmitido el riesgo por el vendedor, este hecho no libera al comprador de su obligación de pagar el precio a menos que la pérdida o deterioro mencionado se deba a un acto o a una omisión del vendedor.⁴⁶

De igual forma, si el contrato involucra el transporte de las mercaderías y no existe obligación expresa del vendedor de entregar dichas mercaderías en un lugar específico, se entiende que el vendedor cumplió con la obligación de entrega en el momento en que pone en poder del primer porteador las mercaderías.⁴⁷

En el caso de las mercaderías en tránsito, el riesgo se encuentra radicado en cabeza del comprador desde el momento de la celebración del contrato, pero puede establecerse de las circunstancias que el riesgo sea también asumido por él desde el momento en que las mercaderías hayan sido

41. *Ibidem*, p. 289-295.

42. Artículo 51 de la Convención.

43. Artículo 35 de la Convención.

44. Artículo 42 numeral 1) de la Convención.

45. *Vid.* Sierralta Ríos & Olavo Baptista, *op. cit.*, p. 119-123.

46. Artículo 66 de la Convención.

47. Artículo 67 numeral 1 de la Convención.

puestas en poder del porteador que haya expedido los documentos que acreditan el transporte.⁴⁸

5. Entregar los documentos.

La obligación de entrega de documentos se encuentra establecida en los artículos 30 y 34 de la Convención, correspondiendo a una obligación adicional de carácter especial del vendedor toda vez que debe hacerse entrega de los documentos cuando éstos acompañen las mercaderías.

b) *Obligaciones del comprador*

1. Pagar el precio.

Esta obligación se encuentra consagrada en el artículo 53 de la Convención, determinando que el comprador está obligado a pagar el precio en el lugar y en el tiempo estipulados. Es evidente que el precio debe estar definido para poder cumplir con esta obligación pero se presentan casos en que el precio no se encuentra claramente establecido.

En este punto la Convención tuvo que conciliar dos posiciones contradictorias en cuanto a que en múltiples ordenamientos jurídicos, como el caso de los países socialistas o los de tradición jurídico neorromanista es necesario la certeza en el precio para que exista contrato. En el ordenamiento jurídico de la extracción del Common Law⁴⁹ la indeterminación

del precio no afecta la validez del contrato.

Por lo tanto, la Convención admite la validez de los esquemas de contrato con precio indeterminado pero a su vez establece un sistema para determinarlo.⁵⁰ Es importante tener en cuenta que la Convención no debe aplicarse en los esquemas donde la ausencia de precio lleva a la invalidez del contrato.

Ahora bien, parece entonces haber una aparente contradicción cuando la Convención en su artículo 14 establece que para que pueda haber una propuesta con aptitud de tornarse en oferta es necesario que exista un precio determinado o determinable, la cual no obstante se resuelve con el texto del artículo 55.⁵¹

El pago del precio, según la Convención, involucra cumplir también con las obligaciones fijadas por las leyes y los reglamentos para poder hacer efectivo dicho pago.

El pago del precio también debe circunscribirse a condiciones de lugar y tiempo, así:

a) *Circunstancias de lugar*

La Convención establece que el lugar del pago será el establecimiento del vendedor en el caso en que no medie estipulación en contrario o en el lugar donde se entregue la mercancía

48. Artículo 68 de la Convención.

49. Vale decir el Código de Comercio Uniforme de Estados Unidos, la Ley de Ventas Inglesa, la Ley Uniforme de Ventas de los Países Escandinavos.

50. Artículo 55 de la Convención: "...Cuando el contrato haya sido válidamente celebrado pero en él ni expresa ni tácitamente se haya señalado el precio o estipulado un medio para determinarlo, se considerará, salvo indicación en contrario, que las partes han hecho referencia implícitamente al precio generalmente cobrado en el momento de la celebración del contrato por tales mercaderías, vendidas en circunstancias semejantes, en el tráfico mercantil de que se trate..."

51. Vid. Honnold, op. cit., p. 186-188.

en el caso en que dicha compraventa sea contraentrega de las mercaderías o de documentos.⁵²

b) *Circunstancias de tiempo*

El momento en que el pago debe hacerse es cuando el vendedor ponga la cosa o los documentos representativos a disposición del comprador sin que medie requerimiento de ninguna clase por su parte.⁵³

2. Examinar las mercaderías.

El comprador debe examinar, o hacer examinar por un tercero, la mercancía en el plazo más corto posible en relación con las circunstancias.⁵⁴

3. Comunicar la evicción.

Es obligación del comprador notificar al vendedor la existencia de derechos o pretensiones de terceros sobre las mercaderías en un plazo razonable.

En el evento en que el comprador no adelante esta acción, puede perder los derechos otorgados en los artículos 41 y 42 de la Convención relacionados con la responsabilidad del vendedor sobre la evicción y en especial la protección de los derechos de propiedad industrial.

El comprador está exento de esta obligación en el caso en que el vendedor hubiese conocido el derecho o la pretensión del tercero.⁵⁵

4. *Incumplimiento del contrato y sus efectos*

El incumplimiento del contrato y sus efectos y las sanciones por la inejecución son tratados por los artículos 45 a 52, 61 a 65 y 71 a 88 de la Convención.

a) *El incumplimiento del contrato*

Es importante tener en cuenta que el propósito de la Convención es el de propender al mantenimiento, vigencia y continuidad del contrato y solo en caso excepcional⁵⁶ ocuparse de la resolución de los contratos.

Sin embargo, como no siempre es posible la preservación contractual, resultaba indispensable regular los supuestos de incumplimiento, respecto de lo cual la Convención introdujo el vigoroso concepto del incumplimiento esencial del contrato, derivado de la noción conocida como "*fundamental breach of contract*"⁵⁷ del Common Law que, básicamente, clasifica el incumplimiento del contrato de

52. Esta materia se encuentra regulada en el artículo 57 de la Convención, artículo que presenta problemas en su aplicación por cuanto en algunos países el lugar del pago determina la competencia judicial en caso de litigio.

53. Artículos 58 y 59 de la Convención.

54. Artículo 38 inciso 1º de la Convención.

55. Artículo 43 de la Convención.

56. Vid. Guardiola Sacarrera, Enrique. *La Compraventa Internacional. Importaciones y Exportaciones*. Barcelona: Bosch, Casa Editorial, S.A., 1994. p. 131 y 132. En el mismo sentido, Vid. Heuze, Vincent. *La Vente Internationale de Marchandises. Droit Uniforme*. Paris: GLN Joly Editions, 1992. p. 310. Finalmente, Vid. Garro & Zuppi, op. cit., p. 145, citando a Farnsworth, uno de los delegados por los Estados Unidos de América, cuando se refiere a la tercera línea de la política legislativa de la Convención, denominada 'estabilización' cuyo objetivo es el de "...dotar de continuidad a la relación contractual, esto es, 'salvar' en lo posible el contrato en lugar de fomentar su rescisión...".

57. Vid. Cheshire, Fifoot & Furmston. *Law of Contract*. 12 ed. London: Butterworths, 1991, p. 539-ss. En el mismo sentido, Vid. también, Atiyah, P.S. *The Sale of Goods*, 9 ed. London: Pitman, 1995, p. 303.

acuerdo con el grado de eficacia que puede representar respecto a la continuidad y vigencia del mismo.

En otras palabras, un incumplimiento será esencial en la medida en que frustre definitivamente las expectativas del contratante cumplido. Desde otra perspectiva, un incumplimiento no será esencial si existe alguna alternativa que permita la supervivencia del contrato.⁵⁸

b) *La resolución del contrato*

1. Concepto.

La resolución se entiende como la terminación del acto jurídico por voluntad de una de las partes. La Convención prevé los supuestos en los que es posible declarar la resolución del contrato de manera somera y taxativa.

La noción de resolución, tal como está consagrada en la Convención, podría decirse que es muy amplia y muy genérica en relación con lo que el concepto quiere significar en los distintos ordenamientos, puesto que ella no es una concepción armónica en todos ellos.

2. Forma de efectuar la resolución del contrato.

De conformidad con el artículo 26 de la Convención, la resolución del contrato se efectúa “...mediante una declaración que se comunica a la otra parte...”,⁵⁹ sin que sea indispensable que medie una declaración judicial. Se aprecia un criterio ágil y pragmático, que se acompasa con las necesidades del comercio de mercaderías,

sin intervención de terceras personas y de procedimientos formalistas que no contribuyen a la resolución expedita y satisfactoria de las controversias.

Si bien la Convención no exige una formalidad particular o exclusiva para llevar a cabo la notificación de la resolución del contrato, vale decir, que consagra libertad de formas para ejecutar este acto, resulta pertinente afirmar que es conveniente que el comprador la efectúe de manera tal que pueda probar que la ha realizado fehacientemente.

3. Causales de resolución del contrato.

a) *Por parte del comprador*

Las siguientes son las causales de resolución del contrato por parte del comprador que se encuentran consagradas en la Convención en el artículo 49 numeral 1o., así:

1. Incumplimiento esencial del contrato por parte del vendedor.
2. Falta de entrega dentro del plazo suplementario.

b) *Por parte del vendedor*

Las siguientes son las causales de resolución del contrato por parte del vendedor:

1. Incumplimiento esencial del contrato por parte del comprador.
2. Incumplimiento tardío del comprador.
3. Incumplimiento dentro de un plazo razonable.

58. *Vid.* Garro & Zuppi, op. cit. p. 134-135.

59. *Vid.* Honnold, op. cit., p. 303.

El incumplimiento distinto del incumplimiento tardío dentro de un plazo razonable se presenta en los siguientes casos: (i) Después de que el vendedor haya tenido o debiera haber tenido conocimiento del incumplimiento, o (ii) Después del vencimiento del plazo suplementario fijado por el vendedor o después de que el comprador haya declarado que no cumplirá sus obligaciones dentro del plazo suplementario.

La Convención prevé, en caso de que se presente el incumplimiento de las obligaciones del contrato por parte del comprador, que el vendedor cuente con las siguientes acciones: (i) Exigir que el comprador pague el precio, que reciba las mercaderías o que cumpla con las obligaciones relacionadas con el contrato, y (ii) Establecer un plazo suplementario razonable para que el comprador pueda cumplir con las obligaciones derivadas del contrato. Es importante resaltar que el vendedor conserva en todo momento el derecho a exigir indemnización de daños y perjuicios por mora en el cumplimiento del contrato aun durante el plazo adicional que haya concedido al comprador.

4. Efectos de la resolución del contrato.

Los siguientes son los efectos previstos por la Convención frente a la resolución del contrato:

1. Liberación a las dos partes de sus obligaciones.

2. Restitución de lo suministrado.

3. Restitución de las mercaderías.

c) *Indemnización por daños y perjuicios*

La sección II del capítulo V de la parte III de la Convención regula lo relacionado con la indemnización por daños y perjuicios, como consecuencia del incumplimiento del contrato por alguno de los contratantes.

El artículo 74 de la Convención consagra una disposición general sobre el monto indemnizable, que se dobla entre el valor de la pérdida sufrida y el valor de la ganancia dejada de obtener por la otra parte. Estos términos textuales que parecen obedecer a los conceptos de daño emergente y lucro cesante no necesariamente tienen su significado y alcance.⁶⁰

La Convención trae previsiones que parten del hecho de la resolución del contrato, limitando el concepto indemnizatorio a la diferencia que exista entre el precio del contrato y el precio de la operación de reemplazo,⁶¹ cuando alguna de las partes haya utilizado esa específica opción o a la diferencia entre el precio del contrato y el precio corriente en el momento de la resolución, cuando no haya sido posible la operación de reemplazo,⁶² quedando a salvo, en ambas circunstancias, la posibilidad de obtener otros daños y perjuicios de conformidad con lo ordenado por el artículo 74.

60. *Vid.* Garro & Zuppi, op. cit., p. 207-208.

61. Artículo 75 de la Convención.

62. Artículo 76 de la Convención.

Se estatuye una obligación para la parte que invoca el incumplimiento, en el sentido de "...adoptar las medidas que sean razonables, atendidas las circunstancias, para reducir la pérdida, incluido el lucro cesante...", so pena de que se le reduzca de la indemnización el valor "...en que debía haberse reducido la pérdida..."⁶³ Como es apenas obvio, múltiples han sido las controversias surgidas en los distintos ordenamientos al tratar de aprehender esta norma, basada en la equidad y en el principio de comunidad de suerte.

Finalmente, en adición a la norma general sobre indemnización de daños y perjuicios, la Convención trae una previsión⁶⁴ para aquellos casos de sumas adeudadas, incluida la del precio del contrato, en cuanto que la parte acreedora tiene derecho a percibir los intereses correspondientes.

Aunque la Convención no establece el tipo de interés ni un sistema para su cálculo, se ha entendido que tal solución debe buscarse en las respectivas disposiciones del derecho interno o simplemente deferirse al tribunal competente que conozca del asunto.⁶⁵

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UPDATING BELIEFS: ARE ECONOMIC AGENTS INSPIRED BY RATIONAL ACTION OR ACCORDING TO ONES HOPES AND FEARS?

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ABSTRACT

The purpose of this investigation was to simulate a real life scenario and explore the way economic agents update their beliefs. Do they update according to what they hope? Or do they update inspired by rational behavior?

We mimicked the environment which a recently high school graduate faces when entering college to see how a student updates his beliefs in regards

to his classroom position. We examined how economic agents envisage themselves through and through college and see if they update their beliefs about a *hypothesis A* in the light of new evidence *B*, or if they update their beliefs subject to what they choose they hope. In this sense we explored the possibility of setting aside the neoclassical assumption that agents are anything more than hyper rational naïve optimizers acting on

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perfect (and in some cases, limited information) in order to turn back to an older tradition in economic theory, that is agents are recognizably human.

KEYWORDS

Belief formation, rational behavior, rational choice, wishful thinking,

counter wishful thinking, hopes, fears, preference relation, information processing mechanisms: Bayes approach.

Classification: A

JEL classification: C9/C91

1. INTRODUCTION

The purpose of this investigation was to simulate a real life scenario and explore the way economic agents update their beliefs. Do they update according to what they hope? Or do they update inspired by rational behavior?

We mimicked the environment which a recently high school graduate faces when entering college to see how a student updates his beliefs in regards to his classroom position. We examined how economic agents envisage themselves through and through college and see if they update their beliefs about a *hypothesis A* in the light of new evidence *B*, or if they update their beliefs subject to what they choose they hope. In this sense we explored the possibility of setting aside the neoclassical assumption that agents are anything more than hyper rational naïve optimizers acting on perfect (and in some cases, limited information) in order to turn back to an older tradition in economic theory, that is agents are recognizably human.

In other words, we did not attempt to see people as locations of their respective utilities, as spots at which utility is realized. We conceived people with emotions as well as emotional dispositions. For the former, individuals that experience actual episodes of anger, fear, joy and the like, and for the latter, individuals prone to having actual emotions. Men and women with distorted recollection of

past events, and distorted causes of success or failure. And if this is not enough, we are only left with human beings eternally doomed to being human.

2. REVIEW OF THE LITERATURE

Following this brief introduction, we will present some of the related literature in regards to the hypothesis that a vast majority of people that assess their position in a distribution of peers on almost any positive trait, for example driving ability (Ola Svensson, 1981), income prospects (Weinstein, 1980) or marriage success (Baker and Emery, 1993) say they are above average, even though only half can be (if the trait is symmetrically distributed).

Other empirical studies (e.g., James March and Zur Shapira, 1987), show that most business failures are due to entrepreneurs entry mistakes, in other words to the optimistic bias that distorts their inferences and influences their economic behavior entry into markets.¹ They proved the hypothesis that business failure is the result of managers acting on optimism about their relative skill. Others concentrated their efforts on the explanation for high rate business failure (Richard Roll, 1986). Later studies departed from the fact that economic decisions were the result of overconfidence. Others linked these two elements and measured economic decisions and person overconfidence si-

1. There are interesting studies that show the percentage of entrant failure, Timothy Dunne (1988) estimated that 61.5 percent of all entrants exited within ten years, to do so he used plant-level data from the U.S. Census of Manufactures spanning 1963-1982.

multaneously² (Camerer and Lovallo, 1999).

Psychologists have compiled ample evidence that people have biased perceptions, Guthrie, Rachlinski and Wistrich (2001) distributed a questionnaire to 168 federal magistrates' judges as part of the Federal Justice Center's Workshop for Magistrate Judges II in the city of New Orleans. They tested the relationship of the judges' estimates of their ability relative to other judges; they were asked the following question: "if we were to rank all of the magistrate judges currently in this room according to the rate at which their decisions have been overturned during their careers, what would your rate be?" The judges were then asked to place themselves into the quartile corresponding to their respective reversal rates: highest (> 75%), second highest (> 50%), third highest (> 25%), or lowest. The judges' answers were very particular: 56.1% put themselves into the lowest quartile, 31.6% into the second lowest quartile, 7.7% in the second highest quartile and 4.5% in the highest quartile, meaning that nearly 90% thought themselves above average.

Kennedy and Dimick (1987) found that 48% of college athletes in revenue-producing sports expect to play professionally, far in excess of the real figure of 2%.

Another body of extensive literature (Cho, I.-K and D. M Kreps 1987) re-

lated with belief formation is neoclassical decision theory which state that an agent chooses whether or not to undertake an activity either by computing the expected values of that activity or situation, or more generally by computing the expected utility of that situation, where it is assumed that they combine new data with the existing knowledge. In other words, they update their belief about a *hypothesis A* in the light of new evidence *B*. Specifically, their posterior belief $P(A|B)$ is calculated by multiplying the *prior* belief $P(A)$ by the *likelihood* $P(B|A)$ that *B* will occur if *A* is true. The essence of this approach, the Bayesian approach, is that *beliefs must be the best the agent can form, i.e. have the greatest likelihood of being true, given the information available to him* (Jon Elster 2001) in order to characterize an action as rational. It provides a mathematical rule explaining how the agent should change his existing beliefs in the light of new evidence in order to choose the best means of satisfying his desires.

Additionally, neoclassical economic theory agents -especially game theory- (Bicchieri 1999) are assumed to be, as I mentioned before, rational. This assumption includes the hypothesis that agents form rational beliefs, i.e., beliefs are the very best agents can form. Individuals are "gifted" in the sense that their beliefs are embedded by the available information, as well as all kinds of mechanisms to process information.

2. They created two experimental settings with basic features of business and entry situations. Their experiments developed a paradigm: business entry and other skill based competitions can be studied further to determine that the success of entry subjects depends on their relative skill (compared to others entrants).

3. THE ASSUMPTIONS IN THE EXPERIMENT

Even though the literature on overconfidence mentioned previously is based on psychological experiments and surveys showing that individuals overestimate their own abilities or knowledge as well as the precision of their information, the theoretical core supporting this evidence is based on a large body of cognitive disorder theories (Kahneman and Tversky 2001).

We on the other hand will support the evidence obtained in this investigation, not based on the agents' cognitive state but on the importance of the agents' hopes and fears and how they affect him in a way where he might fail to conform to the prescriptions of neoclassical decision theory, were he might fail to form rational beliefs.

This research departs from neoclassical decision theory by incorporating an essential element among players that interact. Under a scenario of strategic interaction a problem of inference and induction arises when players must come to form correct beliefs in the presence of incomplete, inconclusive and distorted evidence about how other players are. There is ample evidence (Bicchieri 1998) that an entire group of people is affected by the performance of every individual within that group because what one does depends on what one believes one is going to do; what one

believes the other is choosing; and what one believes the other believes one is going to do.

As it was mentioned before (Young 1998) there are various studies that demonstrate that human behavior deviates in systematic ways, particularly from the behavior attributed to the expected utility maximizers, and to rational economic man in general. The purpose is to move away from the overdependence on idealized models of hyper-rationality.

In other words, despite the principles of mutual rationality and common knowledge the purpose of the present investigation is to explore the possibility that people form their beliefs not inspired by rational behavior.³

In this sense, various unanswered questions arise. For example, what kind of special being must one be to be miraculously gifted with the capacity to change his existing beliefs in the light of new evidence, and additionally lacks of weakness of the will⁴ when making his decisions, in other words, he is never tempted to fail to his beliefs. What if individuals form beliefs subject to what they choose they hope? In this way, when referring to belief formation we suggest that rational choice theory is not sufficient to explain, imagine and envisage belief formation. However, as I mentioned above, various unanswered questions

3. For a recent discussion on the motivational elements for economic agents acting rationally, See Linda Eriksson, Maximize What: The completeness Assumption and Rational Choice Theory Centre for Basic Research in the Social Sciences, Harvard University, March 2002.

4. According to Jon Elster weakness of the will can be understood as, "acting without regard for the consequences of one's behavior, and acting against one's own better judgment." *Alchemies of the mind: Rationality of the Emotions*, Cambridge University Press 1999.

arise. For example, what if individual's beliefs concerning uncertain events are not expressed in numerical form, as odds or subjective probabilities? Or what if individuals rely on a limited number of heuristic principles which reduce complex tasks of estimating probabilities and predicting values to simpler judgmental operations?

Let us begin by imagining an agent that must decide what to do after graduating from high school, where A represents his set of alternatives. Suppose the alternatives in A are given by the following: {applying for a job, buy an airplane ticket and travel around the world, attend college, lay back and take time off}.

In a preference based approach, the objectives of the agent are summarized in a preference relation. This relation is technically a binary relation on the set of alternatives A , which allows the comparison among alternatives $\{a, b, c, d\} \in A$, where $a =$ *applying for a job*, $b =$ *buying an airplane ticket and traveling around the world*, $c =$ *attending college*, $d =$ *laying back and taking time off*.

However, the comparison among alternatives will stand after each individual envisages himself under each imaginary state of the world. In this sense, an economic agent's imagination is implicitly evaluative when forming his beliefs as it reflects how he sees himself, how he sees others and how he thinks others see him. Therefore, as beliefs are product of the human agent's imagination he is incapable of constructing beliefs he doesn't really believe in.

Let us return to our high school graduate example. If an agent were to de-

fine his preferences between all possible alternatives, for example: $c \geq b$, $a \geq d$ this would take work and serious reflection for the agent to find out his own preferences. He would begin by imagining himself in each of these states, and in the course of action, envisage what it would feel to actually experience them. He would experience his journey creating relationships within the world that surrounds him. However, when a recently high school graduated student forms his beliefs with respect to the set of alternatives, his process of belief formation hasn't just begun. In other words, this process does not precisely initiate immediately after facing his decision. This process begins with every experience he has had of others experience in each of these states of the world he relates to.

In occasions, and without knowing, every relationship he encounters along his life has been inspired by what appears to be others emotions in each of these states of the world. He uses his imagination and conceives what he himself hopes (or fears) he would feel in that specific state of the world in order to form an idea of the way in which others are affected. He uses his imagination, and in the course of action he systematically evaluates himself in an unreasonably optimistic (or pessimistic) way with respect to others experience. In other words, when envisaging himself in other's situation his hopes and fears plausibly and predictably influence the belief he forms of other's sensations in a way that they will seldom correspond to the existing facts or outcomes. When relating to the experiences of others in each of these states of the world, he

is influenced by what he hopes and by what he fears others experiences of grief or joy are all about. The beliefs he has formed about the experiences of others will be conditioned to his hopes and fears.

This recently graduate student doesn't represent his preference relation only on the basis of his experience of others experience, but additionally he nourishes his preference relation upon the beliefs he forms after facing his decision. When wanting to decide what comes next in his life, this high school student will envisage himself given the set of alternatives in A. He pictures himself after graduating from high school under each imaginary state of the world, not to mention the experience he has related to other's experiences. Moreover, his imagination is impregnated of an implicitly evaluative way of forming his beliefs, as it reflects his hopes and fears of how he sees himself, how he sees others and how he thinks others see him.

For example, if a high school student were to conceive what he himself would feel and look like in the following state of the world $c \in A$, where c represents attending college, his imagination could implicitly evaluate this state in accordance with how he hopes (fears) seeing himself *attending college*, how he hopes (fears) seeing others *attending college*; and how he hopes (fears) others see him *attending college*. If this student were to imagine his passage through college as an outstanding student (top

five), this imaginary state could be subject to his hopes with respect to the evaluation of others, not to mention the accumulative experience he also has related to through the experience that others have had in the past in regards to college attendance. On the contrary, if he were to envisage his journey through college as an under average student his beliefs could be subject to his fears.

Additionally, we shall consider his beliefs to be firm beliefs. This means that whenever a student forms a belief, he has made use of his imagination, in other words, he believes firmly in his imaginary state due to his incapability of constructing beliefs he doesn't really believe in.⁵

Continuing with the formation of the imaginary state of our student (where he hopes his journey through college as an outstanding student) he consolidates his formed belief conceiving each imaginary state according to his hopes or fears, for example:

"I am going to be an outstanding student given what I hope about my own relative abilities, in other words what I hope about myself with respect to my classmates' abilities. And, what I hope my classmates' believe about my abilities as well."

In addition, he never forgets the experience he has encountered in the past when relating to the experience of others in this particular state of the world. Therefore, he doesn't nourish his preference relation only on his hopes of others' past experience

5. However, if individual's beliefs concerning uncertain events are expressed in numerical form or subjective probabilities, firm beliefs can be understood as when an agent's subjective probability for believing in X equals to 1. See Bicchieri, *Rationality and Coordination*; Cambridge University Press (March 1997).

(knowing that it seldom corresponds to the existing facts or outcomes of others) but it is also determined by the influence of his hopes (fears) after facing his decision. In the end, the beliefs he has formed about himself in college will be conditioned to his wishful and counter-wishful thinking.

Our recently high school graduated student's imaginary state can be simplified as follows:

A student's imaginary state during any semester is subject to what he hopes of himself; what he hopes of others and what he hopes others hope of him, that is, a student's imaginary state during any semester is given by his beliefs. For example, if a student's imaginary state can be represented by being among the top five in his classroom during his college attendance given his beliefs, and the latter is expressed by what he hopes of himself; then the product of his hopes is to envisage himself as part of the top five in his class.

Additionally, his beliefs are subject to what he hopes of others and what he hopes others hope of him, for the former the student beliefs represent what he hopes of the rest of the class. He hopes that with exception of four more classmates the rest of his classmates are not part of the top five during his college attendance. Nonetheless, the student's beliefs are also subject to what he hopes others hope of him. In this sense, when he envisages himself as part of the top five in his classroom during his college attendance given his belief of what he hopes of the rest of the class it is impossible for him to believe others (except his four companions in the top five list) believe that in comparison

with him, they have higher abilities than him. After all, his beliefs stem from his hopes, and if he should suffer of wishful thinking, he would never believe that in comparison with him, others have higher abilities. Likewise he believes what he hopes others hope of him. He believes what he hopes his classmates believe of him and he hopes they believe what he hopes of himself.

Not only is a student's wishful thinking useful to support his beliefs when mismatching others experience through an imaginary situation he has conceived of others experience when encountering the world he relates to. Moreover, after graduating from high school and facing the decision of what to do, wishful thinking serves to support the way he envisages himself during his journey through college.

The idea that overconfidence will affect how human agents envisage themselves will additionally influence the way he represents his preference relations. Moreover, it will represent an inconvenience when rationalizing his preference relation since it arises from how he hopes he will feel and see himself in each state of the world. He conceives himself subject to (i) his personal experience with others experience in relation to his hopes; (ii) his wishful thinking in comparison with others and with what others believe with respect to him. Therefore, if a student is looking for a rational way out for the decision he faces, most probably he will be disappointed with himself after making his decision due to the influence of his hopes -and fears- when forming his beliefs.

Let us now consider a group of students coming from different types of schools, meaning public and private high school systems and quite different family levels of income who must decide what to do after graduating from high school. Each one of these students faces different alternatives in the sense that they have different options in terms of what to do after graduating. However each student has something in common with one another, they share at least one same alternative: attend college. Besides attending college some of these students will share another common aspect. They can decide to enroll in the same college. The choices each student has are University type A, B or C:

$$\begin{aligned}
 &U_A = f_{U_A}(C_h, P_h, S_m, i_h, r_h) \\
 (1.1) \quad &U_B = f_{U_B}(C_m, P_m, S_l, i_m, r_l) \\
 &U_C = f_{U_C}(C_l, P_l, S_h, i_l, r_m)
 \end{aligned}$$

Where U_A , U_B and U_C denote university A, B and C, c_h , c_m and c_l express a high cost tuition, a medium and a low cost tuition respectively; p_h , p_m and p_l represent high prestige (understood as the university's good will), medium standards, and low levels as well; s_h , s_m and s_l , correspond to high, medium and low academic standards; i_h , i_m and i_l , represent high, medium and low levels of expected income after graduation day and r_h , r_m and r_l , denotes how fast a recently undergraduate is recruited for a specific job, which can fluctuate between high, medium and low.

Since each student has among his alternatives attend college, and each one has his unique hopes, then each one will believe what he hopes of his particular state of the world; that is of his unique college attendance pro-

cess. For this to work, we decided to categorize the universities if we wanted to simulate—in a much more realistic way—the process he eventually could live in the flesh if he decided to attend college. The reason for categorizing universities in types A, B and C had to do with the need for students to transport themselves to that particular state and recreate their hopes with respect to one particular aspect: his relative abilities. According to his hopes, he will form his beliefs and in the process he will end up envisaging his imaginary state of the world.

During the experiment we will simulate the process he eventually could live in the flesh if he decides to attend the university. *The intention is to transport each student to that particular state and recreate his hopes with respect to one particular aspect: his relative abilities. According to his hopes he will form his beliefs and in the process he will end up envisaging his imaginry state of the world.* To do so, we designed two types of experiments.

4. THE SETTING AND CONDITIONS OF THE EXPERIMENT

We conducted the experiment in three different classrooms, one for each type of university. That is, one for each group of students that share not only the desire of going to college, but attending the same school as well. Because of the individual student's preferences, each university did not share an equal amount of students desiring to go to the same university. In this sense, the number of students that choose university A, B and C were 8, 10 and 7 respectively.

After each student was located in his or her classroom, we provided him with a proper identification, that is, a code. Additionally, immediately after he was located in a seat his belief formation process initiated. When entering the classroom he began to imagine what it would be like to share the same career path⁶ through and through with other students. He began to imagine how he sees himself under that scenario.

Each experiment started by giving instructions to each student about what they were required to do. After the instructions were read out loud a comprehension test was handed out to guarantee understanding of the tasks they will have to carry out during each experiment.

After every student was accommodated in his respective classroom (in accordance with his preferences) he was asked privately what position he expected to attain among his classmates. Each time he was asked to assess his position in a distribution of peers we gave him in return the result of his real position among his classmates. Both his expected position and his real result were registered. In addition he was informed that neither university A, B or C request down payments in regards to their tuition fees. In this sense, he was told *“each student will have to pay his debt to tuition fees only after he has finished his ten semesters and the pecuniary incentives for good*

academic performance were calculated and granted (see pecuniary incentives below).”

Before we describe the two types of ranking systems required to determine the way his or her real position is granted, we must refer to the motivational aspect developed for the experiments in order to encourage students in judging their skills accurately. To do so, we devised two a pecuniary incentives.

First, if a student's personal assessment at the beginning of each semester corresponds to the result at the end of his semester, then he will receive a bonus point. At the end of the career, that is, after finishing tenth semester the student that accumulates the highest value of bonus points will receive a reward.⁷ Where, $\beta = 1$ if $\varepsilon_p = r_p$.

Then β represents the bonus point the student receives at the end of each semester, ε_p corresponds to the student's expected rank position given at the beginning of each semester and r_p denotes the students result at the end of the each semester.

The second pecuniary incentive was to offer the student the opportunity to live a closer and meaningful experience. In this sense, we designed real life institutional similarities. Many universities grant full or partial scholarships to students with special qualifications, such as high academ-

6. When entering the classroom each student believes that his classmates share not only his same preferences in terms of attending college and applying to the same school but studying the same career also.
7. We incorporated the monetary element to awake the numb disposition of students to take the experiment seriously. Henceforth, if students forecast accurately their academic performance against their real result they have the opportunity to win a monetary reward. This could be an interesting field to be treated in another investigation: how much are individuals willing to correct their cognitive disorders given monetary incentives?

ic performances. We designed a similar mechanism. At the end of each semester, students that occupy first class rank position will be granted, in some cases full scholarships and in other cases, partial scholarships. Tables 1 to 6 show the percentage discounts and the percentage payments that were used to grant the pecuniary incentives used to calculate the debt related tuition fees at the end of a student's passage through college.

We conducted two types of experiments: a) A randomized experiment, and b) A skill-based experiment. Before we describe how to calculate each student's corresponding punctuation first we will describe the two types of experiments and so the two different ranking systems required determining the way his or her real position is granted.

4.1. Randomized experiment

The result that each student receives arises from a chance device: a random process. We placed in a bag the quantity of marbles indicating the position any student can occupy in the class. The quantities of marbles in each bag must correspond to the number of students appertaining to universities type A, B or C. However, what does this marble represent? How many times have you heard a story of a student that had an outstanding academic performance but for some good or not so good reason—probably falling in love—flunks the semester? His academic performance didn't depend on his academic abilities only. The marble repre-

sents fate: the fact that in many occasions life can catch you off the beam. For this reason we designed the randomized experiment with the intention to incorporate fate in these students imaginary world. Adding fate to each student's state of mind will not limit his imagination because when all is said and done, how many of us include the possibility of falling in love, but believe what we hope (or fear) love can do to us. We never imagine, or on the contrary imagine too much of what it can do to us. With the randomized experiment we explore if a student takes into account, or not these possible pitfalls and surprises to reassess his position in the classroom through and through each semester.

We assigned each rank position, that is, each marble a percentage discount and a percentage payment. For example, a student who withdraws from the bag the position number one will occupy first place among his classmates and is assigned a percentage discount of 100% and a percentage payment of cero. In other words, the university will condone the totality of the debt if and only if he occupies first place. If,

$$(1.2) \quad P = (\%D) - (\%P)$$

Where P represents the punctuation of each student; $\%D$ expresses the institutional percentage discount each university stipulates according to its criterion⁸ and given the students rank position and $\%P$ denotes the percentage payment each university stipulates according to its judgments and the position the student occupies.

8. We assumed all three universities granted the same percentage discounts and percentage payments according to the students position rank.

Table 1, 2 and 3 summarize the scale punctuation for universities A, B and C.

Table 1: Scale Punctuation Randomized Experiment University A

Rank position	Percentage disscount	Percentage payment	Punctuation
1	100	0	100
2	80	20	60
3	70	30	40
4	60	40	20
5	40	60	-20
6	30	70	-40
7	20	80	-60
8	0	100	-100

Table 2: Scale Punctuation Randomized Experiment University B

Rank position	Percentage disscount	Percentage payment	Punctuation
1	100	0	100
2	90	10	80
3	80	20	60
4	70	30	40
5	60	40	20
6	50	50	0
7	40	60	-20
8	20	80	-60
9	10	90	-80
10	0	100	-100

Table 3: Scale Punctuation Randomized Experiment University C

Rank position	Percentage disscount	Percentage payment	Punctuation
1	100	0	100
2	80	20	60
3	60	40	20
4	40	60	-20
5	20	80	-60
6	10	90	-80
7	0	100	-100

At the end of the tenth semester those students who accumulate the three highest punctuation values received another monetary reward. The pay-offs at the end of his career will be given by the following,

$$(1.3) \quad TP = \sum_{i=1}^9 \%D - \%P$$

4.2. Skill-based experiment

It is important to mention that the initial characteristics of this type of experiment are the same as the ones described for the randomized experiment. During each semester students are asked what position they expect to attain in their class. However, a difference comes to view with respect to the past experiment. Students' position or rank depends on their skill. In other words, each student will be ranked according to his relative performance on a skill⁹ based task. Skill ranks are determined by how many questions subjects answer correctly on a sample questionnaire of ten questions. Each student receives a questionnaire and begins answering the semester's examination until the time limit¹⁰ is up. After picking up each student's examination, we graded it and in return we gave him or her rank position. Nonetheless, each student will receive two rank positions.

Again, we added the same two financial incentives to the experiment for judging ones skill accurately. Let us return to our prior idea in regards to the fact that each student receives

9. See Annex 1. The skills we chose to be evaluated were logic puzzles, analogies, logic.

10. Each questionnaire has different time limits depending on the difficulty of each semester's examination.

two rank positions. First, each rank position was assigned according to the number of questions he answered correctly. For example, if a student fails in absolutely no question at all, he receives a percentage discount of 100% and a percentage payment of zero. However, if nobody answers correctly all ten questions no one will occupy an overall first place and no one will receive complete tuition coverage. If only one student among all ten students in a classroom fails in two questions, and nobody else has made fewer mistakes, he will have obtained an overall third place even though among his class mates he is the least worse off. Therefore, both levels of information are given to each student, that is, we provide each student with the following: his overall position, as well as his relative position (his position in comparison with others). So a student who occupies first place among his lassmates given the number of incorrect answers is assigned a percentage discount and a percentage payment and the university will condone a portion of the debt when,

$$\begin{aligned}
 P &= \%D[\#i.q] - \%P[\#i.q] \\
 (1.4) \quad \%D &= \text{fn}(\#i.q) \\
 \%P &= \text{fn}(\#i.q)
 \end{aligned}$$

Where P represents the students punctuation each semester; $\%D[\#i.q]$ expresses the institutional percentage discount according to each students rank position¹¹ and $\%P[\#i.q]$ denotes the percentage payment each

university stipulates according the position each student occupies.

It is important to highlight that both the percentage discount, and the percentage payment, depend on the student's rank position. And the rank position depends on the number of incorrect questions: $\#i.q$ a student answers.

Table 4, 5 and 6 summarize the scale punctuation for universities A, B and C used during the skill-based experiment.

Table 4: Scale Punctuation Skill-Based Experiment University A

Rank position	# i.q	Percentage discount	Percentage payment	Overall Punctuation
1	0	100	0	100
2	1	80	20	60
3	2	70	30	40
4	3	60	40	20
5	4	40	60	-20
6	5	30	70	-40
7	6	20	80	-60
8	7	0	100	-100

Table 5: Scale Punctuation Skill-Based Experiment University B

Rank position	# i.q	Percentage discount	Percentage payment	Overall Punctuation
1	0	100	0	100
2	1	90	10	80
3	2	80	20	60
4	3	70	30	40
5	4	60	40	20
6	5	50	50	0
7	6	40	60	-20
8	7	20	80	-60
9	8	10	90	-80
10	9	0	100	-100

11. Another important element that we left aside was the criterions each university has to grant percentage discounts and payments. In this sense, we assumed all three universities granted the same percentage discounts and percentage payments according to the students position rank.

Table 6: Scale Punctuation Skill-Based Experiment University C

Rank position	# i.q	Percentage disscout	Percentage payment	Overall Punctuation
1	0	100	0	100
2	1	80	20	60
3	2	60	40	20
4	3	40	60	-20
5	4	20	80	-60
6	5	10	90	-80
7	6	0	100	-100

At the end of each student's journey through college, those who accumulate the three highest punctuation values will receive another pecuniary prize.¹² The total punctuation values at the end of the student career will be given by the following,

$$(1.5) \quad T \varphi = \sum_{i=1}^{10} \%D [\#i.q] - \%P [\#i.q]$$

During the randomized experiment the student received information indicating the position he occupied among his classmates subject to a chance device: a random process. The intention of incorporating a bag full of marbles was to explore if incorporating fate (contrary to that in the skill-based experiment) changed the way each student reassessed his position in the classroom through and through each semester; if he reassessed his beliefs subject to what he hoped (or feared) more than he did during the skill-based experiment. When adding fate to each student's state of mind we wanted to show that incorporating a bag of marbles sheds very poor limits to his imagination as

it reflects his hopes and fears of how he sees himself, how he sees others and how he thinks others see him. In other words, we wanted to show that when incorporating fate his imagination is no longer bounded to his relative performance on a skill, contrary to what occurs in the skill-based experiment.

5. CONCEPTUAL FRAMEWORK FOR THE ANALYSIS OF RESULTS

With the skill-based experiment we were seeking an answer to the central question: In a natural occurring setting, does each student update his position in a distribution of peers on a given trait—in this case his skills—each semester in the light of new evidence? Or does he envisage and believe his journey through college the way he hopes (fears) it will be?

As we mentioned before, during both types of experiments each student was asked to asses his position in a distribution of peers and we gave him in return the result of his real position among his classmates.

From a Bayesian approach, when each student is asked to reassess his position he decides to incorporate the evidence he received from his past performance by updating his subjective belief. There are three possible results: a) his expected position (his estimate) is better than his real performance (his results), b) his expected position is worse than his real performance, or c) his expected position coincides with his real performance.

12. In fact this incentive was designed, not necessarily for experiment two, but was thought in order to stimulate students in answering the skill based examination the best way according to their abilities.

If a student's expected position for semester i is better than his real performance for semester i , that is $\varepsilon_i < R_i$,¹³ his estimated position for semester $i+1$ will not be as surprisingly good as his past assessment, neither as bad as his past performance, that is $\varepsilon_i < \varepsilon_{i+1} \leq R_i$. Where ε_i corresponds to his expected position with respect to the previous semester; R_i represents his real performance during the previous semester and ε_{i+1} denotes his updated belief. Both his previous expected position, as well as his previous real performance, represents the information he will use to update his belief.¹⁴

If a student's expected position for semester i is worse than his real performance for semester i , that is $\varepsilon_i < R_i$,¹⁵ his estimated position for semester $i+1$ will be better than his past assessment, and the same or worse than his past performance, that is $R_i \leq \varepsilon_{i+1} \leq \varepsilon_i$. Whereas, if a student's expected position for semester i matches his real performance for semester i , that is $\varepsilon_i = R_i$, his estimated position for semester $i+1$ will match, both his past assessment, and past performance, that is $R_i = \varepsilon_{i+1} = \varepsilon_i$.

However, are students updating their beliefs, but unmoved towards subordinating their desires? Do students fail to subject themselves to the pre-

scriptions of the rational choice theory? In this sense, our interest isn't to explore if it is student's desire doing what reason cannot do, but to explore if it is their desires doing what reason can do, only differently.

From a non Bayesian approach, when a student is asked to reassess his position he knows how he has performed in the past, still his hopes and fears remain relentless. Nonetheless, it is important to separate students rosy beliefs from their spiny ones, in that the former are conceived as wishful thinking and the latter as counter wishful thinking.

For example, if a student envisages next semester the way he hopes (in other words, subject to his desires) and at the end of a given semester he is asked how he thinks he will do the next semester, in terms of his performance, and in addition his expected position during semester i is better than his real performance for semester i , $\varepsilon_i < R_i$, his estimated position for next semester will be the same or better than his past expected position, that is $\varepsilon_{i+1} \leq \varepsilon_i$. Where ε_{i+1} denotes his updated belief, ε_i represents his estimated performance during the previous semester and R_i corresponds to his performance during the previous semester. If a student imaginary state at the beginning of a given se-

13. When we refer to a better position, we mean a student expecting to be second in his class and turning out in fifth place; this to explain our inequalities.

14. We will assume that agents have a memory constraint based on the fact that the only information acquired by the agent to update his belief corresponds to that of his past expected and real position. This information is stored in memory and then used. Agents are not paying attention to information supporting their initial hypothesis, they are not paying attention to all past information, they simply pay attention to the last sample of information acquired from past actions.

15. Again, we refer to much worse, when a student expects to be fifth in his class and at the end of the semester he turns occupying first place.

mester is based upon what he hopes of himself, what he hopes of others, and what he hopes others hope about him, and for example he hopes he will occupy second rank position, but at the end of the semester he occupies fifth place, that is, $\varepsilon_i < R_i$ he knows how he has done and yet the power of his hopes unleash skepticism.

However if he envisages next semester the way he fears (counter wishful thinking) and in addition his expected position during semester i is better than his real performance for semester i , $\varepsilon_i < R_i$, his estimated position for next semester will be worse than his real performance during the past semester, that is, $R_i < \varepsilon_{i+1}$. The student knows how he has done and yet his fears tell him he has not done it: "*his wishes (fears) are father to the thought*" (Elster 2001).

If a student envisages next semester the way he hopes —wishful thinking— but contrary to the situation recently described above, his expected position during semester i , is worse than his real performance, that is $\varepsilon_i > R_i$, his expected position for the following semester will be better than his real performance during the past semester: $\varepsilon_{i+1} < R_i$. However, if he envisages the next semester the way he fears, his expected position during the following semester will be the same or worse than his expected position during the past semester: $\varepsilon_i \leq \varepsilon_{i+1}$

Finally, if his expected position during semester i , is the same as his real performance: $\varepsilon_i = R_i$, and he envisages next semester the way he hopes, his expected position for the following semester will be better than his expected position during the past semester hence his expected performance will be: $\varepsilon_{i+1} < \varepsilon_i$. Nonetheless, if he envisages next semester the way he fears, his expected position will be worse than his expected position during the past semester: $\varepsilon_i < \varepsilon_{i+1}$.

At the end of the student's journey through college there are two possible outcomes: (i) he is granted the title of being a Bayesian agent or (ii) he is not granted the title. In addition, we classified the outcomes in each trail as successes and failures.¹⁶ In both types of experiments successes will refer to the outcome that represents a "*student acting as if he was a Bayesian agent*" and is denoted by the letter A , and failures will refer to the outcome that represents a student acting as if he was a non Bayesian individual and is denoted by the letter B . However, our interest does not lie on the outcome of a succession of n trials —made up of successes and failures— but in the *number* of successes¹⁷ that lie among the succession of n trials. In regards to both our experiments, it is not the outcome of a succession of nine semesters —trials— that interests us, but computing the probability that the number

16. Such type of experiment, which has two possible outcomes, is called a Bernoulli trial. See Sidney Siegel; Non-parametric Statistics for the Behavioral Sciences; McGraw Hill Book Company, 1956.

17. During both experiments, successes will refer to the outcome of a student acting as if he was a Bayesian agent.

of *successes* (outcomes that represent a student acting as if he was a Bayesian agent) will be κ for any integer $\kappa = 0, 1, 2, \dots, n$. We intend computing the number of trials of size κ that may be formed from a set containing n trials. For simplicity we will denote the probability of a successful outcome: $P[\mathcal{A}]$ by (p) and the probability of an unsuccessful outcome: $P[\mathcal{B}]$ by (q) . Where $p \geq 0, q \geq 0, p + q = 1$. In addition we assumed that a student acts as if he was a Bayesian agent if he updates his beliefs in the light of new evidence, that is if (i) $\varepsilon_i < R_i$ then $\varepsilon_i < \varepsilon_{i+1} \leq R_i$ or (ii) $\varepsilon_i > R_i$ then $R_i \leq \varepsilon_{i+1} < \varepsilon_i$ or (iii) $\varepsilon_i = R_i$ then $R_i = \varepsilon_{i+1} = \varepsilon_i$. And he acts as if he were not, that is, if he forms his imaginary state subject to his hopes or fears, in other words if (i) $\varepsilon_i < R_i$ then $\varepsilon_{i+1} \leq \varepsilon_i$ (wishful thinking) or $R_i < \varepsilon_{i+1}$ (counter wishful thinking) (ii) $\varepsilon_i > R_i$ then $\varepsilon_{i+1} < R_i$ (wishful thinking) or $\varepsilon_i \leq \varepsilon_{i+1}$. (counter wishful thinking) (iii) $\varepsilon_i = R_i$ then $\varepsilon_{i+1} < \varepsilon_i$ (wishful thinking) or $\varepsilon_i < \varepsilon_{i+1}$ (counter wishful thinking).

A summary of the student's decision rules are presented in Table 7.

In order to specify the number of times κ that an event occurs in n independent trials, we turned to an experiment, which has precisely two possible outcomes,¹⁸ that is a Bernoulli trial.¹⁹ This type of experiment involves independent repeated trials whose outcome is classified in two classes or categories, called successes and failures. From the point of

Table 7: Student's Decision rules.

Possible results of Semester (i)	Students possible expected result estimates Semester (i + 1)		
	Bayesian	Non Bayesian	
		Wishful Agent	Counterwishful Agent
$\varepsilon_i < R_i$	$\varepsilon_i < \varepsilon_{i+1} \leq R_i$	$\varepsilon_{i+1} \leq \varepsilon_i$	$R_i < \varepsilon_{i+1}$
$\varepsilon_i > R_i$	$R_i \leq \varepsilon_{i+1} < \varepsilon_i$	$\varepsilon_{i+1} \leq R_i$	$\varepsilon_i \leq \varepsilon_{i+1}$
$\varepsilon_i = R_i$	$R_i = \varepsilon_i = \varepsilon_{i+1}$	$\varepsilon_{i+1} < \varepsilon_i$	$\varepsilon_i < \varepsilon_{i+1}$

view of each student, the outcome of each trial is not affected by his knowledge of the outcome of the previous trials when this knowledge is expressed as "the student acts as if he were Bayesian" or "the student acts as if he were non-Bayesian".

As we mentioned above, our interest does not lie on the outcome of a succession of n trials but in the probability that the number of successes will be κ , for any integer κ from 0, 1, 2, ... n . In this sense, the event " κ successes in n trials" can occur in as many ways as κ letters \mathcal{A} may be distributed among n places. In other words, the probability denoted by $b(\kappa, n, p)$, that n independent repeated Bernoulli trials, with probability p for success and $q = 1 - p$ for failure,

18. According to our experiment, from the student's point of view two possible outcomes refer to an agent that (i) updates his beliefs as if he was a Bayesian agent or (ii) as if he was not.

19. See E. Prazen, *Modern Probability Theory and its Applications*, John Wiley & Sons, Inc, New York-London (1960).

will result in k successes and $n-k$ failures (for $k = 0, 1, 2, n$) is called the binomial law and expressed by,

$$(1.6) \quad b(k, n, p) = \binom{n}{k} p^k q^{n-k}$$

Where there are $\binom{n}{k}$ descriptions that contain k successes and $n - k$ failures. And in addition each description has probability $p^k q^{n-k}$, where p represents the probability of a successful outcome (that the student apparently acts as if he was a Bayesian agent), and q denotes the probability of an unsuccessful outcome (that the student acts as if he was not a Bayesian).

6. ANALYSIS OF THE RESULTS

As we mentioned previously, during each trial the student acts as if he was Bayesian or as if he was not. However, we decided to grant the condition that the student is in fact Bayesian if he apparently acts as a Bayesian in at least seven of nine trials.²⁰ In other words, let $P[p]$ equal the probability that the student is Bayesian given his true probability that in fact he is Bayesian (say, $p = 0.85$) is given by:

$$(1.7) \quad \left[\binom{9}{7} (0.85)^7 (0.15)^2 \right] + \left[\binom{9}{8} (0.85)^8 (0.15)^1 \right] + \left[\binom{9}{9} (0.85)^9 (0.15)^0 \right]$$

Whereas the probability that the student is Bayesian given his true probability that in fact he is Bayesian, in other words because he is merely lucky (say, $p = 0.5$) is given by,

$$(1.8) \quad \left[\binom{9}{7} (0.5)^7 (0.5)^2 \right] + \left[\binom{9}{8} (0.5)^8 (0.5)^1 \right] + \left[\binom{9}{9} (0.5)^9 (0.5)^0 \right]$$

After examining the mathematical approach of the binomial law, Table 8 lists the Binomial probabilities of

$$b(k, n, p) = \binom{n}{k} p^k q^{n-k} \text{ for } n = 9, k = 0, 1, 2, n, k \geq p = 0.85 \text{ and } p = 0.5$$

In particular, the probability that the student is Bayesian because he apparently acts like one, in at least seven of the nine trials is given by $p(0.85) = 0.86$. In other words, there is an 86% probability that a student is Bayesian because he

20. The rationale to chose at least seven of nine trials in order to grant the Bayesian condition is found in "How to tell skill from luck: A rather famous personage in statistical circles is the tea-tasting lady whose claims have been discussed by such outstanding scholars as R.A Fisher and J. Neyman; see E. Parzen, *Modern probability theory and its applications*, John Wiley & Sons, Inc. New York-London, 1960, pp. 103-104. In addition, we also examined table 20 and we compared both the probability that in at least $k \geq 1, 2, n$ of the nine trials he is a Bayesian (i) because he seemingly acted like one and (ii) because he was merely lucky. We found that the difference between the probability that in seven or more trials he is a Bayesian because he apparently acts like one, and the probability that in at least $k \geq 1, 2, \dots, n$, where $n = 6$ as the number of successes in nine trials. However, what does this mean? This means that the differential among both the probability that he is a Bayesian because he apparently acts like one and because he is merely lucky gets smaller each time the number of successes among the succession of nine trials becomes larger. In other words, whenever the differential becomes smaller, there is a similar probability that a student is granted the title of Bayesian because he is merely lucky and because he apparently acts like one. This means that there is too much of a thin line to realize if the student is a Bayesian because he is merely lucky or because he apparently acts like one. Nonetheless, classifying at least $k \geq 8, 9$ as the number of successes in nine trials, brings us to the same problem mentioned previously, this is why we have decided to classify at least seven successes in nine trials as our cut point.

Table 8. Binomial Probabilities.

1	2	3	4	5	6	7
n	k	$p=0.5$	$p=0.5$ $k \geq$	$p=0.85$	$p=0.85$ $k \geq$	(6-4)
9	0	0.00195	1.0000	0.000000	1.0000	0.0000
	1	0.01758	0.9980	0.000002	1.0000	0.0020
	2	0.07031	0.9805	0.000044	1.0000	0.0195
	3	0.16406	0.9102	0.000588	1.0000	0.0898
	4	0.24609	0.7461	0.004995	0.9994	0.2533
	5	0.24609	0.5000	0.028303	0.9944	0.4944
	6	0.16406	0.2539	0.106922	0.9661	0.7122
	7	0.07031	0.0898	0.259667	0.8591	0.7693
	8	0.01758	0.0195	0.367862	0.5995	0.5799
9	0.00195	0.0020	0.231617	0.2316	0.2297	

apparently acts like one, in at least seven of the nine trials. Whereas the probability that the student is Bayesian because he is merely lucky in at least seven of the nine trials is given by $p(0.5) = 0,09$, that is, there is a 9% probability that a student is Bayesian because he is merely lucky, in at least seven of nine trials.

6.1. Result Analysis of Skill-Based Experiment

With the skill-based experiment we were searching to answer the following query, *“does each student update his position in a distribution of peers on a given trait -in this case his skills- each semester in the light of new evidence? Does he envisage and believe his journey through college the way he hopes (fears) it will be? Does he*

receive the title of Bayesian or does he not?”

During the skill based experiment and according to the student’s decision rules presented in Table 7, six of twenty five students changed their existing beliefs in the light of new evidence in at least seven of the nine trials: *24% of the students were granted the title of Bayesian agents. Whereas nineteen students acted as if they were envisaging their journey through college the way they hoped or feared: 76% used their imagination to implicitly evaluate themselves in accordance with how they hope (fear) seeing themselves.*²¹

However, amongst those six students only one student changed his beliefs in the light of new evidence during all nine trials; three in at least eight

21. According to each student’s decision rules presented in table 7, appendix A, B and C show the number of trials in which a student (that assisted to any type of university) (i) apparently acts as a Bayesian, (ii) uses his imagination, and in the course of action evaluates himself in an unreasonably optimistic way with respect to his academic performance and (iii) uses his imagination to implicitly evaluate himself in an unreasonably pessimistic way with respect to his academic performance.

of nine trials and two in at least seven of nine trials.

6.2. Result Analysis of Randomized Experiment

Just like the skill-based experiment, with the randomized we were searching to answer an important question mark, *“does each student update his position in a distribution of peers on any given trait each semester in the light of new evidence? Does he envisage and believe his journey through college the way he hopes (fears) it will be? Does he receive the title of Bayesian or does he not?”* However, when reassessing his position each semester given a chance device during the previous semester versus reassessing his position given the number of questions he answered correctly during the previous semester makes a difference. During the skill-based experiment: *every student’s state of mind has been influenced by the previous number of correct and incorrect questions when reassessing his belief (position).* Contrary to what happens with the randomized experiment: *where each student’s state of mind has been influenced by a random process when reassigning his belief.*

Nevertheless, during the randomized experiment, none of the twenty five students assessed their position

in a distribution of peers on any positive trait in the light of new evidence in at least seven of the nine trials: *none of the students were granted the title of Bayesian agents.* In other words, the entire group of twenty five students used their imagination to implicitly evaluate themselves and form their beliefs subject to his hopes and fears.²² During the randomized experiment we didn’t concentrate on a specific and unique positive trait, for example academic skills. In this case, all of the twenty five students reassessed their position in a distribution of peers above and/or below average. When reassessing his beliefs with respect to his position in a distribution of peers, but influenced by a chance device, his imaginary state is no longer bounded to his academic skills. On the contrary, he pictures himself in each imaginary state of the world (position)²³ and in view of the fact that he does not self bound his imagination to a unique positive trait,²⁴ he is influenced by what he hopes -and fears his position will be.

7. CONCLUSIONS

The main question is whether each student is gifted with the capacity to change his existing beliefs in the light of new evidence (not to mention the lack of weakness of the will²⁵ when

22. According to each student’s decision rules presented in table 7, appendix D, E and F show the number of trials in which a student (that assisted to any type of university) (i) apparently acts as a Bayesian, (ii) uses his imagination, and in the course of action evaluates himself in an unreasonably optimistic way with respect to his academic performance and (iii) uses his imagination to implicitly evaluate himself in an unreasonably pessimistic way with respect to his academic performance.

23. Not to mention the experience he had when relating to other’s experiences.

24. Which is impregnated of an implicitly evaluative way of forming his beliefs, as it reflects his hopes and fears of how he sees himself, how he sees others and how he thinks others see him.

25. According to Jon Elster weakness of the will can be understood as, “acting without regard for the consequences of one’s behavior, and acting against one’s own better judgment.” *Alchemies of the mind: Rationality of the Emotions*, Cambridge University Press 1999.

making his decisions, understood as never tempted to fail to their beliefs), or if he envisages his journey through college the way they hope or fear it will be, that is, does he form his beliefs subject to what he hope or fear? The main question —when referring to belief formation— is if rational choice theory is, or isn't sufficient to explain, imagine and envisage belief formation.

The answer is “No”: when referring to belief formation, rational choice theory isn't sufficient to explain, imagine and envisage belief formation. It is essential never to forget those nineteen students who did not form rational beliefs and who did not conform to the prescriptions of neo-classical decision theory. Nineteen students that conceive themselves subject to (i) their personal experience with others experience in relation to each ones hopes; (ii) their wishful (counter wishful thinking in comparison with others and with what others believe with respect to each one of them. Nineteen student who use their imagination, and in the course of action systematically evaluate themselves in an unreasonably optimistic way (or pessimistic) with respect to others experienc. Nineteen students who's imagination is vividly impregnated of an implicitly evaluative way of forming his beliefs, as it reflects his hopes and fears of how each one sees himself, how each one sees others and how each one thinks others see him.

And even though the majority of students during the skill based experiment, 76% used their imagination to

implicitly evaluate themselves as it reflects his hopes and fears of how he sees himself, how he sees others and how he thinks others see him whereas 24% changed their existing beliefs in the light of new evidence in at seven of the nine trials, rational choice theory should not be powerful enough to rule out the imagination of those nineteen students and move away from those who form their beliefs not inspired by rational behavior.

Various questions arise from the results of this investigation, however due to our interests they will not be explored. For example, during the previous results we talked about the whole group of students and how these twenty five individuals formed there beliefs. Nonetheless, according to the tables presented previously we can also see how during the skill-based experiment, students assisting university type A have a higher propensity to change their existing beliefs in the light of new evidence in at least seven of the nine trials, that is, to act as if they were Bayesian agents. Do students assisting university A have special characteristics that help them be prone to act as if they were Bayesian agents? Another important question that arises from the results has to do with why students assisting university B have a natural disposition to use their imagination in a way that they evaluate themselves in an unreasonably optimistic way (independent of the type of experiment we are talking about)? I leave an open window to answer these, and other further questions.

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SECCIÓN: EL CASO DEL TRIMESTRE

En cada una de las entregas de la revista incluimos un caso seleccionado de los mejores presentados por los estudiantes de posgrado de la Universidad Icesi en el trimestre anterior. Incluimos además comentarios acerca del caso presentados por profesores.

La base de datos «Casos Facultad de Ciencias Económicas y Administración, Universidad Icesi», está disponible a profesores de las facultades de administración del país y el exterior.

Son de nuestro interés los comentarios sobre el uso que hagan de este caso

El editor

