International Journal of Business and Management Studies,
CD-ROM. ISSN: 2158-1479 :: 1(3):505–515 (2012)

TWO CASE STUDIES ON HOW TO DEAL EFFECTIVELY WITH FIXED PLUS

Murillo de Oliveira Dias

Fundação Getulio Vargas, Brazil

The present paper refers to an explanatory multiple-case study about how to optimize fixed plus variable costs contracts, analyzing two cases in different areas. The primary data were collected through interviews and direct participation of the author on both. The first case refers to one copier machine rent contract. The second case refers to current mobile phone contracts. Both contracts were signed in Rio de Janeiro, Brazil. In both cases, the outcomes were similar and the conclusion points to a likely strategy in order to assess and evaluate related forms of contracts, optimizing their usability. Such contracts, basically, present two main variables: fixed cost and variable cost. Through observation and simulation it is possible so select and negotiate a best-performance contract, adjusting the client's demand to the service supply. In both cases either, clients due to miscalculation and absence of correct simulations, had low-performance results, choosing base fixed-costs parameters with high variable costs, which is a common mistake. The present paper throws more light on this subject in order to present safe ways to deal with such types of contracts, avoiding scarce results and improving financial performance through implementing a Six-Step Approach.

Keywords: Fixed plus variable costs contracts, Negotiation, Decision making, Six-Step approach.

Introduction

One research question has driven the author's attention into the subject of negotiating contracts: how to improve performance, in order to reduce, minimize or even extinguish financial losses when dealing with fixed plus variable costs contracts. This article throws more light on this subject, presenting a framework best suitable to all kinds of fixed plus variable costs contracts named Six-Step Approach.

For instance, when a regular citizen decides to become a phone mobile company client through ordering a new bundle including several features like high-speed conection, phone, 3G or 4G, wireless service, adding TV services, changing phone plans, more bundles and calling features, lots of brands with differentiated services and approaches come out with all sort of fantastic and irresistible opportunities. Many mobile contracts include bundles with limits (for instance, 100 to 1.000 minutes to local calls) and extras to be paid if those limits are crossed. The bundle is the fixed cost and the extras are the variable costs. The first reaction is confusion with so many different offers. Barry Schwartz (2004), tell us about the paradox of choice, why more is less, explaining how the culture of abundance is nocive to our society. So many different choices confuse us about the right thing to do, the correct path to follow. "Knowing what we want means, in essence, being able to anticipate accurately how one choice or another will make us feel" (Schwarz, 2004:48).

The cases studied here show how difficult is to forecast the best suitable contract without correct simulation.

Consider another example: one company decides to rent a copier machine. A fixed plus variable cost contract is signed. By the end of the second month, the bill is almost forty per cent more expensive. This way, the total amount of the contract is about to cost a fortune. The cases studied reveals cognitive traps when dealing with fixed plus variable cost contracts.

Those two scenarios were selected to be analyzed through case study approach. There are differences in scope, but both present a common structure. How to avoid the trap of cognitive illusion? This article presents explanatory solutions to such research questions analyzing two different cases and proposes a Six-Step Approach focused on benefit-cost ratio maximization in order to avoid miscalculations and/or misinterpretations when negotiating such contracts.

This paper is divided into seven sections: introduction, objectives, methodology, Case #1, Case #2, Why costumers are so attached to fixed part of the contract: Cognitive Biases and hiding principles, How to improve performance when dealing with fixed plus variable costs contracts: The Six-step Approach and conclusions.

Objectives

The two objectives are: 1) understand through multiple-case study approach why contracting is so attached to fixed part of the fixed plus variable cost contract, disregarding or miscalculating the variable part of the same contract, underlying hidden principles; 2) to provide a systematic way of evaluation, assessment and financial performance improvement when negotiating fixed plus variable costs contracts, here named Six-Step Approach.

Methodology

The present article is the result of qualitative research, multiple-case explanatory study, which unit of analysis is one specific type of service's contract, the *Fixed plus Variable Cost Contract.* A contract is an obligation with a mutual assent, assumed between two or more parties in order

Source of Evidence	Case # 1	Case # 2
Documentation	Contract Maintenance flowchart invoices proforma invoice	Contract Brochures and advertising material invoices proforma invoice
Direct Observation	Preventive and Corrective Maintenance Customer support Circumstancial operations	User Costumer Support
Direct participation	Consulting and Advising	Client and User
Interviews	4 employees	2 employees

Figure 1: Sources of Evidence

Source: elaborated by the author

to build consensus, with legal obligations and collaterals. The qualitative research here cannot be applied to: *lump sum contracts* (also named fixed contracts); *unit price contracts* (fixed price for unit - final price depends on amounts of units); *adhesion contracts* (which there is no margin for bargain) and so on and so forward. All contracts studied are bilateral, i.e., two parties, one contractor and one contracting party. According to Raiffa (1982), all negotiations presented in Cases #1 and #2 are named integrative negotiations, because more than one subject is at the bargaining table (fixed plus variable parts of the contract and many more options). The source of evidence comes basically from documentation gathered, interviews, first hand observation and direct participation according to Figure 1, as follows (Yin, 2008):

Four ways of case testing strategies were applied to this work (Yin, 2008): a) construct validity through evidence multiple source usage and inter correlation (see Figure 1); b) Internal validity, adopting three strategies: explanation constructing, explanation studying and logical modeling; c) external validity, through replication logic (best fit for this multiple case study); d) reliability through case study protocol and data bank collected. Cases #1 and #2 were selected on different areas of service providers, in order to generate one single approach. Case # 1 studies a twenty four-month, copier machine fixed plus variable cost contract between one company hereinafter called contracting and one copier service's provider, henceforth called contractor. Case # 2 describes a twelve-month fixed plus variable cost mobile phone contract, between one company, hereinafter called contractor and one single person, from now on mentioned as a customer. Both contracts were signed and registered at Rio de Janeiro, Brazil, in 2010-2011. All prices are expressed in Reais (Real or BRL or (R$), Brazilian currency: USD 1.00 = R$ 1,78 and € 1,00 = R$ 2,30[1]). The author participated directly in Case #1 and Case #2. The former as a consultant, the latter as a customer. Both contracts come from Technological Information Industry but with different applications: the former, printing business; the latter, communication business. All sources of evidence converge into findings and conclusions (Yin, 2008:127). The conclusion wrap up all points studied and propose a Six-Step Approach, in order to help improving financial performance when negotiating about similar situations.

Case #1

Case #1 represents author's twenty years of experience dealing on a daily basis with copier machines' contracts of all sorts. As shown in Figure 1, data were collected through documentation, direct observation, direct participation and interviews.

Initially, the company contracting hired for twenty-four months one copier machine service provider, or contractor. The contract signed, a fixed plus variable cost contract (see Figure 2 below - Contract A), included preventive and corrective maintenance, OEM (Original Equipment Manufacturer) supplied consumables and spare parts for optimum performance plus paper. The contract was originally negotiated to 5.000 BW (black and white) printings, as the minimum fee (the fixed cost of the contract). In other words, if the monthly consumption is equal or less than 5.000 printings, then minimum fee is charged (see Figure 2). The variable part under the contract, usually called "quick charge", represents the usage of extra copies beyond monthly fee, measured in amount of money (R$) per 1.000 (extra) copies. Then, the total amount of the month is calculated as follows: minimum fee plus quick charge. After the second month, the manager contracting revealed dissatisfaction with the total monthly fee charged and hired a specialist

[1] Real x euro x US dollar exchange rate from 01.30.12. Source: JORNAL O GLOBO. Available from: http://g1.globo.com/economia/; Cited: Jan 2012.

(consultant) to find a solution for the dilemma: the overall services were good; the copier performed as expected, in sum, everything but the prices paid were satisfactory. The consultant, in its turn, firstly interviewed four contractor's employees and took two simple measures: a) To observe the machine counter and maintenance chart, in order to verify maintenance schedule and how many copies were produced within two months, in order to compare production *versus* copier capacity; b) to observe through interviews what was the real contracting service's demand, in order to check if the equipment was well indicated for the services required and to forecast future demands; c) the copier was well chosen to fulfil the entire contract (not a surprise); d) the monthly copy estimate was wrong: for each four copies produced only one copy belonged to fixed part of the contract, which is by definition, less expensive than the quick charge, because of a simple and sometimes decisive fact: if the minimum fee is too high, a competitor may offer a combination of a lower minimum fee plus more expensive quick charge and win the competition. It is well known by service providers that the majority of the clients do not anticipate through simulations entire contract and put their attention to the fixed part of the contract (in this situation, the minimum fee). According to Kahneman and Tversky (1982), Bazerman and Neale (1992), Ariely (2010), Schwartz (2004), Iyengar (2010), Plout (1993) and others, decision makers may be trapped into representative cognitive bias, when one decision is made considering mostly its stereotype and quick decisions, instead of analytical judgment (what explains why focusing on a minimum fee). So, it is a very common practice in this market segment to minimize the minimum fee in order to win a contract. In other words, 20.000 copies were produced each month, 5.000 fixed on minimum fee and 15.000 extra copies (quick charge). There is a second reason for the quick charge to be usually more expensive than the minimum fee: the more usage, the more maintenance, supply consumables, paper, replacement parts, service interruption, attrition and equipment depreciation.

Description	Extra Copies	Quantity of Equipments	Quantity of BW copies per month	Total per month per equipment (R$)	Total per 24-month per equipment (R$)	Cost per copy (R$)
Fixed Cost (minimum fee)			5.000	2.230,00	53.520,00	
Variable Cost (quick charge)	no	1	0	750,00	0,00	0,45
Contract A features			5.000	2.230,00	53.520,00	
Fixed Cost (minimum fee)			5.000	2.230,00	53.520,00	
Variable Cost (quick charge)	yes	1	15.000	11.250,00	270.000,00	0,67
Total Before Renegotiation: Contract A			20.000	13.480,00	323.520,00	
Fixed Cost (minimum fee)			12.000	4.500,00	108.000,00	
Variable Cost (quick charge)	no	2	0	720,00	17.280,00	0,38
Contract B features			12.000	4.500,00	108.000,00	
Fixed Cost (minimum fee)			12.000	4.500,00	108.000,00	
Variable Cost (quick charge)	yes	2	8.000	5.760,00	138.240,00	0,40
Total After Renegotiation: Contract B			20.000	7.990,00	191.760,00	

Figure 2: Case #1 features

Source: elaborated by the author and data collected with the contracter

According to Figure 2 above, it is possible to observe why the contracting manager was so dissatisfied: due to initial negotiations, the total usage verified (Total Before Renegotiation: Contract A) was six times the total initial forecast (Contract A features), an expensive contract.

Contract B has overall cost per copy smaller than the contract A. Contracts with quick charge (both Contracts A and B) present higher cost per copy. The consultant then offered four possible solutions: e) keep copy usage strictly attached to the minimum fee; f) renegotiate, increasing fixed part under the contract to 20.000 copies per month or the highest acceptable by both parties; g) to reduce or eliminate quick charge amount; h) combination of these strategies.

Finally, the contract was renegotiated (Contract B features). At the beginning of the renegotiation, the service provider was adamant about making any changes; after all, the contract has been signed with a mutual consensus. The solution came through increasing minimum fee (fixed cost) and reducing the quick charge (variable cost), but the contracting has made a concession: added one second similar equipment into the new contract (Contract B features).

Case #2

Case #2 is a logical replication of Case #1 because they share the same unit of analysis, the fixed plus variable cost contract. It is related to the mobile phone service industry. In 2011, Brazilians possessed 242.2 million mobile phones[1], more than 1 mobile per inhabitant (Brazilian population is around 190 million people[2]).

Similarly to Case #1, data were collected through documentation, first hand observation, direct participation and interviews. The difference here is that the contracting is the author, therefore an individual contract and the contractor is one of the four major mobile operator companies from Rio de Janeiro[3]. The customer signed annual and individual contracts, A and B (A in 2010 and B in 2011 – see Figure 3, ahead).

Mobile phone individual bundles include lots and lots of different offers: packages including local calls, long distance calls, with or without internet access, local call plus SMS (Short Message Service), packages with 100, 200, 300, 400 and 800 minutes, wireless home services and so on and so forth, all convergent, comprehensive and integrated. All the operators use the same type of fixed plus variable costs contract. Basically, the customer selected one mobile operator who offers was more attractive than others and best suitable. According to Figure 3, the Contract A (300-minute), included free calls to mobiles from the same operator[4], 300 minutes to other operators' local calls, internet access and a package with 100 SMS. Contract B (800-minute), included internet, unlimited SMS, free calls to mobiles from the same operators.This is the fixed cost of the contract. For each and every extra local or long-distance call, an extra fee is charged, as shown in Figure 3, below:

[1] Source: Agencia Nacional de Telecomunicações – ANATEL. Telefonia movel. Available from: http://www.anatel.gov.br/Portal/exibirPortalInternet.do#. Cited: Jan 2012.

[2] Source: Contagem da população 2007. Rio de Janeiro: IBGE, 2007. Available from: http://www.ibge.gov.br/home/estatistica/populacao/contagem2007/contagem.pdf. Cited: Jan 2012.

[3] The four major telecommunications mobile companies in Rio: Vivo, Claro, TIM, Oi (2011-2012).Source: ANATEL (Brazilian Telecomunications Agency).

[4] Limited up to 10.000 minutes within a month, according to contract terms and conditions.

Description	Extra Minutes	Time of usage (minutes)	Total per month (R$)	Total per 12-month (R$)	Cost per minute (R$)
Fixed Cost		300	213,90	2.566,80	
Variable Cost	no	0	0,00	0,00	0,71
Contract A features		300	213,90	2.566,80	
Fixed Cost		300	213,90	2.566,80	
Variable Cost	yes	700	567,41	6.808,92	0,78
Total Before Re-negotiation: Contract A		1.000	781,31	9.375,72	
Fixed Cost		800	269,00	3.228,00	
Variable Cost	no	0	0,00	0,00	0,34
Contract B features		800	269,00	3.228,00	
Fixed Cost		800	269,00	3.228,00	
Variable Cost	yes	200	190,34	4.568,16	0,46
Total After Re-negotiation: Contract B		1.000	459,34	7.796,16	

Figure 3: Case #2 features

Source: elaborated by the author and data collected with the contracter

In comparison with Case #1, it is possible to observe that the conditions were replicated: cost per minute is smaller if the customer stick to the fixed part of the contract and the higher minimum fee (fixed cost), the less expensive the contract is. In such case, the customer took four months to search another best suitable bundle, jumping successfully to Contract B. Sometimes, in practical terms, it takes more than two sampling months to decide which course of action will be adopted. It occurred many times that the next bill should be smaller, that longer calls should definitely be avoided, etc.

One last observation: for 1.000 minutes bundle, it is preferable Contract B than Contract A (see Figure 3). Once more, two factors are the most important among all: a) the more adjusted fixed cost to the customer's needs, the smaller variable costs; b) the smaller the variable costs, the smaller overall amount of expense and best contract performance.

Why do contracting are so attached to fixed part of the contract: Cognitive Biases and hiding principles

This section explains Objective 1 (see Objectives). Case #2 is a logical replication of Case #1 because they share the same unit of analysis, the fixed plus variable cost contract, so they are analyzed together here, with similar features and same outcomes. Before explanation, it is mandatory to mention some cognitive limits of the human thinking process. According to Kahneman (2011:20-21), people have two systems on mind, working in parallel:

- *System 1* operates automatically and quickly, with little or no effort and no sense of voluntary control.
- *System 2* allocates attention to the effortful mental activities that demand it, including complex computations. The operations of System 2 are often associated with thw subjective experience of agency, choice and concentration.

System 1 is automatic, effortless, quick, impulsive. *System 2* is voluntary, effortful, slow, and analytical (Bazerman and Moore, 2009). While System 1 checks all information in seconds or instants within our memory based on previous experiences, System 1 is slower and has to build one concept or idea through step by step analysis. (Bazerman and Moore (2009), Kahneman (1982, 2010), Schwartz (2004), Iyengar (2010), Plous (1993), Ariely (2008)) Kahneman points out System 2 as a "Lazy controller" (Kahneman, 2010:38). In other words, people dislike making analytical-based decisions, slower by definition. That could be one feasible explanation why most of contracting disregard variable cost part of the contract. But there is more. "People not only compare things, but also compare things that are easily comparable" (Ariely, 2008:8). The Six-Step Approach (described ahead) is an easy and safe framework to compare specific fixed plus variable costs contracts through simulation and comparison. Also decisions and rationality can be bounded by time, information and cognitive aspects (Simon, 1957). Decision makers are also vulnerable to some cognitive biases, named judgmental heuristics ((Bazerman and Moore,2009), Kahneman (1982, 2003, 2010), Schwartz (2004), Iyengar (2010), Plous (1993), Ariely (2008)): *availability heuristic*, when "the event is "available" in memory" (Bazerman and Moore, 2009:7); *representativeness heuristic*, when "people tend to look for traits an individual may have that correspond with previously formed stereotypes" (Bazerman and Moore,2009: 8); *affect heuristic*, when judgments are made at first sight, affectively and emotionally (Kahneman, 2003). Both heuristics refer to *System 1* (quick, intuitive response). In Cases #1 and #2 were observed a combination of all factors discussed above: time, information, cognitive constraints and biases. The contracting get so attached to fixed part of contract because it is visible at first sight, an instantly measurable part of the contract. If no preventive actions are taken, it is even harder to anticipate or forecast one's demands, especially if no preparative actions have been made. In such circumstances, the contracting is more vulnerable to biases and constraints and can be easily manipulated. In Cases #1 and #2, it is temptative to think that one is paying less if stuck to minimum fees, adopting quick and easy decisions (*System 1* simplifications and shortcuts) but the evidence gathered here proved just to be the opposite. Analytical decision based upon contracts simulations proved to be the best choice in order to avoid cognitive biases and hidind principles.

How to improve performance when dealing with fixed plus variable costs contracts: The Six-step Approach

This section explains Objective 2 (see Objectives section). The Six-Step Approach is a framework suitable for all versions of fixed plus variable costs contracts. It is inspired by Bazerman's decision making general process (Bazerman and Moore, 2009:2-3) with six steps: 1) define the problem; 2) identify the criteria; 3) weight the criteria; 4) generate alternatives; 5) rate each alternative on each criterion and 6) compute the optimal decision. The Six-Step Approach is, therefore, adapted, customized and restricted to fixed plus variable costs contracts. Here, the problem is always pre-defined. The advantage of using this method is to avoid miscalculations and to reduce, minimize or even extinguish financial losses. One helpful spreadsheet (the same used in Case#1 and Case#2) is available at Annex I. The logical model of Six-Step framework is presented below (see Figure 4):

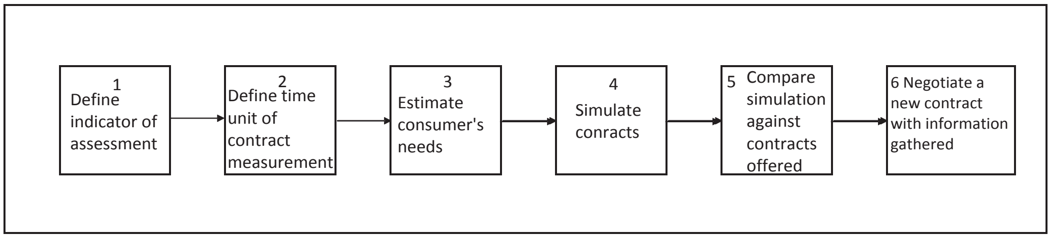

Figure 4:Logic Model of 6-Step Approach
Source: elaborated by the author

Before calculating, it is important to select two or three competitors in order to provide enough data to compute optimum decision. It is always important to avoid bargaining over position, adopt mutual gains approach, try to separate people from the problem and have a Best Alternative to a Negotiated Agreement – BATNA, the major source of power in any negotiation and to (Fisher, Roger; Ury, William; Patton, Bruce,1981). The recommendation here is to compare two or more contracts from different service providers, in order to stimulate competition and to be safeguarded against possible financial losses. The Six-Step Approach is described as follows:

- *Step#1*: Define indicator of assessment to compare alternatives (Case#1, cost per copy and Case#2, minutes).
- *Step#2*: Define analysis periodicity (Case#1, month/24-month and Case#2, month/12-month).
- *Step#3*: Estimate contracting's needs (Case#1, 20.000 copies per month and Case#2, 1.000 minutes per month).
- *Step#4*: Simulate contracts (Cases#1 and #2, Contracts A and B).
- *Step#5*: Compare simulation against contracts offered by the service provider. The closer the entire contract to the fixed part of the contract, the better, in other words, the minimum variable part of the contract, the better (Case#1, Contract B: fixed cost (minimum fee)= 12.000 copies and variable cost (quick charge) = 8.000 copies; Case#2, Contract B: fixed cost = 800 minutes, variable cost = 200 minutes).
- *Step#6*: Negotiate a new contract with information gathered.

Conclusion

This section presents: a) explanation construction through theoretical initial statements, findings comparison and final explanation; b) Final recommendations.

Statement #1: the success or failure when dealing with fixed plus variable costs service's contracts starts with best definition of the customer's needs through the finest usage of indicators of assessment.

Findings comparison #1: in both cases here presented, poor initial understanding of the customers' needs has driven into contract renegotiations or adjustments with losses to the customer. In Case #1, the total demand of copies was underestimated. The contract A anticipated 5.000 BW copies of minimum fee against 20.000 BW copies of proved demand. In Case #2, the contract A of 300-minutes underestimated the real need of 1.000-minutes of proved demand. Both cases demanded urgent adjustments that could be avoided.

Final Explanation#1: when dealing with fixed plus variable costs contracts, the first move is the most important one. In both cases, if the contracting had reduced the gap between fixed cost and own demand through the usage of indicators of assessment (in Case#1, cost per copy and in

Case#2, cost per minute), contract A would never exist. A best financial performance approach in both cases would be starting with contract B instead of contract A. Sometimes it takes a long time to make decision due to sampling problems, miscalculations, inflexible contractors, etc. The shorter the time to make amendments or even new agreements, the smaller the losses. Best assessment information makes all difference between financial gain or losses in all cases.

Statement #2: when the contracting masters its own quantitative demand for services through best estimative approaches, it is easier to negotiate a term closer to the total amount of fixed cost of the contract. In this situation, there is very small room for negotiations with the variable part of the contract.

Findings comparison #2: in both cases here presented, due to miscalculation, the fixed part of both contracts (5.000 copies in Case#1 and 300 minutes in Case#2) were underestimated (75% underestimated in Case#1– 5.000 to 20.000 copies and in Case#2, 70% underestimated – 300 to 1.000 minutes). The gap existing was fulfilled by the variable part of the contract, normally higher than the fixed one as already discussed somewhere else.

Final Explanation #2: Statement #2 is directly linked to Statement #1. When someone negotiates a best suitable fixed part of the contract, the variable part will perhaps never be used. It will not disappear at all, but the usage will decrease and best financial performance achieved.

Finally, one agreement is based upon mutual consensus, both parties having participation and responsibilities, rights and legal obligations. It is important to keep in mind that in every negotiation, parties do not bargain only tangible aspects or the substance; they also negotiate intangible aspects or relationship. Therefore, building consensus with focus on substance will generate short term agreements. Building relationship is the path to long term agreements (Fisher, Ury, and Patton (1981), Cohen (1982), Lempereur and Colson (2008), Mnookin (1999, 2000), Thompson (1998), Shell(2006), Susskind(1987), Kochan(1986) , Lax and Sebenius(2006)).

The Six-Step Approach, then, is a rational, safe path to evaluate, simulate, and provide information for best computation and assessment, when dealing specifically with fixed plus variable costs contracts. Although it is a tool, it does not substitute common sense in any circumstance. In sum, in order to enhance best financial performance, it is important to deal with tangible and intangible aspects of the ongoing negotiation, separating people from the problem, invent mutual gains options, be prepared to change every single detail and to keep open mind to new ideas or suggestions both for both parties, improving best solutions for everyone involved.

References

1. Ariely, Dan (2008). *Predictably Irrational*. USA: Harper Collins.
2. Bazerman, Max; Moore, Don A.(2009) *Judgment In Managerial Decision Making*. USA: John Wiley And Sons Inc., 7th edition.
3. Breslin, J. William; Rubin, Jeffrey (1991). *Negotiation: Theory And Practice.* Cambridge: Pon.
4. Cohen, Herb (1982). *Você Pode Negociar Qualquer Coisa*. Rio de Janeiro: Editora Record.
5. Fisher, Roger; Ury, William; Patton, Bruce (1981). *Getting To Yes: Negotiating Agreement Without Giving In.* USA: Houghton Mifflin Company.
6. Iyengar, Sheena (2010). *The Art Of Choosing.* USA:Hachette Book Group.
7. Kahneman, Daniel (2011). *Thinking Fast And Slow.* New York: Farrar, Strauss And Giroux.
8. Kahneman, Daniel; Slovic,Paul; Tversky, Amos.(1982) *Judgment Under Uncertainty: Heuristics And Biases*. New York: Cambridge University Press.

9. Kahneman, Daniel (2003). "Maps of bounded rationality: psychology for behavioral economics". *The American Economic Review* 93 (5): 1449–75.
10. Kennedy, Gavin (1992). *The Perfect Negotiation*. London: Arrow Business Books.
11. Kochan, T.; Osterman, Paul (1986). *The Mutual Gains Enterprise*. Boston, MA, Harvard Business School Press.
12. Lax, David A.; Sebenius, James K.(2006). *3D Negotiation: powerful tools to change the game in your most important deals*.Boston, MA: Harvard Business School Press.
13. Lempereur, Alain P.; Colson, Aurélien (2008). *First Things First: A Negotiation Method* France: CO-DEV.
14. Marczyk,Geoffrey; Dematteo, David; Festinger,David. (2005) *Essentials of research design and methodology*. New Jersey: John Wiley and Sons, Inc.
15. Mnookin, Robert H.; Peppet,Scott R.; Tulumello, Andrew S. (2000) *Beyond Winning: negotiating to create value in deals and disputes.* Cambridge, MA and London, UK: The Belknap Press of Harvard University Press.
16. Mnookin Robert H.; Susskind, Lawrence E.; Foster, Pacey C.(1999). *Negotiating on behalf of others: advice to lawyers, business executives, sports agents, diplomats, politicians, and everybody else.* Thousand Oaks, CA. : Sage.
17. Plous, Scott (1993). *The Psychology of Judgment and Decision Making.* USA: McGraw-Hill.
18. Raiffa, Howard (1982).*The art and the science of negotiation: how to resolve conflicts and get the best out of bargaining*. Cambridge, MA:Harvard University Press.
19. Raiffa, Howard; Hammond John S.; Keeney Ralph L.(1999) *Smart Choices: a practical guide to making better life decisions*. Boston, Massachussets: Harvard Business School Press.
20. Schwartz, Barry (2004). *The paradox of choice: why more is less.* New York: Harper Collins Publishers.
21. Simon, Herbert (1957). "A Behavioral Model of Rational Choice", in Models of Man, Social and Rational: Mathematical Essays on Rational Human Behavior in a Social Setting. New York: Wiley.
22. Shell, G. R.; (2006). *Bargaining for advantage: Negotiation Strategies for Reasonable People.* NY: Penguin Books, 2nd. ed.
23. Susskind, Lawrence; Cruikshank, Jeffrey(1987). *Breaking the impasse: consensual approaches to resolving public disputes.* USA.Basic Books.
24. Thaler, Richard (2009). *Nudge: Improving Decisions About Health, Wealth, and Happiness.* USA: Penguin Updated edition.
25. Thompson,Leigh.(1998) *The mind and the heart of the negotiator*. New York: Prentice-Hall.
26. Yin, Robert K. (2008). *Case Study Research: Design and Methods.* USA: Sage Publications, Inc; 4th edition.

ANNEX I: SIX-STEP APPROACH SPREADSHEET

DESCRIPTION	STEP#3: CONTRACTING'S NEEDS ESTIMATE	STEP #2: ANALYSIS PERIODICITY: Total per month ($)	STEP #2: ANALYSIS PERIODICITY: Total per n-months ($)	STEP #1: INDICATOR OF ASSESSMENT
Fixed Cost				
Variable Cost				
PROSPECT CONTRACT A				
Fixed Cost				
Variable Cost				
STEP #4: SIMULATE CONTRACT A				
Fixed Cost				
Variable Cost				
PROSPECT CONTRACT B				
Fixed Cost				
Variable Cost				
STEP #4: SIMULATE CONTRACT B				

Annex I: Six-Step Approach spreadsheet

Source: elaborated by the author and data collected with the contracter