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Presentation

ECORFAN Journal-Republic of Peru is a research journal that publishes articles in the areas of:

Business Administration, **A**ministrative Management, **S**ME Management, **T**ourism and Hotel management and **F**inancial Administration

In Pro-Research, Teaching and Training of human resources committed to Science. The content of the articles and reviews that appear in each issue are those of the authors and does not necessarily the opinion of the editor in chief.

In Number 1st presented an article *Administration and management of the company America Movil, S.A.B. of C.* by MONTES-AGUILAR, Marco with adscription in the Universidad Tecnológica de México, in the next Section an article *Administration and management of Grupo Bimbo, S.A.B. of C.V.* by VAZQUEZ-NIETO, Omar with adscription in the Universidad Tecnológica de México, in the next Section an article *Administration and management of GRUPO BAFAR, S.A.B. of C.V* by MUÑIZ-AVILA, José with adscription in the Universidad Tecnológica de México, in the next Section an article *Administration and management of the Grupo Carso company, S.A.B. of C.V.* by AGUILA, María with adscription in the Universidad Tecnológica de México, in the next Section an article *Administration and management of the IDEAL company S.A.B. of C.V.* by AGUILAR-HERNANDEZ, Edgar with adscription in the Universidad Tecnológica de México, in the next Section an article *Administration and management of the INVEX CONTROLADORA Company, S.A.B. of C.V.* by HERNANDEZ-GOMEZ, Ricardo with adscription in the Universidad Tecnológica de México in the next Section an article *Influence decision making in operations, distinctive competencies of SMEs in the hotel sector in Galicia* by SUYO-CRUZ, Gabriel and CASTROMAN-DIAZ, Juan, with adscription in the Universidad Nacional de San Antonio Abad del Cusco, Universidad de Santiago de Compostela respectively.

Content

Article	Page
Administration and management of the company America Movil, S.A.B. of C.V.	1-11
Administration and management of Grupo Bimbo, S.A.B. of C.V.	12-16
Administration and management of GRUPO BAFAR, S.A.B. of C.V	17-20
Administration and management of the Grupo Carso company, S.A.B. of C.V.	21-24
Administration and management of the IDEAL company S.A.B. of C.V.	25-29
Administration and management of the INVEX CONTROLADORA Company, S.A.B. of C.V.	30-33
Influence decision making in operations, distinctive competencies of SMEs in the hotel sector in Galicia	34-58
<i>Instructions for Authors</i>	
<i>Originality Format</i>	
<i>Authorization Form</i>	

Administration and management of the company America Movil, S.A.B. of C.V.

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Abstract

Then introduce a structured data real market, which will be based on data and variables that gives us the Mexican Stock Exchange and the Bank of Mexico model, all to determine how impacts or may impact a company or station in the economy, in turn we take the variables that have already been predetermined for the application. But not before presenting the theory behind this model, to understand the background I will explain what each variable of the same.

Telecommunications services, telecommunications services, wireless services, wireless services

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Methodology

To venture into the field of international finance was taken in the first instance to the company "Agro Industrial Export" yet to find their values on the Mexican Stock Exchange; I found that not enough data to perform the exercise in which we seek to know the value of the station in question.

Agro Industrial Export, S.A. of C.V.
Key Issuer: AGRIEXP
Series: Capitals

Quotes Serie A		Indicators Serie A	
Sales Volume	0	Price / Earnings	0
Sales Position	0	Price / Book Value	0
Sales Volume	0	Earnings per / Action	0
Purchase stance	0	Book value p / Action	0
Made last price	0.059	Shares Outstanding	175000000
PPP	0		
Price Previous	0.059		
Variation	0		
Trading Volume	0		
Maximum	0		
Minimum	0		
Last Year Ago	N/A		

Table 1 Mexican Stock Exchange Data

Company

Therefore it was decided to work with another company that exemplified the best way to model this case look for work with a company that has data that could operate in the exercise. America Movil is a company founded in 2000 whose value on the MSE is presented below.

America Movil, S.A.B DE C.V.
Key Issuer: AMX
Series: Capitals

Quotes Series L		Indicators Series L	
Sales Volume	32594	Third quarter	42064
Sales Position	14.39	Price / Earnings	39.578824
Sales Volume	25000	Price / Book Value	9.699245
Purchase stance	14.38	Utility w / Action	0.363326
Made last price	14.36	Book value p / Action	1.48259
PPP	14.38	Shares Outstanding	42,127,208,063
Price Previous	14.03		
Variation	2.494654		
Trading Volume	57379125		
Maximum	14.42		
Minimum	13.96		
Last Year Ago	N/A		
Max. Last year	17.51		
Min. Year Ago	12.43		

Table 2 Mexican Stock Exchange Data

To determine the MIF has the following formula:

$$MIF = \frac{\left[\frac{(MD - MI)}{Determination - Depreciation} \right]^{Coverage} \left[\frac{Devaluación + Cok}{Forward - Exposition} \right]^{Arbitration}}{Capital cost} - \left[\frac{FCP + FMP + FLP}{(Not fundable - Fundable)} \right]^{(CP+MP)_{LP}^+} + \left[\frac{Performance}{Utility} \right]^{financial range}$$

Variables

(1)

Variables

The general variables to consider are:

- $1/2 = 0.50$
- $3/4 = 0.75$
- $\varepsilon = -0.50$
- $lim = 0.10$
- $\beta_0 = (0.50)^0 = 0.50$
- $\beta_1 = (0.50)^1 = 0.50$
- $\beta_2 = (0.50)^2 = 0.25$

- $\lambda = 0.75$
- $\eta = 0.25$
- $\partial = 0.50$
- $f = 1$
- $d = -1$

I'll start with the first part corresponding to the upper left corner of the formula.

$$\left[\frac{(MD - MI)}{Determination - Depreciation} \right]^{Average} \quad (2)$$

This will require determining where each value:

$$\begin{aligned}
 MD &= \pi - \left[\frac{P_{max} - P_{min}}{2} \right]^{1/2} \\
 MI &= \left[\frac{\pi + PPP}{2} \right]^{1/4} \\
 Determination &= (\pi_s + \pi_-) \int_{M4}^{M1} \lim_{\pi_-} \frac{\pi_s}{\pi_-} \\
 Depreciation &= \frac{dM1}{d\lambda1} + \frac{dM2}{d\lambda2} + \frac{dM3}{d\lambda3} + \frac{dM4}{d\lambda4} + \left[\frac{d\lambda1}{\lambda1} \right]^{e2} \\
 Coverage &= \left[\frac{T.CD}{T.CI} \right]^{\pi_s - \pi_-}
 \end{aligned} \quad (3)$$

I'll start with the values of the Direct Currency, corresponding according to the following, inflation π is determined by the Bank of Mexico and will be equal to π_s / π_- (-s), Pmax and Pmin are those prices are determined on the Exchange Securities. For this exercise we consider the following specific data.

Inflation measured by	Annual
CPI subyacentel /	2.38
Non-core CPI	2.96

Table 3 Inflation Data

Maximum	14.42
Minimum	13.96

Table 4 Data Exchange Rates

For the calculation of inflation, we replace the original formula that takes part of the underlying security and non-core.

$$\pi = \frac{2.38}{2.96} = 0.80 \quad (4)$$

Substitute values into the formula of Direct Currency

$$\begin{aligned}
 MD &= 0.80 - \left[\frac{14.42 - 13.96}{2} \right]^{1/2} \\
 MD &= 0.80 - \left[\frac{0.46}{2} \right]^{1/2} \\
 MD &= 0.80 - [0.23]^{1/2} \\
 MD &= 0.80 - [0.23]^{1/2} \\
 MD &= 0.80 - 0.47 = 0.33
 \end{aligned} \quad (5)$$

Once I had the courage to Direct Currency (0.33) I will proceed to calculate the value of the Indirect Currency according to the following values.

$$\pi = \frac{2.38}{2.96} = 0.80$$

PPP 14.38

Table 5 BMV Data

Where:

$$\begin{aligned}
 MI &= \left[\frac{0.80 + 14.38}{2} \right]^{0.75} \\
 MI &= \left[\frac{15.18}{2} \right]^{0.75}
 \end{aligned}$$

$$MI = [7.59]^{0.75} = 4.57 \tag{6}$$

Once we got the value of the currency Indirect (4.57) values are represented in the formula of the determination, in which we need only know the values of M1-M4 and will be reflected in this way.

M1-M4 will be taken according to the target rate and based on this the value will be sequential and will increase.

Interbank		
target rate	02/11/2015	3.00

Table 6 Data from the Bank of Mexico

Therefore M1 = 3, M2 = 6, M3 = 9 and M4 = 12. Once we know the values we can only replace the corresponding formula.

$$Determination = (2.38 + 2.96) \int_{12}^3 \lim \frac{2.38}{2.96}$$

$$Determination = (5.34) \int_{12}^3 \lim 0.80 \tag{7}$$

As a next step in this part replace the depreciation formula.

$$Depreciation = \frac{dM1}{d\lambda1} + \frac{dM2}{d\lambda2} + \frac{dM3}{d\lambda3} + \frac{dM4}{d\lambda4} + \left[\frac{d\lambda}{\lambda n} \right]^{\xi2}$$

$$Depreciation = \frac{-1(3)}{-1(0.75)} + \frac{-1(6)}{-1(0.75)} + \frac{-1(9)}{-1(0.75)} + \frac{-1(12)}{-1(0.75)} + \left[\frac{-1(0.75)}{0.75(0.25)} \right]^{(-0.5)^2}$$

$$Depreciation = \frac{-3}{-0.75} + \frac{-6}{-0.75} + \frac{-9}{-0.75} + \frac{-12}{-0.75} + \left[\frac{-0.75}{0.18} \right]^{0.25}$$

$$Depreciation = 4 + 8 + 12 + 16 + [-4.16]^{0.25}$$

$$Depreciation = 40 + 1.42 = 41.42 \tag{8}$$

Finally calculate the values of coverage to complete this part, it will be necessary to bring the exchange rate to be handled at the Bank of Mexico considering the interbank 48 hours.

Date	Exchange rate
30/10/2015	16.50

Table 7 Data from the Bank of Mexico

$$T.CD = 16.50$$

$$T.CI = \log T.CD = 1.21$$

$$Coverage = \left[\frac{16.50}{1.21} \right]^{2.38-2.96}$$

$$Coverage = 0.21 \tag{9}$$

Thus presents the final formula for the first part.

$$\left[\frac{(MD - MI)}{Determination - Depreciation} \right]^{Coverage}$$

$$\left[\frac{(0.33 - 4.57)}{\left((5.34) \int_{12}^3 \lim 0.80 \right) - 41.42} \right]^{0.21}$$

$$\left[\frac{-4.24}{\left((5.34) \int_{12}^3 \lim 0.80 \right) - 41.42} \right]^{0.21}$$

$$\left[\frac{-4.24}{\left((5.34) \int_{12}^3 (0.10) 0.80 \right) - 41.42} \right]^{0.21}$$

$$\left[\frac{-4.24}{\left((5.34) \int_{12}^3 0.08 \right) - 41.42} \right]^{0.21}$$

$$\left[\frac{-4.24}{((5.34)[(1)9](0.08)) - 41.42} \right]^{0.21}$$

$$\left[\frac{-4.24}{3.84 - 41.42} \right]^{0.21}$$

$$\left[\frac{-4.24}{-37.58} \right]^{0.21} = 0.11^{0.21} = 0.62 \quad (10)$$

Once we have the first part I will follow the formula.

$$\left[\frac{\text{Devaluation} + Cck}{\text{Forward} - \text{Exposition}} \right]^{\text{Arbitration}} \quad (11)$$

Where:

$$\text{Devaluation} = \left[\frac{\pi_s}{\pi_{-s}} \right]^{3/4 - 1/2}$$

$$Cck = \left(\frac{CV - CF}{CFL} \right)^{\pi - 1/2}$$

$$\text{Forward} = \left(\frac{PPP - 2}{A. \text{Circulación}} \right)^{3/4}$$

$$\text{Exposition} = [T.CD + T.CI]^\pi$$

$$\text{Arbitraje} = \beta(\$0) + \beta(\$1) + \beta(\$2) + [\beta(\$n)]^2 \quad (12)$$

First the values according to the formula of depreciation taken.

$$\text{Depreciation} = \left[\frac{2.38}{2.96} \right]^{0.75 - 0.5}$$

$$\text{Depreciation} = [0.80]^{0.25}$$

$$\text{Depreciation} = [0.80]^{0.25}$$

$$\text{Depreciation} = 0.94 \quad (13)$$

The following values are substituted into the formula of C. Variable, it is necessary to know the values of costs (variable, fixed and floating). We take these values to calculate the price / utility that will give us BMW.

Price / Earnings	39.57
------------------	-------

Table 8 BMW Facts

$$C. \text{Variable} = (39.57)^{0.75} = 15.77$$

$$C. \text{Fixed} = (39.57)^{0.5} = 6.29$$

$$C. \text{Fluctuating} = \frac{\text{Priceless/Utility}}{\cos \text{Price/Utility}} = \frac{\sin 39.57}{\cos 39.57} = \frac{0.63}{0.77} = 0.81 \quad (14)$$

Therefore:

$$Cck = \left(\frac{15.77 - 6.29}{0.81} \right)^{0.80 - 0.50}$$

$$Cck = \left(\frac{9.48}{0.81} \right)^{0.30}$$

$$Cck = (11.70)^{0.30} = 2.09 \quad (15)$$

Subsequent to this part of the Forward and is calculated prior to it need to obtain other required values.

Shares outstanding are taken from the value provided by the BMV; however it is necessary to smooth the number through a logarithm.

Outstanding shares	42,127,208,063
--------------------	----------------

Table 9 Facts BMW

$$A. Circulation = \log(42,127,208,063) = 10.62 \quad (16)$$

Once we have that information then the formula of the Forward.

$$Forward = \left(\frac{PPP - 2}{A. Circulación} \right)^{3/4}$$

$$Forward = \left(\frac{14.38 - 2}{10.62} \right)^{0.75}$$

$$Forward = (1.16)^{0.75} = 1.11 \quad (17)$$

Once we have obtained the values of Forward, you must perform the calculation of exposure.

$$Exposure = [16.50 + 1.21]^{0.80}$$

$$Exposure = [17.71]^{0.80}$$

$$Exposure = [17.71]^{0.80}$$

$$Exposure = 9.96 \quad (18)$$

Finally the value of arbitration is calculated by substituting in the following formula.

$$Arbitration = 0.50 + 0.50 + 0.25 + [0.50(0.25)]^2$$

$$Arbitration = 1.25 + [0.12]^2$$

$$Arbitration = 1.25 + [0.12]^2$$

$$Arbitration = 1.25 + 0.01 = 1.26 \quad (19)$$

Once all the required values were obtained are represented in the formula that led to each variable.

$$\left[\frac{Devaluation + Cck}{Forward - Exposure} \right]^{Arbitration}$$

$$\left[\frac{0.94 + 2.09}{1.11 - 9.96} \right]^{1.26}$$

$$\left[\frac{3.03}{-8.85} \right]^{1.26}$$

$$\left[\frac{3.03}{-8.85} \right]^{1.26}$$

$$[-0.34]^{1.26} = 0.25 \quad (20)$$

To determine the capital cost will be necessary to follow the following formula, which will result from the sum of the variable cost plus the cost fluctuating between fixed cost and this will be submitted to Brownian.

$$Capital cost = \left(\frac{CV + CFL}{CF} \right)^{3/4}$$

Where:

$$Capital cost = \left(\frac{15.77 + 0.81}{6.29} \right)^{0.75}$$

$$Capital cost = \left(\frac{16.58}{6.29} \right)^{0.75}$$

$$Capital cost = (2.63)^{0.75} = 2.06 \quad (21)$$

Once it obtained all the left part of the formula the next step will be replaced in the central section of it.

$$\left[\left[\frac{FCP + FMP + FLP}{(Not\ fundable - Fundable)} \right] \right] \left(\frac{CP+MP}{LP} \right)^2 \quad (22)$$

Where:

$$FCP = \left(\frac{V - \pi}{T.C} \right)^{MAX} \quad (23)$$

For the value of "V" it will be taken from the value provided by the BMV.	
Sales Position	14.39

Table 10 BMV Data

MAX is the maximum value that marks the BMV for the actions of the organization.	
Maximum	14.42

Table 11 BMV Data

Therefore:

$$FCP = \left(\frac{14.39 - 0.80}{16.50} \right)^{14.42}$$

$$FCP = \left(\frac{13.59}{16.50} \right)^{14.42}$$

$$FCP = (0.82)^{14.42} = 0.05 \quad (24)$$

Following this we have to calculate the medium-term financing, corresponding to the following formula.

$$FMP = \left(\frac{C + \pi}{T.C} \right)^{MIN} \quad (25)$$

For the value of "C" we find the data in the position of buying it throws the BMV and MIN will find it again in the same data frame.

Purchase stance	14.38
Minimum	13.96

Table 12 BMV Data

According to these values:

$$FMP = \left(\frac{14.38 + 0.80}{16.50} \right)^{13.96}$$

$$FMP = \left(\frac{15.18}{16.50} \right)^{13.96}$$

$$FMP = (0.92)^{13.96} = 0.31 \quad (26)$$

The last of the financing, the long-term financing will be developed through the following formula.

$$FLP = \left(\frac{V - \pi}{C + \pi} \right)^{T.C - \frac{MAX}{MIN}}$$

$$FLP = \left(\frac{14.39 - 0.80}{14.38 + 0.80} \right)^{16.50 - \frac{14.42}{13.96}}$$

$$FLP = \left(\frac{13.59}{15.18} \right)^{16.50 - 1.03}$$

$$FLP = (0.89)^{15.47} = 0.16 \quad (27)$$

As it has done the calculation of financing, now must resolve the formulas of fundable and not fundable, this will be this way.

$$Not\ fundable = \int \frac{\frac{MIN}{d\lambda(MIN)}}{\frac{MAX}{d\lambda(MAX)}}$$

$$Not\ fundable = \int \frac{13.96}{\frac{[(-1)0.75](13.96)}{14.42}}{\frac{[(-1)0.75](14.42)}$$

$$\begin{aligned} \text{Not fundable} &= \int \frac{13.96}{\frac{-10.47}{14.42}} \\ &\quad \frac{14.42}{-10.81} \\ \text{Not fundable} &= \int \frac{-150.90}{-150.97} \\ \text{Not fundable} &= \int \frac{150.90}{150.97} = (1)0.99 = 0.99 \\ \text{Fundable} &= \int \frac{(MAX)}{d\lambda(MAX)} - \int \frac{(MIN)}{d\lambda(MIN)} \\ \text{Fundable} &= \int \frac{(14.42)}{[(-1)0.75](14.42)} \\ &\quad - \int \frac{(13.96)}{[(-1)0.75](13.96)} \\ \text{Fundable} &= \int \frac{(14.42)}{-10.81} - \int \frac{(13.96)}{-10.47} \\ \text{Fundable} &= \int -1.33 - \int -1.33 \\ \text{Fundable} &= -1.33 + 1.33 = 0 \end{aligned} \quad (28)$$

To continue values are substituted into the formula of deadlines.

Max. Last year	17.51
Min. Year Ago	12.43

Table 1 BMV Data

Short term

$$\begin{aligned} CP &= \left[\int \frac{(MAX-MIN)^{0.5}}{(MAXAnt+MINAnt)^{0.75}} \right]^2 \\ CP &= \left[\int \frac{(14.42-13.96)^{0.5}}{(17.51+12.43)^{0.75}} \right]^2 \end{aligned}$$

$$\begin{aligned} CP &= \left[\int \frac{(0.46)^{0.5}}{(29.94)^{0.75}} \right]^2 \\ CP &= \left[\int \frac{0.67}{12.79} \right]^2 \\ CP &= [(1)12.12]^2 = 146.89 \end{aligned} \quad (29)$$

Medium term

$$\begin{aligned} MP &= \left[\int \frac{(MIN+MAX)^{0.5}}{(MINAnt-MAXAnt)^{0.75}} \right]^2 \\ MP &= \left[\int \frac{(13.96+14.42)^{0.5}}{(12.43-17.51)^{0.75}} \right]^2 \\ MP &= \left[\int \frac{(28.38)^{0.5}}{(-5.08)^{0.75}} \right]^2 \\ MP &= \left[\int \frac{5.32}{-3.38} \right]^2 = [(1) - 8.7]^2 = 75.69 \end{aligned} \quad (30)$$

Long term

$$\begin{aligned} LP &= \left[\int \frac{\left(\frac{MAXAnt+MAX}{2}\right)^{0.5}}{\left(\frac{MINAnt+MIN}{2}\right)^{0.75}} \right]^2 \\ LP &= \left[\int \frac{\left(\frac{17.51+14.42}{2}\right)^{0.5}}{\left(\frac{12.43+13.96}{2}\right)^{0.75}} \right]^2 \\ LP &= \left[\int \frac{\left(\frac{31.93}{2}\right)^{0.5}}{\left(\frac{26.39}{2}\right)^{0.75}} \right]^2 \\ LP &= \left[\int \frac{3.99}{6.92} \right]^2 = [(1)2.93]^2 = 8.58 \end{aligned} \quad (31)$$

Once you have calculated all the data corresponding to the formula, the next step is to replace each value.

$$\left[\frac{0.05 + 0.31 + 0.16}{(0.99 - 0)} \right] \left(\frac{146.89 + 75.69}{8.58} \right)^2$$

$$\left[\frac{0.52}{(0.99)} \right] \left(\frac{222.58}{8.58} \right)^2$$

$$[0.52]^{(25.94)^2} = [0.52]^{672.88} = 0 \tag{32}$$

For the last part of our formula the following reference will be made to begin to calculate the necessary data.

$$\left[\frac{Performance}{Utility} \right]^{Fundable\ range} \tag{33}$$

Where performance:

$$Performance = \frac{d(MAX)}{d\lambda_1} - \frac{d(MIN)}{d\lambda_2}$$

$$Performance = \frac{-1(14.42)}{-1(0.75)} - \frac{-1(13.96)}{-1(0.75)}$$

$$Performance = \frac{-1(14.42)}{-1(0.75)} - \frac{-1(13.96)}{-1(0.75)}$$

$$Performance = 19.22 - 18.61 = 0.61 \tag{34}$$

Once the utility will continue to yield was obtained.

$$Utility = \left[\frac{(dMAX / lim\ MAXAnt)^{1/2}}{(dMIN / lim\ MINAnt)^{3/4}} \right]^2$$

$$Utility = \left[\frac{\left(\frac{(-1)14.42}{(0.10) 17.51} \right)^{0.5}}{\left(\frac{(-1)13.96}{(0.10) 12.43} \right)^{0.75}} \right]^2$$

$$Utility = \left[\frac{(-14.42/1.75)^{0.5}}{(-13.96/1.24)^{0.75}} \right]^2$$

$$Utility = \left[\frac{-2.87}{-6.14} \right]^2 = [0.46]^2 = 0.21 \tag{35}$$

Finally we have the allowable range, corresponding to the following formula.

$$Fundable\ range = \int_{\left(\frac{\partial MIN}{\partial MINAnt} \right)}^{\left(\frac{\partial MAX}{\partial MAXAnt} \right)} \left[\frac{\partial MAX - \partial MIN}{\partial MAXAnt + \partial MINAnt} \right]^{0.75-0.5}$$

$$Fundable\ range = \int_{\left(\frac{(0.50)13.96}{(0.50)12.43} \right)}^{\left(\frac{(0.50)14.42}{(0.50)17.51} \right)} \left[\frac{(0.50)14.42 - (0.50)13.96}{(0.50)17.51 + (0.50)12.43} \right]^{0.75-0.5}$$

$$Fundable\ range = \int_{\left(\frac{6.98}{6.21} \right)}^{\left(\frac{7.21}{8.75} \right)} \left[\frac{7.21 - 6.98}{8.75 + 6.21} \right]^{0.25}$$

$$Fundable\ range = \int_{(1.12)}^{(0.82)} \left[\frac{0.23}{14.96} \right]^{0.25}$$

$$Fundable\ range = [(1)0.3][0.01]^{0.25}$$

$$Fundable\ range = [0.3]0.31 = 0.09 \tag{36}$$

On the last occasion, we substitute our three values in the original formula.

$$\left[\frac{\text{Performance}}{\text{Utility}} \right]^{\text{Fundable range}}$$

$$\left[\frac{0.61}{0.21} \right]^{0.09}$$

$$[2.90]^{0.09} = 1.10 \quad (37)$$

Once all real values of the formula will substitute each data to determine the real value of MIF was obtained.

$$MIF = \frac{0.62[0.25]}{2.06} - [0 + 1.10]$$

$$MIF = \frac{0.15}{2.06} - 1.10$$

$$MIF = 0.07 - 1.10 = |-1.03| = 1.03 \quad (38)$$

Conclusion

Once you gather all the necessary data from America Movil, it was necessary to begin replacing the values along each formula, involving the exchange, currencies, types of term (short, medium and long), among others.

This in order to sustain the current value of the issuer with respect to the country, variables was taken into account in real time for assessment, so we're talking about:

Through the financial integrative model it was determined that the value of financial activity station America Movil represents 1.03 of our national economy in Mexico, holding an exchange rate of 16.50, taking inflation (non-core) 2.96 and being fork or market in the Mexican financial market.

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Administration and management of Grupo Bimbo, S.A.B. of C.V.

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Abstract

"Grupo Bimbo", the first group company, was founded in 1945 in Mexico City.; subsequently, in 1952-1978 over 12 floors they were opened, allowing you to extend the distribution of its products throughout Mexico. During this same period, the company "cakes and biscuits," which later became "Marinela products" and first floors of sweets and chocolates "Ricolino" and salty snacks "Harcel" settled was established. Grupo Bimbo began its international expansion in 1990 and today has become one of the companies with the largest bakery in the world, standing as a leader in Mexico and several Latin American countries. It has plants strategically located in Mexico, eu Argentina, Brazil, Chile, Colombia, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panama, Paraguay, Peru, Uruguay, Venezuela, Spain, Portugal and China. It also has an extensive direct distribution network with more than 52,000 routes and more than 125,000 employees the workforce.

Products frequently consumed, food, drinks and snuff, food, food production and marketing, controller of companies engaged in the development and distribution of food products

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Financial integrative model

- π = Inflation	- M1 = Currencies	C.V = Variable cost
- P max = Maximum Price	- M2 = Coins and Banknotes	C.F = Fixed cost
- P min = Minimum Price	- M3 = Coins, Banknotes and Paper	C.FI = Circulated cost
- Ant Max = Maximum Price Previous Year	- M4 = Coins, Banknotes, Paper and Titles	Circulation = circulation shares Log = A log. Circulation
- Ant Min = Minimum price Previous Year	- $\beta 0$ = stochastic correlation	- λ = Lamnda, Fixed value
- $\frac{1}{2}$ = Brownian Value	- $\beta 1$ = stochastic correlation	- \int = Integral, Fixed value
- $\frac{3}{4}$ = Stochastic Value	- $\beta 2$ = stochastic correlation	- q = Derivative, fixed value
- Ppp = Weighted Average Price	- Lim = limit, fixed value.	- ϵ = Epsilon, Fixed value
- πs = Core Inflation	- V = Stance Sale	- n = Fixed value
- $\pi 1 s$ = Non - core inflation	- C = Posture Purchase	- \bar{d} = Partial fixed value
- T.C.D = direct exchange rate	- x = Fixed value	
- T.C.I = indirect exchange rate		

Table 1 Definition of symbols and terms

- π = (.80)	- M1 = 3	<p>PRICE UTILITY</p> <p>C.V = $(49.31)^{1/4} = 18.60$ C.F = $(49.31)^{1/2} = 7.02$ C.FI = $\left(\frac{49.31 \times 100}{100 \times 100}\right) = 1.16$</p> <p>- A. Current = 4,703,200,000 log = 9.67 - λ = .75 - \int = 1 - q = -1 - ϵ = -.50 - n = .25 - \bar{d} = .50</p>
- P max = 49	- M2 = 6	
- P min = 47.44	- M3 = 9	
- Max. Ant = 43.17	- M4 = 12	
- Min. Ant = 32.53	- $\beta 0 = (.50)^2 = 1$	
- $\frac{1}{2}$ = .50	- $\beta 1 = (.50)^2 = .50$	
- $\frac{3}{4}$ = .75	- $\beta 2 = (.50)^2 = .25$	
- Ppp = 48.75	- Lim = .10	
- πs = 2.38	- V = 48.77	
- $\pi 1 s$ = 2.96	- C = 48.67	
- T.C.D = 16.5349	- x = .75	
- T.C.I = 1.22		

Table 2 Value table

Formula based on Financial Model Integrator (NIF)

$$NIF = \frac{\left[\frac{\text{Direct currency} - \text{Indirect currency}}{\text{Determinant} - \text{Depreciation}} \right]^{2\text{Power}} \left[\frac{\text{Evaluation} + \text{C. Variable}}{\text{Forward} - \text{Exposition}} \right]^{\text{Exponential}}}{\text{Capital cost}} - \left[\frac{\text{FCP} + \text{FMP} + \text{FLP}}{\text{Via fundable} - \text{Fundable}} \right] + \left[\frac{\text{Variables} - \text{Hable} \text{ var.}}{\text{Log} \text{ var.}} \right]^2 + \left[\frac{\text{Indicador}}{\text{Indicador}} \right]^{\text{Loge}}$$

(1)

INDICADORES SERIE A

Tercer trimestre del año	3 / 2015
Precio/Utilidad	49.311634
Precio/Valor Libro	3.988826
Utilidad p/Acción	0.988611
Valor Libro p/Acción	12.221642
Acciones de Circulación	4,703,200,000

Table 2 Information Issuer " BIMBO "

Replacing concepts by Formulas

$$NIF = \frac{\left[\frac{\left[\frac{\pi - (2\text{max} + 2\text{min})}{\pi} \right]^{\frac{1}{2}} - \left[\frac{\pi - 2\text{pp}}{\pi} \right]^{\frac{1}{2}}}{\left[\frac{\pi + \pi 1 s}{\pi} \right]^{\frac{1}{4}} \int \frac{M1}{M4} \lim = \frac{\pi}{\pi 1 s} - \sqrt{\frac{M1}{M2} + \frac{M2}{M3} + \frac{M3}{M4} + \frac{M4}{M5}} \left[\frac{1}{2} \right]^{\frac{1}{2}} \right]}{\left[\frac{V - \pi}{T.C} \right]^{\text{max}} + \left[\frac{C + \pi}{T.C} \right]^{\text{min}} + \left[\frac{V - \pi}{C + \pi} \right]^{\text{T.C} - \frac{\text{max}}{\text{min}}} \left[\frac{\int \left[\frac{\text{max} - \text{min}}{\text{max Ant} - \text{min Ant}} \right]^{\frac{1}{2}} + \int \left[\frac{\text{min} + \text{max}}{\text{min Ant} - \text{max Ant}} \right]^{\frac{1}{2}}}{\int \left[\frac{\text{max Ant} + \text{min Ant}}{\text{min Ant} + \text{min Ant}} \right]^{\frac{1}{2}}} \right]^2} \right]^{\frac{1}{2}}$$

(2)

Less (-)

$$\left[\frac{\left[\frac{V - \pi}{T.C} \right]^{\text{max}} + \left[\frac{C + \pi}{T.C} \right]^{\text{min}} + \left[\frac{V - \pi}{C + \pi} \right]^{\text{T.C} - \frac{\text{max}}{\text{min}}} \left(\frac{\int \left[\frac{\text{max} - \text{min}}{\text{max Ant} - \text{min Ant}} \right]^{\frac{1}{2}} + \int \left[\frac{\text{min} + \text{max}}{\text{min Ant} - \text{max Ant}} \right]^{\frac{1}{2}}}{\int \left[\frac{\text{max Ant} + \text{min Ant}}{\text{min Ant} + \text{min Ant}} \right]^{\frac{1}{2}}} \right)^2}{\left[\frac{\int \left[\frac{\text{min}}{\text{max Ant}} \right] - \int \left[\frac{\text{max}}{\text{min Ant}} \right] - \int \left[\frac{\text{min}}{\text{max Ant}} \right]}{\left[\frac{\text{max Ant} - \text{min Ant}}{\text{min Ant} + \text{min Ant}} \right]^{\frac{1}{2}}} \right]^2} \right]^{\frac{1}{2}}$$

(3)

More (+)

$$\left[\frac{\frac{d(\text{max})}{d\lambda_1} + \frac{d(\text{min})}{d\lambda_2}}{\left[\frac{d(\text{max}/\text{limmax Ant})^{\frac{1}{2}}}{d(\text{min}/\text{limmin Ant})^{\frac{3}{4}}} \right]^2} \right] \left(\frac{\bar{d} \text{ min}}{\bar{d} \text{ min Ant}} \right) \left[\frac{\bar{d} \text{ max} - \bar{d} \text{ min}}{\bar{d} \text{ max Ant} + \bar{d} \text{ min Ant}} \right]^{\frac{3}{4} - \frac{1}{2}}$$

(4)

Substitution amounts concepts

$$NIF = \frac{\left[\frac{\left[\frac{\pi - (2\text{max} + 2\text{min})}{\pi} \right]^{\frac{1}{2}} - \left[\frac{\pi - 2\text{pp}}{\pi} \right]^{\frac{1}{2}}}{\left[\frac{\pi + \pi 1 s}{\pi} \right]^{\frac{1}{4}} \int \frac{M1}{M4} \lim = \frac{\pi}{\pi 1 s} - \sqrt{\frac{M1}{M2} + \frac{M2}{M3} + \frac{M3}{M4} + \frac{M4}{M5}} \left[\frac{1}{2} \right]^{\frac{1}{2}} \right]}{\left[\frac{V - \pi}{T.C} \right]^{\text{max}} + \left[\frac{C + \pi}{T.C} \right]^{\text{min}} + \left[\frac{V - \pi}{C + \pi} \right]^{\text{T.C} - \frac{\text{max}}{\text{min}}} \left[\frac{\int \left[\frac{\text{max} - \text{min}}{\text{max Ant} - \text{min Ant}} \right]^{\frac{1}{2}} + \int \left[\frac{\text{min} + \text{max}}{\text{min Ant} - \text{max Ant}} \right]^{\frac{1}{2}}}{\int \left[\frac{\text{max Ant} + \text{min Ant}}{\text{min Ant} + \text{min Ant}} \right]^{\frac{1}{2}}} \right]^2} \right]^{\frac{1}{2}}$$

(5)

Less (-)

$$\left[\frac{[48.77 - .80]^{49} + [48.67 + .80]^{47.44} + [48.77 - .80]^{18.22} - \frac{48}{97.42}}{16.53} \right] \left(\frac{\int_{(42.17+32.53)^{75}}^{(49-47.44)^{20}} + \int_{(32.53-42.17)^{75}}^{(47.44+49)^{20}}}{\int_{(21.58+16.26)^{25}}^{(42.17+32.53)^{75}}} \right)^2 \quad (6)$$

More (+)

$$\left[\frac{\frac{(-1)(49) + (-1)(47.44)}{(-1)(75)} + \frac{(-1)(47.44)}{(-1)(75)}}{\left[\frac{((-1)(49)/(-10)(42.17))^{50}}{((-1)(47.44)/(-10)(32.53))^{75}} \right]^2} \right] \frac{\int_{(50)(43.17)}^{(50)(49)} (50)(49) - (50)(47.44)}{\int_{(50)(32.53)}^{(50)(43.17)} (50)(43.17) + (50)(32.53)} \quad (7)$$

First reduction

$$MIF = \frac{[.80 - (.4222)]^{20} - [14.77]^{20}}{[(5.34) \int_{12}^3 (.10)(.80) - \frac{-3}{-75} + \frac{-6}{-75} + \frac{-9}{-75} + \frac{-12}{-75} \frac{[22](.25)}{324}]^{20}} \left[\frac{[.80]^{25} + [9.98]^{20}}{[4.83]^{75} - [17.75]^{20}} \right]^{20} \quad (8)$$

Less (-)

$$\left[\frac{[2.90]^{49} + [2.99]^{47.44} + [1.97]^{15.49}}{\frac{\int_{-35.58}^{47.44}}{49} - \int_{-36.75}^{49} - \int_{-35.58}^{47.44}} \right] \left(\frac{\int_{(75.70)^{75}}^{(1.56)^{50}} + \int_{(-10.64)^{75}}^{(96.44)^{50}}}{\int_{(29.98)^{75}}^{(46.08)^{50}}} \right)^2 \quad (9)$$

More (+)

$$\left[\frac{\frac{-49}{-75} + \frac{-47.44}{-75}}{\left[\frac{(-49/4.32)^{50}}{(-47.44/3.25)^{75}} \right]^2} \right] \frac{\int_{(21.58)}^{(24.50)} [24.50 - 23.72]^{25}}{(23.72) [21.58 + 16.26]} \quad (10)$$

Subsequent reductions

$$MIF = \frac{[-6.89 - 11.10]^{22}}{[(5.34) \int_{12}^3 (.10)(.80) - [40.79] \frac{[.94 + 1.99]^{17.4}}{3.25 - 9.98}]} \cdot \left[\frac{4.54 + 3.68 + .62}{\frac{1}{-11} - \int_{-1.33} - \int_{-1.33}} \right] \left(\frac{\int_{(1.25)^{17.4}}^{(42.22)^{17.4}} + \int_{(1.25)^{17.4}}^{(42.22)^{17.4}}}{\frac{[42.22]^{17.4}}{17.4} + \frac{[1.25]^{17.4}}{17.4}} \right) + \left[\frac{42.22 - 42.22}{-17.4} \right]^{17.4} \quad (11)$$

$$MIF = \frac{-18}{[(5.34) (1)(.72) - [40.79] \frac{2.93}{-6.72}]^{1.76}} \cdot \frac{2.93}{-6.72} \cdot \left[\frac{8.84}{\frac{1}{-1.33} - \int_{-1.33} - \int_{-1.33}} \right] \left(\frac{(1) \frac{1.25}{15.66} + (1) \frac{9.82}{(1)(42)^2}}{(1)(42)^2} \right)$$

$$MIF = \frac{-18}{[3.84] - [40.79] \frac{2.1722}{-23}} \cdot \frac{2.1722}{-23} \cdot \left[\frac{8.84}{(1) 1 - [(-1.33) - (-1.33)]} \right] \left(\frac{8.84}{[642.90]^{(89)(2.47)}} \right)$$

$$MIF = \frac{-18}{[-36.95]^{22}} \cdot \frac{[-23]}{1} \cdot \left[\frac{8.84}{1} \right]^{(81)} + [642.90]^{(81)}$$

$$MIF = \frac{[.85] [-23]}{2.17} \cdot [8.84]^{(81)} + 188.19$$

$$MIF = -.08 \cdot 1 + 188.19 = 187.11$$

$$MIF = \log 187.11 = 2.27\%$$

Conclusion

Through the Integrator Financial Model, it was determined that the percentage of financial activity of the issuing company BIMBO, represents 2.27% of the national economy in Mexico, holding an exchange rate of \$ 16.53, an inflation of 2.96% and being a stock company in the Mexican financial market.

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DINAMICA ECONOMICO FINANCIERA
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Administration and management of GRUPO BAFAR, S.A.B. of C.V

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Abstract

GROUP BAFAR, S.A. de C.V. is a company that acts as pure parent, and through its subsidiaries is one of the leading producers and distributors in the country of cold meats, dairy, red meat and other meat products, besides being one of the leading exporters of cattle in Standing in the State of Chihuahua. BAFAR GROUP's goal is to become the largest group in Mexico in the processing and marketing of meat products, with strong influence on milk and other refrigerated products taking advantage of the growth opportunities that offer export markets. In 1996 the Company made public to trading on the Mexican Stock Exchange (BMV) 20% of its paid-in capital by an offer of 10,514.863 shares Series B. The proceeds of the initial offering were used to invest heavily fixed assets, information technology, integrated systems, marketing, training and product distribution. Finally on March 20, 2002, a contract of sale with the preparatory companies Nestle Mexico SA de CV and Societe de Produits Nestle SA was signed whereby fixed assets, brands and inventories of the industrial unit located in La Piedad, Michoacan, for the production of cold meats, sausages and matured under the Parma, Campestre Sabori and brands were acquired. The Company has been characterized as the leader of growth in the market of meat products, and has maintained a sustained growth in sales about 30% annually, a great concern for the training of its employees, and investment in technology expanding its operations.

Products frequently consumed, food, drinks and snuff, food, production of meat and derivatives, controller companies engaged in the production, distribution and marketing of processed foods, trading meat, fattening and marketing of cattle in foot

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$$\Pi = 32.38/2.96 = 0.80 \tag{1}$$

$$P_{max} = 36 \tag{2}$$

$$P_{min} = 36 \tag{3}$$

$$\frac{1}{2} = 0.50 \tag{4}$$

$$\frac{3}{4} = 0.75 \tag{5}$$

$$P_{pp} = 0 \tag{6}$$

$$\pi_s = 2.38 \tag{7}$$

$$\pi_{\neg s} = 2.96 \tag{8}$$

$$Lim = 0.10 \tag{9}$$

$$\varepsilon = -0.50 \tag{10}$$

$$M_{1=3} \tag{11}$$

$$M_{2=6} \tag{12}$$

$$M_{3=9} \tag{13}$$

$$M_{4=12} \tag{14}$$

$$TCD = 16.41 \tag{15}$$

$$TCI = \log 16.41 = 1.21 \tag{16}$$

$$\text{Acciones en Circulación} = 316,661,568 \tag{17}$$

$$\text{Acciones en Circulación Log} = 8.50 \tag{18}$$

$$\beta_0 = (0.50)^0 = 0.50 \tag{19}$$

$$\beta_1 = (0.50)^1 = 0.50 \tag{20}$$

$$\beta_2 = (0.50)^2 = 0.25 \tag{21}$$

$$\lambda = 0.75 \tag{22}$$

$$C.Variable = (70.60)^{3/4} = 24.35 \tag{23}$$

$$C.Fijo = (70.60)^{1/2} = 8.40 \tag{24}$$

$$C.Fluctuante = \frac{\sin(70.60)}{\cos(70.60)} = \frac{0.94}{0.33} = 2.83 \tag{25}$$

$$MaxAnt = 36.49 \tag{26}$$

$$MinAnt = 31.50 \tag{27}$$

$$f = 1 \tag{28}$$

$$\partial = 0.5 \tag{29}$$

$$d = -1 \tag{30}$$

$$n = 0.25 \tag{31}$$

Formula:

$$M.I. = \left[\frac{\left[\frac{(MD - M1)}{Determination - Depreciation} \right]^{Coverage} \left[\frac{Devaluation + C.Variable}{Forward - Exposition} \right]^{Arbitration}}{Capital Cost} \right]$$

$$- \left[\frac{[FCP + FMP + FLP]}{No fundable - Fundable} \right]^{CP+MP^2} + \left[\frac{Performance}{Utility} \right]^{Financial rank}$$

$$M.I. = \frac{\left[\frac{\left[\frac{\pi(P_{max} + P_{min})}{2} \right]^{\frac{1}{2}} - \left[\frac{\pi + P_{pp}}{2} \right]^{\frac{1}{2}}}{\left[\frac{(\pi_s + \pi_{\neg s}) f^{\frac{1}{2}} \lim_{\pi_{\beta}} \frac{\pi_2}{\pi_{\beta}} \right] - \left[\frac{d_{11} + d_{12} + d_{13} + d_{14}}{d_{11} + d_{12} + d_{13} + d_{14}} \right] \left[\frac{d_{11}}{\lambda} \right]^{\frac{1}{2}}} \right]^{\frac{TCI}{TCI}} \left[\frac{\left[\frac{\pi_s}{\pi_{\beta}} \right]^{\frac{1}{2}} + \left(\frac{CV - CF}{CF} \right)^{\frac{1}{2}}}{\left[\frac{P_{pp} - 2}{AC} \right]^{\frac{1}{2}} - [TCD + TCI]} \right]^{\frac{1}{2}}}{\left(\frac{CV + CFE}{CF} \right)^{\frac{1}{2}}}$$

$$+ \left[\frac{\left(\frac{V - \pi}{TC} \right)^{\frac{max}{min}} + \left(\frac{C + \pi}{TC} \right)^{\frac{max}{min}} + \left(\frac{C - \pi}{TC} \right)^{\frac{max}{min}}}{\left[\int \frac{min}{max} - f \frac{d\lambda(min)}{d\lambda(max)} \right] - \left[\int \frac{max}{min} - f \frac{d\lambda(max)}{d\lambda(min)} \right]} \left[\frac{\left[\frac{MaxAnt + max}{(MaxAnt + min)^2} \right]^{\frac{1}{2}}}{\left[\frac{MinAnt + min}{(MinAnt + max)^2} \right]^{\frac{1}{2}}} \right]^{\frac{1}{2}} + \left[\frac{\frac{dmax}{d\lambda} - \frac{dmin}{d\lambda^2}}{\left[\frac{dmax/limMaxAnt}{dmin/limMinAnt} \right]^{\frac{1}{2}}} \right]^{\frac{1}{2}}$$

$$MIF = \frac{\left[\frac{.80 \left(\frac{36 + 36}{2} \right)^{.50} - (.80 + 0)^{.75}}{\left[(2.38 + 2.96)(0.25)(0.08) - [4 + 8 + 12 + 16 + (4.16)] \right]} \right]^{-.55} \left[\frac{\left(\frac{2.38}{2.96} \right)^{.25} + \left(\frac{24.35 - 8.40}{2.83} \right)^{.25}}{\left(\frac{0 - 2}{316,661,568} \right)^{.25} - (16.41 + 1.21)^{.25}} \right]^{1.21}}{\left(\frac{24.35 - 8.40}{2.83} \right)^{.75}}$$

$$\begin{aligned}
 & \left[\frac{(0.08) + (.30) + (.27)}{\left[f \left(\frac{36}{(-1)(.75)(.36)} \right) - f \left(\frac{36}{(-1)(.75)(.36)} \right) - f \left(\frac{36}{(-1)(.75)(.36)} \right) \right]} \right] \\
 & + \left[\frac{\left[\frac{(-1)(.36)}{(-1)(.75)} - \frac{(-1)(.36)}{(-1)(.75)} \right]}{\left[\frac{(-1)(.36)}{(-1)(.75)} - \frac{(-1)(.36)}{(-1)(.75)} \right]} \right] \\
 & MIF = \frac{4.8 - 0.50}{0.11 - 44.16} \left[\frac{0.95 + 1.66}{7.08} \right]^{1.89} - \left[\frac{0.65}{f(1) - f(1.33) - f(1.33)} \right] \left[\frac{f \left(\frac{0}{1.76} \right) + f \left(\frac{0.48}{1.14} \right)}{f \left(\frac{0.02}{14} \right)} \right] \\
 & + \left[\frac{48 - 0.80}{(-0.50)^2} \right] \left[\frac{0.48}{1.14} - \left(\frac{0}{1.76} \right)^{1.89} \right] \\
 & MIF = \frac{(2.33)(0.15)}{3.65} - \left[\frac{0.65}{1.76} \right] + [0]^{1.89} = -0.0000089 \\
 & MIF = |0.0000089| = \text{valor absoluto} \Rightarrow (0.0000089 * 100)^{1ra \text{ iteración}} \\
 & = (0.00089 * 100)^{2da \text{ iteración}} = (0.089 * 100)^{3ra \text{ iteración}} = \frac{8.9 * 100}{100} = 8.9\%
 \end{aligned}
 \tag{32}$$

Through the Int. Financial model is determined that the percentage of financial activity of the station Bafar Group, represents 8.9% of our national economy in Mexico, holding an exchange rate of \$ 16.41, inflation of 2.96 non-core and being Holder or market in the Mexican financial market.

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Administration and management of the Grupo Carso company, S.A.B. of C.V.

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Abstract

The company is established as Galas Group, S.A. in 1980; in 1981 it became a public limited company with variable capital and in 1982 changed its name to Grupo Inbursa, SA de C.V. Between 1980 and 1990, the company acquired most of the shares of Cigatam, Sanborn Hermanos. (Sanborns) and Empresas Frisco (Frisco), among others. In 1990 took place the following events: (i) the company absorbed by merger Industrial Corporation Carso, SA de CV, changing its name to Grupo Carso, SA de C.V. and increasing their participation in Sanborns and Frisco; (ii) it carried out a placement of shares of Grupo Carso in the Mexican Stock Exchange; and (iii) Grupo Carso, together with Southwestern Bell International Holding Corp., France Cables et Radio and a group of investors, acquired control of Telmex, through competitive bidding. During 1992, Grupo Carso bought most of the shares of Grupo Condumex. In 1996 Grupo Carso spun off, mainly in Carso Global Telecom, which will be transferred the assets of Telmex. In 1997, Grupo Sanborns acquired 60% stake in Sears Roebuck de Mexico (Sears) and subsequently made a public offer to purchase 25% of the capital, Sears Roebuck Inc. maintaining a 15%. Likewise, Grupo Sanborns redefined its corporate structure, including business lines of Grupo Carso related to the business side, and also the business of department stores, restaurants and cafes, pastry shops and music stores, took over the development, income , operation and management of shopping centers.

Industrial Goods, Controllers.

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The information used for this GRUPO CARSO Integrator Financial model corresponds to one of the largest conglomerates in Latin America, controls and operates companies Industrial, Commercial and Infrastructure and construction.

$t = 2382.96 = 23$	$S_t = (1.80)^t = 1$	$M_t = 3$
$P_{max} = 74.7$	$S_t = (1.80)^t = 30$	$M_t = 6$
$P_{min} = 74.7$	$S_t = (1.80)^t = 23$	$M_t = 9$
$1/2 = 50$	$C = 73.76$	$M_t = 12$
$3/4 = 75$	$V = 73.92$	$L = 75$
$PPP = 73.84$	$YOD = 16.50$	$b = 30$
$15 = 1.38$	$YD = \log 16.50 = 1.22$	$f = 1$
$175 = 2.96$	$CV = 12.82$	$\theta = 50$
$\alpha = .10$	$CF = 3.48$	$c = 1$
$n = 23$	$CFL = 37$	$Max Ant = 82.40$
$L = 75$	$A. Circulation = 2.273.954.558$ $log = 9.35$	$Min Ant = 62.13$

Table 1 Value table

$$MIF = \frac{[Direct\ currency - Indirect\ currency]^{Over\ 40} [Evaluation + C. Variable]^{Over\ 40}}{[Determination - Depreciation] [Forward - Exposure]} - \frac{FCF + FMP + FLP}{[Net\ fundable - Fundable]} + \frac{[Per\ 1000]^{[Over\ 40]}}{[Loop]}$$

$$MIF = \frac{[n - (P_{max} - P_{min})]^M - [n - PPP]^M}{[(1 + \pi)^t]^{M_1} M_1^{100} - \frac{\partial M_1}{\partial \pi} + \frac{\partial M_2}{\partial \pi} + \frac{\partial M_3}{\partial \pi} + \frac{\partial M_4}{\partial \pi} \frac{[M_1]^{100}}{[M_2]^{100}}]}{\frac{[CF + CF]^{100}}{CF}} \left[\frac{[CF - CF]^{100}}{CFI} + \frac{[CF - CF]^{100}}{CFI} \right]^{100 + 8(10) + 8(2) + 8(3) + 8(4)}$$

(1)

Less -

$$\left[\frac{[V - \pi]^{max} + [C + \pi]^{min} + [V - \pi]^{T.C} - \frac{max}{min}}{\frac{f \frac{\partial \lambda (Min)}{\partial \lambda (Min)}}{(Max)} - \int \frac{\partial \lambda (Max)}{\partial \lambda (Max)} - \int \frac{\partial \lambda (Min)}{\partial \lambda (Min)}} \right] \left(\frac{\int \left[\frac{(max - min)^{1/2}}{[(Max\ Ant + Min\ Ant)^{1/2}]^2} + \frac{\int (min + max)^{1/2}}{[(Min\ Ant - Max\ Ant)^{1/2}]^2} \right]^2}{\int \left[\frac{(max\ Ant + min)^{1/2}}{[(min\ Ant + min)^{1/2}]^2} \right]^2} \right)^2$$

(2)

More +

$$\left[\frac{\frac{d(max)}{d\lambda_1} + \frac{d(min)}{d\lambda_2}}{\left[\frac{d(max)/limmax\ Ant}{(d\ min/limmin\ Ant)} \right]^{1/2}} \right] \left(\frac{\frac{d\ max}{d\ min\ Ant} \left[\frac{d\ max - d\ min}{Ant + Ant} \right]^{1/2 - 1/2}}{\frac{d\ min}{d\ min\ Ant}} \right)^{1/2 - 1/2}$$

$$MIF = \frac{[.38 + 2.96] \int_{12}^3 (10) \cdot \frac{2.36}{2.96} - \frac{[1.13]}{[1.75]} - \frac{[1.9]}{[1.75]} + \frac{[1.12]}{[1.75]} - \frac{[1.12]}{[1.75]} + \frac{[1.12]}{[1.75]}}{\frac{[1.12] + 1.12}{[1.75]}} \left[\frac{[.38] \cdot 33.33 + [12.82 - 5.48] \cdot 10^{-11} + 10^{-22} + 10^{-22}}{[.38] \cdot 33.33} \right]^{[10] \cdot [10] \cdot [10]}$$

(3)

Less -

$$\left[\frac{[73.92 - .80]^{74.7} + [73.76 + .80]^{73.04} + [73.92 - .80]^{16.50}}{16.50} - \frac{74.7}{(-1)(75)(74.7)} - \frac{73.04}{(-1)(75)(73.04)} \right] \left(\frac{\int \left[\frac{(74.7 - 73.04)^{50}}{(82.4 + 62.13)^{75}} + \frac{\int (73.04 + 74.7)^{50}}{(62.13 - 82.4)^{75}} \right]^2}{\int \left[\frac{[22.44 + 74.7]^{50}}{[22.12 + 73.04 + 75]^{75}} \right]^2} \right)^2$$

(4)

More +

$$\left[\frac{(-1)(74.7)}{(-1)(75)} + \frac{(-1)(73.04)}{(-1)(75)} \right] \left(\frac{\int \left[\frac{(50)(74.7)}{(50)(82.4)} \right] \left[(50)(74.7) - (50)(73.04) \right]^{75 - 50}}{(50)(73.04)} \left[(50)(82.4) + (50)(62.13) \right] \right)^2$$

$$MIF = \left[\frac{[80 - (1.18)]^{50} - [37.22]^{75}}{[5.34] \int_{12}^3 (10)(80) - \frac{[-3]}{[-75]} + \frac{[-6]}{[-75]} + \frac{[-9]}{[-75]} + \frac{[-12]}{[-75]} \frac{[17]}{[25]} \right]^{[1411]^{22}} \left[\frac{[80]^{75} + [12.88]^{55}}{[7.66]^{75} - [17.72]^{60}} \right]^{22}$$

(5)

Less -

$$\left[[4.43]^{74.7} + [4.52]^{73.04} + [98]^{15.48} \right] \left(\frac{\int \left[\frac{(1.66)^{50}}{(144.52)^{75}} + \frac{\int (147.74)^{50}}{(20.27)^{75}} \right]^2}{\int \left[\frac{[73.22]^{50}}{[37.22]^{75}} \right]^2} \right)^2$$

(6)

More +

$$\left[\frac{[-74.7, -73.04]}{[-75, -75]} \right] \left[\frac{[27.35]}{41.2} [27.35 - 36.52]^{25}}{[26.52]} [41.2 + 31.06] \right]$$

$$MIF = \left[\frac{[-855 - 15.07]}{[5.34] \int_{12}^3 (10) - [40.79]} \right]^{10} \left[\frac{[1.94 + 4.08]}{[4.20 - 9.37]} \right]^{10} \left[\frac{[1.93 + 7.10 + .73]}{[-1.12] - [-1.33] - [-1.33]} \right] \left[\frac{[1.12]^{10} + [1.12]^{10}}{[1.12]^{10}} \right] + \left[\frac{[1.12]^{10}}{[1.12]^{10}} \right]^{10}$$

$$MIF = \left[\frac{-23.62}{[(5.34) (1)(7.2)] - [40.79]} \right]^{22} \left[\frac{5.02}{[-5.37]} \right]^{10} \left[\frac{9.76}{[-1.12] - [-1.33] - [-1.33]} \right] \left(\frac{[1][40.89]^{10} + [1] - [21.7]^{10}}{[1][27]^{10}} \right)$$

$$MIF = \left[\frac{-23.62}{[3.84] - [40.79]} \right]^{22} [9.9] \left[\frac{9.76}{(1) - 1 - [(-1.33) - (-1.33)]} \right]^{10} + [895.32]^{[26] \cdot [29]}$$

$$MIF = \frac{[-23.62]^{22}}{[-36.95]} [9.9] \left[\frac{9.76^{(10)}}{1} \right] + [895.32]^{(26)}$$

$$MIF = .46 \cdot [1] + 175.19 = 174.63$$

$$MIF = \log 174.65 = 2.24\%$$

(7)

Conclusion

Through the Financial Integrator Model is determined that the percentage of financial activity of the Issuer GRUPO CARSO, represents 2.24% of the national economy in Mexico, holding a 16.50 Exchange Rate, inflation of 2.96 and being Bursatil in the financial market Mexican.

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Administration and management of the IDEAL company S.A.B. of C.V.

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Abstract

The company is the result of the division of Grupo Financiero Inbursa, SA DE CV, as spun-off company, which was approved by extraordinary general meeting of shareholders held on May 25, 2005. The company being divided result of this merger was established under the corporate name of DRIVING ECONOMIC DEVELOPMENT IN LATIN AMERICA, SA DE CV, it was subsequently modified to be in DRIVING DEVELOPMENT AND EMPLOYMENT IN LATIN AMERICA, SA DE C.V. The company is engaged in the acquisition, management and control directly or indirectly to the acquisition, construction, operation, management, maintenance and / or maintenance of infrastructure in Mexico and Latin America dedicated subsidiaries.

Construction, construction and engineering, infrastructure concessionaires

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$$\begin{aligned}
 MIF &= \frac{\left[\frac{[.80 - \frac{(30.7 + 30.7)^{0.4}}{2}] - [\frac{0.80 + 30.7^{0.75}}{2}]}{(2.38 + 2.96) \cdot \frac{2.38}{2.96}} - \frac{(-1)3}{(-1)0.75} + \frac{(-1)6}{(-1)0.75} + \frac{(-1)9}{(-1)0.75} + \frac{(-1)12}{(-1)0.75} + \frac{(-1)75}{(0.75)0.25} \right]^{1.89}}{\frac{(-19.24 + (-1.26)^{0.75}}{-7.18}} \\
 &= \frac{\left[\frac{[2.88^{0.75-0.5} + \frac{(-19.24 - (-7.18))^{0.8-0.5} [(0.5) + (0.5) + (0.25) + (0.5+0.25)]^2}{-1.26}]}{\frac{[30.7-2]^{0.75}}{9.47}} - \frac{[-16.58 + 1.21]^{2.88}}{(-19.24 + (-1.26))^{0.75}} \right]}{\frac{(-19.24 + (-1.26))^{0.75}}{-7.18}} + \\
 &\left[\frac{\left(\frac{(\frac{30.7-0.8}{16.58})^{30.7} + (\frac{30.7+0.8}{16.58})^{30.7} + (\frac{30.78-0.8}{30.7+0.8})^{16.58} \cdot \frac{30.7}{30.7}}{\frac{f(-1)(0.75)30.7}{(-1)(0.75)30.7} - \frac{f(30.7)}{(-1)(0.75)30.7}} \right)^2}{\left(\frac{f(\frac{30.7-30.7}{45.57+29.48})^{0.5}}{2} + \frac{f(\frac{30.7+30.7}{29.48-45.57})^{0.5}}{2} \right)^2} \right] + \\
 &\left[\frac{(-1)30.7 \cdot (-1)30.7}{(-1)0.75 \cdot (-1)0.75} \right]^{0.5} = \frac{0.5(45.57) - 0.5(30.7)}{0.5(45.57) + 0.5(29.48)}^{0.75-0.5} \\
 &\left[\frac{(-1)(30.7)0.10(29.48)^{0.75}}{(-1)(30.7)0.10(29.48)^{0.75}} \right]^{0.5}
 \end{aligned} \tag{3}$$

After replacing the values and after performing some operations; simplifying the following results

$$MIF = \frac{[-5.46 - 7.49]^{0.21} [0.94 + 1.96]^{1.89}}{[3.84 - 38.59]^{2.19}} - \frac{[86647171.59 + 427538917.7 + 0.46]^{(26.32)^2}}{1 - (-1.33)} + \left[\frac{0}{0.40} \right]^{0.45} \tag{4}$$

To obtain further simplify subsequent values

$$\begin{aligned}
 MIF &= \frac{[-13.36]^{0.21} [-936.37]^{1.89}}{[-34.75]^{2.19}} - \frac{[514186089.8]^{692.4}}{2.33} + \left[\frac{0}{0.40} \right]^{0.45} \\
 MIF &= \frac{[0.38]^{0.21} [-3.09 \times 10^{-3}]^{1.89}}{2.19} - \frac{[514186089.8]^{692.4}}{2.33} + \left[\frac{0}{0.40} \right]^{0.45}
 \end{aligned} \tag{5}$$

By simplifying almost everything remains to the following

$$MIF = \frac{0.81(-18.10 \times 10^{-6})}{2.19} - 0 + 0 \tag{6}$$

And the end result is financial integration model:

$$MIF = -6.69 \times 10^{-6} = 0.00000669 \tag{7}$$

Once this value is obtained proceeds to 3 iterations for the three days there in finance

First interaction

$$0.00000669 \times 100 = 0.000669$$

Second interaction

$$0.000669 \times 100 = 0.0669$$

Third interaction

$$0.0669 \times 100 = 6.69$$

$$MIF = \frac{6.69(100)}{100} \tag{8}$$

Later iterations have made the final result is obtained

$$MIF = 6.69\%$$

Conclusion

Through the financial integrative model it was determined that the percentage of financial activity IDEAL station represents 6.69% of our national economy in Mexico; holding an exchange rate of 16.53, 2.96 and inflation still trading in the Mexican financial market

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Administration and management of the INVEX CONTROLADORA Company, S.A.B. of C.V.

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Abstract

INVEX emerged in 1991 as a brokerage firm and in 1992 INVEX International subsidiary is established in the United States. In 1994, the bank started operations, which is formally integrated financial group Invex. INVEX generates alternatives aim to get great results for its clients through financial solutions tailored to each individual case. It has a presence in Mexico City, Monterrey, Guadalajara and Miami, Florida. In 2004, Mexico began operations Spira, a company issuing credit cards, with a share of 50% invex. In 2007, INVEX controller is created as public stock corporation and parent company of the group. That same year, INVEX acquires the remaining 50% of Speyer and the merger between it and Banco Invex is made. This operation makes clear the interest of INVEX to enter more strongly the consumer banking market.

Financial Services, financial institutions, financial markets, institutions controllers' financial services

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$$MIF = \frac{\left(\frac{MD - MI}{\text{Determinación - Depreciación}}\right)^{\text{Coverage}} \left(\frac{\text{Devaluation} + C.\text{Variable}}{\text{Forward - Exposure}}\right)^{\text{Arbitration}}}{\text{Costo de Capital Comparativo}} - \left(\frac{FCp + FMp + FLp}{\text{Not Fundable - Fundable}}\right)^{\frac{Cp+Mp}{Lp}} + \left(\frac{\text{Performance}}{\text{Utility}}\right)^{\text{Financial range}} \quad (1)$$

Direct Currency (MD).	Counted → Swap	
$MD = \left(\pi - \frac{Pmax + Pmin}{2}\right)^{\frac{1}{2}}$	$TC = \left(\frac{A.Circulación}{PPP}\right)^{\frac{1}{2}}$	Long term
Indirect Currency (MI)	Coverage	$F_{LP} = \left(\frac{Y-m}{C+r}\right)^{\frac{max}{min}}$
$MI = \left(\frac{\pi + Pmax}{2}\right)^{\frac{1}{2}}$	$\left(\frac{TCp}{TC}\right)^{\pi - \pi - 1}$	Fundable
$PPP = \frac{Pmax + Pmin}{2}$	$(TCp + TC)^{\pi}$	$\int_{min}^{max} = \int_{d1(min)}^{(max)} - \int_{d1(min)}$
Determination	Arbitration	Not Fundable
$TC = (\pi_s + \pi_{\dots}) \int_{s_{t_1}}^{s_{t_2}} \lim_{\pi_s} \frac{\pi_s}{\pi_s}$	$AS = [\beta(s_1) + \beta(s_2) + \beta(s_3) + \beta(s_4)]^2$	$\int_{min}^{max} = \int_{\frac{d1(max)}{d1(min)}}^{\frac{max}{min}}$
Depreciation	Comparative Cost of Capital	Executable
$\frac{dM_1}{dL_1} + \frac{dM_2}{dL_2} + \frac{dM_3}{dL_3} + \frac{dM_4}{dL_4} + \left(\frac{dL}{dL}\right)^2$	$CCC = \left(\frac{Cp + Cp}{Cp}\right)^{\frac{1}{2}}$	$\int_{max-min}^1 = \left(\frac{d1(max-min)}{1}\right)^2$

Figure 1

Devaluation	Short term	
$\left(\frac{\pi_s}{\pi_s}\right)^{\frac{1}{2} - \frac{1}{2}}$	$FCp = \left(\frac{Y-m}{TC}\right)^{max}$	$Cp = \int \left[\frac{(max - min)^{\frac{1}{2}}}{\left(\frac{max}{Ant} + \frac{min}{Ant}\right)^{\frac{1}{2}}} \right]$
Advanced → Forward	Middle term	
$TA = \left(\frac{PPP - 2}{A.Circulación}\right)^{\frac{1}{2}}$	$FMp = \left(\frac{C+m}{TC}\right)^{min}$	
	Range	
$Mp = \int \left[\frac{(min + max)^{\frac{1}{2}}}{\left(\frac{min}{Ant} + \frac{max}{Ant}\right)^{\frac{1}{2}}} \right]$	$\int \left(\frac{\frac{\partial max}{\partial min Ant} : \dots}{\left(\frac{\partial min}{\partial min Ant}\right)} \right)^{\frac{1}{2} - \frac{1}{2}}$	
	Variable cost	
$Cp = \int \left[\frac{(max - min)^{\frac{1}{2}}}{\left(\frac{max}{Ant} + \frac{min}{Ant}\right)^{\frac{1}{2}}} \right]$	$C_{cx} = \left(\frac{Cp - Cp}{Cp}\right)^{\pi - \frac{1}{2}}$	
Performance		
$R_R = \frac{d(max)}{dL_1} - \frac{d(min)}{dL_2}$		
Utility		
$R_U = \left[\frac{\frac{\partial max}{\partial min Ant} : \dots}{\left(\frac{\partial min}{\partial min Ant}\right)} \right]^{\frac{1}{2}}$		

Figure 2

Substituting in equation (1)

$$MIF = \frac{\left[\left(\frac{\pi - Pmax + Pmin}{(\pi_s + \pi_{\dots}) \int_{s_{t_1}}^{s_{t_2}} \lim_{\pi_s} \frac{\pi_s}{\pi_s}} \right)^{\frac{1}{2}} - \left(\frac{\pi + Pmax}{2} \right)^{\frac{1}{2}} \right]^{\beta(s_1) + \beta(s_2) + \beta(s_3) + \beta(s_4)} \left[\frac{\left(\frac{\pi}{A.Circulación} \right)^{\frac{1}{2}} + \left(\frac{Cp - Ck}{Cp} \right)^{\pi - \frac{1}{2}}}{\left(\frac{PPP - 2}{A.Circulación} \right)^{\frac{1}{2}} - (TCp + TC)^{\pi}} \right]^{\beta(s_1) + \beta(s_2) + \beta(s_3) + \beta(s_4)}}{\left(\frac{Cp + Cp}{Cp} \right)^{\frac{1}{2}}} \left[\frac{\left(\frac{max - min}{min Ant} \right)^{\frac{1}{2}} + \left(\frac{min - max}{max Ant} \right)^{\frac{1}{2}}}{\left(\frac{min Ant}{max Ant} \right)^{\frac{1}{2}}} \right]^{\frac{1}{2}} \left[\frac{\left(\frac{U - \pi}{TC} \right)^{max} + \left(\frac{C + \pi}{TC} \right)^{min} + \left(\frac{U - \pi}{C + \pi} \right)^{\frac{max}{min}}}{\int \frac{d1(min)}{d1(max)} - \left(\int \frac{d1(max)}{d1(min)} - \int \frac{d1(min)}{d1(max)} \right)} \right]^{\frac{1}{2}} + \left[\frac{d(max)}{dL_1} - \frac{d(min)}{dL_2} \right]^{\frac{1}{2}} \left[\frac{\frac{\partial max}{\partial min Ant} : \dots}{\left(\frac{\partial min}{\partial min Ant} \right)^{\frac{1}{2}}} \right]^{\frac{1}{2}} \quad (2)$$

Company INVEX CONTROLADORA, S.A.B. OF CV, obtained from the BMV and the World Bank on October 28, 2015 at 12:34 hrs, for the calculation of the Model Integrator Finance (MIF).

$\lambda = 0.75$	$Pmax = 50$	$M2 = 6$	$\beta_1 = 0.50$
$n = 0.25$	$Pmin = 50$	$M3 = 9$	$\beta_2 = 0.50$
$\beta = 0.50$	$\% = 0.50$	$M4 = 12$	$\beta = 0.25$
$f = 1$	$\% = 0.75$	$TCp = 16.53$	$maxAnt = 47$
$d = -1$	$PPP = 0$	$TC_1 = \log(16.53) = 1.21$	$minAnt = 45$
$\theta = 0.50$	$m = 2.38$	$C_{variable} = (20.72)^2 = 9.71$	$V = 50$
$\xi = -0.50$	$\pi_s = 2.96$	$C_{F80} = (20.72)^2 = 4.55$	$C = 49$
$lim = 0.10$	$\xi = -0.50$	$C_{F12} = \frac{\sin 20.72}{\cos 20.72} = 0.37$	
$\pi = \frac{2.38}{2.96} = 0.80$	$M1 = 3$	$A.Circulación = \log(156,171,174) = 8.19$	

Substituting values obtained from the trading company in Eq. (2) and simplifying

$$MIF = \frac{\left[\frac{\left(\frac{0.80 - 50 + 50}{(0.25 + \pi_{\dots}) \int_{s_{t_1}}^{s_{t_2}} \lim_{\pi_s} \frac{\pi_s}{\pi_s}} \right)^{\frac{1}{2}} - \left(\frac{0.80 + 50}{2} \right)^{\frac{1}{2}} \right]^{\beta(s_1) + \beta(s_2) + \beta(s_3) + \beta(s_4)} \left[\frac{\left(\frac{0.80}{A.Circulación} \right)^{\frac{1}{2}} + \left(\frac{Cp - Ck}{Cp} \right)^{\pi - \frac{1}{2}}}{\left(\frac{PPP - 2}{A.Circulación} \right)^{\frac{1}{2}} - (TCp + TC)^{\pi}} \right]^{\beta(s_1) + \beta(s_2) + \beta(s_3) + \beta(s_4)}}{\left(\frac{Cp + Cp}{Cp} \right)^{\frac{1}{2}}} \left[\frac{\left(\frac{max - min}{min Ant} \right)^{\frac{1}{2}} + \left(\frac{min - max}{max Ant} \right)^{\frac{1}{2}}}{\left(\frac{min Ant}{max Ant} \right)^{\frac{1}{2}}} \right]^{\frac{1}{2}} \left[\frac{\left(\frac{U - \pi}{TC} \right)^{max} + \left(\frac{C + \pi}{TC} \right)^{min} + \left(\frac{U - \pi}{C + \pi} \right)^{\frac{max}{min}}}{\int \frac{d1(min)}{d1(max)} - \left(\int \frac{d1(max)}{d1(min)} - \int \frac{d1(min)}{d1(max)} \right)} \right]^{\frac{1}{2}} + \left[\frac{d(max)}{dL_1} - \frac{d(min)}{dL_2} \right]^{\frac{1}{2}} \left[\frac{\frac{\partial max}{\partial min Ant} : \dots}{\left(\frac{\partial min}{\partial min Ant} \right)^{\frac{1}{2}}} \right]^{\frac{1}{2}} \quad (3)$$

$$MIF = \frac{\left\{ \frac{(-7.01) - (0.50)}{[(5.34)(12-3)(0.10)(0.80)] - [4 + 8 + 12 + 16 + (-4)^{0.25}]} \right\}^{(13.66)^{0.22}} \left[\frac{0.94 + (13.94)^{0.20}}{(-0.24)^{0.75} - (17.74)^{2.33}} \right]^{1.89}}{\left(\frac{9.71 + 0.37}{4.55} \right)^{0.75} - \left(\frac{4.83 \times 10^{23} + 8.86 \times 10^{23} + 0.82}{1-0} \right) \left\{ \frac{\left(\frac{(i)}{(129.72)} \right)^2 - (i) \left[\frac{10}{-1.68} \right]^2}{\left(\frac{(i)}{(18.09)} \right)^2} \right\}^2} + \left\{ \frac{66.66 - 66.66}{\left[\frac{25-25}{123.50-22.50} \right]^{0.22}} \right\} \left[\frac{(-10.63)^{0.50}}{(-11.11)^{0.75}} \right]^2 \quad (4)$$

$$MIF = \frac{\left(\frac{-7.51}{3.84 - 38.59} \right)^{0.21} \left(\frac{3.14}{-0.34 - 938.66} \right)^{1.89}}{(2.21)^{0.75}} - (1.36 \times 10^{24}) \left[\frac{(29.70)^2 + (-1.68-10)^2}{(18.09-6.98)^2} \right]^2 + \left[\frac{0}{(-3.26)^2} \right]^{\left(\frac{0}{46} \right)^{0.25}} \left[\frac{0}{(-6.08)} \right]^2$$

$$MIF = \frac{(0.21)^{0.21} (-3.34 \times 10^{-3})^{1.89}}{1.81} - (1.36 \times 10^{24}) \left(\frac{1019.51}{123.87} \right)^2 + \left[\frac{0}{(0.53)^2} \right]^0$$

$$MIF = \frac{0.72(-2.08 \times 10^{-5})}{1.81} - (1.36 \times 10^{24})^{(8.22)^2} + \left\{ \frac{0}{0.28} \right\}^0$$

$$MIF = \frac{-1.49 \times 10^{-5}}{1.81} - (1.36 \times 10^{24})^{67.56} + 0$$

$$MIF = (-8.27 \times 10^{-6}) - (1.36 \times 10^{24})^{67.56} + 0$$

$$MIF = |8.27 \times 10^{-6}| = 0.00000827 \quad (5)$$

1st iteration

0.00000827 (100) = 0.000827

The 2nd iteration

0.000827 (100) = 0.0827

The 3rd iteration

0.0827 (100) = 8.27

$$\frac{8.27(100)}{100} = \mathbf{8.27\%} \quad (6)$$

Through the Financial Integrator Model (NIF) is determined that the percentage of financial activity of the issuing company INVEX CONTROLLER, SAB DE CV, represents 8.27% of our national economy in Mexico, holding an exchange rate of 16.53, 2.96 and inflation still trading in the Mexican financial market.

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Influence decision making in operations, distinctive competencies of SMEs in the hotel sector in Galicia

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Abstract

The aim of this paper is to identify and assess whether the emphasis on decision-making function of operations (grouped in "capacity", "location", "service delivery protocols," "productive work / labor" and "logistics management") leads to the formation of core competences that may influence the competitive success of SMEs in the hospitality industry. Small and medium enterprises (SMEs) in the hotel industry have been selected for its relevance to the development of many countries. The study is conducted in the framework of the Resources Based View, which emphasizes the value and importance of tangible and intangible assets as sources of competitive advantage. The study was conducted by a survey presented to a sample of SMEs in the Galicia - Spain. The main results can be summarized in identifying, in the sample, four factors that summarize competitive priorities in the decisions of operations mentioned ("level of operational tasks", "logistics and capacity management", "booking system" and "infrastructure and services") and four competitive skills ("customer satisfaction" , "quality booking system", "quality of hotel services" and "productivity"). We found three significant relationships: "customer satisfaction" with "booking system" and "level of operational tasks"; "quality booking system" with "booking system" and "logistics and capacity management"; and "quality of hotel services" with "level of operational tasks". These reasons justify the acceptance of some of the hypothesis that expressed the relationship between decision-making in the area of operations and the achievement of core competencies.

Competitiveness, competitive advantages, SMEs, production and operation management.

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Introduction

This paper aims to identify and assess the influence of the administration of the area of operations in the competitive success of SMEs in the hospitality industry.

To this end, following Schroeder (1992, p. 2, 2004, p. 4), identify management operations "decision making in the operations function," that is, making decisions on production of the goods or services of the organizations and the design of the processing systems used in companies. Function, system and decisions: So, three fundamental aspects of production operations are addressed.

With regard to competitive success, we will work from the perspective of the Theory of Resources and Capabilities developed from the seminal works of Wernerfelt (1984), Aaker (1989) and Barney (1991). This theory includes a set of contributions that have a common trait or starting point, that is the heterogeneity of resources between companies and their imperfect mobility, which helps explain the differences in profitability sustainable (Barney, 1991, p. 102). You can pan between the set of theories that attempt to explain the operation and the basis of value creation of companies, as the "Theory of Firm", "Theory of Transaction Cost" or "agency theory" (Barroso Castro, 2010, p. 67). From the perspective of the Theory of Resources and Capabilities, it states that the competitive position of the company depends on the resources and heterogeneous capabilities that are generated and developed in the course of time, a competitive advantage (Arbelo Alvarez Perez Gomez Gonzalez Aponcio, Chinae Martin and Calvo Aizpuru, 2000, p. 31). In short, we talk about resources and "strategic" or "distinctive" capabilities when we refer to the resources and capabilities that enable the organization to gain competitive advantage (Navas Lopez and War Martin, 2007, p. 239, 2012, p. 132).

This approach is applicable to operations management, because from Skinner (1969) and more extensively since the 1980s, thanks to the contribution of authors like William Abernathy, Kin Clark, Robert Hayes and Steven Wheelwright, among others, it accepts a paradigm in which companies use their manufacturing capabilities as a "competitive weapon", to develop and operate through a "manufacturing strategy." In addition, a context of continuous change, requiring companies to find new processes and techniques to obtain, develop and sustain distinctive competencies, based on, or at least supported by the production system and the strengthening of its resources and capabilities.

We decided to focus the work in SMEs, the lack of studies of this type that exist on them, although they are both in Spain as in any European country, the main source of wealth creation in the domestic economy and the main source of employment. Thus, in Europe they account for 97% of all businesses and contribute more than 65% of jobs and more than half of the GDP of nations, which realizes high degree of relevance to society and the economy of the countries.

Like other SMEs, the hotel sector in the Autonomous Community of Galicia, they also have the need to develop competitive advantages that are sustainable over time. To do this, they develop the exploitation of tangible and intangible assets associated with the functional activities of the company, among which we will focus on the role of operations. They do this by making decisions that Fernández Sánchez et al. (2003, p. 79) classified in structural decisions and decisions on infrastructure, because for these authors, "the two groups are closely related decisions and determine the configuration of the production system."

In short, the objective of this work is to identify and assess whether the emphasis on decision-making in the operations function (decisions grouped in "capacity", "location", "service delivery protocols," "productive tasks / workforce "and" logistics management ") influences the competitive success of SMEs in the hospitality industry.

The content of this paper is organized five sections. Following the introduction (Section 1), set forth in paragraph 2, the theoretical arguments supporting this study, aspects related to the competitive factors that influence the decision areas and distinctive competencies of area operations SMEs in the hospitality industry. Besides working hypotheses arise. In paragraph 3, the methodology developed is presented. Paragraph 4, includes the analysis of data and statistical results. Finally, Section 5 sets out the main conclusions of the study, scope limitations and some future research.

Theoretical and hypothesizing

Decision areas operations function

In reviewing the literature many related decisions in operations management studies arise; we usually manifested clearly that these decisions and operations policies must be linked to the functional strategy, then, to the competitive strategy. It then elaborates on this issue, focusing on the decision area of operations.

Skinner (.. 1969, p 141, 1974, p 120) provides a summary of a number of categories of decision in the framework of the existing literature to find the decision operations, comprising the following components: Decisions on structure (plant and equipment) and decisions on infrastructure (planning and control, organization and control, personnel, product design).

Also, Starr (. 1974, p 5) Management believes that the production is linked to the decisions that divide in areas of importance: 1) design of the production system, and 2) development of control systems.

For Schroeder (1992, p. 49), operational policies are "strategic decisions that guide the further decision (tactical) decisions in the areas of process, capacity, inventory, workforce and quality" and considers related how competitive priorities will be achieved. Schroeder (. 1992, p 13), he notes that such decision areas provide a theoretical framework for operations management, with the following contents:

Process; decisions are related to the physical process or the facilities used to produce the product (good and / or service). Such decisions have long-term effects cannot be reversed easily, and undertake a major investment. They include the following decisions: type of equipment and technology, the process flow, the distribution of plants and other decisions related to the physical facilities.

Capacity; It refers to the capacity decisions aimed at providing the right amount of goods or services over a given period of time. Also, it represents the size and use of facilities (installed capacity). Likewise, proper sizing of organizational resources, to supply a certain maximum amount of product in the right place and right time.

Inventory; are decisions that are related to inventory management and determine what to buy, when and how much. The inventory control system used to manage the materials needed for the manufacture of products, work in progress (WIP for its acronym in English) and inventory of finished products.

Work force; It refers to one of the most important areas of decision in operations, covering decisions about recruitment, hiring, firing, training, supervision, remuneration system or allocation to jobs, among other decisions related to personnel involved in the area operations.

Quality; it refers to decisions on the quality of the goods and / or services produced, of which it is responsible of the production system. Decisions on quality in the area of operations should ensure that it is maintained in each of the tasks that are your responsibility.

Moreover, Fernandez and Sanchez et al. (2003, p. 79) consider structural decisions and decisions on infrastructure, and that "the two groups are closely related decisions and determine the configuration of the production system."

Buj Garrido (2006, p. 132) identifies five areas of decision in the production function, process, capacity, inventories, workers and quality. However, the decisions taken in the area of operations are basically the same in all companies, but with the logical characteristics of each production system.

Diaz Garrido and Martin Pena (2007, p. 152), conceptualized areas in production decisions or policies as "all the courses of action that make production strategy contributing to the achievement of production targets and in particular overall corporate objectives." That is, these strategies contribute to achieving the key objectives of production and finally support the competitive priorities chosen.

Ibarra Miron et al. (2009, p. 169), considered 52 possible policies and programs to improve widely used in manufacturing, and grouped into nine categories or strategic decision areas, four of structural (capacity, facilities, technology and procurement process / integration vertical), and five of infrastructural nature (personnel management, quality management, planning and production control, product development and organization / management).

The structural decisions have strategic implications since they involve significant capital investments and affect physical assets. They are "hard" hardly reversible and long-term effects, making for what is also called "strategic decisions" and include capacity decisions, size and location, the technology used in the production process and the degree of integration Vertical activities. Decisions in infrastructure are also called "tactical and operational decisions", as they have operational implications affecting the current expenditure. They are "soft" decisions involving human resources, organizational structure and systems that perform the work of the production function as, systems planning and control and quality management (Fernández Sánchez et al. 2003, p 78;. Fernández Sánchez, Avella Camarero, & Fernández Barcala, 2006, p 79).

In Table 1, the designation of areas of decision or policy operations is presented, as proposed by the various authors studied.

Author	Denomination	Components
Skinner (1969)	Operating decisions	Decisions on structure (plant and equipment) and infrastructure decisions (planning and control, organization and control, personnel, product design)
Wheelwright (1978, p. 62)	Relationship with other functional areas	Process, power plants, vertical integration and infrastructure
Hayes y Wheelwright (1984, p. 31)	Decision categories	Capacity, facilities, Processes and technology, breadth of process, quality monitoring policies, new products, human resources and supplies.
Schroeder (1992, pp. 13, 33, 2004, p. 26)	Decision or policy areas of operations	The process, capacity, inventory, workforce and quality
Dominguez Machuca et al (1995, p. 90, 2005, p. 90)	Operations strategy decisions	Products, processes, technology, capacity, location, floor layout, quality, planning and control, procurement and personnel.
Meredith (1999, p. 113)	Tasks of the area of operations	Results planning, design of the transformation process, design work and project management, scheduling
Haister y Render (2001, p. 37)	Decisions on operations	Product quality, process, location, organization, human resources, purchasing, inventory, scheduling and maintenance.
Gaither y Frazier (2003, p. 44)	Operations Strategy	Positioning of the production system, production approach, design and plan products and services, production processes and technology plans, allocation of resources to strategic alternatives facilities plans: capacity, location and physical layout.
Miranda Gonzalez et al. (2004, p. 69)	Strategic decisions of operations	Design of the product / service, structure of the manufacturing process, selection of production technologies to be used, optimum capacity for the facilities, the most appropriate location for each installation, plant layout, human resources management and design work, management quality of products and / or services, inventory policy, procurement strategy and plan maintenance.
Fernandez Sanchez et al. (2003, p. 78, 2006, p. 79)	Production decisions	Structural decisions and decisions on infrastructure
Miltenburg (2005, p. 65)	sub systems	Human resources, organizational structure and control, procurement, planning and production control, process technology, and facilities
Garrido Buj (2006, p. 132)	Decision areas	Process, capacity, inventories, workers and quality
Ibarra Miron et al. (2009, p. 169)	Strategic areas of decision	Structural policies (capacity, facilities, technology and procurement processes / vertical integration) policies infrastructural nature (personnel management, quality management, planning and organization)
Moyano Fuentes et al. (2011, p. 172)	Decisions of the production system	Process, workforce, capacity, inventory and quality

Table 1 Summary of the areas of policy decisions or operations

For clarity and ease of understanding, also in our research, will follow a similar classification to the proposals by different authors summarized above, although, according to the characteristics of the studied companies (SMEs in the hotel sector) and because to the importance that they have different types of decision, the group them in the following areas: "the ability of the company", "business location", "service delivery protocols," "productive work" and "logistics management".

Competing priorities and distinctive competencies in the operations function

The study of competitive priorities of the operations area has emerged from the strategic importance of the production function, and its consideration as a determining factor in achieving the success of activity transformative element. Also, these priorities have a profound impact on product characteristics that companies must realize, to contribute to improved business results and achieve the objectives of its activity and likewise, to achieve distinctive competencies that provide competitive advantage (Anderson, 1989; Hayes and Wheelwright, 1984, p. 2; Van Wassenhove and Cornett, 1991, p. 1; Wheelwright and Hayes, 1985, p. 4).

The competing priorities are defined as a set of production targets and policy decisions for that area, representing the link with market requirements. These issues have been championed by numerous authors such as Anderson (1989); Schroeder (1992, p 31, 2004, p. 23.); Dominguez Machuca et al. (1995, p 74, 2005, p. 74.); Avella Camarero, Fernandez Sanchez and Vazquez Ordás (1999, p 236.); Sanchez Fernandez et al. (2003, p 70, 2006, p. 71.); Espino Rodriguez (2003, p. 83); Miranda Rubio, Chamorro, and Bañegil (2004, p. 59); Moyano Fuentes et al. (2011, p. 171). Knowledge of content production targets and competing priorities is paramount, as it relates to the possible development and sustainability of distinctive competencies likely to become competitive advantages.

Following Skinner (1969, 1974), the competitive priorities are contributing to the success of the business strategy different from the traditional way of efficiency, that is, of reducing costs.

It also provides in its initial work that competitive priorities are: short delivery cycles, product quality, compliance with deadlines, and the ability to introduce new products quickly, the flexibility to adapt quickly to changes in volume and low costs.

However, other authors consider include other priorities so that they can transform the area of operations in a real competitive weapon. As an example mention some authors included other priorities:

- Hayes and Wheelwright (1984), and Van Wassenhove Corbett (1993), Chen (1999), Zhao et al. (2002), Ahmad and Schroeder (2002), Alegre Vidal (2003), Sarache Castro et al. (2007), who added "innovation".
- Chase et al. (2005), Fernández Sánchez et al. (2003); Dominguez Machuca et al. (1995, 2005), Davis et al. (2001), Gaither and Frazier (2003), who added the competitive priority of "customer service".
- De Burgos Jimenez (1999) and Martin Peña Diaz Garrido (2007), Martin Garrido and Diaz Peña (2007a, 2007b, 2009) who incorporated the "environmental protection".
- Sarache Castro, Marrero Delgado, Perez and Hernandez (2004), Sarache Castro et al. (2011), who added "technical assistance".

In short, the literature review shows some commonality in the first four priorities, which other authors add that obtained in the study of different types of companies in various sectors. All this is shown in Table 2 below.

Author	Distinctive competencies in the area of operations					Types of companies	Country
	1	2	3	4	5		
Chen (1999, p. 334)	Cost	Quality	Innovation	Service	Flexibility	SMEs from various sectors	Taiwan
Avalla Camarero, Fernández Sánchez, y Vázquez Ordás (1999, p. 241)	Cost	Flexibility	Quality	Delivery	-	Industrial companies with more than 200 Job.	Spain
Zhao et al. (2002, p. 278)	Quality	Delivery	Service	Innovation	Flexibility	Moldings and machinery	China
Ahmad y Schroeder (2002, p. 80)	Quality	Delivery	Efficiency	Innovation	-	Cars, electronics and machinery	Germany, Italy, Japan, USA
Boyer y Lewis (2002, p. 14)	Cost	Quality	Delivery	Flexibility	-	Advanced factories AMT	USA
Sarache Castro et al. (2004, p. 42)	Price	Quality	Speed	Flexibility	technical assistance	Clothing industries	Colombia
Urgal González y García Vázquez (2005, p. 109)	Price	Flexibility of product and volume	Delivery	Design quality	Quality compliance	Metal industry, with more than 50 workers	Spain
Urgal González y García Vázquez (2006, p. 139)	Price	Quality	Deadline	Flexibility	Service	metal Sector	Spain

Martin Peña y Diaz Garrido (2007, p. 147)	Quality and delivery	Service	Environment	Flexibility	-	NACE 28	Spain
Diaz Garrido y Martin Peña (2007, p. 119)	Service and flexibility	Quality	Submission	Cost, flexibility (volume)	Environment	NACE DI, DK, DL and DM	Spain
Buehlmann, Bungardner, Lihra, y Frye (2007, p. 88)	Quality	Delivery	Service	Flexibility	-	Furniture retailers	USA
Sarache Castro et al. (2007, p. 112)	Cost	Quality	Delivery	Service	Innovation	Metalworking Industry	Colombia
Askar Mortagy (2007, p. 36)	Cost	Quality	Delivery	Service	Flexibility	Manufacturing and construction services	Egypt
Martin Peña y Diaz Garrido (2009, p. 79)	Delivery	volume flexibility	Service	Environment	product flexibility	NACE 28, 29, 31 and 34	Spain
Kathuria et al. (2010, p. 385)	Cost	Quality	Delivery	Flexibility	quality- and cost	several sectors	India
Sarache Castro et al. (2011, p. 101)	Quality	Price	Innovation	Flexibility	-	Clothing industries	Colombia

Table 2 distinctive competencies in the area of operations and its applications

However, in the reviewed literature little research has focused on competing priorities in the area of operations that may lead to the generation of distinctive competencies in small and medium-sized service companies.

Highlight two of them, one of Chen (1999), who presented a study related to competitive priorities in SMEs called "The Manufacturing Strategy and Competitive Priority of SMEs in Taiwan: A Case Survey", which analyzes the contributions of 33 previously published cases, and another Tukamushab, Musinguzi, Katongole, and Xiao (2012) for the study of priorities in establishing models for improving the quality of service in hotels selected in Uganda, called "Service Quality Modeling Improvement Priorities in Selected Hotels for Efficient Service Delivery".

Chen (1999) proposes seven (quality, reliability, cost, flexibility, innovation, service and time) competing priorities and, among them, the quality as the most important highlights. It also identifies ten strategic decisions in the area of operations, which ordered as follows: product development, workforce, organization, control system, technology, quality program, facilities, vertical integration the ability and finally, performance measurement. Quality is one of the competing priorities that allow SMEs to improve their services and customer satisfaction, but now it is taken into account exceed the expectations of customers.

Tukamushab, Musinguzi, Katongole, and Xiao (2012), in his study pursued three objectives, related to a set of attributes of service quality, previously selected: 1) determine the importance of each; 2) establish its relationship with the level of satisfaction perceived by customers and 3) establish key indicators that allow administrators to focus their improvement efforts.

The study used a performance matrix to determine which items contributed the most to the level of customer satisfaction in a number of hotels in Kampala (Uganda), showing that most of them corresponded to the ratio of staff to customers. Classified by their importance, these were the five outstanding items:

- Employ staff with the ability to offer customers personalized attention.
- Ensure that customers feel secure while resting in their respective hotels.}
- Staff should have the skills to respond to customer requests.
- The opening hours of the hotels.
- The staff must understand the specific needs of its customers and maintain a polite behavior at all times.

As can be seen, these two works refer to very distant object that constitutes our research geographical areas. With the aim of focusing on the analysis of what are the basic skills that really underlie the chances of success or failure of SMEs in the hotel service industry Community of Galicia, we will refer to, studies found closest to the object hand, though their views differ from the perspective of competitive priorities of the operations area. Rodeiro Pazos and Fernandez (2006, p. 16), conducted an investigation with respect to innovation as the main factor to achieve a better competitive position, noting that, as part of their study, the innovations are done mainly on their own initiative They relate to the ability to create and effectively implement new products and processes and make design changes to existing services.

Also, bear any relation to our purposes, the study by (Rodeiro Penabad Pazos and López, 2007), which attempt to identify the factors that positively influence the efficiency and profitability of the Galician SMEs, highlighting, including the importance of training.

On the other hand, the quality today has become one of the key variables of competitiveness must be part of the strategy. The Galician company is increasingly aware that quality is an essential element of their competitiveness in an increasingly demanding environment, as indicated Cruz River Rama and Martinez Carballo (2008, p. 19). Quality is the most important single factor affecting the competitiveness of SMEs in the tourism sector of the region of Galicia, where the greater complexity of the processes of operation requires the employer to use the procedures of standardization and quality control (Alvarez Garcia, Fraiz Brea and De la Cruz Del Rio Branch, 2012, p. 261). Therefore, quality is a prerequisite for success in an increasingly competitive market tool.

In our work, we seek to discover what the competing priorities are the decisions taken on the role of operations and, accordingly, distinctive competencies do care about developing and supporting SMEs in the hotel sector in the Autonomous Community of Galicia.

Hypotheses proposed

As we come to point in pursuing the study we determine how far the various companies give priority to one or other distinctive competence and to what extent this leads them to a position of advantage. To do this proceed to:

- Conduct exploratory factor analysis (EFA), in order to try to validate the hypothesis that generic variables representing the competing priorities have materialized through the decision making in the various areas of decision operations, so that the company can achieve the desired distinctive competencies.
- Test the hypothesis that "the emphasis on different areas of decision operations (capacity, location of the business, service delivery protocols, productive work / labor, and logistics) management of SMEs in the hotel sector leads to the generation of distinctive competence in the area of operations, "so that:

H1.1. The greater the emphasis on operational decisions related to the ability of the company, the greater the competitive SMEs in the hospitality industry.

H1.2. The greater the emphasis on operational decisions related to the location of the business of the company, the greater the competitive SMEs in the hospitality industry.

H1.3. The greater availability of service delivery protocols, the greater the competitive SMEs in the hospitality industry.

H1.4. The greater the emphasis on productive tasks, the greater the competitive SMEs in the hospitality industry.

H1.5. The higher the interest shown in logistics management, the greater the competitive SMEs in the hospitality industry.

Methodology

Population, sample and data collection

This section describes the procedures used in data collection and measurement of the study variables are detailed. The population or object of study of this work is formed by the "SME hotel sector" of the Autonomous Community of Galicia - Spain. The breadth of the universe under study population makes it necessary to conduct the investigation in a sample that represents the population studied. What part of the four provinces of Galicia (A Coruna, Lugo, Ourense and Pontevedra). SMEs that have a number of employees between 10 and 250 employees. Therefore, we eliminated microenterprises (businesses with fewer than 10 employees and a figure of less than 2 million Euro) (OJ L107 no. 1996, pp. 004-009).

The study population was taken from the database on-line Business Information Chamber of Commerce (Camerdata, 2012), accessed March 2012, by month consultation Camerdata able to complete this list, reaching a population of 152 SMEs in the Accommodation service in hotels and motels in the Autonomous Community of Galicia. Also, it was found that three of the companies had been definitively closed (one in the province of Lugo and two in Pontevedra) and other eight (all the area of Sanxenxo) closed seasonally, all being unsuccessful attempts to contact, leaving the number of companies studied in 141 SMEs.

Fieldwork was conducted between March 20 and July 06, 2012. Data were it collected based on personal interview, a self-administered questionnaire support aimed at managers and / or managers of SMEs in the sector are used hotelier. On the other hand, shipments were also used by mail, and other survey was sent by mail (though in an amount minimum).

After the period allocated to the completion of fieldwork 90 completed questionnaires were received. Table 3 contains the technical specifications of the field study.

Aspects of research	Polls
methodological procedure	personal Polls
Type questions	With Likert scale, open and closed
Population	SMEs in the hotel sector
geographical scope	Galicia (Spain)
Method of obtaining information	Staff at the workplace (hotels)
Total population / sample	152 SMEs as Camerdata data. Spain
Response rate	59.21%
Final sample	90
Confidence level	95% $Z = 1.96$ $p = q = 50\%$
sampling error	5.2%
Date of fieldwork	From March 20 to July 6, 2012
Trabo control field	It was not carried out because they were made by the researcher
Information Processing	SPSS (in its version for Windows 18 was called IBM "PASW")

Table 3 Technical details of the investigation

Measurement of the variables

The development of the questionnaire began with a review of the empirical and theoretical literature, from which questions regarding the tasks defined operations decision.

The final questionnaire is divided into four major blocks. The first section includes questions related to the general data, that is, the demographics of the hotel and the respondent. The second block, collects information about the environment intra-company operations area (relationship with the other functional areas), limited to the following variables: marketing activities and marketing; the frequency of use of sources of financing and management of human resources.

The third section contains questions related to the various areas of decision of the operations function, and its variables: productive capacity, location of the business, providing protocol services, productive work / workforce and finally logistics management. Finally, the fourth section of the questionnaire deals specifically distinctive competencies in the area of operations (cost, quality, reserves / reception, flexibility and service), highlighting the importance of resources and capacities in the formation of these powers and ultimately on the competitiveness of SMEs in the hotel Galicia.

The variables involved in the analysis we propose in this paper are those relating to the areas of decision, competing priorities and distinctive competencies in the field of operations. Item assessment is done on a Likert scale of 1-5 (1, much lower than the competition, much higher 5 competition).

For the measurement of the different variables, we have relied on the work of various authors who have investigated in this field (Ahmad and Schroeder, 2002, p 80;. Avella, Fernandez and Vazquez, 1999, p 241;. Boyer and Lewis, 2002, p 14;. Chen, 1999, p 334;. Ganaza Vargas, 2000, p 142. ; Kathuria, Porth, Kathuria, and Kohli, 2010, p 885;. Martin Garrido and Diaz Peña, 2007, p 147;. Moyano, Bruque, Maqueira, Fidalgo, and Martinez, 2011, p 171;. Sarache Castro, Castrillón, and Giraldo, 2011, p 101;. Urgal Garcia Gonzalez and Vazquez, 2005, p 109;.. Zhao, Yeung, and Zhou, 2002, p 287) .As noted above, to obtain the values for these variables have gone to the primary sources of information.

Data analysis and results

Analysis Areas Decision

The data processing was performed with univariate descriptive techniques to calculate frequency distribution of nominal and ordinal variables.

Also, for the analysis of reliability of the scales, through the average correlation of an item with other items, the measure used was Cronbach's alpha coefficient, valuing as proposed by Peterson (1994, 382 p.): Lower 0.50 unacceptable level, weak level from 0.50 to 0.60, 0.60 to 0.70 questionable level, good level from 0.70 to 0.80 and 0.90 above an excellent standard.

Table 2 shows the reliability of the scales referred to using Cronbach's alpha. We begin by calculating the coefficient for integrated by "the location of the company", "protocols provide services", "productive work / labor" and "logistics management" block. Cronbach's alpha coefficient of this block is 0.848. In aTable 2 it can be seen initially that the last three dimensions and constructs used to measure areas of decision operations, have acceptable reliability with Cronbach's alpha values above 0.70. Meanwhile, the first dimension "business location" Cronbach's alpha value is not acceptable, however, is quite weak. Finally, this variable will not be considered for factor analysis of main components.

In short, we get:

- For items of variable "location of the company" Cronbach's alpha, 488 level is quite weak and therefore this group variable has not much association with other variables;

- The variable "service delivery protocols" have achieved a Cronbach's alpha of an acceptable level reaches 0,791;
- Also, the variable "productive work" presents a Cronbach's alpha, 0.853 and finally,
- The variable "logistics management" obtained a Cronbach's alpha of 0.748.

Dimensions and constructs		Items	Cronbach alpha
Decision areas of operations		Company Location	0,848
		Service delivery protocols	
		Production / task force working	
		Logistics Management	
Company Location	IMPD1	Locating the business	0,488
	IMPD2	Company image	
	IMPD3	Accessibility of transport	
	IMPD4	Buildings, facilities and other infrastructure	
service delivery protocols	PROC1	Traditional online booking system (with response by email)	0,791
	PROC2	Reservation system in real time	
	PROC3	Permanent improvement techniques applied on its website	
	PROC4	Use of modern technologies in the customer's attention	
Production / task force working	TAPR1	Sufficient number of employees for operations	0,853
	TAPR2	Skilled with a high level of skills and abilities Personal	
	TAPR3	Middle level staff with expertise in operations	
	TAPR4	Personal experience in operations	
	TAPR5	Preparation and training of operations personal	
	TAPR6	Level introduction of new automated systems operations	
	TAPR7	Adequate system of remuneration and allocation of jobs	
	TAPR8	Customer service skills	
Logistics Management	INVL1	Purchasing management and handling of suppliers	0,748
	INVL2	Inventory of raw materials and consumables	
	INVL3	Management reserves clients	
	INVL4	The transport costumers	
	INVL5	Complementary services to costumers	

Table 4 Level of reliability of the scales used to measure areas of decision area of operations

Analysis of Competitive Priorities Areas Decision

Before proper analysis of statistical data, must perform a series of tests on. In the first part, it has been performed exploratory factor analysis of principal components with varimax rotation on the set of items.

Then it conducted a factor analysis of principal components for the variable "decision areas and competing priorities in the field of operations." In the measurement, 21 items grouped into four factors were used. A factor analysis of principal components with varimax rotation, with extraction of four fixed factors applied. Thus, in the correlation matrix with contrast (correlation matrix anti-image), it was noted, first, that the variable (IMPD1) "The location of the company", was worth measure of sampling adequacy of 0.488. Because they are not acceptable values that are less than 0.50 (Hair, Anderson, Tatham, & Black, 2001, p. 88), it was decided to remove this item from further analysis.

After the above changes, the exploratory factor analysis of principal components with varimax rotation resulted in a total of 4 factors, as reflected in Table 3, explain getting 61.052% of the total variability, counting all with a value greater than unity. This result can be considered satisfactory, as it is online so affirmed by many authors of social science in the sense that studies should explain more than 60% of the total variance (Hair et al., 2001, p. 93) . The correlations between the factors and the different items, expressed through the factor loadings, are very significant.

The first factor (F1B) was called "level operational tasks"; It presents an eigenvalue 6,355 and a percentage of explained variance of 31.775%. This factor encompasses the first six items of the scale, reaching Cronbach's alpha value of 0.843.

Within this factor, the first two items ("personnel with experience in operations" and "preparation and training of operating personnel") show the highest rating, which refers to the possibility that constitute competing priorities.

The second factor (F2B) called "logistics management and capacity" is composed of six items. This factor obtained an eigenvalue of 2,634, accounting for a total variance of 13,169%. In addition, the Cronbach was a good 0.848 level. The first two are the factor loadings, above 0.80 most significant values. They are the items, "purchasing management and supplier management" (INVL1) and "inventory of raw materials and consumables" (INVL2), with factor loadings of 0.870 and 0.839 respectively.

The third factor (BF3) resulting from factor analysis of the operational processes of the production area, was a factor composed of four items which we have called "reservation system". This third factor obtained an eigenvalue of 1,749, accounting for a total variance of 8,746%. In addition, the Cronbach showed a level close to good, 0.791. This factor is composed by items that refer to the central theme of our research. The high score on this factor indicates that production systems are still traditionally brought online, suggesting a promising field in seeking improvements in the performance of services for SMEs in the hotel industry.

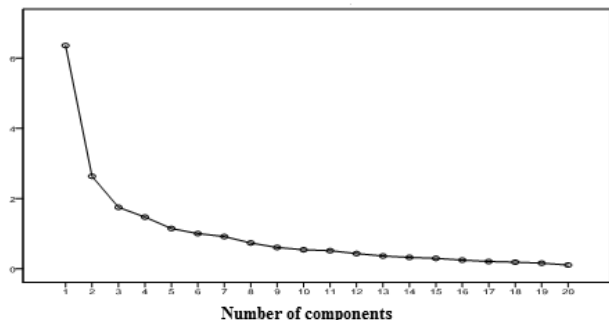
The last factor (F4B) is composed of five items and what we call "infrastructure and services". This fourth factor obtained an eigenvalue of 1.472 and explains a total variance of 7,362%. However, the Cronbach was not acceptable, reaching a very low value: 0.565. In any case, this factor has the greatest load factor is the item "corporate image" (IMPD2) of 0.733.

Factors	Variables	Comunalidad	Factor 1	Factor 2	Factor 3	Factor 4	Cronbach Alfa
1B FACTOR: Level operation tasks	TAPR4 Personal experience in operations	0,711	0,813	0,127	0,119	-0,029	0,848
	TAPR5 Preparation and training of operations personnel	0,666	0,794	0,159	0,076	0,086	
	TAPR3 Middle level staff with expertise in operations	0,724	0,738	0,199	0,090	0,384	
	TAPR6 Level introduction of new automated systems operations	0,659	0,677	0,223	0,410	-0,104	
	TAPR2 Skilled with a high level of skills and abilities Personal	0,333	0,485	0,373	0,039	0,439	
2B FACTOR: Logistics management and capacity	INVL1 Purchasing management and handling of suppliers	0,779	0,139	0,870	-0,042	-0,018	0,848
	INVL2 Inventory of raw materials and consumables	0,741	0,161	0,839	0,073	0,072	
	TAPR1 Adequate system of remuneration and allocation of jobs	0,642	0,423	0,668	-0,034	-0,116	
	TAPR5 Customer service skills	0,651	0,433	0,638	0,008	0,230	
	TAPR3 Sufficient number of employees for operations	0,330	-0,019	0,594	0,393	0,280	
	INVL3 Management reserves clients	0,473	0,121	0,569	0,276	0,232	
FACTOR 3B: System de reservas	PROCC1 Traditional online booking system (with response by email)	0,706	0,100	0,182	0,816	-0,063	0,791
	PROCC3 Permanent improvement techniques applied on its website	0,676	0,194	0,021	0,799	0,005	
4B FACTOR: Infrastructure and services	PROCC2 Reservation system in real time	0,365	0,071	0,020	0,747	-0,047	0,565
	PROCC4 Use of modern technologies in the customer's attention	0,352	0,499	-0,036	0,572	-0,064	
	IMPD2 Company image	0,398	0,127	-0,163	-0,126	0,733	
	IMPD3 Accessibility of transport	0,417	-0,032	0,143	-0,095	0,622	
	IMPD4 Buildings, facilities and other infrastructure	0,444	-0,227	0,379	-0,119	0,484	
INVL3 Additional services to customers	0,333	0,433	0,271	0,298	0,465		
INVL4 The transport customers	0,383	0,323	0,114	0,232	0,448		
Auto value factor			6,355	2,634	1,749	1,531	
Partial percentage of variance explained			31,775	13,169	8,746	7,362	
Total percentage of variance explained			61,052				
Measure of sampling adequacy Kaiser-Meyer-Olkin(KMO) : 0,775							
Bartlett's test of sphericity: 910,755							
Significance level: 0,000							
Cronbach's alpha for the total scale							0,839

Table 5 Principal components analysis and reliability of scales measuring decision areas of competitive priorities and the scope of operations

On the other hand, the result of the Kaiser-Meyer-Olkin index shows a value of (KMO = 0.775) and test "Bartlett test of sphericity" also indicates the feasibility analysis and the significance level of 0.000 leading the rejection of the hypothesis that the correlation matrix is the identity matrix ($p < 0.05$), then there is a correlation between some variables.

In summary, the results of the factor analysis can be considered acceptable as they account for over 60% of the total variance, and correlations between the factors and the different items, expressed through the factor loadings are significant, as all present levels above 0.50. Next, shown in Figure 1, the association matrix components rotated by the rotation method: Varimax with Kaiser Normalization



Graphic 1 Sedimentation of the components of the size of areas of decision operations area

From the analyzes, they are then created four indexes, one for each factor "level of operational tasks" (AD_NIVTAOPER2); "Logistics management and capacity" (AD_ADMLOCAP2); "Reservation system" (AD_SISTERESER2); and "infrastructure and services" (AD_INFRA SERV2). Specifically, the index created from the group of initial items and the results of the factor analysis of principal components are part of the decision area and competing priorities in the field of operations of SMEs in the hospitality industry and will be considered in subsequent analyzes.

Analysis distinctive competencies in the field of operations

Within this variable distinctive competencies in the area of operations they were taken five distinctive competencies measured by scales: "cost / productivity", "quality", "reserve management and reception", "flexibility and seasonality of demand" and "complementary services".

Cronbach's alpha coefficient of the five dimensions is about 0.728. In addition, the reliability of the scales for each distinctive competency in the area of transactions:

- For the variable "cost / productivity" SMEs in the hotel sector with a Cronbach's alpha of 0.710, which is an acceptable level and therefore this group of variables have internal consistency or relationship between items or questions that you get part;
- The variable "quality" has a Cronbach a fairly acceptable level, 0.793
- The variable "reserve management and reception" and "ancillary services" get a Cronbach of 0.773 and 0.795 respectively, which is acceptable level of internal consistency of the items.
- Finally, the variable "flexibility and seasonality of demand" reaches only a Cronbach's alpha of 0.439 which is a rather weak.

In Table 6, it can be seen that the first three dimensions and the final dimension of distinctive competencies have acceptable reliability with Cronbach's alpha values above 0.70.

Meanwhile, the dimension of "flexibility and seasonality of demand", presents a Cronbach's alpha value is not acceptable, and likewise, this dimension as a whole is not a scalar variable. Therefore, it is not considered in subsequent factor analysis.

Therefore, this value is not acceptable, being less than the minimum recommended 0.50 (Hair et al., 2001, p. 88). Consequently, this item has been removed for subsequent analyzes.

Dimensions and constructs	Items	Cronbach Alfa
distinctive competencies	Cost/Productivity	0,728
	Quality	
	Reserve management and reception	
	Flexibility and seasonality of demand	
	Complementary services	
Cost/Productivity	COSTP1 The cost and unit price of your products / services	0,710
	COSTP2 Continuous efforts to reduce costs	
	COSTP3 The productivity of labor (Sales/hrs.No.Of persons)	
	COSTP4 Total productivity per euro spent (Sales/total costs)	
Quality	CALI1 The quality of their products / services	0,793

Second, after modification indicated, we proceeded to perform the exploratory factor analysis of principal components with varimax rotation, taking into account, for analysis, 25 items. In the partial correlations (measure of sampling adequacy) shows that the item "cost (to the customer) for canceling reservations" (RESE6), gets a value of partial correlations of 0.465. This value is not acceptable for analysis, so it was decided to delete the item for later analysis.

	CALI2	Availability and quality of supply	
	CALI3	Effort to achieve and maintain a reputation	
	CALI4	Satisfying customers with your products / services	
Reserve management and reception	RESE1	Reliability promising Bookings	0,773
	RESE2	Interest in solving the problems of reserves	
	RESE3	The right service at the time of check-in	
	RESE4	The accessibility to the transparency of the information about booking	
	RESE5	Will ease the company and cancellation of reservations	
	RESE6	Cost (for the customer) for canceling reservations	
Flexibility and seasonality of demand	FLEX1	Distinguishes your company in the high season and low season	0,439
	FLEX2	Personnel changes in high season and low season	
	FLEX3	It closes in the off season	
	FLEX4	In high season it has an agreement with other companies	
	FLEX5	It is able to accommodate very large service demands	
	FLEX6	It is able to achieve alignment with times of low demand service	
Complementary services	SERV1	Meeting the demands of customers	0,795
	SERV2	The information activities (brochures, website, etc.)	
	SERV3	Customer risk reduction	
	SERV4	Make it easier to purchase action (payment, credit lines)	
	SERV5	Treatment of kindness and respect to customers	
	SERV6	Broad customer service capabilities	

Then new exploratory factor analysis with the elimination of the two items "cost and unit price of your products / services" (COSTP1) and "cost (to the customer) for canceling reservations" (RESE6) was performed. The result of factor analysis of principal components with varimax rotation shown in Table 5.36, with the 24 items, grouped with a priori criteria four factors, resulting in a structure that explained by a total of 64.427% of the variance and achieving in all the factor loadings higher value of 0.50.

Table 6 Level of reliability of the scales used to measure the area of distinctive competencies operations

First, exploratory factor analysis of principal components with varimax rotation, a priori approach was applied four factors. Inside dimension of distinctive competencies of the operations area, 26 items grouped into four factors were originally used. In the correlation matrix with contrast Barlett (measure of sampling adequacy) of the variable "cost and unit price of your products / services" (COSTP1), it has a value of 0,343 measurement sampling adequacy partial correlations.

Factor	Variables	Common load	Factor 1	Factor 2	Factor 3	Factor 4	Alpha Cronbach
F1C FACTOR: Satisfied customers	CAL13 Effort to achieve and maintain a reputation	0,134	0,782	0,137	0,323	-	0,014
	CAL14 Satisfying customers with your products / services	0,643	0,765	0,133	0,192	0,056	
	SERV4 Make it easier to purchase action (payment, credit lines)	0,612	0,722	0,013	-	0,101	0,233
	SERV3 Customer risk reduction	0,631	0,704	0,290	-	0,015	0,267
	SERV6 Broad customer service capabilities	0,702	0,592	0,433	0,404	0,003	
	SERV5 Treatment of kindness and respect to customers	0,593	0,521	0,417	0,324	-	0,206
	CAL12 Availability and quality of supply	0,509	0,514	0,057	0,330	0,363	
	SERV2 The information activities (brochures, website, etc.)	0,327	0,459	0,143	0,301	0,039	
	Factorial load						
FACTOR 2 C: Quality reservation service	RESE4 The accessibility to the transparency of the information about booking	0,331	0,273	0,830	0,131	0,103	0,863
	RESE3 The right service at the time of check-in	0,797	0,295	0,816	0,071	0,197	
	RESE5 Will ease the company and cancellation of reservations	0,636	-	0,799	0,047	-	0,106
	RESE2 Interest in solving the problems of reserves	0,761	0,279	0,787	0,127	0,213	
	RESE1 Reliability promising Bookings	0,433	0,081	0,542	0,090	0,335	
F3C FACTOR:	CAL11 The quality of their products / services	0,633	0,133	0,011	0,757	0,176	0,692
	COSTP 2 Continuous efforts to reduce costs	0,613	0,029	0,194	0,724	0,234	
	SERV1 Meeting the demands of customers	0,383	0,337	0,112	0,618	0,145	
F4C FACTOR: Productivity	COSTP 3 The productivity of labor (Sales / hrx. No. Of persons)	0,790	0,145	0,122	0,133	0,848	0,799
	COSTP 4 Total productivity per euro spent (Yon Sales / total costs)	0,705	0,161	0,162	0,341	0,733	
Auto value factor			6,927	2,020	1,537	1,113	
Partial percentage of variance explained			38,48	11,22	8,542	6,183	
Total percentage of variance explained			1	1			
Measure of sampling adequacy Kaiser-Meyer-Olkin							
KMO: 0.792							
Bartlett's test of sphericity: 903.820							
Significance level: 0.000							
Cronbach's alpha for the total scale							0,921

Table 7 Principal component of analysis and reliability of scales measuring distinctive competencies in the area of operations

The first factor (F1C) called "satisfied customers" presents an eigenvalue 6,927 and a percentage of explained variance of 38.481%. This factor encompasses the first six items of the scale, reaching Cronbach's alpha value of 0.861. The first two items refer to the possibility that the effort to achieve and maintain a reputation and customer satisfaction with their products and services provide a competitive advantage in SMEs in the hotel sector.

The second factor (F2C) expresses "reservations service quality", consisting of five items. This factor obtained an eigenvalue of 2,020 explained a total variance of 11,221%. In addition, the Cronbach turned to a solid level of 0.865. The first two factorial loads are significant values above 0.80; the items are "accessibility to the transparency of information on the reservation" and "the right service at the time of check-in" with factor loadings of 0.850 and 0.816 respectively.

The third factor (F3C) resulting from factor analysis is called "quality of hotel services," focuses on three items: "quality of products / services" (cali1), "ongoing effort to reduce costs" (COSTP2) and "meeting the demands of customers" (SERV1). This third factor obtained an eigenvalue of 1,537 explained a total variance of 8,542%. In addition, the Cronbach was an acceptable level (0.691).

The last factor (F4C) which we have called "productivity" is composed of two items. This fourth factor has an eigenvalue of 1.113 explaining a percentage of the total variance of 6,183%. In addition, the Cronbach was a fairly good level (0.799). In this factor, the item that has a higher load factor is the so-called "productivity of labor", representing a load factor of 0.848.

Finally, after the "factorial analysis of main components", he has made the test of sphericity Bartlett level of critical significance and adequacy test measurement Kaiser-Meyer-Olkin (KMO), showing values (p = 0.000) and 0.792 respectively, and verified the adequacy of the structure of the correlation matrix, as shown at the end of Table 8.

Contrast of hypotheses

After verifying the reliability and validity of scales measuring the variables that make the decision areas of operations with priorities and distinctive competencies of field operations, we proceed to make the appropriate analysis to contrast each of the hypotheses. Below they are presented in Table 5, the partial correlations areas decision operations, with the factors distinctive competencies represent, resulting in:

- The "level of operational tasks" correlates with:
- Factors "satisfied customers" positive and very significant (sig = 0.400 and 0.040); Y
- With "quality of hotel services", positive (0.323) and very significantly (sig = 0.002).
- On the other hand, the "logistics management and capacity" and "quality of service reserves" are positively correlated (0.316) and very significantly (sig = 0.002).
- The "reservation system" is correlated to:
- "Satisfied customers" positive and very significant (sig = 0.241 and 0.022); and with
- "Quality of service reserves", positive (0.437) and very significantly (sig = 0.000).
- Finally, "infrastructure and services" and "satisfied customers" are positively correlated (0.309) and very significantly (sig = 0.003).

	1	2	3	4	5	6	7	8
1. AD_level operational tasks	r	1	0,000	0,000	0,440	0,206	0,323	0,006
	significanc e		1,000	1,000	1,000	0,002	0,000	0,353
2. AD_administration and logistics capacity	r	0,000	1	0,000	0,000	-0,316	0,111	-0,019
	significanc e	1,000		1,000	1,000	0,003	0,286	0,380
3. AD_Booking System	r	0,000	0,000	1	0,000	0,241	0,437	0,001
	significanc e	1,000	1,000		1,000	0,002	0,000	0,447
4. AD_Infrastructure and Services	r	0,000	0,000	0,000	1	0,309	0,009	-0,065
	significanc e	1,000	1,000	1,000		0,003	0,387	0,982
5. Cp_satisfied customers	r	0,400	-0,005	0,241	0,309	1	0,000	0,000
	significanc e	0,000	0,803	0,002	0,003		1,000	1,000
6. Quality Cp_reservation service	r	0,206	0,316	0,437	0,009	0,000	1	0,000
	significanc e	0,005	0,000	0,000	0,387	1,000		1,000
7. Cp_quality hotel services	r	0,323	0,111	0,005	0,000	0,000	0,000	1
	significanc e	0,000	0,286	0,852	0,982	1,000	1,000	
8. Cp_Productivity	r	0,006	-0,019	0,006	-0,005	0,000	0,000	0,000
	significanc e	0,353	0,380	0,447	0,342	1,000	1,000	1,000

Table 8 Correlations of areas of decision factors and distinctive competencies

Here are, as a graphic scheme, the results found in the correlation between emphasis on the various areas of decision operations and distinctive competencies. ; The "customer satisfaction", "quality service reserves", "quality of hotel services" and "productivity" latent variables predict the existence of cause and effect with latent variables "level of operational tasks", "logistics management and capacity", "reservation system" and "infrastructure and services". In this case, all estimates of the proposed model were statistically significant and reliable; likewise, the very low standard errors were found.

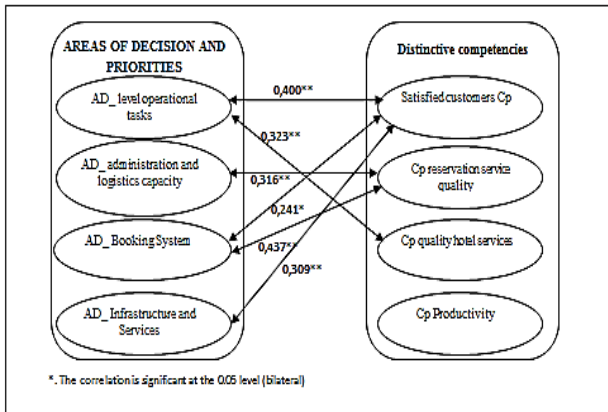


Figure 1 Correlations of the area of decision factors and the distinctive competencies

As shown in Figure 1, the latent "satisfied customers" variable is related to the factors "level operational tasks"; "Reservation system"; and "infrastructure and services" direct and positive way. The coefficients show the degree of importance of the exogenous variables on the endogenous variable. So, the higher the value of the possible responses of the variables directly related, the higher the variable "satisfied customers"; in effect, there is therefore a linear relationship between them, as shown in the following equation:

$$CP_CLIENSATS = 0,400 \times AD_NIVTAOPER + 0,241 \times AD_SISTERESER2 + 0,309 \times AD_INFRASERV2 + \epsilon_i \tag{1}$$

Where:

CP_CLIENSATS3 = Satisfied customers;

AD_NIVTAOPER2 = level operational tasks;

AD_SISTERESER2 = reservation system;

AD_INFRASERV2 = infrastructure and services;

ei = Error.

The following equation is composed of the results of the relationship between the factor "service quality reserves", with the factors of "logistics management and capacity" and "reservation system" which presents a direct and positive way. Thus, the higher the value of the potential responses of exogenous variables the greater will be the quality of service reservation. The equation form is:

$$CP_CALISRES = 0,316 \times AD_ADMLOCAP2 + 0,437 \times AD_SISTERESER2 + \epsilon_i \tag{2}$$

Where:

CP_CALISRES 3 = Quality reservation service;

AD_ADMLOCAP2 = Administration and logistics capacity;

AD_SISTERESER2 = reservation system;

ei = Error.

Finally, we show that the "quality of hotel services" factor is related to the factor "level of operational tasks" direct and positive way. It can be seen that, indeed, the "level of operational tasks" is the most influential factor on the improvement or worsening of the quality of hotel services. The equation form is:

$$CP_CALISHOT3 = 0,323 \times AD_NIVTAOPER2 + \epsilon_i \tag{3}$$

Where:

CP_CALISHOT3 = quality hotel services;

AD_NIVTAOPER 2 = level operational tasks;

Conclusions, limitations on the scope and future research

Regarding the decision areas of the operations function and competing priorities, exploratory factor analysis of principal components with varimax rotation resulted in a total of 4 factors that explain achieve 61.052% of the total variability, counting all with a value greater than unity. The correlations between the factors and the different items, expressed through the factor loadings, are very significant. The factors are:

- The first factor (F1B) was called "level operational tasks"; encompasses the first six items of the scale; the first two items ("personnel with experience in operations" and "preparation and training of operating personnel") show the highest rating, which refers to the possibility that constitute competing priorities.
- The second factor (F2B) called "logistics management and capacity" is composed of six items. The first two are the factor loadings, above 0.80 most significant values. Are the items, "purchasing management and supplier management" and "inventory of raw materials and consumables".
- The third factor (BF3) is composed of four items which we have called "reservation system". The scores indicate that production systems are still traditionally brought online, suggesting a promising field in seeking improvements in the performance of services for SMEs in the hotel industry.
- The last factor (F4B) consists of five items and what we call "infrastructure and services". He earned an eigenvalue of 1.472 and explains a total variance of 7,362%. However, the Cronbach was not acceptable (0,565) .The more item factor loading is "corporate image".

Inside dimension of distinctive competencies of the operations area, 26 items grouped into four factors, to make an exploratory factor analysis of principal components with varimax rotation, a priori test four factors were originally used. Subsequently, a factor analysis of principal components with varimax rotation, with 24 items, grouped with a priori test is performed four factors, resulting in a structure that explained by a total of 64.427% of the variance and achieving in all factor loadings superior value 0.50. The factors are:

- The first factor (F1C) called "satisfied customers", explains 38.481% of the variance. It covers the first six items of the scale. The first two items refer to the possibility that the effort to achieve and maintain a reputation and customer satisfaction with their products and services provide a competitive advantage in SMEs in the hotel sector.
- The second factor (F2C) expresses "reservations service quality", consisting of five items, explains 11.22% of the variance. The first two factorial loads are significant values above 0.80; the items are "accessibility to the transparency of information on the reservation" and "the right service at the time of check-in".

- The third factor (F3C) is called "quality of hotel services," an 8,542% of the variance and concentrated to three items: "quality of products / services", "ongoing effort to reduce costs" and "satisfying the customer demands."
- The last factor (F4C) which we have called "productivity," a 6,183% of the variance and is composed of two items. In this factor, the item that has a higher load factor is the so-called "productivity of labor (Sales / hrs. Number of people)" and represents a factor loading of 0.848.

Regarding the relationship between decision areas of operations, with the factors that represent distinctive competencies, it turned out:

- The "level of operational tasks" is correlated with: the factors positively and very significantly "satisfied customers" (sig = 0.400 and 0.040); and "quality of hotel services", positive (0.323) and very significantly (sig = 0.002).
- On the other hand, the "logistics management and capacity" and "quality of service reserves" are positively correlated (0.316) and very significantly (sig = 0.002).
- The "reservation system" is correlated with positive and very significant (sig = 0.241 and 0.022) "satisfied customers"; and "quality of service reserves", positive (0.437) and very significantly (sig = 0.000).

- Finally, "infrastructure and services" and "satisfied customers" are positively correlated (0.309) and very significantly (sig = 0.003).

In short, and considering that the hypothesis was defined as: "The emphasis on the various areas of decision operations (capacity, location of the business, service delivery protocols, productive work / workforce, and management logistics) of SMEs in the hotel industry, leads to the generation of distinctive competence in the area of operations, "we can conclude that some of the variables that represent the distinctive competencies of SMEs in the sector, are related to variables areas decision operations. That is, the hypothesis was partially accepted, as follows:

"H1.1: The greater the emphasis on decisions related to the ability of the company operations, the greater the competitive SMEs in the hospitality industry." It is not acceptable, because it has not found any association argument factors distinctive competencies with the capabilities of the facilities of SMEs.

"H1.2: The greater the emphasis on operational decisions related to the location of the company, the greater the competitive SMEs in the hospitality industry." We can say that, indeed, this was a qualitative variable and did not participate in the latent variables.

"H1.3: The greater the availability of service delivery protocols, the greater the competitive SMEs in the hospitality industry." This relationship is accepted, as there is a significant dependence of the latent variables "reservation system" and the "satisfied customers" and "quality service reserves".

"H1.4: The greater the emphasis on productive tasks, the greater the competitive SMEs in the hospitality industry." It is accepted as a significant relationship of latent variables "level of operational tasks" with "satisfied customers" and "quality of hotel services" appreciated.

Importantly, the level of productive jobs in SMEs in the hotel industry, is determined by the staff working in this sector (which is sufficient for operations, there specialized personnel or personnel with average knowledge level of operations, which includes people with experience in operations) and the preparation and training of operations personnel available. Thus, it is the quality of the performance of people (through the level of the tasks carried out) which allows further distinctive competence.

"H1.5: The higher the interest showed in logistics management, the greater the competitive SMEs in the hospitality industry." It is accepted. Indeed, there is a significant relationship between the latent variables "logistics management and capacity" and the "quality of service reserves". Thus, the hotel sector SMEs with better management of purchasing and supplier management, inventory of raw materials and consumables, and management of customer reservations, can establish a distinctive competence.

Also, a significant correspondence of the latent variables "infrastructure and services" is shown, that of "satisfied customers". It is interesting to see how the assumption that transport customers and additional services to customers, are an essential component to achieve endogenous distinctive competence of SMEs in the hotel industry is confirmed.

It is pertinent to note several limitations that should be considered in the empirical work to better understand the scope of the results.

We also believe that there are still many unanswered questions, some of which can be summarized in possible future research, which will be detailed later.

Regarding the limitations on the scope of the study conducted, we highlight the following:

- The study population corresponds to SMEs of between 10 and 250 hotel workers and Galicia. Therefore, the data cannot be extrapolated to companies with fewer than 10 or more than 250 workers or companies in other sectors or other geographical areas.
- Failed to access all the data of the population under study, so we had to work with a stratified sample, which we proceeded to rule out the possible existence of bias. Now there is a relatively small population (152 companies, of which a sample of 90 was achieved), which complicated the statistical treatment and prevented the use of structural equations.
- Regarding distinctive competencies studied, we have limited the competitive priorities related areas of decision the scope of operations. Therefore fall outside the study other possible powers derived from other functional areas as well as those that may arise from competitive and corporate strategies of the companies studied.

With regard to future research, we propose the following developments:

- Continue the study initiated by relating the demographic characteristics of the study population with distinctive competencies found, looking for the existence of strategic groups.
- Complete, as planned, the study of the relationship between distinctive competencies and competitive success of the companies studied.
- Finally, a longitudinal investigation that involved the same companies that in the present investigation, would be particularly relevant to check the influence on the ratios obtained, differently to the economic crisis that existed in the area during the biennium economic situation studied (2011-2012).

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	1	2	3	4	5		
Chan (1999, p. 334)	Cost	Quality	Innovation	Service	Flexibility	SMEs from various sectors	Taiwan
Avella Camarero, Fernández Sánchez, y Vázquez Ordás (1999, p. 241)	Cost	Flexibility	Quality	Delivery	-	Industrial companies with more than 200 Job.	Spain
Zhao et al. (2002, p. 278)	Quality	Delivery	Service	Innovation	Flexibility	Moldings and machinery	China
Ahmad Schroeder (2002, p. 80)	Quality	Delivery	Efficiency	Innovation	-	Cars, electronics and machinery	Germany, Italy, Japan, USA
Boyer y Lewis (2002, p. 14)	Cost	Quality	Delivery	Flexibility	-	Advanced factories AMT	USA
Sarache Castro et al. (2004, p. 42)	Price	Quality	Speed	Flexibility	technical assistance	Clothing industries	Colombia
Urgal González y García Vázquez (2005, p. 109)	Price	Flexibility of product and volume	Delivery	Design quality	Quality compliance	Metal industry, with more than 50 workers	Spain
Urgal González y García Vázquez (2006, p. 139)	Price	Quality	Deadline	Flexibility	Service	metal Sector	Spain

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