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FROM A FRANCHISE ACQUISITION TO THE DEFAULT ON PAYMENT. HOW TO DEAL WITH THIS SITUATION?

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Abstract:
The aim of this work is to design a debt restructuring proposal through a new payments scheme, with the purpose of giving franchisees an opportunity to finish credit debts acquired with the aim to buying operative equipment for a franchise. With this purpose, this work used the procedure proposed by García–Santillán and Vega Lebrúm (2008) related to an equivalent equations model capable of, in first place, re-evaluating the original debt, including overdue payments, as well as those that already were paid. Besides, the debt restructuring model pursues knowing the amount of each payment in the new payments scheme. The result of the design proposed by the restructuring scheme, offers the franchisee a scenario where he/she could have a better control on the reference debt and besides offers a viable scenario for finishing it.

Keywords: franchises, payment insolvency, debt restructuring

AMS 62PO5, 91G30, 91G40, 91G50, 97M30, 97D40
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1. Introduction

Nowadays, acquiring a franchise might represent a certain amount of security for investors, due to the advantages that this model shows. This franchise modality is a

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proven, experienced business and knowing how is the key that can explain what works fine and leads to success, all this, based on the processes and final products uniformity and of course, with a big advertising support.

About franchises, the Department of Enterprise and Employment from the Generalitat de Cataluña (2012), (Departamento de Empresa y Empleo de la Generalitat de Cataluña), has refered that this business figures are the kind of business model that works according a contractual collaboration system between two companies, legally and economically independent, and where one of the parts (named franchisor) gives transfers the other (franchisee) the right to take advantage of its brand and commercialize a series of services object of the business activity, in response to certain economic remunerations.

Nevertheless and as it happens at every business, there is a risk, even though in the case of franchises it might be lesser, there are some external factors that strongly affect the brand's performance, giving place to a loss of profits and above all, liquidity and in economic crisis periods this happens to be a very serious situation. An example is when there is a depreciation of the Mexican peso; it could represent for the investors in foreign franchises an unpayable debt and even worse, the loss of a brand.

Nowadays, the Company "Emparedados de Veracruz" is a fast food brand that performs under the franchise model. The starting investment for acquiring a franchise in this kind of business MX $1'500,000.00, and this amount, when covered, gives the franchisee the right to make use of the brand for five years, with the right to receive assistance in profitability, performance and marketing as well as material for the restaurant's operation, including furniture, advertising material and even equipment such as ovens, refrigerators, fridges, cold line, hot line, toaster, among other elements. It is important to clarify that the investment does not include supplies neither the space for the commercial use.

However, when the franchisee does not count with an enough amount of resources in order to cover the total amount of the starting investment, he/she may ask the brand a financing and therefore be able to acquire all the required electric equipment in order to start operations (ovens, refrigerators, fridges, cold line, hot line and toaster). Normally, all this package is valuated in MX $800,000.00; When the franchisee accepts the debt, he/she also accepts responsibility for paying each month the agreed amount with a previously stipulated interest rate and the corresponding monthly capitalization. About this, it is important to point out that the aforementioned assumed debt is calculated in dollars.

In some cases, the franchise's success is affected by factors from the macro environment and the results might not be the desired ones. The business becomes not profitable and the franchisee after paying royalties, chooses only to cover only the

supplies invoices and basic expenditures such as electricity, internet and rent, and stops paying the credit previously acquired on equipment for the business operation.

This decision causes that the debt and the interests will increase month after month getting to a point where the franchisee does not know what to do and might lose all his/her investment. This scenario opens the possibility for renegotiating the debt as it has been proposed in the seminal works on equivalent equations models by García-Santillán and Vega-Lebrúm (2008) and recently in the works of García-Santillán, Venegas-Martínez and Escalera-Chávez (2014); Moreno-García, García-Santillán, Bermúdez, and Almeida (2015); García-Santillán, Escalera-Chávez, Moreno-García, and Kramer-Rojas (2015).

It is from these reasoning that the next question emerges: Which is the best alternative for negotiating the debt derived from the acquisition of operative equipment of the franchises model, given a possible payment breach scenario? What to do in such a case?

Which is the restructuring model that may allow both parts (debtor and creditor) to benefit in terms of equity?

2. Literature Review

It is the purpose of this work to show possible alternatives for designing a debts restructuring scheme, these alternatives are derived from the payments insolvency in a franchise business model. Therefore, in this section it is carried out the conceptual theoretical discussion on the analysed phenomena. First, the key elements of the franchise variable are defined and later, the debt restructuring variable is discussed and analysed.

On the franchise variable, these are business models where, through a commercial and finance agreement (royalties and rights), a company named *franchiser* (owner) permits the use of its business model to another named *franchisee or franchised* (Silva, 2003). One of the keys for companies profitability are the fees that the franchisee pays to the brand in an obligatory way each certain period of time and that is not conditioned the sales success. Based on what Silva (2003) remarks, these mandatory payments are divided the following way:

1. RIGHTS (*fee*). Some franchisers ask for an entry amount in order to be able to have access to the right of receiving the transference of a business model. This amount is relative to the franchise's prestige that would support the commercial success for the franchisee
2. OPERATION ROYALTIES. They refer to the rights that the franchisee must pay due to the use of the business format received plus the support of training

supplied by the franchiser. They can vary between 1 and 12% of the gross sales depending on the franchisers positioning.

3. ROYALTIES FOR ADVERTISING. They refer to the contribution that the franchisee does in order to design and execute a corporate advertising plan at wide coverage mass media keeping an image uniformity at all business. This element is centralized at the franchise's owner and is equivalent to an average between 3% and 55 of the gross total sales.

About this and with a less optimistic point of view, the Department of Enterprise and Employment of the Generalitat de Cataluña (2012), points out that these obligatory fees are one of the main disadvantages when acquiring a franchise, since they become much higher compared to a start up with one's own brand, since they are set in accordance with the restaurant's net sales and not in accordance to its profitability.

Regardless the franchises high costs, a research carried out by Alba (2010) on the franchises in Mexico, demonstrated that there is a progressive increase of this business model penetration in Mexico. By the end of 2007, the business with the biggest amount of franchises were: food and restaurants, remarking foreign fast food, restaurants and bars, cafeterias and national fast food; in second place, beauty and personal care, education and specialty stores, standing out the food and restaurants sector that jointly represented 33% of the market.

For operating this kind of food and restaurants franchises it is fundamental the required equipment in order to produce the final products, which can reach 50% of the initial investment. In those cases where the franchisee does not count with enough solvency, a possible option is acquiring a debt that might supply the required economic resources. This fact leads to the search for financing at the bank system or with the suppliers themselves.

A possible advantage of suppliers is that they are who supply materials and variable consumable goods for the companies that they have deals with. Even if it is true that franchises offer security through a business model that has been proved and accredited, and that allows a better probability for assured profitability and self-sustainability, it is also true that unfortunately success does not depend only of the name of the acquired brand, but there are external factors like inflation and devaluation, jointly with other variables associated to financial crisis and that have a direct relation with the acquired debt. (Departamento de Empresa y Empleo de la Generalitat de Cataluña, 2012).

That is why, any instability or affectation in these aforementioned variables, triggers an economic imbalance for every moral or natural person's finances, which added to a lack of financial culture and the possible absence about knowledge on models on debt restructuring, leads people and companies to make bad decisions related to the acquired debts and this might cause legal situations that have to be solved

at legal courts, besides being in the possibility of losing the initial investment provided by the franchisee.

Considering this, García-Santillán and Vega-Lebrúm (2008), García-Santillán, Venegas-Martínez and Escalera-Chávez (2014) refer that when facing a debt's non-fulfillment what is healthier is looking for a renegotiation or restructuring, instead of a moratorium or even declaring bankruptcy. About this, we can refer the strategy proposed by Citibank and this is associated precisely, with negotiating with the creditors. Literally mentions:

> *"Negotiate with your creditors: Do not fear about negotiating with your creditors in order to figure out a way to pay your debt. Design a plan that you can show them. It is recommended to pay the same monthly amount to each creditor, or more to that one who asks for the highest interest rate".*
>
> (Citibank, 2007)

Following the same idea, another research carried out by García-Santillán, Escalera-Chávez, Moreno-García, Rojas-Kramer (2015), identified a common factor based on the valuation of original debts and the new dates proposal for the programed payments, that permits setting a balance between the expired promissory notes and future promissory notes that have not expired yet, benefiting both, debtor and creditor.

They also point out that besides, within this debt restructuring proposal the departure point is valuating all the amounts (expired and not expired) to a certain date, which they denominated focal date.

Later, and according to the debtor's requirements and possibilities, a proposal for the new payment dates is made as well as the amounts, which also will have a focal date in order to obtain the number of payment coefficient, starting from de equivalent equations model. With this procedure, a debt restructuring model can be achieved and through it, people and companies are able to pay off the debt and reduce the possibility to become legal cases.

In summary, and considering as a reference what Pastor (1999) and García-Santillán, (2014) recommended, the next procedure is followed:

1. It must be defined a date when every original debt must be located as well as the new payment scheme, which will be named focal date.
2. Recalculate the value of all the debt that will be renegotiated considering that it is about promissory notes that were signed with the same supplier (creditor). All these values are taken to the focal date, the expired indexing the values to future value $S_1\left(1+ i/m\right)^{n/m}$ and those not expired are discounted those values to present value $S_1 / \left(1+ i/m\right)^{n/m}$.

3. Calculate based on that focal date the supplier payment options proposed by the debtor, this is, the new payment scheme (number of payments and dates).

4. Last, calculate the amount of each payment that the debtor wants and is able to pay to the creditor, all this derived from the new payment scheme.

3. Hypothetical case developed

The hypothetical assumption showed in this work, starts from the insolvency situation of the debtor who got the franchise, where it is assumed that given the moment of liquidity loss, this will derive in a lack of payment to his creditor, who in this case is the supplier of the machinery and equipment for the business that was required in a certain moment by the person who acquired the franchise.

4. Model Development

In order to develop the mathematic model of the assumption set, we depart from the following data: The franchisee gets a credit for MX $400,000.00 in order to acquire equipment that consists of a refrigerator and an industrial fridge and therefore be able to start operations with the new franchise. To finish the debt the franchisee must pay during 3 years equal amounts of MX $11,111.11 each month. With an interest rate of 18% annual nominal that can be capitalized monthly starting at the second year and through the end. With this consideration the debtor would make the payments the first year without interests as part of an agreement previously agreed. This way, the payment of the first month of the second year and through the payment number 36, would already consider an interest rate of 18% and in the case of a lack of payment an interest rate of 29% would be applied for all the payments (expired and not expired).

When starting operations the new franchise sales show good dividends and above all good cash flow, which made possible covering each month's payments on time. After the opening's "hit" and in combination with external and internal factors, the sales begin to decline gradually causing that only the basic expenditures of the franchise and mandatory payments such as royalties could be covered, neglecting the debt's payment, leading to a point where the franchisee has already several months and promissory notes unfulfilled and some promissory notes next to be paid, all this in a sales scenario not favourable.

Next, the situation of the payments made by the franchisee is shown:

- 12 monthly payments paid.
- 5 monthly payments unfulfilled (a*fd*)
- 1 monthly payment that expires the focal date (*fd*) the month 18

- 18 monthly payments remaining *(bfd)*

Therefore, in order to restructuring debt, firstly we have to apply a formula that allows us to know the amount of each payment *Y (formula 3)* (according to number payments proposed), to do this, we need to assess the original debt ($O_{DV,\ formula\ 1}$), after, in order to calculate the new payment scheme, we need to get the coefficient and to know the dates of the new payment scheme, hence, we must use the formula 2 (N_{SD}):

$$O_{DV}=\sum_{1\ldots j}^{bff} Pn_{1bfd}\left[1+\left(\frac{i_1t_1}{a}\right)\right]^{t/m}+\ldots Pn_{j_{bfd}}\left[1+\left(\frac{i_jt_j}{a}\right)\right]^{t/m}+Pn_{fd}+\sum_{1\ldots j}^{ff}\frac{Pn_{1afd}}{\left[1+\left(\frac{i_1t_1}{a}\right)\right]^{t/m}}+\ldots\frac{Pn_{j_{afd}}}{\left[1+\left(\frac{i_jt_j}{a}\right)\right]^{t/m}} \quad (1)$$

$$N_{SD}=\sum_{1=j}^{bfd} Sn_{bfd}\left[1+\left(\frac{i_1t_1}{a}\right)\right]^{\frac{t}{m}}+\ldots Sn_{bfd}\left[1+\left(\frac{i_jt_j}{a}\right)\right]^{\frac{t}{m}}+S_{fd}+\sum_{1=j}^{afd}\frac{Sn_{afd}}{\left[1+\left(\frac{i_nt_n}{a}\right)\right]^{\frac{t}{m}}}+\ldots\frac{Sn_{afd}}{\left[1+\left(\frac{i_jt_j}{a}\right)\right]^{\frac{t}{m}}} \quad (2)$$

$$Y=\frac{O_{DV}}{N_{SD}} \quad (3)$$

Next, the first stage of financial modelling is developed, based on the formula for Value of Original Scheme, ($O_{DV,\ formula\ 1}$), which allows us to know the debt's updated value at the focal date (month 18).

$$O_{DV}=\sum_{1\ldots j}^{bff} Pn_{1bfd}\left[1+\left(\frac{i_1t_1}{a}\right)\right]^{t/m}+\ldots Pn_{j_{bfd}}\left[1+\left(\frac{i_jt_j}{a}\right)\right]^{t/m}+Pn_{fd}+\sum_{1\ldots j}^{ff}\frac{Pn_{1afd}}{\left[1+\left(\frac{i_1t_1}{a}\right)\right]^{t/m}}+\ldots\frac{Pn_{j_{afd}}}{\left[1+\left(\frac{i_jt_j}{a}\right)\right]^{t/m}}$$

$$O_{DV}=\sum_{j\ldots n}^{aff}\$11{,}111.11\left(1+\left(\frac{0.29}{12}\right)\right)^{5}+\$11{,}111.11\left(1+\left(\frac{0.29}{12}\right)\right)^{4}+\$11{,}111.11\left(1+\left(\frac{0.29}{12}\right)\right)^{3}+\ldots$$

$$\ldots+\$11{,}111.11\left(1+\left(\frac{0.29}{12}\right)\right)^{2}+\$11{,}111.11\left(1+\left(\frac{0.29}{12}\right)\right)^{1}+\$11{,}111.11+\sum_{j\ldots n}^{dff}\frac{\$11{,}111.11}{\left(1+\left(\frac{0.29}{12}\right)\right)^{1}}+\ldots$$

$$\ldots+\frac{\$11{,}111.11}{\left(1+\left(\frac{0.29}{12}\right)\right)^{2}}+\frac{\$11{,}111.11}{\left(1+\left(\frac{0.29}{12}\right)\right)^{3}}+\frac{\$11{,}111.11}{\left(1+\left(\frac{0.29}{12}\right)\right)^{4}}+\ldots+\frac{\$11{,}111.11}{\left(1+\left(\frac{0.29}{12}\right)\right)^{18}}$$

$$O_{DV} = \sum_{1...5}^{aff} \$11,111.11\left(1.12681646\right) + \$11,111.11\left(1.10022763\right) + \$11,111.11\left(1.07426620\right) + ...$$

$$... + \$11,111.11\left(1.04897736\right) + \$11,111.11\left(1.02416667\right) + \$11,111.11 + \sum_{1...18}^{dff} \frac{\$11,111.11}{\left(1.02416667\right)} + ...$$

$$... + \frac{\$11,111.11}{\left(1.04891736\right)} + \frac{\$11,111.11}{\left(1.07426620\right)} + \frac{\$11,111.11}{\left(1.10022763\right)} + \frac{\$11,111.11}{\left(1.12681646\right)} + \frac{\$11,111.11}{\left(1.15404786\right)} + \frac{\$11,111.11}{\left(1.18193735\right)} + ...$$

$$... + \frac{\$11,111.11}{\left(1.21050084\right)} + \frac{\$11,111.11}{\left(1.23975461\right)} + \frac{\$11,111.11}{\left(1.26971535\right)} + \frac{\$11,111.11}{\left(1.30040013\right)} + \frac{\$11,111.11}{\left(1.33182647\right)} + \frac{\$11,111.11}{\left(1.36401228\right)} + ...$$

$$... + \frac{\$11,111.11}{\left(1.39697591\right)} + \frac{\$11,111.11}{\left(1.43073616\right)} + \frac{\$11,111.11}{\left(1.46531228\right)} + \frac{\$11,111.11}{\left(1.50072399\right)} + \frac{\$11,111.11}{\left(1.53699149\right)}$$

$$O_{DV} = \sum_{1...5}^{bfd} \begin{bmatrix} \$\ 12,520.18 \\ \$\ 12,224.75 \\ \$\ 11,936.29 \\ \$\ 11,654.64 \\ \$\ 11,379.63 \end{bmatrix} + \$11,111.11 + \sum_{1...18}^{afd} \begin{bmatrix} \$\ 10,848.93 \\ \$\ 10,592.93 \\ \$\ 10,342.98 \\ \$\ 10,098.92 \\ \$\ 9,860.62 \\ \$\ 9,627.95 \\ \$\ 9,400.76 \\ \$\ 9,178.94 \\ \$\ 8,962.35 \\ \$\ 8,750.87 \\ \$\ 8,544.38 \\ \$\ 8,342.76 \\ \$\ 8,145.90 \\ \$\ 7,953.69 \\ \$\ 7,766.01 \\ \$\ 7,582.76 \\ \$\ 7,403.83 \\ \$\ 7,229.13 \end{bmatrix} = \$231,460.29$$

Later, we make use of the New Scheme Value, (N_{SD}), in order to obtain the coefficient of the number of payments from which it is wanted to make a proposal with the restructuring model. The origin formula lays down that:

$$N_{SD} = \sum_{1=j}^{bfd} Sn_{bfd}\left[1+\left(\frac{i_1 t_1}{a}\right)\right]^{\frac{t}{m}} + ...Sn_{bfd}\left[1+\left(\frac{i_j t_j}{a}\right)\right]^{\frac{t}{m}} + S_{fd} + \sum_{1=j}^{afd} \frac{Sn_{afd}}{\left[1+\left(\frac{i_n t_n}{a}\right)\right]^{\frac{t}{m}}} + ... \frac{Sn_{afd}}{\left[1+\left(\frac{i_j t_j}{a}\right)\right]^{\frac{t}{m}}}$$

For the development of the hypothetical case, the following payment scheme is proposed: 1st. payment, one month after the focal date; 2nd payment, six months after the focal date. A monthly capitalizing nominal annual discount rate of 7% is used.

$$N_{SD} = \sum_{1=n}^{afd} \frac{X_1}{\left(1+\left(\frac{0.07}{12}\right)\right)^1} + \frac{X_2}{\left(1+\left(\frac{0.07}{12}\right)\right)^6} = \sum_{1=n}^{afd} \frac{1_1}{(1.00583333)^1} + \frac{1_2}{(1.00583333)^6}$$

$$N_{SD} = \sum_{1=n}^{afd} \frac{1_1}{(1.00583333)} + \frac{1_2}{(1.03551438)}$$

$$N_{SD} = 1.95990413$$

Last, it is necessary to know which will be the amount of the two payments:

$$\frac{O_{DV} = \$231,460.29}{N_{SD} = 1.95990413} = \$118,097.76$$

5. Conclusion

As aforementioned at the theoretical chapter of this work, since the seminal Works of García-Santillán and Vega-Lebrúm (2008), research has been looking for designing new ways for restructuring debts between individuals. The breach of payments by the debtor is a reality that must not be ignored because this is a possibility derived from all kind of commercial and financial transactions carried out by clients and service suppliers which transforms them, starting from this credit operation, into debtors and creditors.

When looking for identifying a new payments scheme through which the debtor might face the commitments acquired with his/her creditor and that has not been able to accomplish on time and according to what was agreed, probably due to a lack of liquidity. All this gives us the opportunity to establish a parameter in a time line in the search for balance and benefit for both parts, this is, with the new payments scheme the debtor will benefit getting a profit from the concept of interests in his favour for restructuring his/her debts. On the other hand, the debtor obtains a deferral in time, what allows him/her to manage the cash flows in a way that makes it possible to administer the working capital and therefore, generate economic liquidity indicators in order to face the contractual commitments with the creditors.

Several have been the proposals showed at the studies made by García-Santillán and Vega-Lebrúm (2008); García-Santillán, Venegas-Martínez and Escalera-Chávez (2014); Moreno-García, García-Santillán, Bermúdez, and Almeida (2015); García-Santillán, Escalera-Chávez, Moreno-García, and Kramer-Rojas (2015), all of them using the modelling of equivalent equations. Within this idea looks it has been searched that this proposals might be a conduct through which an agreement can be achieved in the

benefit of all the parts involved, before getting to legal instances that besides being costly, they are exhausting for both.

In this specific case in which this work is framed, it was found that the debtor's payment breach derives from the acquisition of a franchise. This business model has been identified by a high index of proven success according to Alba's (2010) findings, who demonstrated that there has been a progressive increase in this business model's penetration in Mexico. However, beyond this documented information, it is also true that in some cases it has been proved that it is not like that, that is the case in which the proposal of this article is circumscribed, where it could be found that the franchisee acquires an additional credit with the aim of buying operating equipment, which due to the loss of economic liquidity due to a decrease of sales, through the time the resource became insufficient in order to face the commitments with the creditor.

In this idea we can say that when using the equivalent equations model for restructuring debts, they constitute schemes that supply benefits for both parts involved. In the case of the debtor, it offers a finance vision traced over a time line on the current situation of all the promissory notes, including those who already expired and sparked off an alert for a payment breach. All this supplies the basement for the next stage of the equivalent equations model, which refers to the proposal of the new payments scheme (amounts and dates).

Finally, what has been attempted here with this proposal, is being able to offer an alternative with the aim that the persons or companies at this financial and legal situation might get to an agreement that favours both parts and that, might reduce the risk of converting the debt in legal cases or a bigger economic penalization.

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