

STRUCTURE, STRATEGY AND MARKET POWER OF GENOMMA LAB

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Abstract

In this research the subject of the structure, strategy and market power is addressed Genomma Lab lab. The Herfindahl-Hirschman index (HHI) and Pascual, which are a measure of the level of concentration in an industry are used. The HHI index is defined as the sum of the squares of the market shares of the various companies operating in an industry, that to define the Mexican pharmaceutical industry in a market structure. In the results you will see how is that Genomma Lab is a great strategist racing innovation and diversification in the products it handles, takes a different approach to advertising regarding drugs and design of the products, in the same way be seen as having a unique model of distribution in the country that helps you generate high levels of sales.

Keywords: Pharmaceutical industry, market concentration, strategy.

JEL: L110, D410

Resumen

En el presente trabajo de investigación se aborda el tema de la estructura, estrategias y poder del mercado de Genomma Lab. Se utilizan los índices de Herfindahl-Hirschman (IHH) Y Pascual, los cuales son una medida del nivel de concentración existente en una industria. El índice IHH es la suma del cuadrado de las cuotas de mercado de las distintas empresas que operan en una industria. Esto para delimitar a la industria farmacéutica Mexicana en una estructura de mercado. En los resultados veremos cómo es que Genomma Lab es una gran estrategia que compite con innovación y diversificación en los productos que maneja, toma un enfoque diferente de la publicidad en cuanto a los medicamentos y el diseño del productos, de la misma forma se observa como tiene un modelo de distribución único en el país que le ayuda a generar grandes niveles de ventas.

Palabras clave: Industria farmacéutica, concentración de mercado, estrategia.

1. Introduction

The pharmaceutical industry is one of the most important worldwide, because it seeks the health of the population, and prevents future illnesses. Medications allow a healthy population. It is precisely the emergence of new drugs what drives the increase in life expectancy of the population.

The pharmaceutical industry for its importance and responsibility manifests itself as an industry of constant innovation, is dedicated in many respects to the research and technological development. It is not uncommon to hear about the patent of a drug, because it is precisely the degree of innovation that causes these businesses need large amount of investment. It is estimated that each drug requires 10 years of research and \$ 600 million investment on average (Esquivel, 2013). Precisely because of this economic barrier, it becomes a highly lucrative industry and totally dominated by some originator companies in highly developed countries, transnational called, but it is precisely the ability to invest in these companies which cause even if they are few these strongly compete for the market.

Mexico is one of the countries that have major markets of health inputs and products that accounts for 1.2% of national GDP. The pharmaceutical activity is the ninth most important activity of the Mexican economy as well as the fourth most prominent in manufacturing (INEGI 2009). As manufacturers of raw materials for the production of pharmaceuticals materials there are 15 establishments, with 3,048 people employed (INEGI, 2013).

The pharmaceutical industry is one of the industries that require more preparation; jobs in this industry are composed about 30% by staff with masters and doctorates. Investing in Mexico on this industry is growing. Currently it has 130 plants, generating 80 thousand direct jobs and 300 thousand indirect jobs, making it the first pole of development of the industry in Latin America (CANIFARMA, 2012). Mexico is the second country in Organization for Economic Co-operation and Development (OECD) with the highest percentage of drug expenditure of total expenditure. This situation is worrying, Mexico functions as cheap labor for developed countries but very little actually produces. This market is a long term booming market, due to the reverse situation of the population pyramid, where most people will be elderly and many drugs are needed to survive.

In general, the drugs are divided into controlled and free prescription over the counter (OTC). This is as prescribed. The first are those medications that need to be

prescribed by a doctor and are used for the treatment of severe diseases, while the latter are drugs are intended for mitigation, treatment or prevention of minor conditions and have been authorized for sale without a prescription (Perez, 2013). As discussed below, the paper focuses on free prescription drugs.

The high costs of laboratories cause that countries like Mexico support alternatives such as interchangeable generic drugs that are intended for low-income families and thus acquire medicines. This is a strategy to cause the patent firms lower their costs or generate their own generic, although the participation of these was not significant until 2007, when he obtained a 4.9% share of sales in Mexico (CANIFARMA, 2012).

The most important company in the sector at the time is Genomma Lab. It is a 100% Mexican company, listed on the Mexican stock exchange. It has a significant market share in the sector, and has been criticized for its intense campaigns advertising, and even have demands from the competition arguing that their products do not work and are lying to the consumer. Genomma Lab to be a very influential company in the sector has the opportunity to manage their competition, which is very hard, but can be considered only one company that competes with it which really is Bayer.

2. Background of the problem

The origins of the chemical and pharmaceutical industry in Mexico were in the nineteenth century. Thanks to Don Leopoldo Rio de Loza, he started the production of various chemicals in the country at the end of the century and early twentieth century. Great discoveries were generated, as vaccines, aspirin, sulfa drugs and penicillin. The high demand for these products caused the pharmaceutical industry, appearing major firms such as Schering, Merck, Bristol, Stering, Roche, companies that after some time began production in Mexico.

The great Mexican discovery emerged in the 40s, with the entry of transnational corporations to the country after World War II. Mexico became one of the most important exporters of raw materials to manufacture drugs. Mexico mainly produced steroid hormones allowing being a leading exporter of these, and developing a strong pharmaceutical industry, which paid off about 30 years, but the discovery of another term component with this growth. Currently, Mexico is one of the countries where transnational pharmaceutical manufacture their drugs. They have the infrastructure to create, but research is needed to become a leader in the sector.

3. Delimitation of the problem

Genomma Lab is a company leader in its field in Mexico, was founded in 1996 as a company direct consumer advertising (DTCA) later in 2004 changed its business strategy, with drug development with sale over the counter (OTC) and other products of personal care and creating its own line of generic drugs. For 2008, Genomma Lab quoted for the first time on the Mexican Stock Exchange. In a short time has become the number one company of manufacturing and distribution of drugs in Mexico, increasing its market share to 13.7% in 2009 (Genomma Lab, 2011).

Genomma Lab is found in 14 countries outside Mexico, where 23% of its total sales is concentrated, being Mexico the largest share with 77% of these (Genome Lab, 2011). It acquires each year lot of brands, between 11 and 12. It is diversified, as those brands ranging from Vanart (shampoo) to Colgate (toothpaste). It is a company with a strategy of intensive and aggressive consumer market which has led to be in the pit of pharmaceutical laboratories in Mexico.

Therefore, the research question is:

How does the market power of Genomma is influenced by in the structure and strategies of this company?

4. Justification

This document will discuss the business of Genomma Lab, its structure behavior, its history, but mainly its competence and present place in the sector and strategies that follow and what can achieve. The business model is sought, according to industry organization, which fits best for this company along with its competence and be able to better understand the functioning of the sector.

5. Theoretical assumptions

The market structure of the industry, and Genomma Lab strategies positively impact concentration and market reach, and company strategies.

6. Theoretical framework

Companies in the market apply different strategies in order to increase their participation in this. Formerly companies were a paradigm, which is now known as the old paradigm of industrial organization called structure-conduct-performance, main contribution to the economy of the organization industrial (Vargas Hernandez, 2014)

which was based on economic assumptions that all supply creates its own demand. The structure refers to the structural attributes of the industry, as input costs and output. Conduct, as the actions of the company as product differentiation and performance is the result of the behavior of the firm in response to the structure of the company.

Now the new paradigm corresponds to behavior- structural performance, indicating that first thought as how to reach the consumer, then now and the end is evaluated, which corresponds to a more rational view of the situation in real life, and not so much based on an economic model.

Businesses in real life act as firms that bear costs; actually they exist to save costs both organizational and of certain economic activities. According to Coase, costs are of two types: Transaction costs, which are given by problems of information flows and opportunistic behavior (Vargas Hernandez, 2014) and coordination costs or costs related to production. It is now essential that transaction costs are higher than those of coordination, because if the product price is low provides more room for maneuver, to lower the price and compete in the market.

All markets move between perfect competition and monopoly. To know where they are is a very complicated situation, as all companies are different in all respects that are why there are concentration measurements, to measure the amount of the market that a company possesses. Because if a company has market power causes the efficiency, both dynamic and static, decline significantly, as they cause decreases in consumer surplus, which is not offset by any decrease in any other surplus, thereby causing efficiency loss (Cabral, 1997)

- A. Rates vary from 0 to 1, with 0 being perfect competition and monopoly 1.
- B. There are major concentration indices.

Lerner: describes the market control of a company by the following formula:

$$L = \frac{P-C}{P}$$

Where:

P = price

C = cost

The problem with this index is the ability it has to get the data from each of the companies. It is very difficult to determine the marginal cost of a company.

Entropy: provides the degree of market concentration by the degree of uncertainty among the competitors. It is generated from the sum of the market shares multiplied by logarithms.

$$IE = \sum_{i=1}^n q_i \log(q_i)$$

Where:

q_i = amount

n = number of companies

i = generating unit

It was already mentioned two of the relevant indexes. These two indexes with the Gini index are used to measure market concentration although they have their shortcomings. In this study is not developed Gini, is a bit relevant to the index analysis. Instead it will focus on the two indexes that are they:

- 1) **Herfindahl-Hirschman**
- 2) **Paschal**

- 1) **Herfindahl-Hirschman**

The Herfindahl index known as H this index is very similar to the already popular concentration index consisting of:

$$C_k = \sum_{i=1}^k S_i$$

Where:

S_i = Demand enterprise market, companies ordered from smallest to largest.

The small change in the index H

$$H = \sum_{i=1}^n S_i^2$$

Where:

S_i^2 = The market share of firm i

The Herfindahl index known as H is very similar to the already popular concentration index or C consisting of:

$$C_k = \sum_{i=1}^k S_i$$

Because of their similarity there is a strong correlation between the two although C is widely used because of its ease to calculate it.

2) Pascal

Pascal index is a modification of index Has this measures the concentration measured byH.

$$p = \sum_{i=1}^n \left(\frac{S_i^2}{H} \right)^2$$

Where:

S_i^2 = the market share of firm i

H = concentration index

What makes P in a concentration index of concentration? This change was introduced because of deficiencies that have the H index to measure the concentration when there are mergers, since whatever they may be are punished. Since the merger of two small companies does not alter much the market composition P index does not punish the merger, since it depends on the relative size of the companies. Leaving room to think that mergers are not always bad, not necessarily reduce welfare. For purposes of this document it would be ideal to work with Pascual, but unfortunately the choice of a good concentration index does not guarantee a good estimate of this, since the concentration indices have problems like the following:

- A. The existence of holdings: should not only account for the share of a company, but also that of their agents, as these may have more companies.
- B. Aggregation level that is chosen: is the problem of defining the relevant market size.
- C. Are static measures: Do not show progress information companies only show information from a moment in time.

For this reason the measures of volatility were created. Therefore, these measures can be known the degree of competition of enterprises over time.

The measure of volatility is best known instability index.

$$I = \frac{1}{2} \sum_{i=1}^n |S_{2i} - S_{1i}|$$

Where:

S_{2i} , S_{1i} are the market shares of the company i in the 2 periods
 N total number of companies

If the value of I is 0 means that companies maintained their market share. $I = 1$ means that in the second time the companies have zero market share. Because the concentration indices are measured to determine the amount to which a company controls a market, it will be calculate both indexes and thus know the market concentration of the pharmaceutical industry, as well as to calculate the volatility in the market.

A. The oligopoly models

Interdependence assumes that the benefits of each of the companies depend not only on their decisions, but also the actions taken by their rivals. Companies compete on prices or quantities, although they have other possibilities as technology etc., as follows (see table 1)

Table 1: Event of market structures.

Model	Assumptions	
Cournot	-Companies make decisions simultaneously. -The product of companies is homogeneous -The market price is only aggregate supply of the company -The strategic variable manipulated by each company is the amount produced.	-Amounts are chosen simultaneously -The benefit of each company is a function of the amount produced by that company and the market price The market equilibrium is given
Bertrand	-Companies make decisions simultaneously. -The product of companies is homogeneous	-Each stable company with a profit-maximizing price. -Strategic manipulated variable for each company is the price produced.
Stackelberg	-Two companies competing; leader and follower. -Produce the same good -The decision is sequential. -The company follower behaves as Cournot. -The leader knows that the other behaves Cournot	-The leader chooses the quantity to be produced, leaving the market share it wants to its competition. -It's a two-period model.
Collusion	-Companies agree to act in a coordinated manner.	-They can agree to both the price and quantity. -They can share the market

		-Fix the price and allow the existence of competition. -The main problem of the agreements is that with very unstable
Company dominant	-A large company has a large market share. Fixed price	-Small businesses behave as price takers
Chamberlin	-Differentiated products or perfect substitutes High cross-elasticity No barriers to entry	-Companies differences in order to sell their products, advertising strategies, image, etc.

Source: Own elaboration.

Companies behave in different ways, they can follow a single model or many, as it shall be seen, but to compare companies must be identified their competence, for that serves the theory of Strategic Group, which is to identify a group of firms in an industry following the same or similar strategy.

- 1) Having the same structural and competitive features.
- 2) Companies of similar size, with similar portfolios of products, production systems alike, similar distribution channels, etc.
- 3) Equivalent Technologies

B. Analysis of the company and its competition

One of the most important strategies used by Genomma Lab is derived from various agreements with different broadcasters. Their bargaining power and its ability to adapt and react to changes in the consumer, as it has in portfolio more than 700 products in 92 scattered marks and brands. It is a unique company to maintain an annual growth of 30.4%. It is a privileged company that already has a distribution network with more than 43,000 outlets in Mexico and 104,000 international points, but sells in Mexico more than 58.2% of its production.

Its fundamental success is based on its 5 main principles are:

- 1) Development of unique and innovative capacity products.
- 2) Differentiated business model.
- 3) Owned marketing and advertising.
- 4) Portfolio comprised of leading brands.
- 5) Quick action to market trends.

This model is based on adapting quickly to market changes following the paradigm behavior, structure and performance. Therefore it is a much diversified company offering a range of products divided into three segments:

- 1) Free marketing pharmaceutical (OTC)
- 2) Personal hygiene (HP)
- 3) Interchangeable generic products (BG)

Genomma Lab had a short period of time to enter the generics market, but has done so in an impressive way with its line of products called first level, which is rapidly consolidating market.

C. The market of Genomma Lab

As mentioned above Genomma Lab is an international company but its main market is Mexico. And it is this that keeps greater diversification by consumers. But are OTC products that have the highest percentage therefore are those that will be used later in the statistical analysis of this document.

D. Marks and brands

Genomma Lab has a large number of brands, but only 10 of them account for over 45% of total sales. Asepsis is the most important brand Genomma Lab, followed by Cicatricure and Goicoechea. The growth strategy of the company in the coming years will focus on creating and acquiring new products to achieve increase its market share. These strategies are informed by the company by two factors.

This strategy began around 2009 and it is this that has led the company to be the number 1 company in Mexico. It must be very careful that acquiring companies comply with a set of guidelines (Genomma Lab, 2013).

- 1) The product is positioned in the consumer's mind.
- 2) The product adapts to the working model of the Company.
- 3) The product is attractively priced.

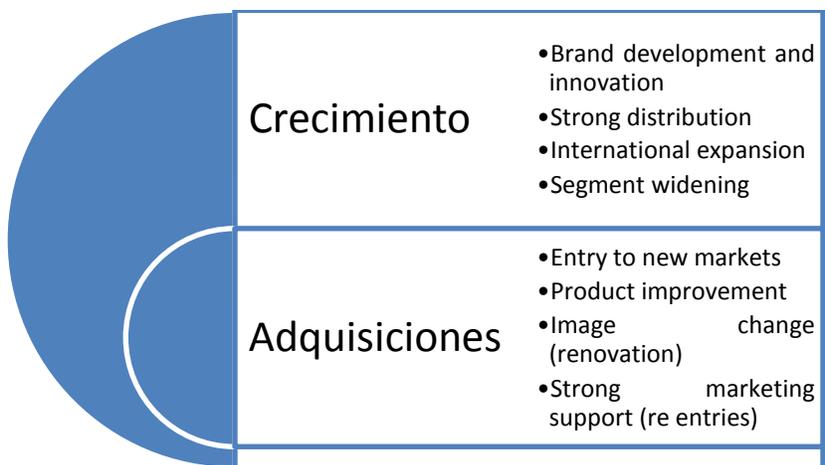


Figure 1: fundamentals of strategies Genomma Lab
Source: Own elaboration.

After the evaluation of products, Genomma Lab performs the following procedure:

- 1) Improvement of the product.
- 2) Renewal of the image.
- 3) Creating a new campaign.
- 4) Product Relaunch

Although not a stellar figure internationally, since it has no force as Pfizer laboratories, besides not produce specialized drugs.

E. Customers

The main customers Genomma Lab are large retail chains as Commercial Chain Oxxo, Chedraui, Comercial Mexicana, Droguería del Sud, Farmacias Benavides, Farmacias Guadalajara, Farmacity, Midway, American Monroe, Nadro, Outlet Beauty and Health, representations JMP, Sanborns, Services in Ports and Terminals, Servimed, Soriana, Distribuidora de Alimentos Santa Cruz, Argentina Suizo, Walgreens and Wal-Mart. (Genome, 2013)

Top 10 customers of Genomma Lab manage to sell more than 50% of its total sales, so Genomma Lab develops unique strategies for each client. Whereupon manages to be close to them and care for them, because they are a fundamental part of its company. It maintains a unique distribution model in Mexico, where wholesale distribution is emphasized.

This is how does Genomma Lab have a large distribution network, which will undoubtedly continue to be used for a long time. Its products not being of a high cost are aimed at a mass audience, as it can be seen in the great variety of commercials on television. Each product has its own market segment. Genomma Lab has high transaction costs are much higher than those of coordination, as spending on advertising is stratospheric, plus their distribution channels are not as detailed but very specific. Therefore it complies perfectly with the theory of the firm.

F. OTC Products

In Mexico, pharmaceuticals are divided into three types:

- 1) Prescription products.
- 2) Free marketing products (OTC).
- 3) Generic products.

In the present study of Genomma Lab competition it focuses on free marketing products, corresponding to painkillers, formulas for cough and common cold, formulas for indigestion, medicinal products for skin care, traditional medicines, vitamins and minerals etc. OTC products are involved in highly competitive markets characterized by the launch of new products, so every day there are more products in this market, and there are various medications that no longer need prescription for sale, as well as being accompanied by strong advertising campaigns, this influences the market growth.

Genomma Lab considers its competition in OTC products to large laboratories as competitors of the Company include large pharmaceutical companies OTC such as Bayer AG, Boehringer Ingelheim, Sanofi-Aventis, SA, SP CHC Pfizer, BMS Sm, Procter Gamble, Pisa Pharmaceutical, Novartis AG and their respective subsidiaries and affiliates, as well as consumer product companies such as Colgate-Palmolive de Mexico, SA de C.V., Procter & Gamble of Mexico, S.A. de C.V., Jafrá Cosmetics International, S.A. de C.V., Pond's of Mexico, S.A. de C.V., Avon Cosmetics, S.A. de C.V., Cosbel, S.A. de C.V., House of Fuller, S.A. de C.V. and their respective subsidiaries and affiliates, among others, many of which have greater financial resources than the Company. These companies could consider their strategic group delimit them a little, as subsequently is shown.

Competitors of Genomma Lab tend to be aggressive to spend large amounts of money in advertising and promotion to increase sales at the expense of its competitors, even of the same company, because if the company does not have the resources to bring new products and launch strong advertising campaigns, will be taken off the market by their competitors. There is another very important point in the OTC drugs called consumer loyalty, so new products may not have the expected response in the market. Besides almost all Genomma Lab products are manufactured abroad limiting control in the manufacturing process, so it can cause variations in product quality.

7. Analysis of results

Genomma Lab has a wide variety of products in the market, and market share in Mexico of each one is high as it can be seen in the following table, which contains the most important and largest market share of the company drugs.

As evidenced by the chart below Genomma Lab has the largest market share in each and every one of them, but for educational purposes are included some categories to choose free marketing products, known as OTC which encompass all of the above products.

Table 2: Market share and positioning.

Brands	Position	Market share
Medicasp	1	70%
Asepxia	1	68%
Unesia	1	55%
Nikson	1	53%
X Ray Caps	1	49%
Genoprazol	1	40%
Dalay	1	38%
Goicotabs	1	31%
Bengue	1	25%
Lomecan Crema	1	21%
Next	1	20%

Source: Genomma Lab (2011), Sustainability Report

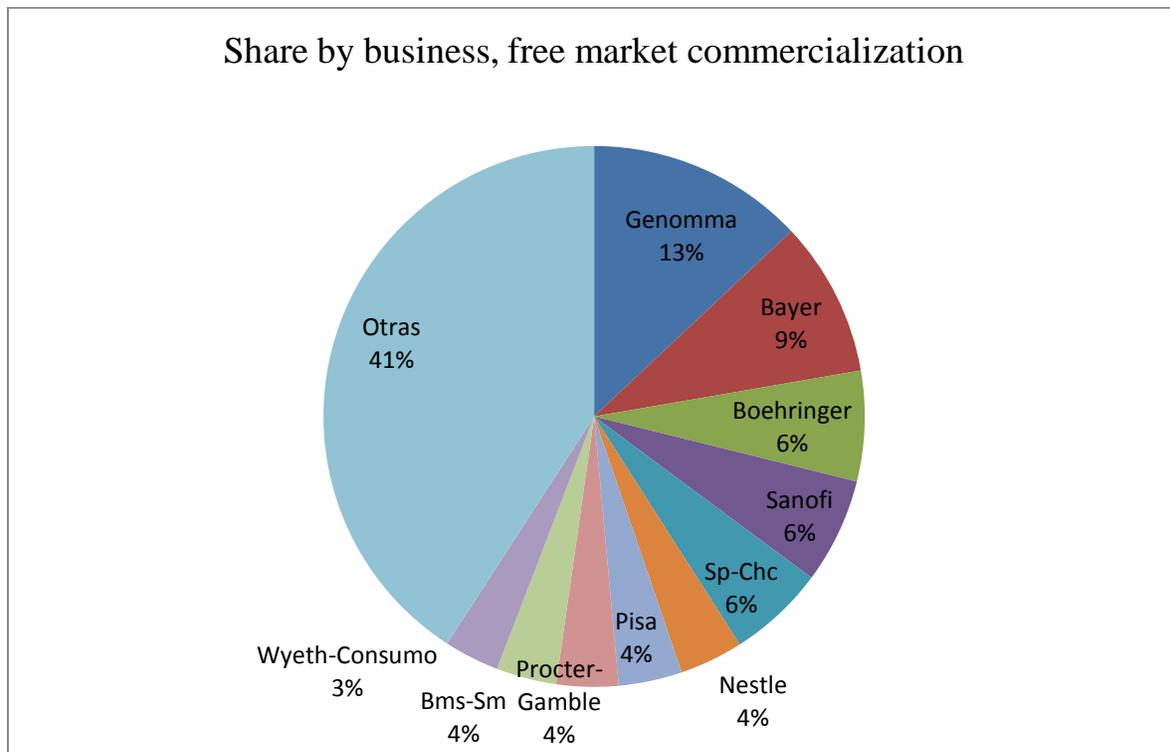


Figure 2: Participation by enterprise and free market commercialization. Source: Prepared with information from HR Ratings (7 June 2013)

With the above data will be calculated the Herfindahl-Hirschman and Pascual indices for 2012, as well as Instability index for 2011-2012. Genomma Lab identifies the

following laboratories as their competition but strategic group is much smaller because the only company that actually competes with Genomma Lab in this market is Bayer.

Table 2: Comparison of Indices (HHI - Pascual)

Company	2012	H	P
Genomma Lab	13%	0.0169	0.00127425
Bayer	9%	0.008649	0.00033374
Boehringer	7%	0.004356	8.4656E-05
Sanofi	6%	0.003969	7.0282E-05
Sp-Chc	6%	0.003364	5.0489E-05
Nestle	4%	0.001444	9.3029E-06
Pisa	4%	0.001444	9.3029E-06
Procter-Gamble	4%	0.001369	8.3616E-06
Bms-Sm	4%	0.001296	7.4936E-06
Wyeth-Consumo	3%	0.001089	5.291E-06
Others	41%	0.167281	0.12484634
		0.211161	0.12669951

Source: Own elaboration

As it can be seen the H index is much higher than Pascual, as it believes that there is a high concentration in the market because of the many companies that manifest being included in the category other, same reason why P does not punish because for these companies come together manifest a better distribution of the market, but both indices indicate that market concentration in the pharmaceutical sector is very low.

Table 3: Comparison of the enterprise market in the years (2011, 2012).

Company	2011	2012	I
Genomma Lab	13.6%	13.0%	0.0030
Bayer	9.1%	9.3%	0.0010
Boehringer	6.2%	6.6%	0.0020
Sanofi	5.7%	6.3%	0.0030
Sp-Chc	5.6%	5.8%	0.0010
Nestle	3.0%	3.8%	0.0040
Pisa	3.5%	3.8%	0.0015
Procter-Gamble	3.7%	3.7%	0.0000

Bms-Sm	3.8%	3.6%	0.0010
Wyeth-Consumo	4.6%	3.3%	0.0065
Other	41.0%	40.9%	0.0005
			0.0235

Source: Own elaboration

As it can be seen the pharmaceutical industry is very stable the instability index for each of the companies, which it is very close to 0%, indicating that movements in this are practically nil, so the total index is .023, nothing significant.

For teaching purposes it is proceeded to do simulations to test the ability of punishment indices.

Table 4: Capacity punishment of Indexes (HHI - Pascual). Simulation 1.

Firm	2012	H	P
Genomma Lab			
Bayer			
Boehringer	0.29	0.083521	0.02634578
Sanofi	0.06	0.003969	5.9495E-05
Sp-Chc	0.06	0.003364	4.274E-05
Nestle	0.04	0.001444	7.8751E-06
Pisa	0.04	0.001444	7.8751E-06
Procter-Gamble	0.04	0.001369	7.0783E-06
Bms-Sm	0.04	0.001296	6.3435E-06
Wyeth-Consumo	0.03	0.001089	4.4789E-06
Otras	0.41	0.167281	0.10568491
		0.264777	0.13216658

Source: Own elaboration

In the previous simulation companies with largest market share merge, as it can be seen the reaction to indexes is very low because each company individually has a market share almost equal. What should be noted is the index H that goes from .21 to .26, punishing the merger in .05, while P increases from .12 to .13 the .01. The H index reacts much more than Pascual, because the first punishes any minimal merging. However, Pascual punishes less because is not taking much of the market.

As it can be seen in the chart below, both indices punish the merger, but still the market is in competition, because now there are two companies that are hardly fighting for the market.

And there is none that concentrate more than 70% so there is no monopoly.

By granting a company with more than 50% market share, both indexes soar, punishing the merger, denoting that the market is highly monopolistic. In this case and with a merger so clear is Pascual, the index that penalizes merger with a 62% increase, while H has only 51%. Because these results can show that the ability of punishment of the indexes is totally different.

Table 5: Capacity punishment of Indices (HHI - Pascual). simulation 2

Business	2012	H	P
Genomma Lab	0.13	0.0169	0.00071829
Bayer	0.46	0.213444	0.11457615
Boehringer	0.066		
Sanofi	0.06		
Sp-Chc	0.06		
Nestle	0.04		
Pisa	0.04		
Procter-Gamble	0.04		
Bms-Sm	0.04		
Wyeth-Consumo	0.03		
Other	0.41	0.167281	0.07037519
		0.397625	0.18566962

Fuente: Elaboración Propia

Table 6: Capacity punishment of Indices (HHI - Pascual). Simulation 3.

Company	2012	H	P
Genomma Lab	0.13	0.0169	0.00036827
Bayer	0.09		
Boehringer	0.066		
Sanofi	0.06		
Sp-Chc	0.06		
Nestle	0.04		
Pisa	0.04		

Procter-Gamble	0.04		
Bms-Sm	0.04		
Wyeth-Consumo	0.03		
Other	0.87	0.758641	0.74210927
		0.775541	0.74247754

Source: Own elaboration

8. The models

The approach presented above is aimed to demarcate at which point the existing line between monopoly and perfect competition is a business, ranging from monopoly to perfect competition.

Genomma Lab for being a company with such outstanding qualities and having large market products, with an aggressive marketing strategy may qualify for most models which are presented in the following table.

Table 7. Characteristics of the models applied to Genomma Lab

Model.	Characteristics.
Cournot	Companies make their decisions simultaneously (Varian, 2010), Genomma Lab has no way of knowing what will its competition but intuits, making the best decision thinking about what could happen. The product of companies is homogeneous and only differentiates advertising. Omeprazole will be always Omeprazole. It is a game of numbers, Genomma Lab strives to sell its entire batch produced using strategies such as intensive advertising.
Bertrand	Bertrand is the set of prices, companies compete to give the best price, in this model Genomma Lab has its own line called first level, where the main competition is the price, because there is no patent that allows them to give a higher price, but of course in real life fail to $MC = MR$ ($CMg=IMg$).
Stachelberg	Stachelberg In this model based on the information previously submitted by the sector, it can be seen that Genomma Lab and Bayer are scrambling to be the best and dominate the small segment of the market that the other leaves free. If Genomma Lab earn 1 point in market share

	is remove it by Bayer, a situation that also happens in reverse. Genomma Lab behaves like the leader, because it has the largest share, but the way they behave both companies are very similar, commercial campaigns, prices, etc.
Parent company	Although not well stated, Genomma Lab is the dominant company and all others follow, though with a share of any significant market, so accept prices that puts Genomma and compete to corner the market left uncovered, though Genomma is highly diversified in each sector has its own competence.
Chamberlin/Monopolistic competition	This model says that the difference between products, are labels packaging, etc. As it can be seen, it is difficult for a company not fit in. Genomma Lab is a clear example because as the formulas are the same, must strive to get the public's preference otherwise, whether commercial, pink packing zany boxes, etc.

Source: Own elaboration

Genomma Lab is a diversified company that takes the best of each company and potentiates, so fits most models as they are forced to act as a monopoly. But in a too competitive market where its market share is low in comparison to other companies in other sectors, but they are small differences in market share causing to compete hard. In addition to behave as a dominant company as it is the industry leader and makes all other companies follow it, but have a company that competes very close to her that is Bayer, causing situations of Stakelberg between them.

All it lacks collusion Genomma Lab situation that is unlikely, because of its market position is more likely to absorb companies to decide to make a treaty, in addition to the highly competitive international pharmaceutical situation.

9. Conclusions

Market concentration is a major problem in all industries because it causes loss of efficiency. For that reason is discovered methods to measure market concentration. The particular case of the pharmaceutical industry has a long history in Mexico, forming integral part of national GDP since the 40s, in addition to providing a significant proportion of employment levels and wages, as well as remunerations. It is a sector that requires high degree of innovation, because of these; transnational corporations are investing and have presence, for the high costs of production of a drug.

In Mexico there are a number of transnational companies established in the country for the benefits of labor, and infrastructure that the country has. As there is a single national company called Genomma Lab, data of the free drug marketing sector was analyzed, which is the strongest sector in which it operates, turning out to be a little concentrated sector and highly competitive, since both H and P chastened mergers because of the similarity of business. But despite these drawbacks, by merging smaller companies the expected result was obtained. It was proved that P does not punish mergers of small businesses, if not that these mergers make the index decreases, while for H any merger however small increases in value.

Instability indexes help to know how to change the market share of each company over time, in this case the .0235 rate instability is small, which means that market share has changed very little. The three indexes show that the market is quite competitive, although there are few companies that control it, it can be shown that these compete a lot, to have very similar market shares.

The pharmaceutical industry is a stable industry that has strong barriers to entry, so only few companies are in the market, but those few firms compete strongly to win market, and buy other companies. But over time the change in participation market is not really significant. Genomma Lab is a company that fits in almost all models of imperfect competition except collusion due to the competitiveness of the market and the constant changes included in the sector. It is a dominant player with a very close competitor (Bayer) that provides differentiated products, and competes with the price in its struggle for consumer preference.

It was observed how Genomma Lab is a great strategist who seeks to diversify, compete to acquire companies and gain market and does in a great way. Limits are set and achieved, competes hard with Bayer, brings new products, please his followers, not afraid to invest in advertising and design products. It has a unique model of distribution in the country that helps to generate high levels of sales, meets all expectations of a firm model, as well as the new paradigm of industrial organization. It is the strongest company in the sector and makes its power in a highly competitive and diversified market.

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