

## The calm, the squall - 10 years that delighted and disappointed the Brazilian customer<sup>1</sup>

### Bonança e borrasca - Dez anos que encantaram e desiludiram o consumidor brasileiro

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#### ABSTRACT

The last decade was a period of great political and economic revolutions that brought significant changes and directly impacted the everyday of the Brazilian population. Analyzing such period is essential to understand the current state of things and make better decisions for tomorrow. Using historical data from the INC – National Confidence Index (consumer confidence survey conducted by Ipsos and published by ACSP - São Paulo Chamber of Commerce), it is implemented an analysis of how Brazilians perceived economy trends over the past 10 years - between 2005 and 2015. This analysis starts with a segmentation study and compares the profile progress with other economic indicators and political changes. This study aims to help understand why a population that, in 2006 saw Brazil as the country of the future, now sees Brazil as a country without a future.

**KEYWORDS:** Consumer confidence; Economic trends; Political crisis; Segmentation.

#### RESUMO

A última década foi um período de grandes transformações políticas e econômicas, que trouxe mudanças significativas que impactaram diretamente no dia a dia da população brasileira. Analisar esse período é imprescindível para entender o hoje e tomar as melhores decisões amanhã. A partir de dados históricos que compõem o Índice Nacional de Confiança (pesquisa de confiança do consumidor realizada pela Ipsos e divulgada pela Associação Comercial de São Paulo) é feita uma análise de como a população brasileira percebeu o rumo da economia nos últimos 10 anos - entre 2005 e 2015. A análise parte de uma segmentação de dados e compara a evolução dos perfis encontrados com outros indicadores econômicos e mudanças políticas. O estudo auxiliará no entendimento de como uma população que, em 2006 enxergava o Brasil como sendo o país do futuro vê, hoje, um país sem futuro.

**PALAVRAS-CHAVE:** Confiança do consumidor; Tendências econômicas; Crise política; Segmentação.

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## 1 INTRODUCTION

An unsuspecting observer who could arrive in Brazil in 2015 would find pessimist people, worried about economy, with low expectations, not willing to take any risks, afraid of losing their jobs, so that this observer would assume that this was the Brazilian pattern. This very observer would be surprised to know that it was exactly the opposite of the country that was formed one decade ago, in 2006, since, upon the end of the first term of President Lula, economy was a success, expectations were great, and people would leave their jobs to become entrepreneurs.

The last 10 years were a period of great political and economic revolutions that directly impacted the everyday of the Brazilian population. Understanding what happened over this period is critical to piece together a picture of the present moment and get a glimpse of future prospects.

By relating consumer confidence to the perception of country prospects, and Government approval rating, this paper follows up the change in people's perception of the economic situation, helping understand why a population that, in 2006, believed that Brazil was the "country of the future", now sees it as a country without future.

To better understand what happened to the country over this period, this paper is based on a study carried out by Ipsos Public Affairs over the past 10 years (Ipsos Pulso Brasil, 2015) that has monthly followed up consumer-citizens' opinion and accumulated accurate, unbiased information on the main topics that influenced the country future.

Besides political, economic, and social information, the study Ipsos Pulso Brasil (2015) serves as a basis for the calculation of National Confidence Index, a customer confidence index monthly disclosed by São Paulo Chamber of Commerce (ACSP), which is comprised of 10 questions on the current perception and prospects of Brazilian economic scenario, personal financial situation, and investment and employment expectations.

Such questions were the basis for a segmentation that, starting in 2006, followed up by algorithmic replication the profiles evolution until 2015, offering a simplified analysis method for its results over the past 10 years.

## 2 OBJECTIVE

This study is aimed to understand how Brazilian population has perceived economic changes over the past 10 years, a period from 2005 to 2015, and for such, a data segmentation was performed, being its result compared to other economic and political data.

The segmentation used questions from Ipsos/ACSP National Confidence Index, and, through a clusters analysis, it attempted to classify people according to their level of confidence in country's economy and future expectations. The analysis was carried out over the last 6 months of 2006, a period selected due to the election of President Lula for his second term, as opposed to the last 6 months of 2014, year of re-election of the then President Dilma.

From the result of this first segmentation, a classification algorithm was generated and subsequently applied to the rest of the sample – 110.400 interviews performed in 2005 and first half of 2006, in addition to interviews carried out in the period between 2007 and 2015, classifying all the interviewees into the same segments, enabling a cross-sectional analysis and an assessment of their evolution over the past 10 years.

## 3 IMPORTANT POLITICAL AND ECONOMIC FACTS OVER THE PAST 10 YEARS IN BRAZIL (2005-2015)

2005 was the year of "Mensalão", an investigation involving several political parties allied to the government.

Since it was brought to light, "Mensalão" scandal was constantly featured in news headlines until its final judgment, in 2012, as the end of investigations confirmed the existence of a scheme where political parties would monthly receive money to politically support the government. Many players

were involved in this scandal, from different parties' congressmen to businessmen and executives of Banco Rural, a bank that facilitated the payment logistics between the other two groups. "Mensalão" judgment is today regarded as a historical event, due to the condemnation of top government officials, and condemnation of upper class people for crimes that - until that moment - they would usually get away with.

This case seems to have contributed to the reduction of sensation of impunity and increase of intolerance against corruption in the country. Miguel and Coutinho (2007) have assessed such facts comparing them to publications in newspapers, TV news, and magazines.

In 2007, Brazil faced an unprecedented air transport crisis, where the population that had just had access to new opportunities to travel across Brazil and abroad was subject to structure issues and many other bottlenecks at Brazilian airports.

According to Barros, Ramos, & Soares de Mello (2010), who have collected data from 2007 to 2010, and assessed the different airlines, showing which were the most efficient in terms of delay, a direct impact has been perceived on people's lives.

In 2008, the world as a whole suffered from American subprime mortgage crisis - especially the bankruptcy of Lehman Brothers generated instability around the world. Brazil had an instable moment, but it shortly dissipated, moreover, the announcement of the host city of 2016 Olympic Games was celebrated throughout the country at the end of 2009. The fact that Rio was the first ever Latin American city to host this event and the prospect of new investments contributed to an increased optimism regarding the near future.

In 2010, Brazil saw a GDP growth of about 7.3%, the 5<sup>th</sup> greatest GPD growth among G20, only behind Argentina, Turkey, India, and China. Once again, this fact and its effect brought Brazilian people great hopes and expectations.

In 2012, also as a consequence of GDP growth, Brazil had the greatest minimum wage growth of that decade (minimum wage indexation considered the sum of GDP variation in 2010 and the 2012 inflation). The country seemed to live up to the expectations on its future, as that rule resulted in earnings way higher than the inflation calculated and experienced at that point.

2013 saw the first evidences that some issues had been neglected, when a protest against bus fare increase, in São Paulo, paved the way to the largest popular protest since the movement for country's re-democratization.

All this contributed to the election of President Dilma for her second term after a neck and neck result, in October 2014.

Also in 2014, another investigation by Federal Police was started aimed to investigate frauds in bidding processes for contracts between suppliers and Petrobras, named Lava-jato operation. The calculation of losses related to corruption (losses initially estimated in R\$ 6.1 billion), and the oil barrel price drop (Brent), resulted in a process of Petrobras' shares fall.

The so-called Petrobras crisis, an essential company for the positive perception of Brazil as the "country of the future", opposes to the optimism of previous years, when pre-salt discovery was announced, claiming a self-sufficiency in oil production.

From that split election decision and Petrobras dismantling by Lava-jato investigation, the second term of Dilma already started with a polarization - part of Brazilians chose to keep on supporting Dilma to solve country's problems, while other voters agree that a change is necessary as they perceive country's situation getting worse and question president's ability to handle that.

The population that, in 2013, had already realized its power when could revert the bus fare increased, started a new wave of protests. Once again, the movement starts in São Paulo and then is disseminated across other major cities. Thousands of people go to the streets raising different questions on country's situation, including public expenditures. Less than one year from the elections, Dilma had to deal with an increased inflation, growth in unemployment rate, and their effects on the intensification of protests - the economic situation required cost savings.

A remarkable fact is the increase in the number of young people attending university, which climbed from only 11% in 2005 to 18%, in 2015. This education improvement leads people to be

more critical and attentive to social inequalities and problems. Table 1 provides information from Brazilian Research by Households Sample (PNAD).

**Table 1** - Number of young people going to university

Item	2005	2015
Population aged 18-24 (out of 1,000)	24.580	22.432
Attend University, 18-24 years old (out of 1,000)	2.749	3.991
%	11%	18%

Source: PNAD, 2005 and 2015.

Actions taken by Government had no effect on credit rating agencies' judgment, which, skeptical about the effectiveness of fiscal adjustment measures, downgraded Brazilian investment rating, generating impacts on the financial market and intensifying the perception of crisis.

In this scenario, PMDB, party of Vice President Michel Temer and of President of the Chamber of Deputies, Eduardo Cunha, departs from government support alliance. As a response to PT deputies who supported a proceeding to revoke the term of Eduardo Cunha, he accepts one of the many impeachment petitions against the President that were pending at that point.

Political-economic crisis is critical to confirm the impeachment of the president, showing the world that the country was not facing a "ripple", but actually a tsunami with international repercussion<sup>2</sup>.

Gonçalves (2014) made a critical review of the economic development process in Brazil after 2003, and concluded that the Peripheral Liberal Model (PLM), adopted by the Government of Fernando Henrique Cardoso (1995-2002), was consolidated by the Governments of Lula (Luis Inácio Lula da Silva) and Dilma Rouseff, nevertheless, this legacy had a poor performance when compared to world economy standards.

Despite the problems that happened over the 2005-2015 period, Teixeira and Pinto (2015) concluded that, the recent changes in the power bloc, from the end of Lula's Government and beginning of Dilma's Government, granted State more autonomy, especially in face of bank-financial sector, hegemonic until that moment, which paves way to the resumption of development policies.

## 4 LITERATURE REVIEW

Segmentation is extensively employed to understand consumer's behavior and attitudes towards politics. This article aims to present some examples of how segmentation may be used to group together people with similar consumption and/or mood characteristics.

Alfinito (2009) investigated consumers' choice through the study of social axioms and human values in the prediction of the social behavior specifically, and applied the clusters analysis to understand clusters in universities and colleges.

González and Bello (2002) concluded that the quick and comprehensive changes to which today's society is subject are resulting in an increased customization of consumer's behavior patterns, changes that are less and less explained by socio-demographic and economic criteria. This effect seems to be particularly well reflected by the tourism market, characterized by its heterogeneity, where a need for including other information quickly emerged, such as lifestyle, so to better segmenting and allow for greater knowledge of the variables that influence tourists' behaviors, making it easier for companies to identify them, so to better meet their demands and requests, offering more effective services to everyone.

Motta (2009) verified whether the combination of attitude variables and environmentally-friendly brands attributes, at the consumer goods market, may be used as a basis for market segmentation. The factor analysis could reduce the set of variables to two factors and explain part of the relationship.

Bacha, Strehlau, and Schaun (2011) worked to propose a segmentation of low-income consumers regarding conscious consumption in São Paulo. The cluster analysis indicated the existence of four segments: healthy responsible, environmentally educated, uninformed, and fake knowledgeable, each one with their specific, well-actionable characteristics.

Ramos, Machado, and Cordeiro (2015) worked with data from Prova Brasil, and segmented the performance of students from Brazilian public schools, identifying groups with the best and worst results by adding external data to validate the analysis.

## 5 METHODOLOGY

This article worked with information from project Pulso Brasil to understand people's mood regarding the economic situation in Brazil and their future expectations. Segmentation was chosen as the technique to find clusters of people with similar profiles.

The objective of the non-supervised classification, or cluster, is to determine a structure of groups that match available data, that is, classifying objects according to the natural grouping of the very data. Even when, as this is the case, little or next to nothing is known about the structure, groups, and number of existing groups.

The structure must gather objects with similar characteristics into a same group, which means that the association degree is high among the members of the same class and low among the elements of different categories. Groups must show internal homogeneity and external heterogeneity.

The point is to find a partition of  $N$  objects within a number of  $K$  groups that meet the basic premises: internal cohesion and the isolation of agglomerates.

IBM, in order to improve the classification of individuals and help create groups, has programmed in its software a technique based on three main advantages compared to techniques, such as k-means and principal components:

1. Dealing with two continuous and category variables, widening the measured distance based on the model used by Banfield and Raftery (1993) for situations with two continuous and category variations;
2. Using an approach based on similar two-step groups for Birch (Zhang, 1996);
3. Enabling the possibility of automatically finding an ideal number of clusters. The method started using a sequential clustering approach (Theodoridis & Koutroumbas, 1998), that is, the method will select the best set of groups and implement the procedure by building a modified cluster resources tree (CF) (Zhang, 1996). The CF-tree is comprised of node levels, where each node has a number of entries. A leaf entry (an entry at the leaf node) represents a sub-cluster you may want. Non-leaf nodes and their entries are intended to quickly guide a new record to an appropriate leaf node. The second step uses subgroups resulting out of the first step as an entry to, subsequently, group them into the desired number of clusters.

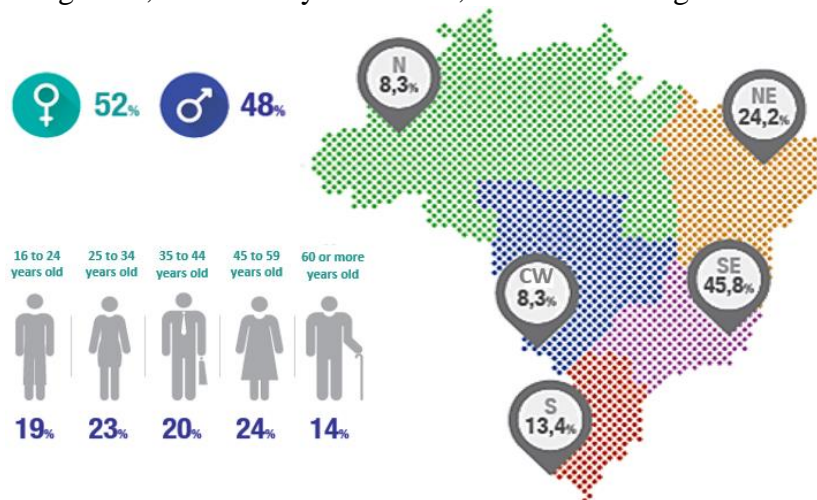
Besides this two-step cluster analysis, a discriminating analysis was also used whose objective was to find any existing connections between a qualitative character to be explained and a set of quantitative explanatory characteristics, that is, creating an algorithm able to classify new elements into the segments previously found by the application of some classificatory questions<sup>1</sup>.

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<sup>1</sup> Bouroch and Saporta (1980) explain that each individual may be part of classes different from  $q$  (being  $q \geq 2$ ) and, by means of a discriminating analysis, the main characteristics represented by this group may be found.

## 6 PROJECT DATA

This article was based on a research carried out by Ipsos Public Affairs, named Ipsos Pulso Brasil (2015), with monthly interviews in over 70 municipalities across all Brazilian regions; in 2014 there was a change to 1,200 monthly interviews, as showed in Figure 1.



**Figure 1** - Distribution of data gender, age, and region  
Source: Ipsos Pulso Brasil, 2015.

The questionnaire applied in Ipsos Pulso Brasil (2015) research is quite extensive and addresses topics such as people’s confidence in economy, politics, as well as a small survey of family income and goods ownership.

For this study, the National Confidence Index block was selected, which is calculated from the questions in Figure 2, and includes questions on four main topics:

1. Country’s economic situation - Current and future (6 months);
2. Personal economic situation - Current and future expectations (6 months);
3. Willingness to invest - Short and long term;
4. Employment stability - Current and next 6 months.

Question	Scale	
Please, assess the economic situation of the area where you live, assigning a value from 1 to 7. Assign 7, if you think that the economy in your region is very strong today, and 1, if the economy is very poor today.	<b>1</b> Very poor	<b>7</b> Very strong
Considering the next 6 months, do you that the economy in the region you live is going to get stronger, a little stronger, remain the same, a little worse or even worse than today?	<b>1</b> Much stronger	<b>5</b> Even worse
Assess your personal financial situation by assigning a value from 1 to 7. Assign 7 if you consider your personal financial situation very good, and 1, if your personal financial situation is very bad today.	<b>1</b> Very bad	<b>7</b> Very good
Considering the next 6 months, do you that that your personal financial situation is going to get much better, a little better, remain the same, a little worse or even worse than today?	<b>1</b> Much better	<b>5</b> Even worse
Comparing to 6 months ago, would you say that TODAY you feel more or less comfortable to buy something expensive, such as a vehicle or a house? (IF MORE COMFORTABLE: Much more comfortable or only a little more comfortable?) (IF LESS COMFORTABLE: Much less comfortable or only a little less comfortable?)	<b>1</b> Much more comfortable	<b>5</b> Much less comfortable
Comparing to 6 months ago, would you say that TODAY you feel more or less comfortable to buy other items for your home, such as a fridge or a stove? (IF MORE COMFORTABLE: Much more comfortable or only a little more comfortable?) (IF LESS COMFORTABLE: Much less comfortable or only a little less comfortable?)	<b>1</b> Much more comfortable	<b>5</b> Much less comfortable
Compared to 6 months ago, would you say that TODAY you feel more or less	<b>1</b>	<b>5</b>

confident in your ability to invest in the future, including your capacity to save money for retirement or pay for your children's education? (IF MORE CONFIDENT: Much more confident or only a little more confident?) (IF LESS CONFIDENT: Much less confident or only a little less confident?)	Much more confident	Much less confident
Comparing to 6 months ago, would you say that TODAY you feel more confident or less confident regarding your job stability, the job of other people in your family and the job of other people that you personally know? (IF MORE CONFIDENT: Much more confident or only a little more confident?) (IF LESS CONFIDENT: Much less confident or only a little less confident?)	<b>1</b> Much more confident	<b>5</b> Much less confident
Considering the last 6 months, have you, someone in your family, or someone personally known by you lost the job due to the economic conditions? How many people approximately?	<b>1</b> Yes	<b>2</b> No
Now, considering the next 6 months, what's the likelihood of you, someone in your family, or someone personally known by you to lose the job due to the economic conditions? Very likely, likely, maybe, unlikely, or very unlikely?	<b>1</b> Very likely	<b>2</b> Very unlikely

**Figure 2** - Questions and scales used in the segmentation

## 7 RESULTS

For the segmentation study, the last 6 months of 2006 (6.000 cases) were used for analysis, a period that politically coincides with the re-election scenario of 2014, the time at which we performed the first results analysis. Two-Step Cluster (TSC) was used in this analysis. TSC is a clustering technique that enables the use of continuous and discrete variables without segmentation quality loss.

The definition of the number of segments to be used must take into account both statistics and results interpretation characteristics. From a statistical perspective, Schwarz's Bayesian Criterion (BIC) statistic was used. This criterion is calculated by the formula:

$$BIC = -2\ln f(y|\hat{\theta}_k) + K \ln n$$

Where:

n: total of assessments;

K: number of groups;

$f(y|\hat{\theta}_k)$ : value of the likelihood function to each one of the selected K segments estimating all the model parameters.

Checking the lower possible value for BIC Statistic is how the best quantity of groups is classified. Table 2 shows BIC statistic information for solutions with 2-10 segments.

**Table 2** - BIC statistics for each number of groups

Number of clusters	Schwarz's Bayesian Criterion (BIC)	BIC change(a)	Ratio of BIC changes(b)	Ratio of distance measures(c)
1	41758			
2	22197	-19561	1	4
3	17655	-4542	0	2
4	11413	-2243	0	1
5	11652	-2261	1	2
6	12064	-2488	1	2
7	13808	-2756	1	2
8	14053	-2766	1	2
9	14504	-2849	1	2
10	15042	-2962	1	2

Please note that the lower value for Schwarz’s criterion is found in the four-segment solution, with 11413.

Following determination of the groups, a discriminating analysis technique was used to classify all other interviewees in the database (110.400 cases) and notice how groups are distributed over the 10 years of the research. As such, it is possible to follow up interviewees migration across the groups the change in mood as a whole.

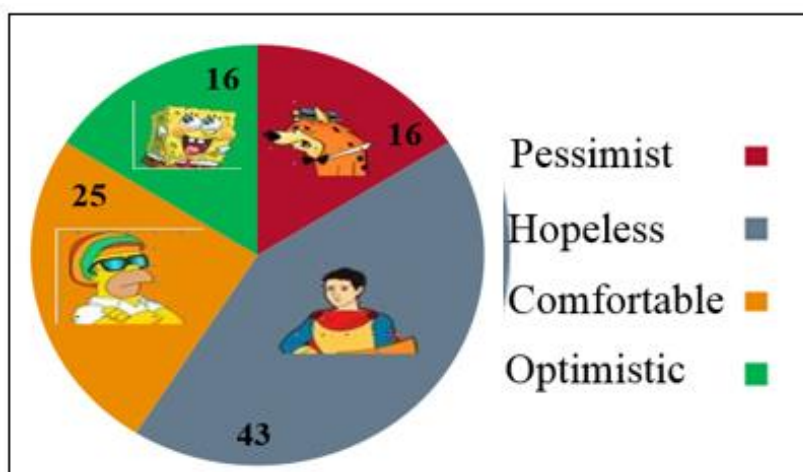
Among the model options, the four-segment option was selected, as it better explains population behavior regarding both elections result and consumer confidence pillars.

The four segments found were named: Pessimist, hopeless, comfortable, and optimistic, as shown in Figure 3.

<b>Pessimist:</b>	<b>People thinking that both economic and personal situations are bad, and can’t see things getting better.</b>
<b>Hopeless:</b>	<b>People that have no great expectations on the future. They think that economic situation is somehow good, but their personal situation isn’t.</b>
<b>Comfortable:</b>	<b>People whose situation is comfortable today. They believe that the situation will remain the same or will be even a little better in the near future.</b>
<b>Optimistic:</b>	<b>People thinking that both economic and personal situations are good. They are confident about things getting better.</b>

**Figure 3** - Segments found

Figure 4 provides the size of each segment in 2006, when there was a balance between **pessimist** (pessimist + hopeless) and **optimistic** (comfortable + Optimistic) segments.



**Figure 4** - Size of Brazilian population segments in 2006

After characterization of segments based on 2006 data, interviewees of the other years were classified, which, besides confirming the consistence of the model, showed that segments remained statistically similar over the past 10 years. Before defining the classification algorithm, the database was divided into two groups: one group (with 70% of the data), where the classification algorithm would be generated, and the other group (with 30% of the data), where the model would be tested for its efficiency. Definition of the classifying algorithm is provided in Table 3, where the original segment (found in the segmentation model) is compared to the final segment predicted by the classifier.



**Table 3** - Original Segments x Classifying Segments

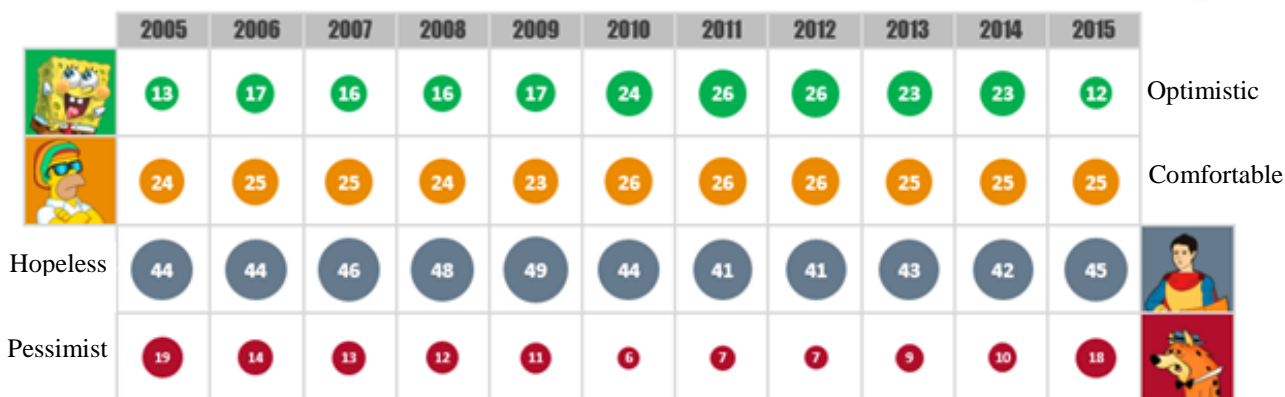
		Original Segment				Total
		1	2	3	4	
Predicted Segment	1	663	25	56	32	826
	2	28	390	2	8	418
	3	35	17	293	17	352
	4	48	18	3	165	204
Total		774	450	354	222	1800

Table 3 shows that the 30% used for classifying the segments resulted in an 83.9% (1511/1800) success rate, this value is the sum of the main diagonal. Besides the analysis, it was necessary to check the individual success rate of each segment, for instance, segment 1 had an 85.7% successful rate; segment 2, 86.7%; segment 3, 82.8%, and finally, segment 4, 74.3%, where there was no impairment for any segment in particular.

It is worth mentioning that, at the end of 2014, a distribution quite similar to 2005 is observed, that is, by using the 2006 segmentation algorithm, virtually identical groups were found in 2014, which reinforces the “lost decade” theory, at least at a perceptive level.

This is even more surprising when we remember that Brazil, in 2006, experienced an uncertainty period, and Brazil, in 2014, a disappointment period. From 2006 to 2014, the country came from uncertainty to the calm, and from the calm to the squall.

Segments evolution over 10 years is provided in Figure 5.



**Figure 5** - Evolution of segments size  
Source: Ipsos Pulso Brasil, 2015.

An analysis of segments size over time shows an increase in the **optimistic** segment, following its decrease, until 2015, where this segment figures with its lower percentage over the past 10 years (only 12%), as shown in Figure 5.

Similarly, a decrease of **pessimist** segment is verified until 2010, coming from 19% (2005) to 6% (2010); nevertheless, after 2010, this segment increases again, reaching 18% in 2015, a level quite similar to the one found 10 years before, in 2005.

This contrast between **optimistic** and **pessimist** segments appears in every analysis, where the **optimistic** segment has a rather positive assessment of the economic scenario, while **pessimist** segment has a pessimist opinion on that very scenario. Leading us to believe that there are other variables outside the model that influence this polarization, possibly with a political bias.

A more simplified interpretation, but equally representative, is possible by the aggregation of **optimistic** and **comfortable** segments and of **hopeless** and **pessimist** segments. This sum shows more clearly that optimistic segments about the future have increased until 2011, keeping the same

percentage in 2012 (52%), but, dropped after that, reaching, in 2015, the same level as in 2005 (37%), as shown in Figure 6.

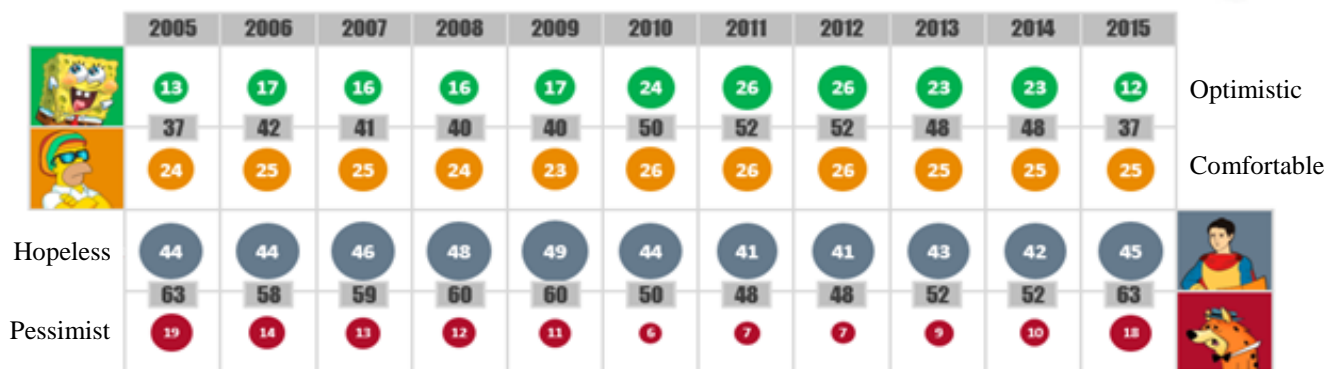


Figure 6 - Evolution of segments size (with aggregated data)  
Source: Ipsos Pulso Brasil, 2015.

To help understand size variation in the segments of the past 10 years, Table 4 provides some economic indicators.

Table 4 - Economic Indicators of the past 10 years

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Commercial Dollar (R\$)	2.34	2.14	1.77	2.34	1.74	1.67	1.88	2.04	2.34	2.66	3.98
GDP	3.2%	4.0%	6.0%	5.0%	-0.2%	7.6%	3.9%	1.8%	2.7%	0.2%	-3.0%
INPC	5.1%	2.8%	5.2%	6.5%	4.1%	6.5%	6.1%	6.2%	5.6%	6.2%	7.1%
Minimum Wage	15.4%	16.7%	8.6%	9.2%	12.0%	9.7%	6.9%	14.1%	9.0%	6.8%	8.8%
Unemployment rate (*5%)	9.8%	10.0%	9.3%	7.9%	8.1%	6.7%	6.0%	5.5%	5.4%	4.8%	10.0%

Obs.: Commercial dollar - dollar reference value at the last business day of each year (Brazilian Central Bank); GDP - GDP variation (IBGE); INPC - information used as reference to the accumulated inflation over the year (IBGE); Minimum wage - % variation of the minimum wage from one year to the next, for example, 15.4% in 2005 means that the minimum wage increased by 15.4% in 2005, compared to 2004 (Federal Government Portal); Unemployment rate - percentage of unemployed people (IBGE).

Source: Banco Central do Brasil, 2005-2015; Instituto Brasileiro de Geografia e Estatística, 2015; Portal do Governo Federal, 2015.

As mentioned, 2006 was the year in which President Lula was re-elected; a year with a great economic performance, when even the high rates of unemployment were due to the high employment turnover in an economy at its growth peak. Little did people know at which costs the country would reach these growth rates.

American subprime mortgage crisis started in 2008 upon the bankruptcy of Lehman Brothers (Sep 15th, 2008), which had an effect on many countries around the globe. President Lula even stated that the crisis would reach Brazil as 'ripple', and, despite the financial crisis in many countries, Brazil kept on decreasing its unemployment rate and increasing minimum wage. Despite a decreased GDP growth rate (2008 x 2007) and a higher inflation than in the previous year; indeed, 2008 was not a complicated year for Brazil as it was for the rest of the world. As to segments, we may verify a shift from **pessimism** to **hopelessness**, that is, despite **pessimist** group remains greater than **optimistic**, even the more skeptical people start believing in Brazilian economy and politics.

It was in 2009 that the world felt the impacts of the subprime mortgage crisis of the previous year. Although without GDP growth (-0.2%), Brazil still had good indicators (dollar kept on

decreasing, an apparently controlled inflation rate, and a minimum wage with gains against inflation. Population enjoyed that, and 2009 was the first year, since 2005, where **optimistic** segment increased (from 16% to 17%).

2010 was a calm year, where Brazil had the fifth best GDP growth compared to G20 countries, only behind: Argentina, China, India, and Turkey, besides having the lowest commercial dollar rate in that decade.

All this calm was perceived by population. A **pessimist** segment decrease is verified (11% to 6%), as well as a % increase of people classified within the **optimistic** segment (17% to 24%). Also, for the first time, since 2005, **pessimist** groups are not larger than **optimistic** groups, 50/50; it all indicates an inflection point in Brazilian population's opinion.

2011, 2012, and 2013 were the years in which not only Brazil started to feel the effects of world economic crisis, but also it started to pay for the mistakes made by its economic policy. GDP growth dropped, reaching 1.8% in 2012.

Nevertheless, such drop had no direct impact on people's perception, since, in 2012, minimum wage had the greater increase over the entire studied period (14%)<sup>3</sup>. Maybe, in the absence of this increase, one could suppose that the events could have happened, and the result of 2014 election would be different.

Even with all the fiscal efforts to keep the minimum wage level, freeze of public utilities bills, maintenance of oil derivatives prices, among other tactics, population realized that a new crisis was approaching. However, as Brazilian unemployment rate was still low and inflation was under control, this perception was totally polarized: both **optimistic** and **pessimist** segments increased, that is, some people thought that the country was really doing well, while other people thought it was exactly the other way around, as it would be evident looking at the big picture of 2014 presidential elections.

After 2013, the crisis approached Brazil and economic indicators started to present poorer results: dollar climbing, GDP growing next to nothing, no minimum wage increase, and an increasing unemployment rate. This instability scenario has also been perceived by the population, where **pessimist** segment had a three-fold increase, from 6% (2010) to 18% (2015), while **optimistic** segment decreased by 50%, from 24% (2010) to 12% (2015).

## 8 CONCLUSIONS AND RECOMMENDATIONS

Data segmentation applied to the year of 2006 showed four very different segments with different expectations on country's future. Classification of the interviews carried out in the other years showed differences concerning people's confidence in the economy performance, and that could be contrasted with the aid of other economic sources, validating the migration of people's confidence in economy. Therefore, there was an alignment between people's perception of Brazilian economy performance and actual economic data.

Even though the percentage of **pessimists** verified in 2015 is greater than that in 2006 (18% x 16%), and the percentage of people classified within the **optimistic** segment is lower (12% x 16%), this is not the intention of the authors of this paper to support the opinion that the past 10 years have been a lost decade.

In the past 10 years, despite economic deterioration, Brazilian population and institutions were subject to a process of political awareness and special discerning sense increase. As to the population, protests became more frequent, evidencing a population that is less hearty (meaning uncomplaining), and more vocal (meaning demanding). While for institutions, Brazilian democracy evolution challenges are now clear, strengthening of the powers, and the need for significant reforms at political and economic levels.

Crisis will always exist, they come and go, but this awareness process of the population is here to stay, and it means an important evolution for the country; after all, the point is not how you get in a crisis, but how you get out of it.

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<sup>2</sup> Until this article was handed in, impeachment process was still underway, and, without a quick improvement of economic conditions, its final result was still pending.

<sup>3</sup> As widely disclosed, such increase is only due to a strategy to change minimum wage adjustment rule, according to which, the minimum wage is adjusted by the sum of the GDP variation in the 2 previous years and INPC inflation index. As 2010 saw a great GDP growth (7.6%), minimum wage climbed significantly.