



ASOCIACIÓN PARA LA INVESTIGACIÓN DE MEDIOS DE COMUNICACIÓN

Social Class (1988-2015) to Socioeconomic Index (2015-?)

The problem and the solution

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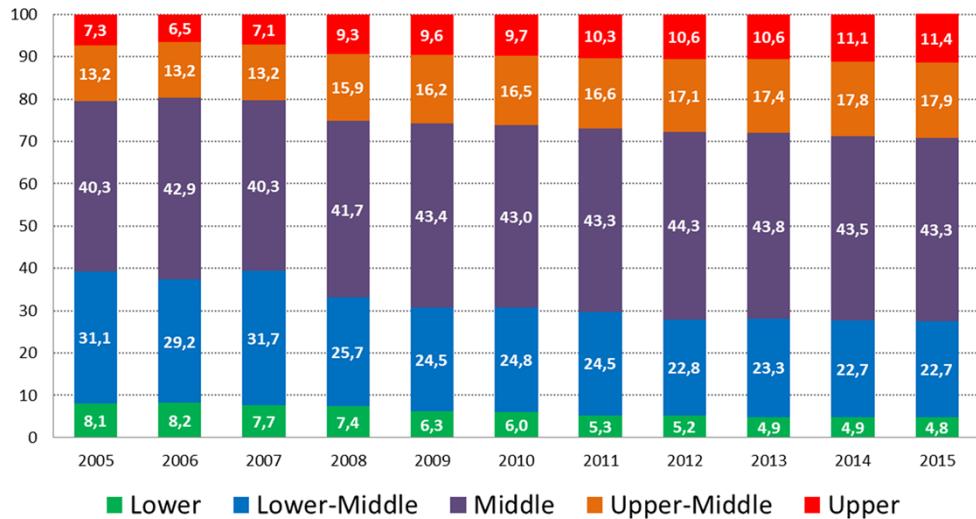
Stockholm 2015





The Problem: Evolution of Social Classes in Spain

Social Classes in Spain EGM 2005-2015



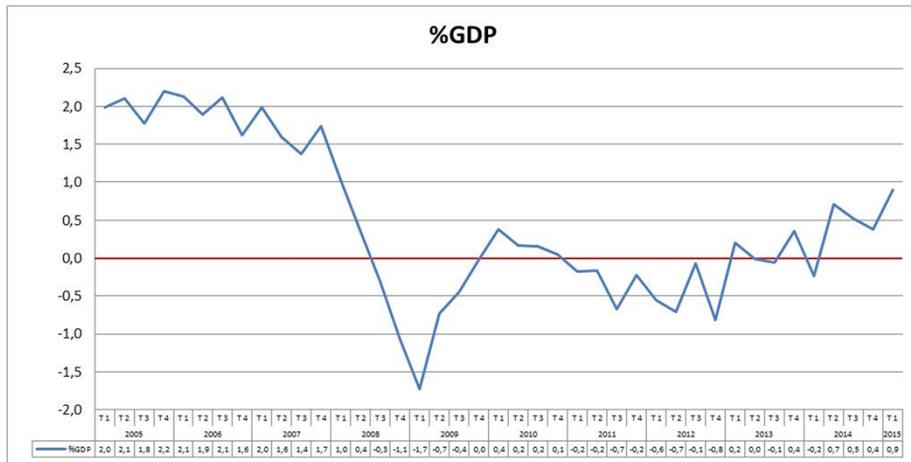
La evolución de la clase social en España ha sido de continuo crecimiento de las clases más altas, lo que estaría muy bien si no fuese por los datos negativos de la economía

In the last years the social class in Spain has shown a continuous

growth of the upper classes. This development would be very good if it weren't for the negative figures of the spanish economy



Evolution of Social Classes in Spain



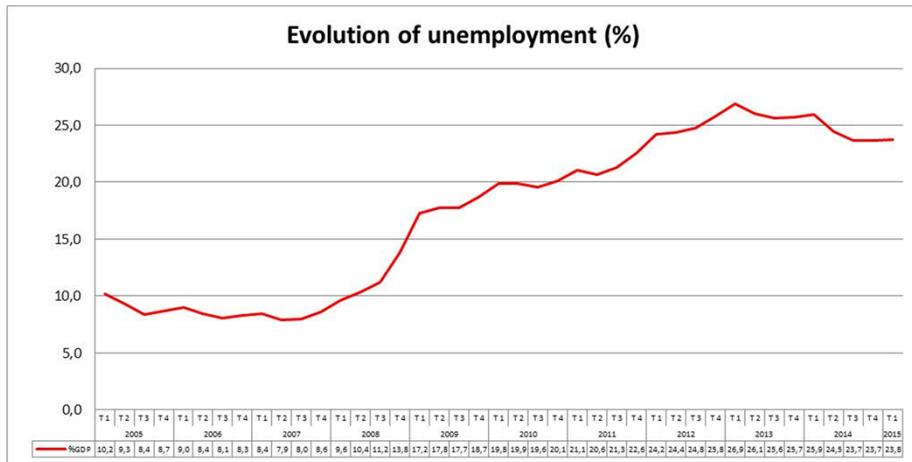
The GDP decreased by 4.2% between 2008 and 2015

El PIB está todavía un 4.2% por debajo del nivel de 2008,

GDP is still a 4.2% below the level of 2008,



Evolution of Social Classes in Spain



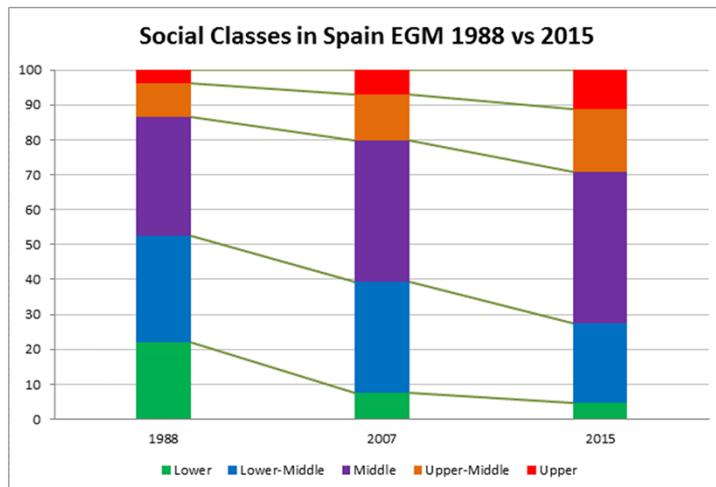
5.444.000 people are unemployed

Y el desempleo afecta aún al 23,8% de la población, mas de 5.400.000 de personas

and unemployment affects even to 23.8% of the active population, that is more than 5.400.000 people



Evolution of Social Classes in Spain

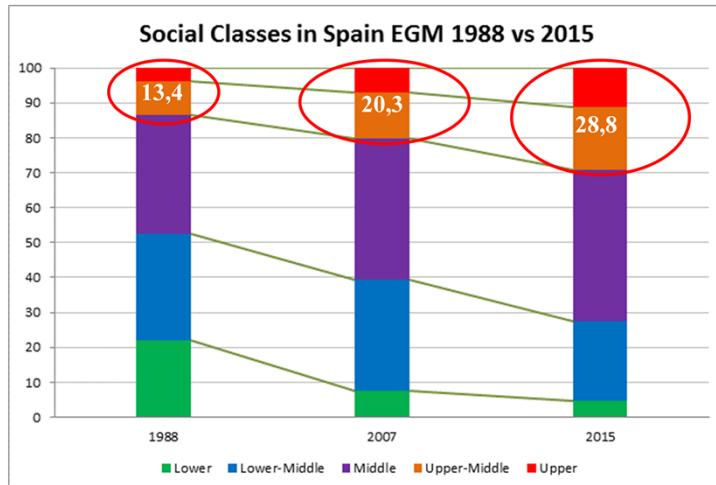


Pero esta tendencia no es nueva. En este gráfico podemos hacer dos observaciones importantes:

But this tendency it's not a new one. In this chart we can have to make two remarkable observations:



Evolution of Social Classes in Spain

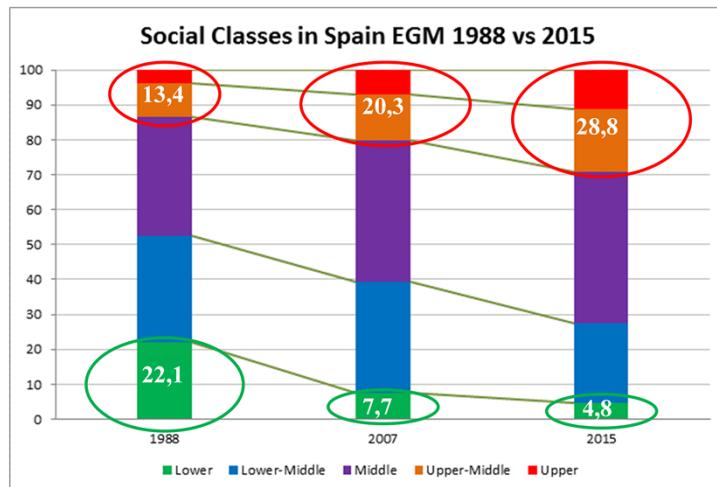


Desde su origen hasta ahora los grupos superiores de la clase social no han dejado de crecer

In the first place, from its implementation the Social Class Index has been reflecting a continuous growth of the upper classes



Evolution of Social Classes in Spain



Y los segmentos más bajos no han dejado
de disminuir

On the other hand the lower segments have been decreasing
continuously



The out-dated classification

- The out-dated classification system is based on a composite of variables of the household principal income earner :
 - Level of education
 - Category of employment.

La clasificación anterior estaba basada en dos variables referidas al sustentador principal: su Nivel Educativo y la categoría del trabajo

The previous classification was based on two variables related to the household's principal income earner: their level of education and category of employment

Evolution of Social Classes in Spain

Composite of educational level and occupation of main income earner

SOCIAL CLASS		MAIN INCOME EARNER'S STUDIES							
		Illiterate	Without Studies	First Grade	Second Grade	High School Education	Medium Univ. Education	High Univ. Education	Others
MAIN INCOME EARNER'S OCCUPATION	Large firm director	C	B	B	A	A	A	A	A
	Retailer with 6/+ employees	C	B	B	A	A	A	A	B
	General Management executive	D	C	B	B	B	A	A	C
	Farmer with 6/+ employees	C	C	C	C	B	B	A	B
	Small firm director	D	C	C	B	B	A	A	C
	Professional	E	C	C	B	B	A	A	C
	Middle Management executive	D	C	C	C	B	B	B	C
	Retailer with 1-5 employees	C	C	C	B	B	A	A	B
	Sales Agent	E	D	C	C	C	B	B	C
	Administrative clerk	E	C	C	C	C	B	B	C
	Foreman	E	D	D	C	C	B	B	C
	Retailer without employees	D	C	C	B	B	B	B	C
	Farmer with 1-5 employees	D	C	C	C	B	B	B	C
	No agrarian cooperative members	D	C	C	B	B	B	B	C
	Menial worker	E	E	D	D	D	C	C	D
	Specialized worker	E	D	D	C	C	C	C	C
	Manual Worker	E	D	D	C	C	C	C	C
	Salesman	E	C	C	C	C	C	B	C
	Farmer in cooperative	E	E	E	D	C	C	C	D
	Non-specialized worker	E	E	D	D	D	C	C	D
	Farmer without employees	E	E	E	D	C	C	C	D
	Others	E	E	D	D	C	C	C	D
	Other non qualified	E	E	D	D	D	C	C	D
	Day Laborer	E	E	E	E	D	C	C	D

A= Upper

B= Upper-Middle

C= Middle-Middle

D= Lower-Middle

E= Lower

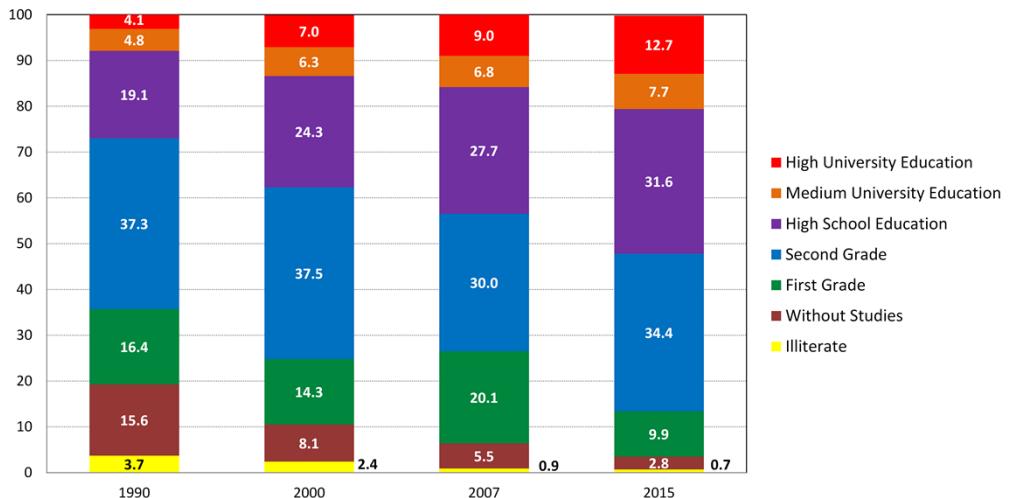
This is the chart that we have been using to obtain the Social Class affiliations

- In columns we represent the eight categories of the Studies of the main income earner
- In rows we can see the 24 categories of the occupation of the same individual



Evolution of Social Classes in Spain

Evolution of Educational Level in Spain EGM 1990 vs. 2015



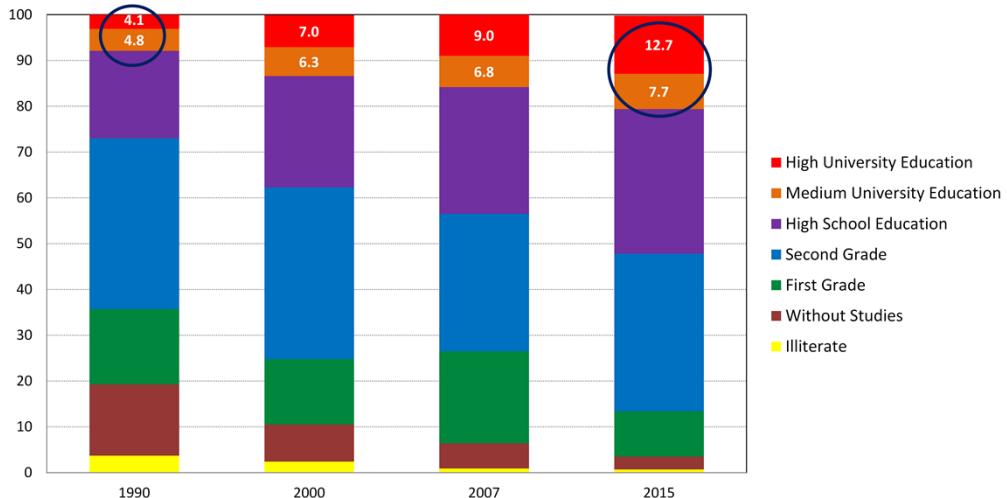
El índice tiene una gran dependencia del nivel de estudios y en los últimos 27 años ha habido muchos cambios:

The Social Class Index depends heavily on the level of studies and in the past 27 years there have been many changes:



Evolution of Social Classes in Spain

Evolution of Educational Level in Spain EGM 1990 vs. 2015



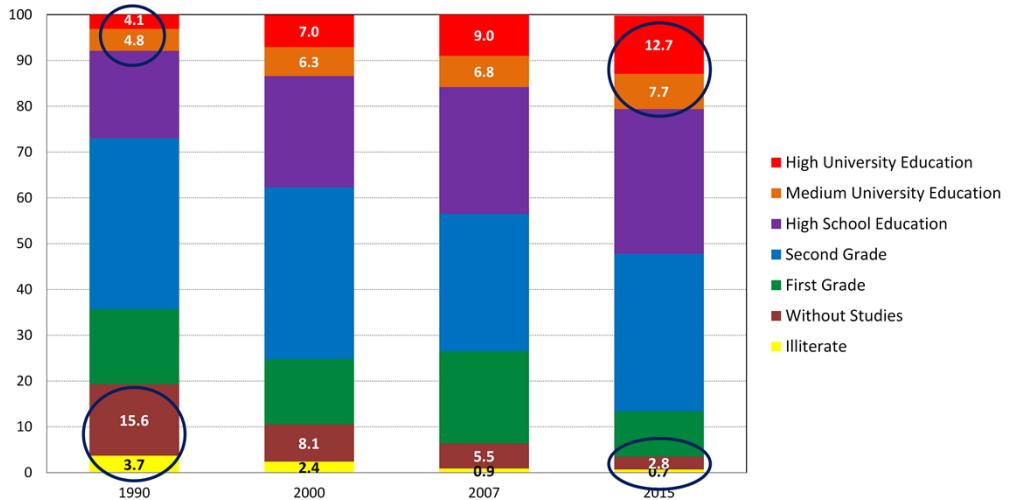
La población con grado universitario ha crecido desde el 9% al 20,4% en los últimos 25 años

The population with a university degree has grown from 9% to 20.4% in the last 25 years



Evolution of Social Classes in Spain

Evolution of Educational Level in Spain EGM 1990 vs. 2015



Y la población sin estudios ha disminuido del 19,3% al 3,5%. En todo este tiempo la definición de la clase social no se ha modificado

And the population without studies has declined from 19.3% to 3.5% in this period

In this 25 years the definition of the Social Classes Index has not been modified

The Solution: A New Index

Take into account
the **Household Income**
to determine the
Socioeconomic Index

Necesitamos crear un nuevo índice y, tras numerosas reuniones entre el equipo ejecutivo de AIMC, representantes del mercado de medios y de las principales compañías de estudios de mercado (ANEIMO) , se decide basarlo en los ingresos del hogar

We needed to create a new index and, after several meetings between the Executive Staff of AIMC and the representants of principal Market Research Companies (ANEIMO), it was decided to base it on the household income

The New Index

- In 1996 we began to ask for the household income in the EGM questionnaire
- On average only 52% of the interviewees respond to the inquiry
- We need a system to more accurately estimate the variable
 - The interviewers estimate the household income in all of the interviews based on their observation of the conditions of the home
 - This system is only effective for face to face interviews. However, it is necessary to find another system for different types of interviews (phone, internet, etc.)

Los ingresos del hogar se están recogiendo en el cuestionario de EGM desde 1996, pero esta pregunta obtiene una baja tasa de respuesta del 52%.

La estimación del entrevistador resuelve este problema

El entrevistador estima los ingresos del hogar basándose en la observación de las condiciones de su residencia

Además necesitamos encontrar otro sistema para estimar esta variable en otro tipo de entrevistas (CATI por teléfono o CAWI, por Internet)

The household income are been collected in the EGM questionnaire since 1996, but this question obtains a low response rate of 52%

The estimation of the interviewer is used to solve this

Interviewers estimate household income based on their observation of the conditions of the home

In addition to that we have to point out that we need to find a new way to estimate this variable in other types of interviewees (CATI, by phone, or CAWI, by internet)

Creating the new index

- We analysed the correlation between the household income and the different EGM variables:

Nº of Income Earners	0,601	Pay TV	0,184
Work Status	-0,491	Invesment Funds	0,129
Nº of Income Earners vs. Nº of Occupants	0,465	Nº of Tv sets 4+	0,129
Composite	0,451	Nº of Cars 3+	0,114
Number of Cars	0,418	Moto	0,108
Dishwasher	0,366	Size of Home	0,106
Car	0,315	Second Residence	0,103
Number of Tv sets	0,248	Domestic Service	0,101
Mortage	0,221	Type of Home	-0,082

- Composite, Number of Income Earners vs. Number of Occupants and Work Status are used in a Multiple Regression model

Composite/Work Status /Number of Income Earners	0,688
Composite/Work Status # of Income Earners vs. # of Occupants	0,696
Composite/Work Status # of Income Earners vs. # of Occupants/# of Cars	0,698

Analizamos la correlación entre los ingresos del hogar y diferentes variables de EGM y las que resultaron mejor son:

El cruce de nivel de educación y categoría de trabajo del sustentador principal, la actividad (Activo, Parado, Retirado e Inactivo) y la relación entre tamaño del hogar y personas con ingresos en el hogar.

Con estas variables somos capaces de explicar un 70% de la variabilidad de los ingresos del hogar.

Whenever we don't have information about the household income, this is the process created to determine it:

- We analyze the correlation between household income and different variables of EGM to determine which are the appropriate ones:
 - The composite of Educational Level and category of main income earner -distinguishing between Working, unemployed, retired and inactive-,
 - and the relationship between the size of the home and people with incomes at home.

With these variables, we are able to explain 70% of the

variability of the household income



New Composite of Educational Level and Occupation of Main Income Earner

	COMPOSITE OF EDUCATIONAL LEVEL AND OCCUPATION OF MAIN INCOME EARNER	MAIN INCOME EARNER'S STUDIES						
		Illiterate	Without Studies	First Grade	Second Grade	High School Education	Medium University Education	High University Education
MAIN INCOME EARNER'S OCCUPATION	Large firm director	2	2	2	2	1	1	1
	Retailer with 6/+ employees	2	2	2	2	2	1	2
	General Management executive	2	2	2	2	2	1	2
	Farmer with 6/+ employees	3	2	2	2	2	2	2
	Small firm director	3	3	2	2	2	2	2
	Professional	4	3	3	2	2	2	3
	Middle Management executive	4	4	3	3	2	2	3
	Retailer with 1-5 employees	4	4	4	3	3	2	3
	Sales Agent	4	4	4	3	3	3	2
	Administrative clerk	4	4	4	4	3	3	4
	Foreman	4	4	4	4	4	3	4
	Retailer without employees	6	4	4	4	4	4	4
	Farmer with 1-5 employees	6	6	4	4	4	4	5
	No agrarian cooperative members	6	6	6	4	4	4	5
	Menial worker	6	6	6	6	4	4	5
	Specialized worker	6	6	6	5	5	4	5
	Manual Worker	6	6	6	6	6	4	5
	Salesman	7	6	6	6	6	6	6
	Farmer in cooperative	7	7	6	6	6	6	6
	Non-specialized worker	7	7	7	6	6	6	6
	Farmer without employees	8	7	7	6	6	6	7
	Others	8	8	7	7	6	6	7
	Other non qualified	8	8	7	7	7	6	7
	Day Laborer	8	8	8	7	7	6	7

Hemos cambiado el cruce entre nivel educativo y categoría del trabajo del sustentador principal de forma que está directamente relacionado con el promedio de ingresos de cada celda.

Todos los hogares de nivel 1 tienen ingresos promedio superiores a los de nivel 2 y estos superan a todos los de nivel 3, etc..

We have changed the composite between education level and category of the work of the main income earner so that it is directly related to the average income of the household in each cell

All level 1 households have average incomes exceeding the level 2 and outweighing all those at level 3, etc.



Description of the formula

- Multiple regression model provides the following formula:

$$\text{Income Estimation} = \text{Composite}_{ij} + \text{Work Status}_j + \text{Number of Income Earners vs. Number of Occupants } ij$$

Breakdown:

			Number of Income Earners			
			0/1	2	3	4+
<i>Composite₁</i>	1.380					
<i>Composite₂</i>	1.113					
<i>Composite₃</i>	710		1	-2.136	-	-
<i>Composite₄</i>	474		2	-1.998	-1.422	-
<i>Composite₅</i>	355		3	-1.995	-1.305	-836
<i>Composite₆</i>	190		4	-1.922	-1.238	-681
<i>Composite₇</i>	84		5	-1.957	-1.309	-788
<i>Composite₈</i>	0		6+	-1.965	-1.421	-905
<i>Work Status₁</i>	<i>Working</i>	3.028				99
<i>Work Status₂</i>	<i>Retired</i>	2.650				0
<i>Work Status₃</i>	<i>Unemployed</i>	2.384				
<i>Work Status₄</i>	<i>Inactive</i>	2.705				

Esta es la formula obtenida de la regresión.

This is the formula obtained from regression.



Cuts of groups

	IA1	IA2	IB	IC	ID	IE1	IE2
Definition	3.006 or +	2.452 to 3.005	2.146 to 2.451	1.603 to 2.145	1.313 to 1.602	745 to 1.312	Under 745
Original Size	7,5%	15,0%	15,0%	20,0%	15,0%	15,0%	7,5%

Y estos los 7 cortes que se han acordado con el mercado, donde IA1 es el grupo de mayores ingresos y IE2 el grupo de menores ingresos

And these are the 7 cuts which have been agreed with the market, where IA1 is the group of higher incomes and IE2 the lowest income group.



Comparison between the two indices

% Row 2015 (EGM 1st wave)	TOTAL	Socioeconomic Index						
		IA1	IA2	IB	IC	ID	IE1	IE2
Definition	3.006 or +	2.452 to 3.005	2.146 to 2.451	1.603 to 2.145	1.313 to 1.602	745 to 1.312	Under 745	
Population (000)	39.724	2.737	5.505	4.926	10.372	5.817	6.859	3.509
Distribution	100,0%	6,9%	13,9%	12,4%	26,1%	14,6%	17,3%	8,8%
Social Class								
High	4.534	36,7%	34,2%	16,6%	12,0%	0,5%	0,0%	0,0%
Medium-High	7.097	7,0%	28,9%	25,3%	21,4%	11,0%	6,3%	0,2%
Medium	17.196	2,6%	9,2%	10,6%	33,9%	20,5%	19,0%	4,2%
Medium-Low	9.005	1,4%	3,3%	5,6%	24,5%	14,1%	29,8%	21,3%
Low	1.892	0,5%	1,8%	2,5%	14,3%	11,0%	24,5%	45,5%

Evolution of the new index

Evolution of Socioeconomic Index 2012-2015



Y la prueba de fuego: El Índice socioeconómico sí que se ha comportado en los años de crisis como uno esperaría que lo haga, disminuyendo los individuos en los grupos superiores y aumentando en los grupos inferiores

And the acid test: the new index, the socio-economic index, behaves in years of crisis as one would expect, decreasing the figures of individuals in higher groups and increasing the ones in the lower

The Challenge



**How long will
survive the
new index
after its
"launching"?**

En abril de esta año hemos publicado los primeros datos oficiales del nuevo índice.

¿Cuanto sobrevivira el nuevo índice después de su "botadura"?

Esperamos que más que el Vasa

In April of this year we have published the first official data for the new index

How long will the new index survive after its "launching"?

We hope longer than the Vasa