



Universidad de Oviedo

Figuring Figures: Exploring Europeans' Awareness of Official Economic Statistics

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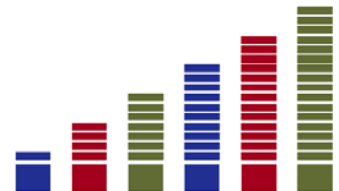
Introduction

Economic issues have been a major concern for Europeans in the last few years. But,

- **Are people aware of the main economic figures?**
- **Do they know the national rate of unemployment? Inflation? And the rate of growth of GDP?**

Eurobarometer 83.3 (May 2015)

- *31% of Europeans do not know either 2014's GDP or inflation rates in their country*
- *20% of Europeans do not know what the unemployment rate was in 2014 in their country*



	Growth rate			Inflation rate			Unemployment rate		
	Estimated	Official	DK	Estimated	Official	DK	Estimated	Official	DK
Austria	2.3	0.3	12	4	1.5	9	12.7	5.6	6
Belgium	2.9	1	46	4.1	0.5	44	16.9	8.5	29
Bulgaria	3.2	1.7	55	7.9	-1.6	52	19.1	11.4	41
Cyprus	2.8	-2.3	50	8.5	-0.3	52	22	16.1	25
Czech Republic	4.7	2	24	7.4	0.4	22	14	6.1	11
Germany	3.8	1.6	30	3.6	0.8	27	10.3	5	18
Denmark	4	1.1	27	4.6	0.3	24	12.5	6.6	13
Estonia	3.7	2.1	15	7.7	0.5	19	14.5	7.4	14
Greece	1.6	0.8	37	7.1	-1.4	39	26.5	26.5	11
Spain	2.1	1.4	40	3.9	-0.2	42	21.9	24.5	24
Finland	1.3	-0.1	24	6.1	1.2	24	14.7	8.7	12
France	3.9	0.4	37	3.9	0.6	37	15.1	10.3	20
Croatia	2.3	-0.4	29	7.3	0.2	30	20.2	17.3	23
Hungary	5.2	3.6	28	7.3	0	22	18.2	7.7	15
Ireland	5.6	4.8	23	6.3	0.3	23	14.4	11.3	18
Italy	3.7	-0.4	30	6.3	0.2	30	20.5	12.7	20
Lithuania	4.8	2.9	40	6	0.2	43	16.7	10.7	27
Luxembourg	3.3	3.1	42	3.3	0.7	41	9.2	5.9	21
Latvia	5.1	2.4	52	6	0.7	48	16	10.8	36
Malta	4.3	3.5	37	4.9	0.8	39	7.6	5.9	35
Netherlands	1.8	0.9	10	2.9	0.3	13	13.9	7.4	9
Poland	5.2	3.4	13	6.5	0.1	11	16.3	9	8
Portugal	5	0.9	56	7	-0.2	56	17	14.1	37
Romania	6.6	2.8	67	6.7	1.4	67	17.2	6.8	58
Sweden	3.4	2.1	12	2.5	0.2	12	11.7	7.9	3
Slovenia	2.6	2.6	32	3.2	0.4	35	16	9.7	22
Slovakia	4.4	2.4	44	4.7	-0.1	40	15.5	13.2	18
United Kingdom	3.9	2.8	24	4.6	1.5	23	14.7	6.1	23

Source: European Commission (2015).

Knowledge determinants

Blinder and Krueger (2004):

$$K_i = F(SI_i, S_i, C_i)$$

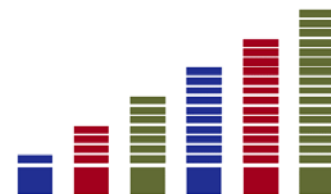
K: Economic Knowledge

SI: Self-interest

S: Sources

C: Personal Characteristics

$i=1, \dots, n$ individuals



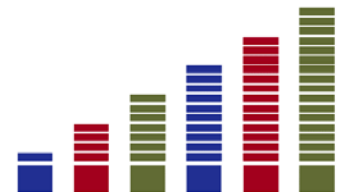
Data source: Eurobarometer 83.3

Population: Individuals aged 15 years old and more living in one of the 28 Member States of the European Union.

Sample: Multi-stage, stratified random sample design was applied in each country

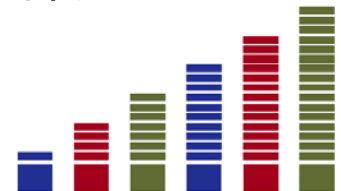
Work field: May 2015

- Total of 27,758 interviews were successfully conducted.
- 27,745 individuals provided information on their knowledge of official statistics.



Questions

- **What was the official growth rate of the economy** (measured in terms of Gross Domestic Product) in your country in 2014? I can tell you that this figure is between -5% and 15%.
- **What was the official inflation rate**, the rate at which consumer prices increased or decreased, in your country in 2014? I can tell you that the exact figure is between -5% and 20%.
- **What was the official unemployment rate**, the percentage of active people who do not have a job, in your country in 2014? I can tell you that the exact figure is between 0% and 30%.

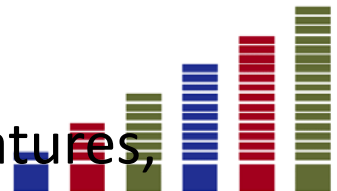


Variables of interest and approach

2 stages:

- Whether the individual has reported a figure (or not)
 - He has provided an estimate or he has answered 'don't know'
 - Trivariate probit regression
- The magnitude of the error made when reporting the figure (absolute value)
 - $|\text{Reported figure} - \text{official figure}|$
 - Joint regression

Regressors: Individual' concerns about his country's economic situation, Internet use, socio-economic features,



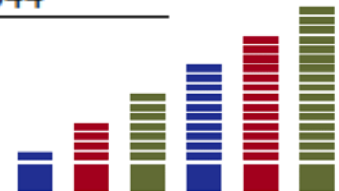
Trivariate probit regression on the likelihood of answering. Coefficient estimates

Variables	Growth	Inflation	Unemployment
Important issue= Country's economic situation	0.023	0.017	0.048*
Woman	-0.302***	-0.297***	-0.263***
Age	0.000	-0.000	-0.001
Education=16-19	0.129***	0.130***	0.181***
Education=20+	0.326***	0.304***	0.347***
Education=Still studying	0.155*	0.121*	0.191***
Education=Don't know/don't answer	-0.097	-0.150*	-0.211***
Area=Small/middle town	0.014	-0.014	0.024
Area=Large town	0.051	-0.017	-0.007
Work=Unemployed	-0.121***	-0.157***	-0.086**
Work=Inactive	-0.122***	-0.098***	-0.131***
Class= Lower middle class	0.185***	0.159***	0.154***
Class=Middle class	0.199***	0.174***	0.165***
Class=Upper middle class	0.399***	0.363***	0.298***
Class=Higher class	0.405***	0.519***	0.333**
Class=Other	-0.223***	-0.250***	-0.334***

Note: Reference categories are: men, education up to 15 years old, living in rural areas or villages, employed and who consider they belong to the working class of society. 'Important issue' is a dummy variable where 1 indicates that the individual considers his country's economic situation as an important issue. Country dummies included. ***, ** and * indicate statistically significant at the 1, 5 and 10 percent levels, respectively.

Joint regression of the errors made when reporting the figures

Variables	Growth	Inflation	Unemployment
Important issue= Country's economic situation	-0.221***	-0.164	-0.021
Internet	-0.460***	-0.912***	-0.837***
Woman	0.584***	0.872***	1.321***
Age	-0.021***	-0.046***	-0.058***
Education=16-19	-0.262***	-0.383***	-0.797***
Education=20+	-0.748***	-1.057***	-1.400***
Education=Still studying	-0.171	-0.720***	-1.669***
Education=Don't know/don't answer	-0.406**	-0.422	-0.825**
Area=Small/middle town	-0.066	-0.184**	-0.270**
Area=Large town	-0.220***	-0.381***	-0.395***
Work=Unemployed	0.173*	0.336**	0.618***
Work=Inactive	0.006	0.262**	0.375***
Class= Lower middle class	-0.376***	-0.662***	-1.307***
Class=Middle class	-0.193***	-0.662***	-1.022***
Class=Upper middle class	-0.422***	-1.006***	-1.603***
Class=Higher class	-0.101	-0.477	-0.816*
Class=Other	-0.252*	-0.894***	-1.044***



- Unemployment is the best known statistics
- Great variation across socio-economic groups:
 - Awareness is larger among the best educated, the highest classes, the oldest and those working and living in large towns.

