



International Year of Statistics 2013

The determinants of confidence, political independence and data utilisation.
The case of STATEC

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Outline

What is trust...(in statistics)?

The perception of *official statistics* in
Luxembourg

Determinants of trust, political independence
and data utilisation (The case of STATEC)

Some practical lessons



Trust

- **Definition (Reinhard et al, 2006):** “Trust is one’s belief in another’s reliability, predictability, and fairness”
- **Marzano :** trust is fundamental (makes life in society possible) and dangerous (risk of betrayal)
- **Antonym of trust ? :** *distrust* (fr:“défiance”) and *mistrust* (fr:“méfiance”)
- **Trust at macro level (institutions) and micro level (fellow citizens)**
- **Age of distrust(“bowling alone”) :** tendency of decay of social capital, consequences of globalization, urbanization and social networks?
- **Impact of economic crisis on trust in political institutions and government**
- **Trust in official statistics: a special case**



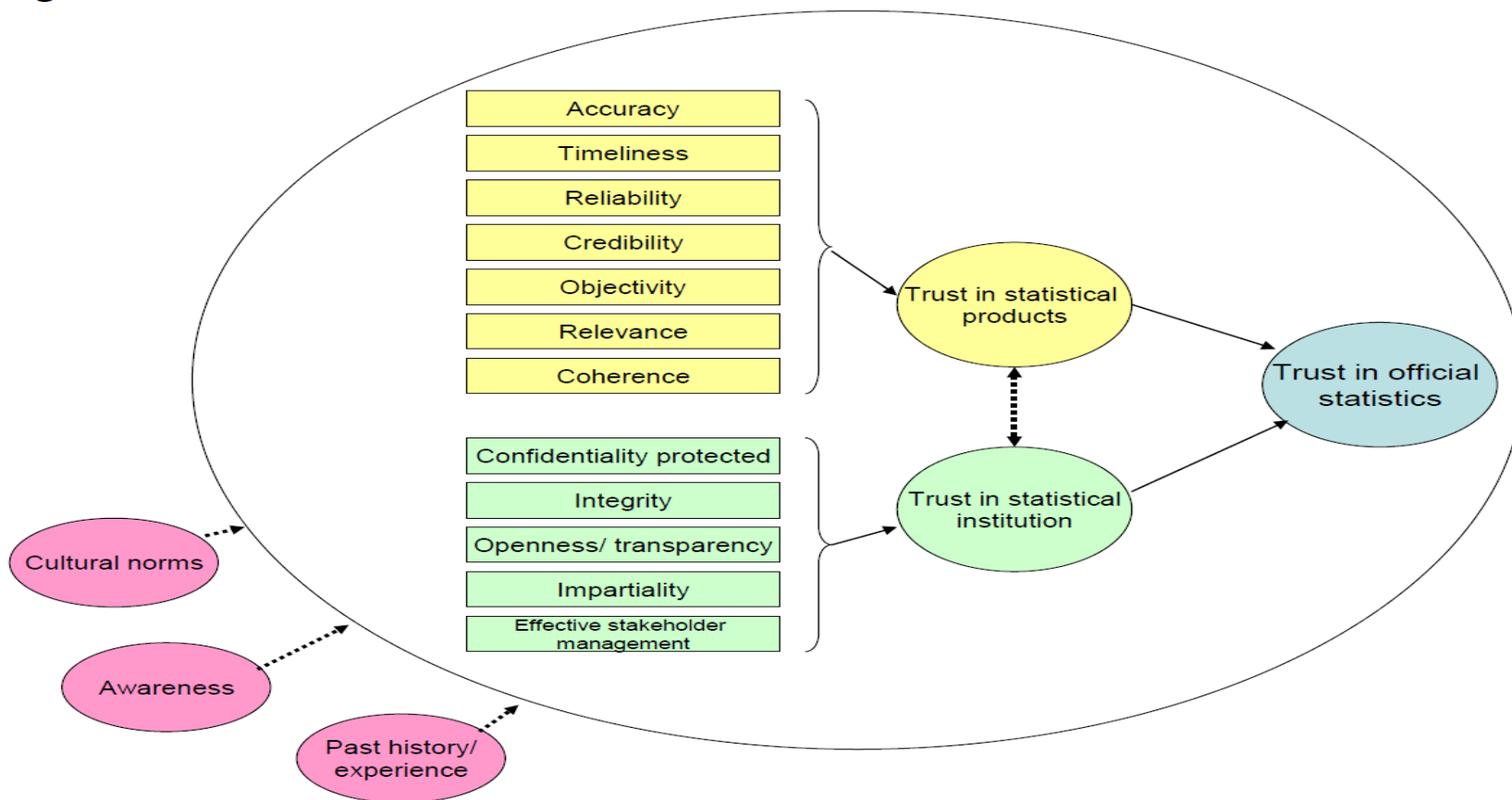
The almost irrational, illiterate user of complex statistics

- **Mathematical difficulty of statistical/probability reasoning (D.Kahneman, J. Haidt, U.Bram)**
- **Illiterate users : surveys show the discrepancy of basic statistical figures and actual statistical numbers**
- **Methodological complexity of data gathering, processing and presentation**
- **Rational inattention : excuse for ignorance?**
- **Entails trust in official statistics : Mark Twain and “statistical lies”**



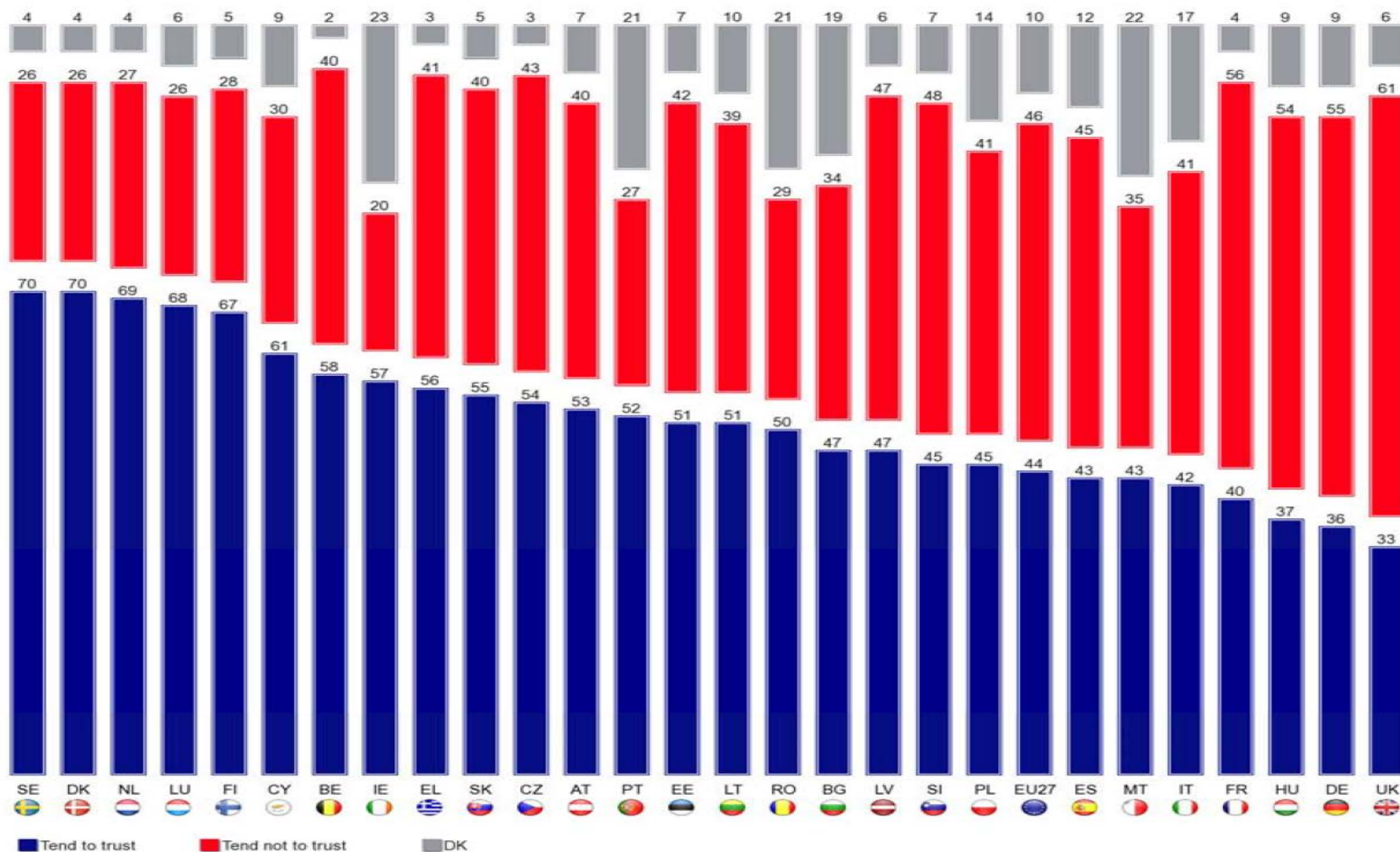
Trust in the OECD approach

Figure 1. Framework for measurement of trust in official statistics





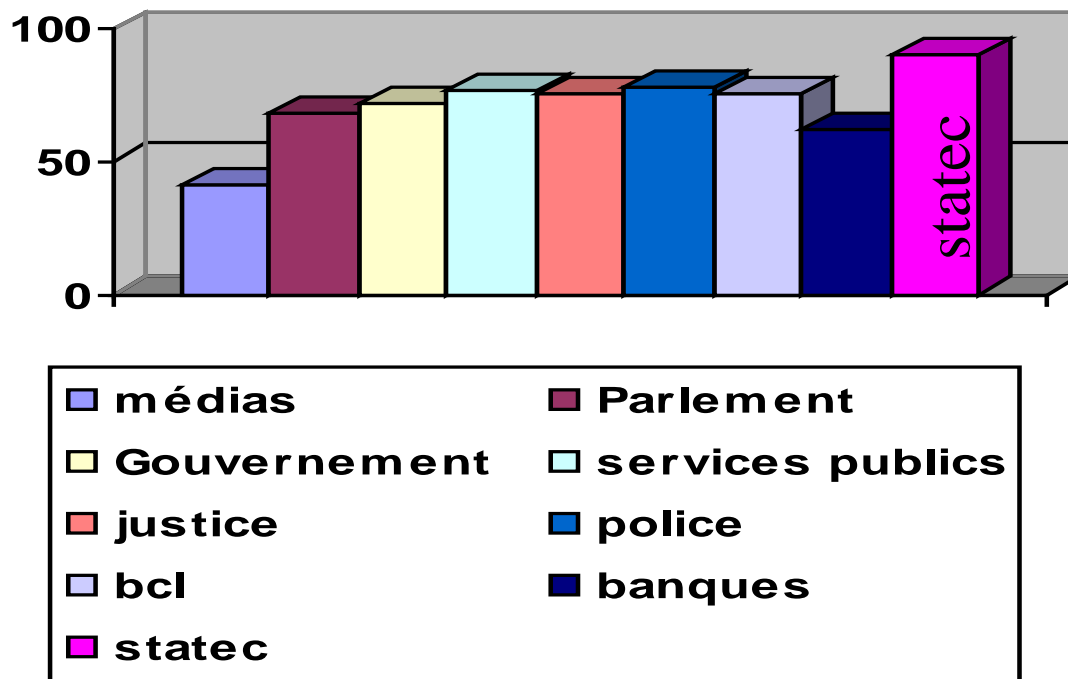
QC6. Personally, how much trust do you have in the official statistics in (OUR COUNTRY), for example the statistics on unemployment, inflation or economic growth? Would you say that you tend to trust these official statistics or tend not to trust them?



Source: Eurobarometer 323, January 2010



Results from the 2011 survey on STATEC and official statistics of Luxembourg



Source TNS ILRES poll « cinquantenaire », N= 2015 persons, 2011, calculations: sa



Results from the 2011 survey on STATEC and official statistics of Luxembourg

Good opinion: 86%

Usefulness of data: 90%

Political independence: 64%

J'ai une opinion positive à l'égard du STATEC

	Freq.	Percent	Cum.
Tout à fait d'accord	523	25.96	25.96
Plutôt d'accord	1,223	60.69	86.65
Plutôt pas d'accord	157	7.79	94.44
Pas du tout d'accord	36	1.79	96.23
Je ne sais pas	76	3.77	100.00
Total	2,015	100.00	

Il est nécessaire de connaître ces données

	freq	%t	%Cum
Tout à fait d'accord	777	38.56	38.56
Plutôt d'accord	1,04	51.61	90.17
Plutôt pas d'accord	142	7.05	97.22
Pas du tout d'accord	19	0.94	98.16
Je ne sais pas	37	1.84	100.00
Total	2,015	100.00	

Les données fournies par le STATEC ne sont pas influencées politiquement

	fréq	%	%cum
Tout à fait d'accord	311	15.43	15.43
Plutôt d'accord	987	48.98	64.42
Plutôt pas d'accord	482	23.92	88.34
Pas du tout d'accord	88	4.37	92.70
Je ne sais pas	147	7.30	100.00
Total	2,015	100.00	

Source TNS ILRES poll « cinquantenaire », N= 2015 persons, 2011, calculations: sa



Determinants of trust

Logit regressions

	confpub	Indep	use	
Use	0.605*	0.366***		
Indep	0.178		0.371***	
media	-0.125	0.658***	-0.150	
Q6_8	-0.550*	-0.152	-0.525***	
sexe	-0.510*	0.0425	0.552***	
CAT_ACT	0.408	0.0536	-0.00653	
EDU_2	-0.278	0.476	0.647*	
EDU_3	0.386	0.427	1.185***	
EDU_4	0.212	0.497	1.155***	
EDU_5	0.583	0.619*	1.529***	
EDU_6	-0.0278	0.989***	1.665***	
EDU_7	.	1.128	0.645	
EDU_8	0.950	0.449	0.882*	
age2	-0.0404	0.124	-0.861***	
age3	0.375	0.445*	-0.921***	
age4	0.721	0.531**	-0.525**	
age5	0.443	0.732***	-0.881***	
lux	1.488***	-0.372***	0.127	
rev2	.	0.727	1.445	
rev3	-0.147	1.436	-0.254	
rev4	1.469	0.848	-0.0560	
rev5	1.439	0.820	0.304	
rev6	1.737	1.024	-0.337	
rev7	1.634	1.063	-0.440	
rev8	1.373	1.077	-0.0672	
rev9	1.582	0.787	-0.248	
rev10	0.845	0.803	-0.105	
rev11	1.420	0.772	-0.143	
rev12	1.894	1.232	0.0992	
rev13	1.401	0.771	-0.350	
prof2	-0.518	-0.139	0.350	
prof3	0.343	0.0583	-0.0642	
prof4	-1.656*	0.162	0.597	
prof6	.	0.471	1.528*	
prof7	-0.229	-0.0387	0.232	
confpub		0.205	0.558*	
_cons	0.540	-1.600*	-1.431	
N		1984	2015	2015
pseudo R-sq	0.104	0.055	0.075	

t statistics in parentheses * p<0.05, ** p<0.01, *** p<0.001

**Trust => + use +survey participation + Lux
- male**

**Independence => + use + media +education
+age - Lux - male**

**Use => + independence +survey
participation + male +education
- age + trust**



Lessons to be learned

- Trust is a tricky concept
- Trust is fragile and hard to preserve
- Taking care of the quality of relations with interviewees during and after data collection
- Combating “statistical discriminations” (gender, non nationals, less educated)
- The critical and knowledgeable citizen
- « We look at statistics as facts we discover and not as numbers we create »(Joel Best,2001)