How can we assure that good quality statistics will crowd out low quality data?

Workshop on statistical data dissemination and communication

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European Central Bank

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www.ecb.europa.eu

Outline

1 The challenge for good quality official statistics

2 Role of statistical agents in counter misinformation

3 Three takeaways

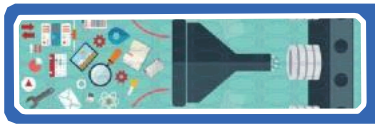
Disclaimer: The views expressed in this presentation are those of the author and not necessarily those of the European Central Bank (ECB) or the European System of Central Banks (ESCB)

Data never sleep

Source: [2018 Update: What Happens In An Internet Minute](), Lori Lewis

Nine challenges for good quality statistics

Big data - Data never sleeps



Multiple sources for similar data and statistics

Assess methodological differences and impact

Social behaviour changes Internet and digital interactions

Increasing exposure to misinformation

Finding the needle in the hay stack

Low belief that statistics is used in policy decisions

Sentiment based policy information

Detrimental low trust in statistics

Pictures: https://goo.gl/images/qpmFZ9; https://goo.gl/images/XP8WG2; https://goo.gl/images/CWcx1C; https://goo.gl/images/U5ZYwd; https://goo.gl/images/sNJgn3; https://goo.gl/images/nxo6UM; https://goo.gl/images/rVfbMH; https://goo.gl/images/34FzZR, https://goo.gl/images/mRx6D4, https://goo.gl/images/opXsuL

Digital and big data

"The rise of "big data" provides far greater opportunities for quantitative analysis than any amount of polling or statistical modelling. But it is not just the quantity of data that is different. It represents an entirely different type of knowledge, accompanied by a new mode of expertise."

William Davies, The Guardian

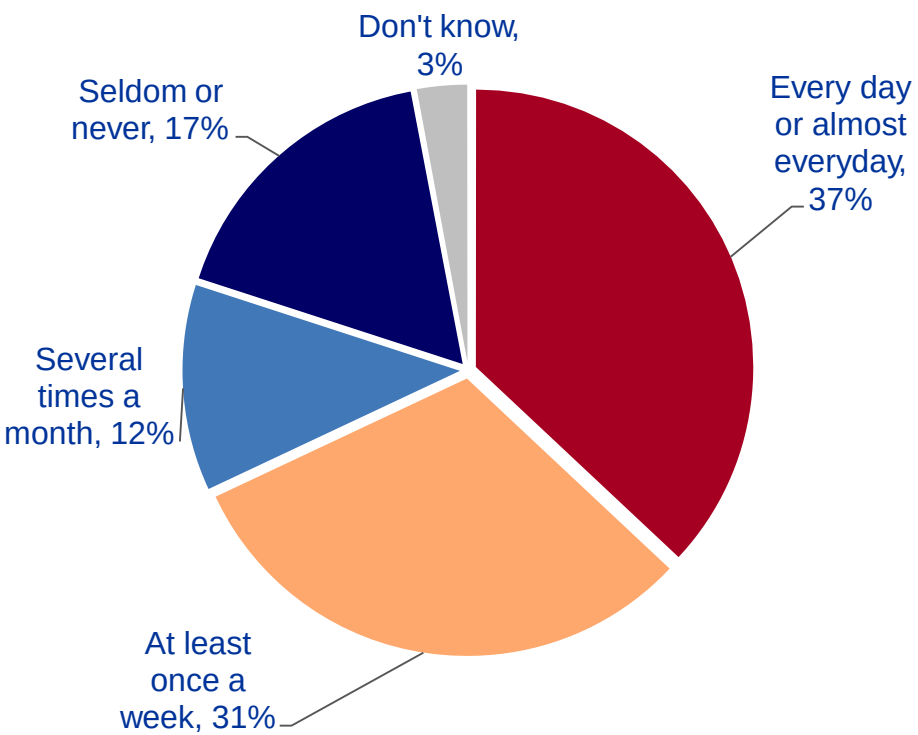
TRADITIONAL STATISTICS	NEW DATA SOURCES
Statisticians formulate questions, build the sample and then collect answers	Digitally recording, statistics is applied and then research questions arise
Statistics are representative, using structures and standards	Borderless, not structured data, no links to statistical classification and semantic
National Statistical Offices, National Central Banks and international organisations provides official statistics	Multiple providers of similar statistics and data, with no transparent methodology and replicability

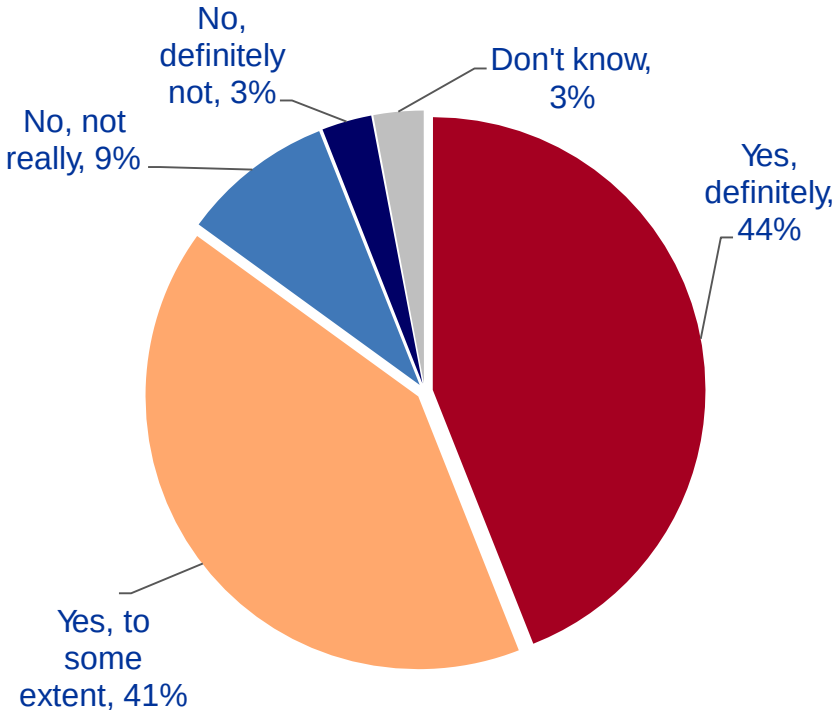
Source: How statistics lost their power – and why we should fear what comes next, William Davies, The Guardian

The challenge of misinformation

Out of 26,576 respondents,

- 68% (37% and 31%) believe they come across news or information, which they believe ***misrepresent reality or is even false*** (daily/weekly) [*left graph*]
- 85% and 83% of respondents think that the existence of fake news is a **problem or** at least to **some extent, in their country and for democracy,** in general

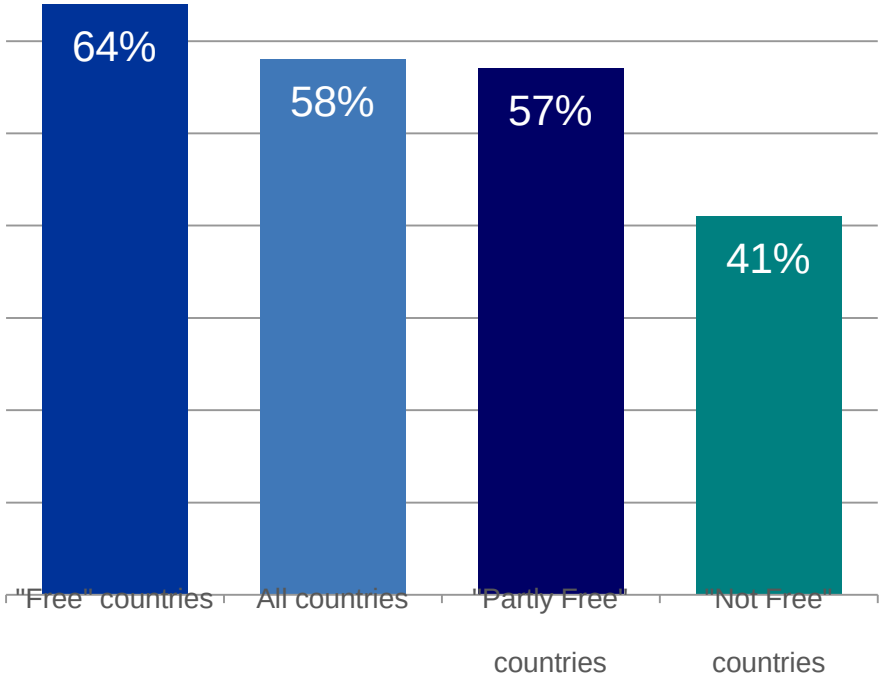


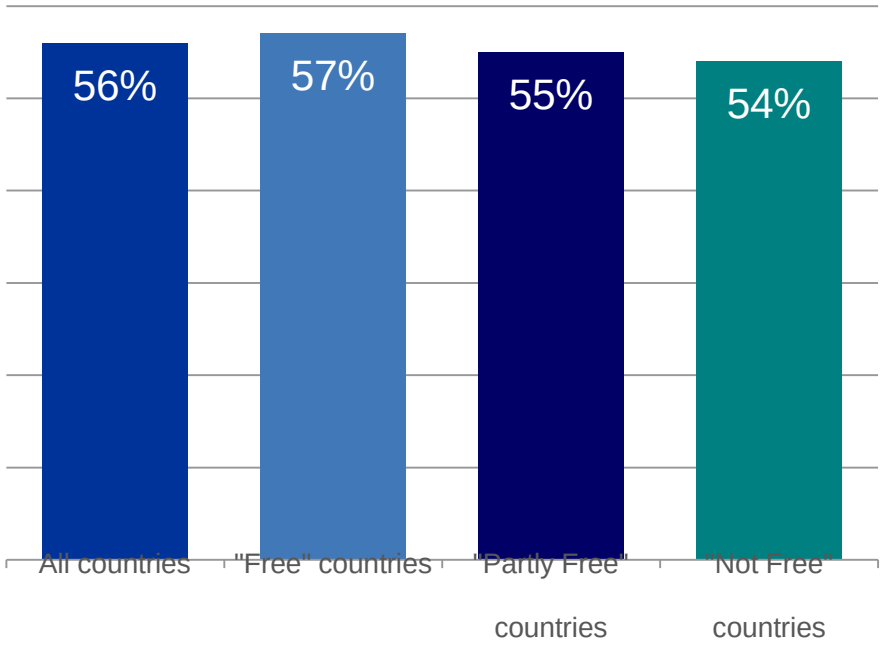


Source: Flash Eurobarometer - *Fake News and Disinformation Online* (2018)

The challenge of misinformation - Global challenge

- Public disillusion, a majority of the population (64%) believes that **their government "rarely" or "never" acts in the interest of the public.** [left graph]
- Citizens across the world do not trust the news they read. 56% of respondents from 50 countries says that the news they read **"rarely" or "never" gives them a neutral or balanced view.**



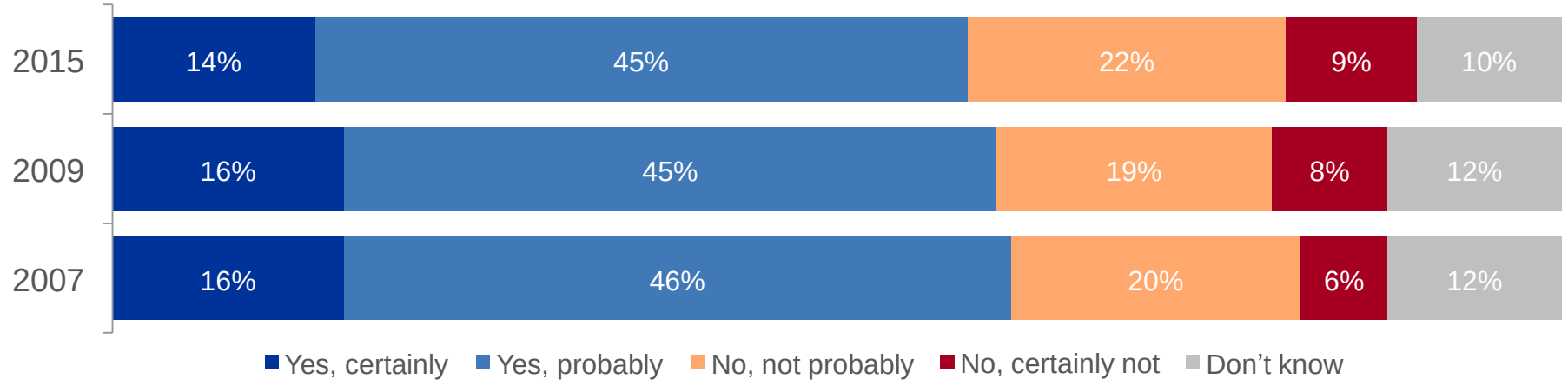


Source: Democracy Perception Index 2018, Dalia Research, Alliance of Democracies and Rasmussen Global

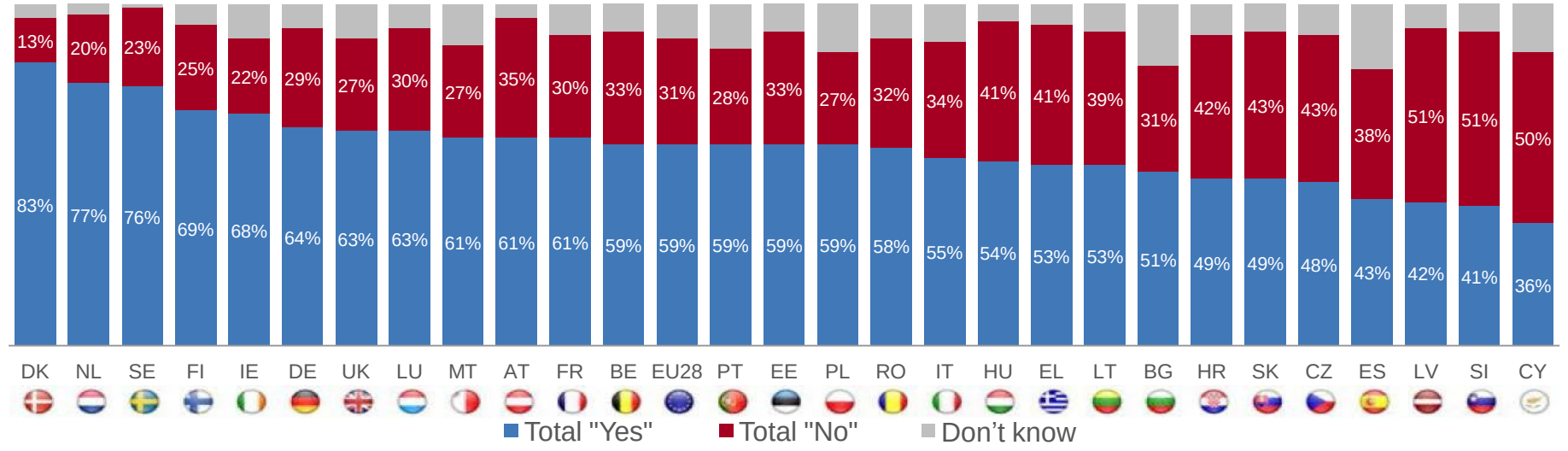
See Annex for more details

The challenges for statistics in policy decisions

➢ Are policy decisions based on statistics ? (half empty or half full?)



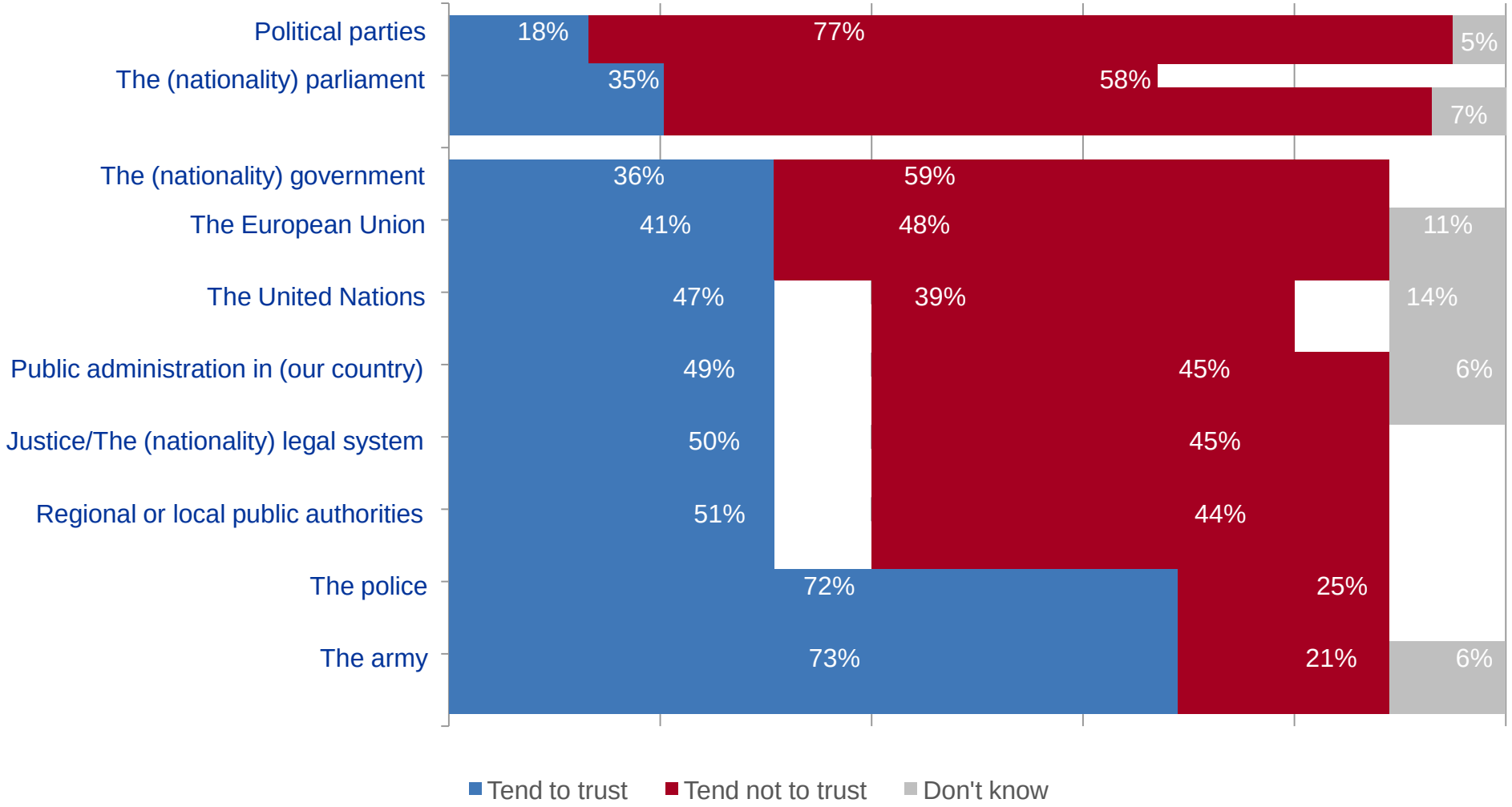
➢ Large dispersion among countries



Source: Eurobarometer - Europeans and Economic Statistics (2015)

Trust in authorities and political system

➢ Europeans' trust in their public administration and institutions

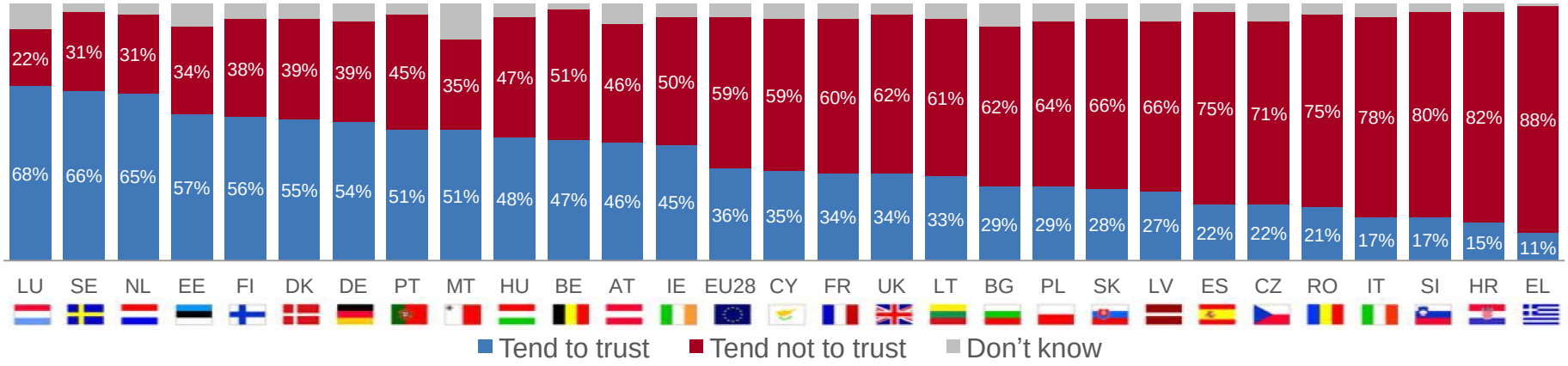


Source: Eurobarometer 88 (Autumn 2017)

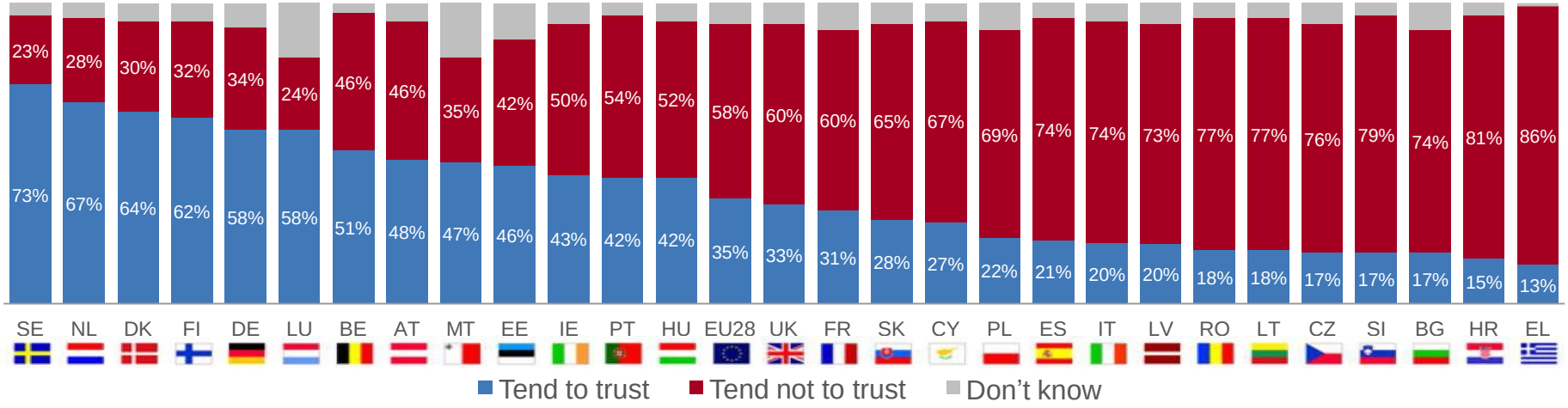
Trust in authorities and political system

➢ Europeans' trust in their political system

Trust in (Nationality) Government



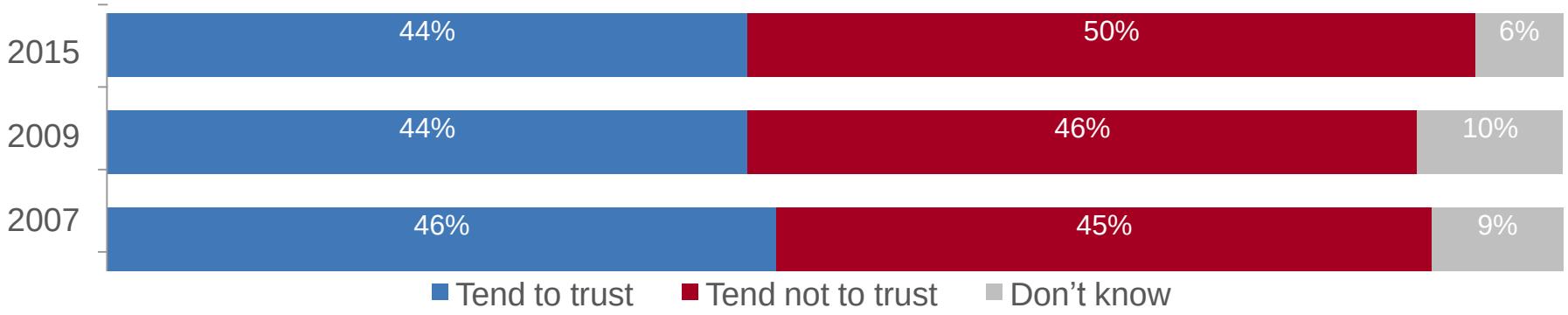
Trust in (Nationality) Parliament



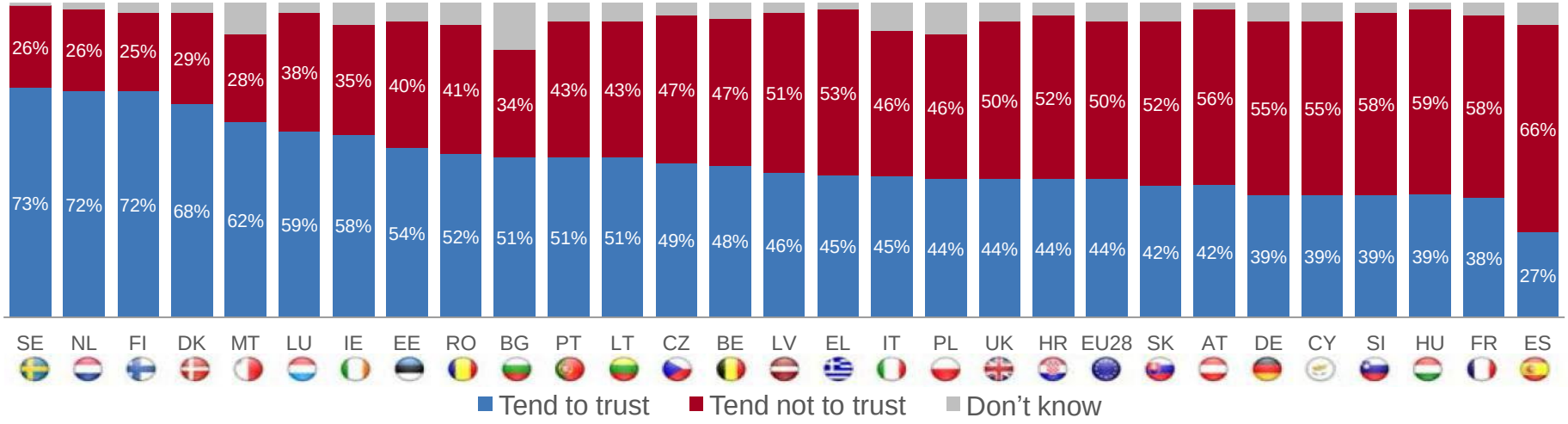
Source: Eurobarometer 88 (Autumn 2017)

Trust in statistics

➢ Do authorities have a challenge when citizens tend not to trust official statistics?



➢ Large dispersion among countries

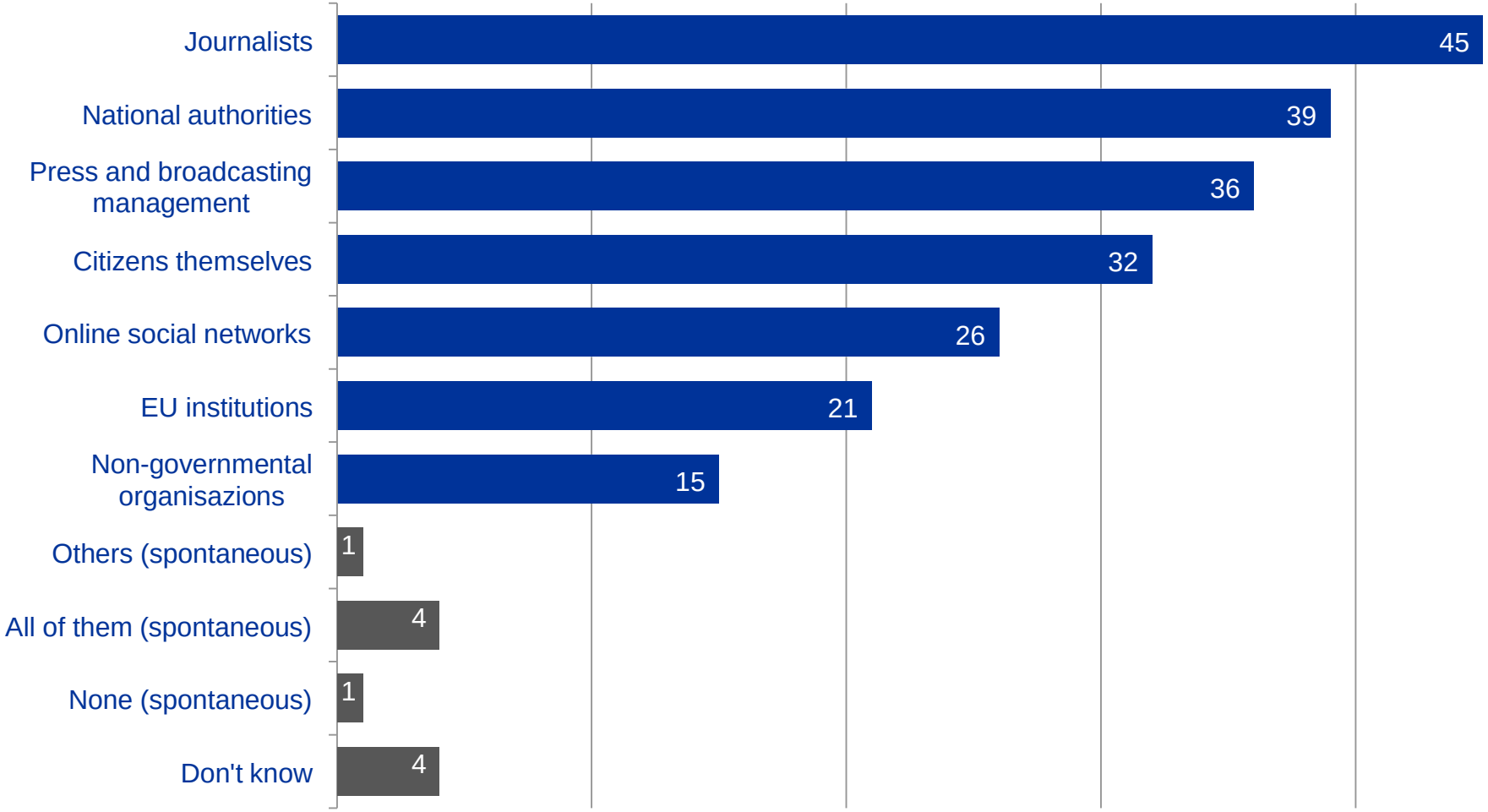


Source: Eurobarometer 88 – Europeans and Economic Statistics

No single lever - requires a multi-stakeholder solution

- Various **authorities** and **media that should** stop the spread of fake news

Actors that should stop the spread of "fake news"(tick max three categories)



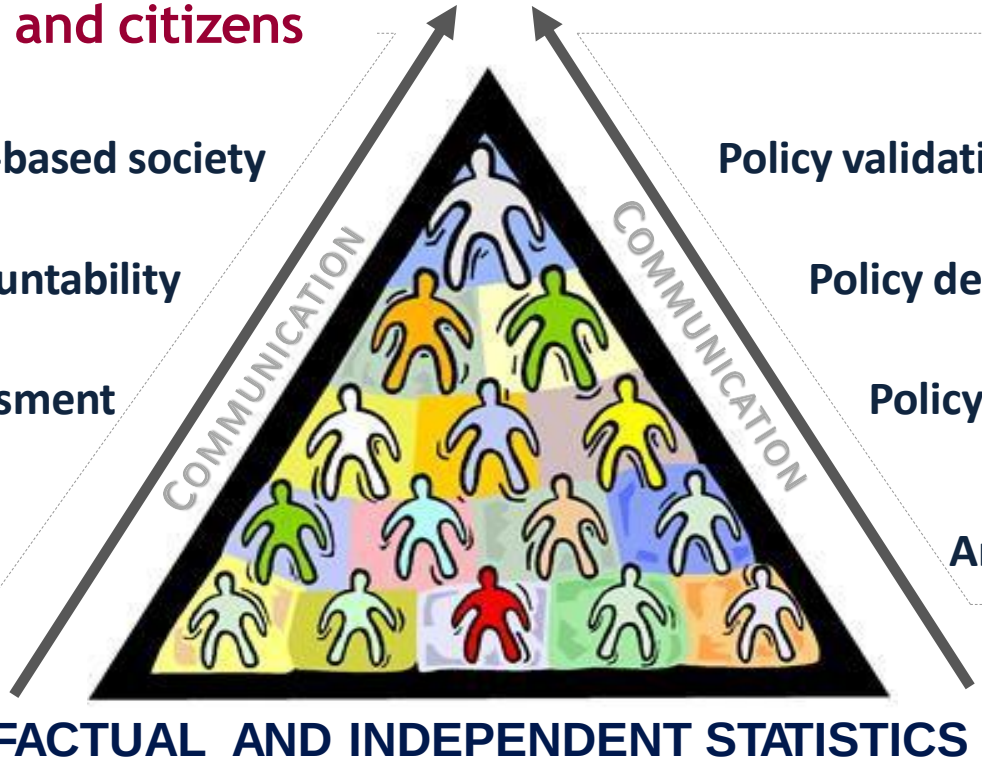
Source: Flash Eurobarometer - *Fake News and Disinformation Online* (2018)

Good quality statistics to counter disinformation

Evidence based and sustainable policy decisions
Building a knowledge based society

Professional users and citizens

- Knowledge-based society
- Policy accountability
- Analysis & assessment
- Statistical and financial literacy



Policy-making

- Policy validations
- Policy decisions
- Policy options
- Analysis & assessment

Factual, independent and transparent quality statistics is fundamental for creating trust in statistics, policy making and institutions

Pro-active stance for statistics to counter misinformation

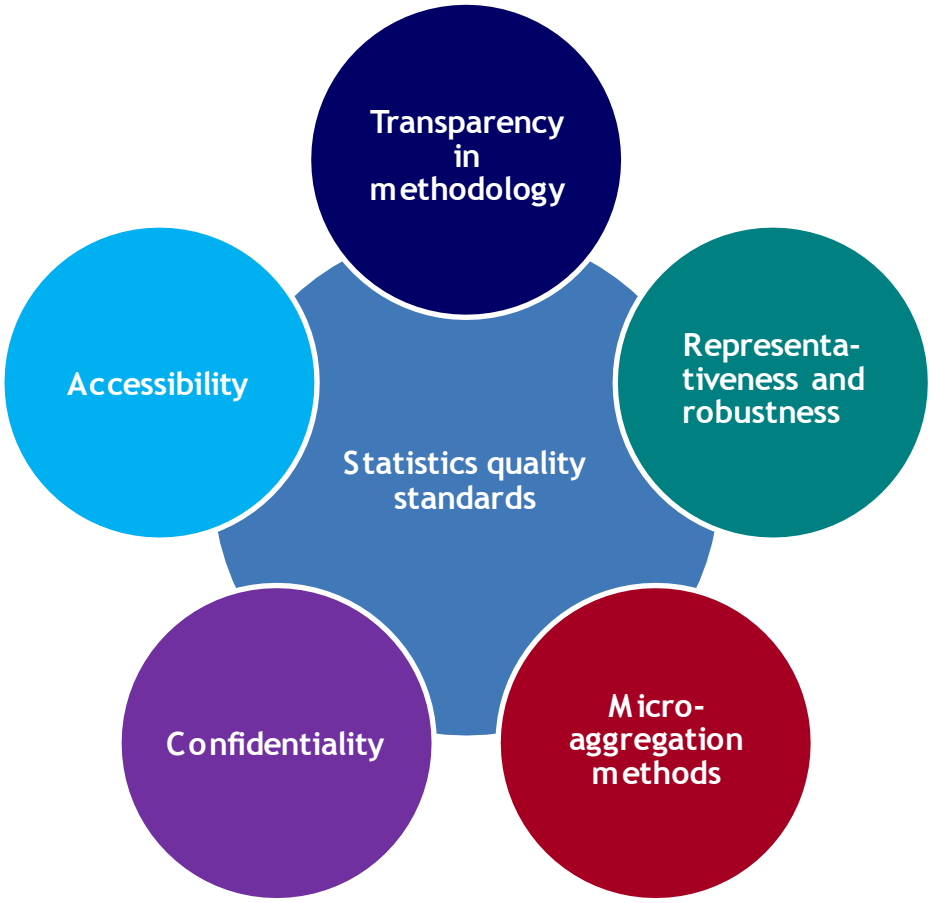
Five pillars in policy initiatives to counter fake news and disinformation spread online

Image: https://spo.gl/images/WGqxKb

Source: Final report of the High Level Expert Group on Fake News and Online Disinformation, European Commission

Pro-active stance for statistics agents - countering misinformation

Characteristics of good quality statistics



Characteristics of low quality statistics

- Lack of transparency in methodology and documentation
- No representativeness considerations
- Ad hoc and no consistency check over time
- Not feasible to replicate results
- No use of international standards, concepts and semantic
- No structured data
- No accountability
- No contacts for public questions
- No transparency in "follow the money"

Statisticians are well placed with their expert knowledge to act as the honest broker

Pro-active stance to render statistics to layman

Does the public and private sector obtain information in a form that is (i) understandable (ii) replicable (iii) sharable which leads to a behaviour where quality statistics is used in news reporting, policy advice, in the public debate and decisions?

Simplicity and Presentation

- Wealth of information, statistics intelligence feeding a complex decision making process
- Analysis, assessments, policy options

Results

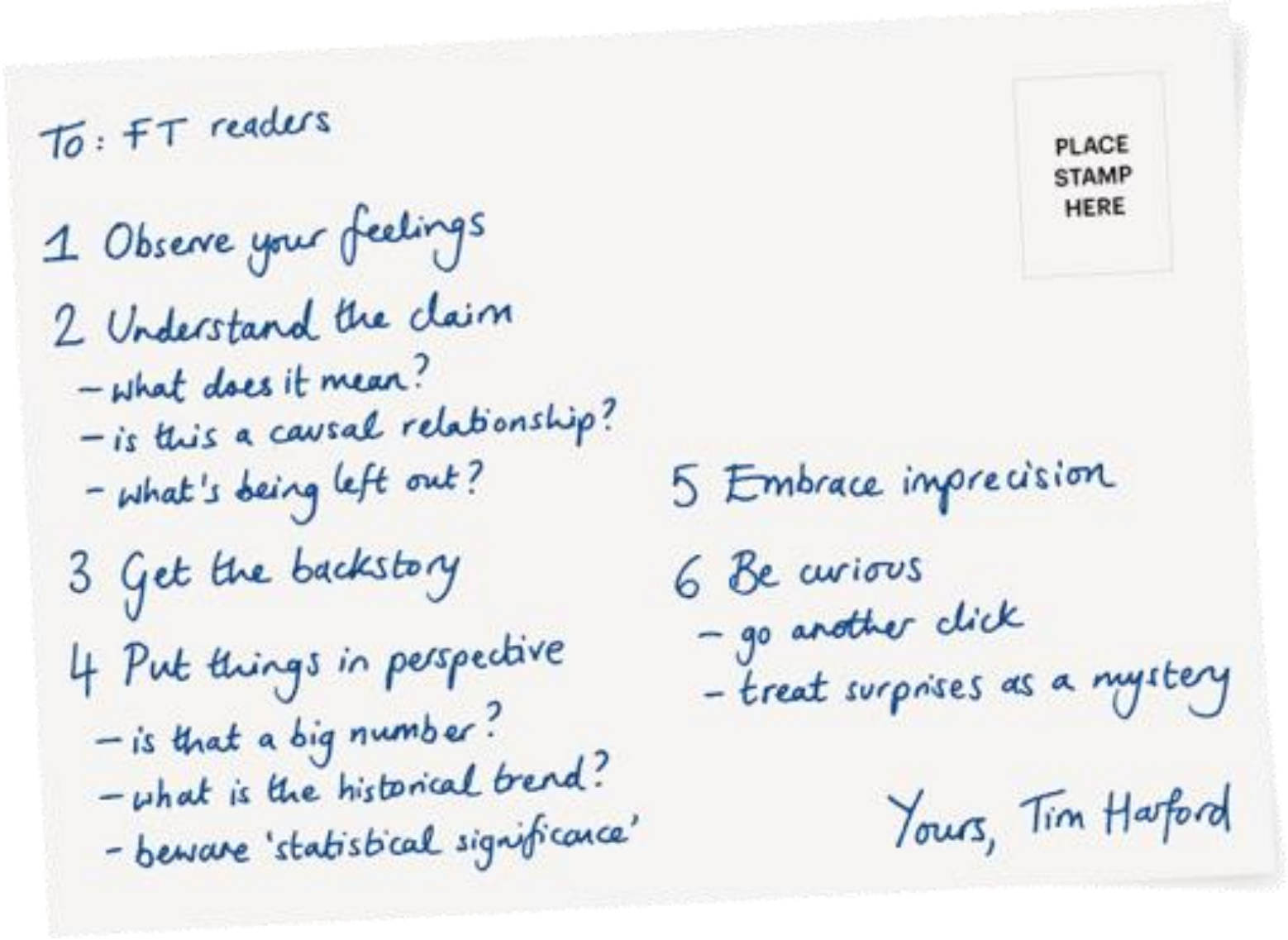
- Transparency & accountability
- Building institutional Trust &
- Knowledge based society
- Crowding out low quality statistics

- extract relevant statistics
- using key messaging
- common language
- provide narrative
- visualise and compare
- facilitate the access and re-use
- foster international standards
- assessment of differences to benchmark and impact
- proactively outreach to key users

- availability of underlying statistics
  - policy suggestions
  - Policy assessments and options
  - policy decisions
- ability to replicate by citizens
- easy access to statistics
- transparency in methodology

Communicating the wealth of statistics is a strategic asset and a fundamental task contributing to transparency and accountability and crowds out low quality statistics

Citizens role and guide to statistics



Source: Tim Harford's guide to statistics in a misleading age, Tim Harford, The Financial Times

Three takeaways – Being pro-active

Acknowledge the challenge and willingness to play a role

Enhance our communication strategy and foster transparency of statistics quality standards

Statisticians to provide expert knowledge and build centre of excellence

A ny question?

EUROPEAN CENTRAL BANK

EUROSYSTEM

ECB STATISTICS PAPER SERIES

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FACTS COUNT

The ***ECB Statistics Paper Series (SPS)*** is a channel for statisticians, economists, researchers and other professionals to publish innovative work undertaken in the area of statistics and related methodologies of interest to central banks.

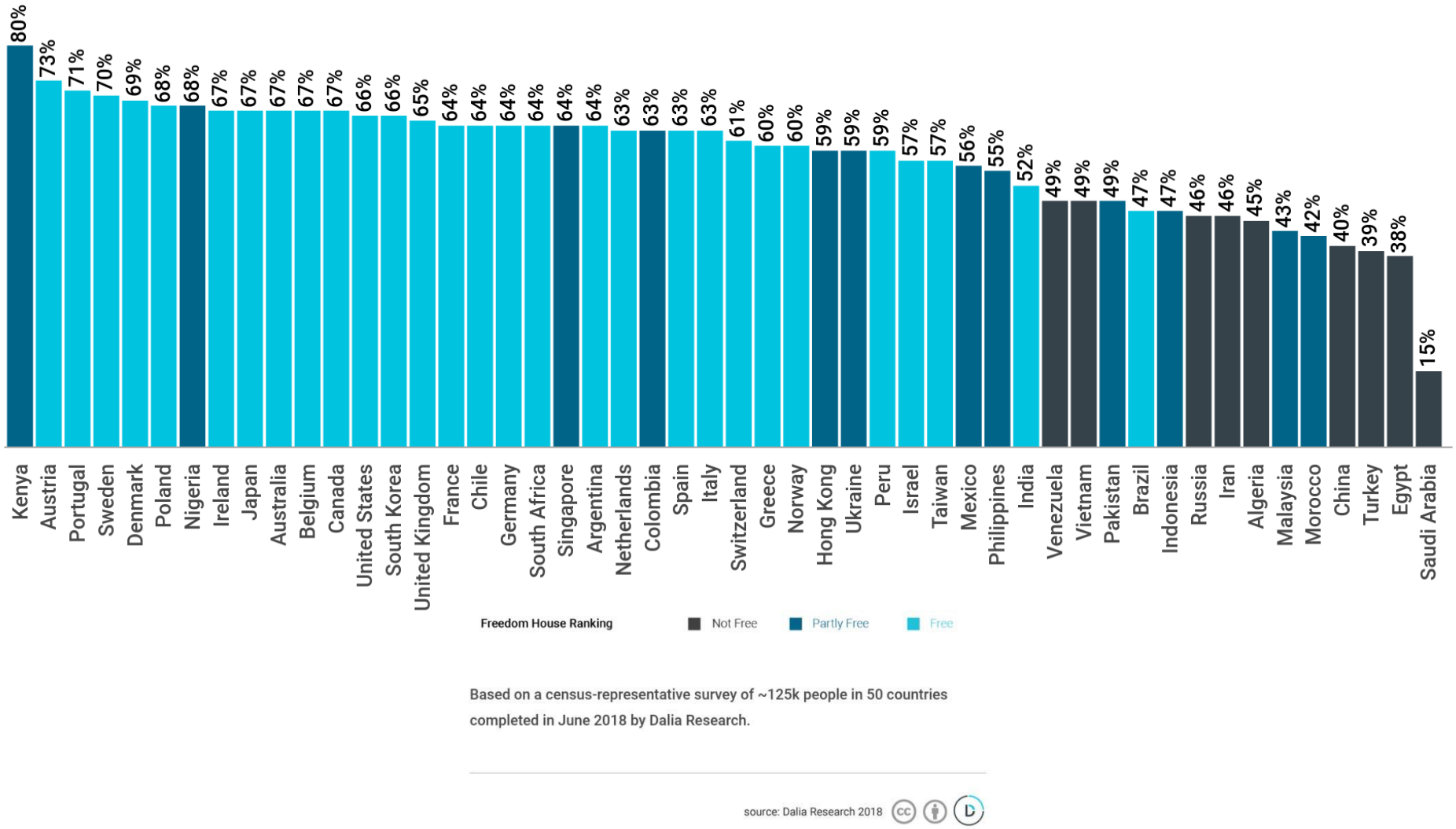
Fact-check your talk before you walk

WHAT ABOUT YOU WRITING?

Annex 1

Do you feel that your government is acting in your interest?

% who responded "Never" or "Rarely"

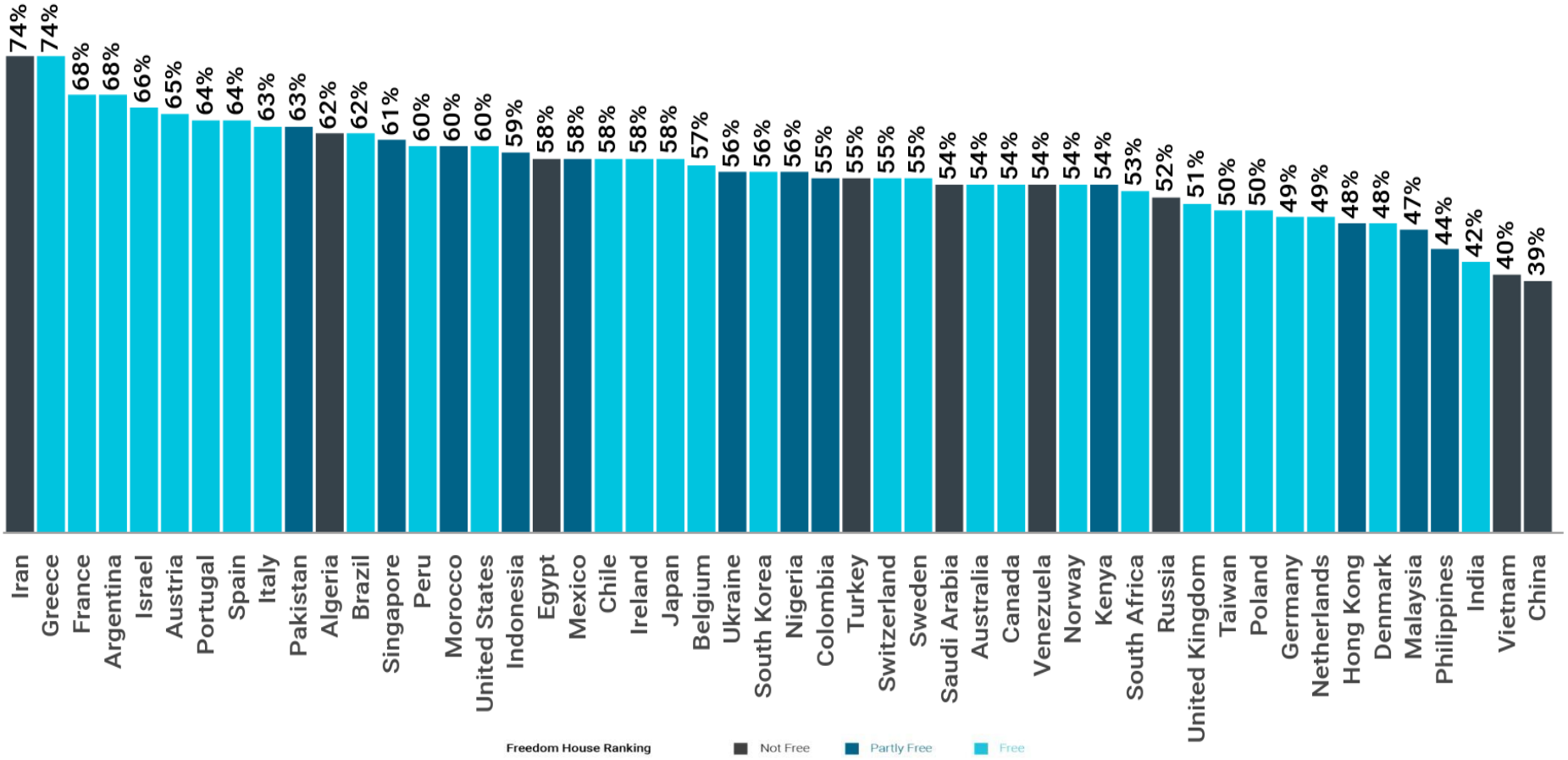


Source: Democracy Perception Index 2018, Dalia Research, Alliance of Democracies and Rasmussen Global

Annex 2

Do you feel like the news you read or watch gives you balanced and neutral information?

% who responded "Never" or "Rarely"



Based on a census-representative survey of ~125k people in 50 countries completed in June 2018 by Dalia Research.

Source: Democracy Perception Index 2018, Dalia Research, Alliance of Democracies and Rasmussen Global