



**YOUunion Final conference, Brussels, 12 December 2014**

***TRADE UNIONS TWITTER ANALYTICS: TO  
WHAT EXTENT TRADE UNIONS INTERACT  
WITH YOUTH AND WITH EACH OTHER?***

Francesca Fazio

ADAPT Research Fellow

University of Modena and Reggio Emilia

 @francesca\_fazio

# OUTLINE

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## Twitter-based Social Science Research: A Focus on Trade Unions

### 1. CONTEXT

- Social media and Twitter: a gateway and research tool

### 2. OBJECTIVES

- An experimentation on trade unions

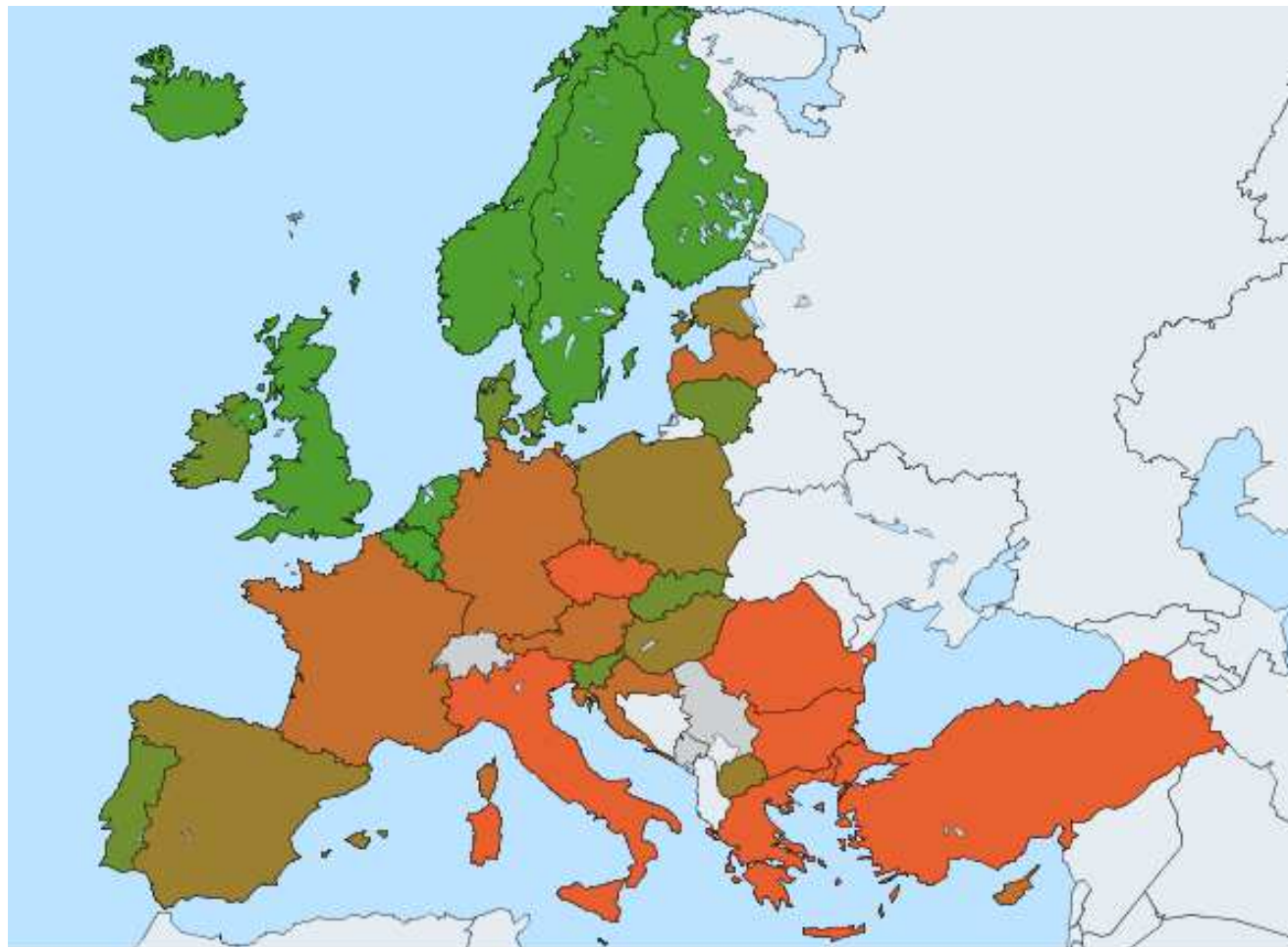
### 3. STRATEGY AND METHODOLOGY

### 4. RESULTS

### 5. CONSLUSIONS



**Individual using the Internet for posting messages to social media sites or instant massaging**



Legend

18.0 - 32.0

32.0 - 37.0

37.0 - 44.0

44.0 - 48.0

48.0 - 65.0

Not available



## Twitter as a research tool

- More than **255 million users worldwide** and over **500 million Tweets every day**: huge availability of brief messages - 140 characters.
- ‘sentimental analysis’ counts over 7,000 articles, hundreds of start-ups and statistical packages including dedicated sentiment analysis tools. [@TwitterData](#)
- Twitter-based applications:
  - Marketing
  - Behavioural sciences
  - Data journalism: live maps on US presidential elections, Arab spring, presidential elections in Iran or Egypt, British unrest summer 2011, [2014 EU elections](#)
  - Public administration (cost reduction and transparency)
- Twitter as unused information for Policy Makers and Institutions, in terms of knowledge and relationships (Egovernment, Edemocracy)



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## OBJECTIVES

- To analyse **how much people talk about trade unions**, compared to other socio-political institutions, in 7 different languages and in 6 countries: Belgium, Germany, Italy, the Netherlands, Spain, the United Kingdom
- To analyse **influence, interaction and communication models** of trade unions, with particular attention at the **youth sphere** providing an instant picture of the extent to which trade unions communicate **to and about young people**
- To fill the gap of information and increase comparability across trade unions and countries
- To highlight new media potential for fostering and broadening trade unions' membership base



## METHODOLOGY AND CAVEAT

- Twitter is used as a database: tweets are considered as data, The observations were collected using two **Twitter analytics applications**:
  - **Topsy** to show the **frequency of “trade union”** occurrence on social media debate
    - **Twitonomy** to extract and analyse **trade unions activity on Twitter**
- Up to **3.200 tweets per each of the 30 trade unions** from Belgium, Germany, Italy, the Netherlands, Spain, the United Kingdom have been collected on 18 November 2014.
- **Descriptive statistics** have been extracted to show **trade unions activity, influence and interaction levels** through several indicators
- Collected tweets were also translated in English using Google translator.

Caveat: The use of Twitter as a database has limits connected to the **sample**

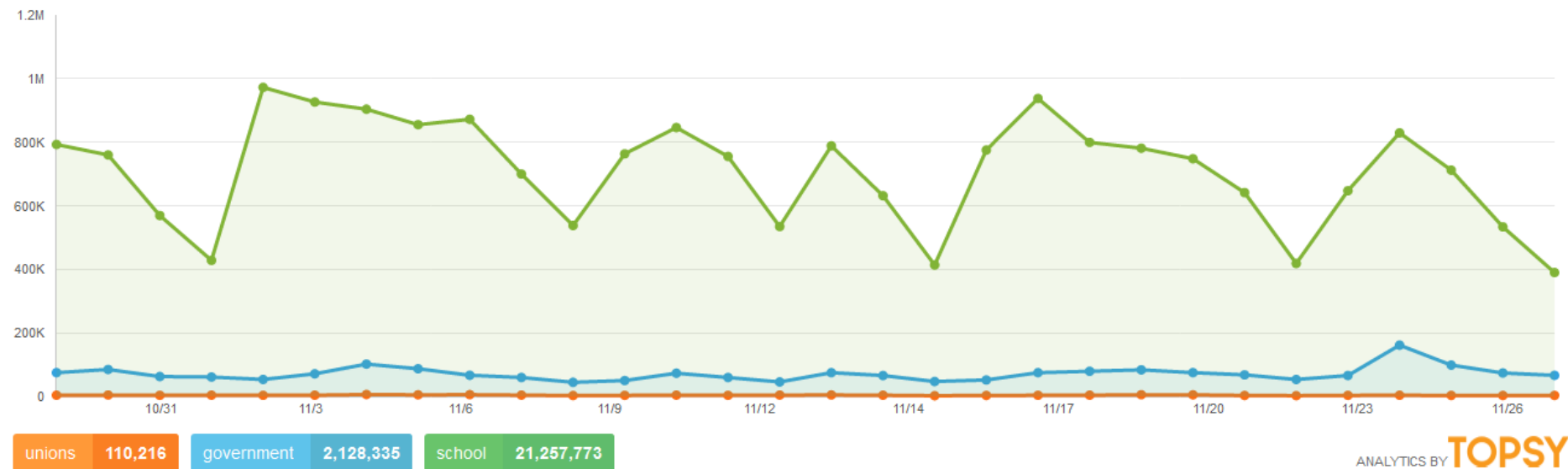


# To what extent people talk about “trade unions” compared to other socio-political institutions?

Frequency of the occurrence “unions” compared to other institutions in Twitter in a random month (29 October – 28 November 2014)

## Tweets per day: unions, government, and school

October 29th — November 28th





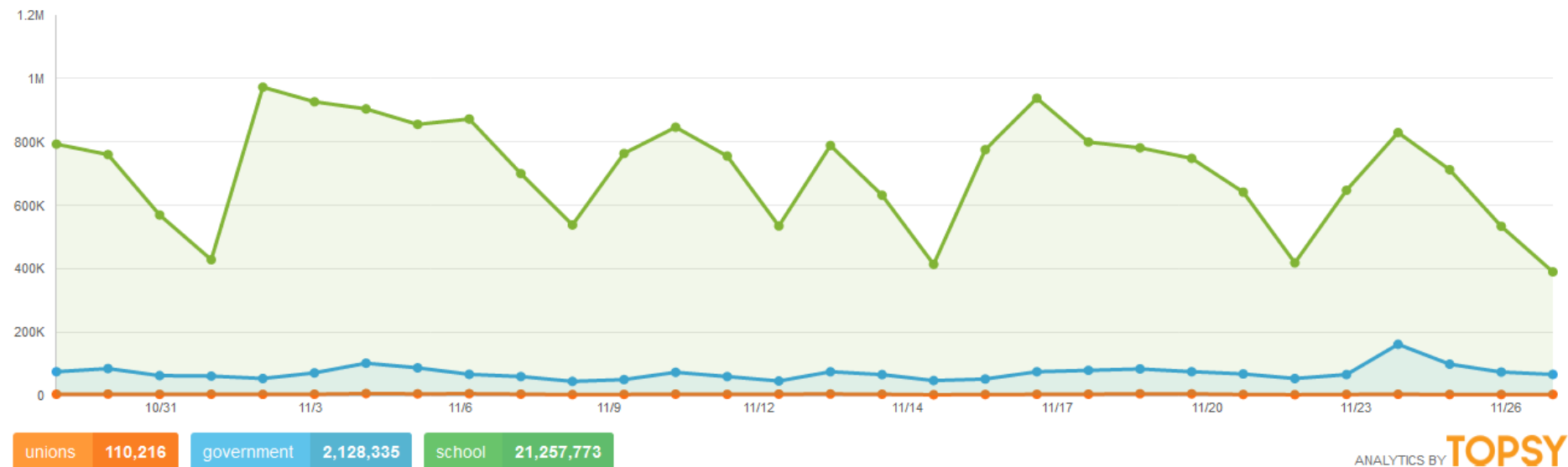


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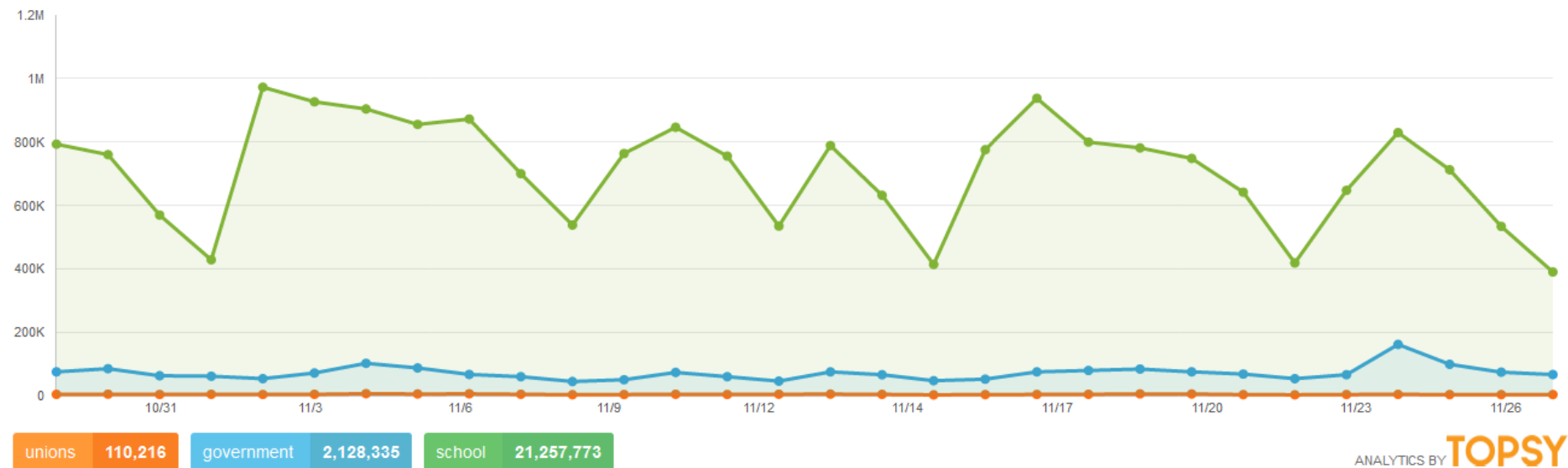


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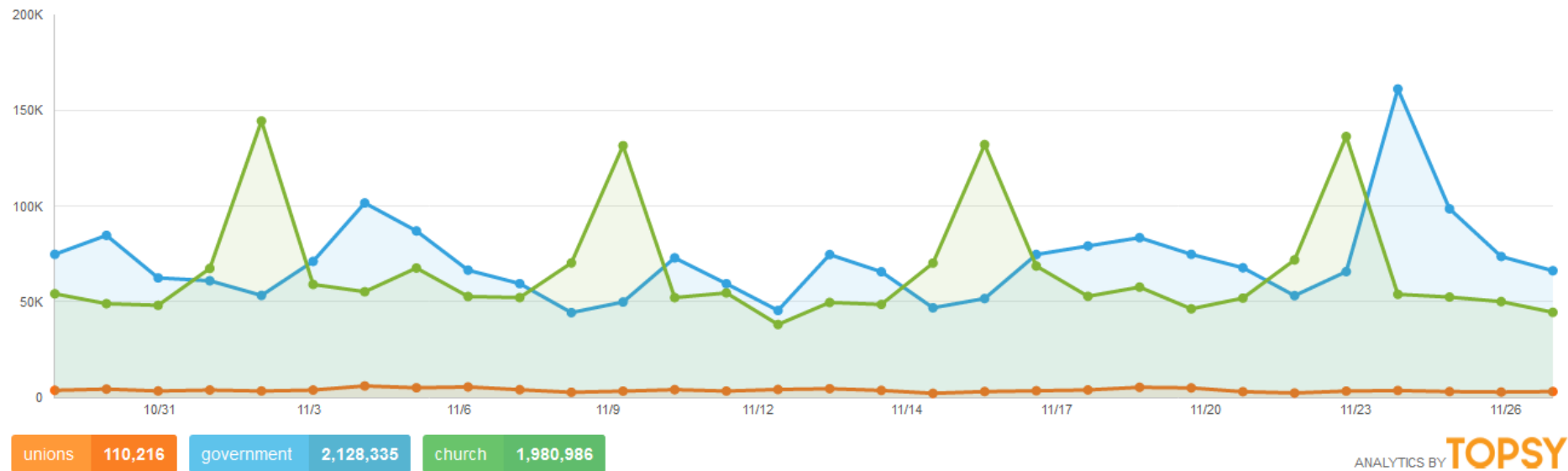


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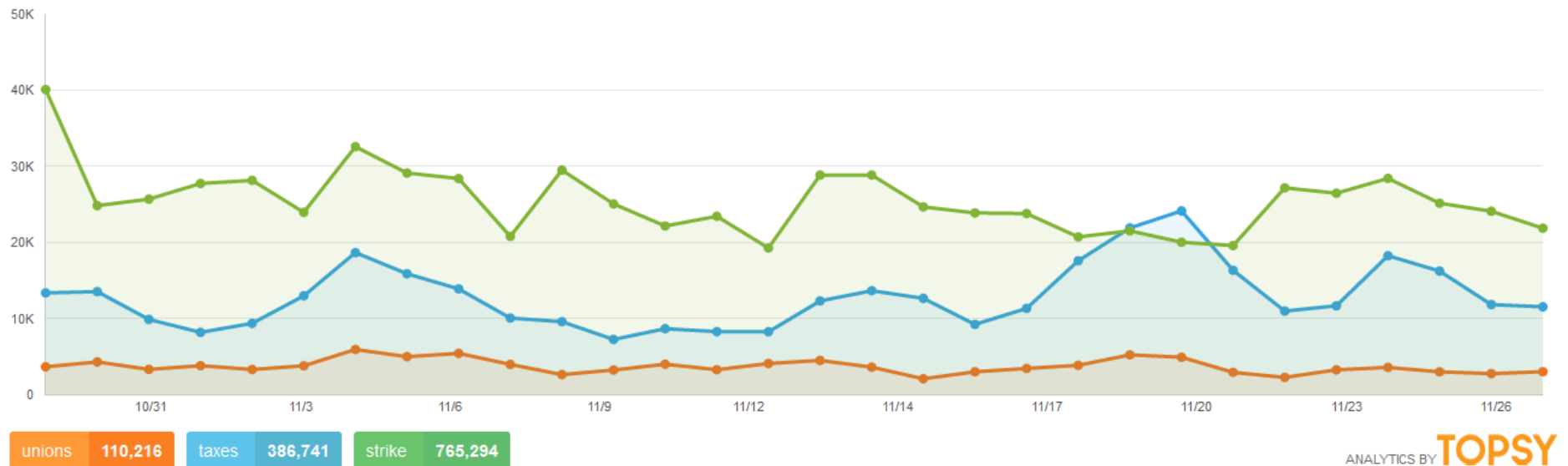




# To what extent people talk about “trade unions” compared to other socio-political institutions?

Frequency of the occurrence “unions” compared to other institutions in Twitter in a random month (29 October – 28 November 2014)

Tweets per day: unions, taxes, and strike  
October 29th — November 28th





## To what extent people talk about “trade unions” compared to other socio-political institutions?

- In a limited period of time (a random month), **the intensity of debate concerning "trade unions" has been lower than that concerning all other institutions** taken into consideration - "school", "church", "government", "politics", "taxes", "strikes", the same being true in all the seven languages analysed.
- If **110.000 twits** have been written in a random month containing the word “**unions**”, almost **20 times higher** is the frequency of discussion regarding “**government**” and “**church**”, and **15 times higher regarding “politics”**.
- The highest frequency has to be found with “**school**” with over 20 million twits, 190 times higher than unions.
- Looking at more homogeneous topics like “**taxes**” and “**strike**”, one can see 7 times higher frequency on “strike” and 3,5 times higher frequency on “taxes” compared to “unions”.



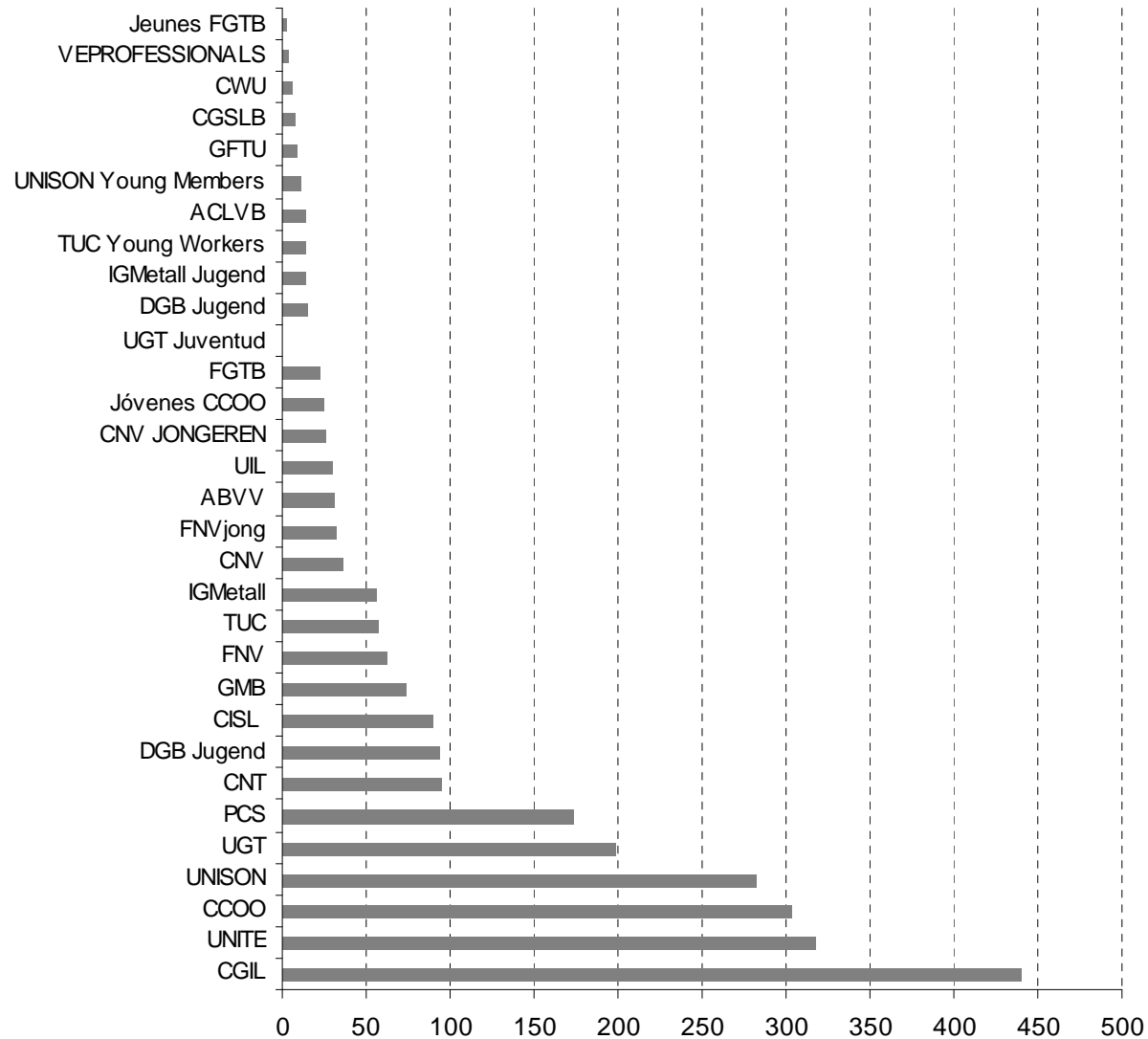
## To what extent and scope trade unions use and Twitter and with what level of influence and impact?

**The number of Followers:** the more simple indicator of **influence**

- At the top one can find **CGIL (IT)** with **44.000** followers, followed by **Unite - the Union (UK)**, **Comisiones Obreras (ES)** and **UNISON (UK)**, with around **30.000**.
- Other UK and Spanish trade unions account follow - **Unión General de Trabajadores** and **Public and Commercial Services Union** - with less than **20.000** followers, while other trade unions do not reach **10.000** followers.
- The same trade unions are those who send an **higher average number of twits per day: the higher the number the more active the user.**



## Trade Unions by number of followers (in hundreds)





## To what extent and scope trade unions use and Twitter and with what level of influence and impact?

### A more comprehensive measure of influence

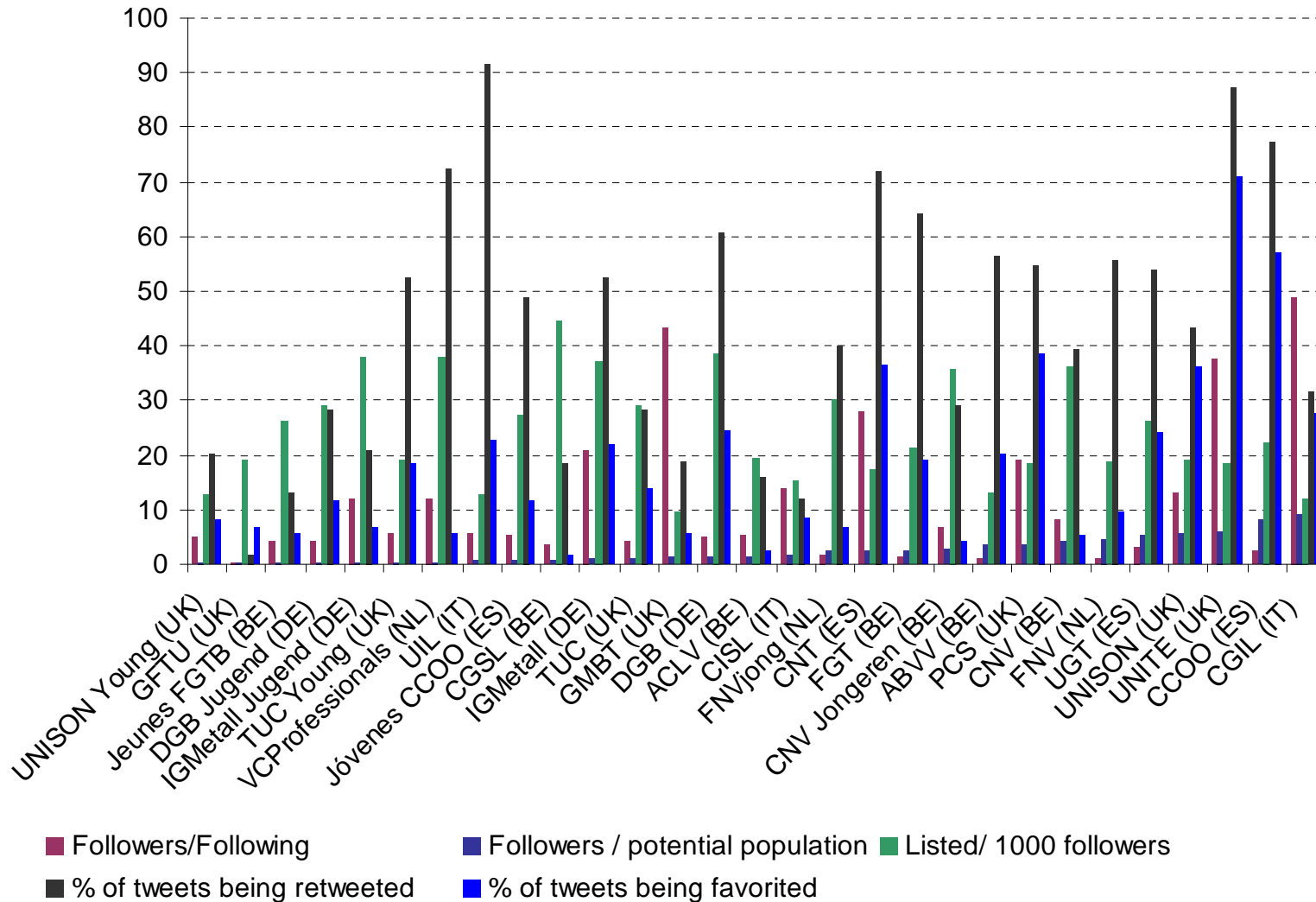
The relative influence of trade unions is recalculated with reference to the multiple dimensions:

- **follower - following ratio**
- **followers related to potential target population (internet users)**
- **ratio of twits listed on 1000 followers**
- **% of twits that are retwited**
- **% of twits that are marked as favourite.**
- Based on these indicators, **the more relatively influent trade unions are to be found in Spain and the UK. Unite** (UK) is in the top five according to 4 out of 5 indicators, followed by **CCOO** (ES) and **CNT** (ES).
- **CGIL** (IT) registers the highest **ratio of followers per person followed** and the highest proportion of **followers by potential population**, reaching 9 persons out of 10000 potential ones. **CCOO** (Spain) with 8 persons reached out of 10.000, followed by Unite (UK) with 6, Unison (UK) with 5 and UGT (ES) with 5.





# Relative trade union influence on Twitter, in descending order by influence relative to potential target population





## Mapping trade union interaction

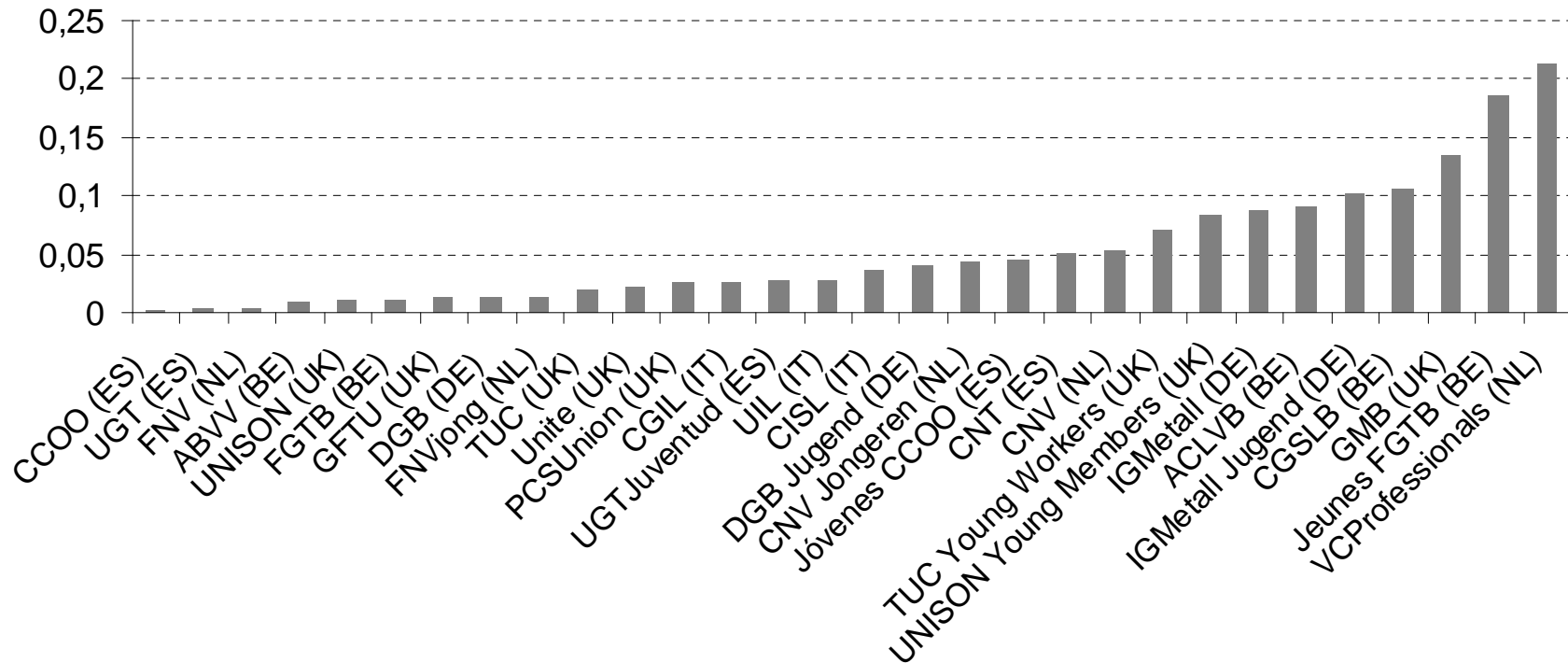
- Interactions via Twitter as the **virtual representation** of trade unions institutional relationships or at least the “declared” ones.
- Acknowledging **the most interacted users**, rather than all following/followers is more revealing because usually only a small percentage of contacts are frequently contacted by the user, this being real on a simple mobile phone or on Facebook.
- **Quantitatively**: “average number of mentions per tweet”, “percentage of retweets in the total of analysed tweets”, “percentage of replies in the total of analysed twits”.
- **Qualitatively**: a “friend” is defined as a person whom the user has directed at least two posts (in the form of retwits, replies or mentions).
- Friends have been divided in categories to reflect their "type", distinguishing by: "same trade union", "other trade union", "politics", "external to trade union", "youth sphere", "media"



## Mapping trade union interaction

Comparing the number of trade unions' **friends** (more recurring interactions) with the number of **followers** the users declare:

Trade unions' friends ratio





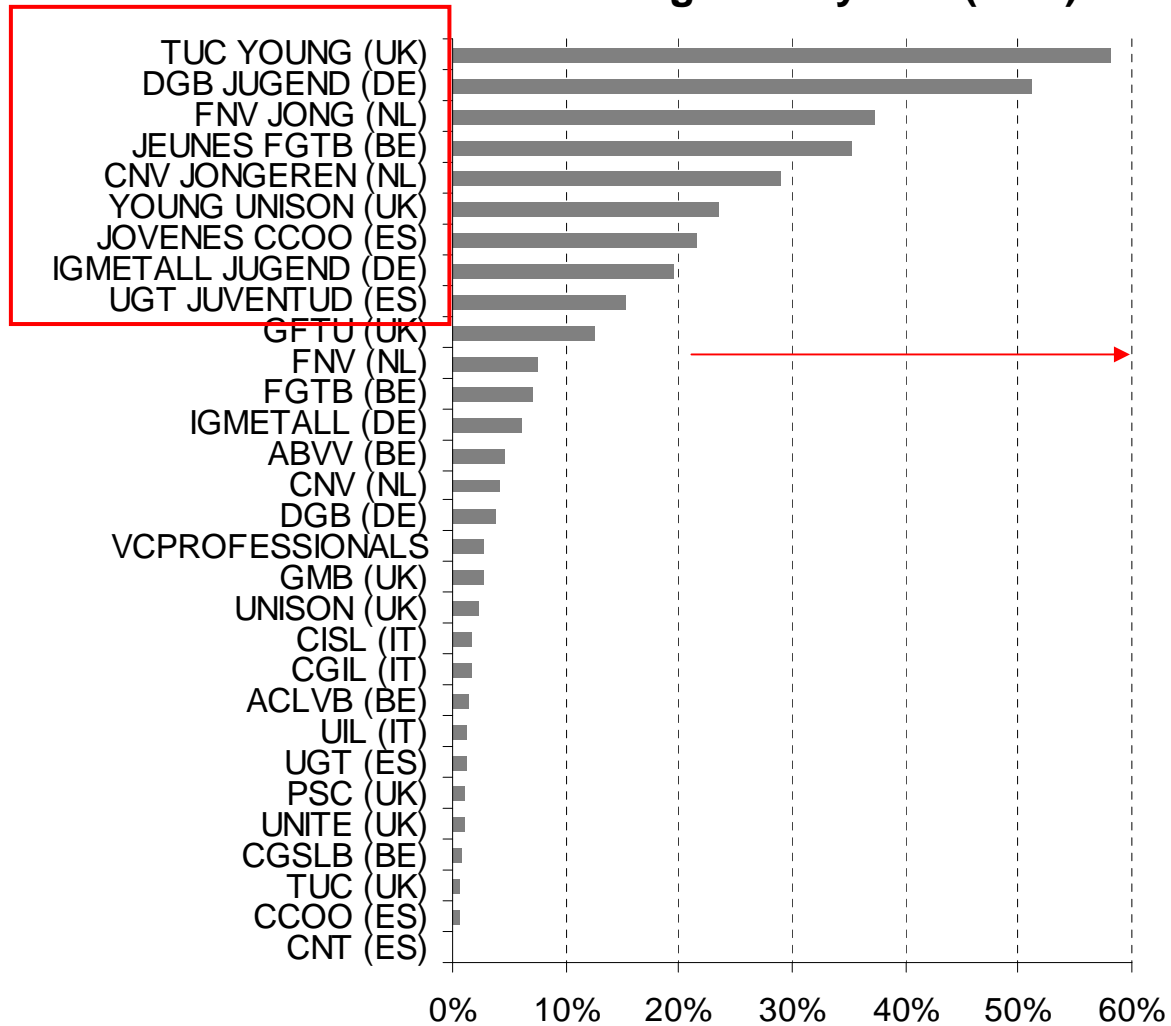
## Who are the friends?

- **5 most interacted users** have been collected for all trade unions concerned, for a total of 115 most interacted users.
- **55 over the 115 most interacted users are indeed included in the category “Same trade union”**, meaning that all trade unions mostly interact with Twitter accounts belonging to their own sphere, both trade union branches, persons working in the trade union and activists.
- The **second most interacted users** belong instead to “**media**”, such as newspaper, radio and other media accounts (19 su 115 most interacted users)
- The third most interacted users are “**External**” to the trade union sphere (16 out of 115) or belongs to the “**youth sphere**” (16 out of 115), the latter **mostly interacted by trade unions youth branches**.
- The fourth most interacted accounts pertain to “**Other trade unions**” (12 out of 115) and a minor part (5 out of 115) to the **politics sphere**.
- The same proportions remain true when one considers all users interacted at least two times



## To what extent trade unions speak about “youth”

Trade unions tweeting about youth (in %)





## To what extent trade unions speak about “youth”

Analysing (up to) 3.200 tweets written by each of the **national trade unions**, it is possible to notice that only a small part (**3% on average**) is directed to (or concerns) **youth**, with differences by country/trade union.

When analysing tweets published by **trade unions youth branches** (when existent), youth are more at the centre of communications (**32% on average, with peak of 60%**)



## Conclusions

Trade union as a **topic** is **less debated than other socio-political institutions**

- Trade unions mostly **interact with persons, activists and members of the same trade union and with media (newspaper, radio)**
- Interaction with people and organisations **external** to trade unions is **still limited**
- Interaction with the “**young sphere**” is mostly entirely done by **youth specific trade unions**, as well as communication concerning youth topics is 10 times higher for trade unions dedicated branches than for general trade unions
- The use of Twitter by trade unions seems to be interpreted more as a way of **fostering existing networks or relationships within the trade unions sphere**, than broadening networks getting in contact with persons and organisations external to trade unions
- **Communication with the young sphere is almost uniquely addressed by trade unions youth branches**, but this might wrongly suggest that youth are not the “first” target of (general) trade unions, especially in countries where young trade unions don’t exist or are not active



**THANKS FOR YOUR ATTENTION!**

[www.adapt.it](http://www.adapt.it)

[francesca.fazio@adapt.it](mailto:francesca.fazio@adapt.it)



@francesca\_fazio