

# TRADE UNIONS TWITTER ANALYTICS: TO WHAT EXTENT TRADE UNIONS INTERACT WITH YOUTH?



Association for International and Comparative Studies in the field of Labour Law and Industrial Relations Modena, Italy

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# TRADE UNIONS TWITTER ANALYTICS: TO WHAT EXTENT TRADE UNIONS INTERACT WITH YOUTH?

FRANCESCA FAZIO \*

### Abstract

Young people experience the highest level of unemployment and, even when in employment, they register the highest level of labour market outsiderness, compared to adults. Institutions could play a pivotal role in increasing the level of social justice for youth, promoting their condition in the labour market. Traditionally, the institution aimed at representing and promoting workers' interests is the trade union, but evidence shows, paradoxically, difficulties of trade unions in getting in contact with the most vulnerable workers - youth - mostly due to youth labour market structural characteristics. Since workers decision of joining a union comes later in the (working) life (as evident by the age distribution of trade unions' members) it remains unclear if youth membership has to be included (or not) among trade unions' strategic priorities. In the wave of increasing digital interaction between citizens and social institutions and the increasing use of social media as research tool in social sciences, the aim of this research is to stress, by using Twitter as a unique source of data, first, the extent to which trade unions are at the centre of debate, compared to theoretically similar institutions and, second, the extent to which trade unions interact with or speak about youth in six countries: Belgium, Germany, Italy, the Netherlands, Spain and the UK. Results show that social media discussions referring to "trade unions" is lower than for other similar socio-political

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institutions, this being true in all six languages analysed in a random month. Moreover, notwithstanding the fact that trade unions in the analysed countries are all formally present on Twitter, interaction with different institutions, and in particular with the youth sphere is limited and mostly done by trade union youth groups, while most communication flows of national trade unions are rather "autoreferential", i.e. mostly referring to the trade union itself. Analysing (up to) 3.200 tweets written by each of the national trade unions, only a small part (3% on average) is directed to (or concerns) youth. When looking at the Twitter accounts of trade unions youth groups (when existent), youth are of course more at the centre of communications (32% on average). These results may suggest the fact that youth are, in practice, considered as a topic that is out of national trade unions' ordinary agenda and daily business, falling instead mostly in youth specific trade unions' business, and thus supporting the hypothesis that youth membership is not specifically addressed by trade unions at the national, especially in those countries where no specific youth department of unions exists.

**Keywords**: youth; trade unions; Twitter; social analytics; labour market institutions; social media; industrial relations; youth unemployment; youth representation, youth membership.

**Summary**: 1. Introduction. – 2. Twitter as a tool for social analysis. – 3. Methodology - 4. Trade unions Twitter analytics

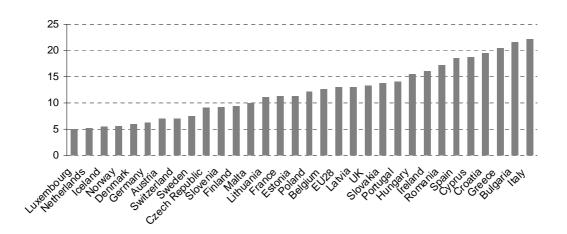
# 1. INTRODUCTION

The scarce inclusion of vulnerable people – including young people – in the decision-making processes may pose a problem in terms of social justice as laws and institutions may not answer to general interests, but to those of the more influential or relevant groups. This becomes particularly true when one considers the labour market, where emerging trends pose new challenges and issues in terms of social justice for young people, that might be exacerbated by the economic crisis. Besides youth unemployment, that reached unprecedentedly high levels across Europe, also youth employment poses challenges related to the fact that young people generally luck sufficient levels of employment protection, being mostly employed on a temporary basis and with non-contractual arrangements. The increasing precariousness put young people at the margin of the labour market and might represent a possible limitation of young people's ability to fully realise their potential in the society they live in (¹). This is also dangerous for societies in terms of the risk of a "lost generation" (²).

Fig. 1 – NEET rates in 2013 (%)

<sup>(1)</sup> Cf. D.D. Burke, R. Carton, *The Pedagogical, Legal, and Ethical Implications of Unpaid Internships, JLSE*, 03/2013, Vol. 30, Iss. 1, p. 99.

<sup>(2)</sup> S. SCARPETTA, A. SONNET, T. MANFREDI, Rising Youth Unemployment During The Crisis: How to Prevent Negative Long-term Consequences on a Generation?, OECD Social, Employment and Migration Working Papers, No. 106, OECD Publishing, 2010



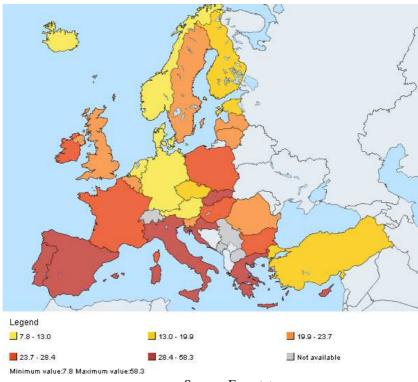
Source: Elaboration on Eurostat

Figure 1 represents the share of young people not in employment, education or training (NEET) in 2013, one of the most significant indicators of youth difficulties in the labour market (<sup>3</sup>). Italy and Spain are among the European countries hit hardest by the crisis where young people are disproportionately affected by inactivity and loss of trust (<sup>4</sup>).

Fig. 2 - Youth unemployment rate in 2013 (%)

<sup>(3)</sup> See VV.AA., Macroeconomic challenges and global labour market developments: Labour market situation of youth worsens further, in Global Employment Trends 2014: Risk of a Jobless Recovery?, ILO, Jan. 2014, p. 21.

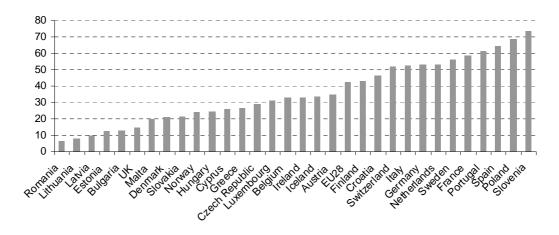
<sup>(4)</sup> This issue has been addressed also at communitarian level, see COUNCIL OF THE EUROPEAN UNION, Conclusions on enhancing the social inclusion of young people not in employment, education or training, February 1<sup>st</sup> 2014, No. 2014/C 30/03, available at <a href="http://eurlex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52014XG0201(02)&from=EN.">http://eurlex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52014XG0201(02)&from=EN.</a>



Source: Eurostat

Similarly, as Figure 2 shows, youth unemployment rates vary greatly across countries. Youth unemployment is dangerously high in southern European countries, especially in Spain (55.5%) and Greece (58.3%), but also in Italy (40%) and Portugal (37.7%). Conversely, youth unemployment is lower than 10% in Germany (7.9%), Austria (9,2%), Norway (9.1%), Switzerland (8.5%) and below 20% in the Netherlands (11%) and Finland (19.9%), while it is slightly higher than 20% in the United Kingdom (20.5%) and France (23.9%) and Belgium (23.7%).

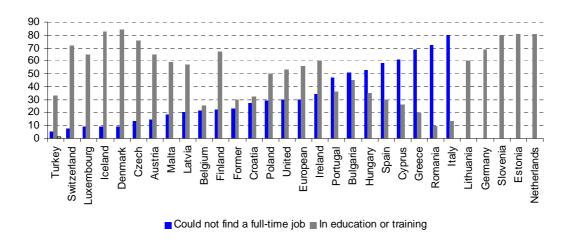
Fig. 3 – Young temporary employees as percentage of the total number of employees aged 15-24 in 2013 (in %)



Source: Elaboration on Eurostat

When employed, youth are mostly hired on a temporary basis and part-time contracts, as shown in Figure 3. More than half (and in certain cases more than two third) of employees aged 15-24 years old is indeed temporary in Switzerland (51,8), Italy (52,5), Germany (52,8), Netherlands (53,1), Sweden (55,8), France (58,4), Portugal (61,5), Spain (64,7), Poland (68,6) and Slovenia (73,6).

Fig. 4 - Main reasons for part-time employment of young people aged 15-24 years old in 2013 (in %)



Source: Elaborations on Eurostat

When looking at the main reasons why young people up to 25 year old are employed part-time, explanations mostly concern their involvement in (full-time) education or training, but in some countries, most notably those experiencing higher (youth) unemployment rates, high shares of young part-time workers are involuntary (could not find a full-time job).

Being education or marginality in the labour market the main reasons, final evidence confirms that youth experience the highest level of unemployment and, even when in employment, they register the highest level of labour market outsiderness, compared to adults.

Institutions could play a pivotal role in increasing the level of social justice, preventing youth precariousness and promoting youth condition in the labour market. A labour market institution that traditionally aims at representing and promoting the interest of workers is the trade union. However, due to youth detachment from the labour market, it is intuitively arguable that trade unions hardly get in contact with young people in the traditional workplace contexts, the low shares of youth membership demonstrating so.

Besides this aspect, the literature pointed out how younger generations are characterised by higher individualism and lower collective values, compared to older ones, but evidence remains ambiguous since low unionization levels among young workers are coupled with the unfulfilled desire for unionization by youth (<sup>5</sup>). Moreover, the economic literature has offered wide contributions, both theoretical and empirical, to the explanations of extensively higher unemployment rates among youth compared to adults and of wide differences among countries with respect to youth performance in the labour market.

YOUNION- UNION FOR YOUTH

<sup>(5)</sup> K. VANDAELE, Youth representatives' opinions on recruiting and representing young workers: A twofold unsatisfied demand? European Journal of Industrial Relations, 18(3) 203–218, 2012

Besides structural reasons, the existence of labour market institutions such as unemployment benefits, minimum wages, employment protection legislation, taxes and school-to-work transition models has been addressed as the main determinant of youth labour market condition.

Within this literature however the role of trade unions has been described ambiguously. On the one side, a stronger presence of trade unions and uniform wage policies would tend to price certain individuals out of the labour market, particularly at the bottom of the wage distribution (6). The effect is considered to be bigger for those individuals characterised by a more elastic labour supply, as youth and women ('), with the consequence of reducing their relative employment, other things equal. Commentators drawn attention also on indirect ways in which unions could influence the labour market, and precisely on the fact that High Performance Work Practices (HPWP) adoption seems to be hindered by the presence of unions (8). However, numerous studies have denied a negative role of trade unions (via wage compression) on employment (9), highlighting, on the contrary, the efficiency function provided by trade unions through their "voice" function. Dunlop in his book conceived unions as analogous to business firms, so as "decision-making unit" trying to maximize some objective, considering "wage bill for the total membership" and the guarantee of the largest possible union employment or the maximization of the "collective wage 'rents' of those employed. Ross, on the contrary, asserted that unions try to maximize a non-measurable variable "the economic welfare" (wages, hours and conditions of work, etc.) of their members. In addition, trade unions' feature of the heterogeneity of their members, implies that

<sup>(6)</sup> W. KOENIGER, M. LEONARDI, L. NUNZIATA, Labour Market Institutions and Wage Inequality, IZA DP No. 1291, September 2004; R. FREEMAN, Labour Market Institutions around the World, NBER Working Paper, N° 13242, 2007

<sup>(7)</sup> G. BERTOLA, F. BLAU, L. KAHN, Labor market institutions and demographic employment patterns, Journal of Population Economics, vol. 20, Issue 4, October 2007

<sup>(8)</sup> M. A. HUSELID, B. L. RAU, The Determinants of High Performance Work Systems; Cross Sectional and Longitudinal Analyses, Academy of Management Meetings, Division, 1997

<sup>(9)</sup> D. CARD, F. KRAMARZ, T. LAMIEUX, Changes in the Relative Structure of Wages and Employment: A Comparison of the United States, Canada, and France, The Canadian Journal of Economics / Revue canadienne d'Economique, Vol. 32, No. 4, August 1999

individual union members often have conflicting preferences and interests due to differences in age, seniority, wages and other related factors. Despite the fact that one follows the "analytical labour economics" by Dunlop (<sup>10</sup>) or the "institutional labour economics" approach by Ross, it remains unclear if youth membership has to be included (or not) among trade unions' strategic priorities in terms of membership and action.

In the wave of increasing digital interaction between citizens and social institutions (something that falls under the concept of E-government and E-democracy) and the increasing use of social media in social sciences, the aim of this research is to stress, by using Twitter as a unique source of data, first, the extent to which trade unions are at the centre of debate, compared to theoretically similar institutions and, second, the extent to which trade unions interact with or speak about youth in six countries: Belgium, Germany, Italy, the Netherlands, Spain and the UK.

The remainder of this paper is organised as follows. Section 2 provides a literature review of Twitter as tool for social science research. Section 3 describes the methodology used and Section 4 collect the results.

# 2. TWITTER AS A TOOL FOR SOCIAL ANALYSIS

The internet and social media are strikingly increasing the amount of information about and interaction between individuals, unveiling their expressions and ideas and thus representing for social scientists a unique and unexplored source from which to analyse, measure and understand previously hidden social mechanisms. Among social media, Twitter, with more than 255 million users worldwide and over 500 million Tweets every day (11), is of particular interest for social scientists because of the huge availability of brief messages – up to 140 characters – made public online representing an unprecedented opportunity to study human communication and interaction. Indeed, Twitter enables users to stay informed and up-to-date on topics

(11) Source: <a href="http://about.Twitter.com/company">http://about.Twitter.com/company</a>.

<sup>(10)</sup> J. DUNLOP, Wage Determination Under Trade Unions, New York: Macmillan, 1944

of interest by 'following' other users, as well as to share their contents with their 'Followers' in real time. Twitter also encourages interaction between users thanks to the possibility to invite someone to join a conversation, or simply to draw his/her attention to a specific tweet by putting @ before the account name of the person they wish to attract. One can also express support or agreement on another's tweet by 'retweeting' (RT) it, with the aim of sharing it with his/her own Followers. In addition to these interesting aspects, one of the main attractions for social scientists is probably the 'hashtag' function, *i.e.* the possibility to tag a word included in the tweet in order to make it visible and traceable through Twitter's search function.

For the purposes of this research Twitter can be considered as a sample of the real world in which is possible to look at communication features and at interactions. Every Twitter user must in fact communicate in a given code (<sup>12</sup>) (a message of a maximum of 140 characters with the possibility to insert pictures or link to websites) and it is possible to trace every message of every user. Hence, it can therefore be argued that Twitter can show and keep track of social relationships.

Social sciences recognised the potential of this tool for research purposes early, investigating a wide range of aspects which often fall into the category of 'sentimental analysis', which counts over 7,000 articles, hundreds of start-ups and statistical packages including dedicated sentiment analysis tools (<sup>13</sup>). Twitter itself created an account in June 2013 named @Twitterdata (<sup>14</sup>) which is specifically aimed at reporting and representing (often visually through interactive maps) results coming from the incredible flow of Tweets published every second on hot topics throughout the world (<sup>15</sup>).

<sup>(12)</sup> In addition to the general rule of up to 140 characters per message there is also a specific language to express a concept with abbreviations, acronyms or Twitter-related words. For some examples see the so-called "Twittonary" in http://www.twittonary.com.

<sup>(13)</sup> See R. FELDMAN, Techniques and Applications for Sentiment Analysis, Communication of the acm, 04/2013, Vol. 56, Iss. 4, p. 82.

<sup>(14)</sup> Cf. <u>https://Twitter.com/TwitterData</u>.

See, as example, the number of Tweets on the EU elections in the UK. @TwitterData, *How #Elections2014 played out on Twitter #animation #map*, in <a href="http://cdb.io/1obYEQJ">http://cdb.io/1obYEQJ</a>. In order to give an idea of the number of Tweets available on hot topics, during the 2014 FIFA World Cup in Brazil 672 million Tweets were published (cf.

Social media (and Twitter in particular) are widely used for commercial purposes (market research, viral marketing, market analysis and customer intelligence) (<sup>16</sup>); they have also been used in the field of behavioural sciences for the analysis of human behaviour and social networks (<sup>17</sup>). Recently, Twitter data has mainly given rise to sentiment analysis and communication studies, analysing the topics of happiness (<sup>18</sup>), social networks (<sup>19</sup>) and the relationship with traditional media (<sup>20</sup>). Research using social media has therefore stressed above all the private sector or focused on sociological-behavioural analysis, but, rarely, on institutions.

With regards to the latter, research has mainly developed analyses of macroscopic socio-economic events, such as the aspects of communication related to politics (e.g. the US presidential elections (<sup>21</sup>)), or has analysed their role in terms of democratisation or support of social change: from the Arab spring (<sup>22</sup>), to the presidential elections in Iran (<sup>23</sup>) or Egypt (<sup>24</sup>), to British unrest during the summer of 2011 (<sup>25</sup>) and, more recently, the unrest in Ukraine.

 $\underline{http://www.theguardian.com/technology/2014/jul/15/Twitter-world-cup-Tweets-germany-brazil)}.$ 

<sup>(16)</sup> MCKINSEY GLOBAL INSTITUTE, Big data: The next frontier for innovation, competition and productivity, McKinsey & Company, June 2011.

<sup>(17)</sup> P. DODDS, K. HARRIS, I. KLOUMANN, C. BLISS, C. DANFORTH, Temporal Patterns of Happiness and Information in a Global Social Network: Hedonometrics and Twitter, PloS one, 2011, Vol. 6, Iss. 12, p. e26752.

<sup>(18)</sup> *Ibidem*.

<sup>(19)</sup> M. CHA, H. HADDADI, F. BENEVENUTO, K.P. GUMMADI, Measuring User Influence in Twitter: The Million Follower Fallacy, Proc. International AAAI Conference on Weblogs and Social Media (ICWSM), May 2010.

<sup>(20)</sup> A. JISUN, M. CHA, K.P. GUMMADI, J. CROCROFT, Media landscape in Twitter: A World of New Conventions and Political Diversity, Proc. International AAAI Conference on Weblogs and Social Media (ICWSM), July 2011.

<sup>(21)</sup> M. CONOVER, J. RATKIEWICZ, M. FRANCISCO, B. GONÇALVES, A. FLAMMINI, F. MENCZER, Political Polarization on Twitter, Proc. of the 5<sup>th</sup> International AAAI Conference on Weblogs and Social Media, AAAI Press, 2011, p. 89.

<sup>(22)</sup> S. ADAY, H. FARRELL, M. LYNCH, J. SIDES, J. KELLY, E. ZUCKERMAN, 2010, *Blogs and Bullets: New Media in Contentious Politics*, Washington, D.C., U.S. Institute of Peace available at <a href="http://www.usip.org/publications/blogs-and-bullets-new-media-in-contentious-politics">http://www.usip.org/publications/blogs-and-bullets-new-media-in-contentious-politics</a>.

 $<sup>(^{23})</sup>$  Ibidem.

<sup>(24)</sup> V.U. AMEL, *Egypt's Presidential Elections and Twitter Talk*, <a href="http://www.jadaliyya.com/pages/index/5716/egypts-presidential-elections-and-Twitter-talk">http://www.jadaliyya.com/pages/index/5716/egypts-presidential-elections-and-Twitter-talk</a>.

<sup>(25)</sup> THE GUARDIAN, LONDON SCHOOL OF ECONOMICS, Reading the Riots. Investigating England's summer of disorder, 2011.

Other studies have shown the effects of social media in increasing the efficiency of public administration, but only from an 'operational-organisational' point of view in terms of cost reduction and transparency.

The extent to which trade unions speak about and to young people has been not investigated, to the knowledge of the author. In this analysis we attempt to fill this gap and assess the possible use of Twitter as a communication and policy tool for trade unions to reach out young people and as an instrument suitable for analysing smaller-scale phenomenon as well, not only macroscopic events.

### 3. METHODOLOGY

From a methodological point of view, social science literature on social media lies on the border with computer science, since automated content analysis has, for the most part, overcome manual analysis (<sup>26</sup>) in order to reach big data. This literature has, however, outlined the limits of machine learning techniques and natural language processing (NLP) in understanding and detecting all shades of human speech, especially when it is as concise or mangled and multi-faceted as 140-character Twitter language (<sup>27</sup>). In this analysis the main purpose is not to collect big data nor to provide statistically representative evidence, but to analyse interaction and communication models of trade unions toward youth (<sup>28</sup>) providing an instant picture of the extent to which trade unions communicate to and about young people.

In doing so, this research attempts to use Twitter social media in order to derive information regarding trade unions communication strategies, with particular

<sup>(26)</sup> G. KING, W. LOWE, An Automated Information Extraction Tool for International Conflict Data with Performance As Good As Human Coders: A Rare Events Evaluation Design, International Organization, 07/2003, Vol. 57, Iss. 3, p. 617.

<sup>(27)</sup> R. PROCTER, F. VIS, A. VOSS, Reading the riots on Twitter: methodological innovation for the analysis of big data, Int J Soc Res Meth, 2013, Vol. 16, Iss. 3, p. 197.

<sup>(28)</sup> S. WASSERMAN, K. FAUST, *Social Network Analysis: Methods and Applications*, Cambridge University Press, 1994.

attention on their relationships with the youth sphere and trade unions centrality in the social media discussion.

The use of Twitter as a database has limits (<sup>29</sup>) connected to the sample size and composition, as well as to a possible lack of representativeness. In fact, Twitter limits the amount of tweets (data) that can be extracted (<sup>30</sup>), while with reference to composition, it is found that Twitter is mostly used by people who are comfortable with technology and mainly liberal (<sup>31</sup>). Also in the field concerned by this analysis, Twitter cannot be considered as representative of all trade unions relationships, however, because of the narrower context it is arguable that some of these institutional relationships are also trackable through Twitter, whose main purpose is indeed to communicate toward others and build network.

The observations were collected using Twitter analytics applications (<sup>32</sup>) to extract and analyse trade unions tweets. A maximum of 3.200 tweets per each of the 30 trade unions included in the analysis - from Belgium, Germany, Italy, the Netherlands, Spain, the United Kingdom (<sup>33</sup>) - were collected on 18 November using Twitonomy. Collected tweets were also translated in English using Google translator.

# 4. TRADE UNIONS TWITTER ANALYTICS

Information and communication are in the midst of a revolution with tangible and undeniable effects. All trade unions are experiencing a moment of redefinition and the rethinking of their roles and responsibilities in societies and seem to recognise the importance of being active and representing today's workers, including through

<sup>(29)</sup> A. MISLOVE, S.L. JØRGENSEN, Y.Y. AHN, J.P. ONNELA, J.N. ROSENQUIST, Understanding the Demographics of Twitter Users, Proc. of the 5<sup>th</sup> International AAAI Conference on Weblogs and Social Media, AAAI Press, 2011, p. 554.

<sup>(30)</sup> Twitonomy allow to extract up to 3.200 twits per account.

<sup>(31)</sup> A. JISUN, M. CHA, K. P. GUMMADI, J. CROCROFT, 2011 (Op. Cit.).

<sup>(32)</sup> Twitonomy. Topsy is also used in the analysis of the requency of occurrence of the work "trade unions" compared to other institutions presented further.

<sup>(33)</sup> Hungarian trade unions do not have a Twitter account at the moment this research was conducted, so restricing the number of countries from 7 to 6.

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innovative communication strategies and they also seem to be aware of their limits in terms of communication (<sup>34</sup>), sorting out their social media presence. This seems particularly crucial for trade unions, considering their claim regarding the necessity to renew by becoming better at reaching out to young people. Before analysing trade unions communication behaviours, it is worth providing a picture of the extent to which trade unions are at the centre of debate.

To what extent trade unions are at the centre of the social media discussions on Twitter compared to other institutions?

In what follows the frequency of tweets per day in a random month concerning the topic "trade unions", with respects to similar topics and comparable socio-political institutions is reported, with the aim of providing a comparison of the extent to which trade unions are at the centre of the debate in societies. In particular, the frequency of occurrence of the word "unions" (<sup>35</sup>) is compared respectively with the words "school", "church", "government", "politics" "taxes" and "strike" for seven languages (English, Dutch, German, Italian, Spanish and French) (<sup>36</sup>).

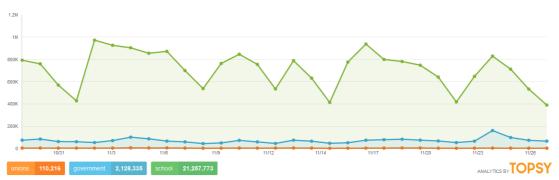
Fig. 5 - Frequency of the occurrence "unions" compared to other institutions in Twitter in a random month (29 October – 28 November 2014)

<sup>(34)</sup> As emerged in trade union representatives interviews collected in the YOUnion national country reports.

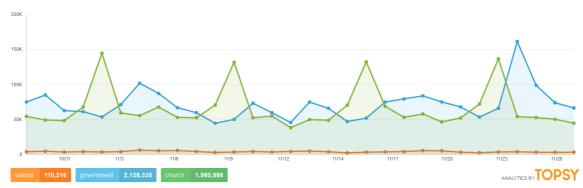
<sup>(35)</sup> The word "unions" is chosen, instead of "trade unions" because it is more informal and used compared to "trade union", especially in maximum 140 characters tweets.

<sup>(36)</sup> The analysis related to languages other than English are provided in Annex 1.

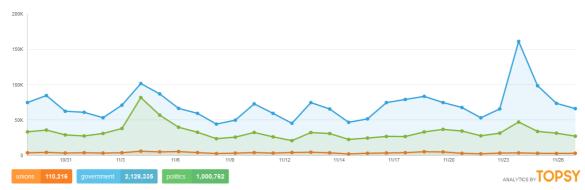
# Tweets per day: unions, government, and school October 29th — November 28th



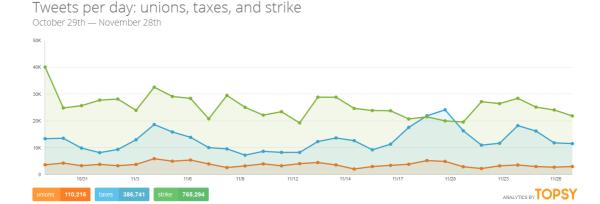
# Tweets per day: unions, government, and church October 29th — November 28th



# Tweets per day: unions, government, and politics October 29th — November 28th



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Source: Elaborations on Topsy data

From the observation of the frequency with which people discuss (or tweets) about certain social institutions, it is possible to see that, in a limited period of time like a random month, the intensity of debate concerning trade unions has been lower than that concerning all other institutions, the same being true for all the seven languages analysed (see Annex 2). If 110.000 tweets have been written in a random month containing the word "unions" (in English), 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 tweets, 190 times higher than unions. Looking at more homogeneous topics like "taxes" and "strike", one can see 7 times higher frequency for "strike" and 3,5 times higher frequency for "taxes" compared to "unions".

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

There is a great amount of variance between countries in the way in which trade unions communicate via Twitter.

All the analysed trade unions in Belgium, Germany, Italy, the Netherlands, Spain and the United Kingdom do include appropriate links to social networks on their web pages, and, specifically Twitter accounts. For each country, the main trade unions (including their young groups, when existent) have been searched. Existing

accounts are summarised in descending order with respect to the number of Followers in Table 1.

Table 1 – Trade unions Twitter account (sorting descending by number of Followers)

Trade union	Country	Following	Followers	N.	Averag
				of	e N. of
				tweets	tweets
					per day
CGIL - Confederazione Generale Italiana del Lavoro	IT	884	44000	16800	39
Unite - the Union	UK	843	31800	15000	23
CCOO - Comisiones Obreras	ES	12700	30400	14200	12,5
UNISON - the union	UK	2096	28300	16200	22
UGT - Unión General de Trabajadores	ES	6284	19900	26700	33
PCS - Public and Commercial Services Union	UK	911	17400	13600	
CNT - Confederación Nacional del Trabajo	ES	331	9535	3637	2,8
DGB Bundesvorstand	DE	1866	9358	4130	2
CISL – Confederazione Italiano Sindacati dei Lavoratori	IT	613	8990	46400	51
GMB - General, Municipal, Boilermakers and Allied Trade Union	UK	170	7383	1766	
FNV - Federatie Nederlandse Vakbeweging	NL	6017	6286	2045	1,3
TUC – Trades Union Congress	UK	1307	5798	18300	14,5

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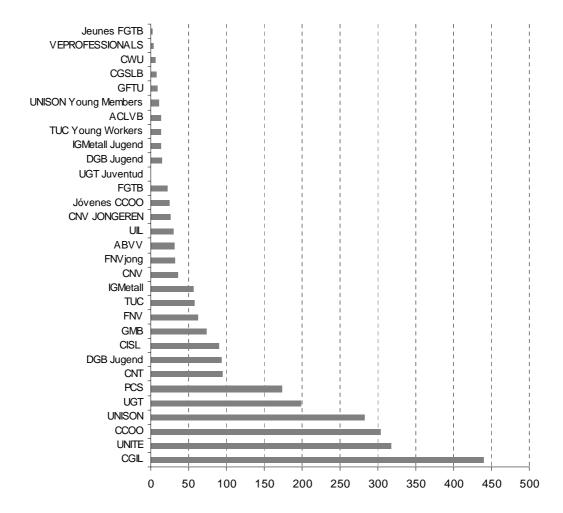
IGMetall	DE	260	5640	7987	3,3
CNV - Christelijk Nationaal Vakverbond	NL	448	3668	2750	1,3
FNVjong	NL	1738	3279	1539	0,8
ABVV - Algemeen Belgisch Vakverbond	BE	2474	3068	1163	1,1
UIL – Unione italiana del lavoro	IT	541	3044	1561	1,7
CNV Jongeren	BE	391	2667	1655	0,8
Jóvenes CCOO	ES	487	2517	1056	0,8
FGTB - Fédération Générale du Travail de Belgique	BE	1785	2285	490	0,4
UGT Juventud	ES	747	2139	3291	2,3
DGB Jugend	DE	349	1465	1370	1,3
IGMetall Jugend	DE	108	1355	1058	0,5
TUC Young Workers	UK	236	1.336	1.672	2,6
ACLVB - Algemene Centrale der Liberale Vakbonden van België	BE	254	1334	1334	0,6
UNISON Young Members	UK	225	1155	1796	2
GFTU - General Federation of Trade Unions	UK	1673	883	1229	1,3
CGSLB - Centrale Générale des Syndicats Libéraux de Belgique	BE	188	695	1074	0,5
CWU - Communication Workers Union	UK	219	687	345	0,8
VCProfessionals - De Vakcentrale voor Professionals	NL	28	340	214	0,1

Jeunes FGTB BE	43	188	68	0,2
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Source: Twitter

Note: On 14 November 2014

Fig. 6 – Trade unions' Followers in Belgium, Germany, Italy, Spain, the Netherlands and the UK (in hundreds)



Source: Elaboration on Twitter

At the top one can find CGIL (IT) with 44.000 Followers, followed by Unite - the Union (UK), CCOO - Comisiones Obreras (ES) and UNISON – the union (UK), with around 30.000 Followers. Other UK and Spanish trade unions accounts follow – UGT - Unión General de Trabajadores and PCS- Public and Commercial Services

Union - with less than 20.000 Followers, while other trade unions do not reach 10.000 Followers. Column 5 of table 1 reports the average number of tweets sent per day by trade union: the higher the number the more active the user. Results show that, in general, accounts registering higher number of Followers are also those that are more active in publishing tweets.

Trade unions' influence cannot be proxied by the number of Followers per se, as this is likely to vary depending on several factors, primarily the strategy used in Twitter and size of the potential target population. Relative indicators of trade unions' influence on Twitter are reported in table 2.

Table 2 – Relative influence of trade unions on Twitter, in descending order by Followers/ potential target population

	Followers/ Following	Followers / potential populatio n ( <sup>37</sup> )	Listed/ 1000 Followers	% of tweets being retweeted	% of tweets being favorited (40)
CGIL (IT)	49	9,2	12,04	31,6	27,7
CCOO (ES)	2,4	8,1	22,5	77,4	57,2
Unite (UK)	37,7	6,2	18,5	87,4	70,8
UNISON (UK)	13	5,5	19,2	43,1	36,1
UGT (ES)	3,2	5,3	26,3	53,9	24
FNV (NL)	1	4,7	18,7	55,5	9,6
CNV (BE)	8,1	4,1	36,2	39,5	5,4
ABVV (BE)	1,1	3,4	13,2	56,3	20,3
PCSUnion (UK)	19	3,4	18,5	54,5	38,7
CNV Jongeren (BE)	6,8	3,0	35,9	29,2	4,2
FGT (BE)	1,3	2,6	21,2	64,2	19,3
CNT (ES)	28	2,6	17,2	72	36,4

<sup>(37)</sup> Calculated as: (N. Followers/N. internet users)\*10000. Source of data on internet users: Eurostat (38) Calculated as: N. of people who added the user to a public list / 1000 Followers

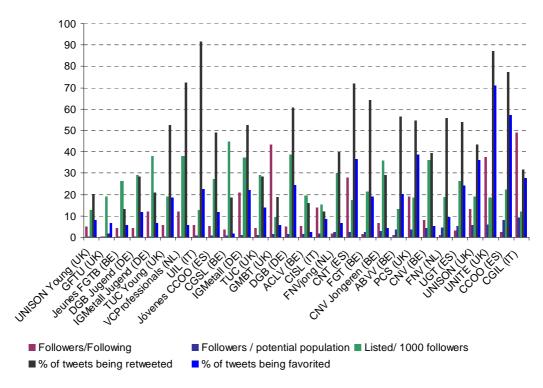
<sup>(39)</sup> The analysis considers the last 3000 tweets of the account, recorded on th 18th of November 2014.

<sup>(40)</sup>The analysis considers the last 3200 tweets of the account, recorded on th 18th of November 2014. For certain trade unions, the total number of tweets is lower than 3.200, the maximum amount that can be extracted through Twitonomy.

FNVjong (NL)	1,9	2,4	30,3	39,9	6,9
CISL (IT)	14	1,9	15,4	12,2	8,4
ACLV (BE)	5,3	1,5	19,4	16	2,4
GMBT (UK)	43,4	1,4	9,7	18,7	5,7
DGB (DE)	5	1,4	38,5	60,8	24,4
TUC (UK)	4,4	1,1	29	28,4	13,9
IGMetall (DE)	21	0,9	37,4	52,5	21,9
CGSL (BE)	3,7	0,8	44,54	18,3	1,8
Jóvenes CCOO (ES)	5,2	0,7	27,4	49	11,6
Uil (IT)	5,6	0,6	12,7	91,5	22,7
TUC Young Workers (UK)	5,7	0,3	19,1	52,4	18,3
VC Professionals (NL)	12,1	0,3	38,1	72,4	5,6
UNISON Young Members (UK)	5,1	0,2	12,9	20,2	8,2
DGB Jugend (DE)	4,2	0,2	29	28,4	11,8
Jeunes FGTB (BE)	4,4	0,2	26,1	13,2	5,8
IGMetall Jugend (DE)	12	0,2	38	20,9	6,9
GFTU (UK)	0,5	0,2	19,1	1,88	6,7

Source: Twitter

Figure 7 - Relative trade union influence on Twitter, in descending order by influence relative to potential target population



Source: Elaboration on Twitter

Concerning the first dimension, the so-called "follow-first rule" ("I follow you then hopefully you follow me") is one of the most used strategy to increase the number of Followers on Twitter (<sup>41</sup>). Therefore, as an indicator, the "ratio of Followers per persons followed" is included, a high ratio combined to a large follower base indicating that the user is very influential (column 1).

The second dimension to be taken into account when looking at trade unions influence in different countries is the population of reference. Here the potential population is calculated as the number of people having access to the internet in the country (column 2). This number seems to be indeed more useful than membership rate because it provides information on the potential population that can be reached, so including non-members and youth. Another measure that is useful to derive trade

<sup>(41)</sup> Twitter puts limits on the number of following: "Every account can follow 2,000 users total. Once you've followed 2,000 users, there are limits to the number of additional users you can follow. This number is different for each account and is based on your ratio of Followers to following; this ratio is not published."

unions' influence is the number of users who added the trade union account to a public list (per 1000 Followers), a high number combined to a large follower base meaning that the user's tweets are considered very relevant to others (column 3). Finally, two telling measures are the proportion of user's tweets that are retwited (column 4) or signed as "favourite" (column 5) by others, the higher these numbers the more the trade union is considered a valuable source of information by others. The recalculated representation of trade unions' influence is shown in Table 2 and, graphically, in Figure 7, representing the relative influence of trade unions with reference to the multiple dimensions presented (follower - following ratio, Followers related to potential target population, ratio of tweets listed on 1000 Followers, % of tweets that are retwited and % of tweets that are marked as favourite).

According to these dimensions, the more relatively influent trade unions are to be found in Spain and the UK. In particular Unite (UK) is in the top five according to 4 out of 5 indicators, followed by CCOO (ES) and CNT (ES), scoring in the top 5 in 3 out of 5 indicators. 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 1000 potential ones. The second most penetrating trade union according to this indicator is CCOO (Spain) with 8 persons reached out of 10.000, followed by Unite (UK) with 6, Unison (UK) with 5 and UGT (Spain) with 5.

To what extent do trade unions interact with others, how much and with whom?

Interaction is crucial for increasing networks, establishing new relationships and communicating ideas to others in a targeted manner. Interaction via Twitter is interpreted as the virtual representation of trade unions institutional relationships or at least the "declared" ones.

In what follows interaction is measured quantitatively (Table 3) and qualitatively. Table 3 presents the indicators "average number of mentions per tweet",

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"percentage of retweets in the total of analysed tweets", "percentage of replies in the total of analysed tweets", higher numbers, higher the interaction level with others.

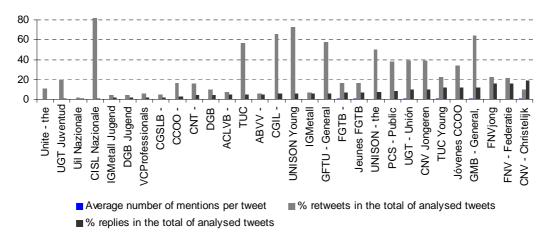
Table 3 – Indicators of trade unions interaction with others, in descending order by percentage of replies

	Average	%	%
	number	retweets	replies
	of	in the	in the
	mentions	total of	total of
	per	analysed	analysed
	tweet	tweets	tweets
CNV - Christelijk Nationaal Vakverbond	0,6	10	19,1
FNV - Federatie Nederlandse Vakbeweging	0,3	21,3	16
FNVjong	0,3	22,1	15,3
GMB - General, Municipal, Boilermakers and			
Allied Trade Union	0,6	64,4	11,6
Jóvenes CCOO	0,3	34,2	11,4
TUC Young Workers	0,5	22,2	11,3
CNV Jongeren	0,3	38,7	10,1
UGT - Unión General de Trabajadores	0,5	38,9	9,6
PCS - Public and Commercial Services Union	0,3	37,7	8,2
UNISON - the union	0,3	49,9	7,7
FGTB - Fédération Générale du Travail de			
Belgique	0,6	16,7	6,7
Jeunes FGTB	0,6	16,7	6,7
GFTU - General Federation of Trade Unions	0,1	57,4	6
IGMetall	0,1	6,3	6
UNISON Young Members	0,1	72,8	5,7
CGIL - Confederazione Generale Italiana del			
Lavoro	0,3	65,8	5,5
ABVV - Algemeen Belgisch Vakverbond	0,2	5,8	5,2
TUC	0,3	57,3	5
ACLVB - Algemene Centrale der Liberale			
Vakbonden van België	0,1	7,7	4,8
DGB Bundesvorstand	0,1	9,8	4,3
CNT - Confederación Nacional del Trabajo	0,3	15,6	3,9
CCOO - Comisiones Obreras	0,4	16,1	2,3
CGSLB - Centrale Générale des Syndicats			
Libéraux de Belgique	0	5	1,9
VCProfessionals - De Vakcentrale voor			
Professionals	0	6	1,8

DGB Jugend	0	3,8	1,5
IGMetall Jugend	0	4,2	1,4
CISL Nazionale	0,1	86,5	1
Uil Nazionale	0,1	1,4	1
UGT Juventud	0,1	20	0,8
Unite - the Union	0,2	11	0,1

Source: Twitter

Fig. 8 - Indicators of trade unions interaction with others, in descending order by percentage of replies



Source: Elaboration on Twitter

In order to analyse also qualitatively the interaction of trade unions on Twitter, the most interacted users have been distinguished by type, and more in particular in: "Same trade union" (it includes trade unions' branches and persons working for the trade union itself), "Other trade union" (it includes other trade unions' accounts and persons working for other trade unions), "Politics" (it includes persons belonging to the politics sphere), "External person" (it includes persons not belonging to previous categories), "Young sphere" (it includes accounts related to the young sphere, such as youth organisations or young groups), "Media" (newspaper, radio and other media Twitter accounts). The 5 most interacted users have been collected for all trade unions concerned, for a total of 115 most interacted users.

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Looking at interaction by type of interacted users, it is possible to observe the general tendency of trade unions to interact mostly with themselves: 55 over 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 and persons working in the trade union. The second most interacted users belong instead to media, such as newspaper, radio and other media accounts (19 su 115 most interacted users), while the third most interacted users are "External" to the trade union sphere (16 out of 115) and belonging 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 (Annex 3).

The analysis of the users most interacted by trade unions confirms what previous studies showed in general, i.e. only a small percentage of contacts are frequently contacted by a user and can be considered "friend", irrespective of the declared number of "Followees", this being real on a simple mobile phone as well as on Facebook (<sup>42</sup>) or Twitter.

Following Huberman, Romero and Wu (<sup>43</sup>) a "friend" is defined as a person whom the user has directed at least two posts (in the form of retweets, replies or mentions). Using this definition and searching in the last 3.200 tweets of trade unions it is possible to find out how many friends each trade union has and compare this number with the number of Followees it declared, showing the actual driver of Twitter user's activity.

### Table 4 – Friends versus Following

<sup>(42)</sup> S. A. GOLDER, D. WILKINSON, B. A. HUBERMAN, *Rhythms of Social Interaction: Messaging within a Massive Online Network*, 3rd International Conference on Communities and Technologies, 2007

<sup>(43)</sup> B. A. HUBERMAN, D. M. ROMERO, F. WU, Social networks that matter: Twitter under the microscope, December 4, 2008

Trade union	Country	Following	Friends	Friends ratio
CGIL - Confederazione Generale Italiana del Lavoro	IT	884	23	0,026
Unite - the Union	UK	843	18	0,021
CCOO - Comisiones Obreras	ES	12700	22	0,001
UNISON - the union	UK	2096	23	0,010
UGT - Unión General de Trabajadores	ES	6284	22	0,003
PCS - Public and Commercial Services Union	UK	911	23	0,025
CNT - Confederación Nacional del Trabajo	ES	331	17	0,051
DGB Bundesvorstand	DE	1866	23	0,012
CISL Nazionale	IT	613	22	0,035
GMB - General, Municipal, Boilermakers and Allied Trade Union	UK	170	23	0,135
FNV - Federatie Nederlandse Vakbeweging	NL	6017	22	0,003
TUC	UK	1307	27	0,020
IGMetall	DE	260	23	0,088
CNV - Christelijk Nationaal Vakverbond	NL	448	24	0,053
FNVjong	NL	1738	23	0,013
ABVV - Algemeen Belgisch Vakverbond	BE	2474	24	0,009
Uil Nazionale	IT	541	15	0,027
CNV Jongeren	BE	391	17	0,043
Jóvenes CCOO	ES	487	22	0,045
FGTB - Fédération Générale du Travail de Belgique	BE	1785	20	0,011
UGT Juventud	ES	747	20	0,026
DGB Jugend	DE	349	14	0,040
IGMetall Jugend	DE	108	11	0,101
TUC Young Workers	UK	236	17	0,072
ACLVB - Algemene Centrale der Liberale Vakbonden van	BE	254	23	0,090

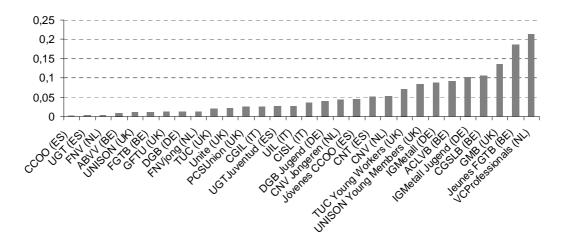
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België				
UNISON Young Members	UK	225	19	0,084
GFTU - General Federation of Trade Unions	UK	1673	20	0,011
CGSLB - Centrale Générale des Syndicats Libéraux de Belgique	BE	188	20	0,106
VCProfessionals - De Vakcentrale voor Professionals	NL	28	6	0,214
Jeunes FGTB	BE	43	8	0,186

Source: Elaboration on Twitter

Table 4 compares the number of trade unions' friends with the number of Followees they declare. Since the total of the users have fewer friends than Followees, almost all the values are less than 1.

Fig. 8 - Trade unions' friends ratio



Source: Elaboration on Twitter

Figure 8 shows a histogram of the values. As we can see most users have a value less than .1, with the number of users with a close to 1 extremely small. The average of the values is 0,052.

This indicates, as in Huberman, Romero and Wu, that the number of friends trade unions have is very small compared to the number of people they actually follow. Thus, even though users declare that they follow many people using Twitter, they only keep in touch with a small number of them.

To what extent trade unions speak about youth?

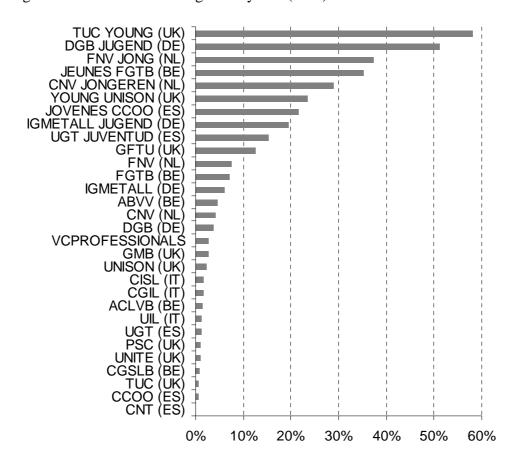


Fig. 9 - Trade unions tweeting about youth (in %)

Source: Elaboration on Twitter

Finally, Figure 9 depicts the percentage of tweets that include the word "youth" (and similar words such as "youth", translated in all languages concerned).

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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 (from minimum of 0,2% of CNT-Spain to a maximum of 13% of GFTU-UK).

When analysing tweets published by trade unions youth branches (when existent), youth are of course more at the centre of communications (32% on average), thus suggesting as possible interpretation the fact that youth, in practice, are considered as a topic that is out of national trade unions' ordinary agenda and daily business, falling instead mostly in youth specific trade unions' business, and thus supporting the hypothesis that youth membership is not specifically addressed by national trade unions, especially in those countries where no specific youth department of unions exists.

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# ANNEX 1

Trade union	Twitter account	Country
Confederazione Generale Italiana del Lavoro	@cgilnazionale	IT
Unite - the Union	@unitetheunion	UK
Comisiones Obreras	@CCOO	ES
UNISON - the union	@unisontweets	UK
Unión General de Trabajadores	@UGT_Comunica	ES
Public and Commercial Services Union	@pcs_union	UK
Confederación Nacional del Trabajo	@cnt1910	ES
DGB Bundesvorstand	@dgb_news	DE
CISL Nazionale	@CislNazionale	IT
General, Municipal, Boilermakers and Allied Trade Union	@GMB_union	UK
Federatie Nederlandse Vakbeweging	@FNV	NL
Trade Union Congress Union of Shop, Distributive and Allied Workers	@TUCGlobal	UK
IGMetall	@IGMetall	DE
Christelijk Nationaal Vakverbond	@vakbond	NL
FNVjong	@FnvJong	NL
Algemeen Belgisch Vakverbond	@VlaamsABVV	BE
Uil Nazionale	@UILofficial	IT
Christelijk Nationaal Vakverbond Jongeren	@CNVJongeren	BE
Jóvenes CCOO	@JovenesCCOO	ES
Fédération Générale du Travail de Belgique	@FGTBwallonne	BE
UGT Juventud	@ugtjuventudcec	ES
DGB Jugend	@DGBJugend	DE
IGMetall Jugend	@IGMetall_Jugend	DE

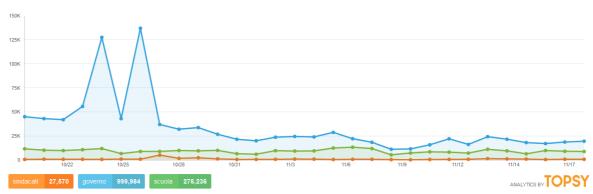
TUC Young Workers	@TUCYoungWorkers	UK
Algemene Centrale der Liberale Vakbonden van België	@ACLVB	BE
UNISON Young Members	@YoungUNISON	UK
General Federation of Trade Unions	@GFTU 1	UK
Centrale Générale des Syndicats Libéraux de Belgique	@CGSLB	BE
De Vakcentrale voor Professionals	@VCProfessionals	NL
Jeunes FGTB	@JeunesFGTB	BE

# ANNEX 2

# Italian

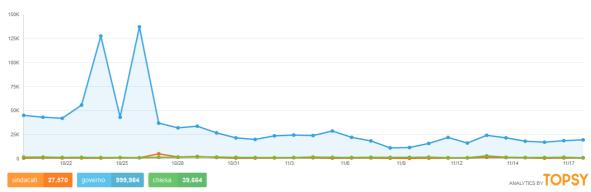
# Tweets per day: sindacati, governo, and scuola

October 20th — November 19th



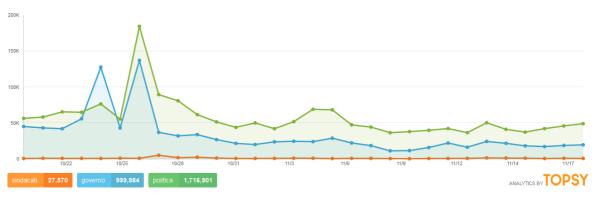
# Tweets per day: sindacati, governo, and chiesa

October 20th — November 19th

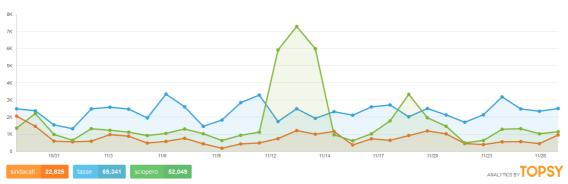


# Tweets per day: sindacati, governo, and politica

October 20th — November 19th

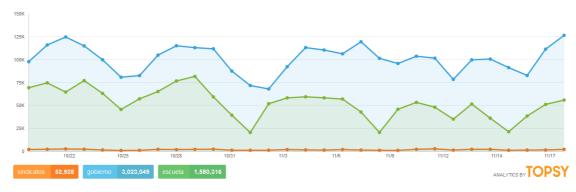


Tweets per day: sindacati, tasse, and sciopero October 29th — November 28th

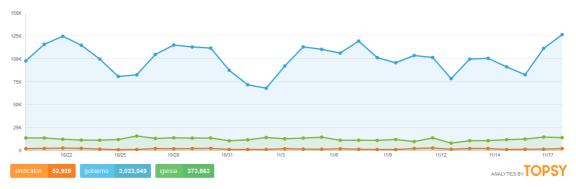


# Spanish

Tweets per day: sindicatos, gobierno, and escuela October 20th — November 19th

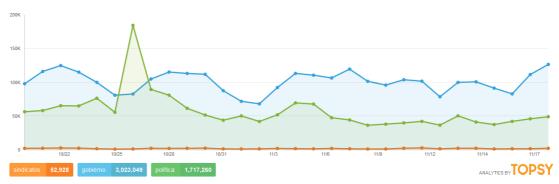


Tweets per day: sindicatos, gobierno, and iglesia October 20th — November 19th

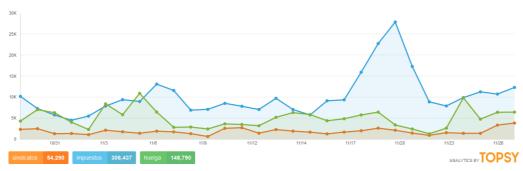


# Tweets per day: sindicatos, gobierno, and política

October 20th — November 19th

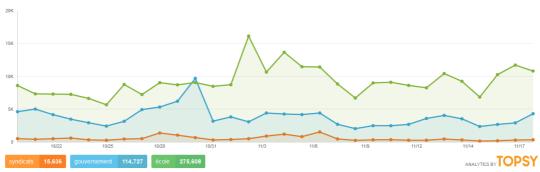


# Tweets per day: sindicatos, impuestos, and huelga October 29th — November 28th

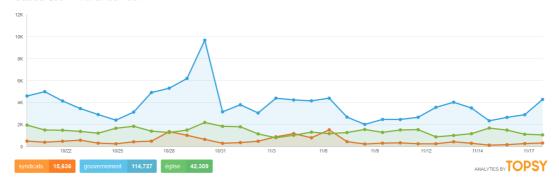


# French

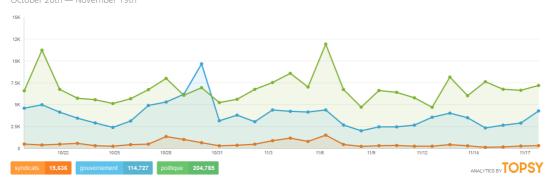
# Tweets per day: syndicats, gouvernement, and école October 20th — November 19th



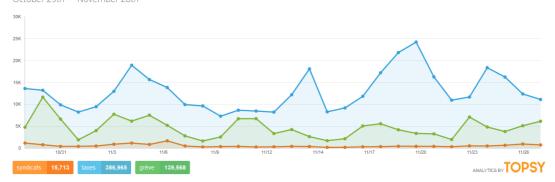
Tweets per day: syndicats, gouvernement, and église October 20th — November 19th



Tweets per day: syndicats, gouvernement, and politique  $_{\rm October\,20th\,-\,November\,19th}$ 



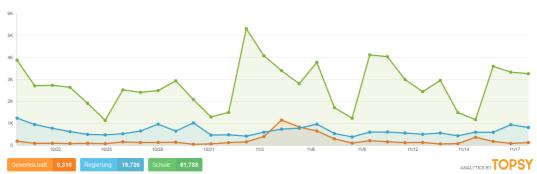
Tweets per day: syndicats, taxes, and grève October 29th — November 28th



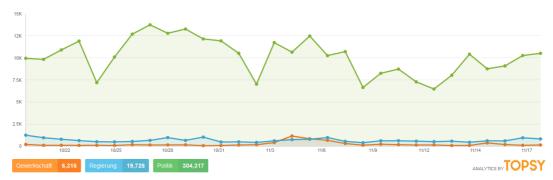
German

F. FAZIO

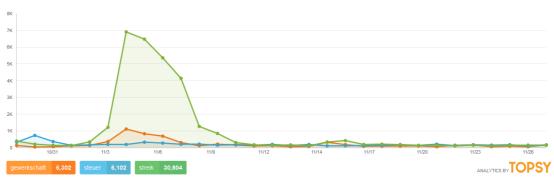
# Tweets per day: Gewerkschaft, Regierung, and Schule October 20th — November 19th



# Tweets per day: Gewerkschaft, Regierung, and Politik $_{\rm October\,20th}$ – $_{\rm November\,19th}$



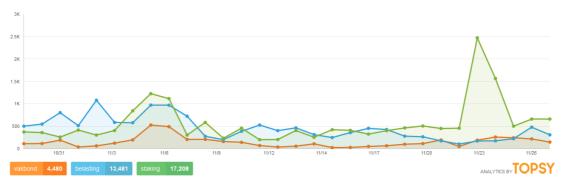
# Tweets per day: gewerkschaft, steuer, and streik October 29th — November 28th



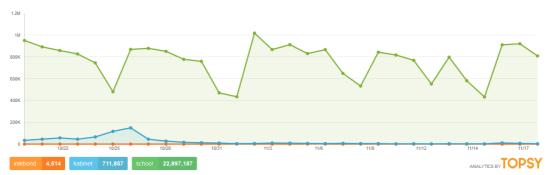
Dutch

# Tweets per day: vakbond, belasting, and staking

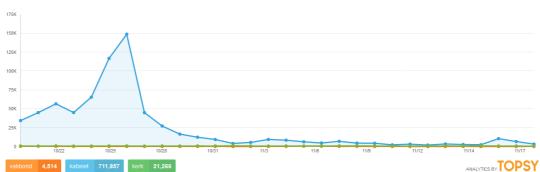
October 29th — November 28th



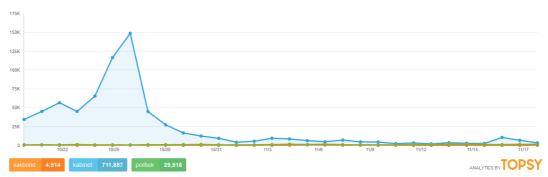
# Tweets per day: vakbond, kabinet, and school $_{\rm October\,20th\,-\,November\,19th}$



# Tweets per day: vakbond, kabinet, and kerk $_{\rm October\,20th\,-\,November\,19th}$



# Tweets per day: vakbond, kabinet, and politiek October 20th — November 19th



ANNEX 3

Following statistics have been extracted on 18 November 2014 using Twitonomy premium.

Name of trade	Count	N. of	Sa	Oth	Politi	Exter	Yout	Med
union	ry	times	me	er	cs	nal	h	ia
			trad	trad			sphe	
			e	e			re	
			uni	unio				
			on	n				
ABVV	BE	57						X
ABVV	BE	29	X					
ABVV	BE	16						X
ABVV	BE	11						X
ABVV	BE	10						X
ABVV	BE	9		X				
ABVV	BE	8	X					
ABVV	BE	8	X					
ABVV	BE	7	X					
ABVV	BE	4	X					
ABVV	BE	4						
ABVV	BE	2		X				
ABVV	BE	2	X					
ABVV	BE	2	X					
ABVV	BE	2				X		
ABVV	BE	2	X					
ABVV	BE	2				X		
ABVV	BE	2				X		
ABVV	BE	2				X		

ABVV	BE	2				X		
ABVV	BE	2				X		
ABVV	BE	2				X		
ABVV	BE	2				X		
ABVV	BE	2				X		
ACLVB	BE	36	X					
ACLVB	BE	22	X					
ACLVB	BE	14	X					
ACLVB	BE	14				X		
ACLVB	BE	10				X		
ACLVB	BE	8				X		
ACLVB	BE	7	X					
ACLVB	BE	6	X					
ACLVB	BE	5	X					
ACLVB	BE	5		X				
ACLVB	BE	4						X
ACLVB	BE	4			X			
ACLVB	BE	3					X	
ACLVB	BE	3						X
ACLVB	BE	3					X	
ACLVB	BE	3				X		
ACLVB	BE	2	X					
ACLVB	BE	2				X		
ACLVB	BE	2				X		
ACLVB	BE	2				X		
ACLVB	BE	2				X	_	
ACLVB	BE	2			X			
ACLVB	BE	2					X	

CCOO	ES	113				X
CCOO	ES	92	X			
CCOO	ES	62	X			
CCOO	ES	45				X
CCOO	ES	34	X			
CCOO	ES	33	X			
CCOO	ES	22	X			
CCOO	ES	16	X			
CCOO	ES	15				X
CCOO	ES	15				X
CCOO	ES	15	X			
CCOO	ES	13	X			
CCOO	ES	13	X			
CCOO	ES	12	X			
CCOO	ES	11	X			X
CCOO	ES	9			X	
CCOO	ES	9	X			
CCOO	ES	9			X	
CCOO	ES	2			X	
CCOO	ES	2			X	
CCOO	ES	2			X	
CCOO	ES	2			X	
CGIL	IT	135				X
CGIL	IT	116	Х			
CGIL	IT	76	Х			
CGIL	IT	95	Х			
CGIL	IT	99	Х			
CGIL	IT	44	X			

CGIL	IT	44	X			
CGIL	IT	41	X			
CGIL	IT	90				X
CGIL	IT	38	X			
CGIL	IT	50	X			
CGIL	IT	6			X	
CGIL	IT	5			X	
CGIL	IT	4			X	
CGIL	IT	4			X	
CGIL	IT	4	X			
CGIL	IT	4			X	
CGIL	IT	3				X
CGIL	IT	3	X			
CGIL	IT	29	X			
CGIL	IT	27	X			
CGIL	IT	24	Х			
CGIL	IT	20	X			
CGSLB	BE	12		X		
CGSLB	BE	11	Х			
CGSLB	BE	10	X			
CGSLB	BE	6			X	
CGSLB	BE	5	X			
CGSLB	BE	5				X
CGSLB	BE	4			X	
CGSLB	BE	4				X
CGSLB	BE	4		X		
CGSLB	BE	3			X	
CGSLB	BE	3				X

CGSLB	BE	3					X	
CGSLB	BE	3	X					
CGSLB	BE	3	X					
CGSLB	BE	2		X				
CGSLB	BE	2	X					
CGSLB	BE	2			X			
CGSLB	BE	2				X		
CGSLB	BE	2				X		
CGSLB	BE	2				X		
CISL Nazionale	IT	1286	X					
CISL Nazionale	IT	226	X					
CISL Nazionale	IT	91	X					
CISL Nazionale	IT	80						X
CISL Nazionale	IT	78	X					
CISL Nazionale	IT	63	X					
CISL Nazionale	IT	61	X					
CISL Nazionale	IT	60	X					
CISL Nazionale	IT	53	X					
CISL Nazionale	IT	53			X			
CISL Nazionale	IT	45				X		
CISL Nazionale	IT	38	X					
CISL Nazionale	IT	21	X					
CISL Nazionale	IT	12						X
CISL Nazionale	IT	11	X					
CISL Nazionale	IT	8						X
CISL Nazionale	IT	6						X
CISL Nazionale	IT	6						X
CISL Nazionale	IT	6			X			

CISL Nazionale	IT	3			X		
CISL Nazionale	IT	2			X		
CISL Nazionale	IT	2		X			
CNT	ES	79	X				
CNT	ES	66	X				
CNT	ES	60	X				
CNT	ES	54	X				
CNT	ES	52	X				
CNT	ES	45	X				
CNT	ES	43	X				
CNT	ES	40	X				
CNT	ES	37	X				
CNT	ES	31			X		
CNT	ES	27	X				
CNT	ES	19	X				
CNT	ES	12	X				
CNT	ES	5			X		
CNT	ES	3			X		
CNT	ES	3	X				
CNT	ES	3	X				
DGB	DE	49		X			
DGB	DE	41		X			
DGB	DE	23	X			X	
DGB	DE	20		X			
DGB	DE	17	X				
DGB	DE	11		X			
DGB	DE	11		X		X	
DGB	DE	9	X				

DGB	DE	9	X					X
DGB	DE	9	X					
DGB	DE	8				Х		
DGB	DE	8		X				
DGB	DE	8				X		
DGB	DE	8	X				X	
DGB	DE	7		X				
DGB	DE	3					X	
DGB	DE	3				X		
DGB	DE	3				X		
DGB	DE	3		X			X	
DGB	DE	3				Х		
DGB	DE	3				Х		
DGB	DE	3				Х		
DGB	DE	2			X			
DGB Jugend	DE	11		X			X	
DGB Jugend	DE	10	X					
DGB Jugend	DE	7	X				X	
DGB Jugend	DE	6	X				X	
DGB Jugend	DE	4		X				
DGB Jugend	DE	3				X		
DGB Jugend	DE	3		X			X	
DGB Jugend	DE	2	X					
DGB Jugend	DE	2	X					
DGB Jugend	DE	2				X		
DGB Jugend	DE	2	X				X	
DGB Jugend	DE	2						Х
DGB Jugend	DE	2		X			X	

DGB Jugend	DE	2	X					
FGTB	BE	9	Х					
FGTB	BE	7		X				
FGTB	BE	5		Х				
FGTB	BE	3						
FGTB	BE	3	X					
FGTB	BE	3						X
FGTB	BE	2				X		
FGTB	BE	2	X					
FGTB	BE	11	Х					
FGTB	BE	14	X					
FGTB	BE	2				X		
FGTB	BE	10						X
FGTB	BE	9	X					
FGTB	BE	6						X
FGTB	BE	6				X		
FGTB	BE	6	X					
FGTB	BE	6			X			
FGTB	BE	6						X
FGTB	BE	6						
FGTB	BE	5		X				
IGMetall	DE	29	X					
IGMetall	DE	14			X			
IGMetall	DE	17			_	X		
IGMetall	DE	17	X					
IGMetall	DE	7	X				X	
IGMetall	DE	25						X
IGMetall	DE	7						X

IGMetall	DE	6					X
IGMetall	DE	5	Х				
IGMetall	DE	4		X			
IGMetall	DE	22					
IGMetall	DE	18			X		
IGMetall	DE	5			X		
IGMetall	DE	5			X		
IGMetall	DE	4			X		
IGMetall	DE	4			X		
IGMetall	DE	16		X			
IGMetall	DE	4			X		
IGMetall	DE	4			X		
IGMetall	DE	3			X		
IGMetall	DE	12	X				
IGMetall	DE	11			X		
IGMetall	DE	8		X			
IGMetall	DE	34					X
Jugend							
IGMetall	DE	27	X				
Jugend							
IGMetall	DE	9					X
Jugend							
IGMetall	DE	6			X		
Jugend							
IGMetall	DE	4					Х
Jugend							
IGMetall	DE	3	Х				
Jugend							
IGMetall	DE	3		X		X	

Jugend							
IGMetall	DE	3	X			X	
Jugend							
IGMetall	DE	2				Х	
Jugend							
IGMetall	DE	2	X			X	
Jugend							
IGMetall	DE	2				X	
Jugend							
Jeunes FGTB	BE	6	X				
Jeunes FGTB	BE	5					X
Jeunes FGTB	BE	3	X				
Jeunes FGTB	BE	2					X
Jeunes FGTB	BE	2					X
Jeunes FGTB	BE	2	X				
Jeunes FGTB	BE	2	X				
Jeunes FGTB	BE	3					X
GFTU	UK	30		X			
GFTU	UK	25			Х		
GFTU	UK	21			X		
GFTU	UK	14		X			
GFTU	UK	14					X
GFTU	UK	16		X			
GFTU	UK	15		X		X	
GFTU	UK	22			X		
GFTU	UK	11					X
GFTU	UK	17		X		X	
GFTU	UK	19		X		X	
GFTU	UK	2			X		

GFTU	UK	2		X				X
GFTU	UK	2						
GFTU	UK	2		X			Х	
GFTU	UK	2				X		
GFTU	UK	4		X				
GFTU	UK	4		X				
GFTU	UK	3		X				
GFTU	UK	3						X
CNV	NL	297	X					
CNV	NL	51	X					
CNV	NL	35				X		
CNV	NL	28						X
CNV	NL	26		X				
CNV	NL	25						
CNV	NL	24			X			
CNV	NL	23	X					
CNV	NL	23	X					
CNV	NL	22	X					
CNV	NL	21	X					
CNV	NL	17	X					
CNV	NL	14				X		
CNV	NL	10	X				X	
CNV	NL	9				X		
CNV	NL	8	X					
CNV	NL	8	X					
CNV	NL	8		X				
CNV	NL	8				X		
CNV	NL	7						Х

CNV	NL	7			X		
CNV	NL	7			X		
CNV	NL	7			X		
CNV	NL	6			X		
FNV	NL	68	X				
FNV	NL	33	X				
FNV	NL	30	X				
FNV	NL	28	X			X	
FNV	NL	26	X				
FNV	NL	13	X				
FNV	NL	12			X		
FNV	NL	12	X				
FNV	NL	11	X				
FNV	NL	11			X		
FNV	NL	9	X				
FNV	NL	8	X				
FNV	NL	8	X				
FNV	NL	8				X	
FNV	NL	7					X
FNV	NL	7					X
FNV	NL	6					X
FNV	NL	5			X		
FNV	NL	5					X
FNV	NL	5	X				
FNV	NL	4				X	
FNV	NL	4			X		
FNV JONG	NL	82				X	
FNV JONG	NL	43	X				

FNV JONG	NL	20	X				
FNV JONG	NL	19			X		
FNV JONG	NL	16				X	
FNV JONG	NL	16	X				
FNV JONG	NL	14			X		
FNV JONG	NL	14		Х			
FNV JONG	NL	12			X		
FNV JONG	NL	6	X				
FNV JONG	NL	6				X	
FNV JONG	NL	6				X	
FNV JONG	NL	6	X				
FNV JONG	NL	6				X	
FNV JONG	NL	6					X
FNV JONG	NL	5	X				
FNV JONG	NL	5	X				
FNV JONG	NL	5			X		
FNV JONG	NL	5			X		
FNV JONG	NL	5			X		
FNV JONG	NL	4				X	
FNV JONG	NL	3				X	
FNV JONG	NL	3			X		
GMB	UK	154	X				
GMB	UK	89	X				
GMB	UK	62			X		
GMB	UK	58	X				
GMB	UK	45		Х			
GMB	UK	44	X				
GMB	UK	44					Х

GMB         UK         28         x           GMB         UK         25         x           GMB         UK         21         x           GMB         UK         20         x           GMB         UK         20         x           GMB         UK         19         x           GMB         UK         17         x           GMB         UK         15         x           GMB         UK         8         x           GMB         UK         6         x           GMB         UK         5         x           GMB         UK         4         x           GOOD         X         X	
GMB         UK         21         x           GMB         UK         20         x           GMB         UK         20         x           GMB         UK         19         x           GMB         UK         17         x           GMB         UK         15         x           GMB         UK         8         x           GMB         UK         6         x           GMB         UK         5         x           GMB         UK         5         x           GMB         UK         4         x           JOVENES         ES         52         x	
GMB         UK         20         x           GMB         UK         20         x           GMB         UK         19         x           GMB         UK         17         x           GMB         UK         15         x           GMB         UK         8         x           GMB         UK         6         x           GMB         UK         5         x           GMB         UK         5         x           GMB         UK         4         x           GMB         UK         4         x           GMB         UK         4         x           GMB         UK         4         x           JOVENES         ES         52         x	ζ
GMB         UK         20         x           GMB         UK         19         x           GMB         UK         17         x           GMB         UK         15         x           GMB         UK         14         x           GMB         UK         8         x           GMB         UK         6         x           GMB         UK         5         x           GMB         UK         4         x           GMB         UK         4         x           GMB         UK         4         x           GMB         UK         4         x           JOVENES         ES         52         x           CCOO         X         X	ζ
GMB         UK         19         x           GMB         UK         17         x           GMB         UK         15         x           GMB         UK         14         x           GMB         UK         8         x           GMB         UK         6         x           GMB         UK         5         x           GMB         UK         4         x           JOVENES         ES         52         x           CCOO         CCOO         CCOO         CCOO	ζ
GMB         UK         17         x           GMB         UK         15         x           GMB         UK         14         x           GMB         UK         8         x           GMB         UK         6         x           GMB         UK         5         x           GMB         UK         4         x           GMB         UK         4         x           GMB         UK         4         x           GMB         UK         4         x           JOVENES         ES         52         x           CCOO         CCOO         CCOO         CCOO	ζ.
GMB         UK         15         x           GMB         UK         14         x           GMB         UK         8         x           GMB         UK         6         x           GMB         UK         5         x           GMB         UK         5         x           GMB         UK         4         x           GMB         UK         4         x           GMB         UK         4         x           JOVENES         ES         52         x           CCOO         CCOO         CCOO         CCOO	K
GMB         UK         14         x           GMB         UK         8         x           GMB         UK         6         x           GMB         UK         5         x           GMB         UK         5         x           GMB         UK         4         x           GMB         UK         4         x           GMB         UK         4         x           JOVENES         ES         52         x           CCOO         CCOO         CCOO         CCOO	
GMB         UK         8         x           GMB         UK         6         x           GMB         UK         5         x           GMB         UK         5         x           GMB         UK         4         x           GMB         UK         4         x           GMB         UK         4         x           JOVENES         ES         52         x           CCOO         CCOO         CCOO         CCOO	
GMB         UK         6         x           GMB         UK         5         x           GMB         UK         5         x           GMB         UK         4         x           GMB         UK         4         x           GMB         UK         4         x           JOVENES         ES         52         x           CCOO         X         X	
GMB         UK         5         x           GMB         UK         5         x           GMB         UK         4         x           GMB         UK         4         x           GMB         UK         4         x           JOVENES         ES         52         x           CCOO         CCOO         CCOO         CCOO	
GMB         UK         5         x           GMB         UK         4         x           GMB         UK         4         x           GMB         UK         4         x           JOVENES         ES         52         x           CCOO         CCOO         CCOO         CCOO	
GMB         UK         4         x           GMB         UK         4         x           GMB         UK         4         x           JOVENES         ES         52         x           CCOO         CCOO         CCOO         CCOO	
GMB         UK         4         x           GMB         UK         4         x           JOVENES         ES         52         x           CCOO         CCOO         CCOO         CCOO	
GMB         UK         4         x           JOVENES         ES         52         x           CCOO         CCOO         CCOO         CCOO         CCOO	
JOVENES ES 52 x CCOO	
ccoo	
JOVENES ES 27 x	
ccoo	
JOVENES ES 26 x	
ccoo	
JOVENES ES 22 x x	
ccoo	
JOVENES ES 22 x	
ccoo	
JOVENES ES 19 x	K
ccoo	
JOVENES ES 17 x x	

CCOO							
JOVENES	ES	11	X				
CCOO							
JOVENES	ES	10					X
CCOO							
JOVENES	ES	10		X			
CCOO							
JOVENES	ES	7				X	
CCOO							
JOVENES	ES	6			X		
CCOO							
JOVENES	ES	6	X				
CCOO							
JOVENES	ES	6	X			X	
CCOO							
JOVENES	ES	6					X
CCOO							
JOVENES	ES	6					
CCOO							
JOVENES	ES	5			X		
CCOO							
JOVENES	ES	4			X		
CCOO							
JOVENES	ES	3		X			
CCOO							
JOVENES	ES	3			X		
CCOO							
JOVENES	ES	2		X			
CCOO							

JOVENES	ES	2			X		
ccoo							
TUC Young	UK	27		X		X	
workers							
TUC Young	UK	22				X	
workers							
TUC Young	UK	18				X	
workers							
TUC Young	UK	14	X				
workers							
TUC Young	UK	14				X	
workers							
TUC Young	UK	8		X			
workers							
TUC Young	UK	8		X		X	
workers							
TUC Young	UK	8	X				
workers							
TUC Young	UK	7	X				
workers							
TUC Young	UK	6			X		
workers							
TUC Young	UK	6		X		X	
workers							
TUC Young	UK	6				X	
workers							
TUC Young	UK	5		X			
workers							
TUC Young	UK	5		X	_		

workers								
	UK	4						**
TUC Young	UK	4						X
workers								
TUC Young	UK	4		X				
workers								
TUC Young	UK	3		X				
workers								
CNV	BE	83				X		
JONGEREN								
CNV	BE	57			X			
JONGEREN								
CNV	BE	46					X	
JONGEREN								
CNV	BE	46	X				X	
JONGEREN								
CNV	BE	45	X					
JONGEREN								
CNV	BE	41	X					
JONGEREN								
CNV	BE	31				X		
JONGEREN								
CNV	BE	22	X				X	
JONGEREN								
CNV	BE	21						X
JONGEREN								
CNV	BE	20		X			X	
JONGEREN								
CNV	BE	19	X					
JONGEREN								

CNV	BE	16			X		
JONGEREN							
CNV	BE	13			X		
JONGEREN							
CNV	BE	11			X		
JONGEREN							
CNV	BE	6				X	
JONGEREN							
CNV	BE	5					
JONGEREN							
CNV	BE	3			X		
JONGEREN							
UGT	ES	132	X				
UGT	ES	93	X				
UGT	ES	63	X				
UGT	ES	55	X				
UGT	ES	53	X				
UGT	ES	53	X				
UGT	ES	53	X				
UGT	ES	53					X
UGT	ES	50	X				
UGT	ES	46					X
UGT	ES	37	X				
UGT	ES	37					
UGT	ES	35	X				
UGT	ES	34					
UGT	ES	32	X				
UGT	ES	32					
UGT	ES	30					

UGT	ES	22	X				
UGT	ES	12	Х				
UGT	ES	9	X				
UGT	ES	9	X				
UGT	ES	8	X				
PCS Union	UK	38	X				
PCS Union	UK	33				X	
PCS Union	UK	31	X				
PCS Union	UK	24	X				
PCS Union	UK	18	X				
PCS Union	UK	16			X		
PCS Union	UK	14					X
PCS Union	UK	13	X				
PCS Union	UK	13		X			
PCS Union	UK	68	X				
PCS Union	UK	27	X				
PCS Union	UK	4				X	
PCS Union	UK	4				X	
PCS Union	UK	28		X			
PCS Union	UK	3				X	
PCS Union	UK	3		X			
PCS Union	UK	3			X		
PCS Union	UK	19			X		
PCS Union	UK	3		_		X	
PCS Union	UK	22				X	
PCS Union	UK	16				X	
PCS Union	UK	15		X			
PCS Union	UK	14		X			

TUC	UK	62				X	
TUC	UK	53		X			
TUC	UK	59	X				
TUC	UK	41					X
TUC	UK	37		X			
TUC	UK	31		X			
TUC	UK	30	X				
TUC	UK	65	X				
TUC	UK	28				X	
TUC	UK	28		X			
TUC	UK	6					X
TUC	UK	6				X	
TUC	UK	5					X
TUC	UK	5				X	
TUC	UK	4				X	
TUC	UK	4					X
TUC	UK	3			X		
TUC	UK	3	X				
TUC	UK	3				X	
TUC	UK	59					X
TUC	UK	43					
TUC	UK	21			X		
TUC	UK	17		X			
TUC	UK	16		X			
TUC	UK	15	X				
TUC	UK	15		X			
TUC	UK	14	X				
<b>UGT Juventud</b>	ES	308	X				

<b>UGT Juventud</b>	ES	66					X	
<b>UGT Juventud</b>	ES	66						X
<b>UGT Juventud</b>	ES	59						X
UGT Juventud	ES	36	Х				X	
UGT Juventud	ES	34	Х					
UGT Juventud	ES	24						X
UGT Juventud	ES	17				X		
UGT Juventud	ES	17			X			
UGT Juventud	ES	17						X
UGT Juventud	ES	16	X					
UGT Juventud	ES	15						Х
UGT Juventud	ES	13	X				Х	
UGT Juventud	ES	13	X					
UGT Juventud	ES	12	X				X	
UGT Juventud	ES	11	X					
UGT Juventud	ES	11				X		
UGT Juventud	ES	3	X					
UGT Juventud	ES	2	X				X	
UGT Juventud	ES	2				X		
UIL Nazionale	IT	38		X				
UIL Nazionale	IT	33		X				
UIL Nazionale	IT	31			X			
UIL Nazionale	IT	17						X
UIL Nazionale	IT	12						X
UIL Nazionale	IT	9						X
UIL Nazionale	IT	9						X
UIL Nazionale	IT	9						X
UIL Nazionale	IT	9						X

UIL Nazionale	IT	7					X
UIL Nazionale	IT	5	X				
UIL Nazionale	IT	4	X				
UIL Nazionale	IT	4					X
UIL Nazionale	IT	3		X			
UIL Nazionale	IT	2					X
Unison	UK	97	X				
Unison	UK	30	X				
Unison	UK	27			X		
Unison	UK	37	X				
Unison	UK	25	X				
Unison	UK	24	X				
Unison	UK	47	X				
Unison	UK	22	X				
Unison	UK	35	X			X	
Unison	UK	19	X				
Unison	UK	26	X				
Unison	UK	5			X		
Unison	UK	5	X				
Unison	UK	4					X
Unison	UK	4				X	
Unison	UK	3			X		
Unison	UK	3	X				
Unison	UK	3			X		
Unison	UK	3			X		
Unison	UK	2	X				
Unison	UK	38	Х				
Unison	UK	33					X

Unison	UK	12					X
Unite the union	UK	52					X
Unite the union	UK	42					X
Unite the union	UK	42				X	
Unite the union	UK	31					X
Unite the union	UK	27				X	
Unite the union	UK	26			X		
Unite the union	UK	25					X
Unite the union	UK	23			X		
Unite the union	UK	20	Х				
Unite the union	UK	16			X		
Unite the union	UK	14			X		
Unite the union	UK	13				X	
Unite the union	UK	11	X				
Unite the union	UK	10	X				
Unite the union	UK	8	X				
Unite the union	UK	8	X				
Unite the union	UK	8					X
<b>Unite the union</b>	UK	7				X	
VCrofessionals	NL	10		X			
VC	NL	4	X				
Professionals							
VC	NL	3	X				
Professionals							
VC	NL	2	X				
Professionals							
VC	NL	2			X		
Professionals							
VC	NL	2	Х				

Professionals							
Young Unison	UK	213	X			X	
Young Unison	UK	48		X		X	
Young Unison	UK	27	X				
Young Unison	UK	35	X				
Young Unison	UK	23	X				
Young Unison	UK	22	X				
Young Unison	UK	28	X				
Young Unison	UK	21		X			
Young Unison	UK	18		X			
Young Unison	UK	17			X		
Young Unison	UK	11			X		
Young Unison	UK	11		X			
Young Unison	UK	6	X				
Young Unison	UK	6			X		
Young Unison	UK	2	X				
Young Unison	UK	2					
Young Unison	UK	2					
Young Unison	UK	2					
Young Unison	UK	8	X			X	
Young Unison	UK	3	X				