



BBVA Research

The Fintech Universe through the Eyes of the Media and Social Networks

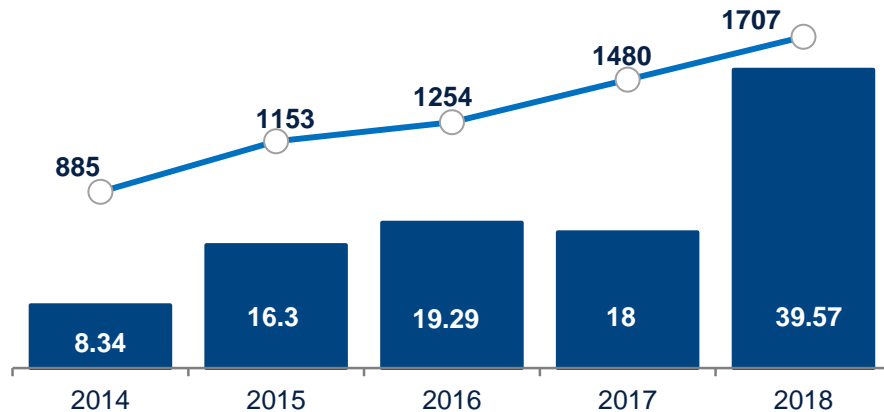
Creating Opportunities

Banking has entered a new age of technology with Fintech growing exponentially

Fintech: finance enabled by new technologies, covering the whole range of financial services, products and infrastructure

Global Fintech investment 2014-2018

(Annual global fintech deals- bars- and funding-line- in \$B)



Source: Reuters

- ✓ FinTech brings all together, the new business models, processes, products, services and applications that emerge around the financial services industry and are digitally available for the client in a more efficient way.
- ✓ FinTech has grown rapidly during last year, reflecting a new scenario where productive processes have dramatically changed as well as consumption patterns

Databases we use

GDELT: Global Database on Events Location and Tone

Open database of human society from every corner of the globe dating back to 1979 ...

... georeferenced across the entire planet...

... including over 300 events around the world and more than 30000 themes...

...and collecting emotions using some of the most sophisticated algorithms

TWITTER: social networking website

Huge social media and open platform with over 300 million monthly active users who can broadcast tweets and follow other users' tweets by using multiple platforms and devices

Text has become a key source of information to enrich analysis

80 % of the total amount of web pages on the internet is given by **textual or unstructured data**



The potential use of textual information and text sources **improves the understanding of the social, economic and financial systems**



Text mining
to extract meaning from strings of letters



It helps us to **monitor** what drives **new trends**, their **impact** and **policy implications**

20%
of used data

80%
of available data in
form of text

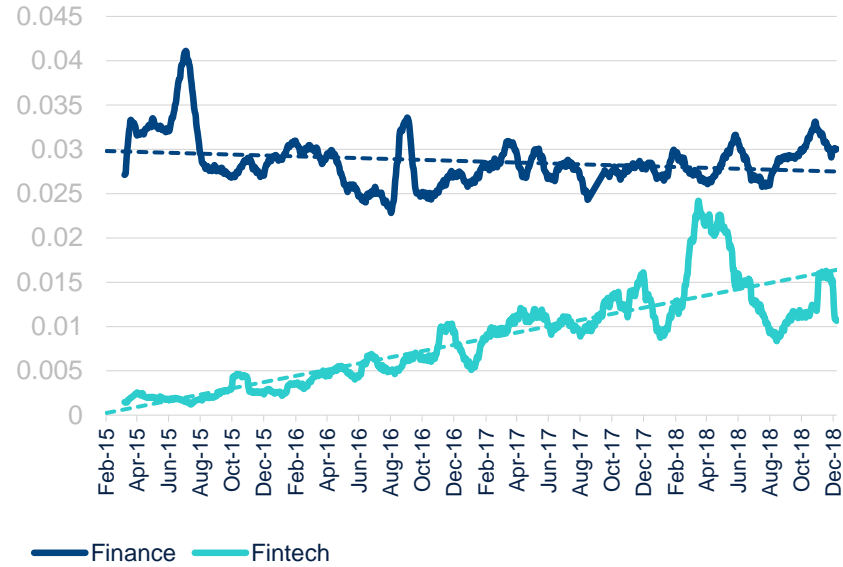
(media, social media,
reports, transcripts,...)



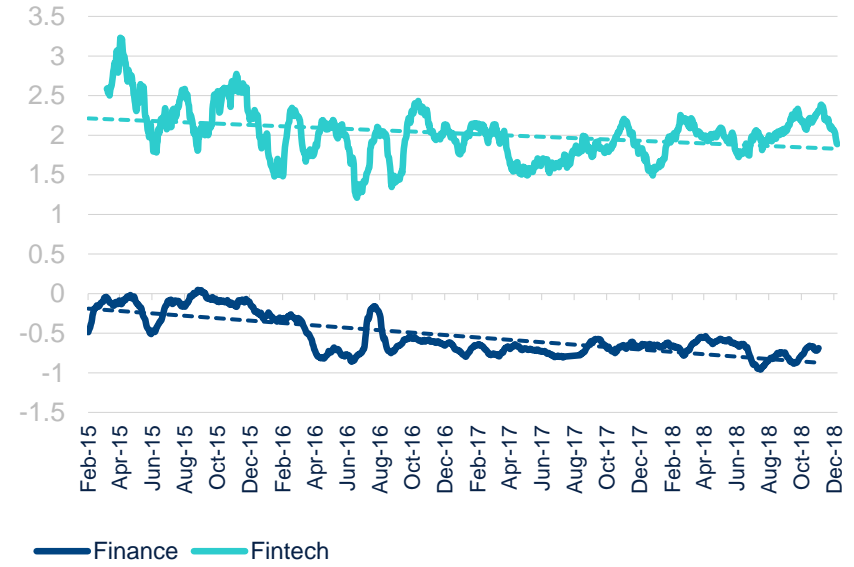
**Let's take
advantage of it!!**

Media coverage of FinTech increases over time and it is catching up with that of Finance, but there's a persistent increasing gap between the perception of both topics

Fintech and finance media coverage over time 2015-2018
(Mov avg 30 days. Relative ratio with respect to total news)



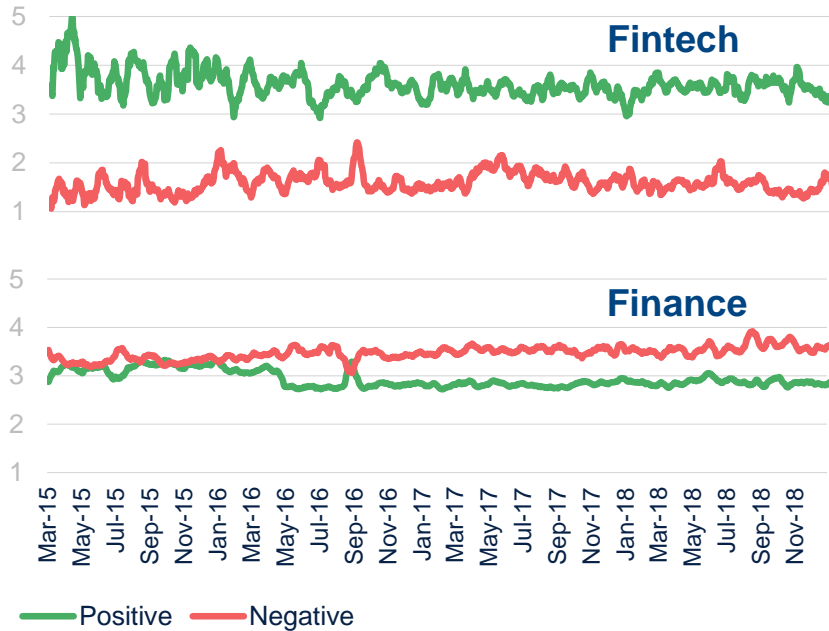
Fintech and finance media sentiment over time 2015-2018
(Mov avg 30 days)



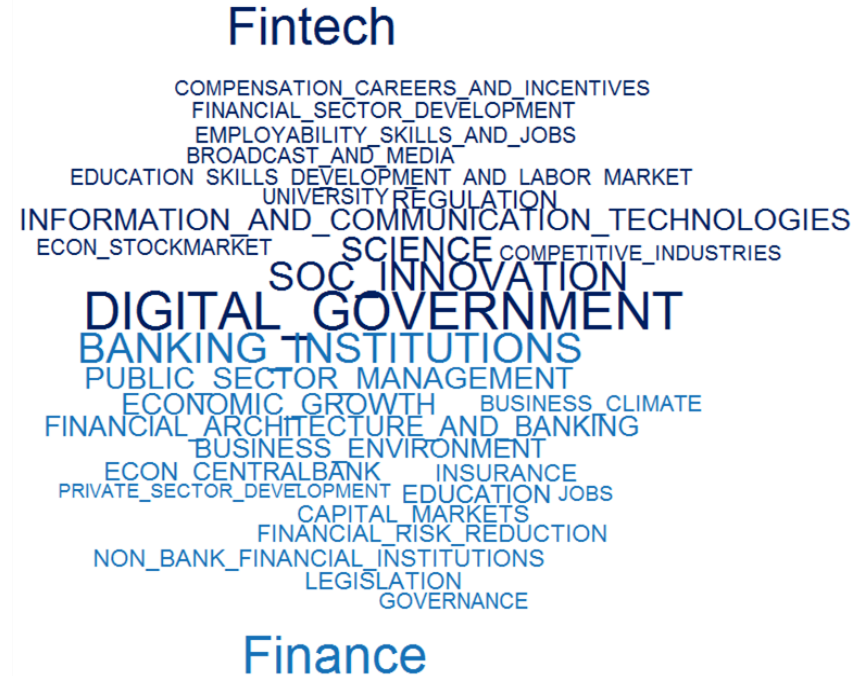
Media coverage is calculated as the ratio between news related with Fintech/ Fintech&Data / Fintech&Digital Payments with respect to the total number of news in the same day. Media sentiment goes normally from -10 (negative perception) to 10 (positive perception), with 0 indicating neutral. More information can be found in the annex.

Articles related to Finance have a higher emotional connotation and they are related to topics such as innovation and science

Proportion of positive and negative words in the media over time (Mov avg 30 days)

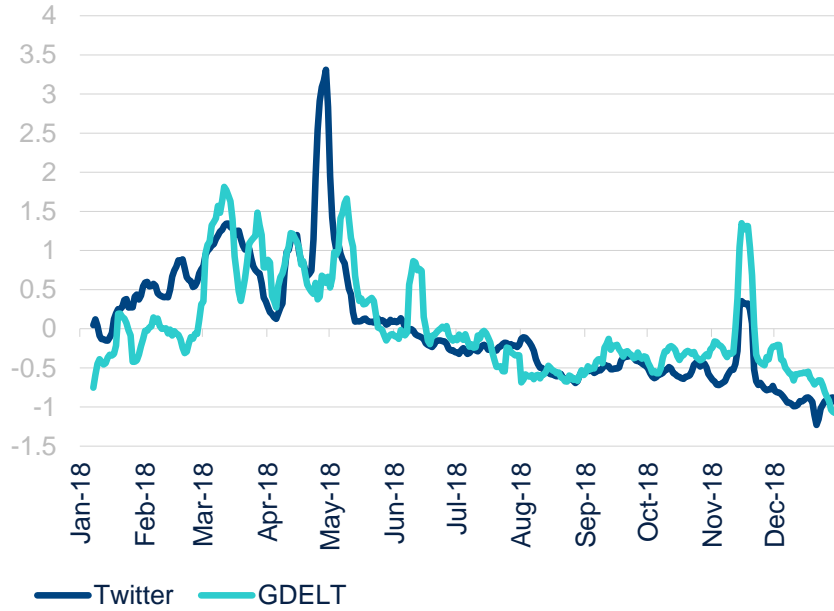


Most related topics with FinTech and finance in the media in 2018

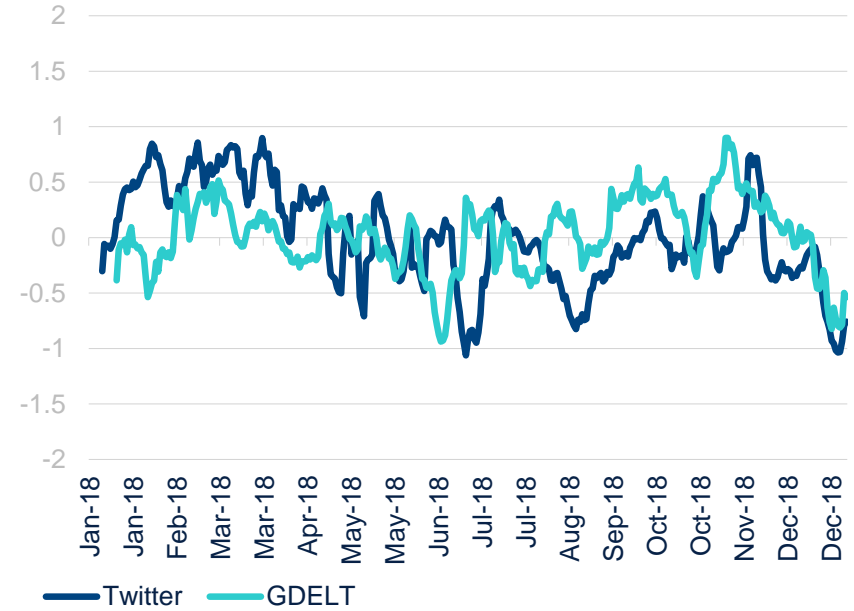


Similar trends emerge between the news and social media series, both in terms of coverage and sentiment

Media and social media coverage evolution of FinTech over time (In standard deviations. Mov. Avg. 15 days)



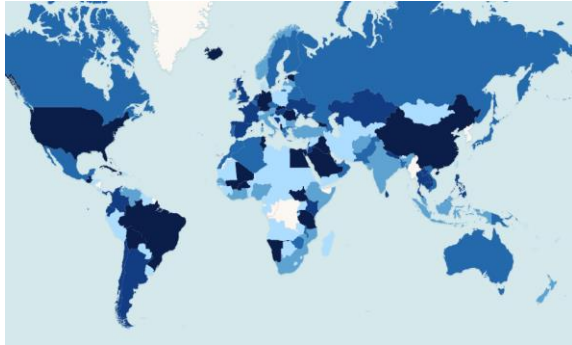
Media and social media sentiment evolution of FinTech over time (In standard deviations. Mov. Avg. 15 days)



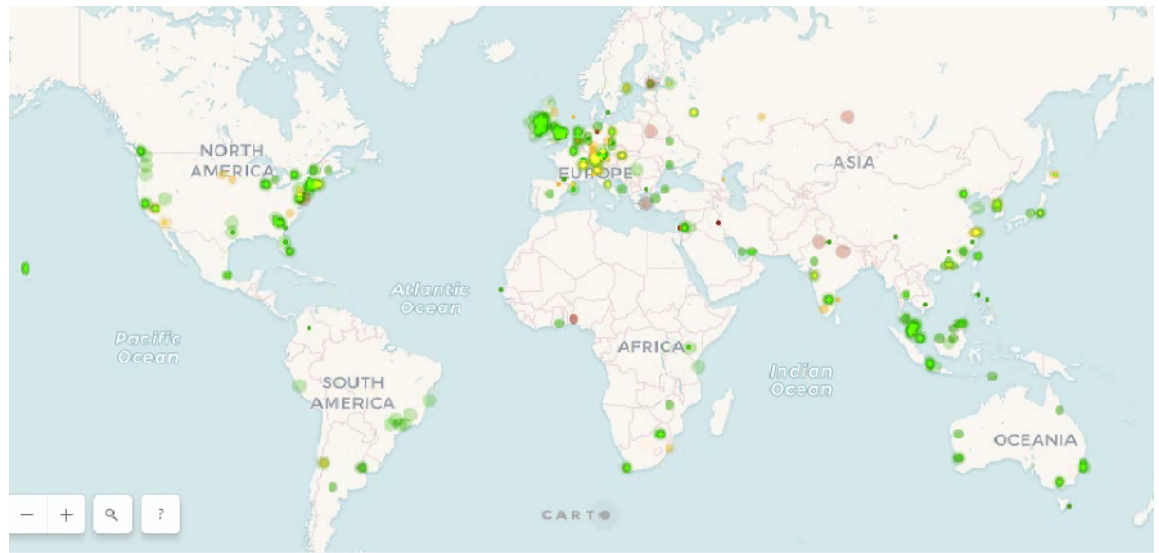
Fintech is a worldwide phenomenon with a broadly positive sentiment and over time and all over the world

Media coverage of Fintech by country Diff 2018-17

(Ratio between Fintech related news over total news by year and country)



Media sentiment of Fintech over time 2015-2018



- Positive
- Neutral
- Negative

Nov 2015 Number of observations over time 2015-2018

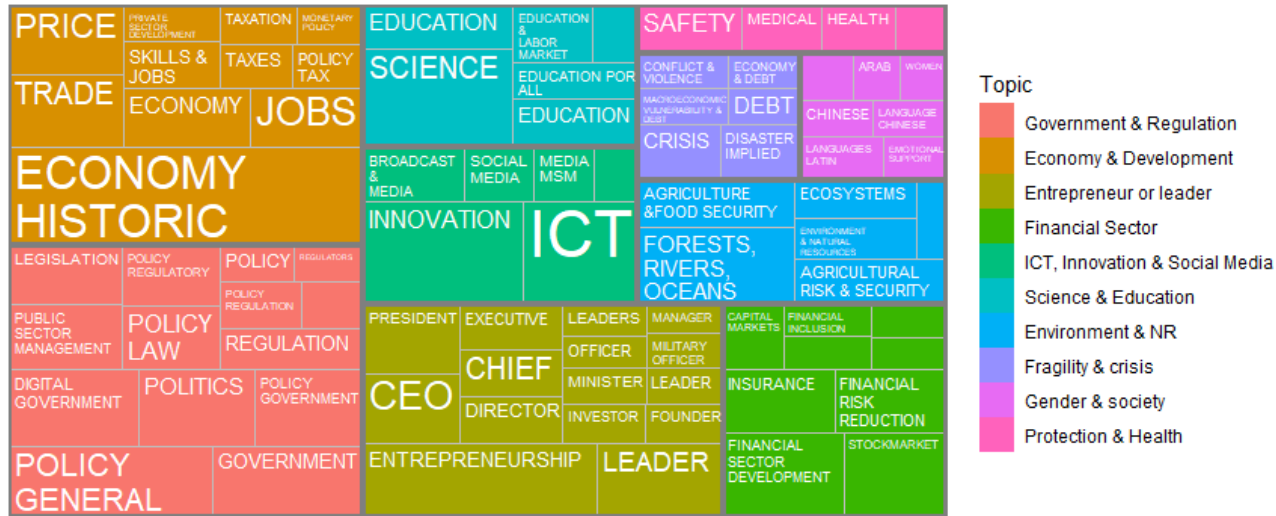
56K SELECTED



Regulation and economic topics emerge among the most related topics with Fintech in the media

Most outstanding Fintech-related topics in the media

(2015-2018. Most commented topics with Fintech based on media coverage)

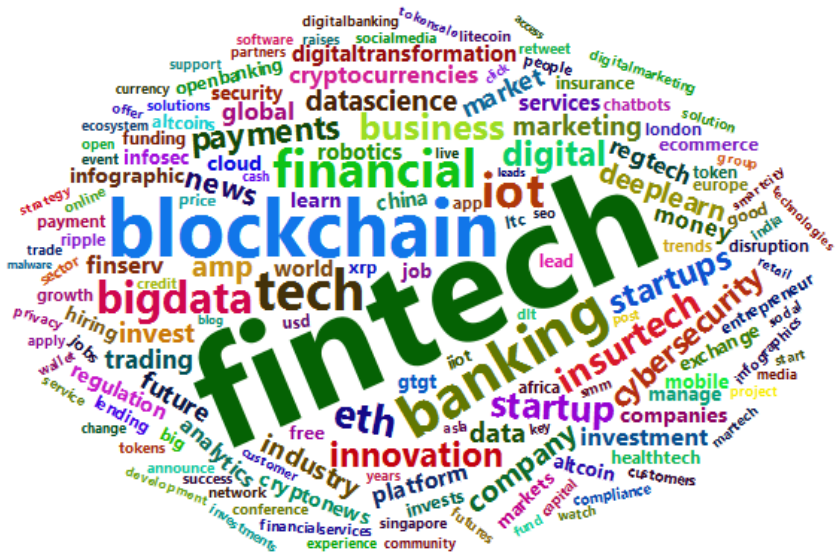


- ✓ FinTech is revolutionising not only the financial system but also other sectors with a high potential for economic growth
- ✓ Policy, regulation, economy and development, entrepreneurship and innovation topics are frequently commented together with Fintech

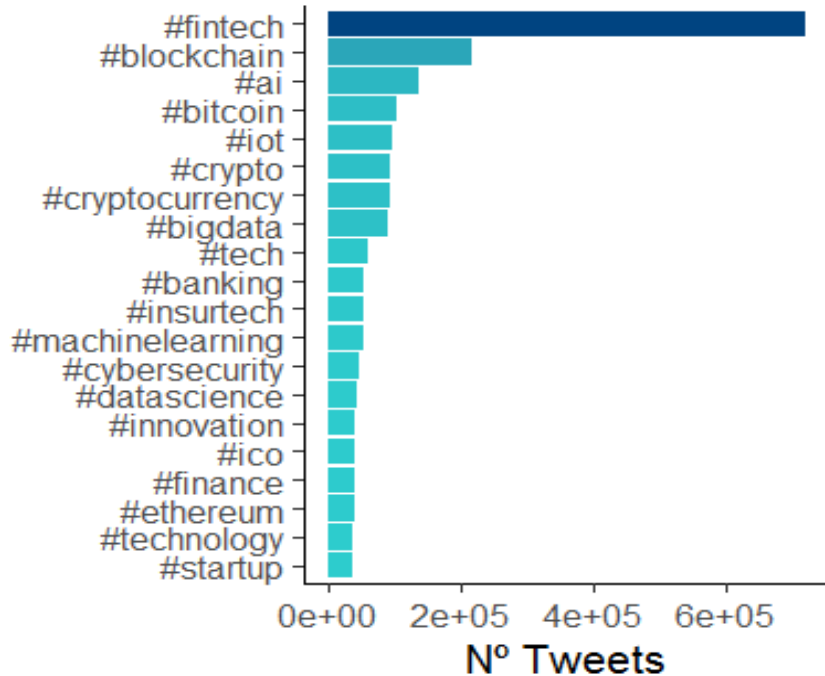
The treemap represents the distribution of the number of news related to fintech by topic. Rectangles size shows the share of media coverage of each topic.

In social media, Blockchain and cryptocurrencies outstand. Hashtags relates most to technology, while tweets are more business-oriented

Most used terms in the FinTech Universe in Twitter (2018)



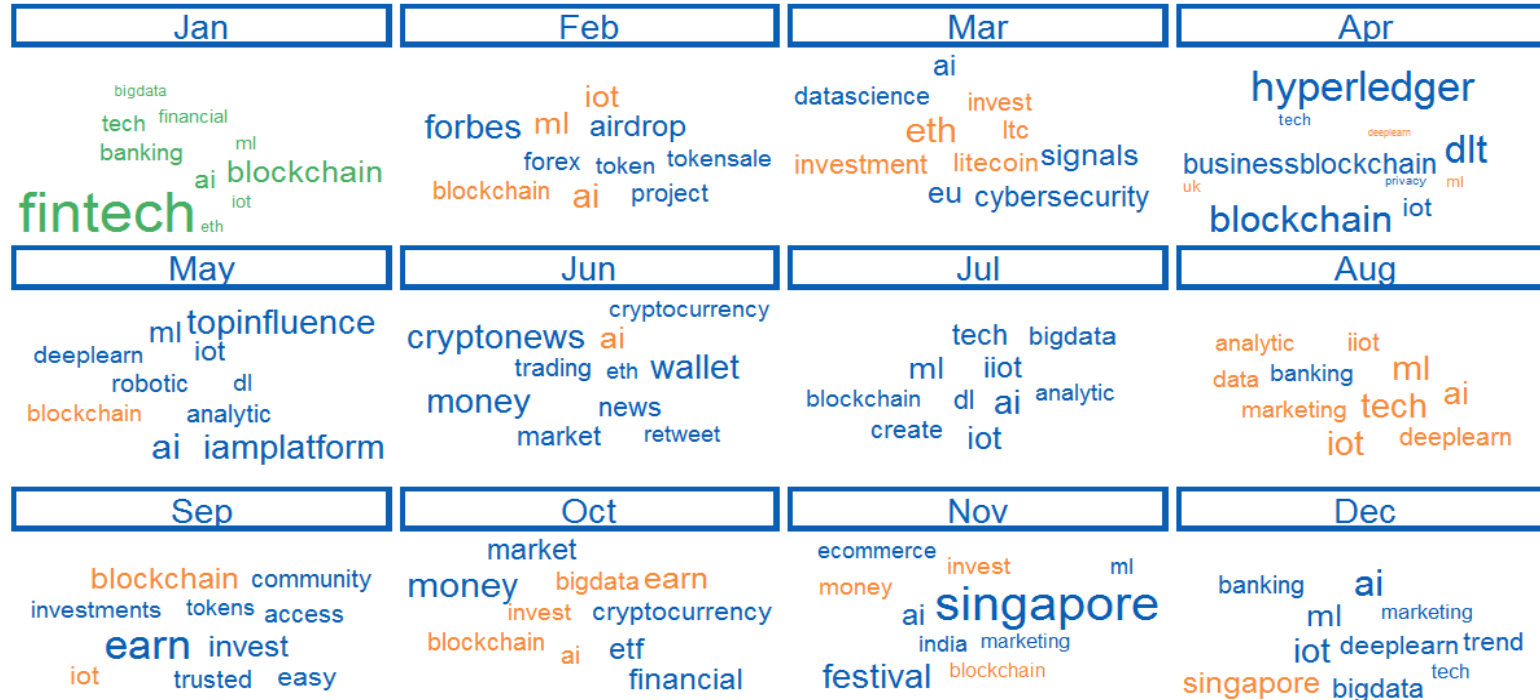
Most used hashtags in the FinTech Universe in Twitter (2018)



Deeping into the evolution of the FinTech ecosystem throughout 2018 to fastly identify topics which emerge each month

Evolution of the most commented issues in Twitter over 2018

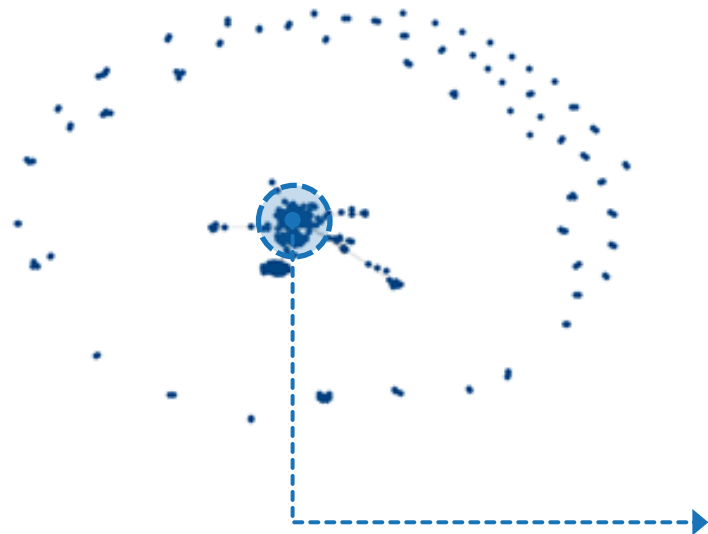
(January data is in levels, represented in green. Feb- Dec data are in monthly differences. Blue colour indicates positive differences and orange colour indicates negative differences between consecutive months)



Analyzing the relationship among topics, there's a centric and high connected cluster of topics, with small communities around

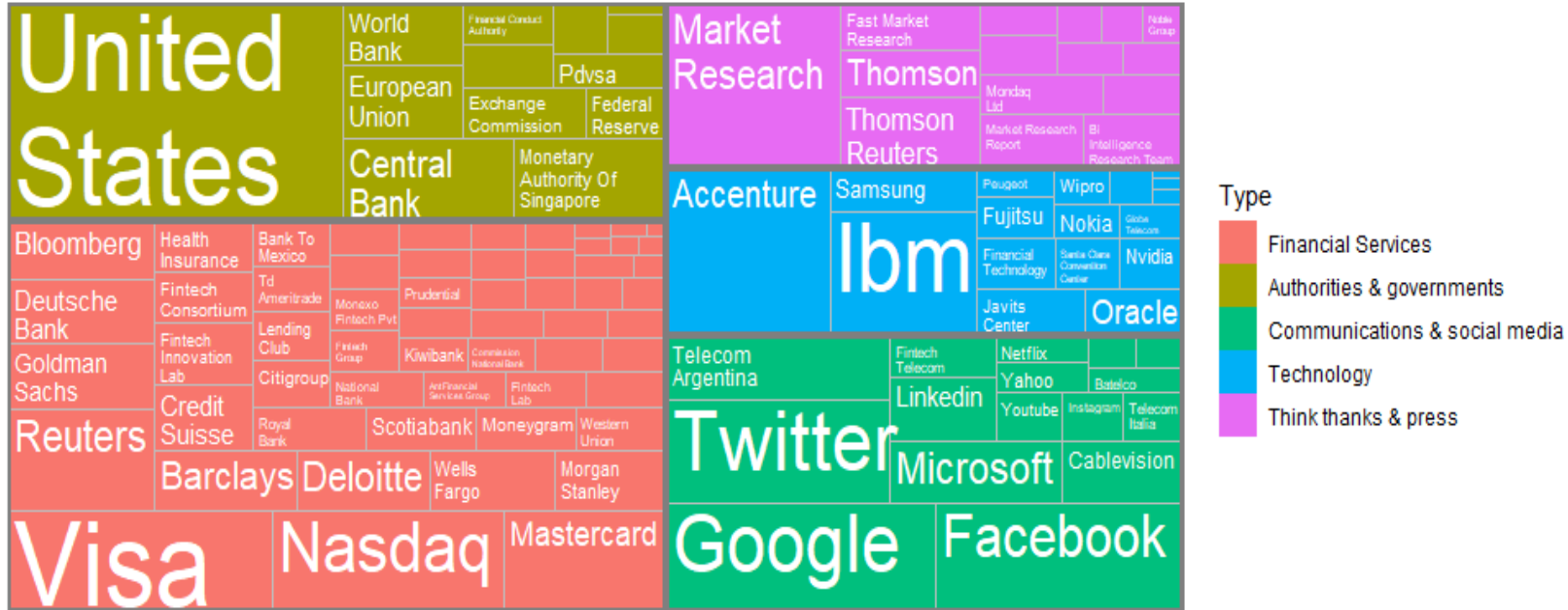
Main terms relationship in the Fintech Universe in Twitter in 2018

(The node size represents the connectivity of each term and the edge size represents the frequency of joint appearance)



Regarding organizations, financial companies, authorities and BigTechs highlight in Fintech articles

Most outstanding FinTech-related firms and organisations in the media
(2015-2018. Most commented topics with Fintech based on media coverage)



The treemap represents the distribution of the number of news related to fintech by topic. Rectangles size shows the share of media coverage of each topic.

Main takeaways

01

The **society is still perceiving FinTech and Finance as two different things**. The perception of FinTech is more positive than the one of traditional Finance.

02

Topics related to FinTech are gaining momentum.

Media coverage is increasing since 2015 and its tone is positive and above the general average tone in the media

03

FinTech is related to a very wide range of topics, not only technological but to many other social themes like employment and education

04

In **social media, the most frequent term related to FinTech is blockchain**.

It points out the great interest in the distributed ledger technology (DLT) behind cryptocurrencies

05

Among the **most active players** in the FinTech world, we found the **Financial Services, Authorities and Governments and BigTechs**



THANK YOU!



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