



About the index model

EY has developed an open banking opportunity index to assess the conduciveness of 10 selected market environments for the success of open banking. Success is viewed as the potential for more consumers to adopt open banking-enabled services within a market.

Our model uses a wide range of measures – 22 indicators and 13 sub-indicators – to assess each country's potential, across four key conditions needed for the success of open banking:

- **1. Regulatory environment** the impetus from policymakers to support open banking:
 - To test regulatory readiness, we assessed a wide range of qualitative indicators, which included: policy and legislation on open banking, the extent to which governments or regulators are working with stakeholders to promote its adoption and oversee third parties, the implementation of standards and guidelines for application programming interfaces (APIs), and data privacy and security measures.
 - For calculating our scores, we took the view that best-inclass countries would be those where the implementation of open banking is mandated, government or regulator engagement is high, and APIs are prescribed as the model of choice to facilitate open banking.
- **2. Adoption potential** the potential for consumers to adopt open banking services on the basis of existing behaviors:
 - To test consumer adoption potential, we assessed current consumer behaviors with respect to the use of digital services and financial services. Our indicators included: the use of mobile banking, uptake of financial technology (FinTech) services, the use of social media and the use of multiple financial products.
 - For calculating our scores, we took the view that an existing preference for digital services implies a lower barrier to the entry or adoption of open banking-related services. And a greater prevalence of consumers with multiple financial products may create a greater demand for open banking services (e.g., account aggregator tools).

- **3. Consumer sentiment** the impact consumer sentiment toward open banking, and the data sharing it involves, has on the buy-in for such services:
 - To test consumer sentiment, we used a combination of responses from consumer surveys, and opinions and thoughts from social media content and prominent consumer forums.
 - The survey responses assessed the comfort level of consumers in sharing transactional data with FinTech companies in exchange for improved services. The online sentiment analysis assessed the views of consumers on using open banking services as well as sharing financial data with third parties, and related apps and services (e.g., account aggregators and spending tracker).
- **4. Innovation environment** the strength of the environment in fostering innovation, especially among financial services firms:
 - ➤ To test the innovation environment, we assessed broad indicators related to a country's ability to foster innovation as well as specific indicators related to FinTech innovation.
 - Our indicators included: Global Innovation Index scores related to R&D and investment, measures of financial services innovation (e.g., FinTech start-up numbers), FinTech VC investment, patents filed by major retail banks and FinTech companies, and the extent to which regulatory sandboxes for financial services are in place.
 - For calculating our scores, we took the view that the absolute number of FinTech start-ups was an important determinant of innovation that could contribute to open banking, irrespective of the size of a particular market (assessed in absolute terms rather than as a proportion of the gross domestic product). And the existence of a sandbox for financial services was a relevant indicator of preparedness from an innovation perspective.



About the data sources

The data used for the index comprise 15 metrics and 15 qualitative assessments. Most quantitative measures were each obtained from a single source respectively (e.g., details of investments in FinTech companies were obtained from Venture Scanner). All qualitative measures were obtained from national sources such as government bodies (e.g., financial regulators and ministries), law firms and specialized media. In cases where the information available was scarce, Longitude contacted the relevant authorities to obtain the required inputs.

While all quantitative data is for the latest full year available, all qualitative assessments were made on the basis of information available until the end of August 2018 and based on a criteria discussed with EY.

1. Regulatory environment:

- National sources such as government bodies (e.g., financial regulators and ministries)
- Law firms
- Specialized media

2. Adoption potential:

- ► EY FinTech Adoption Index 2017
- ► EY Global Banking Consumer Survey
- ► Statista
- ► International Telecommunication Union (data on information and communication technologies)
- ► Newzoo Global Mobile Market Report

3. Consumer sentiment:

- alva Group sentiment analysis on discussion posts sourced from Twitter, Weibo, WeChat, forums and blogs
- ► EY FinTech Adoption Index 2017

4. Innovation environment:

- Venture Scanner
- World intellectual Property Organization
- S&P Capital IQ
- World Bank
- National VC associations
- Global Innovation Index

About the scoring

In order to calculate the index scores and rankings, the data was normalized, i.e., all inputs were converted to a scale of 0 to 10, whereby 10 represents the best score achievable and 0 represents the worst.

For qualitative indicators, the maximum score achievable was determined by the responses to the questions we asked to rate each country. For quantitative metrics, we used a minimum-maximum methodology with fixed benchmarks. We set the equivalent of a score of 10 to a data value (up to 33%) above the best-performing country; a score of 0 was attributed to countries with a value of 0. This approach ensured the possibility of adding more countries to the index without compromising year-on-year comparability.

All indicators were then aggregated into their respective subindex, which were, in turn, aggregated into the overall index score using a weighted sum. All rankings at all levels are based on each country's score rounded to the second decimal point.

We applied a lower weightage to the following areas:

- Regulatory environment pillar It is not a prerequisite for the success of open banking in some markets, but each of the other three pillars are.
- Consumer sentiment There are significant differences in discussion volumes among some of the markets.
- ► Number of FinTech start-ups There are differences in approach to start-up funding across different markets.

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