Numbers

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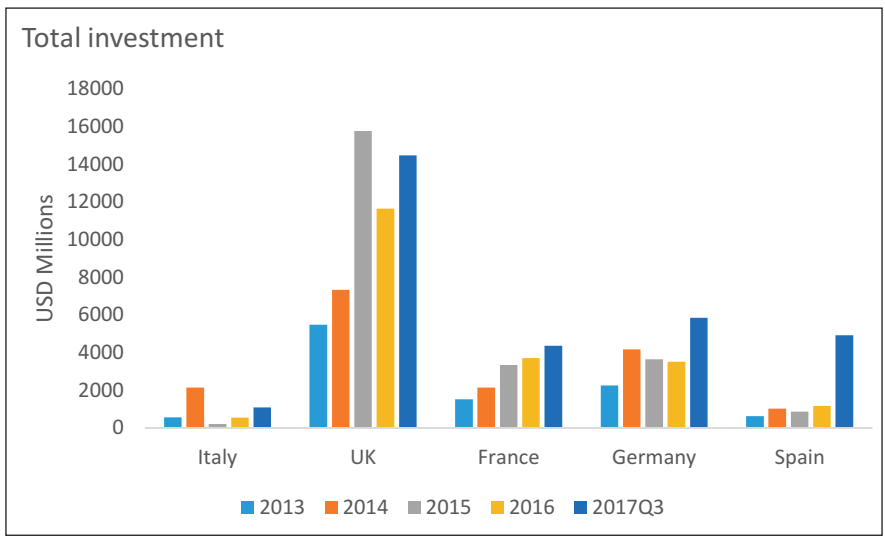
FinTech companies in the European countries

Figure 1: Investment in FinTech companies are increasing in all major European countries although there is much cross-country heterogeneity



Source: Own elaboration based on data from CBInsights (available at: https://www.cbinsights.com/). Value of total investment in FinTech companies in each year; data for 2017 refer to the first three quarters only.

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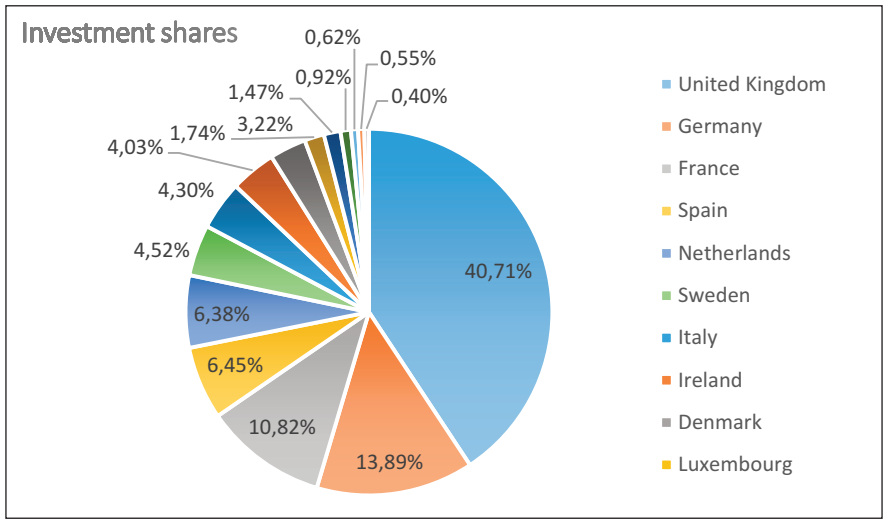
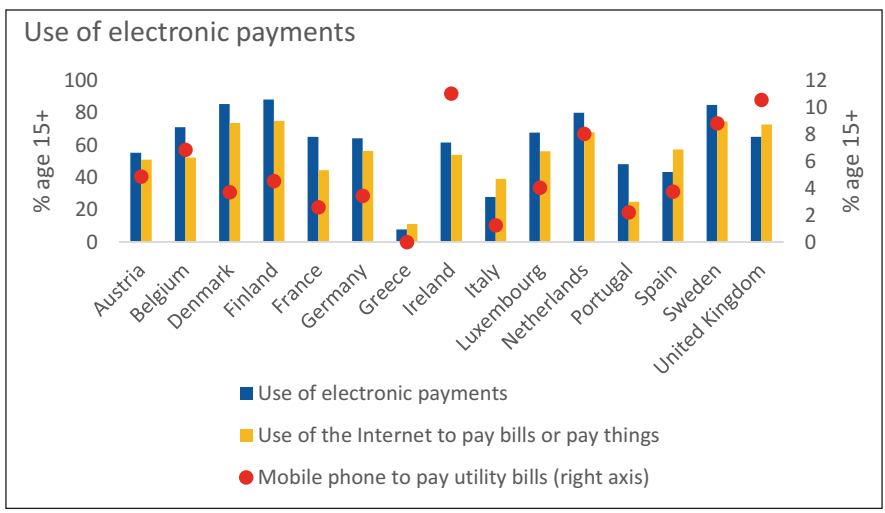
Figure 2: Among European countries, the largest proportion of investment FinTech companies is in the United Kingdom



Source: Own elaboration based on data from CBInsights (available at: https://www.cbinsights.com/). Country shares of total investment in FinTech companies between 2011Q1 and 2017Q3.

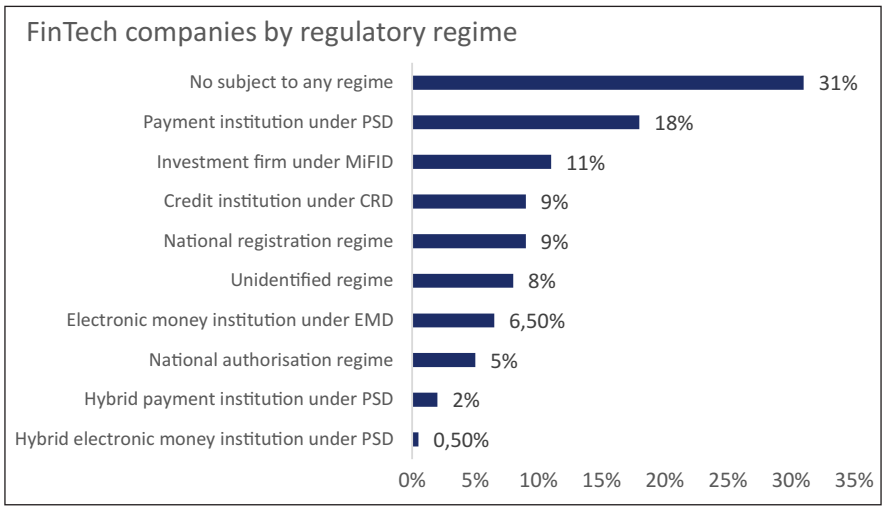
Figure 3: The use of electronic payment technologies is highly heterogeneous across European countries.



Source: Own elaboration based on the World Bank's survey on Global Financial Inclusion (available at: http://www.worldbank.org/en/programs/globalfindex) database. The vertical axis represents percentage of respondents aged 15 or more. Electronic payments are those initially processed and received electronically, beyond the traditional payments systems provided by the banking industry.

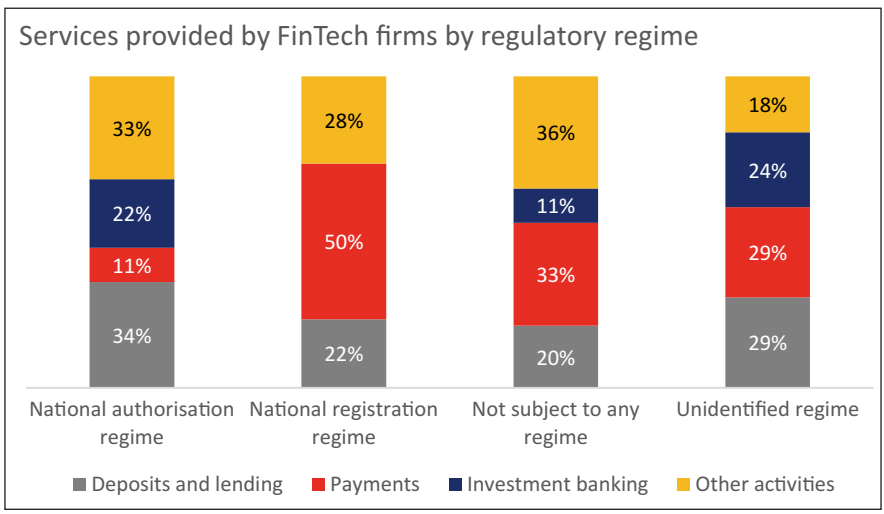
Regulatory status of FinTech companies in Europe

Figure 4: In Europe, most FinTech companies are not subject to any regulatory regime



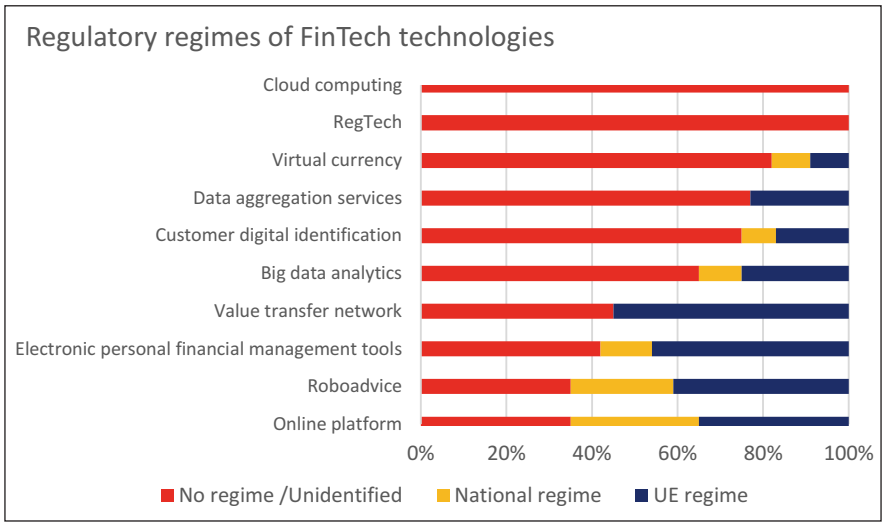
Source: Own elaboration based on the survey run by EBA on 282 European FinTech companies (see EBA, 2017; European Banking Authority, Discussion Paper on the EBA's approach to financial technology (FinTech), EBA/DP/2017/02).

Figure 5: In Europe, the regulatory status of FinTech companies depends on the type of services that they provide



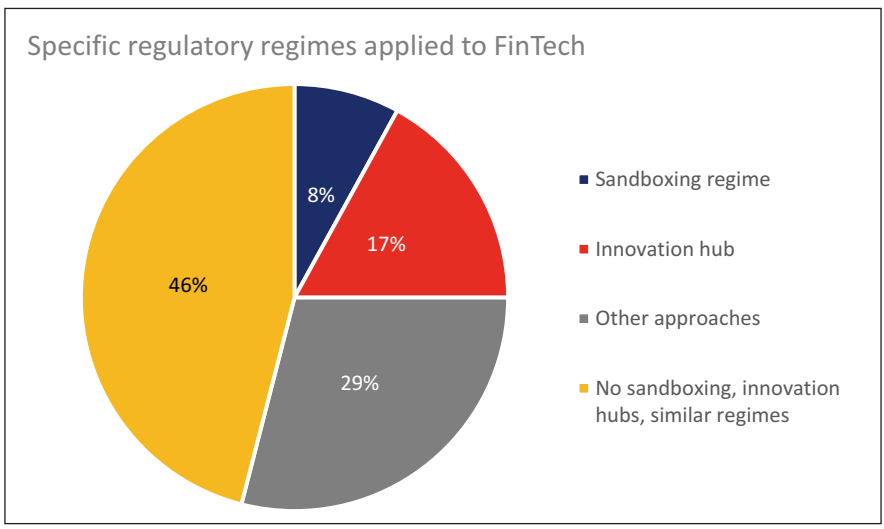
Source: Own elaboration based on the survey run by EBA on 282 European FinTech companies (see EBA, 2017; European Banking Authority, Discussion Paper on the EBA's approach to financial technology (FinTech), EBA/DP/2017/02).

Figure 6: FinTech companies adopting similar technologies are subject to similar regulatory regimes across Europe



Source: Own elaboration based on the survey run by EBA on 282 European FinTech companies (see EBA, 2017; European Banking Authority, Discussion Paper on the EBA's approach to financial technology (FinTech), EBA/DP/2017/02).

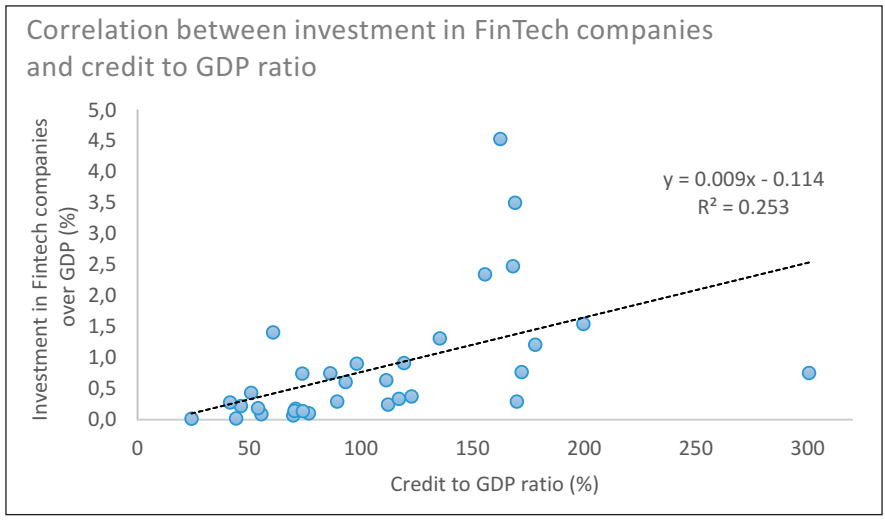
Figure 7: Many European countries apply specific regulatory regimes to FinTech companies



Source: Own elaboration based on the survey run by EBA on 282 European FinTech companies (see EBA, 2017; European Banking Authority, Discussion Paper on the EBA's approach to financial technology (FinTech), EBA/DP/2017/02). Shares of European countries adopting each specific regulatory regime with respect to FinTech activities.

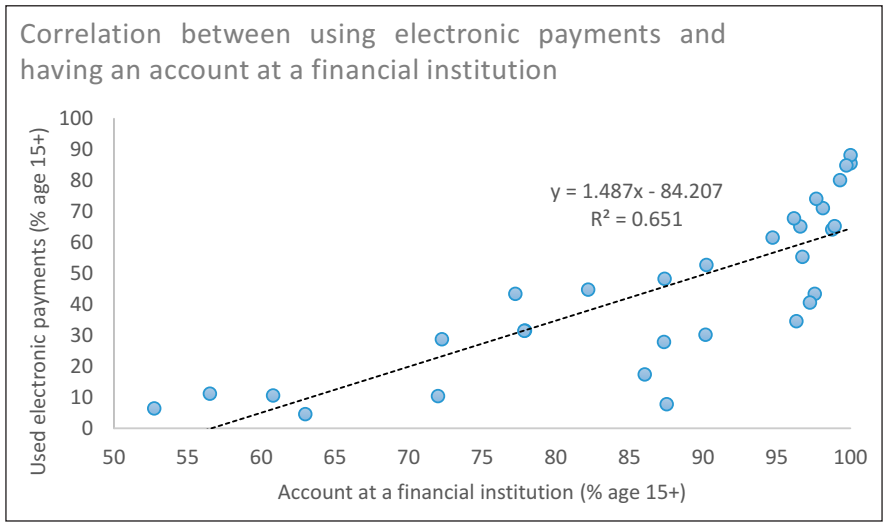
Stylised facts on FinTech and banking

Figure 8: Investment in FinTech companies are larger in more financially developed countries.



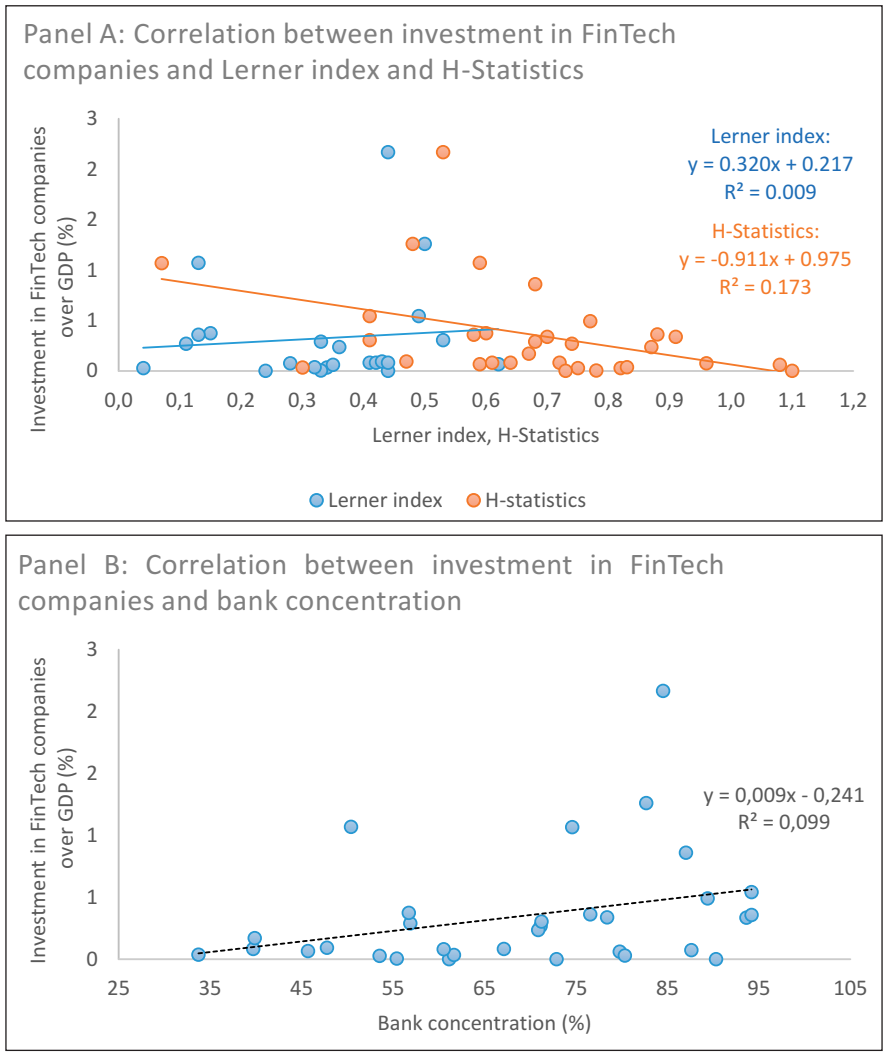
Source: Own elaboration on data from CBInsights (available at: https://www.cbinsights.com/) and the World Bank's Global Financial Development Database (available at: https://datacatalog.worldbank.org/). Credit to GDP ratio is the total value of credit to the private sector as a percentage of nominal GDP. The sample includes the following countries: Austria, Belarus, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, and United Kingdom.

Figure 9: Use of electronic payments is higher in countries where a higher share of the population holds an account with a financial institution



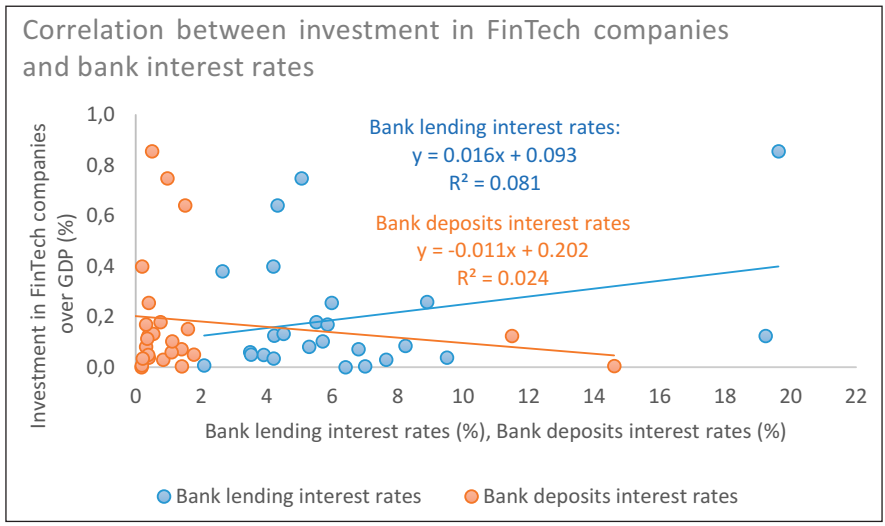
Source: Own elaboration on data from CBInsights (available at: https://www.cbinsights.com/) and the World Bank's survey on Global Financial Inclusion (available at: http://www.worldbank.org/en/programs/globalfindex). Account at a financial institution (% age 15+) is the share of respondents in the country, aged 15 or more, that hold an account at a bank, credit union or another financial institution, or having a debit card. Used electronic payments (% age 15+) is the share of respondents in the country, aged 15 or more, who made payments electronically (see Figure 3 above). The sample includes the following countries: Austria, Belarus, Belgium, Bulgaria, Croatia, Czech Republic, Cyprus, Denmark, Estonia, Finland, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Portugal, Poland, Spain, Romania, Slovak Republic, Slovenia, Sweden, Turkey, Ukraine, and United Kingdom.

Figure 10: Investment in FinTech companies are larger in countries with lower competition in the banking sector



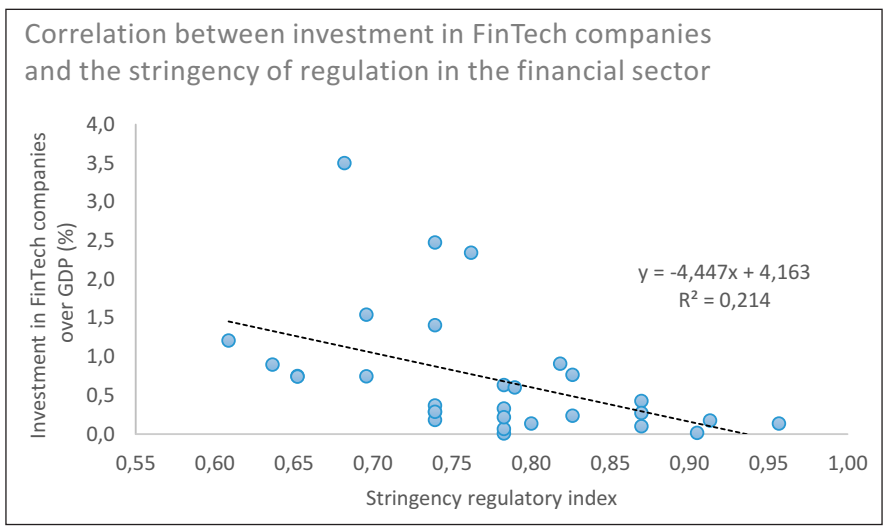
Source: Own elaboration on data from CBInsights (available at: https://www.cbinsights.com/) and the World Bank's Global Financial Development Database (available at: https://datacatalog.worldbank.org/). Funding FinTech over GDP (%) is the share of outstanding amounts of investment in venture capital, corporate venture capital, private equity, angel investment and other investment over GDP. The Lerner index is defined as the difference between output prices and marginal costs, relative to output prices and ranges from 0 (perfect competition) to 1 (monopolistic competition). The H-Statistics measures the elasticity of bank revenues relative to input prices. H-Statistics ranges from 0 to 1 in monopolistic competition and is above 1 in oligopolistic competition. Bank concentration (%) refers to assets of three largest banks as a share of total commercial banking assets. The sample includes the following countries: Austria, Belarus, Belgium, Bulgaria, Croatia, Czech Republic, Cyprus, Denmark, Estonia, Finland, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Malta, Netherlands, Portugal, Poland, Spain, Romania, Slovak Republic, Slovenia, Sweden, Turkey, Ukraine, and United Kingdom.

Figure 11: Investment in FinTech companies are larger in countries with higher lending interest rates and lower deposit interest rates.



Source: Own elaboration on data from CBInsights (available at: https://www.cbinsights.com/) and the World Bank's World Development Indicators Database (available at: https://datacatalog.worldbank.org/). Funding FinTech over GDP (%) is the share of outstanding amounts of investment in venture capital, corporate venture capital, private equity, angel investment and other investment over GDP. Bank lending interest rates (%) refers to the rate that usually meets the short- and medium-term financing needs of the private sector. Bank deposits interest rates (%) is the rate paid by commercial or similar banks for demand, time or savings deposits.

Figure 12: Investment in FinTech companies and stringent regulation are complementary.



Source: Own elaboration on data from CBInsights (available at: https://www.cbinsights.com/) and the World Bank's Bank Regulation and Supervision Survey (available at: https://datacatalog.worldbank.org/). Funding FinTech over GDP (%) is the share of outstanding amounts of investment in venture capital, corporate venture capital, private equity, angel investment and other investment over GDP. The stringency regulatory index is constructed using the following 18 indicators from the Wold Bank's Bank Regulation and Supervision Survey to measure the sensitivity of the regulatory system to bank risk-taking:

1. *Does the minimum capital entry requirement vary depending on the nature of the banking businesses that are licensed?*
2. *Are the sources of funds to be used as capital verified by the regulatory/supervisory authorities?*
3. *Which risks are covered by the current regulatory minimum capital requirements in your jurisdiction?*
4. *Does your agency have the legal authority to require additional capital that is over-and-above the minimum required capital for individual banks if deemed necessary?*
5. *Which of the following are legally allowed in regulatory capital and which are the minimum (or maximum) percentages?*
6. *Which of the following are legally allowed in regulatory capital and which are the minimum (or maximum percentages)?*
7. *Is there a regulatory limit on related party exposures?*
8. *Can the deposit insurance agency/fund take legal action for violations against laws, regulations, and bylaws (of the deposit insurance agency) against bank directors or other bank officials?*
9. *Do you have an asset classification system under which banks have to report the quality of their loans and advances using a common regulatory scale?*
10. *Are there minimum levels of specific provisions for loans and advances that are set by the regulator?*
11. *Are banks required to submit their financial statements to the banking supervisor prior to public disclosure?*
12. *Please indicate whether the following enforcement powers are available to the supervisory agency*
13. *Does the supervisory agency operate an early intervention framework (e.g. prompt corrective action) that forces automatic action when certain regulatory triggers/thresholds are breached?*
14. *Are there any banks that are not under the jurisdiction of this agency? (No =1; Yes=0)*
15. *Can the supervisory authority force a bank to change its internal organizational structure?*
16. *Is the intensity and frequency of supervisory activities explicitly linked to the bank's risk rating?*
17. *Is your agency responsible for publishing a financial stability report?*
18. *Do you conduct stress test as part of the process of assessing systemic stability?*

Total values are normalized so that the stringency regulatory index ranges from 0 (low stringency) to 1 (high stringency). The sample includes the following countries: Austria, Belarus, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, and United Kingdom.