

BBVA

RESEARCH

JUNE
2016



**Digital Context:
Mexico**

Outline

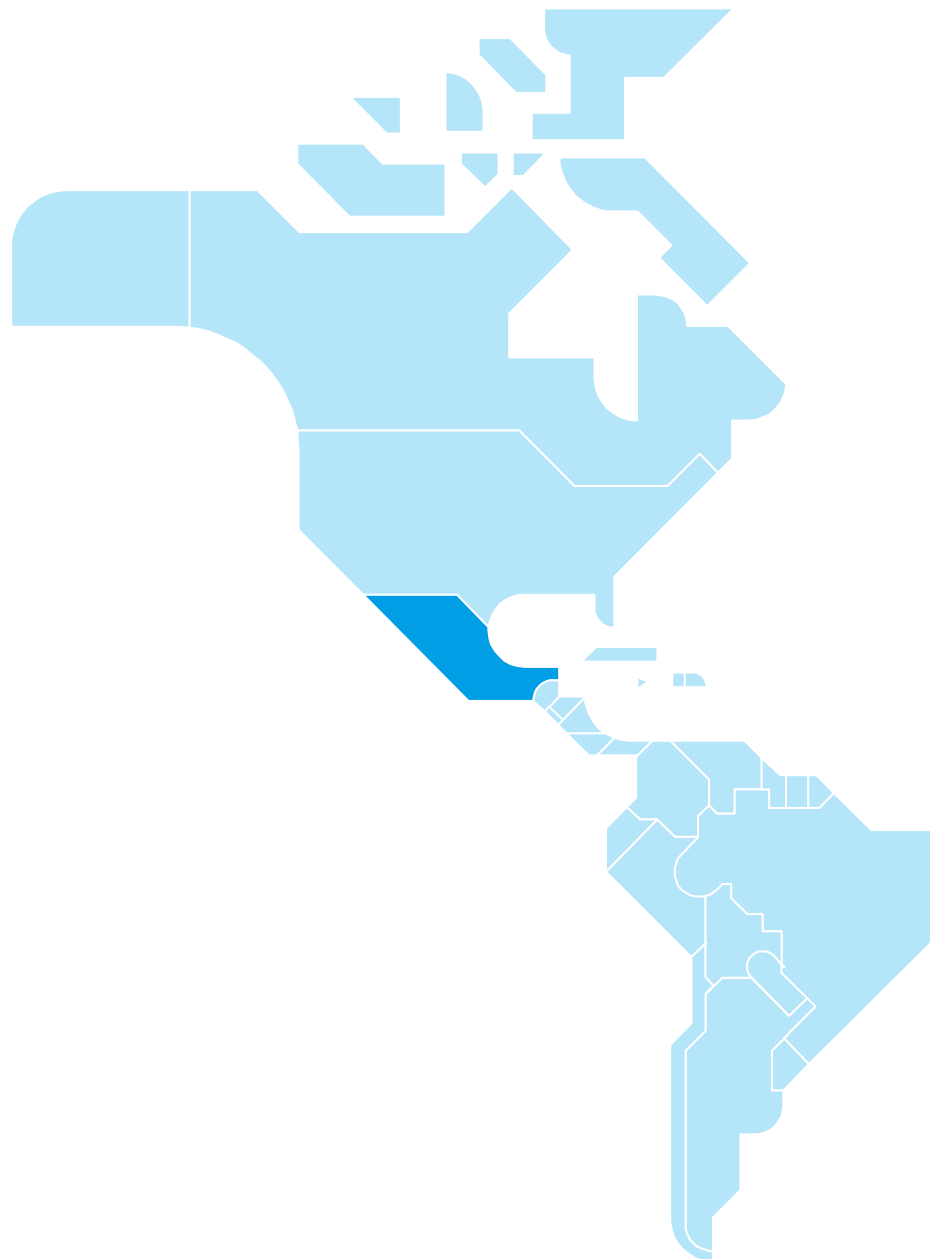
- **Overview**

- 1 Digital scenario**

- 2 Demand side**

- 3 Supply side**

- 4 Regulation side**



Overview

- **Mexico has room for improvement in the digital dimension**
- **Increase of internet access and use.** Currently there is more variety of devices for internet connection apart from computer
- The **lack of money** is the main barrier to access internet for the 60% of households without access
- **E-banking and e-commerce** have registered **significant growth**, but their use is around 10%, **much lower** than the principal uses: communication, information and leisure
- **Mobile broadband gains relevance.** Number of subscriptions have increased 82-fold
- The weight of fixed-telephone inversion has decreased in favor of **internet service** (+52%) and **mobile communications** (+38%)
- There are regulatory constraints for **digital sales of financial services**. There is room for improvement subject to regulatory changes
- **Laws relating with ICT have a positive relation with the legal system efficiency and negative relation with piracy rate**



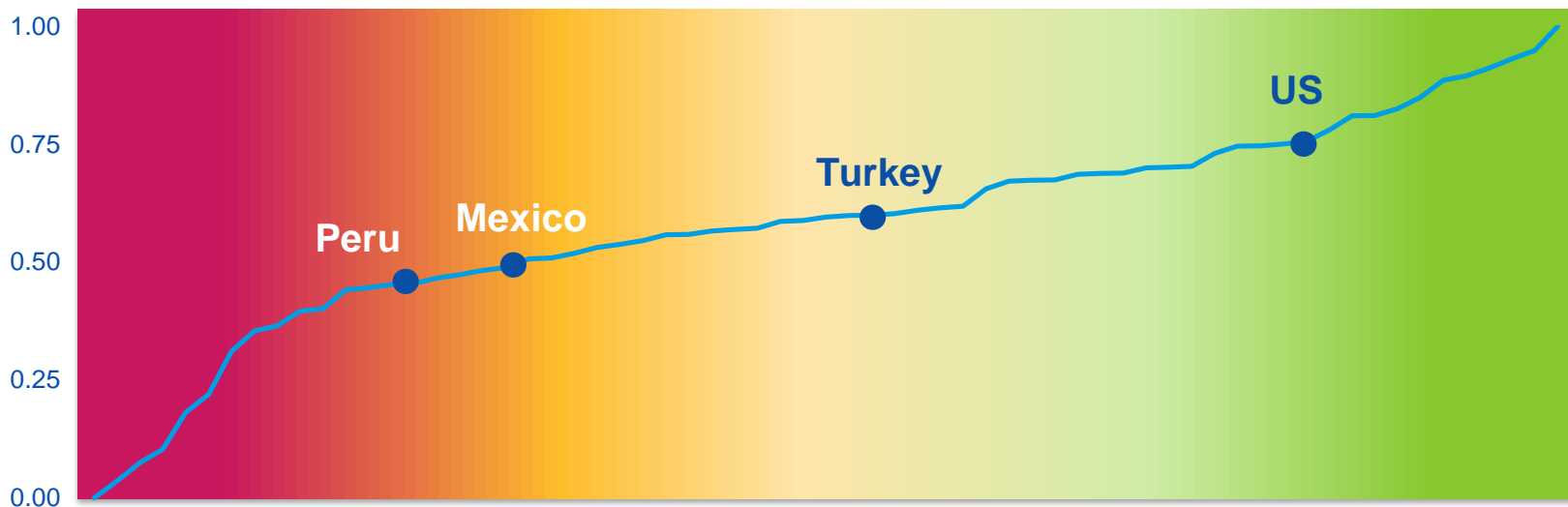


1

Scenario:

Digitization Index

1.1. Structural digitization Index 2015

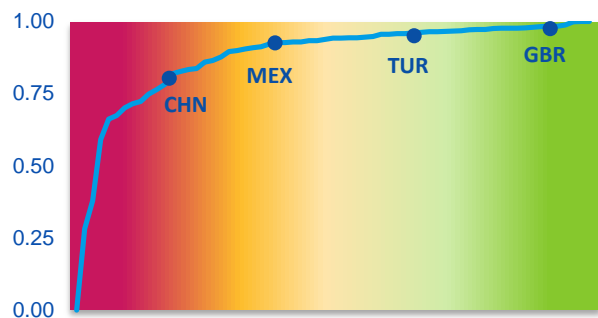


Algeria	Vietnam	Morocco	China	Hungary	Ireland	Germany	Sweden
Qatar	Peru	Thailand	Saudi Arabia	Turkey	Chile	Malaysia	Netherlands
Nigeria	Argentina	Mexico	Croatia	Romania	United Arab Emirates	Denmark	Finland
Pakistan	Egypt	Sri Lanka	Colombia	Uruguay	Belgium	Latvia	Lithuania
Bangladesh	Ukraine	Italy	Slovenia	Luxembourg	Spain	Canada	Korea, Rep.
Paraguay	Greece	Poland	Kazakhstan	Brazil	Singapore	Australia	Japan
India	Philippines	Bulgaria	Russian Federation	Czech Rep.	Austria	France	Estonia
Venezuela	Indonesia	Cyprus	Slovak Republic	South Africa	Portugal	United States	Hong Kong SAR
							United Kingdom

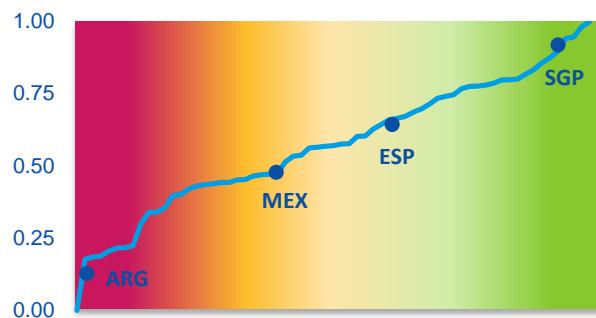
The index comprises the measure of infrastructure level indicators, adoption and use of technologies, costs and regulatory conditions

1.2. Structural digitization Index 2015: By dimension

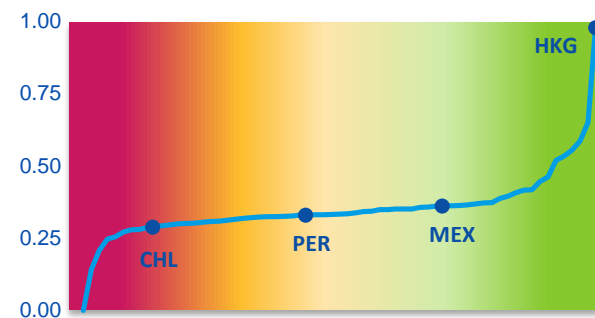
Affordability



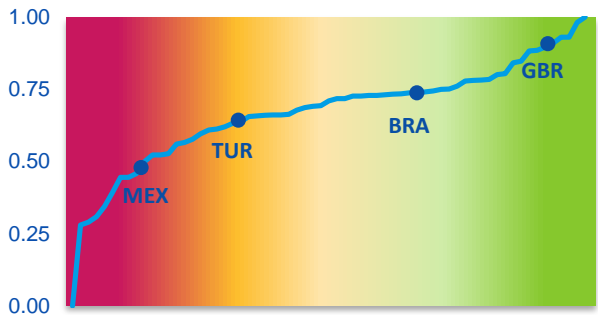
ICT Regulation



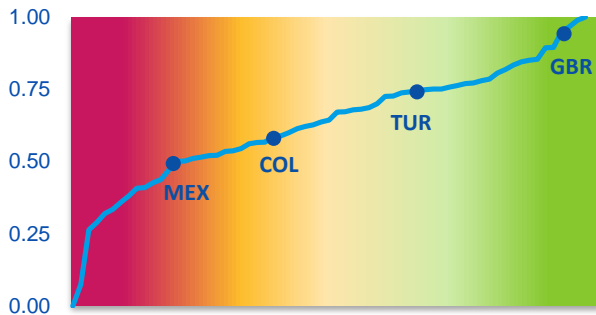
Infrastructure



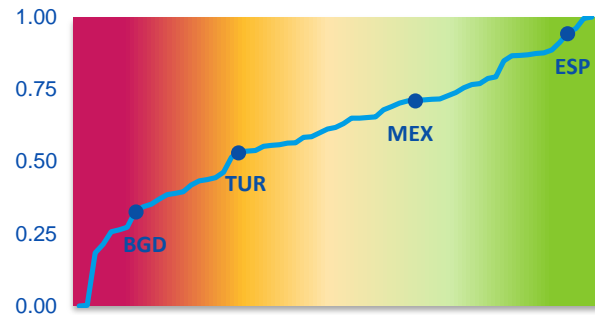
Individual usage



Enterprises usage



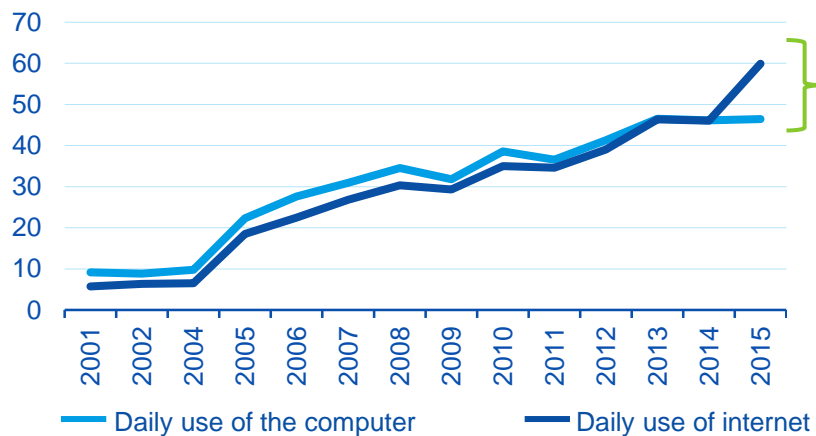
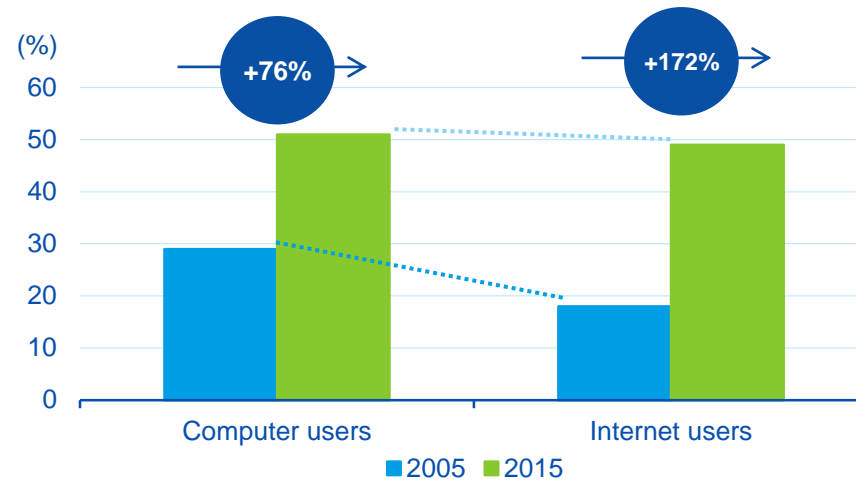
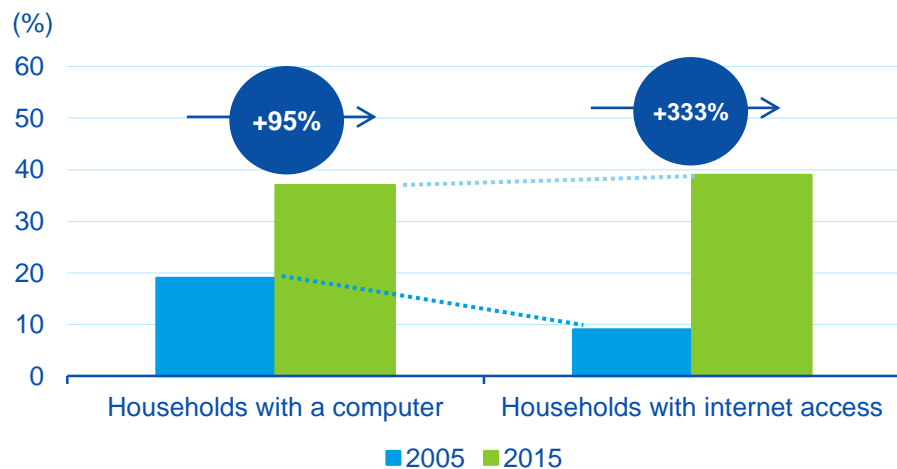
Content





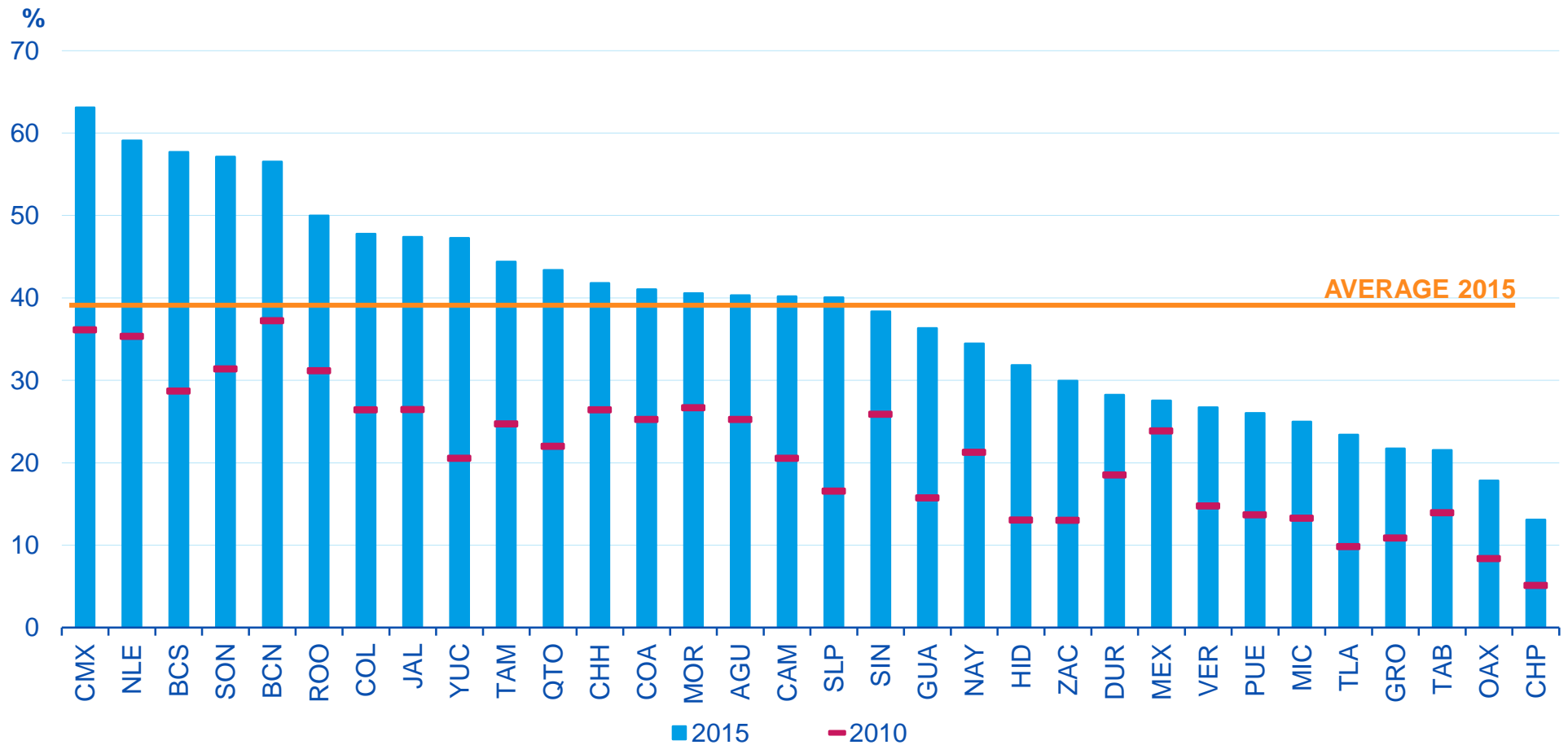
2 Demand side

2.1. Computer and internet: Access at home and usage

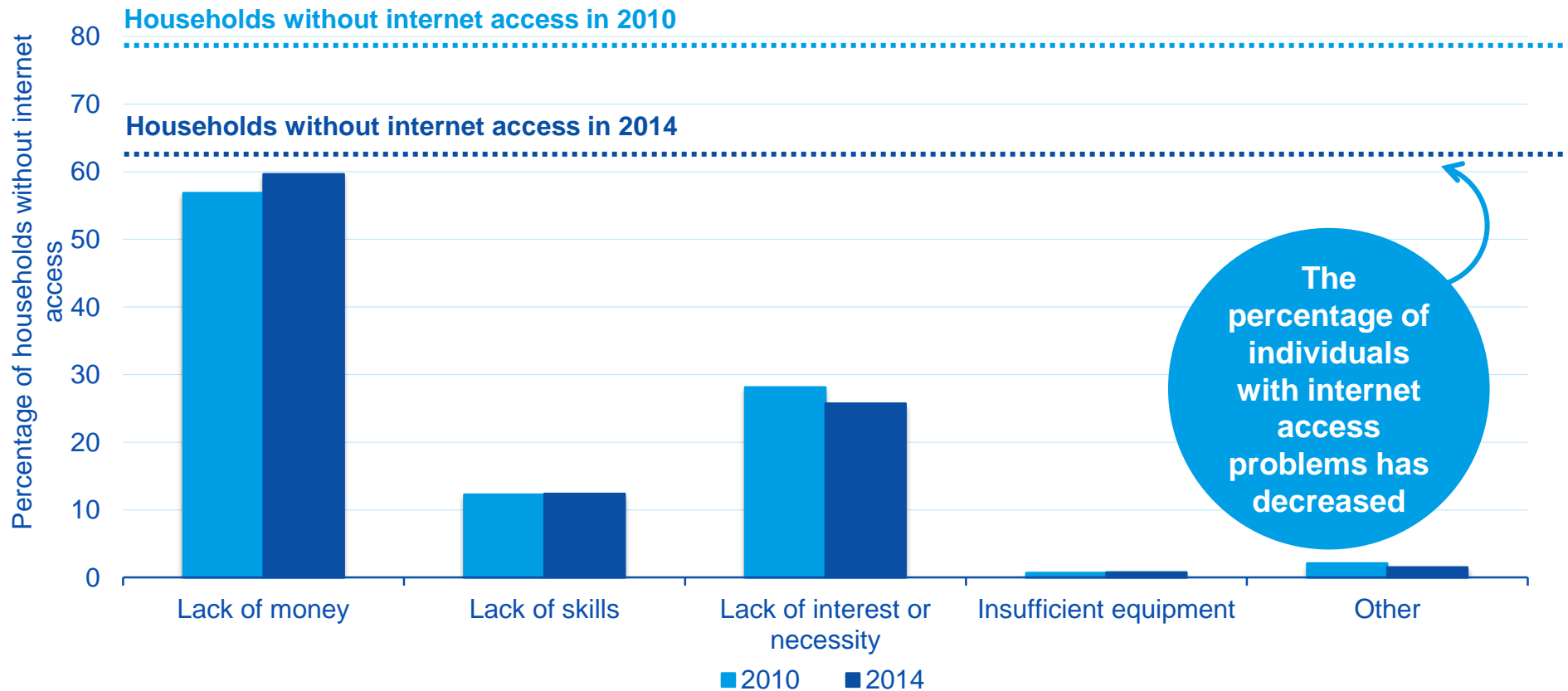


Note: Numbers over the bars correspond to 2005-2015 variation

2.2. Internet access at home: Evolution of the states

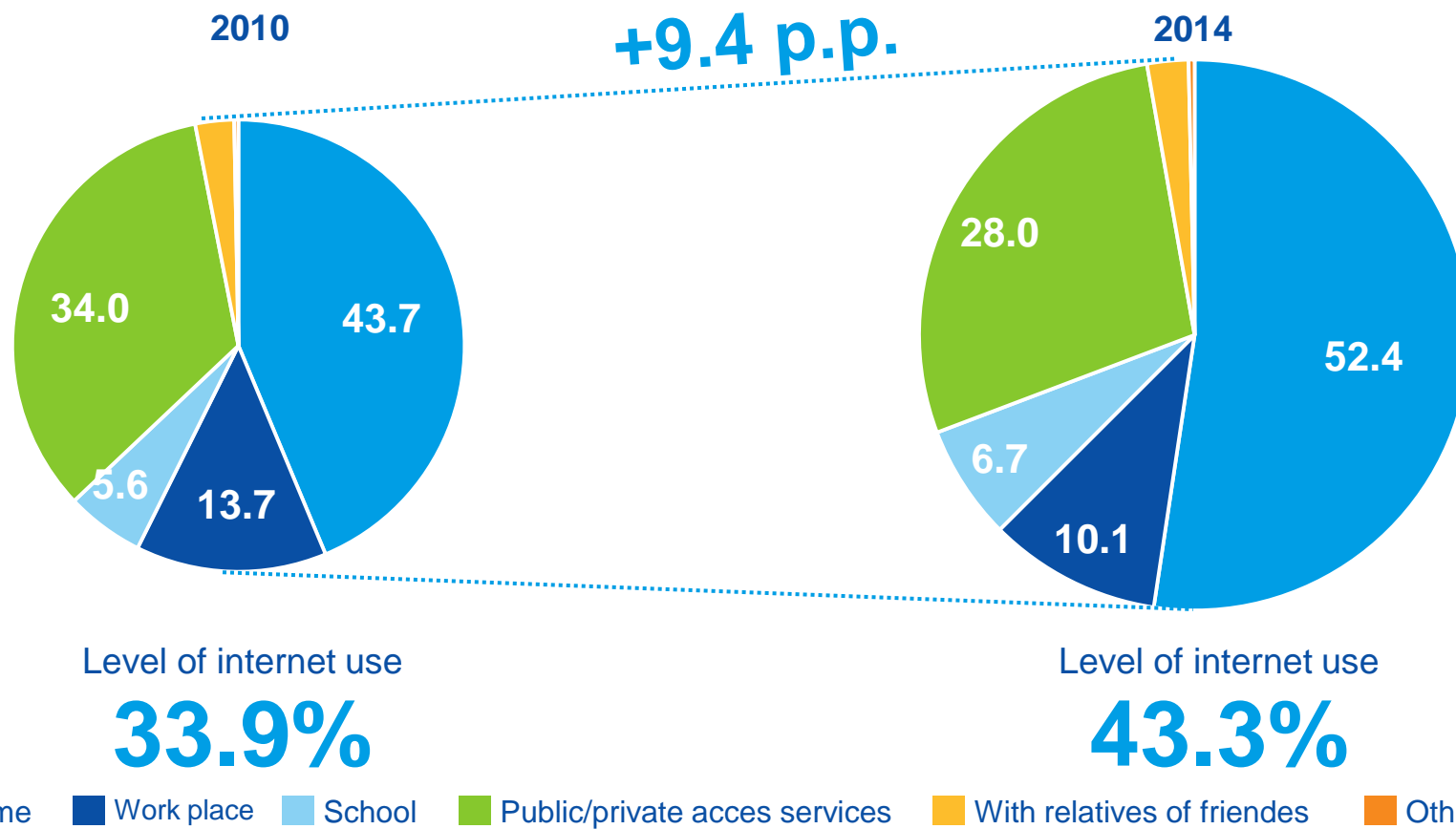


2.3. Internet access barriers at home



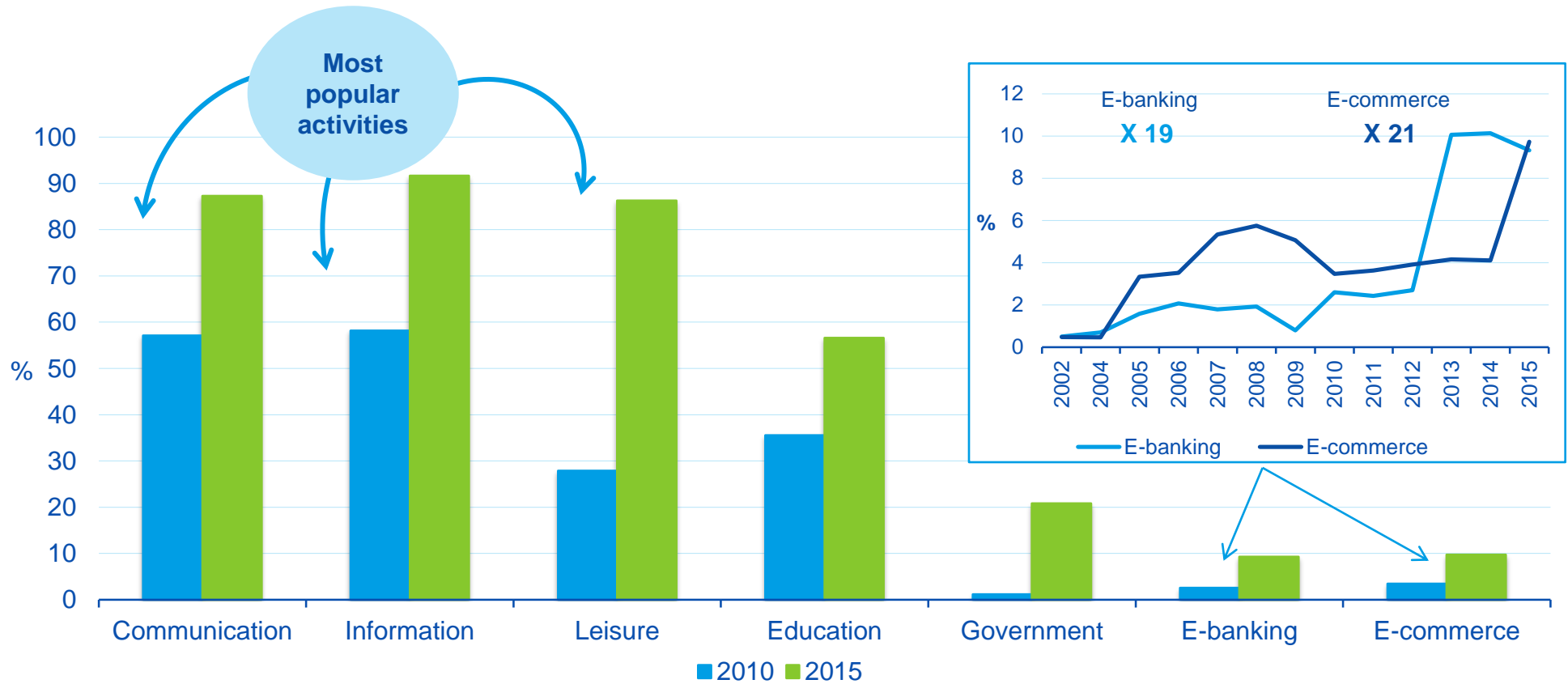
The lack of money is the main barrier to access internet for households

2.4. Places for Internet use



Home and schools gain weight

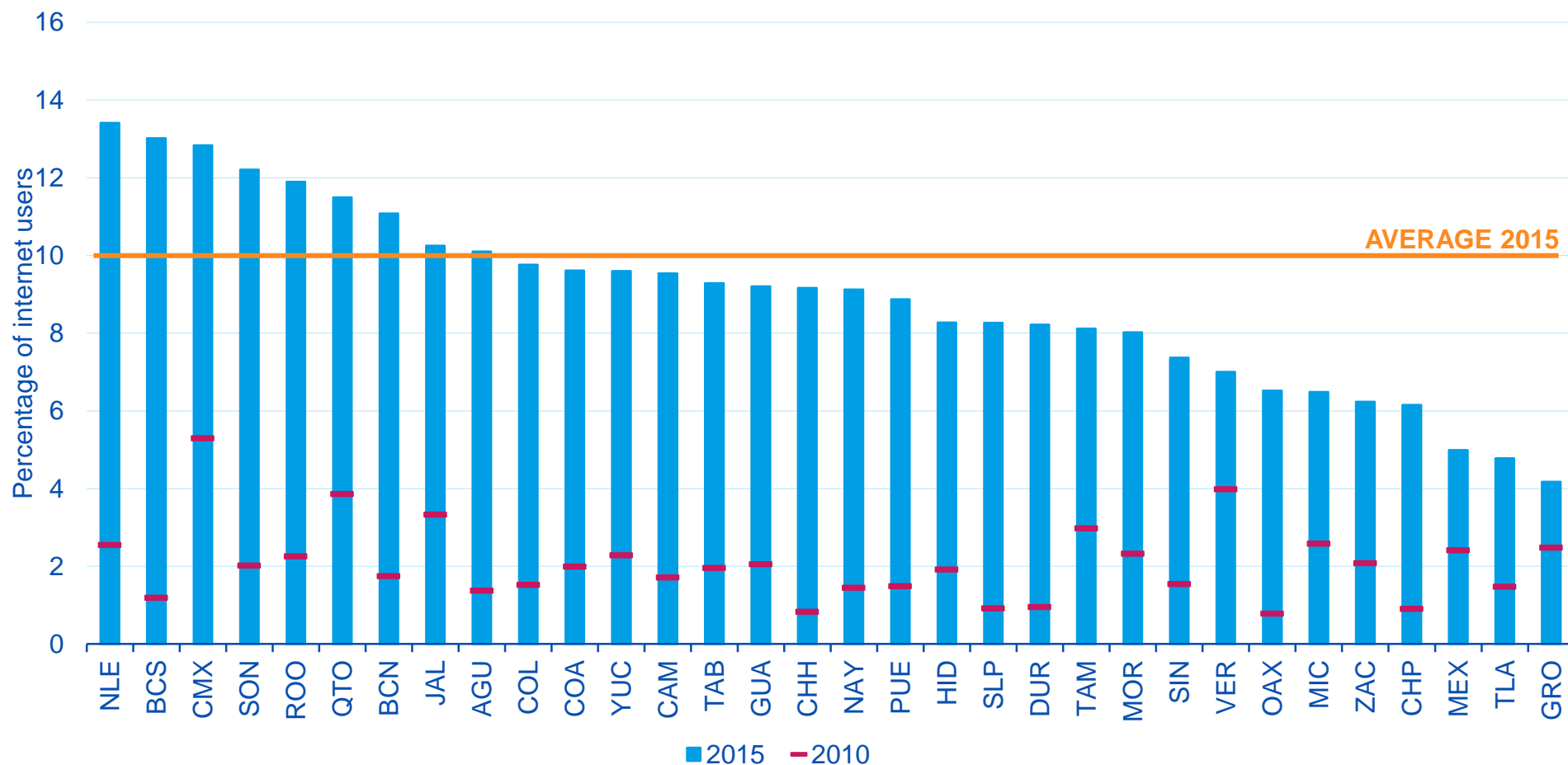
2.5. Internet activities: usages in last three months



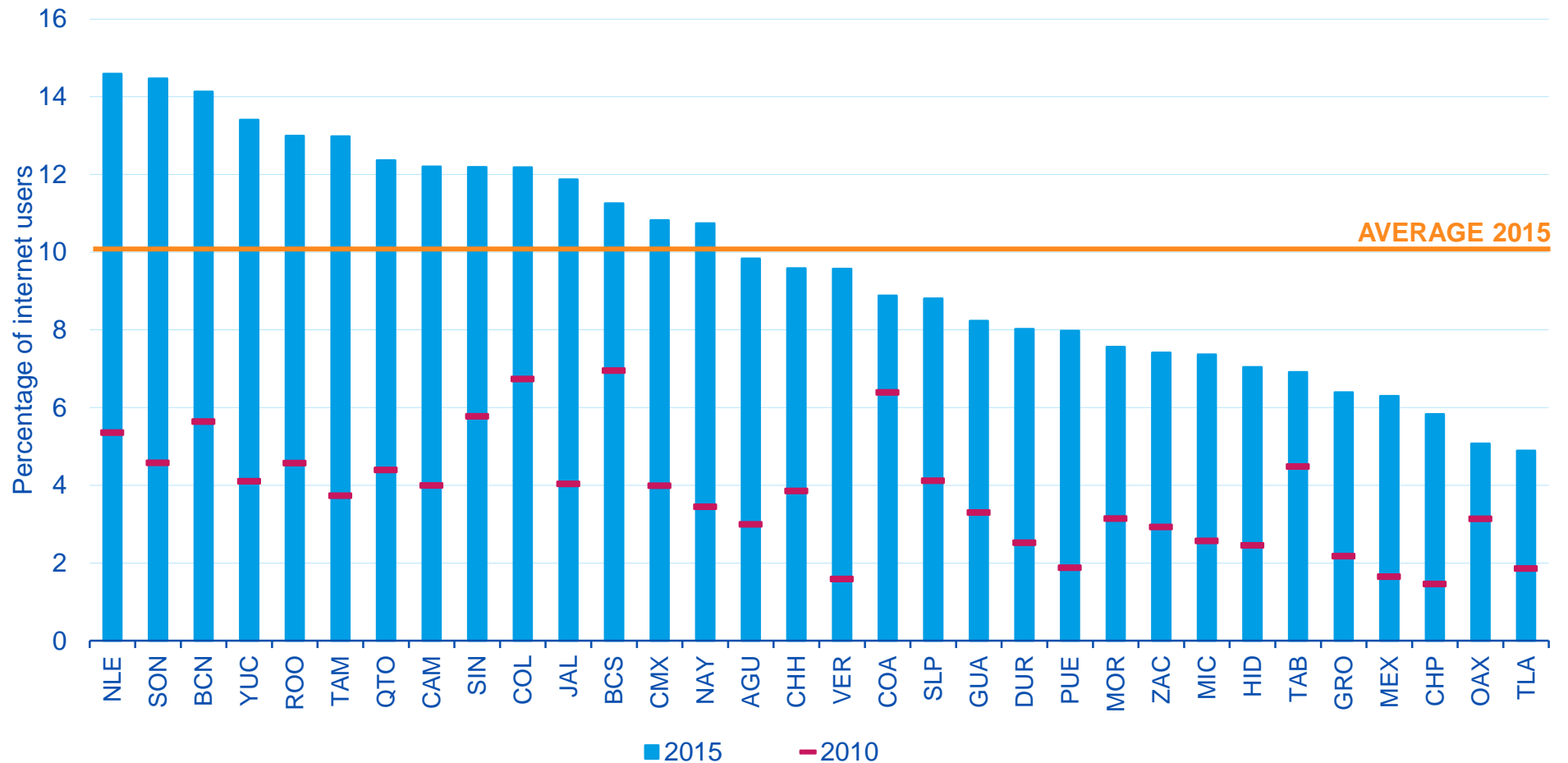
E-banking and e-commerce emerge as one of the two main activities for internet use

* Note: In 2010 individuals only select the two main activities they use/ In 2015 individuals select all activities they use.

2.6. E-banking: Evolution of the states

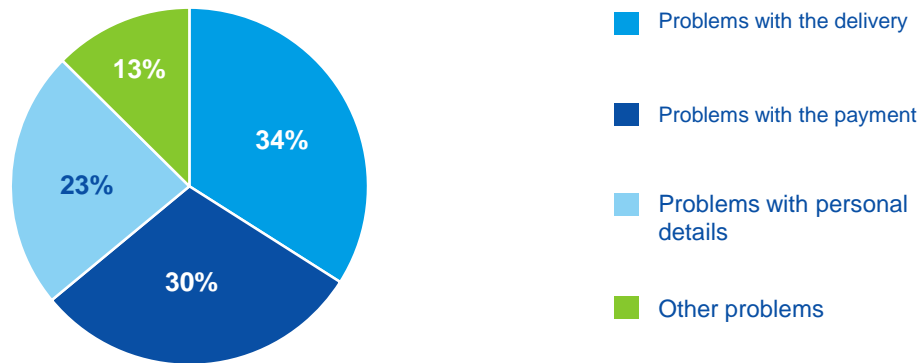


2.7. E-commerce: Evolution of the states

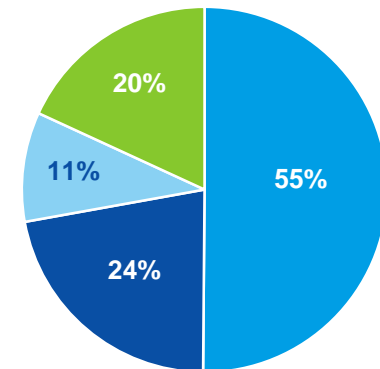


2.8. E-commerce: Sellers and buyers

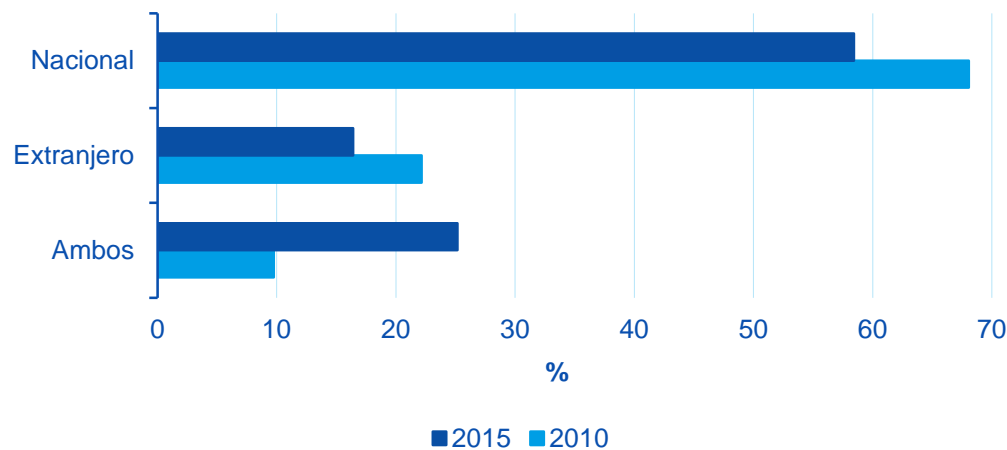
Reported problems by buyers
2010



2015

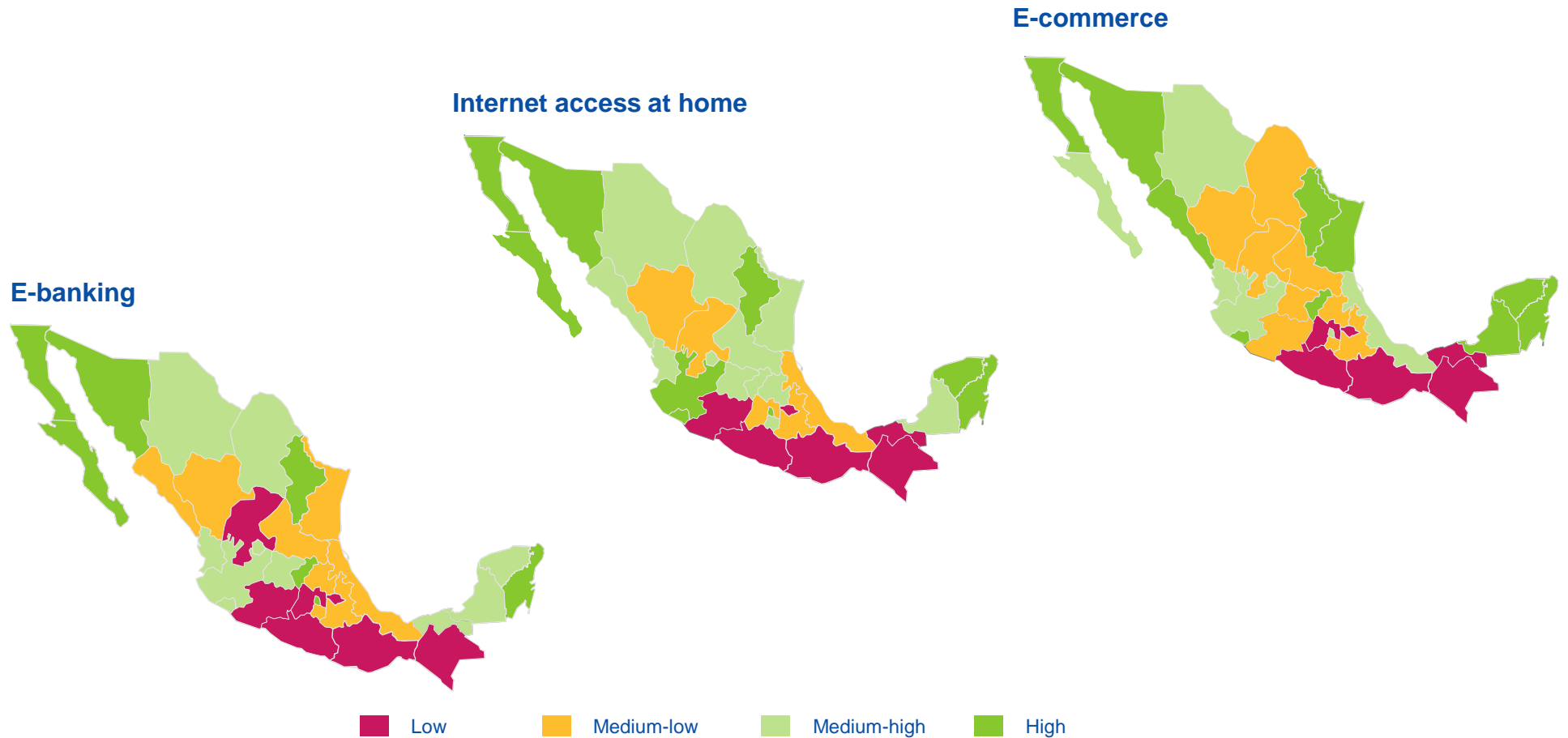


¿Does the sellers origin matter?



Sellers origin is becoming less important when buying on internet

2.9. Geographical distribution in 2015



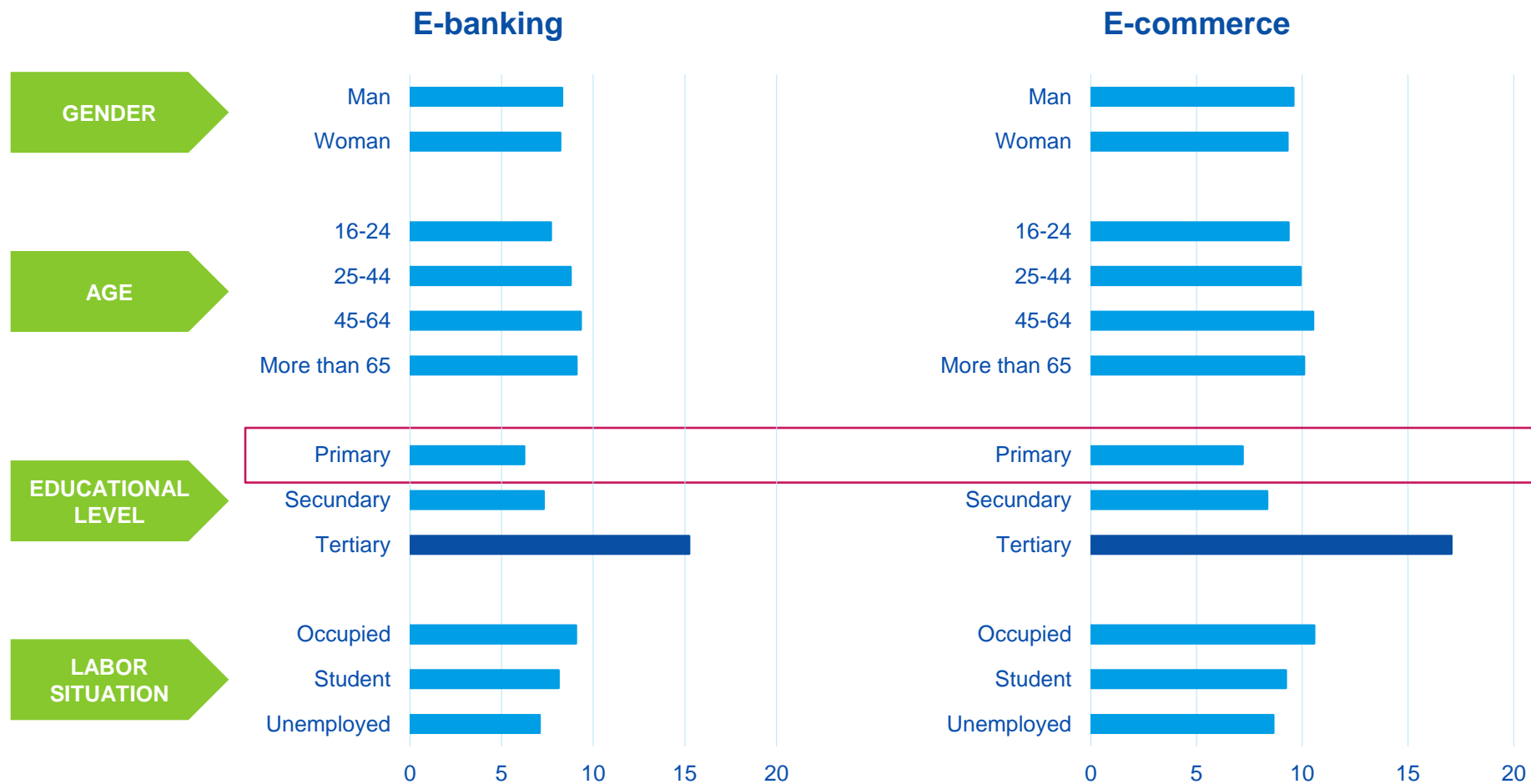
2.10. Population characteristics in 2015 (%)

Internet use

Computer use



2.10. Population characteristics (% of internet users, 2015)

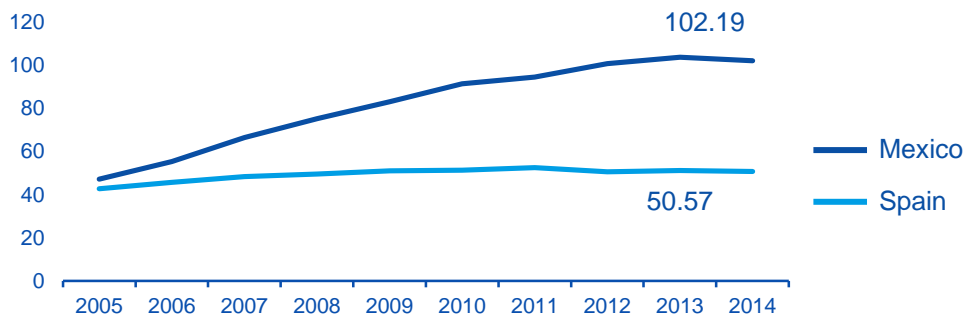




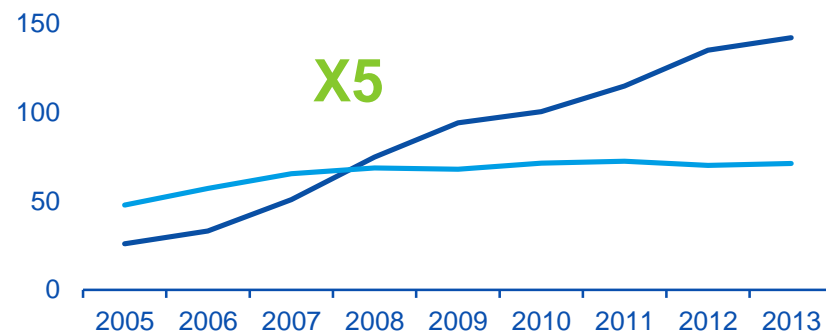
3 Supply side

3.1. Mobile situation

Mobile-cellular telephone subscriptions (millions)



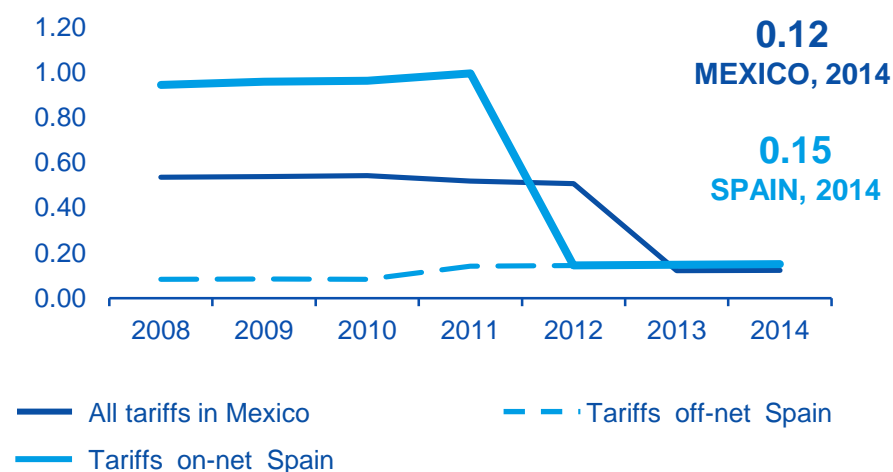
Domestic mobile-telephone traffic (billions of minutes)



Mobile population coverage network

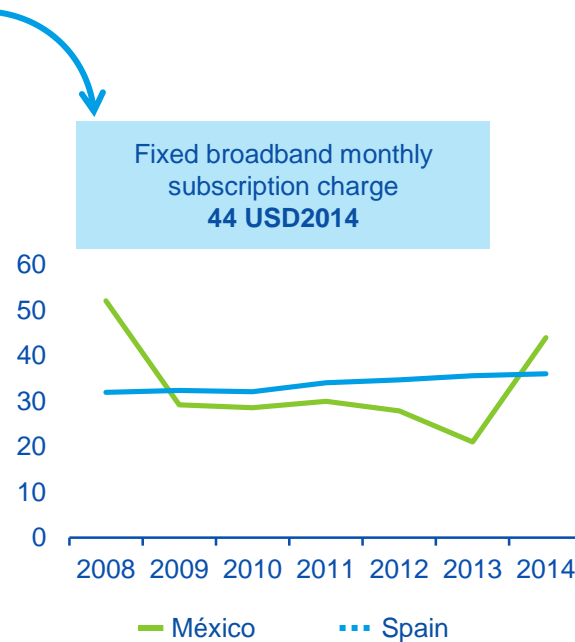
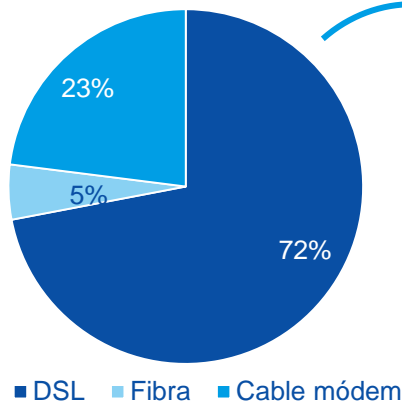


Tariffs: Mobile-cellular prepaid-1 min call (USD)



3.2. Fixed broadband by technology

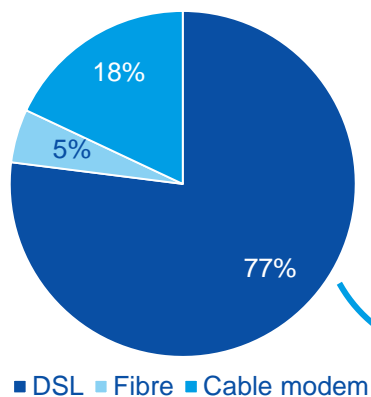
Mexico 2013



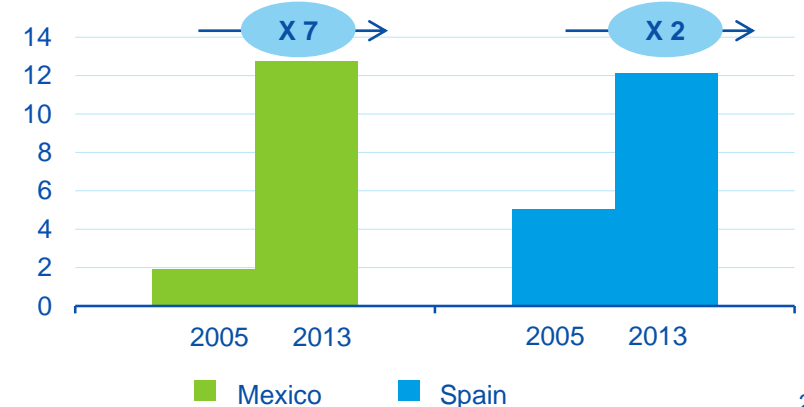
Fixed broadband speed, in Mbit/s)



Spain 2013

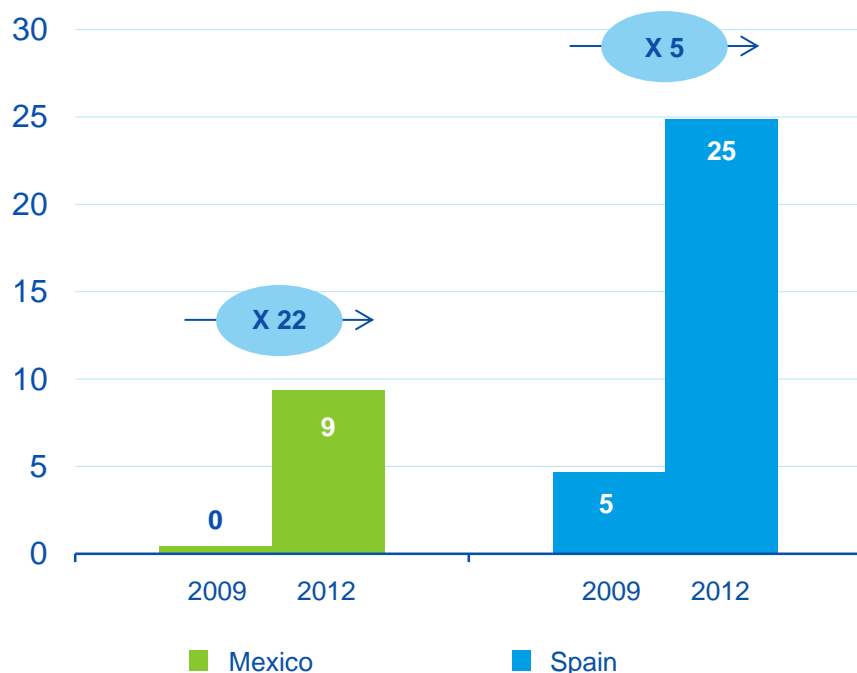


Fixed broadband subscriptions (millions)

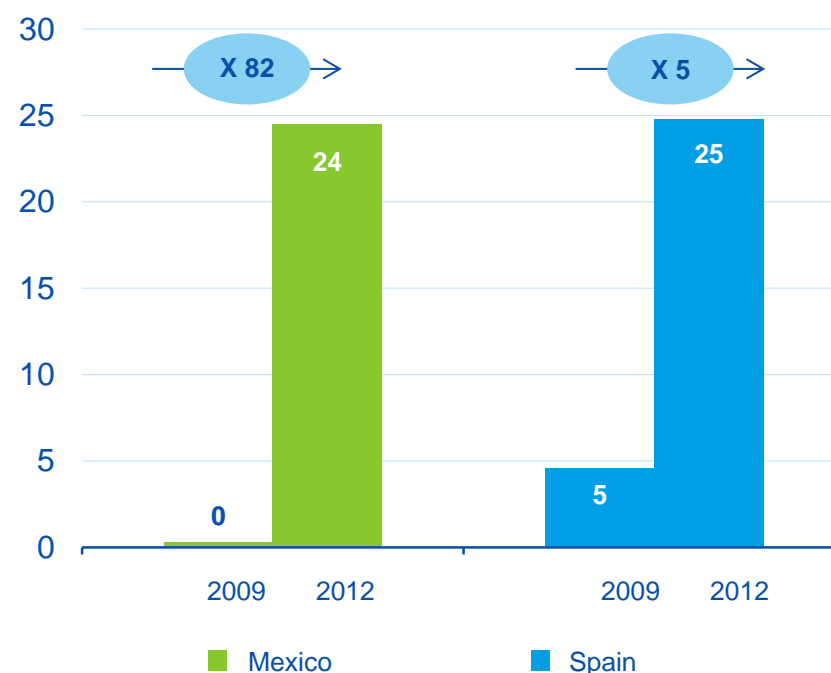


3.3. Wireless broadband

Total wireless broadband subscriptions (millions)



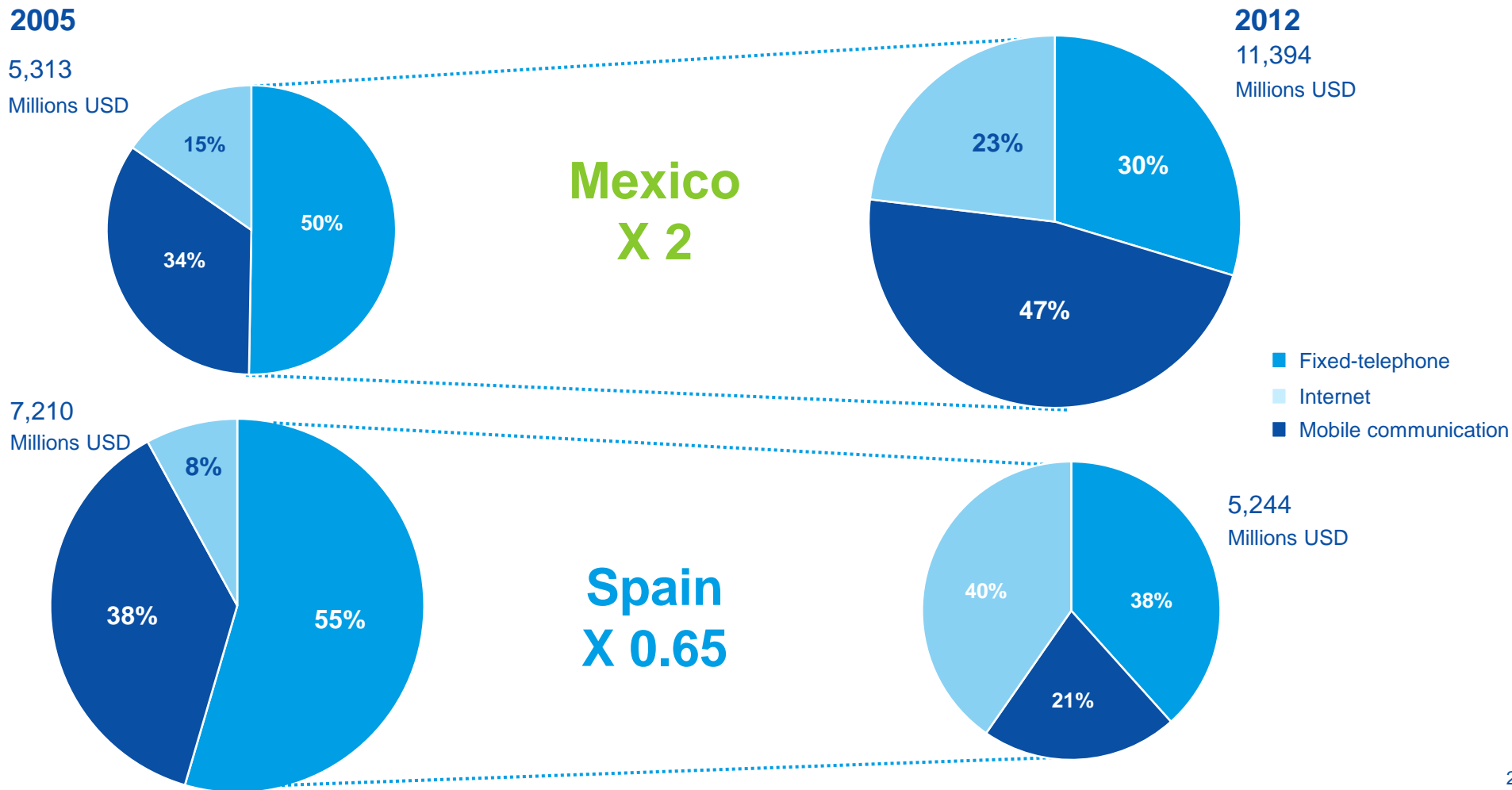
Mobile-broadband subscriptions (millions)



Significant growth in wireless broadband subscriptions, especially in mobile broadband

* Note: numbers inside the bars show nº subscriptions per 100 inhabitants

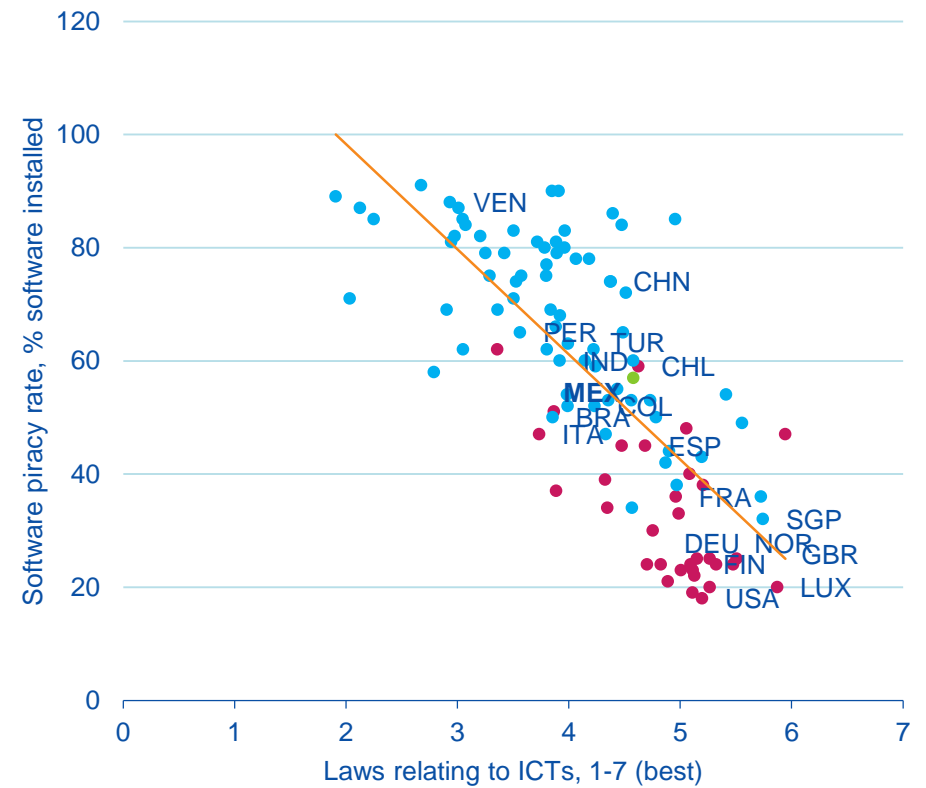
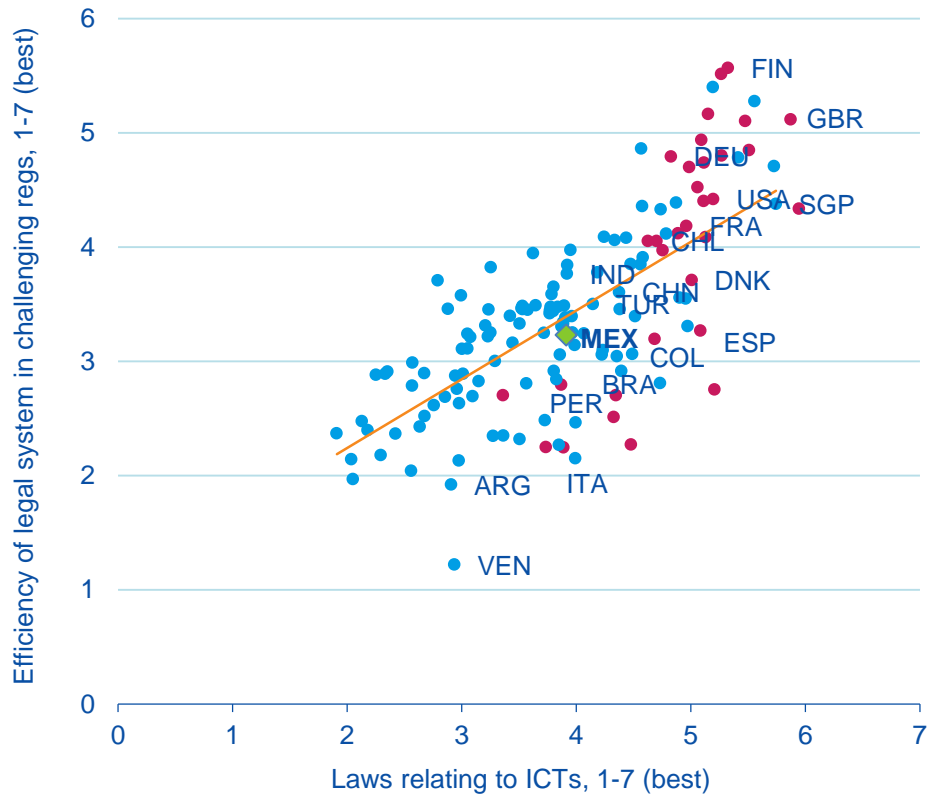
3.4. Annual investment in telecommunication services





4 Regulation side

4.1. ICT laws: Relation with Efficiency and Piracy



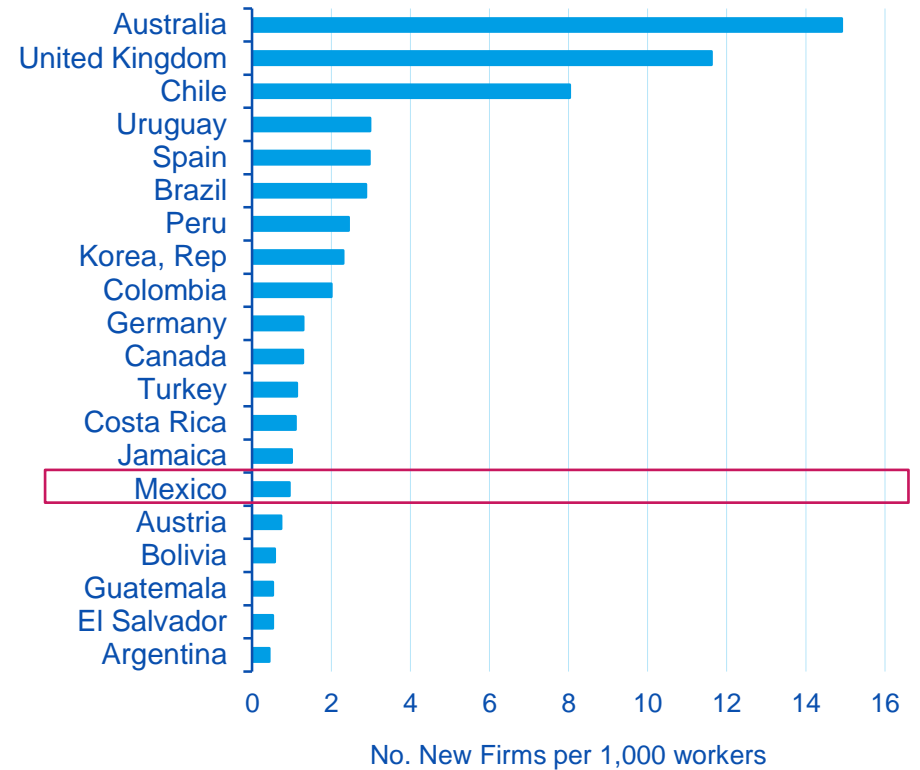
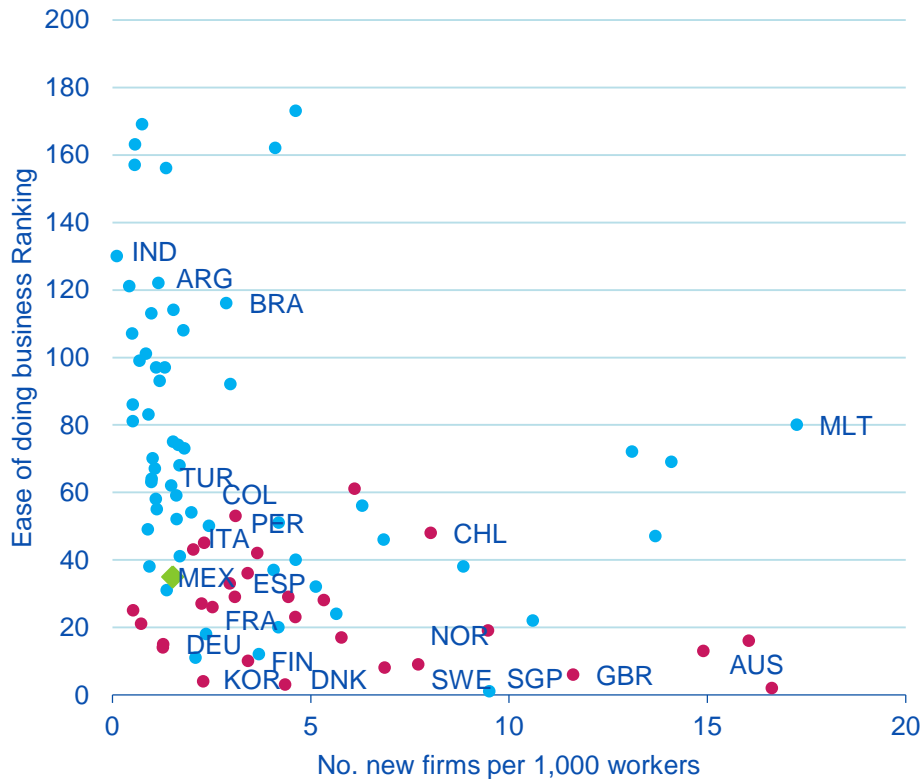
Source: BBVA Research & World Economic Forum

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● High income OECD countries

● Rest (Mexico is highlighted in green)

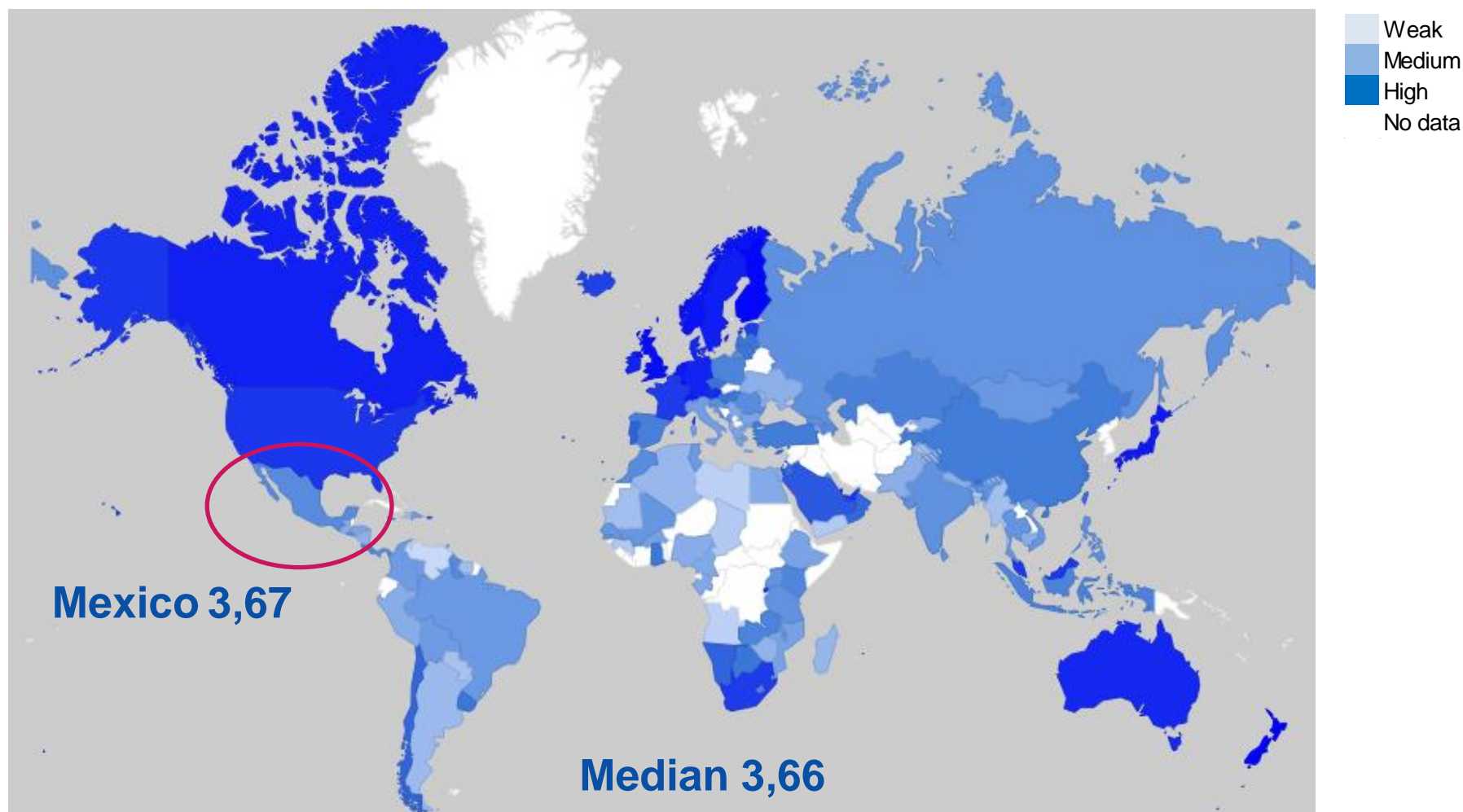
4.2. Ease of doing business & entrepreneurship



● High income OECD countries ● Rest (Mexico is highlighted in green)

Source: BBVA Research & Doing Business (World Bank Group)

4.3. Political and regulatory environment





5 Appendices

Data sources

Composition of the Digitization Index

Infrastructure

- ✓ Fixed (wired)-broadband speed, in Mbit/s.
- ✓ International Internet bandwidth. It is measured in bits per second per internet users
- ✓ Percentage of total population covered by a mobile network signal
- ✓ International Internet bandwidth in megabits per second (Mbit/s)

Users adoption

- ✓ Active mobile-broadband subscriptions.
- ✓ Fixed (wired)-broadband subscriptions.
- ✓ Mobile telephone subscriptions
- ✓ Percentage of households with Internet access at home
- ✓ Proportion of individuals that used the Internet in the last 12 months
- ✓ how widely used are virtual social networks in the country

Firms adoption

- ✓ What extent do businesses use ICTs for transactions with other businesses in the country?
- ✓ What extent do businesses use Internet for selling their goods and services to consumers in the country?
- ✓ What extent do businesses adopt new technology in the country?

[1 = not at all; 7 = to a great extent]

Cost

- ✓ Monthly subscription charge for fixed (wired) broadband Internet service (PPP \$) Fixed (wired) broadband is considered any dedicated connection to the Internet at downstream speeds equal to, or greater than, 256 kilobits per second, using DSL

Regulation

- ✓ How developed are your country's laws relating to the use of ICTs (e.g., electronic commerce, digital signatures, consumer protection)?
[1 = not developed at all; 7 = extremely well-developed]

Content

- ✓ The Government Online Service Index assesses the quality of government's delivery of online services on a 0-to-1 (best) scale. There are four stages of service delivery: Emerging, Enhanced, Transactional and Connected. In each country, the performance of the government in each of the four stages is measured as the number of services provided as a percentage of the maximum services in the corresponding stage

Source of data from the Demand Side: MODUTIH

Module on availability and use of information technologies in households (MODUTIH). The aim is to generate statistical information in order to determine the availability and use of ICTs in Mexico

From 2015, MODUTIH information with the 2001-2014 series is no longer updated, it stops being a module to become an independent project. The National Institute of Statistics and Geography (INEGI) gathers the information in collaboration with the Secretariat of Communications and Transportation (SCT) and the Federal Telecommunications Institute (IFT) since 2015

Source of data from the Supply Side: World Telecommunication/ICT Indicators database (ITU, 2015)

The World Telecommunication/ICT Indicators database contains time series data for the years 1960, 1965, 1970 and annually from 1975 to 2014. These data are available for over 200 economies, however the availability of data for the different indicators and years can vary

The data are collected from an annual questionnaire sent to official economy contacts, usually the regulatory authority or the ministry in charge of telecommunication and ICT. Additional data are obtained from reports provided by telecommunication ministries, regulators and operators and from ITU staff reports

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