



# The economic contribution of broadband, digital transformation and ICT regulation **Econometric modeling for the Americas**

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# The 2018 study and methodology

- This landmark study had been released last year, with the objective to provide clear evidence of the economic impact of **broadband technologies, digitization and ICT regulation**
- Based on cutting-edge econometric modelling
- Using top-tier data metrics on the development of the digital ecosystem (the Digital ecosystem development index) and the maturity of ICT regulatory frameworks (the ICT regulatory tracker)

Expert reports  
Thematics

ITU Publications

## The economic contribution of broadband, digitization and ICT regulation



[www.itu.int/treg](http://www.itu.int/treg)



# Impact of fixed broadband

2010-2018: significant key economic aspects:

- Investment and labour force critically affect economic growth
- Prices for services are the key enablers for adoption
- Income levels affect the revenues and investments of operators
- Critical mass effect: the impact of fixed broadband appears at higher levels of economic development
- Return to scale effect: fixed broadband economic impact tends to increase with economic development
- Fixed to mobile substitution going on



At global level

**10%**

increase in  
**fixed broadband  
penetration**

yielded

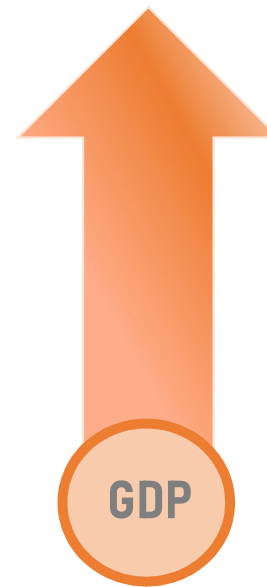
**0.8%**

increase in GDP



# Impact of mobile broadband

- Higher average impact on economic growth than fixed broadband across all income groups
- Higher importance of investment than for fixed broadband
- Affordability is less of a barrier for mobile than for fixed broadband
- Mobile broadband contribution is higher in less developed countries than in more developed
- The lower the income level, the higher the economic impact of mobile broadband



At global level

**10%**

increase in  
**mobile broadband  
penetration**

yielded

**1.5%**

increase in GDP

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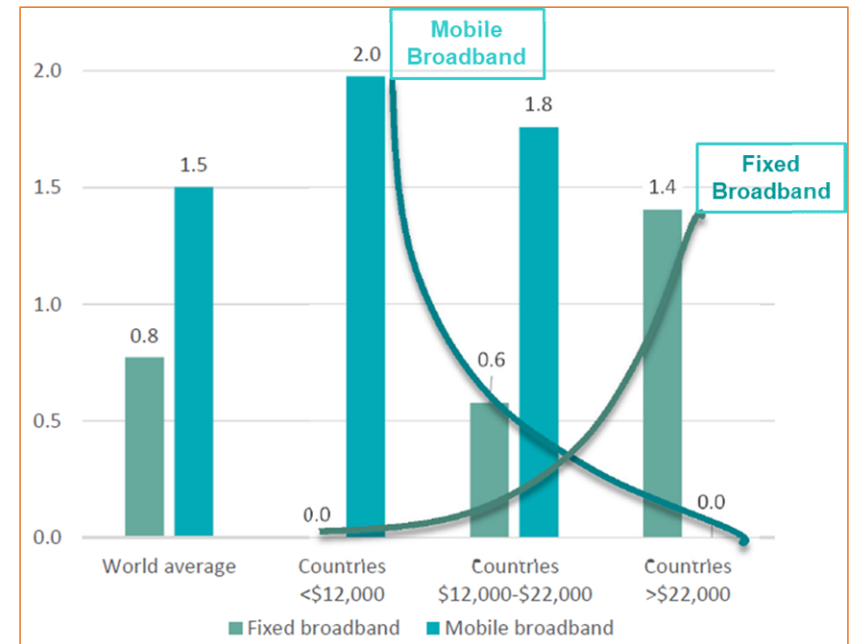


# Impact of broadband at Global level

In summary, the broadband economic impact models confirm that:

- At the aggregate level, mobile broadband appears to have a higher economic impact than fixed broadband;
- The economic impact of fixed broadband is higher in more developed countries than in less developed;
- On the opposite, the economic impact of mobile broadband is higher in less developed countries than in more developed.

## Economic impact of broadband worldwide

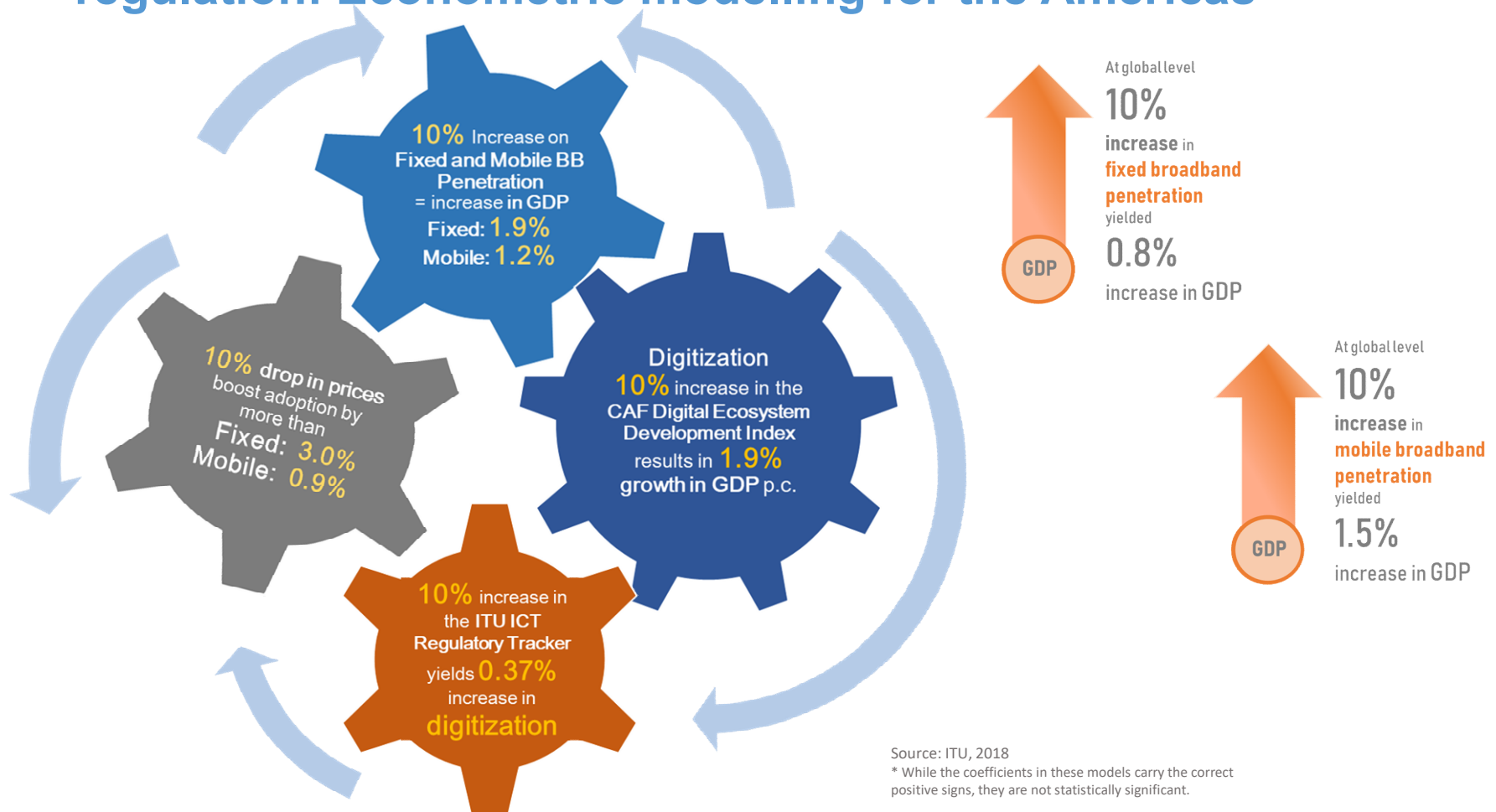


Note: Values expressed as impact on GDP of 10% increase in broadband penetration; for example, when broadband penetration increases from 10% to 11% or from 20% to 22%.

Source: ITU (Katz and Callorda 2018)



# The economic contribution of broadband, digitization and ICT regulation: Econometric modelling for the Americas





# Impact of regulation

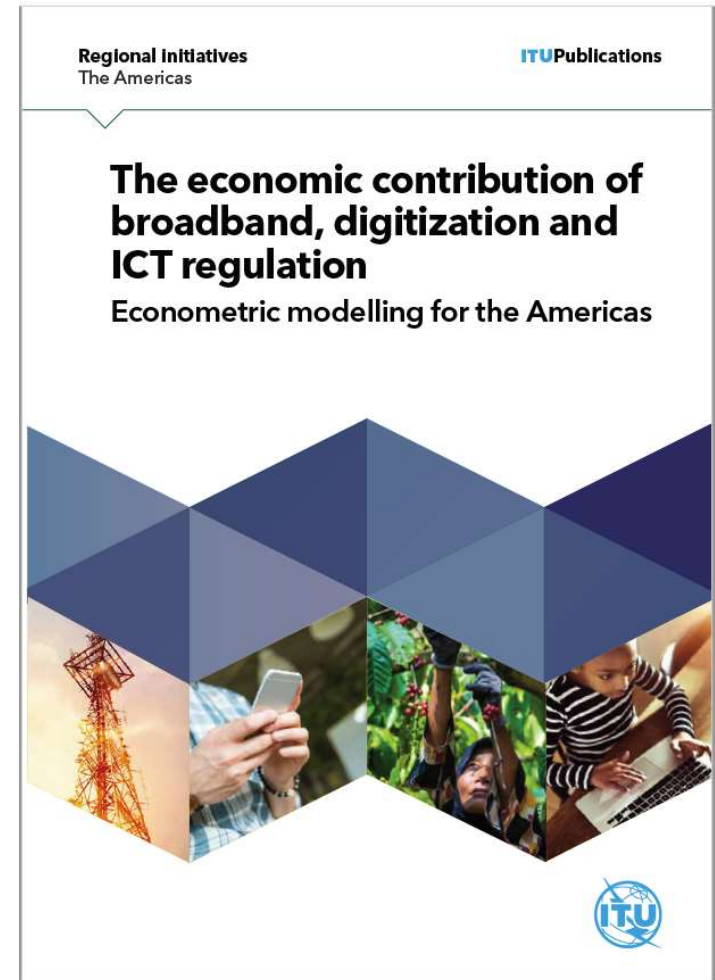
- Regulatory and institutional frameworks are essential in driving digital ecosystem growth and the effect builds up over time
- The connectivity of digital services is significantly correlated with the level of advancement of ICT policies and regulations, and the competition and market power regulatory set-up in particular
- Investment and development of infrastructure in the digital ecosystem are directly and positively influenced by the maturity of ICT regulatory frameworks and by ICT competition frameworks in particular
- Level playing field in the digital marketplace hard to achieve
- New policies and regulations need to be built in and onto existing ones in order to increase their relevance and impact on the development of the digital ecosystem.





# The new regional series

- The regional econometric modelling are now available for Americas, Africa
- Asia & Pacific and Arab States to be released soon
- Europe and CIS countries under development
- A comparative analysis will be also developed when finish the regional modelling
- These studies provides clear evidence of the economic impact of broadband technologies, digitization and ICT regulation







# Benchmarks for regulatory excellence and market performance



[itu.int/go/outlook18](http://itu.int/go/outlook18)



## ICT Regulatory Tracker 2018

#ITUdata

Tracker by Country Country Card **Tracker by Region** Comparison Map Generations of Regulation About the Tracker

Select an option

ICT Regulatory Tracker 2018: Americas ( North America + Latin America & the Caribbean )

Cluster	C1: Regulatory Authority	C2: Regulatory Mandate	C3: Regulatory Regime	C4: Competition Framework	Overall Score
Max Score:	20	22	30	28	100
Country					
Antigua and Barbuda	8	11.5	8	13.33	40.83
Argentina	17	20	21	28	86.00
Bahamas	19	18.5	26	25.33	88.83
Barbados	17	12.5	18	21	68.50
Belize	17	18.5	20	7.33	62.83
Bolivia (Plurinational State of)	9	9	8	8.5	34.50
Brazil	16	18.5	26	28	88.50
Canada	19	16.5	30	20	85.50
Chile	14	20	18	27	79.00
Colombia	15	15	22	27	79.00
Costa Rica	19	16	26	24	85.00
Cuba	2	12	14	5	33.00
Dominica	11	15.5	20	26	72.50
Dominican Rep.	19	19.5	28	28	94.50
Ecuador	20	18.5	21	26	86.50
El Salvador	19	14.5	14	26	73.50
Grenada	14	17	20	23	74.00
Guatemala	12	12.5	10	18.67	53.17
Guyana	18	18	15	11	62.00
Haiti	14	19.5	10	15	58.50

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THANK YOU!

