



# ICT Development Index

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# ICT Development Index - Revision

IDI: a composite index developed by ITU (2009), to monitor:

- The evolution of ICT developments over time & across countries
- The digital divide and progress towards an information society

IDI revision

- Call from countries to make IDI a stronger tool to monitor ICT trends
- New list of 14 indicators adopted in March 2017



# Previous IDI: **Indicators dropped** in 2018

Access sub-index	Use sub-index	Skills sub-index
<b>Fixed-telephone subscriptions (/100 inhabitants)</b>	Individuals using the internet (%)	Mean years of schooling (years)
<b>Mobile-cellular telephone subscriptions (/100 inhabitants)</b>	<b>Fixed-broadband subscriptions (/100 inhabitants)</b>	Secondary gross enrollment ratio (%)
International Internet bandwidth (bit/s/Internet user)		Tertiary gross enrollment ratio (%)
Households with a computer (%)	Active mobile-broadband subscriptions (/100 inhabitants)	
Households with Internet access (%)		



# Revised IDI: **Indicators added in 2018**

## Access sub-index

Households with a computer (%)

Households with Internet access (%)

International Internet bandwidth  
(bit/s/Internet user)

### **Population covered by 3G mobile networks**

- At least 3G (%)
- At least LTE/WiMAX (%)

### **Fixed-broadband subscriptions by speed tiers**

- 256 kbit/s to 2Mbit/s (% of total)
- 2 to 10 Mbit/s (% of total)
- Equal to or above 10 Mbit/s (% of total)

## Use sub-index

Individuals using the Internet (%)

Active mobile-broadband  
subscriptions (/100 inhabitants)

### **Mobile-broadband Internet traffic (/subscription)**

### **Fixed-broadband Internet traffic (/subscription)**

### **Mobile phone ownership (%)**

## Skills sub-index

Mean years of schooling

Secondary gross enrollment ratio (%)

Tertiary gross enrollment ratio (%)

### **Individuals with ICT skills (%)**

1. Copying or moving a file or folder
2. Using copy and paste tools to duplicate or move information within a document
3. Sending e-mails with attached files
4. Using basic arithmetic formula in a spreadsheet
5. connecting and installing new devices
6. Creating electronic presentations with presentation software
7. Finding, downloading, installing and configuring software
8. Transferring files between a computer and other devices
9. Writing a computer program using a specialized programming language



# Challenge: Missingness

- 58% of revised IDI data are estimates (28% for 2017 IDI)
- 77% of revised IDI missing for (6) new IDI indicators (34% for (8) old indicators)
- More than 80 countries have  $\geq 50\%$  estimated data
- Minimum threshold (50%) for indicator coverage not met



# Challenge: Newness

- Some data submitted not in line with ITU definitions
- Selected countries did not agree with estimates; some requested more time
- PP-18 calls for use of country data
- Concerns were confirmed by index results



# New IDI: Indicators added in 2018

## Access sub-index

Households with a computer (%)

Households with Internet access (%)

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(bit/s/Internet user)

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## Use sub-index

Individuals using the Internet (%)

Active mobile-broadband  
subscriptions (/100 inhabitants)

### Mobile-broadband Internet traffic (/subscription)

### Fixed-broadband Internet traffic (/subscription)

### Mobile phone ownership (%)

## Skills sub-index

Mean years of schooling

Secondary gross enrollment ratio (%)

Tertiary gross enrollment ratio (%)

### Individuals with ICT skills (%)

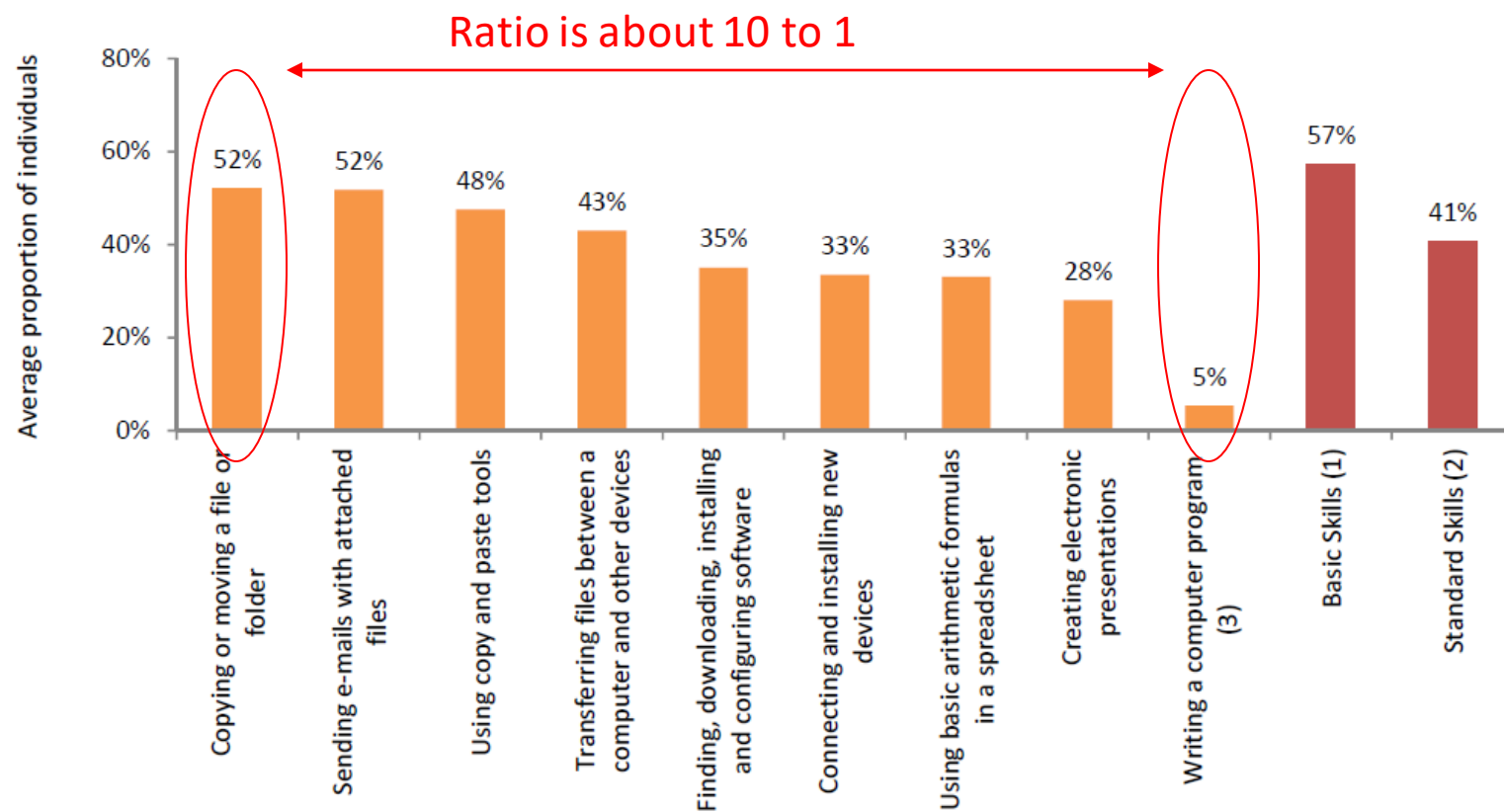
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# Individuals with ICT skills: data estimated for 145 countries

- More people can copy/paste than write a computer program:  
Ratio of 10 to 1

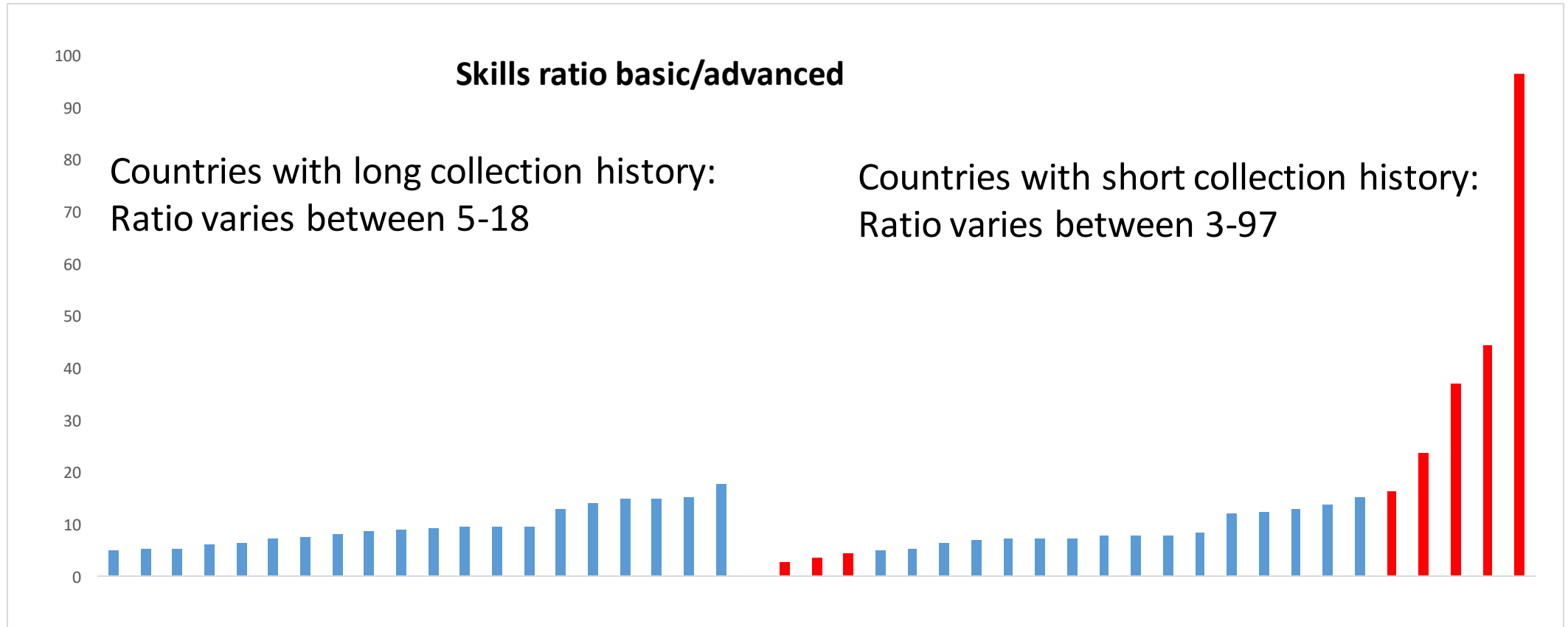
Chart 2.1: Distribution of specific digital skills among individuals, 2017







# Skills ratio – concerns about data quality but also estimates





# New IDI: Indicators added in 2018

## Access sub-index

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## Use sub-index

Individuals using the Internet (%)

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### Fixed-broadband Internet traffic (/subscription)

Mobile phone ownership (%)

## Skills sub-index

Mean years of schooling

Secondary gross enrollment ratio (%)

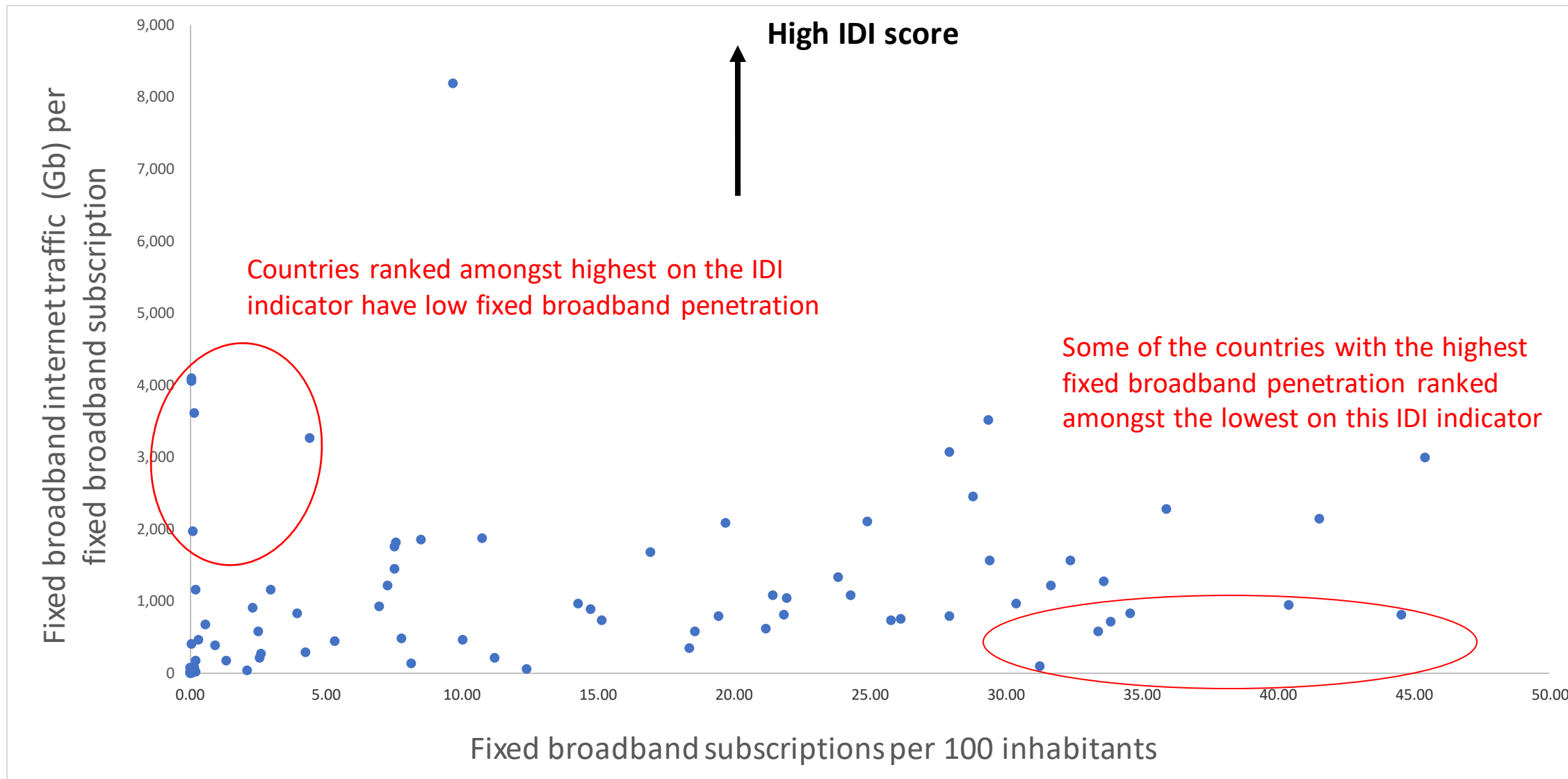
Tertiary gross enrollment ratio (%)

### Individuals with ICT skills (%)

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# Fixed-broadband traffic per subscription: data estimated for 116 countries





# New IDI: Indicators added in 2018

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## Use sub-index

Individuals using the Internet (%)

Active mobile-broadband subscriptions (/100 inhabitants)

### Mobile-broadband Internet traffic (/subscription)

### Fixed-broadband Internet traffic (/subscription)

### Mobile phone ownership (%)

## Skills sub-index

Mean years of schooling

Secondary gross enrollment ratio (%)

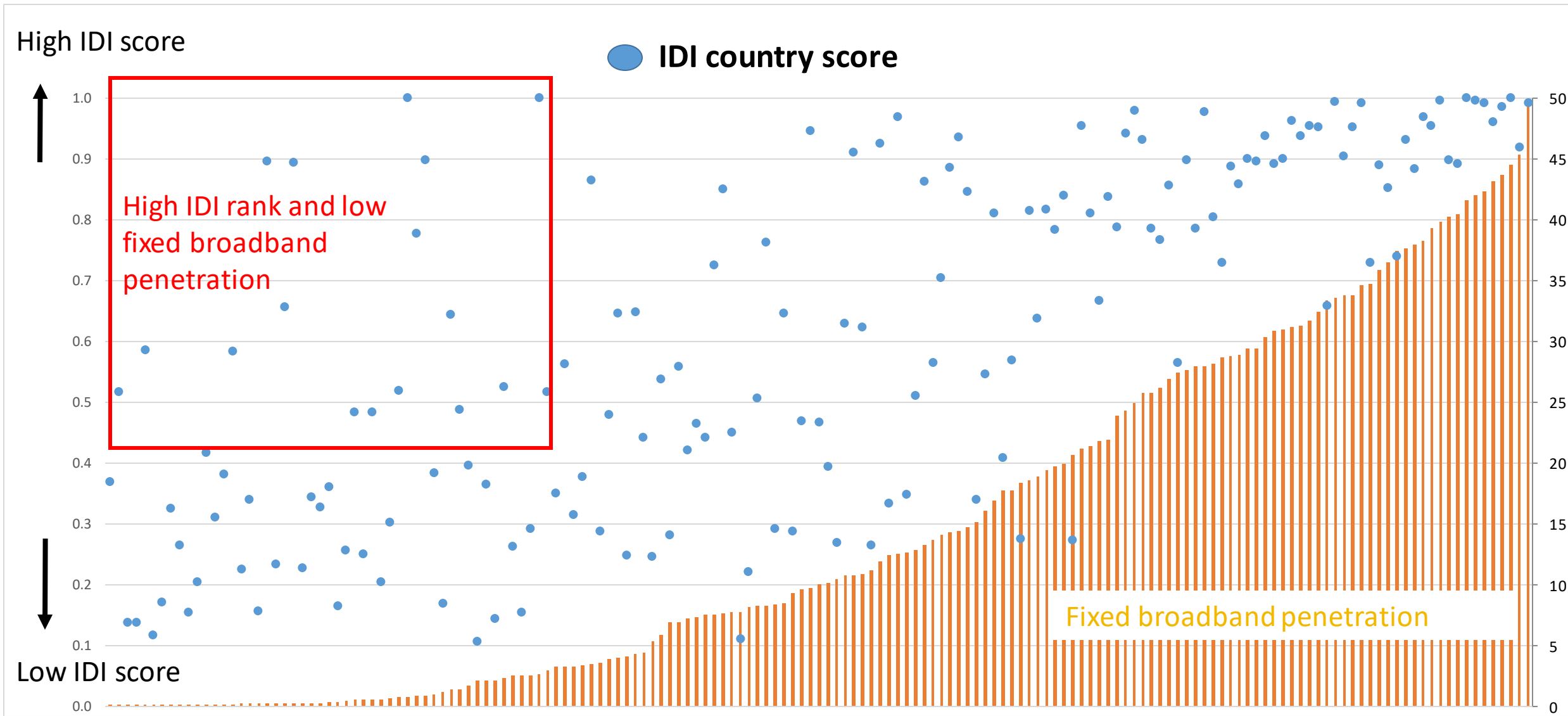
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# Fixed broadband by speed tiers





# Way forward

- Possible short-term solutions:
  - Limit the number of countries included in IDI to those with minimum data availability (but keep current list of indicators)
  - Limit the list of indicators and only include those indicators with minimum data availability (but include large number of countries)
  - Agree on minimum thresholds
- Improve data availability and quality
  - Capacity building workshops and technical assistance
  - Inform countries about data gaps