



# Digital Literacy: A Way to Share Digital Dividends

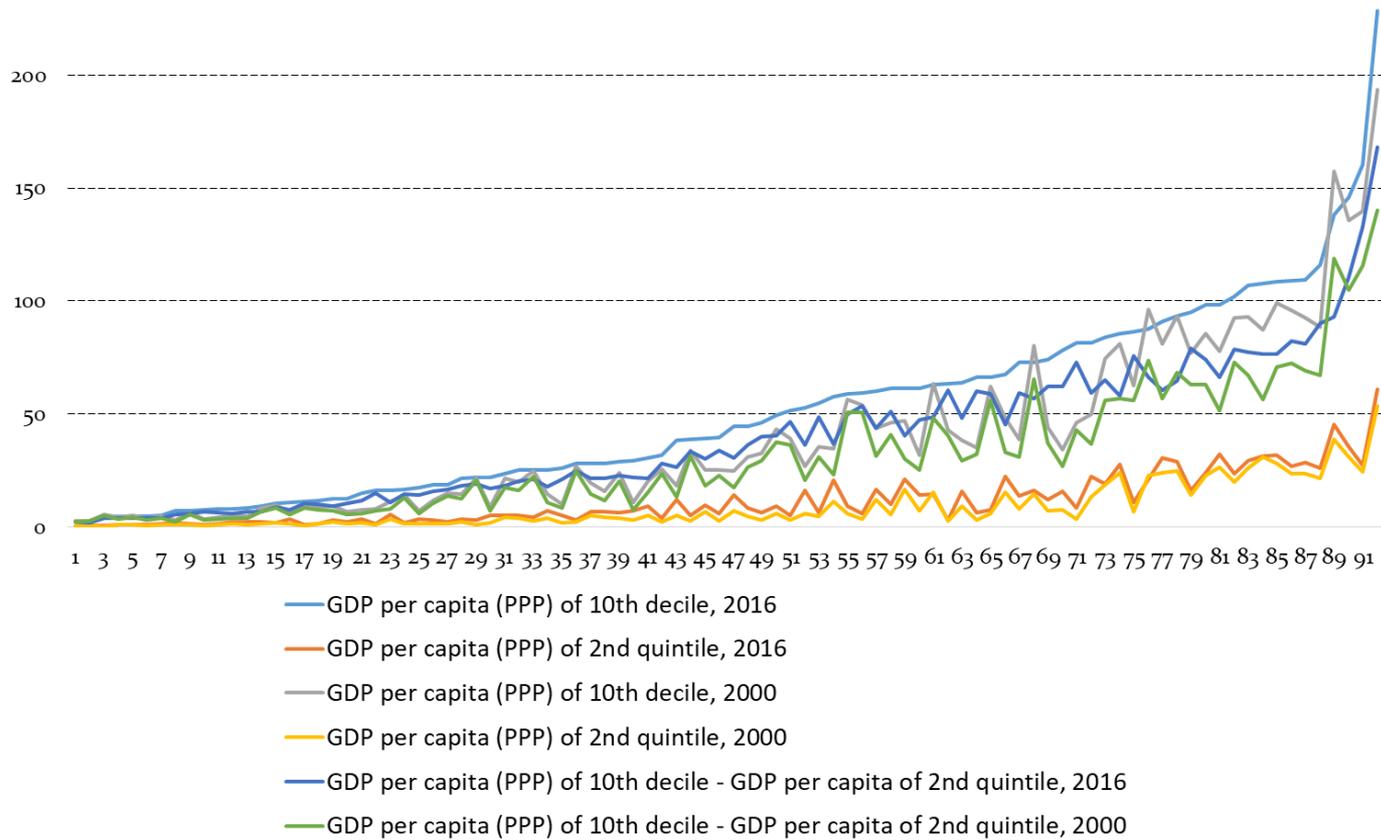
---

**December 1, 2021**

Dr. Alexandra Morozkina

---

*Head of Structural Reforms Division  
Economic Expert Group*



# Global income inequality does not decrease

Source: Grigoryev, Pavlyushina (2019) Global Recession and Income Inequality

✓ **Growing gap** between the average incomes of the 10th decile and 2d quintile is apparent in the lower middle strata

✓ The distribution of household incomes has become **more unequal** during the post-2008 economic recovery

# Digital divide indicators



	Brazil	India	China	Russia	SAR
Access					
Mobile broadband subscriptions (per 100 inhabitants)	90.2	25.8	83.6	80.8	70
Download speed, fixed bb (Mbps)	47.8	38	101.3	60.7	27.9
Usage					
Use of virtual social networks (%)	66	23	71	49	40
Internet shopping (% of pop)	14.2	2.9	45.3	26.9	7.9
Adult literacy (% of pop)	93.2	74.4	96.8	99.7	87
Opportunities					
OSI (Online Service Index), UN DESA	0.92	0.95	0.86	0.92	0.83
Firms with website (% of firms)	54	48.9	66.1	64.6	36



## All five BRICS members

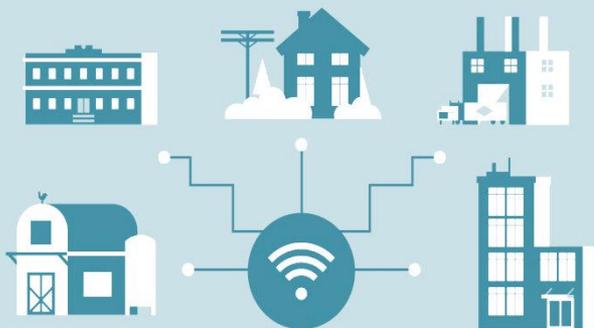
Have ambitious goals in terms of internet coverage



## Building of infrastructure

Is the most popular measure for spreading Internet access

# First-level digital divide in BRICS



## B R I C S Inequality by region groups within BRICS

Economic centers	81	88	96	76	72
Developed	73	81	46	59	55
Middle-income	63	79	36	50	59
Less developed	56	83	29	44	48
<b>Total</b>	<b>70</b>	<b>82</b>	<b>37</b>	<b>53</b>	<b>62</b>

## Inequality indicators

Relative variability	0.56	0.34	3.58	0.72	0.51
Variation ratio	0.14	0.07	0.69	0.19	0.16
Theil index	0.01	0.002	0.02	0.17	0.01

Source: Morozkina (2020) Regional Perspective of Digitalization in BRICS



## Regional inequality and internet access in remote areas

is the main challenge for all five countries. A decrease of digital gap at the national level must be accompanied by respective progress in the least developed areas

## B R I C S

	B	R	I	C	S
Digital literacy		70%	20%		
Share of people who do not use the internet due to the lack of knowledge (% of non-netizens)	24%			52%	13%

Source: Morozkina, Tonkikh (2021) Developing a BRICS-Led Digital Literacy Framework



### **Second-level digital divide**

becomes more important with the development of digital infrastructure



### **India and Russia**

regularly assess digital literacy levels



### **Brazil, China, South Africa**

conduct sample surveys on ICT issues, which include the question on reasons for not using internet



## **Second-level digital divide**

## DigComp 2.0

- Used in EU, Russia, UNESCO Digital Literacy Global Framework;
- covers 21 components of digital competence within the following five areas
  - Information and data literacy;
  - Communication and collaboration;
  - Digital content creation;
  - Safety;
  - Problem solving.

---

 Comprehensive, but too complex for realization in wide range of countries

## India (PMGDISHA program)

- Used to evaluate outcomes of Indian digital literacy program by following indicators:
  - Sending an e-mail
  - Opening and using e-government service portal, applying for certificates;
  - Registration on online learning and Scholarship portals;
  - Creating login credentials for Indian Railways Catering and Tourism Corporation;
  - Applying online for insurance;
  - Executing at least 5 electronic payments

---

Focused on national priorities, such as ability to deal with government e-services 

# Internet users profile



Adv. Ec.    Trans. Ec.    Dev. - Africa    Dev. - Asia    Dev.- LA

Top Internet activities undertaken by individuals, %

Social networks	70	71	86	87	79
E-mailing	85	45	47	60	52
Information on goods	84	51	31	68	52
Reading online	76	42	39	46	30
Music/video/games	57	53	64	66	51
Making calls	57	71	48	63	73

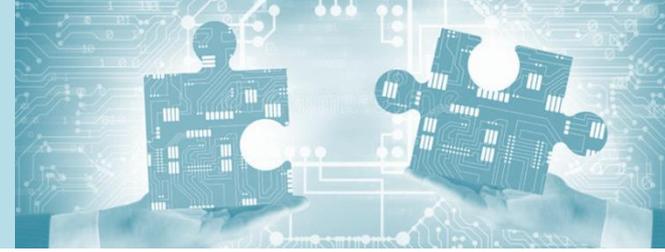
Source: UN (2021) Digital economy report



**Participation in social media is high in all the regions**

Whereas doing a formal online course ranges from 8% to 28%, and using internet for learning purposes is also low: from 13% to 31%

# Potential for cooperation



## *Cases*

Of best projects, effective technologies and comprehensive national strategies aimed at increase of broadband internet coverage



## *Methodology*

Of digital literacy assessment best suited for developing countries and reflecting their priorities, including abilities to use e-government services and access to digital agriculture programs



## *Curriculum*

Aimed at increase of digital literacy levels, including establishment of BRICS Digital Literacy School and platform for exchange of best practices