



Capturing Informal Digital Commerce in the Caribbean

A New Framework for Measuring Messaging-Based Online Trade

Esmond McLean
Senior Economist
ecde@unctad.org

Palais de Nation Geneva

5-12-25

Presented at the plenary session of Working Group Measuring E-commerce and the Digital Economy 6th session



Acknowledgements



Regional Partners(12)

Eastern Caribbean

Montserrat • Dominica • St. Kitts & Nevis • Grenada • Antigua & Barbuda • Anguilla • St. Lucia • St. Vincent & the Grenadines

Northern Caribbean

Jamaica

Southern Caribbean

Trinidad & Tobago • Barbados • Guyana



Institutional Contributors(7)

Eastern Caribbean Central Bank
Tax Administration Jamaica
Bank of Jamaica
Jamaica Tourist Board
Ministry of Industry, Investment & Commerce
Planning Institute of Jamaica
The University of the West Indies



I. Context and the Digital Measurement GAP

II. Evidence from Jamaica and the Caribbean

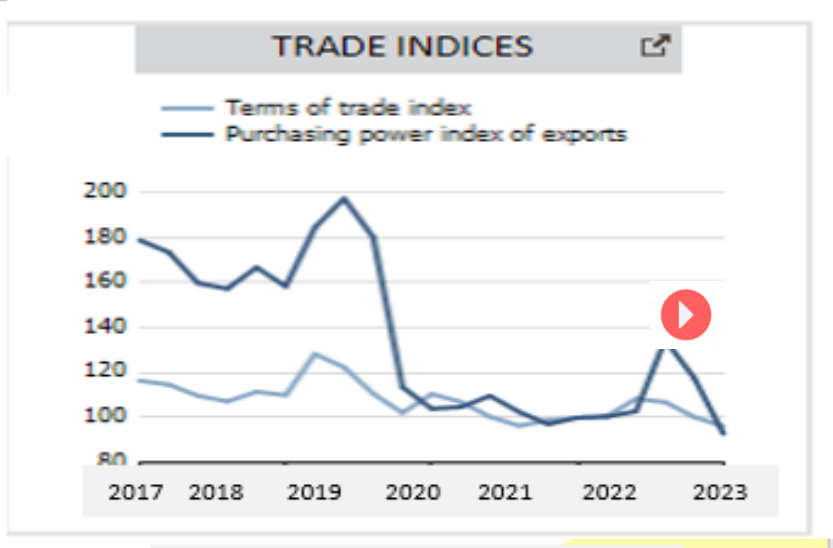
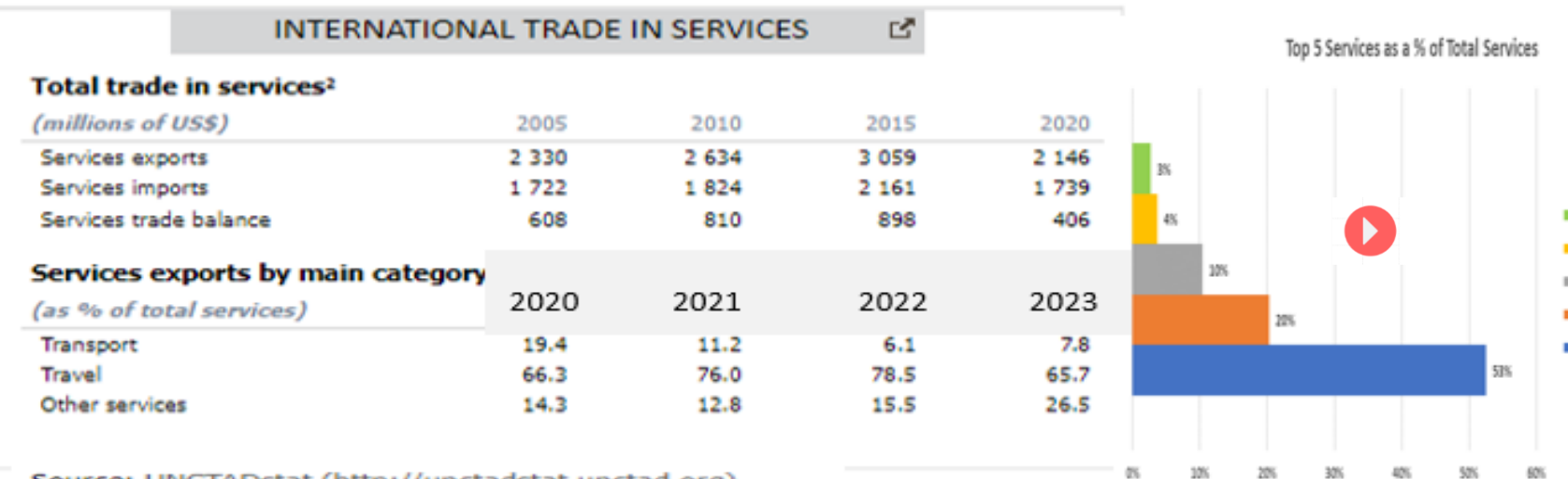
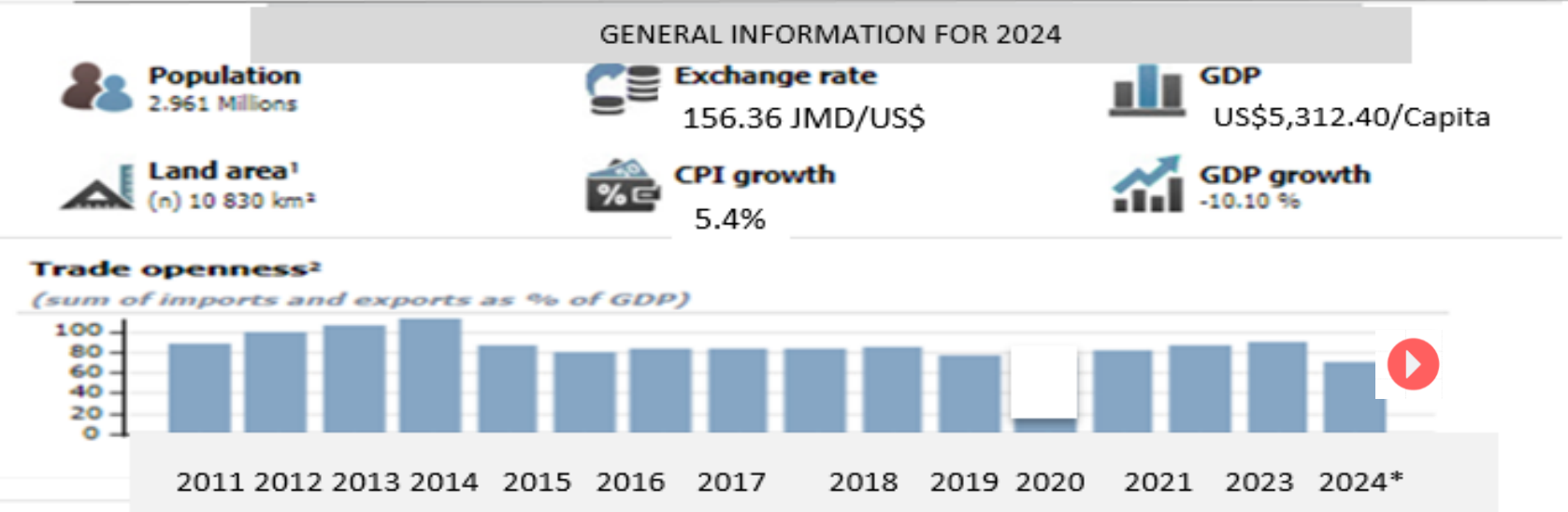
III. Jamaica's Proposed Digital Commerce Measurement Framework

IV. Policy Implications and Recommendations

Jamaican Context



Overview of the Jamaican Economy: Selected Indicators



Source: UNCTADstat (<http://unctadstat.unctad.org>)

Summary Context



1. Jamaica Internet Penetration: 83.4%
2. ECCU Average Internet Penetration: ~78%
3. Jamaica: Informal Sector \approx 40% of GDP
4. ECCU: First multi-country CBDC deployment (DCash)
5. JAM-DEX: Among the first 5 CBDCs globally
6. Jamaica: 1.4M social-media-active consumers
7. Mobile SIM penetration exceeding 100%
8. Digital payments capturing 30–40% of transactions
9. 97% of Jamaican businesses are MSMEs
10. 50–60% of new Jamaican micro-businesses start online

Digital e-commerce is 15.5% of GDP

5. JAM-DEX: Among the first 5 CBDCs globally

6. Jamaica: 1.4M social-media-active consumers

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8. Digital payments capturing 30–40% of transactions

9. 97% of Jamaican businesses are MSMEs

10. 50–60% of new Jamaican micro-businesses start online

These indicators tell a powerful story:

- High digital readiness
- Large informal economy → big formalization potential
- Young digital-first population
- Global CBDC leadership
- Regional economic resilience



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III. Jamaica's Proposed Digital Commerce Measurement Framework

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Introduction

ⁿ In Jamaica, informal digital commerce has flourished—driven by smartphones, social media, and youth entrepreneurship.

□ However:

- Most orders occur via unstructured messaging channels**
- These fall outside the OECD definition of e-commerce**
- As a result, Jamaica's digital economy is under-measured**

This presentation Posits a regional strategy to bridge that gap.

The OECD Definition Gap



The 2025 OECD definition states:

“Digitally ordered trade includes only orders placed over systems specifically designed for placing or receiving orders.” OECD 2025

Excluded:

- WhatsApp
- Instagram DMs
- Facebook Messenger
- TikTok inbox
- SMS, voice notes, screenshots

These channels represent most online sales in Jamaica



Why This Matters for Developing Economies

Excluding messaging-based orders leads to:

- ☐ Underreporting of digital entrepreneurship
- ☐ Invisible MSMEs
- ☐ Weak data for policy & investment
- ☐ Understated digital transformation
- ☐ Difficulty comparing SIDS to advanced economies

.

The measurement system is biased toward platform economies



How Jamaicans Actually Buy & Sell Online

Informal online ordering includes:

- ☐ WhatsApp Status → DMs → Voice notes
- ☐ Instagram photo → DM negotiation
- ☐ TikTok video → inbox message → sale
- ☐ Screenshots used as “invoices”
- ☐ Cash on delivery or bank transfer
- ☐ Informal bike/taxi delivery networks



➔ This is digital commerce, but not measured as e-commerce



Current National Measurement Tools

Jamaica already has a partial framework:

A. Survey of Living Conditions (SLC) – ICT Usage Module

Captures:

- Browsing
- Reading/writing online messages
- Social networks
- Sharing content
- Streaming video
- Online communities

Digital behaviour measured



Figure 6.1: Survey of Living Conditions -
Part I Section 6 - Question on ICT usage

For which of the following personal activities did you use
the Internet in the past 3 months (from any location)?

Sending or receiving email.....A
Information search/Browsing.....B
Telephoning over the Internet.....C
Participating in social networks.....D
Accessing chat sites, blogs, news groups or online discussions.....E
Purchasing/ordering goods or services.....F
Internet banking or other financial services.....G
Education, research and related activities.....H
Reading/downloading online newspapers, magazines, books.....I
Streaming or downloading images, movies, videos, music;
playing or downloading games.....J
Seeking jobs, submitting job applications, participating in professional networks.....K
Using storage space on the Internet to save documents, pictures,
music, video or other files.....L
Using software run over the Internet for editing documents,
spreadsheets or presentations.....M
Other (Specify).....N

YES.....1
NO.....2

MULTIPLE RESPONSES

A	B	C	D	E	F	G	H	I	J	K	L	M	N

Source: STATIN.

CHAPTER 6 – CASE STUDIES

Does NOT measure online selling or digital
ordering.



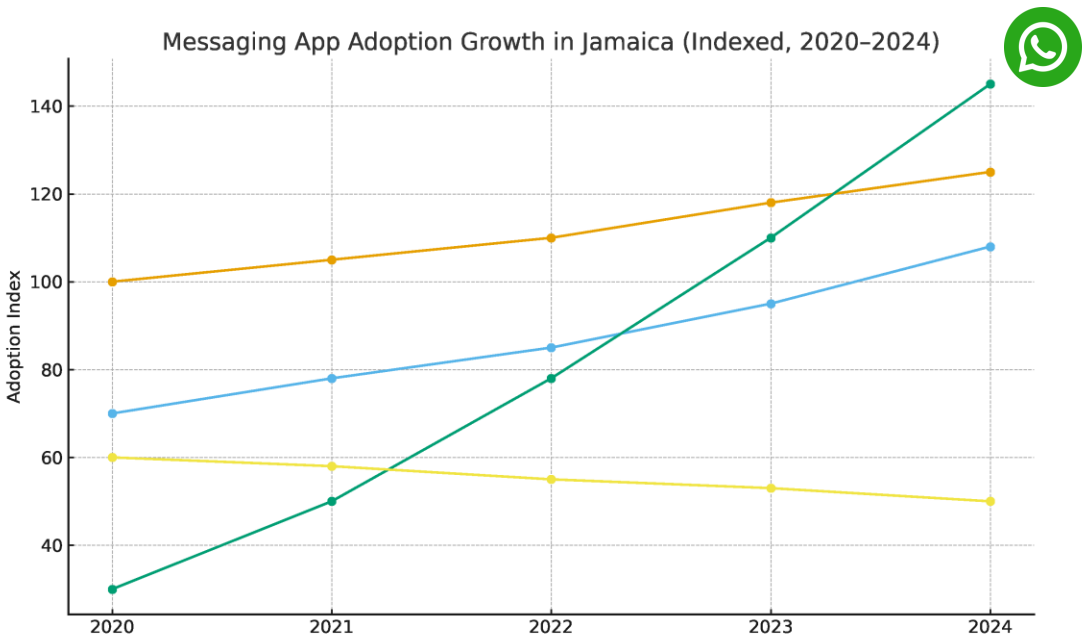
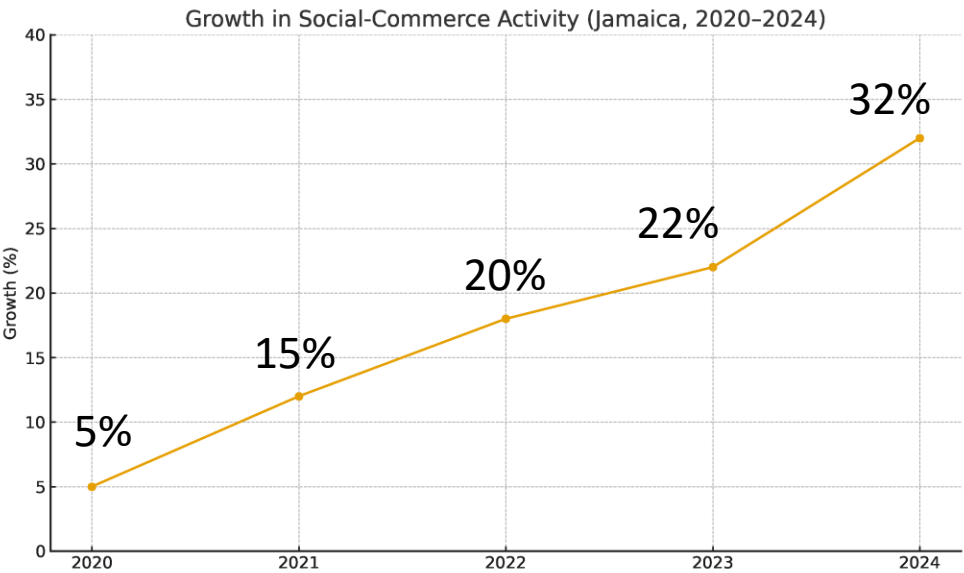
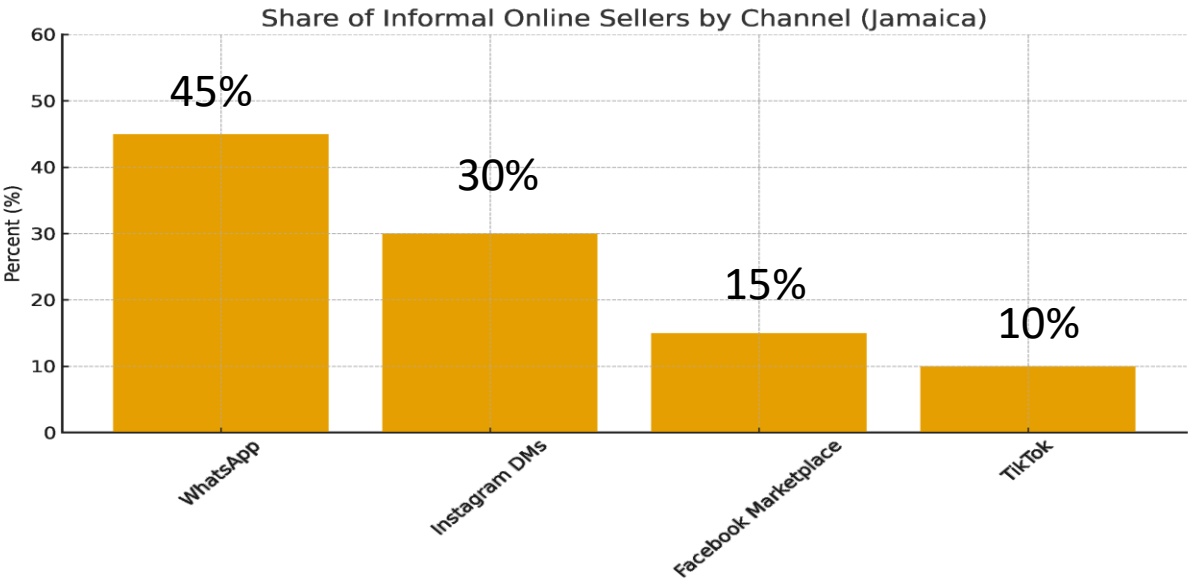
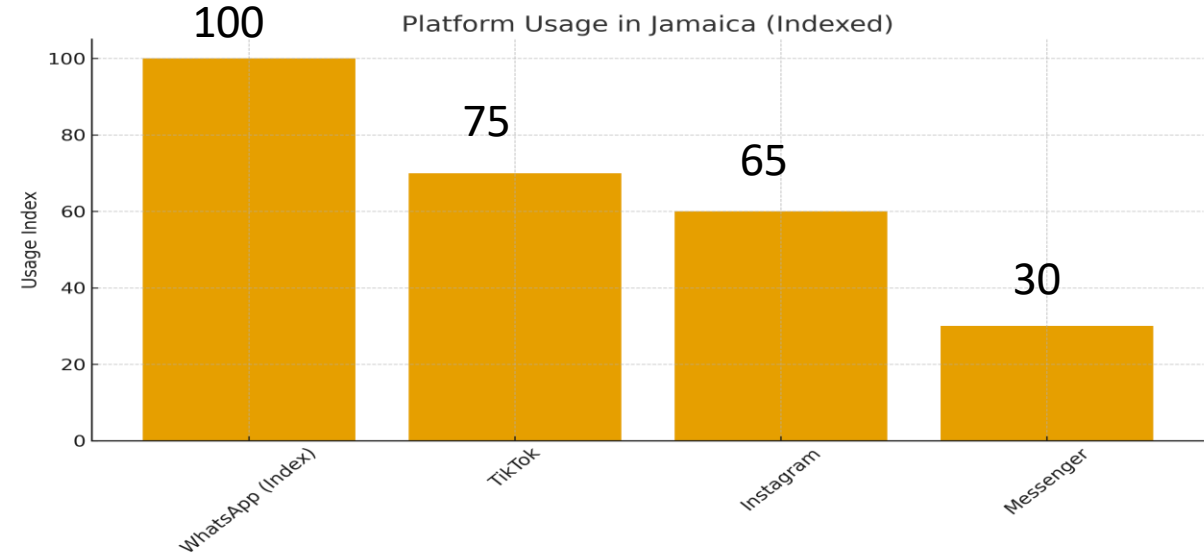


Conclusion: Visibility Gap

Jamaica does **not** capture:

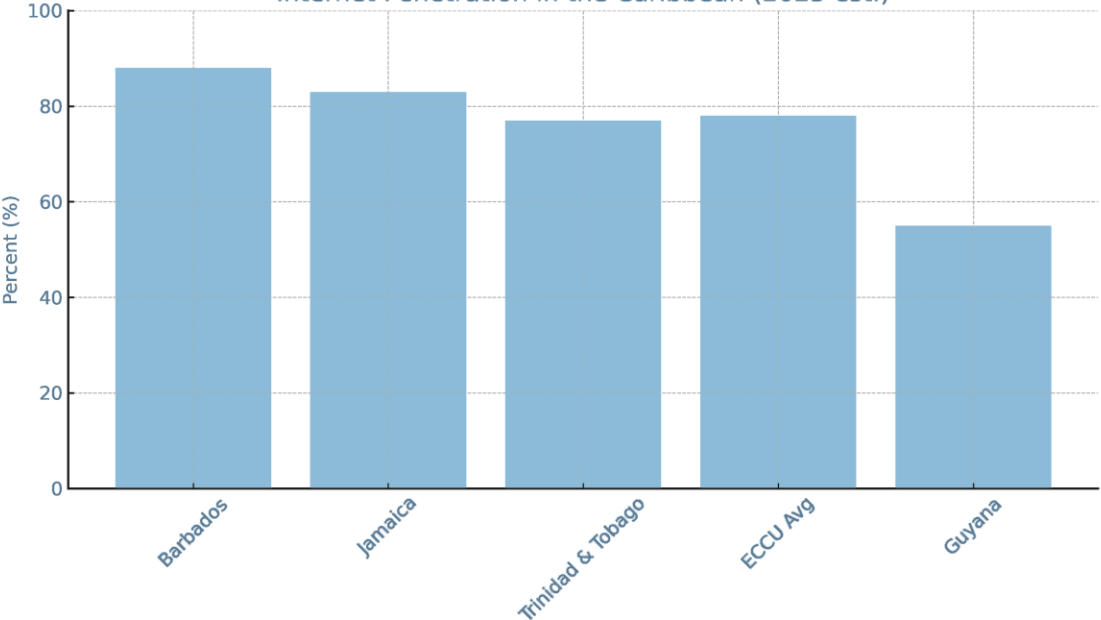
- ❑ Messaging-based orders
- ❑ Informal online selling
- ❑ Cash-based digitally initiated transactions
- ❑ Social-commerce behaviour
- ❑ Digital micro-entrepreneurship

Jamaica: Digital Commerce & Social-Media Dashboard (2025)

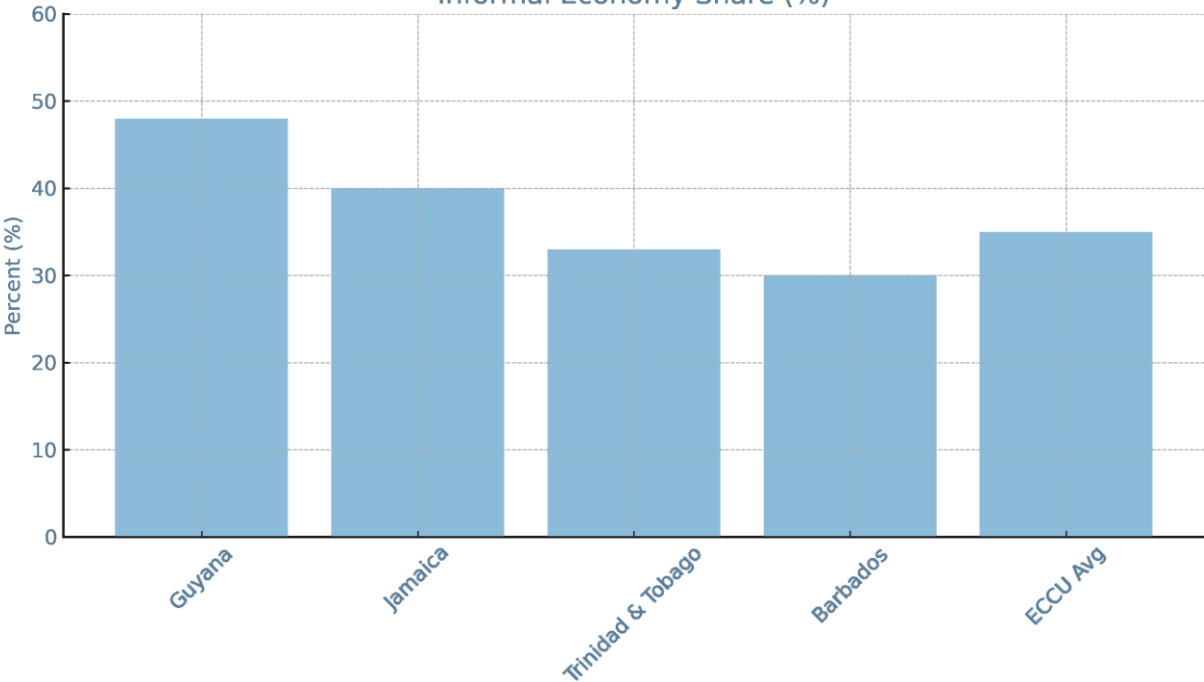


Caribbean Digital Commerce Dashboard (2025)

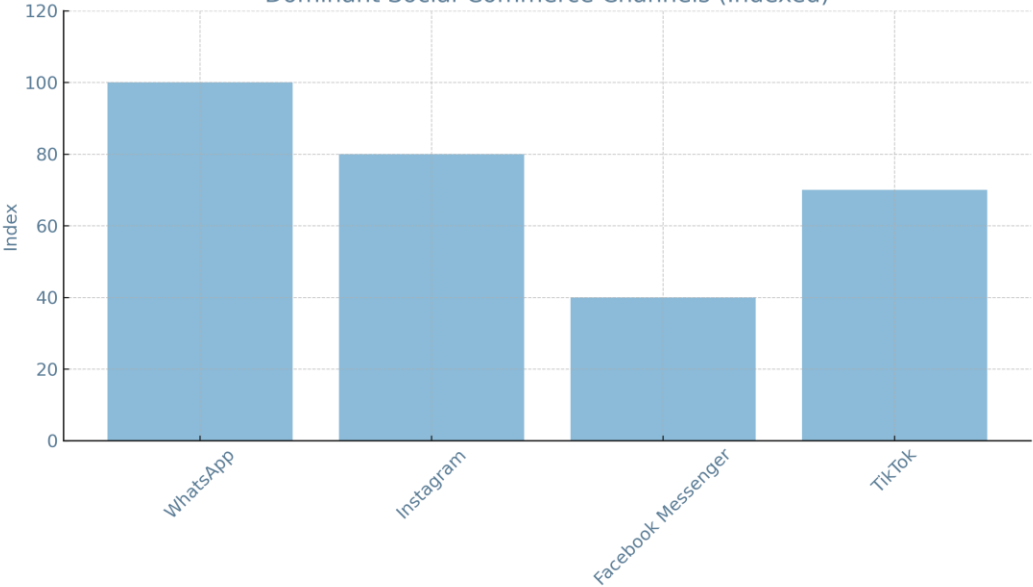
Internet Penetration in the Caribbean (2025 est.)



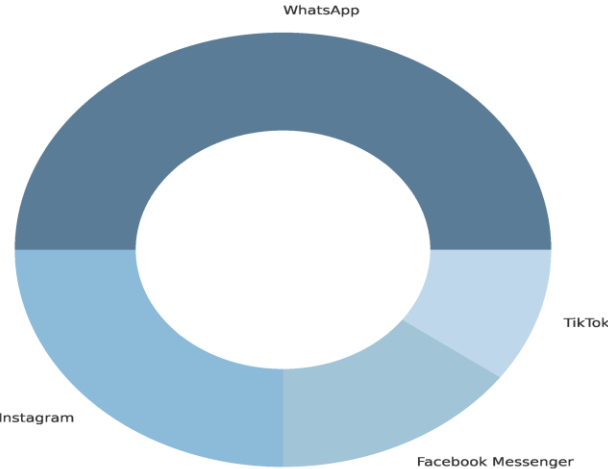
Informal Economy Share (%)



Dominant Social-Commerce Channels (Indexed)



CARICOM Social-Commerce Channels (Donut Chart, Pastel Blue-Grey)



Dashboard Summary

- Jamaica aligns strongly with regional trends but is ahead in social-commerce maturity, TikTok adoption, and CBDC readiness.
- CARICOM countries share the same structural issue
- Jamaica's measurement model (MDOs + CBDC signals + surveys) could serve as a regional blueprint.



JAM-DEX: Jamaica's CBDC Measurement Bridge

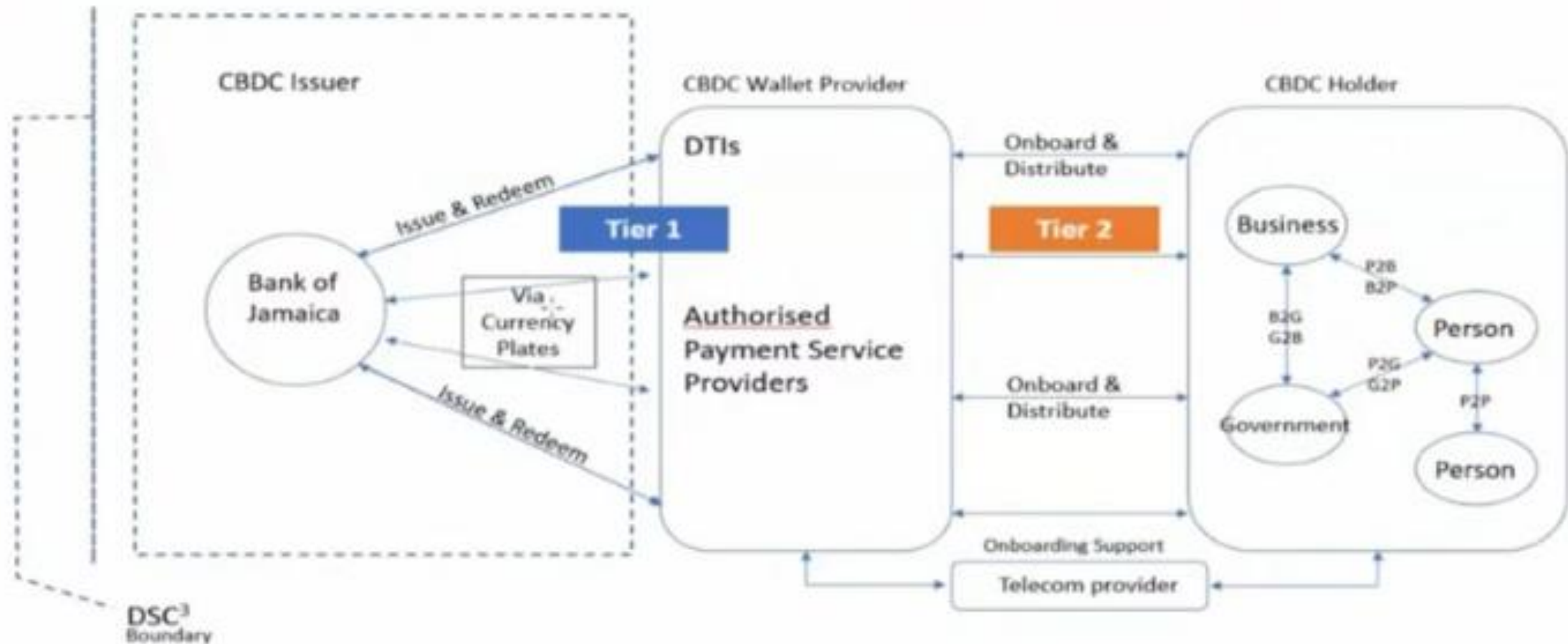
JAM-DEX supports measurement by:

- Creating timestamped digital payment traces
- Serving unbanked micro-sellers
- Reducing dependency on cash
- Expanding digital participation
- Enabling transaction metadata (aggregated, anonymized)



First national mechanism capable of capturing informal digital activity.

JAM-DEX Technology & Design



How does JAM-DEX work ?

JAM-DEX operates using a **three-layer architecture**:



1

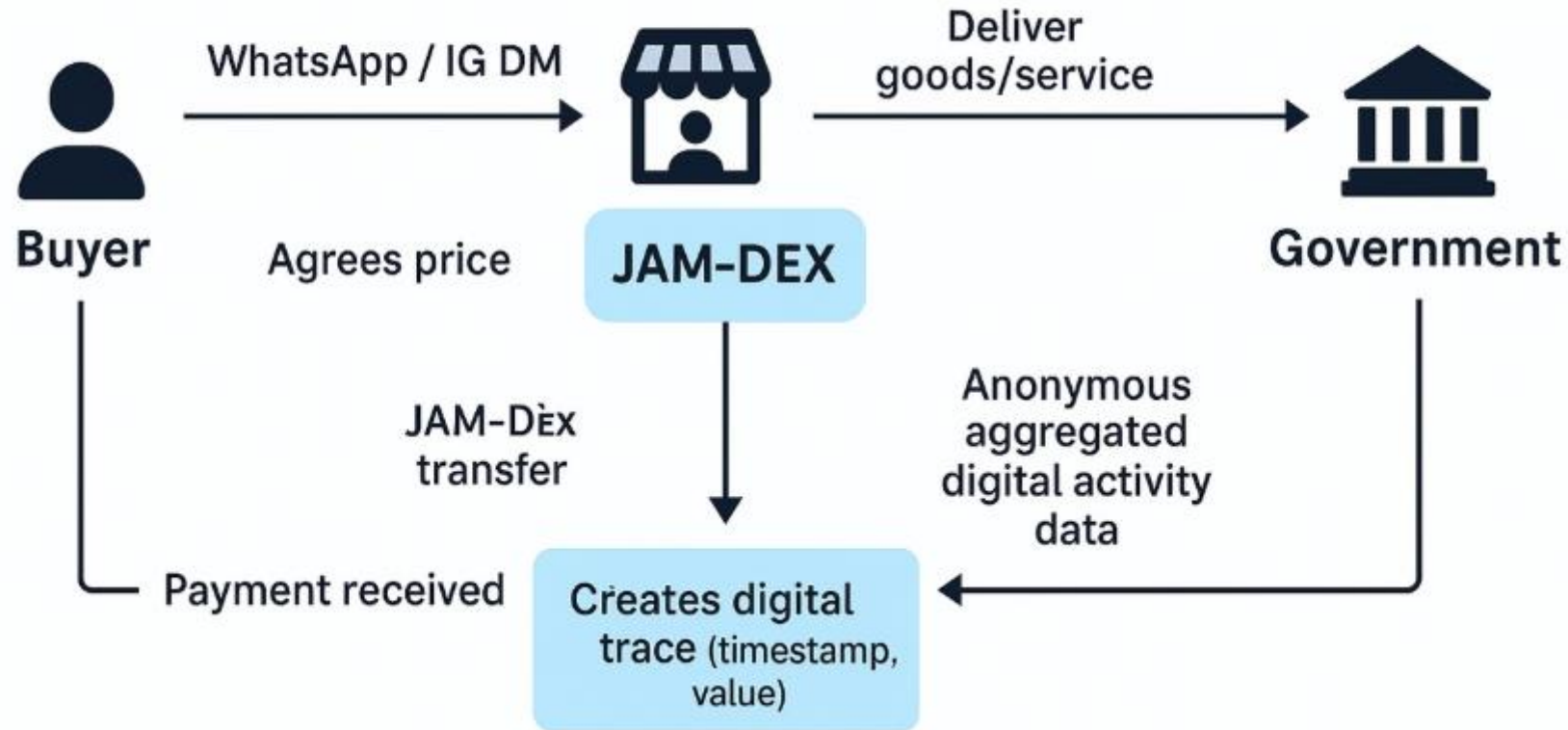
JAM-DEX

1

How JAM-DEX Captures Informal Online Commerce



How JAM-DEX Captures Informal Digital Activity



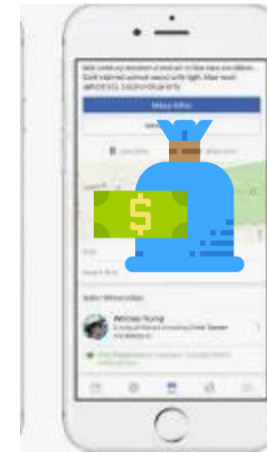
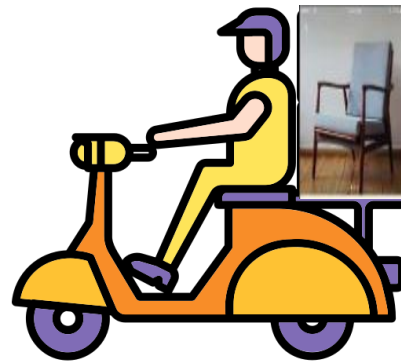
How JAM-DEX Captures Informal Digital Activity



Even when orders happen via WhatsApp or Instagram:



1. Buyer orders in chat
2. Seller provides price
3. Buyer pays via JAM-DEX
4. JAM-DEX creates digital transaction trace
5. Bank of Jamaica receives aggregated indicators
6. Informal seller delivers goods/service



**JAM-DEX captures payment, surveys capture behaviour.
Together, they reveal the informal online economy.**

Proposed new Concept: Messaging-Based Digital Orders (MDOs)



Definition:

Orders initiated, negotiated, or confirmed through manually typed digital messages.

Channels included:

- . WhatsApp DM
- . Instagram DM
- . TikTok Inbox
- . Facebook Messenger
- . SMS

This fills the OECD definition gap for developing economies

Let us integrate the full concept



— A-E MEASUREMENT MODEL

A — CBDC Layer: Digital payment signals

B — Survey Layer: Updated SLC/ICT/MSME modules

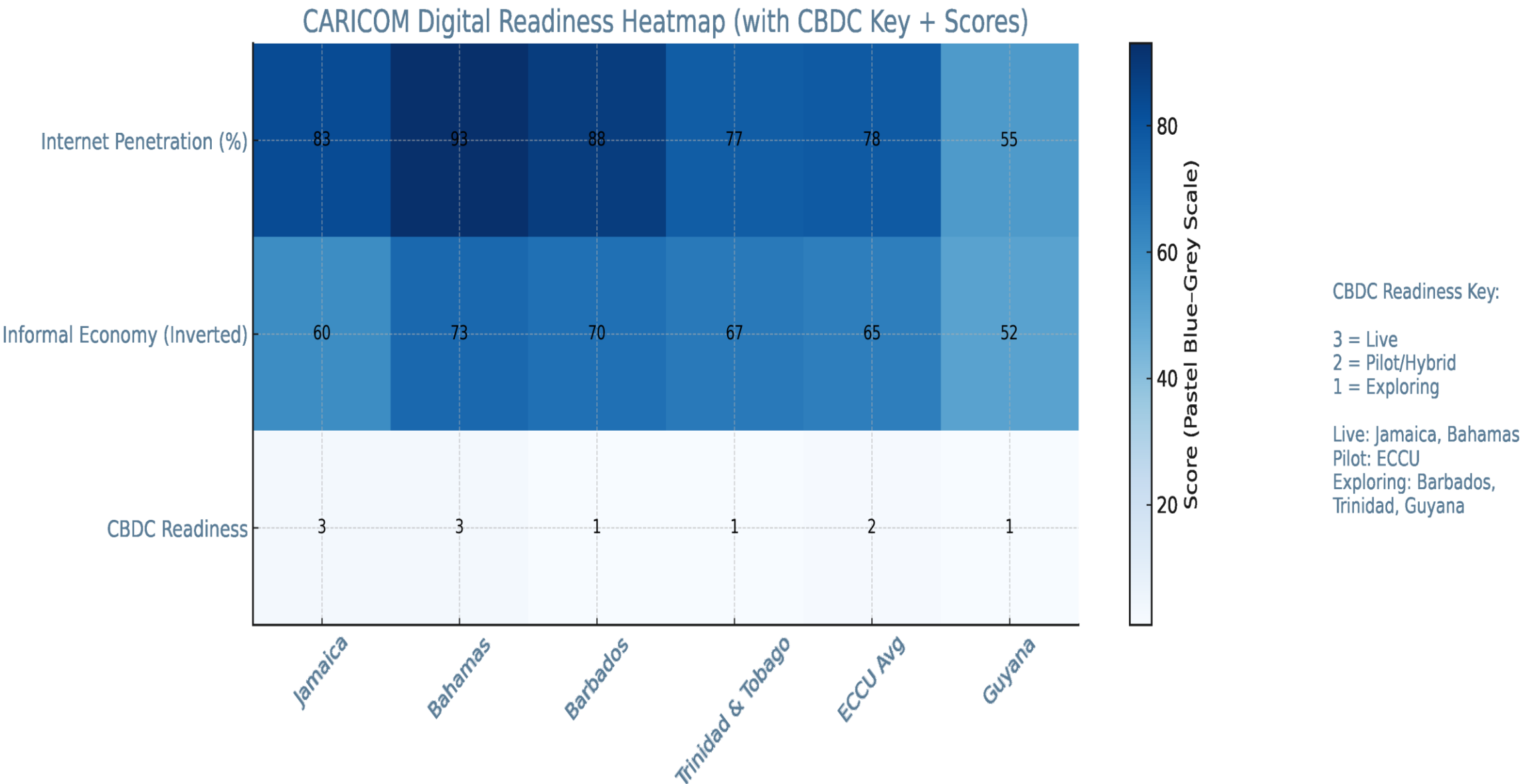
C — Integration Layer: BOJ + STATIN digital commerce engine

D — Privacy Layer: Aggregated, anonymized metadata

E — Output Layer:

- Messaging-based commerce indicators
- Informal digital economy indexes
- Platform/channel adoption rates
- CBDC-enabled commerce statistics

Caribbean Digital Commerce Dashboard (2025)_Cont'd.



Estimated Share of Informal Online Sellers (Regional)

Modeled estimates based on MSME patterns:

- Guyana: 85%
- Jamaica: 80%
- Trinidad: 75%
- Barbados: 60%
- ECCU: 55%

Informal Online Sellers

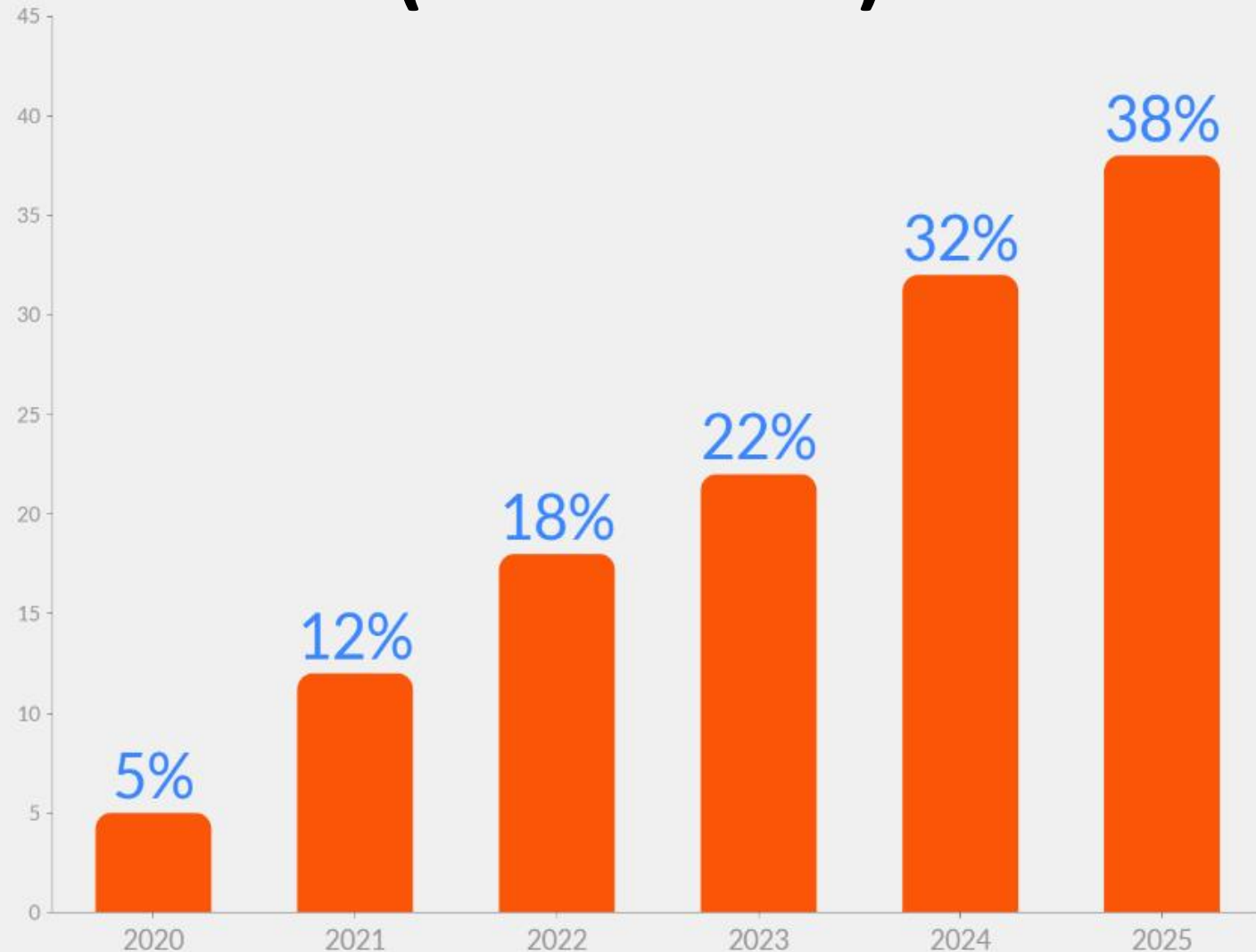
Estimated Share of Informal Online Sellers (Regional)



Trend in Social Commerce Adoption (2020–2025)



The rise is
regionwide and
accelerates with
cheaper
smartphones.



Regional Platform Usage Analysis

WhatsApp → Universal

TikTok → Massive growth in Jamaica, Trinidad

Instagram → Strong across all urban islands

Messenger → Strong in Guyana & ECCU

Messaging channels form the **primary commercial infrastructure.**



Policy Recommendations

UN/WTO/UNCTAD should:

1. Recognize Messaging-Based Digital Orders
2. Support integration of CBDC data in digital-trade measurement
3. Modernize surveys for digital-behaviour tracking
4. Promote cross-country comparability for SIDS
5. Empower developing economies to define digital commerce.-region specific

Appendix

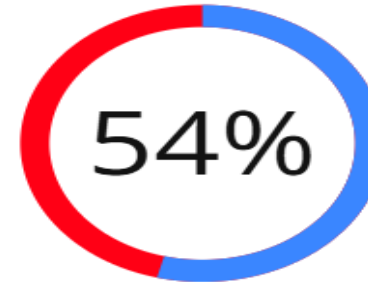


Insights from Digital Trade for Development

The joint WTO–UNCTAD–IMF–OECD–World Bank report highlights:



Digitally delivered services



•global services exports.”

Developing economies lack digital-trade statistics.

- Social-commerce is major for MSMEs, youth, and women.
- Payment systems are barriers to digital trade.
- International support is urgently needed.

These insights directly validate Jamaica’s approach.



Global Problem: Data on Social-Commerce Very Limited

According to the report:

“Few national statistical agencies publish comprehensive figures on digital sales... especially in developing economies.”

And:

“Digitally ordered trade includes only systems designed for order placement.”



KEY –TAKEAWAY

Messaging-based commerce is globally invisible.
Jamaica is offering a solution.



Why CBDCs Perform Better Than Cards for Informal Capture”



Feature	Cash	Bank Transfers	Cards	CBDC
Traceability	✗	⚠	⚠	✓
Cost	✗ uncertain	✗ high	✗ high	zero ✓
Barrier to entry	High	Medium	High	Low ✓
Inclusion	Low	Medium	Medium	High ✓



Tourism Information: Satisfaction Survey Results 2020



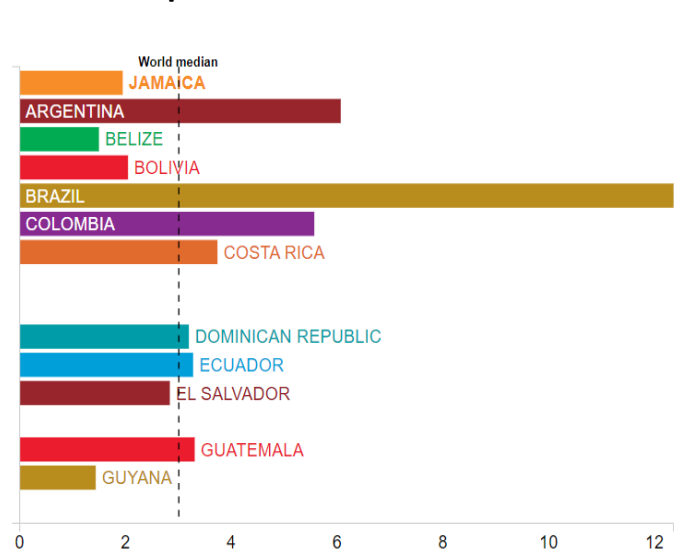
Method used to make reservation

Method used to make reservation	Type of visitor		Overall
	First time visitor	Repeat visitor	
Travel Agent	58%	41%	33.0%
Airline tour package	58%	42%	5.3%
The Internet	42%	58%	47.0%
Called directly to the hotel reservation office	41%	59%	9.0%
Dialled 1-800-JAMAICA	67%	33%	0.3%
Other	44%	56%	3.0%

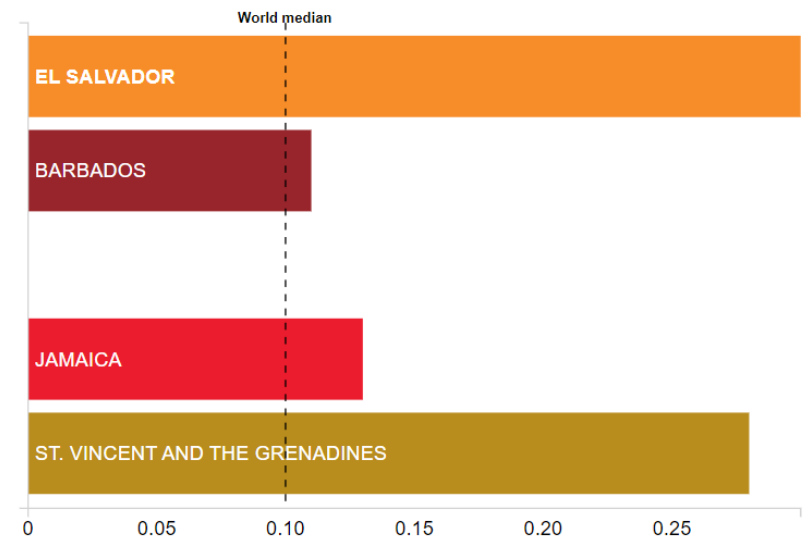
Method used to make reservation by country

Method used to make reservation	Country									
	USA	Canada	UK	Germany	Italy	Other Europe	Latin America	Caribbean	Japan	Other
Travel Agent	31%	45%	36%	25%	0%	43%	33%	11%	35%	50%
The Internet	49%	32%	43%	63%	100%	49%	53%	61%	60%	38%
Called directly to the hotel reservation office	10%	6%	6%	13%	0%	0%	0%	11%	5%	13%
Airline tour package	4%	11%	9%	0%	0%	6%	7%	11%	0%	0%
Dialled 1-800-JAMAICA	0.3%	0.2%	2%	0%	0%	0%	0%	0%	0%	0%
Other	3%	26%	1%	0%	0%	0%	7%	6%	0%	0%

Index of Export Market Penetration



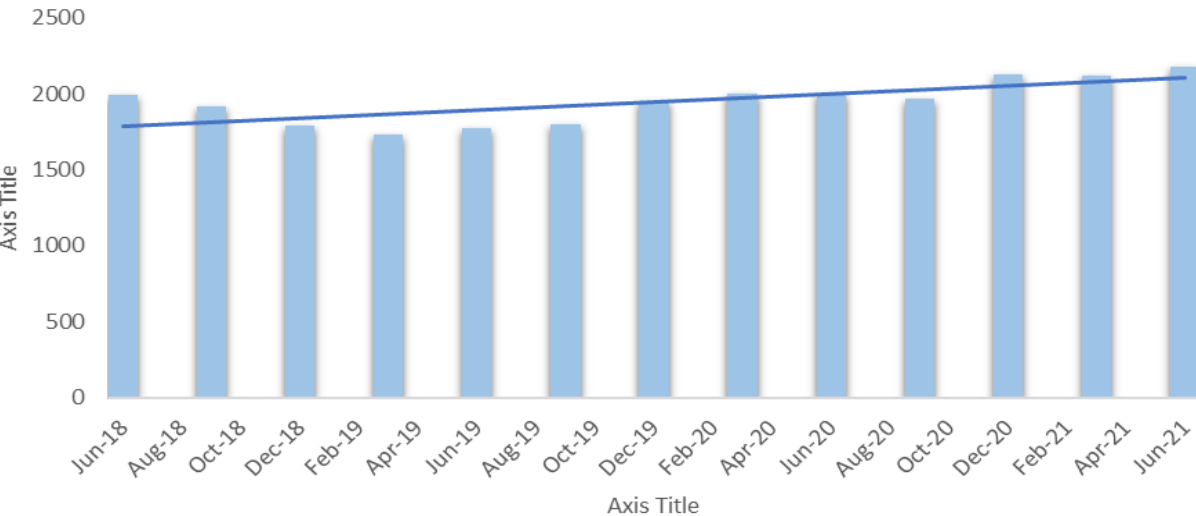
HH Market Concentration Index



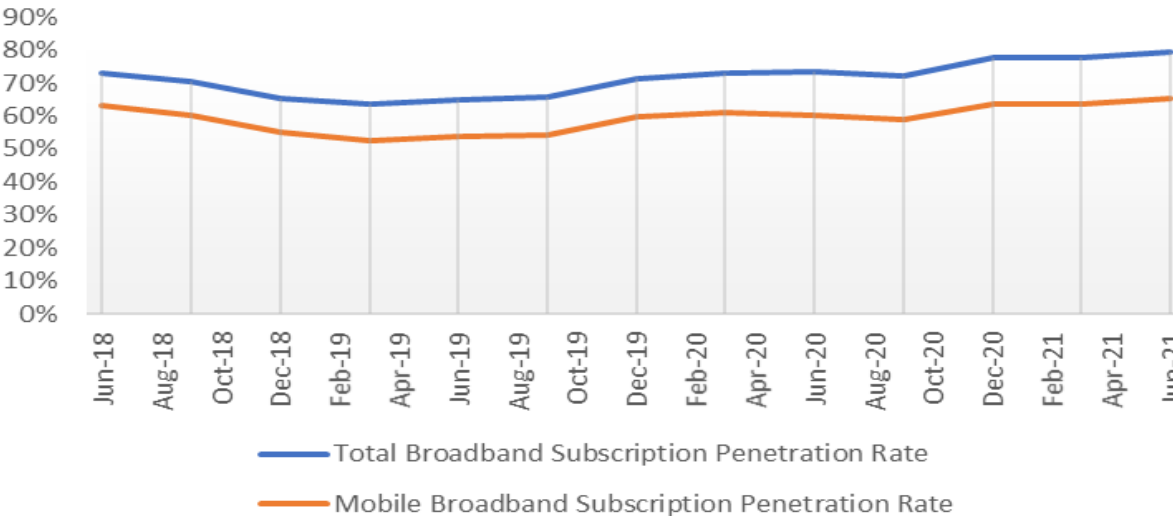
Telecommunications performance



Internet Service Subscriptions

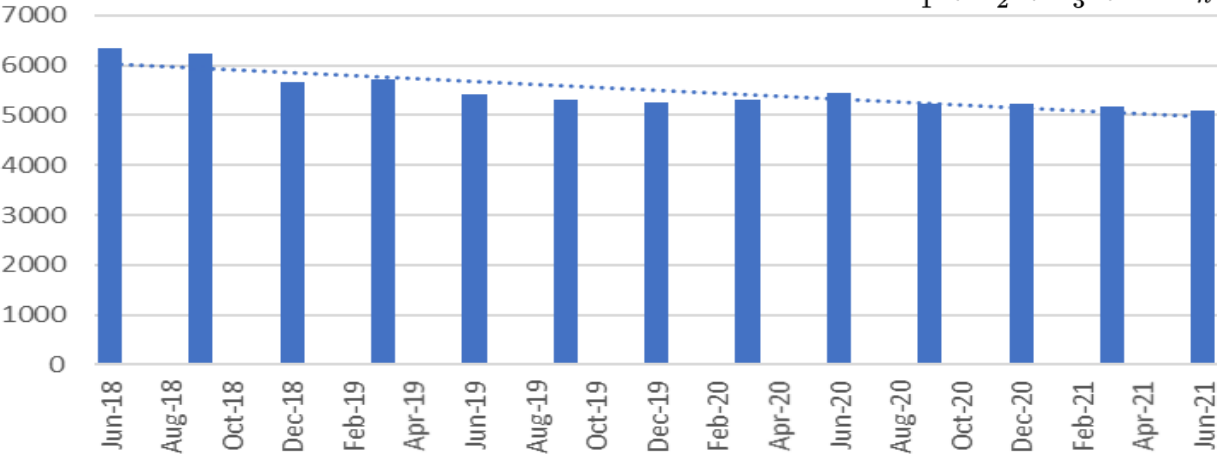


Subscription Penetration %



Concentration Ratio (Herfindahl-Hirschman Index)

$$HHI = s_1^2 + s_2^2 + s_3^2 + \dots s_n^2$$





Quarterly Current Account and Component Balances
(US\$ Mn)

