

Using card data to measure e-commerce transactions with non-residents in Namibia

Working group on measuring e-commerce and the digital economy

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- ▮ Namibia has invested heavily in the modernisation and expansion of its telecommunication network with a growing information and communication technology (ICT) sector
- ▮ Progress has been made in expanding access to internet and broadband services
- ▮ The country has implemented measures to ensure consumer protection through the Cybercrime Bill and Data Protection Bill
- ▮ The ICT sector has been one of the sectors that have positively contributed to the Namibian economy in recent years, especially since Covid-19.
 - ▮ The sector registered growth of **2.5%** in 2022, and **6.9%** in 2021, compared to a growth of **17.4%** recorded in 2020.

Indicator	2012	2022
Mobile operators	4	4
Fixed line operators	1	1
Mobile subscribers	2,146,833	2,903,446
Fixed line subscribers	263,723	87,588
Mobile teledensity	100.00	111.84
Fastest mobile internet access	Fibre	Fibre
Internet users per 100 inhabitants	33.00	78.97
Internet users	702,271	2,050,075
Broadband internet subscribers per 100 inhabitants	31.00	78.94

Source: Communications Regulatory Authority of Namibia (CRAN)



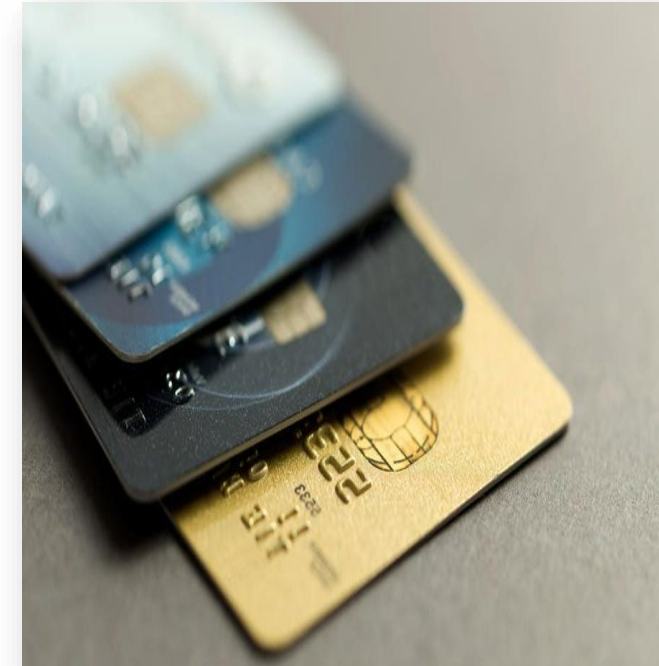
- There is a growing importance of cross-border digital trade due to advancements in technology with the emergence of new and disruptive online platforms
- Households and micro and small businesses are now able to transact and order goods and services from non-residents over computer networks
 - *More Namibians are buying digital goods from abroad (online shopping); paying for digital services such as video streaming and buying applications or software; and paying for transportation services abroad via digital intermediation platforms (UBER, Airbnb, Grab, etc.)*
- Currently, all card transactions are omitted from the balance of payments statistics produced by the Bank of Namibia including cross-border digital trade data
- ***The aim is to enhance the data on the current account of the BOP by including cross-border transactions of digital goods and services by households and businesses.***



- **The Bank of Namibia Cross Border Foreign Exchange Transaction Reporting System (BOPCUS)**

- ▶ The system was initiated for exchange control purposes
- ▶ The international transactions reporting system is used as a main data source for some balance of payments components and as a cross-checking source
- ▶ All the Authorized Dealers are required to submit their daily foreign financial reports to the Bank of Namibia via BOPCUS irrespective of their value.
- ▶ The data is based on three payment transfer types: Bopcus (SWIFT transactions), Bobcard Resident, Bopcard Nonresident (card transactions)
- ▶ The BOPCUS system is in line with international standards with the codes linked to BPM6 while card transactions are not categorized.
- ▶ **Granular dataset on credit/debit cards that includes information such as merchant names and codes at an individual transaction level**
 - ▶ The data is strictly cross border, it includes payments by Namibian-issued cards to non-resident merchants.

The dataset



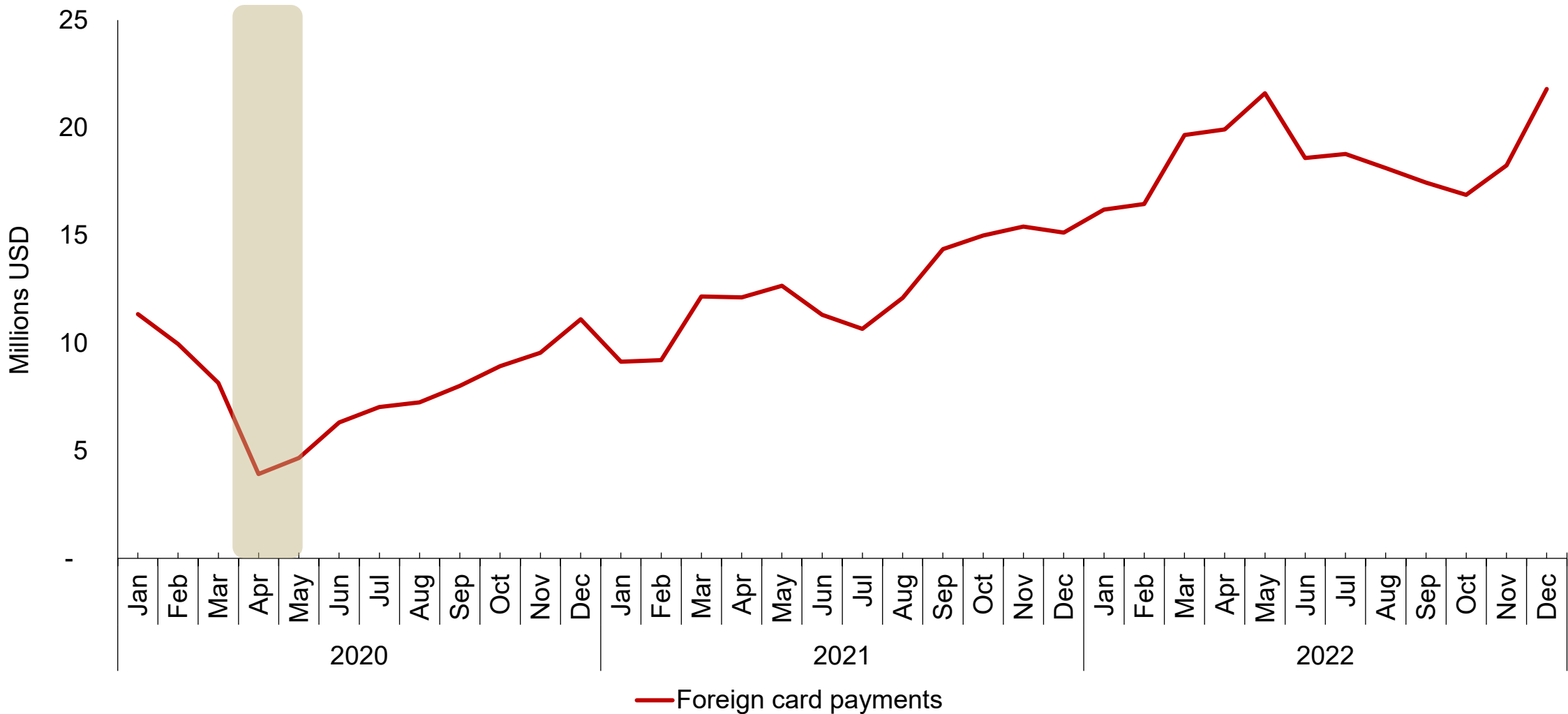


Estimation Approach

- **The estimation approach was guided by the IMF, OECD, UN, and WTO (2023) “Handbook on Measuring Digital Trade”**
 - ▶ Primarily focused on estimating international e-commerce or digitally ordered trade guided by the definition in the draft conceptual and measurement framework for digital trade
 - ▶ *“The international sale or purchase of a good or service, conducted over computer networks by methods specifically designed for the purpose of receiving or placing orders”*
 - ▶ **This presentation focuses on outflows (households and businesses) although analysis could be done on inflows as well**
 - ▶ Merchant category codes and names were used to identify the type of activity that a merchant is engaged in, giving an indication of the product that was digitally ordered
 - ▶ **Digital services - broken down into 10 market segments** – video streaming; music streaming; app stores; cloud services; digital services ordered via Digital Intermediation Platforms (DIPs); social media; online gaming; online gambling; online courses, e-books, and audiobooks; online dating and adult content sites
 - ▶ Transactions through DIPs are also included
 - ▶ **Digital goods** - Data on online purchases from the top e-tailers provides a proxy for digitally ordered goods

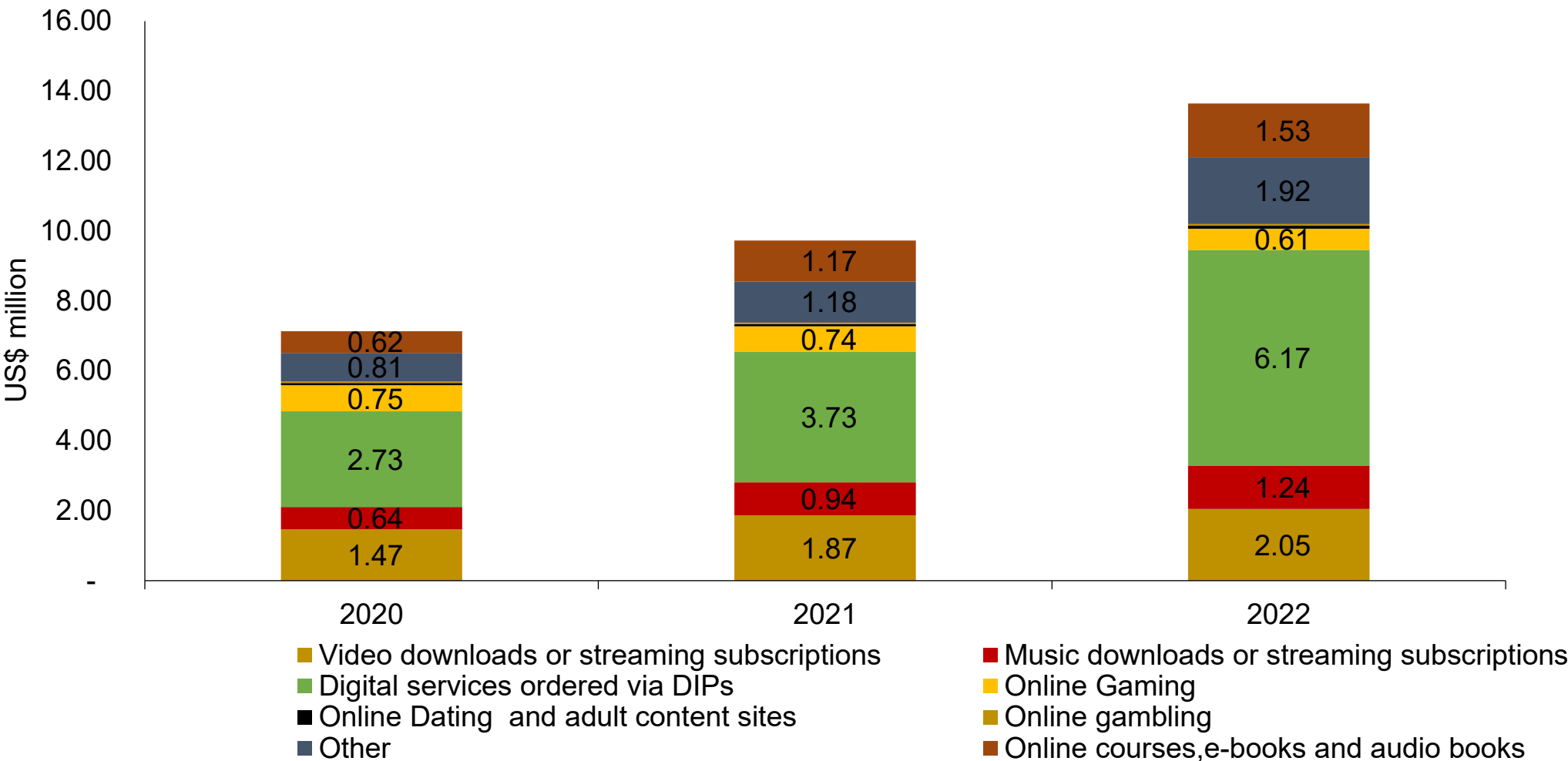


Card payment transactions to non-residents continue to trend upward in recent years





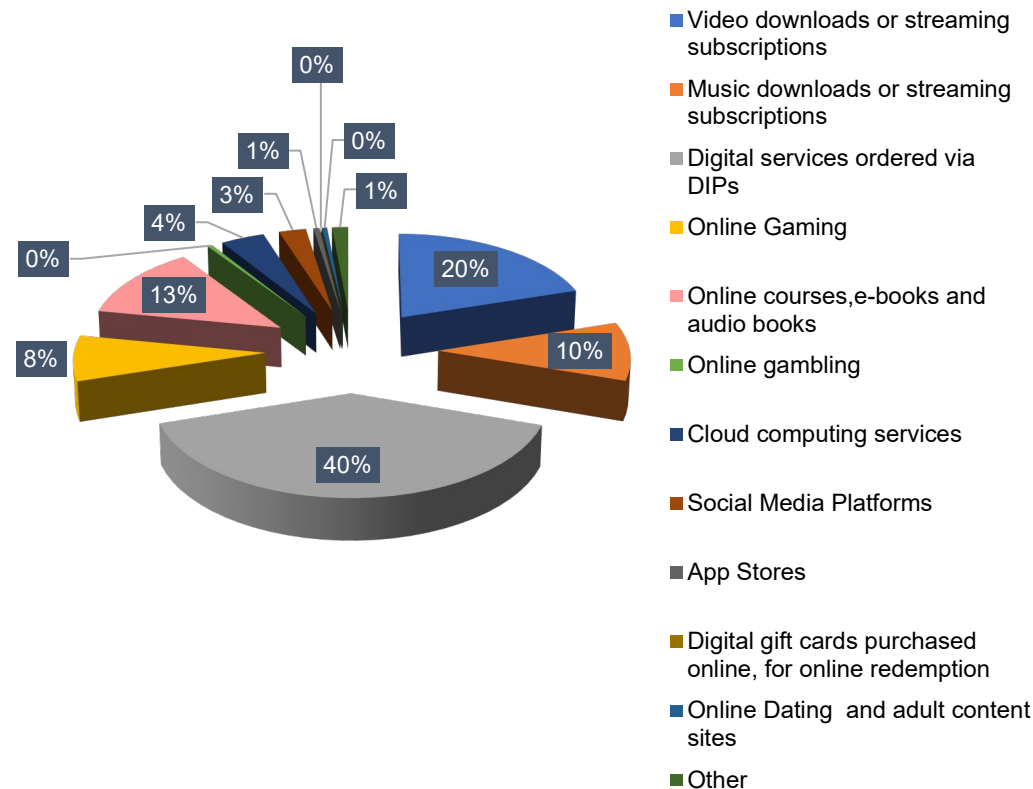
Digital purchases of services from non-residents amounted to N\$204.9 (US\$13.3) million in 2022 with services via DIPs, video streaming and online education being the largest category



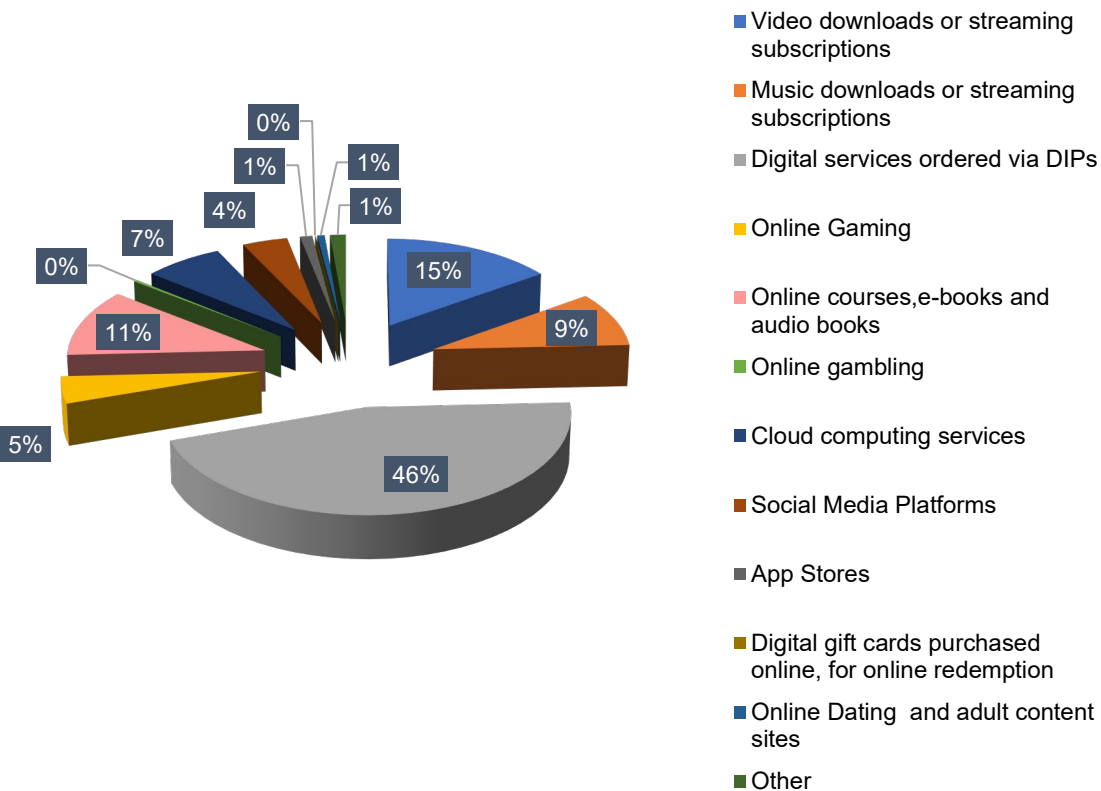
Share of digital purchases of services from non-residents by defined categories



2020



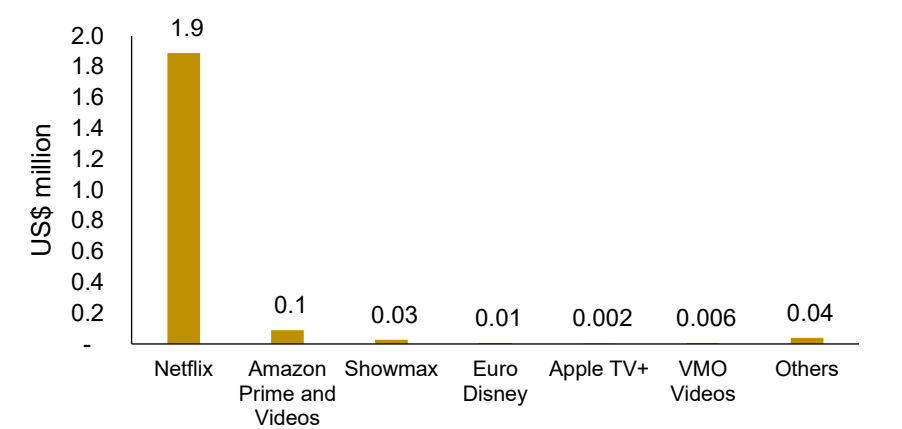
2022



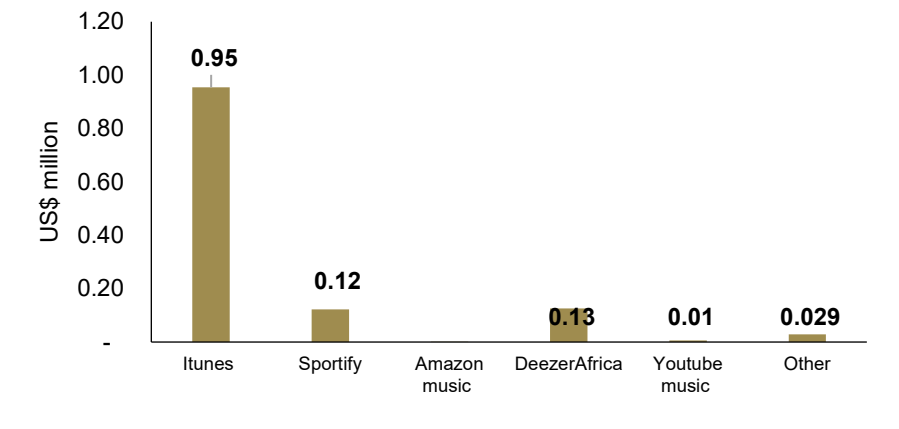
Cross-border digital services payments



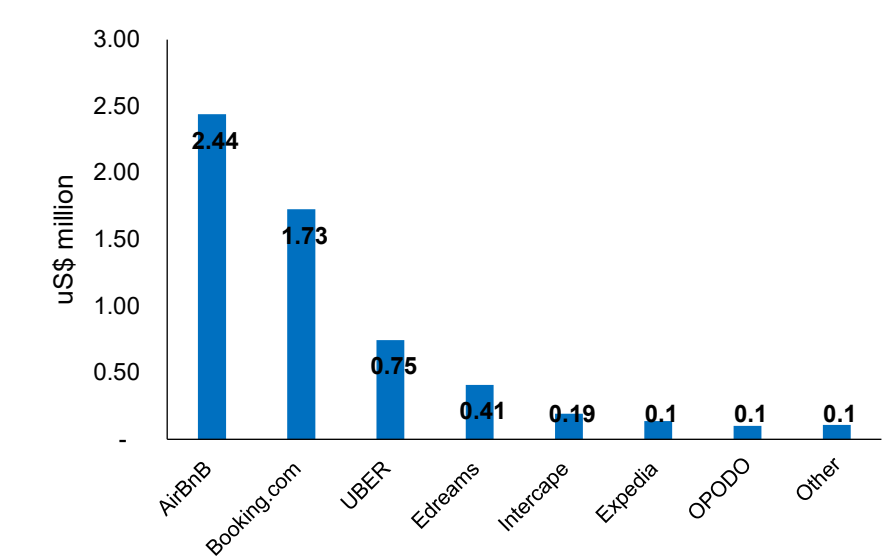
Video Streaming, 2022



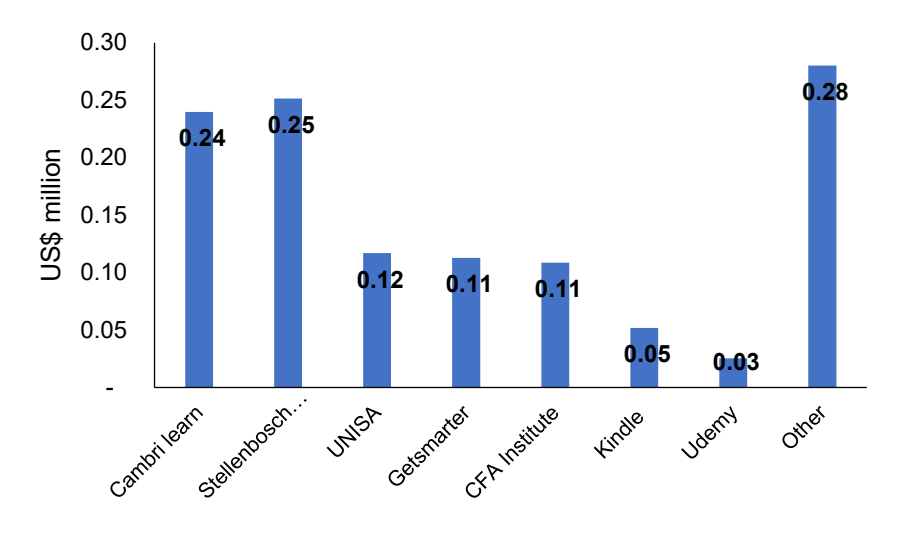
Music Streaming, 2022



DIPs, 2022



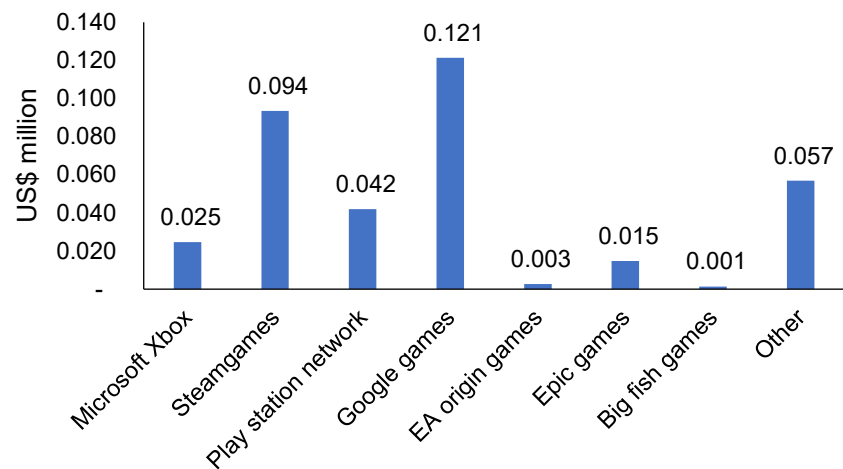
Online courses, e-books and audiobooks , 2022



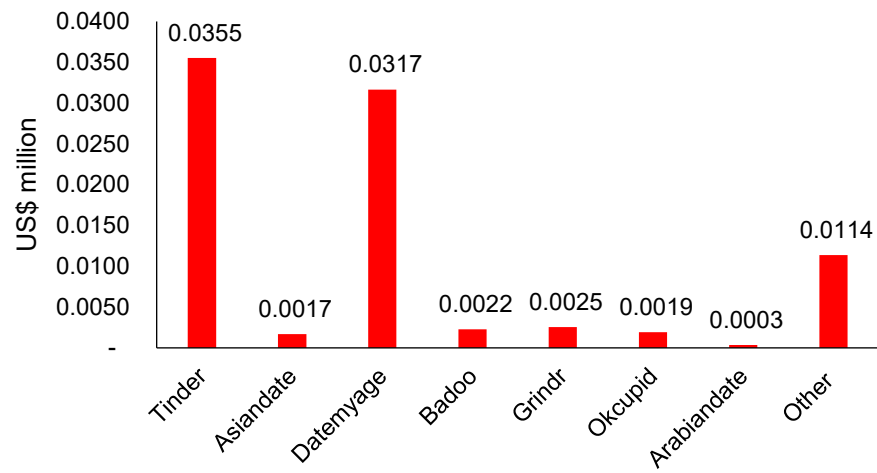
Cross-border digital services payments cont.



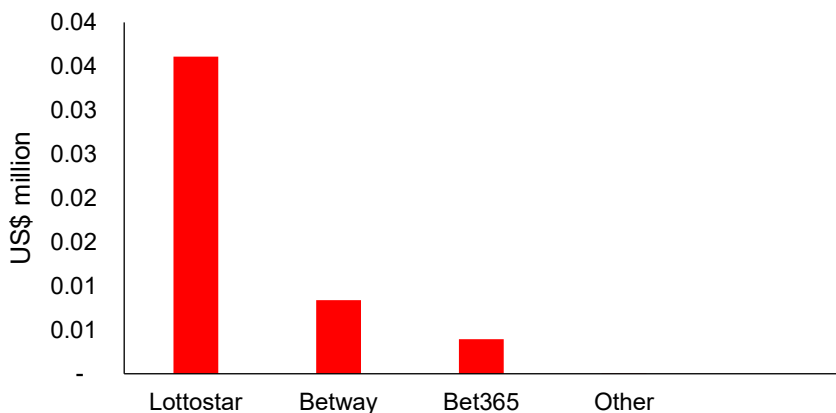
Online Gaming,2022



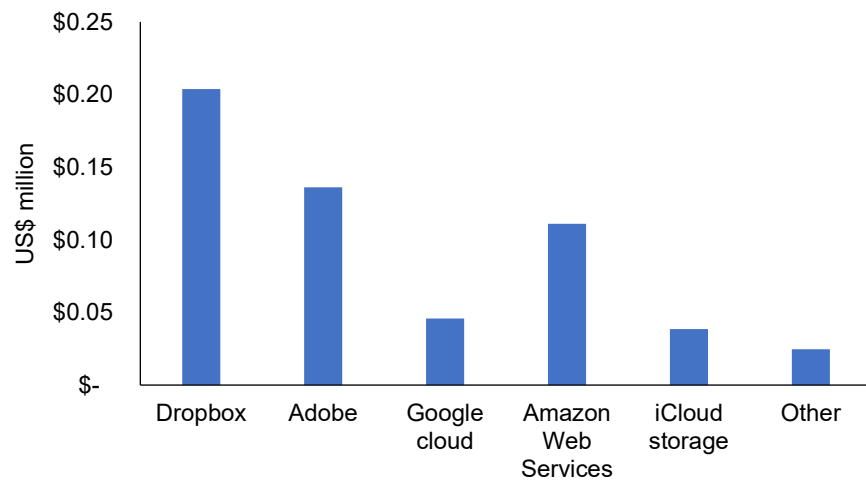
Dating Sites, 2022

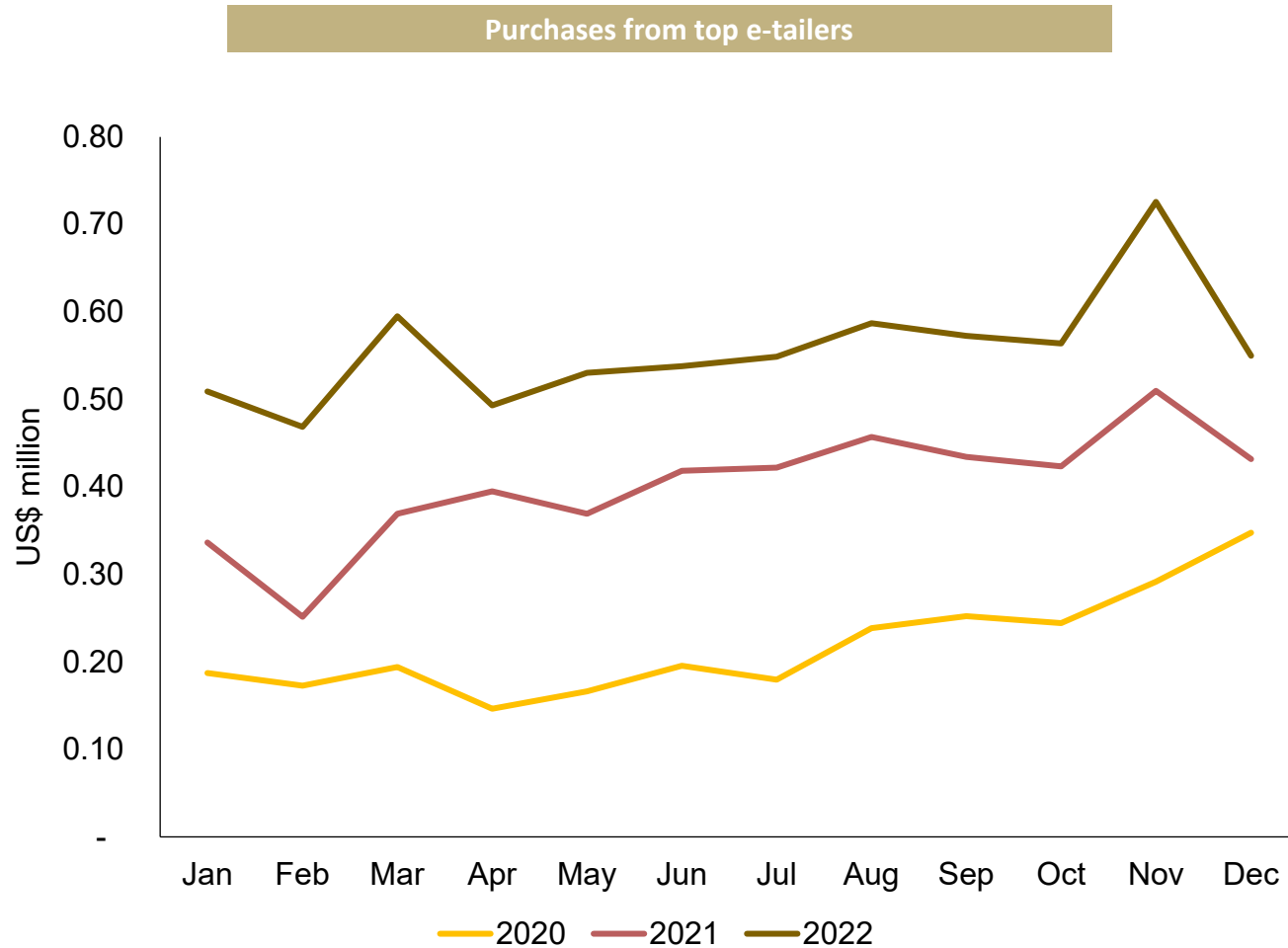


Online Gambling, 2022



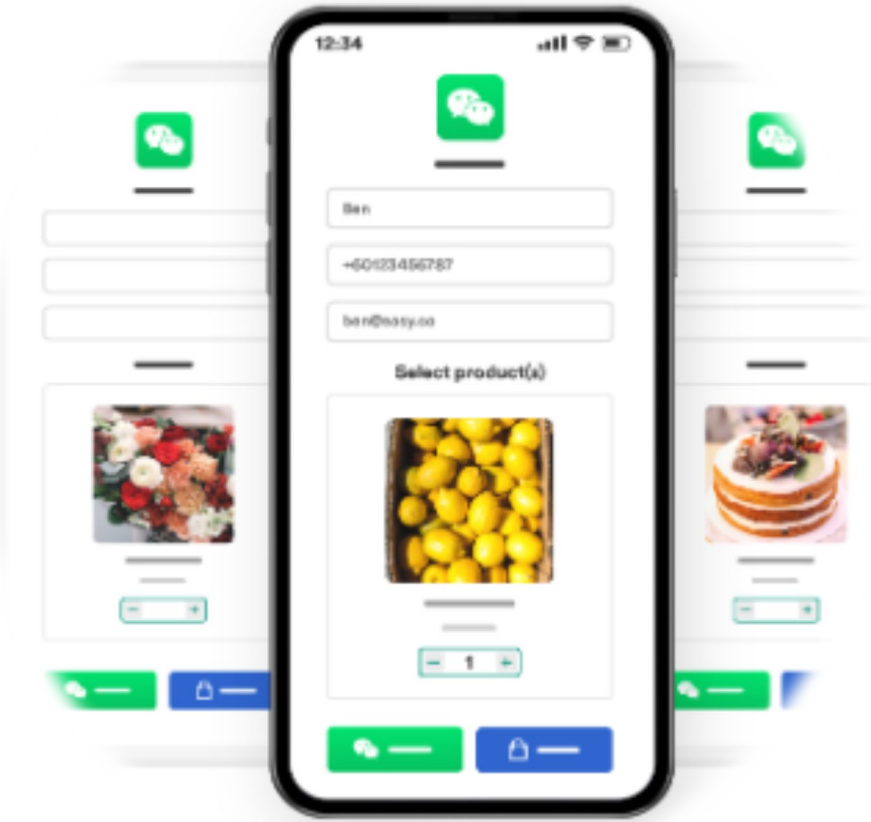
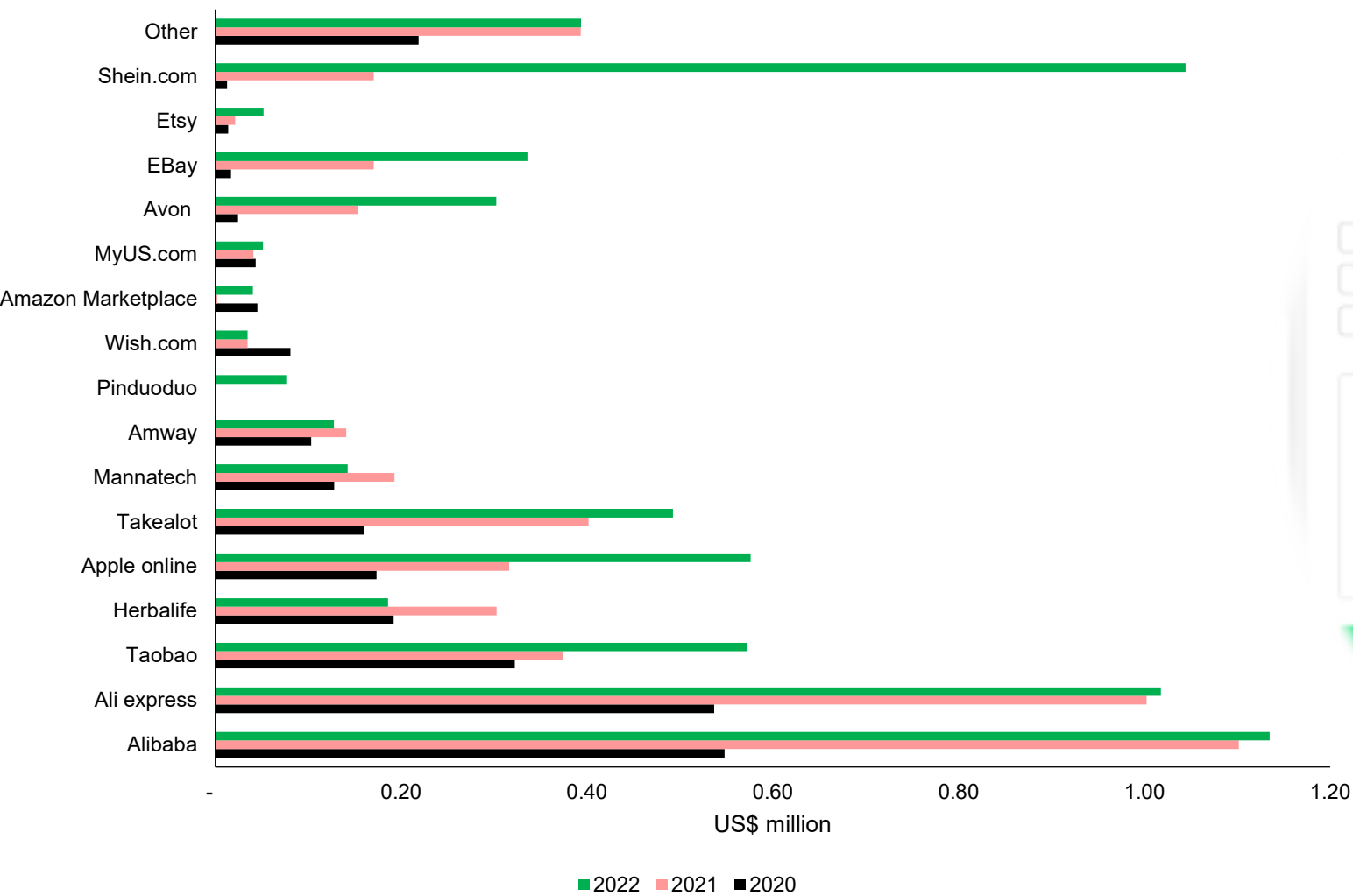
Cloud services, 2022





- Digitally ordered trade in goods and services estimated using online purchases
- Largely focused on the main providers of online services - top e-tailers such as Amazon and Alibaba
- This indicates growing demand for online shopping platforms
- Overly presents interest in digital trade which has growth potential as technology and accessibility advances.
- Digitally ordered goods make up less than 1% of total imports
 - Caveat: this only focuses on card transactions, however, if one includes online orders settled via swift or other means, the ratio could be higher

Digitally ordered trade for goods cont.

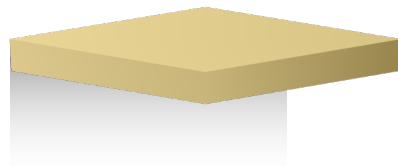


Challenges



There is a challenge in accurately categorizing merchants that offer a diverse range of services into their appropriate market segments. For instance, categorizing a company like Apple—to music streaming, video streaming, apple store, or cloud services—poses a notable difficulty.

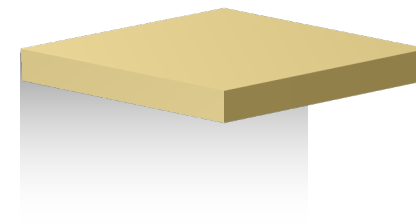
1



Resident vs Non-resident classifications: expatriates using their domestic card in foreign countries.

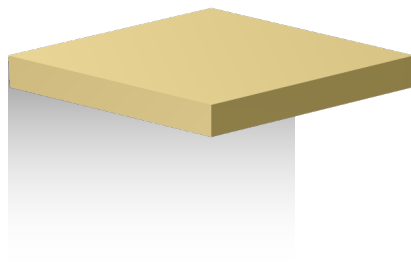
The data may not meet the requirements of BOP, especially the residency requirement before including the dataset in official statistics

2



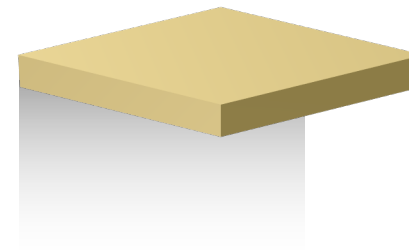
The treatment of purchases of goods or services via online chat functions (such as WeChat or WhatsApp). Which are becoming prominent in Namibia.

3



Some merchant names and codes are not available which may lead to an understatement of the estimates.

4





- ❑ In 2023, BON conducted an exercise to explore, from monthly credit and debit card data, purchases from non-residents captured through the Cross Border Foreign Exchange Transaction Reporting System.
- ❑ Cross-border digital purchases show an upward trend in Namibian-issued card payments to non-resident service providers for the period 2020-2022, indicating great interest in digital trade amongst Namibians.
- ❑ Foreign card transactions are significant and are to be included in the compilation of official BOP statistics for Namibia
 - One of the projects in the pipeline to enhance BOP statistics
- ❑ According to the defined categories, as of 2022 video streaming, services via DIPs, and online education continue to hold the largest digital purchases share reflecting the growing popularity of Netflix, and travel-related payments on digital intermediation platforms such as UBER and Airbnb coupled with increased online learning.
- ❑ There is still room to supplement card transaction data with other sources such as the ITRS (payments via swift) to get more comprehensive data on cross-border digital services and compile the template on digital trade next year.
- ❑ Challenges need to be addressed before the incorporation of these data in official BOP Statistics
 - Conduct the feasibility study for transferring the management of the ITRS from exchange control to the balance of payments section



Bank of Namibia

**THANK
YOU**

