



VIRTUAL CURRENCY & CYBERSECURITY: STRIKING A BALANCE BETWEEN BOUNDARIES & SECURITY



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Governor, ECCB



“Virtual currencies, perhaps most notably bitcoin have captured the imagination of some, struck fear among others, and confused the heck out of the rest of us”

- Thomas Carper, US senator



Virtual currencies are digital representations of value issued by developers and denominated in their own unit of account. They can be obtained, stored, accessed and transacted electronically as long as the transacting parties agree to use them. Examples include airline miles, cryptocurrencies such as Bitcoin and central bank digital currencies such as DXCD.



FINTECH INNOVATION: THE CASE OF THE ECCB

FinTech Pilot Components

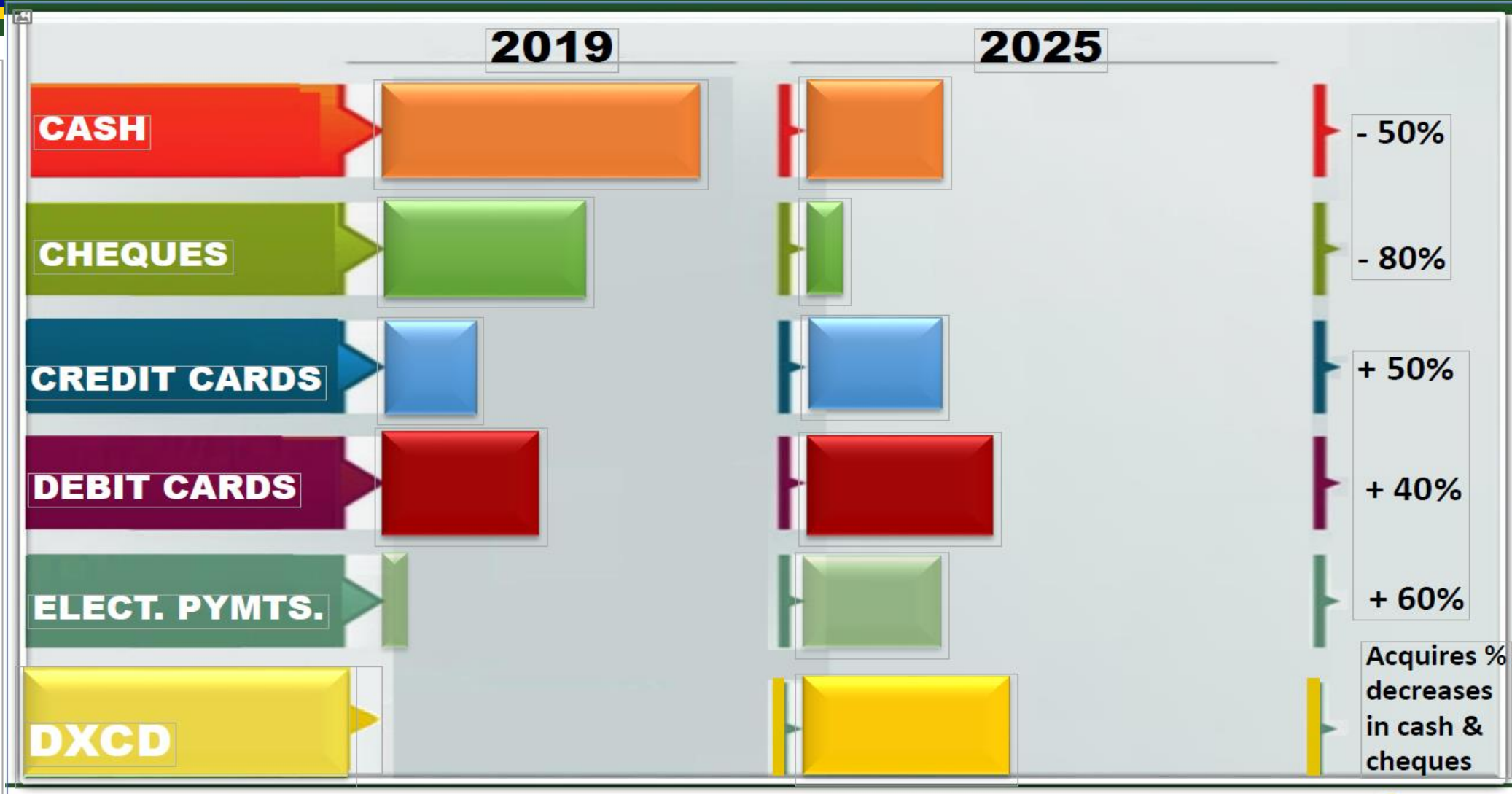
1. **Issuance of a high security digital EC currency** which embraces both the registered-based and value-based models; is interoperable and wallet agnostic; will operate alongside physical EC currency and have near instantaneous, real time processing, with legal settlement finality;
2. **Payments and Transfers:** a real time retail payment system using digital EC currency that can be initiated through digital wallets via multiple channels: smart phones, tablets, and PCs); and
3. **KYC & AML/CFT utilities** as part of the digital payments system architecture. The goal is to assess blockchain's potential to deliver greater transparency, faster access to information and real-time regulatory reporting.

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FUTURE PICTURE

Unscientific illustration of potential payment system shifts after five year mass deployment of DXCD



MULTIPLE CHANNELS





FINTECH : OPPORTUNITIES vs RISKS



Bottom Line : A Balanced Approach is Required



CARIBBEAN FINTECH ECOSYSTEM: SOME KEY RISKS

- **AML/CFT**
- **Inadequate legal and regulatory frameworks**
- **Reputational**
- **Cybersecurity/resilience**
- **Data protection and privacy**
- **Financial stability**
- **Consumer abuse**



THANK YOU



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Cryptocurrency – What is that?

- ▶ **A cryptocurrency is a privately issued digital medium of exchange that uses encryption to secure the processes involved in generating units and conducting transactions.**



Cryptocurrencies are distinct from fiat digital currencies as they are not backed by any sovereign/central bank and are not legal tender.

*While cryptocurrencies can serve as a **medium of exchange** and transfer of value between parties, their price volatility makes them unsuitable as a **store of value** and a **unit of account**. Hence the debate as to whether they are a currency, commodity or security (crypto-assets).*



- ▶ **Where one stands on cryptocurrencies has a lot to do with where one sits.**
- ▶ *There are mixed views among politicians, law enforcement, bankers, regulators, fintech firms and consumers.*



Top Four Cryptocurrencies by Market Capitalisation (Oct 2018)

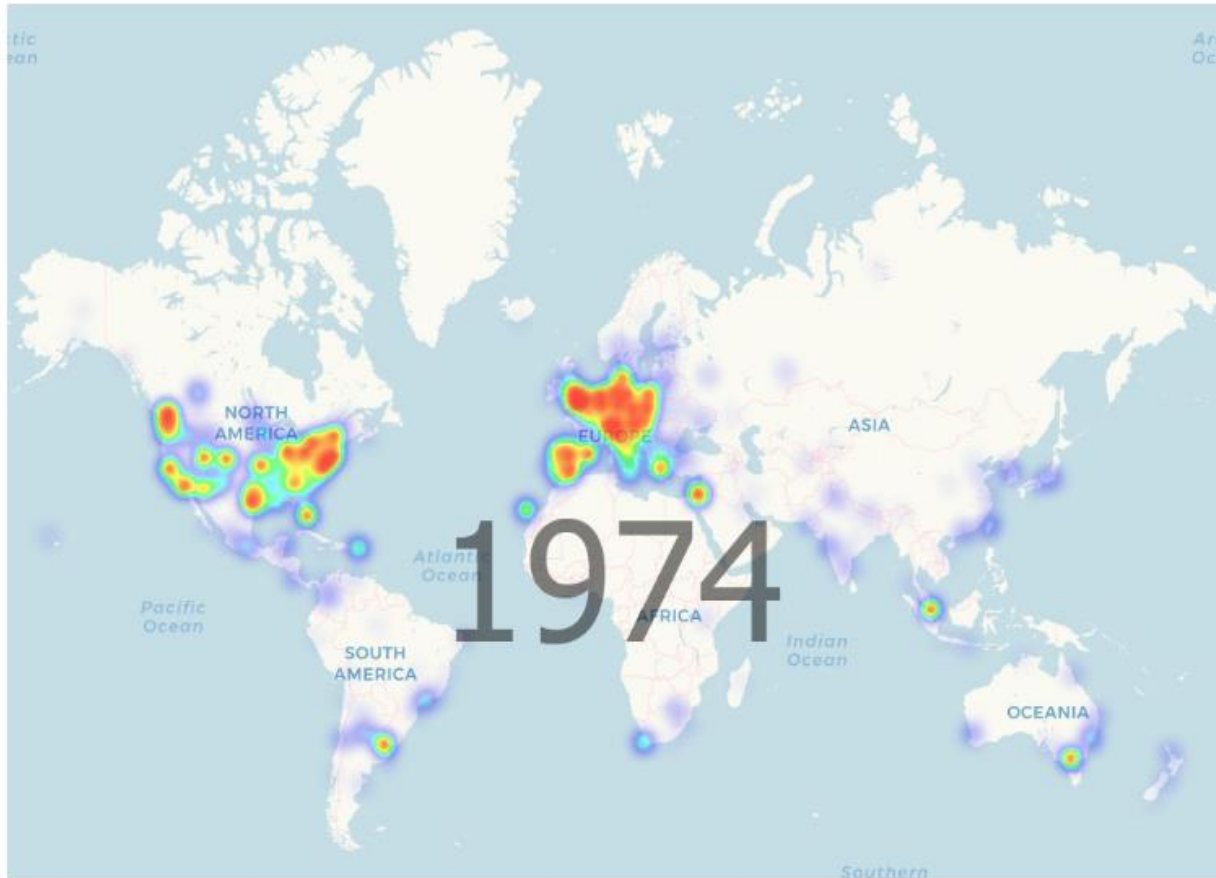
#	Name	Market Cap	Price	Volume (24h)	Circulating Supply	Change (24h)	Price Graph (7d)
1	Bitcoin	\$109,720,340,629	\$6,323.88	\$3,751,264,713	17,350,162 BTC	-0.10%	
2	Ethereum	\$20,218,421,812	\$196.49	\$1,321,322,479	102,896,701 ETH	-0.08%	
3	XRP	\$17,771,255,225	\$0.442010	\$252,045,397	40,205,513,967 XRP *	0.58%	
4	Bitcoin Cash	\$7,255,057,027	\$416.22	\$225,703,299	17,430,975 BCH	-0.15%	

According to <https://coinmarketcap.com>, as at December 04, 2018, there were **2,065** commercial cryptocurrencies at a total market capitalization of **US\$128.5 billion** down from **US\$202.7 billion in August 2018** and **\$616 billion** in January 2018.



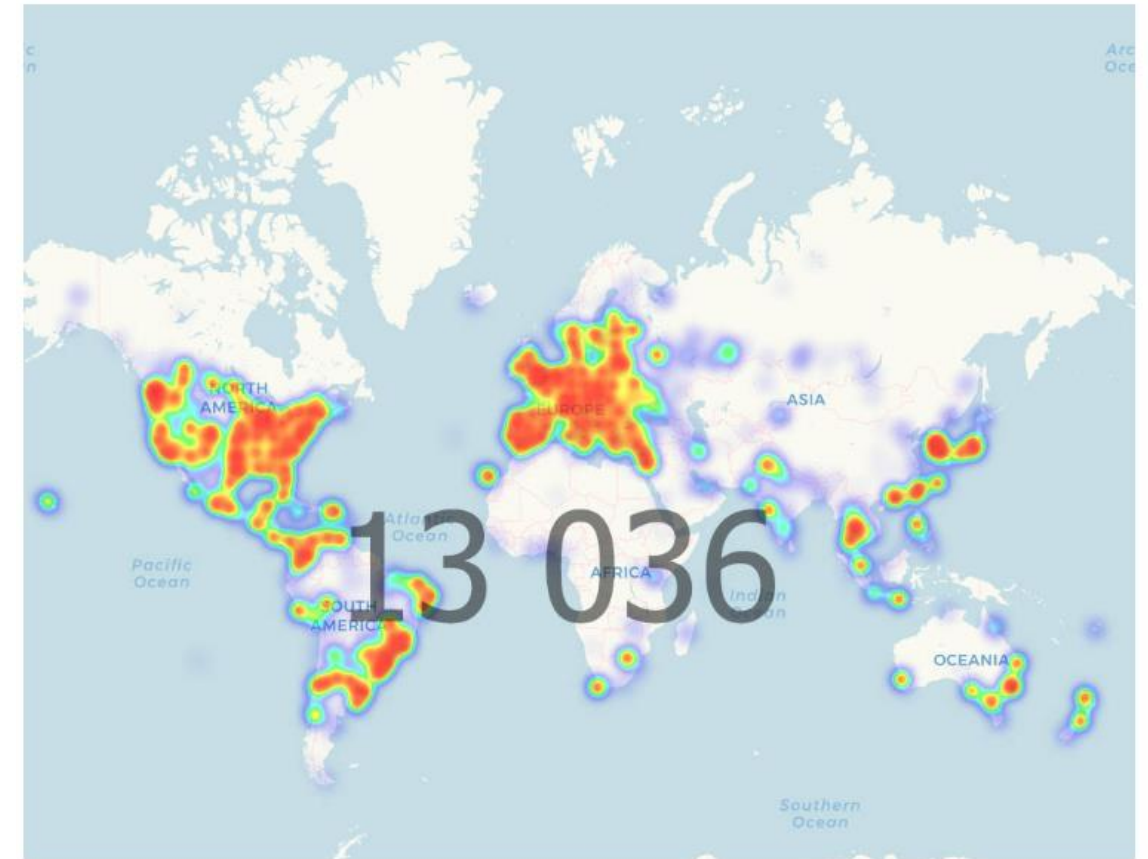
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2014 January: Number of venues accepting cryptocurrencies



Source: coinmap.org

2018 August: Number of venues accepting cryptocurrencies



Source: coinmap.org



Recent Regulatory Efforts in the ECCU

- Issuance of joint advisory to consumers of Fintech services such as cryptocurrencies and ICOs
- Establishment of a Fintech Working Group among regulators (ECCB, ECSRC and non-bank regulators)



Recent Regulatory Efforts in the ECCU

- Agreement among regulators to adopt a regional approach to review and jointly develop an appropriate framework for Fintech regulation and supervision
- Recommendation to the Monetary Council that there be a moratorium on approvals of certain services pending legislative and regulatory review and the introduction of revamped framework



Looking Forward

- **International collaboration and cooperation**
- **More cross-border sandboxes**
- **Harmonised legal framework for FinTech development in CARICOM?**
- **Revamped regulatory architecture**
- **Caribbean Data Protection Regulation (CDPR)?**
- **More financial literacy**