



CENTRAL BANK OF  
TRINIDAD & TOBAGO

# Financial Stability Report 2017

June 21, 2018

[www.central-bank.org.tt](http://www.central-bank.org.tt); email: [info@central-bank.org.tt](mailto:info@central-bank.org.tt)

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# PRESENTATION FLOW

1

Understanding Financial Stability

2

Financial Sector Performance Review

3

2017 Vulnerabilities and Risks Assessment

4

Regulatory and Supervisory Issues Associated with Cryptocurrencies

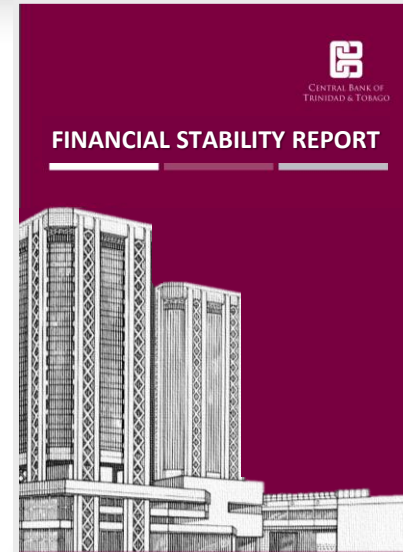
# UNDERSTANDING FINANCIAL STABILITY

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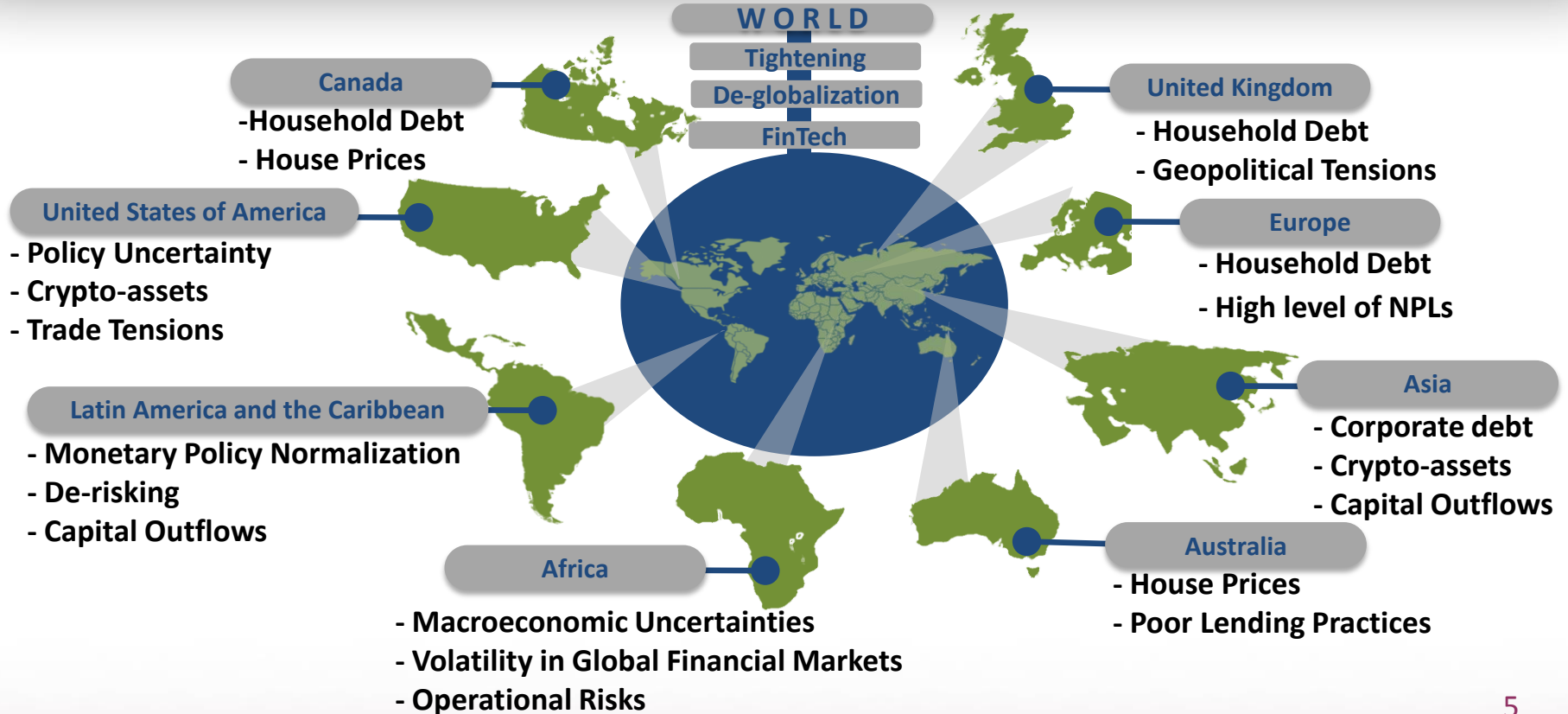


# UNDERSTANDING FINANCIAL STABILITY

- Financial stability has been defined as the **resilience of the financial system in the face of adverse shocks** so as to enable the **continued smooth functioning** of financial intermediation and payments settlement.
- The **annual Financial Stability Report** of the Bank provides an overview of developments in the financial sector and showcases the Bank's efforts to strengthen the macro-financial system.



# GLOBAL FINANCIAL STABILITY RISKS



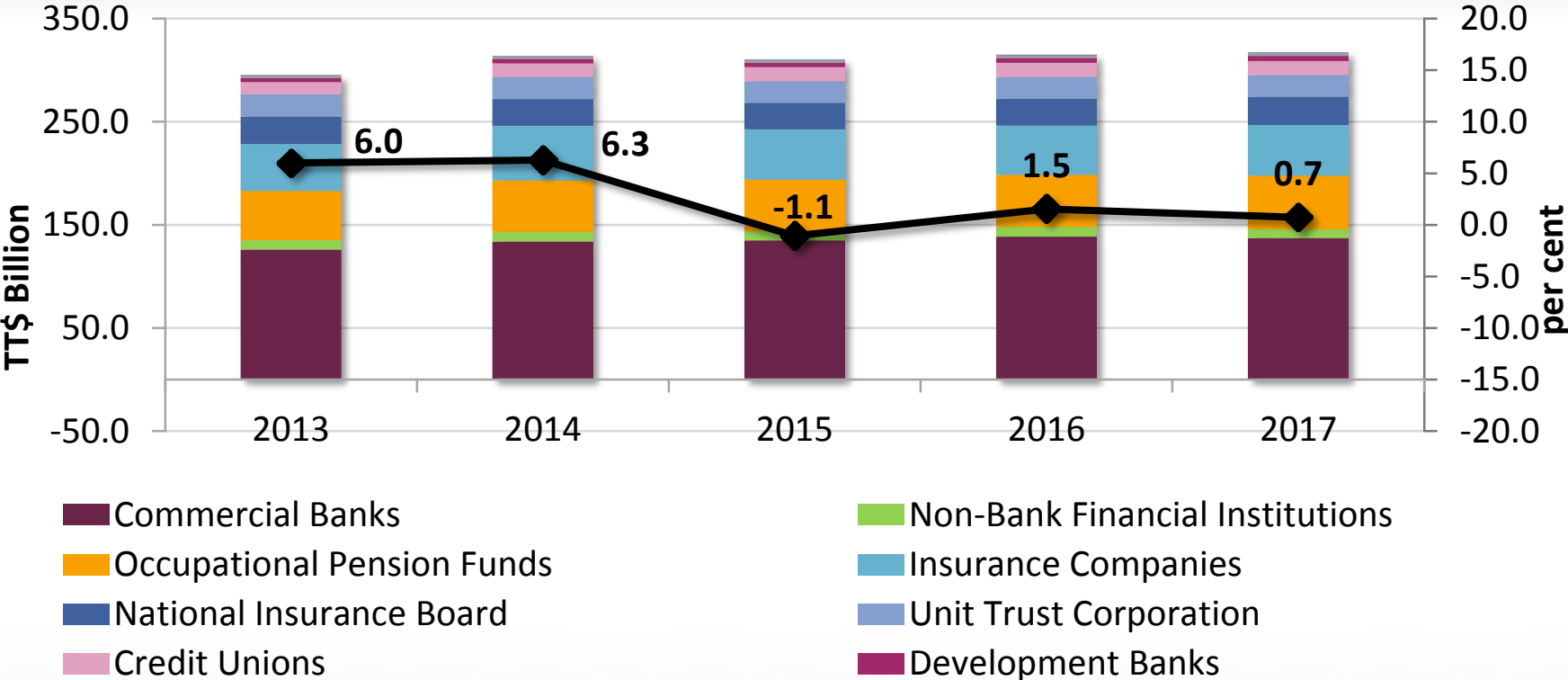


# FINANCIAL SECTOR PERFORMANCE REVIEW

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# SHARE OF ASSETS IN THE DOMESTIC FINANCIAL SECTOR



Source: Central Bank of Trinidad and Tobago.

# KEY FINANCIAL SOUNDNESS INDICATORS

	Dec-13	Dec-14	Dec-15	Dec-16	Dec-17
<b>BANKING SECTOR</b>					
Regulatory Capital-to-Risk-Weighted Assets	25.0	24.6	24.1	23.8	23.4
Non-Performing Loan Ratio	4.3	4.4	3.7	3.2	3.0
Return on Equity	15.8	12.9	18.2	19.9	19.0
Liquid Assets-to-Total Assets	26.8	25.0	23.1	21.8	19.7
<b>LIFE INSURANCE SECTOR</b>					
Investment Yield	5.1	4.8	4.5	4.7	4.7
Return on Equity	15.1	10.6	11.3	15.4	13.8
<b>NON-LIFE INSURANCE SECTOR</b>					
Loss Ratio	45.3	44.3	48.6	47.2	55.1
Investment Income / Net Premium	10.3	5.8	5.8	6.1	6.7

Source: Central Bank of Trinidad and Tobago.



# KEY FINANCIAL SOUNDNESS INDICATORS

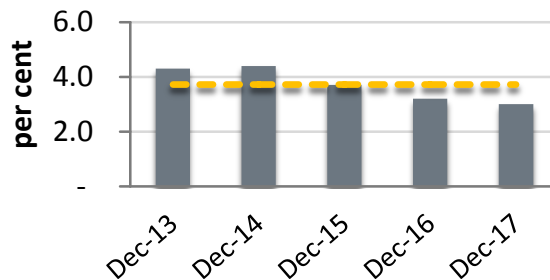
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## Capital Adequacy



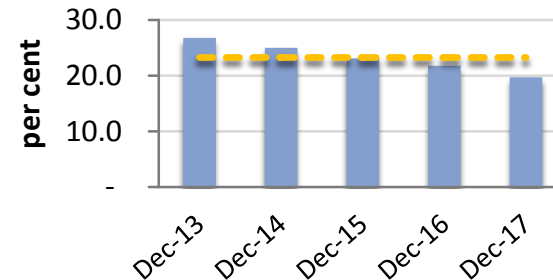
Regulatory Capital-to-Risk-Weighted Assets

## Asset Quality



Non-Performing Loan Ratio  
Historical Average

## Liquidity



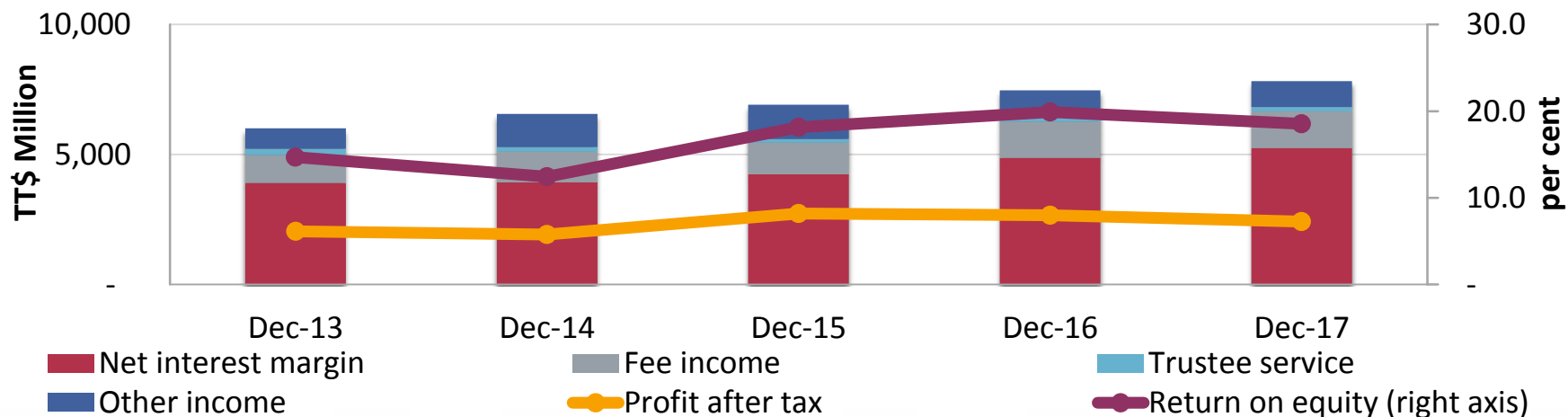
Liquid assets-to-total assets  
Historical Average

Source: Central Bank of Trinidad and Tobago.

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## PROFIT BY SOURCE

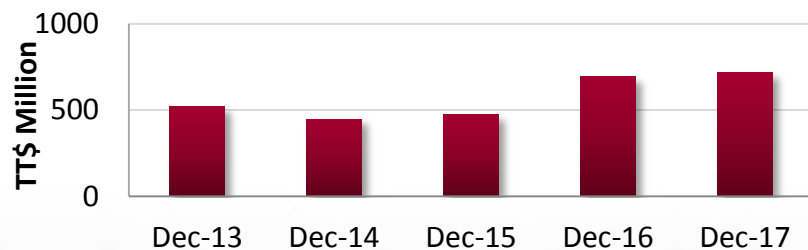


Source: Central Bank of Trinidad and Tobago.

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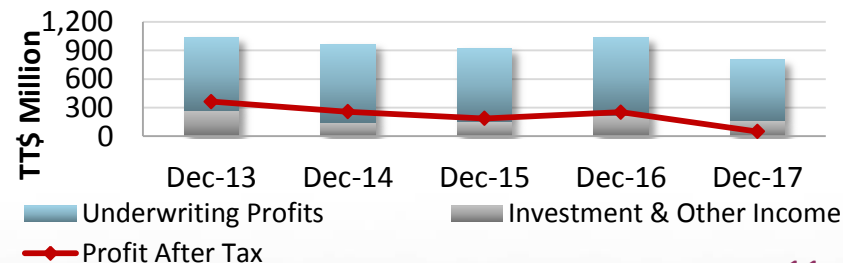
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## LIFE: PROFITS BEFORE TAXES



Source: Central Bank of Trinidad and Tobago.

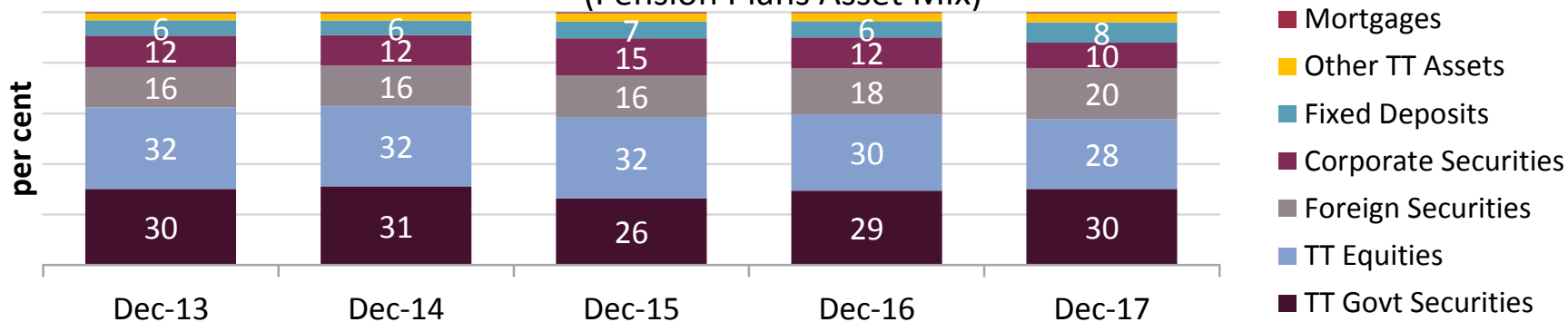
## NON-LIFE: CONTRIBUTION TO PROFIT



# KEY INDICATORS - OCCUPATIONAL PENSION PLANS

## ASSETS AS A PROPORTION OF FUNDS

(Pension Plans Asset Mix)

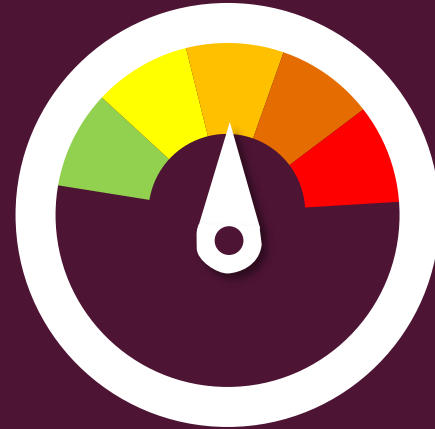


## PENSION PLANS BY TYPE

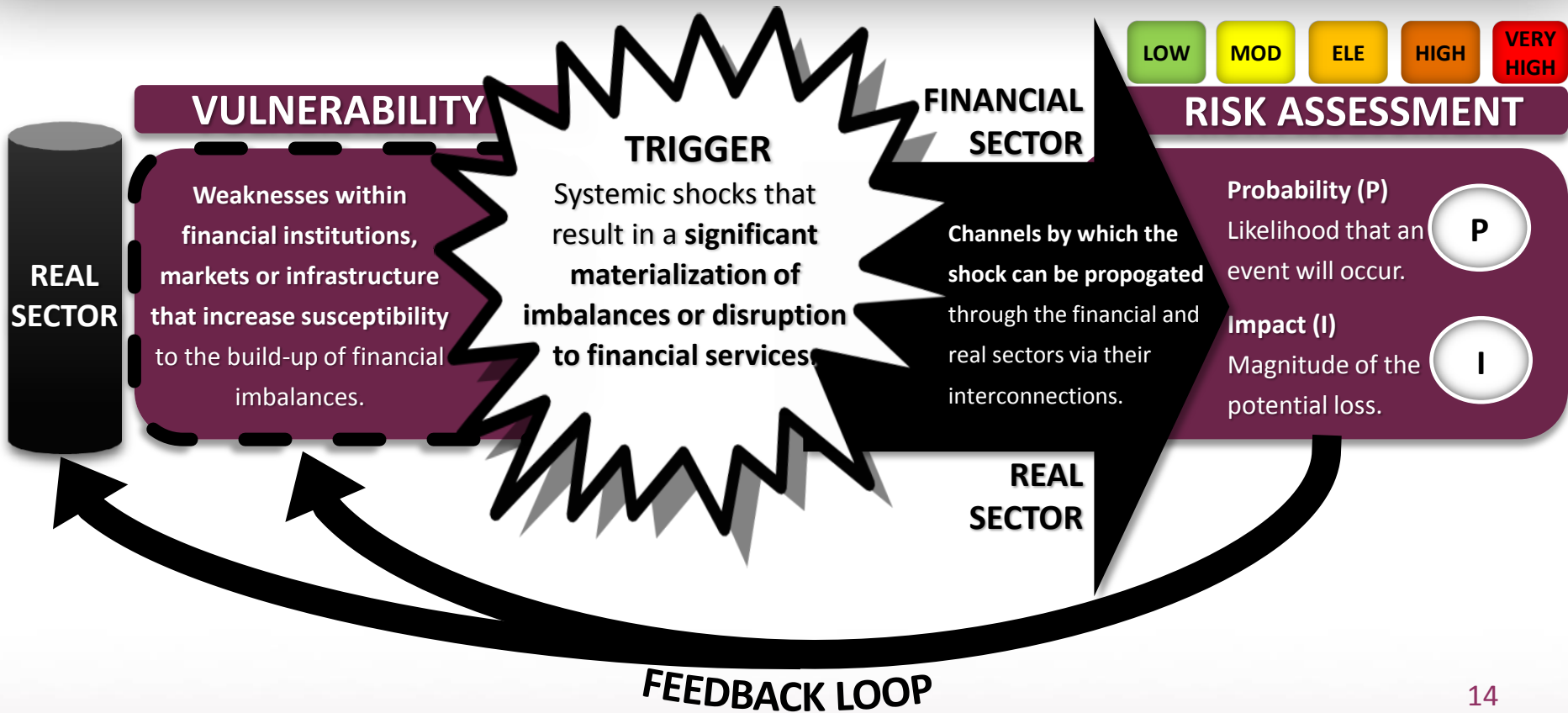
	Sponsored by Govt or Govt-Related entities		Private Company Sponsored	
	Defined Benefit	Defined Contribution or Hybrid	Defined Benefit	Defined Contribution or Hybrid
Number of Plans	36	8	77	65
Total Assets (TT\$ Billion)	\$29.1	\$0.3	\$12.2	\$7.0

# VULNERABILITIES AND RISK ASSESSMENT

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# VULNERABILITY AND RISK FRAMEWORK





# DOMESTIC FINANCIAL STABILITY RISKS

VULNERABILITIES	KEY TRIGGER	MAIN CONTAGION CHANNEL	RISKS	RISK ASSESSMENT
High household indebtedness	Rising interest rates and variable-rate mortgages	Deterioration of household balance sheets	Deterioration in the Quality of Consumer Loan Portfolios	
High sovereign concentrations in the financial system	Credit rating downgrades	Rise in debt servicing	Sovereign Debt Impairment	
Relatively low domestic interest rates	Financial market volatility	Increase pressure on financial positions	Unfavourable Movement in Investment Portfolios	

Low

Moderate

Elevated

High

Very High

# VULNERABILITY I: HIGH HOUSEHOLD INDEBTEDNESS

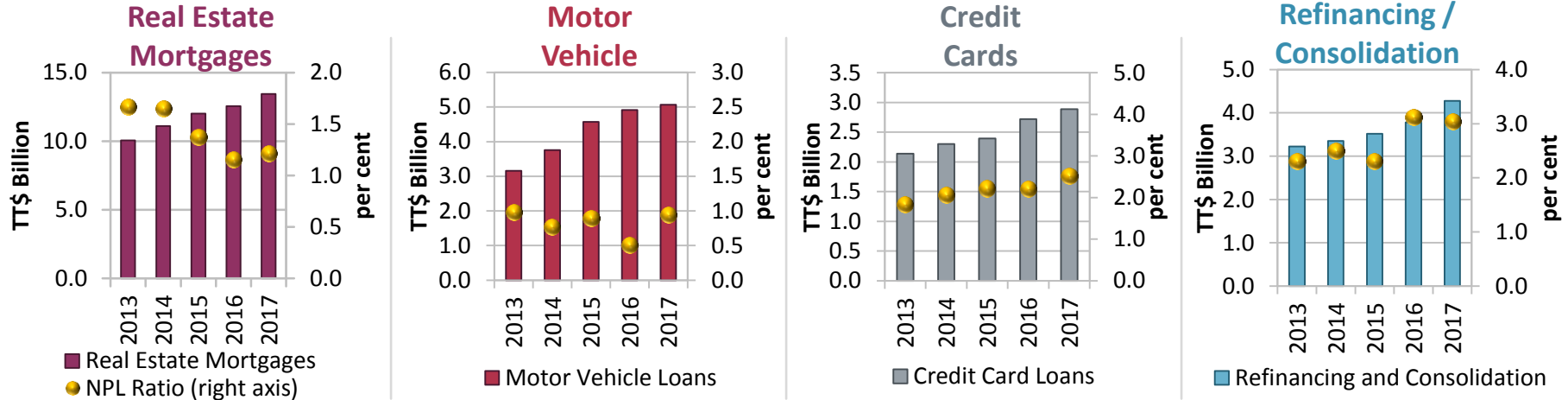
## ESTIMATED HOUSEHOLD DEBT (TT\$ BILLION)

Other Consumer Loans  
29.5

Real Estate Loans  
20.3

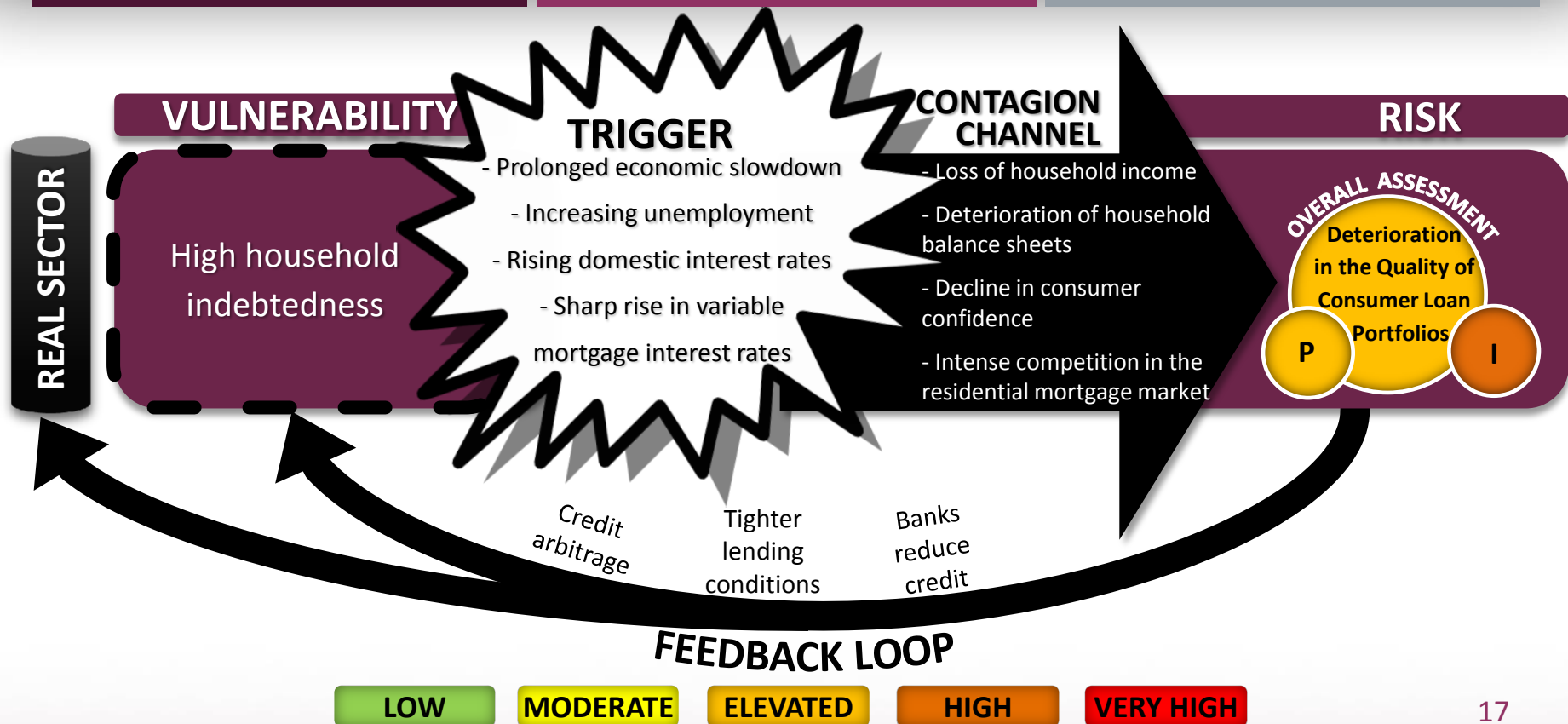
Credit Card  
2.9

Other  
0.5



- ❑ The magnitude of a credit shock to the banking sector is not only dependent on the level of debt, but also on consumers' resilience in the face of triggers which can affect their debt-servicing capacity.
- ❑ The banking sector continued to effectively manage loan delinquency.

# RISK I: DETERIORATION IN THE QUALITY OF CONSUMER LOAN PORTFOLIOS



# KEY MESSAGES

Robust domestic financial system with high capital adequacy, stable profits and strong asset quality

Interconnectedness has been a benefit but can pose challenges if not monitored

Looking forward into 2018 macro-financial indicators reflect continued resilience

Financial sector vulnerabilities and risks have not changed significantly from 2016

On-going assessment of the economic, regulatory and financial landscape



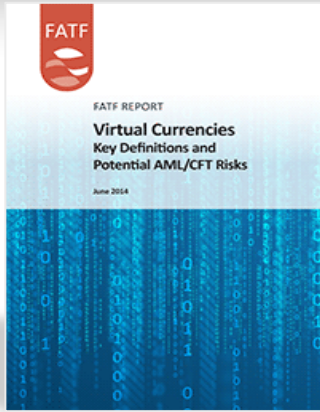


# OVERVIEW

- 1 Digital Currencies and Cryptocurrencies
- 2 What is a Distributed Ledger / Blockchain
- 3 Cryptocurrencies – Pros and Cons
- 4 The Regulatory Response to Digital Currencies
- 5 Central Bank Digital Currencies (CBDCs)
- 6 Our Regulatory Approach



# DIGITAL CURRENCIES & CRYPTOCURRENCIES - THE TERMINOLOGY EXPLAINED



- **Financial Action Task Force (2014)** defines a **Virtual Currency** as: “a *digital representation of value* that can be digitally traded and functions as (1) *a medium of exchange*; and/or (2) *a unit of account*; and/or (3) *a store of value*, but does *not have legal tender status* ... It is neither issued nor guaranteed by any jurisdiction, and fulfills the above functions only by agreement within the community of users of the virtual currency”.
- **European Central Bank (2012)** defines a **Virtual Currency** as: “a *type of unregulated, digital money*, which is issued and usually controlled by its developer, and used and accepted among the member of a specific virtual community”.

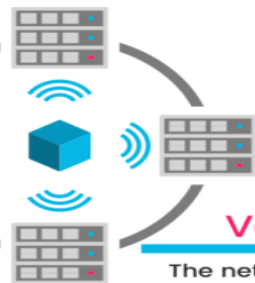


## How it works:



Someone requests a transaction.

The requested transaction is broadcast to P2P network consisting of computers, known as nodes.



### Validation

The network of nodes validates the transaction and the user's status using known algorithms.



A verified transaction can involve cryptocurrency, contracts, records, or other information.



The transaction is complete.



The new block is then added to the existing blockchain, in a way that is permanent and unalterable.



Once verified, the transaction is combined with other transactions to create a new block of data for the ledger.



## Cryptocurrency

Cryptocurrency is a medium of exchange, created and stored electronically in the blockchain, using encryption techniques to control the creation of monetary units and to verify the transfer of funds. Bitcoin is the best known example.



Has no intrinsic value in that it is not redeemable for another commodity, such as gold.

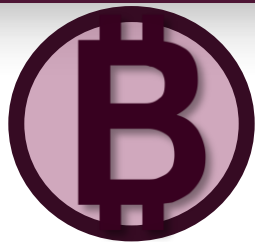


Has no physical form and exists only in the network.



Its supply is not determined by a central bank and the network is completely decentralized.

# DIFFERENCES BETWEEN CRYPTOCURRENCY & FIAT CURRENCY



## Cryptocurrency

Not Legal Tender

Not a Liability of anyone

Unregulated

Exists only in digital form

Less Secure

Decentralized



## Fiat Currency

Legal Tender

Liability of the Central Bank

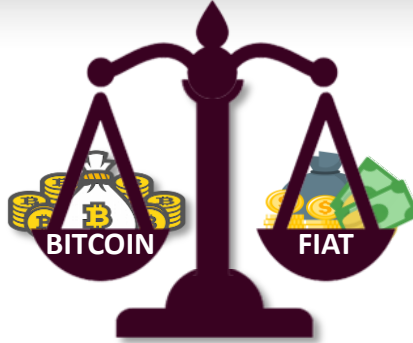
Regulated

Has a physical form

More secure

Centralized

# DOES CRYPTOCURRENCY FUNCTION AS MONEY?



- **Medium of exchange** – at some level cryptocurrencies can serve as a medium of exchange, although their acceptance is currently limited.
- **Store of value** – although some may argue that bitcoin serves as a store of value, this is ill-founded. Bitcoin, a virtual currency, is only as valuable as the market deems it to be and only valuable if it can be converted to a local currency.
- **Unit of account** – Cryptocurrencies exhibit very high time series volatility and trade for different prices on different exchanges.

# PROS & CONS OF CRYPTOCURRENCIES

PROS/CONS



## Cryptocurrency Pros

User anonymity:  
Privacy

Solution to  
De-risking?

Transparency of  
transactions

Financial  
inclusion

Cheaper and  
faster  
transactions

# PROS & CONS OF CRYPTOCURRENCIES

PROS | CONS



## Cryptocurrency Cons

User anonymity:  
AML/CFT

Volatility

Low consumer  
protection

Cyber-risks/  
Cybersecurity

Environmental

Implications for  
Monetary Policy?



# CRYPTOCURRENCIES AND FINANCIAL STABILITY



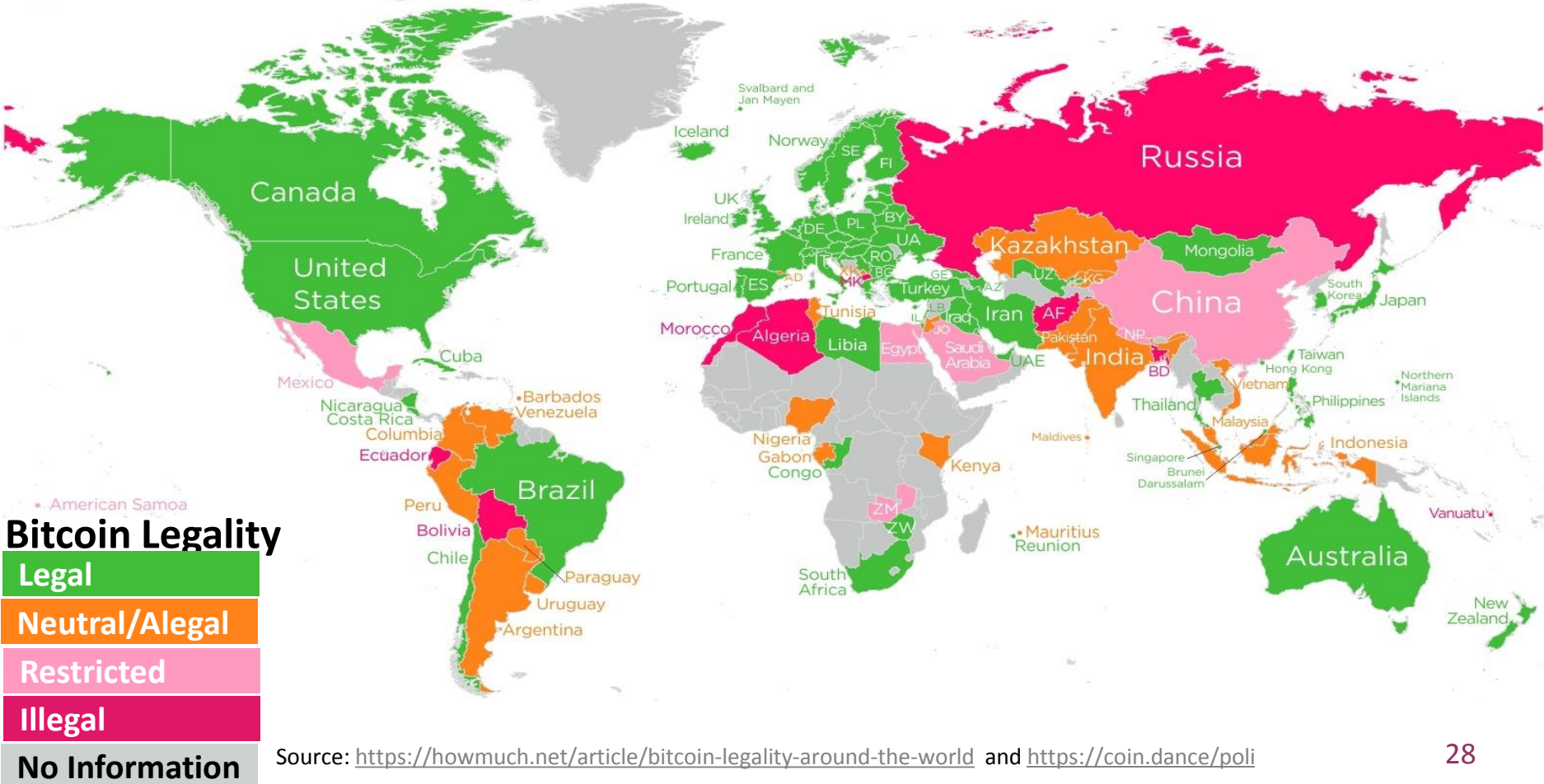
**Mark Carney**  
Chair,  
Financial Stability Board  
Governor,  
Bank of England  
March 2018

*“The FSB’s initial assessment is that **crypto-assets do not pose risks to global financial stability at this time**. This is in part because they are small relative to the financial system...”*

*Crypto-assets raise a host of issues around consumer and investor protection, as well as their use to shield illicit activity and for money laundering and terrorist financing. At the same time, the technologies underlying them have the **potential to improve the efficiency and inclusiveness of both the financial system and the economy...**”*



# Bitcoin Legality Around the World



## Bitcoin Legality

- Legal
- Neutral/Alegal
- Restricted
- Illegal
- No Information

Source: <https://howmuch.net/article/bitcoin-legality-around-the-world> and <https://coin.dance/poli>

# THE REGIONAL RESPONSE TO CRYPTOCURRENCY

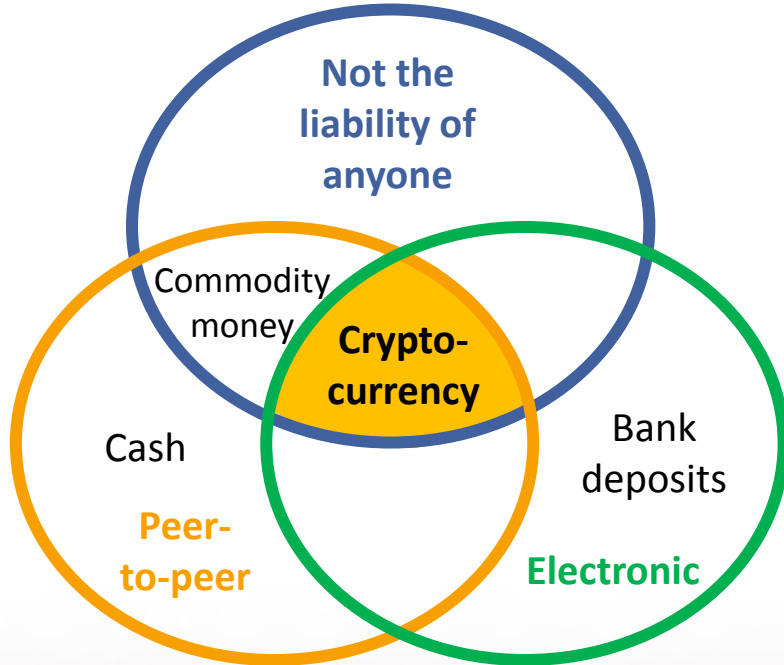
- Some Caribbean Jurisdictions have issued advisories (Aruba, Belize, Curacao and Sint Maarten, ECCB, Jamaica and Trinidad and Tobago. Barbados is preparing and advisory for issue in 2018).
- For many financial sector legislation do not explicitly cover cryptocurrency.
- For some there is some scope under legislation covering payment systems or remittance business.
- Many Central Banks have taken a 'wait and learn' approach.
- Some Central Banks at least 3 have indicated their intention to issue a Central Bank Digital Currency and others are assessing.



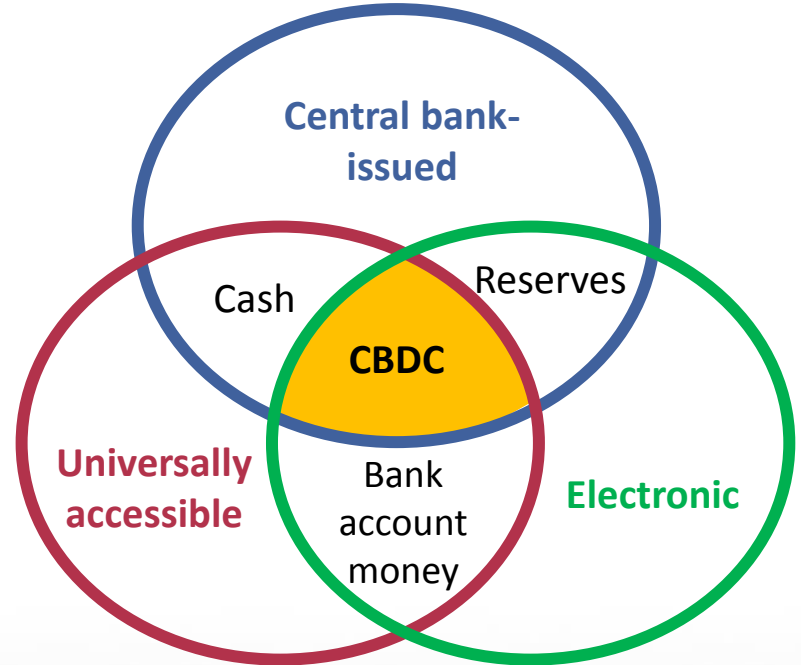
# IS A CENTRAL BANK DIGITAL CURRENCY THE ANSWER?

## TWO TAXONOMIES OF NEW FORMS OF CURRENCY

Cryptocurrency



Central Bank Digital Currency (CBDC)



# OUR REGULATORY APPROACH TO DIGITAL CURRENCIES

Engaging with  
Regional Central  
Banks

Ongoing Monitoring  
& Research

Development of  
Policies

**Accommodative  
Stance to date**  
*Open to Innovations but  
Cautious*

Engaging with  
International  
Regulatory Agencies  
e.g. IMF, FSB

Issued Public Notice  
re: Payment  
Systems

Upskilling of Staff  
via Conferences,  
Seminars etc.

Collaboration with  
Domestic Regulators

Engaging with  
Fintechs

# CONCLUSION - THE REGULATORY APPROACH TO FINTECH



*“We must guard against emerging risks without stifling innovation”*

**Christine Lagarde**

**Managing Director of the International Monetary Fund, 2018.**

Source: Finance and Development, International Monetary Fund, June 2018.