

# FinTech and ML/TF Risks



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Finance, Competitiveness & Innovation

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Confidential

**FinTech in broader context:**  
**No commonly agreed definition of “FinTech”.**  
**Based on the context it may refer to:**

Use of advanced IT technology in:

- delivery of financial services (FinTech), **-focus of this session**
- complying with regulatory requirements (RegTech),
- supervision of financial institutions (SupTech).

This use may not be limited to AML/CFT. However, AML/CFT aspect and particularly Customer Due Diligence is a core component.

# Use of IT in finance is not new. However, some recent developments changed the landscape a lot:

- Increase in access to internet and mobile devices,
- Developments in artificial intelligence,
- Increasing microprocessor capability,
- Increasing digital storage capacity,
- Invention of blockchain technology.

## FinTech examples:

Non-face to face investment platforms,  
Non-face to face money transfer platforms,  
Crowdfunding platforms,  
Internet banking,  
Mobile banking,  
Digital Wallets, Electronic money,  
Mobile money,  
Virtual assets (crypto currencies).

**Although all are under FinTech, their characteristics and money laundering risks can be very different.**

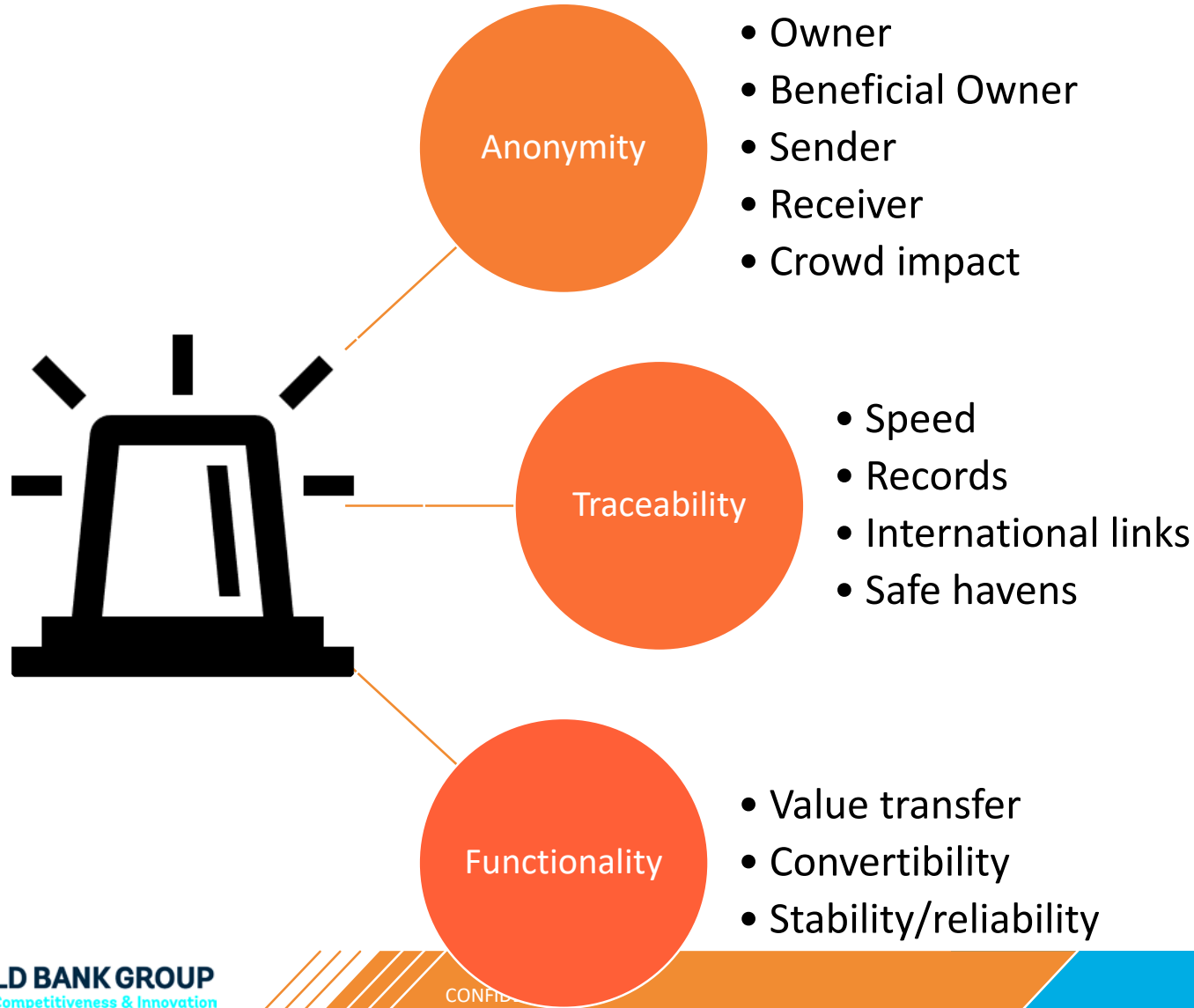
# Assessing and understanding the ML/TF risks of FinTech products

# A generic framework for the risk assessment of FinTech Products

	Non-face to face investment platforms,	Non-face to face money transfer platforms,	Crowdfunding platforms,	Internet banking,	Mobile banking,	Digital Wallets, Electronic money,	Mobile money,	Virtual assets (crypto currencies).	Other FinTech
Size/Volume									
International Transactions									
Transactions with HR Jurisdictions									
ML/TF Typologies									
Convertibility to Cash									
Transaction records									
Quality of CDD									
Quality of monitoring and STR									
Delivery channel (agents).									
...									
...									
...									
<b>Risk Level of FinTech Product</b>									

# FinTECH Inherent Risk Factors

# & Control Factors



Customer Due Diligence  
Monitoring and analysis software

Real time monitoring, red flagging  
Speedy response  
Global standards  
Domestic & Int Cooperation

Limitation of functions  
Controls at cash-in, cash-out points

## A more concise version:

	Non-face to face investment platforms,	Non-face to face money transfer platforms,	Crowdfunding platforms,	Internet banking,	Mobile banking,	Digital Wallets, Electronic money,	Mobile money,	Virtual assets (crypto currencies).	Other FinTech
<b>Inherent Risk Factors</b>									
- Anonymity									
-Traceability									
-Funtionality									
<b>AML/CFT Controls</b>									
<b>Residual ML/TF Risk</b>									



## **FATF RECOMMENDATION 15**

### **New technologies**

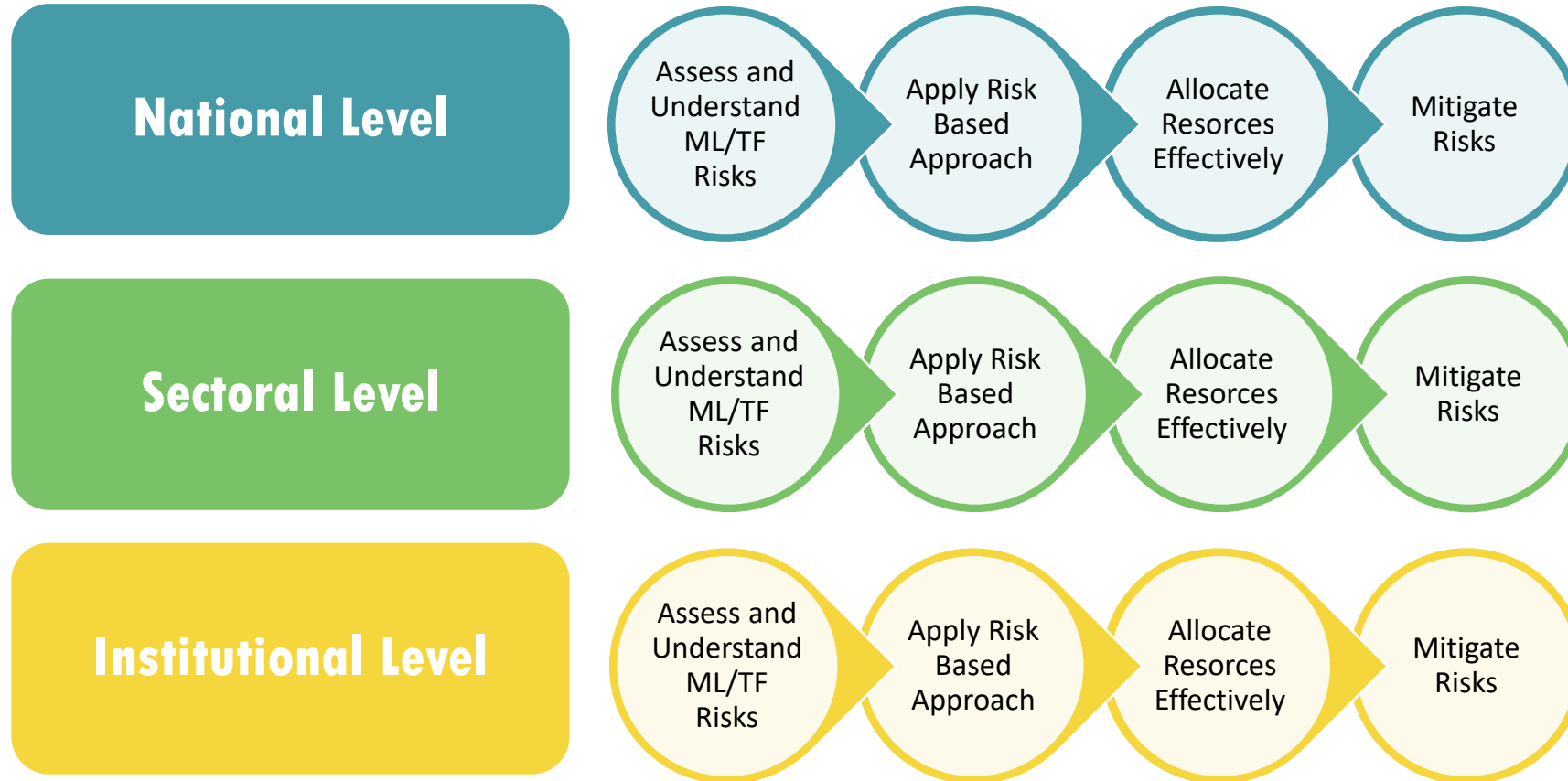
Countries and financial institutions should identify and assess the money laundering or terrorist financing risks that may arise in relation to (a) the development of new products and new business practices, including new delivery mechanisms, and (b) the use of new or developing technologies for both new and pre-existing products. In the case of financial institutions, such a risk assessment should take place prior to the launch of the new products, business practices or the use of new or developing technologies. They should take appropriate measures to manage and mitigate those risks.

To manage and mitigate the risks emerging from virtual assets, countries should ensure that virtual asset service providers are regulated for AML/CFT purposes, and licensed or registered and subject to effective systems for monitoring and ensuring compliance with the relevant measures called for in the FATF Recommendations.

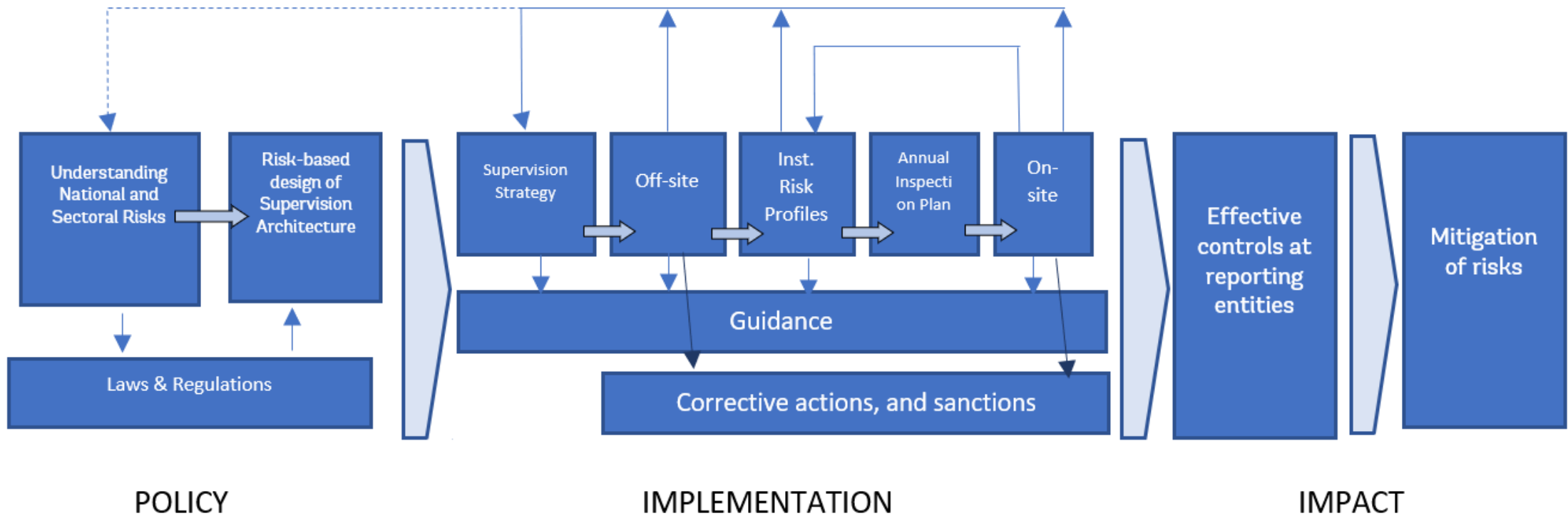
# IMPORTANCE OF ASSESSING AND UNDERSTANDING THE ML/TF RISKS



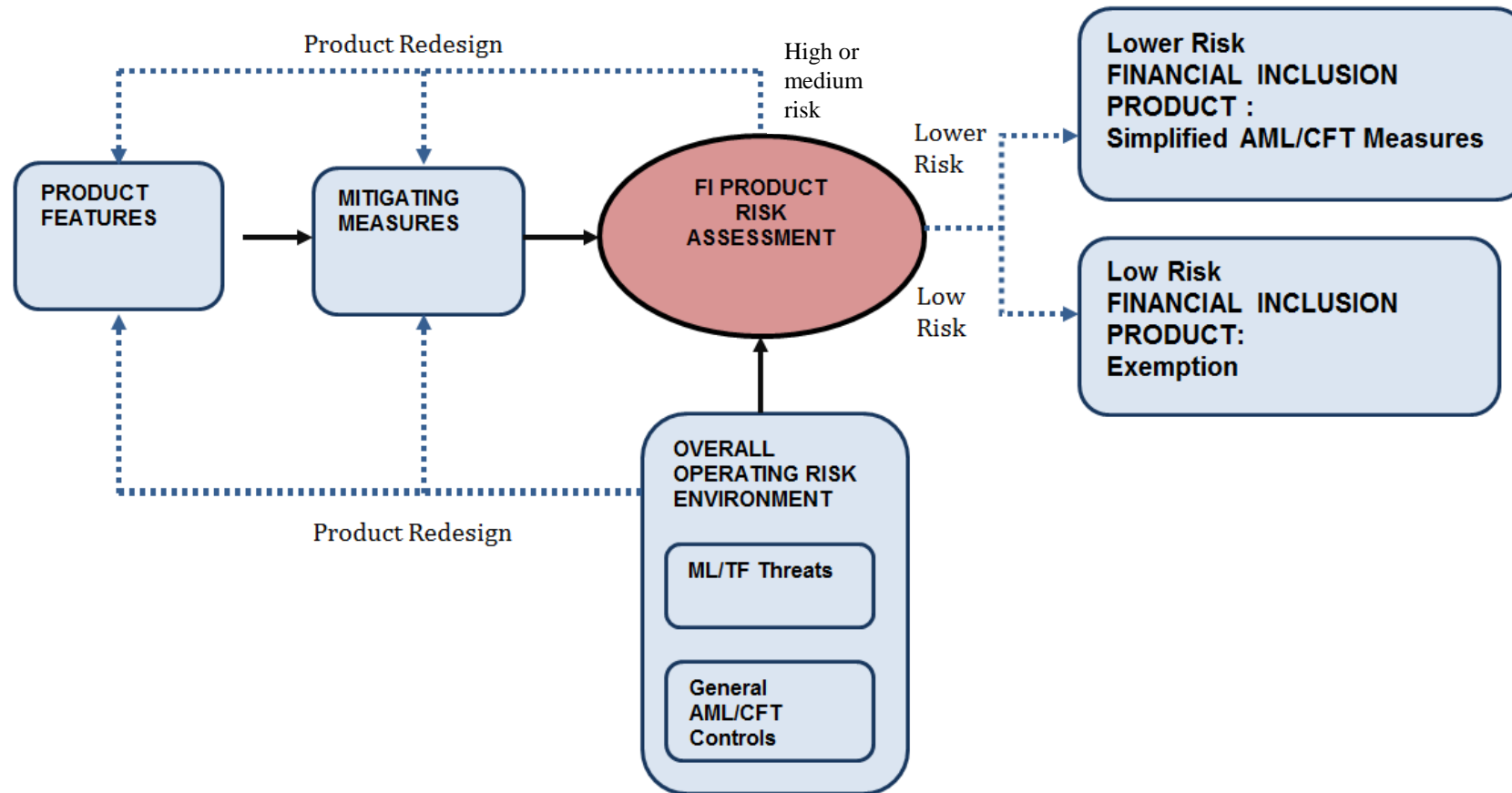
# Risk Based Approach at Three Levels



# Generic AML/ CFT Supervision/Monitoring Framework (Suggested by WB Team)



# WB's Risk Assessment Module for Financial Inclusion



## **A more specific example: ML/TF risks of Virtual Assets**

# Example: Virtual Assets

Do you agree with the info-graph?

## EVOLUTION OF MONEY

VECTOR ILLUSTRATION



BARTER



GOLD



METALL  
COINS



PAPER  
MONEY



PLASTIC  
CARDS



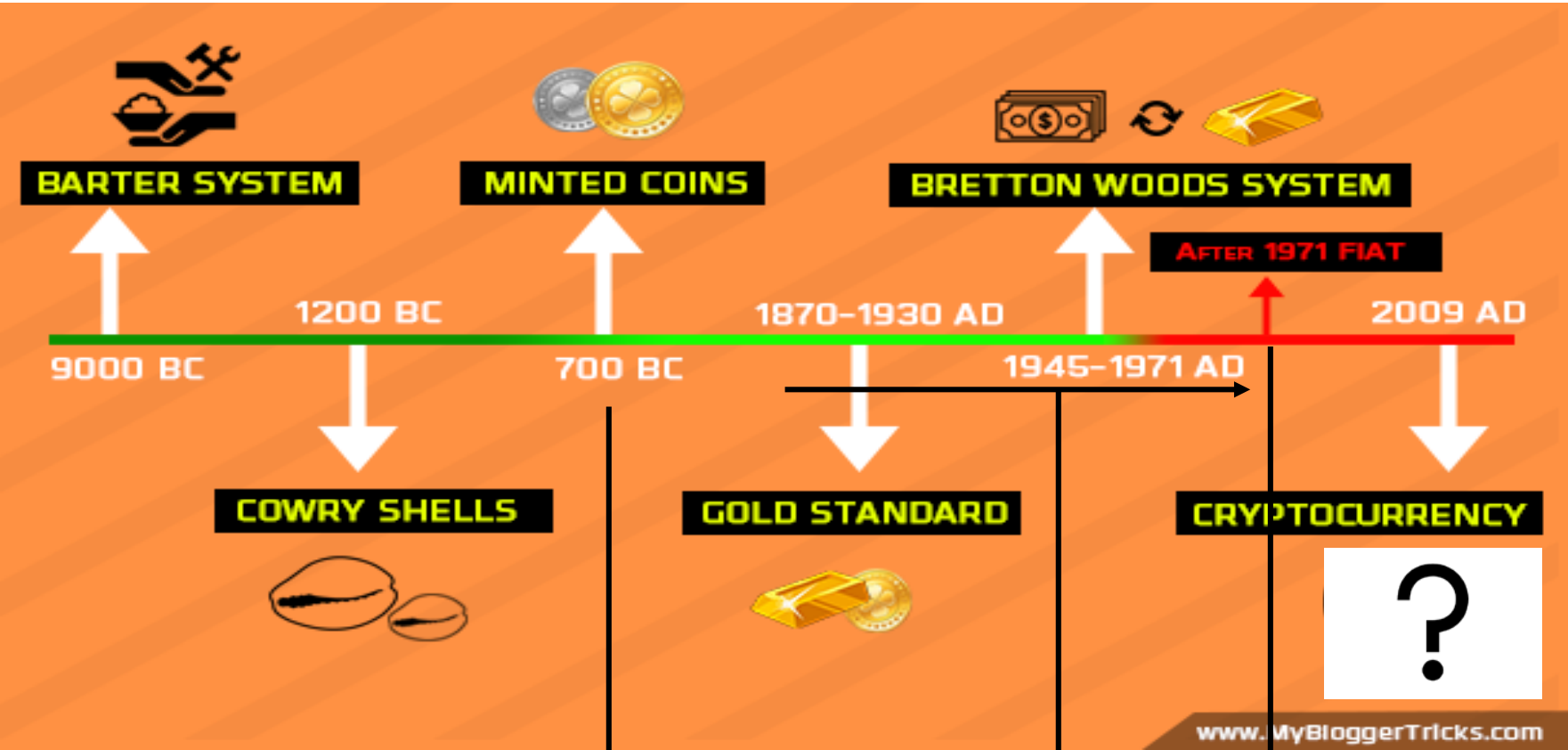
ELECTRONIC  
MONEY



CRYPTO  
CURRENCY

# Example: Virtual Assets

A more accurate presentation of the evolution of money.



In mined coins, value is attributed by the users (market). Not any objective criteria as a basis for the attributed value. Their speculative nature and high volatility limits the possibility to function as a "currency".

Stable coins can be a game changer. The value represents a basket of currencies and stable financial assets.

Value of the money comes from gold or silver in it.

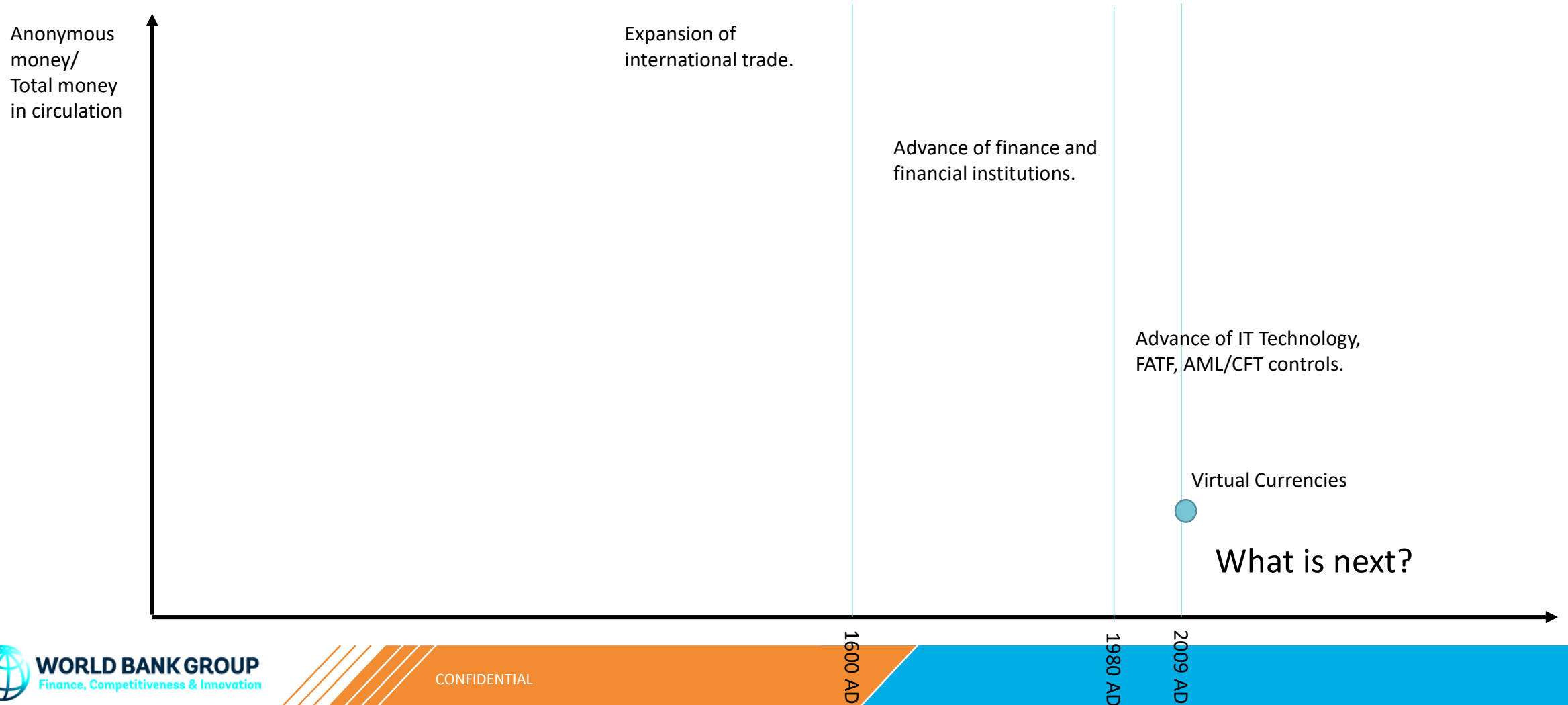
Value of the money comes from the gold it represents.

Money becomes independent from any commodity. Value is attributed by the users (market). The sovereignty, stability, and credibility of the issuing state determines the attributed value.



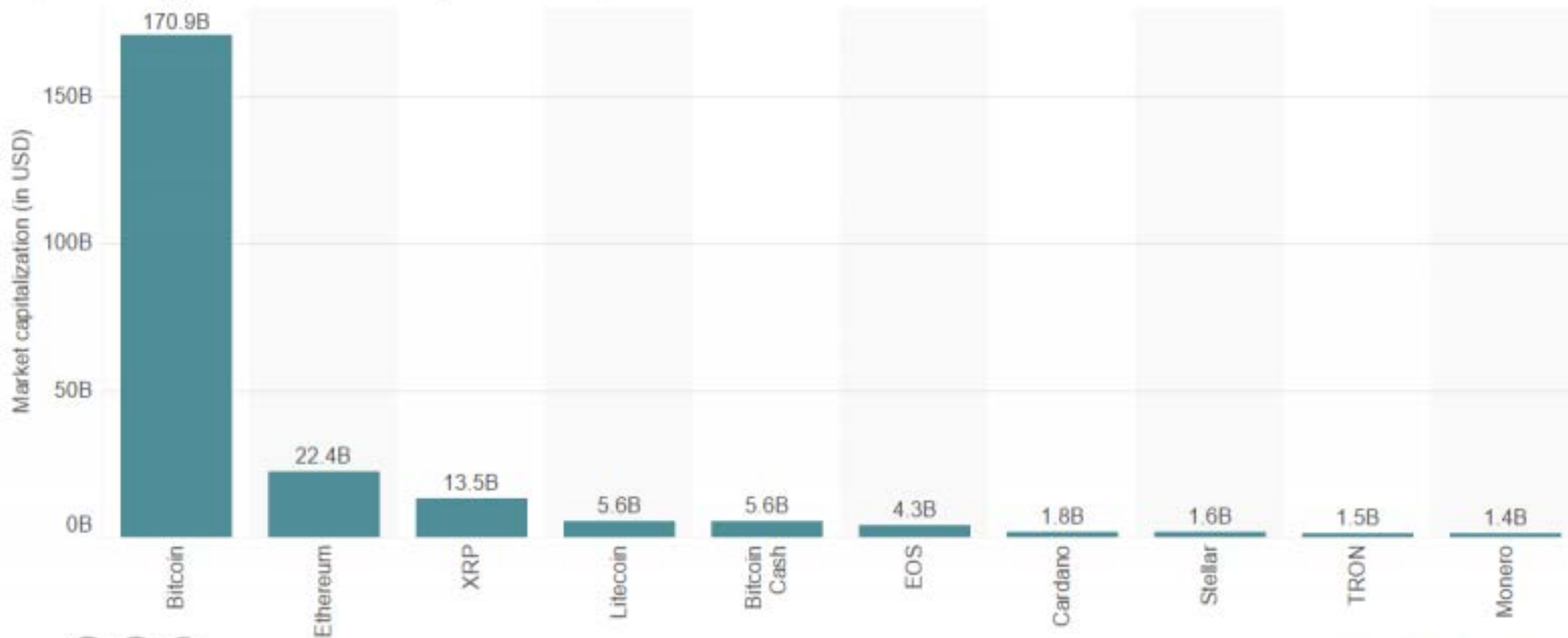
# Whose money is it?

## Anonymity of the money declined exponentially in last century.



## The concentration of ledger-native tokens remains large in 2019

Top ten ledger-native tokens by market capitalization



Source: ITSA - International Token Standardization Association e.V.

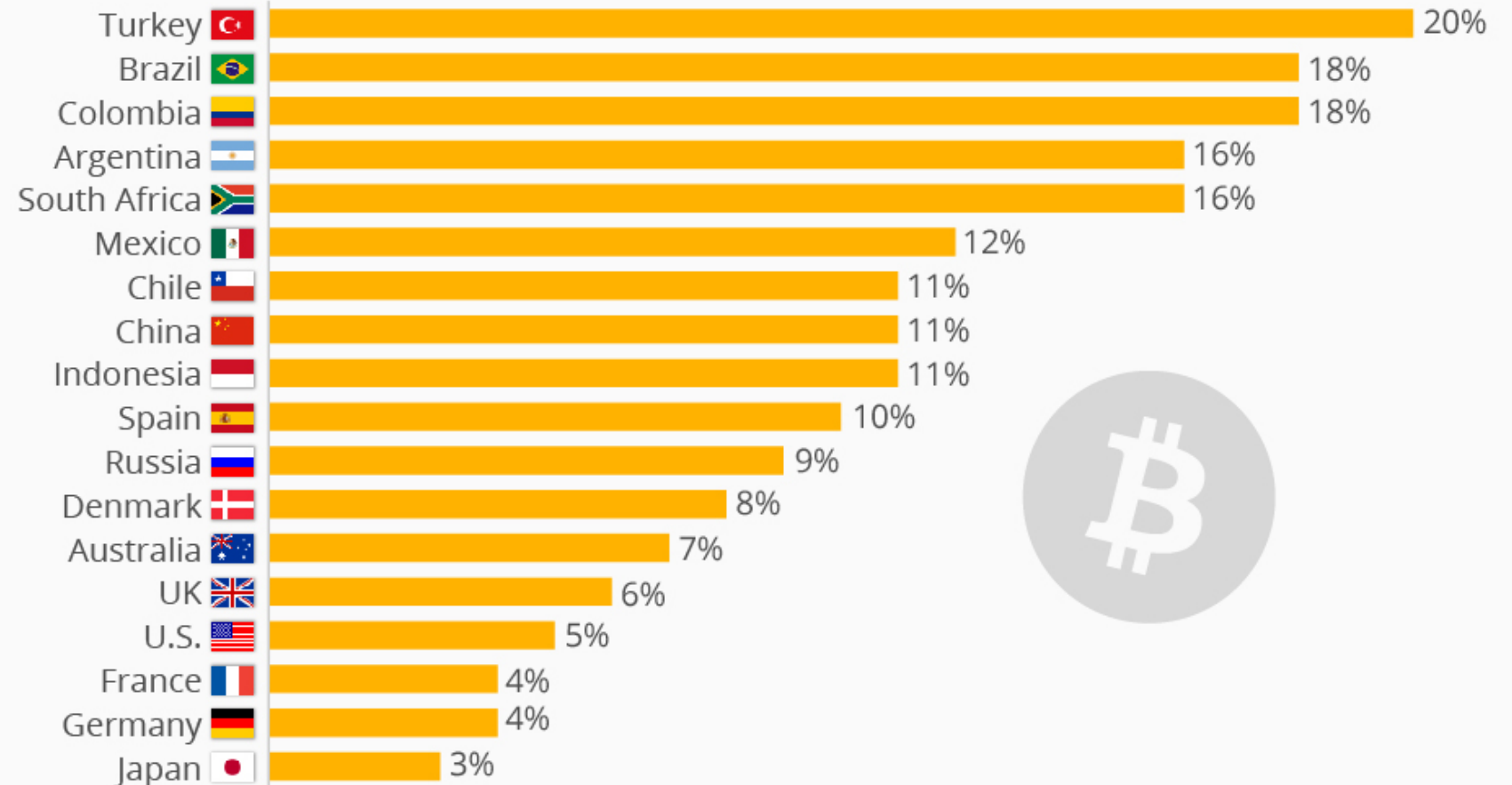


@ITSA\_global

**Virtual assets  
are more  
popular in  
emerging  
markets**

## How Common Are Crypto Currencies Around the World?

Share of respondents who said that they used or owned crypto currencies



CC BY ND  
@StatistaCharts

Selected countries, around 1,000 respondents per country surveyed in 2019  
Source: Statista Global Consumer Survey

statista

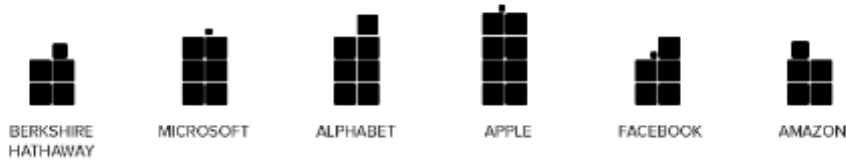
Each square this size is worth \$100 billion

(As of 2017)

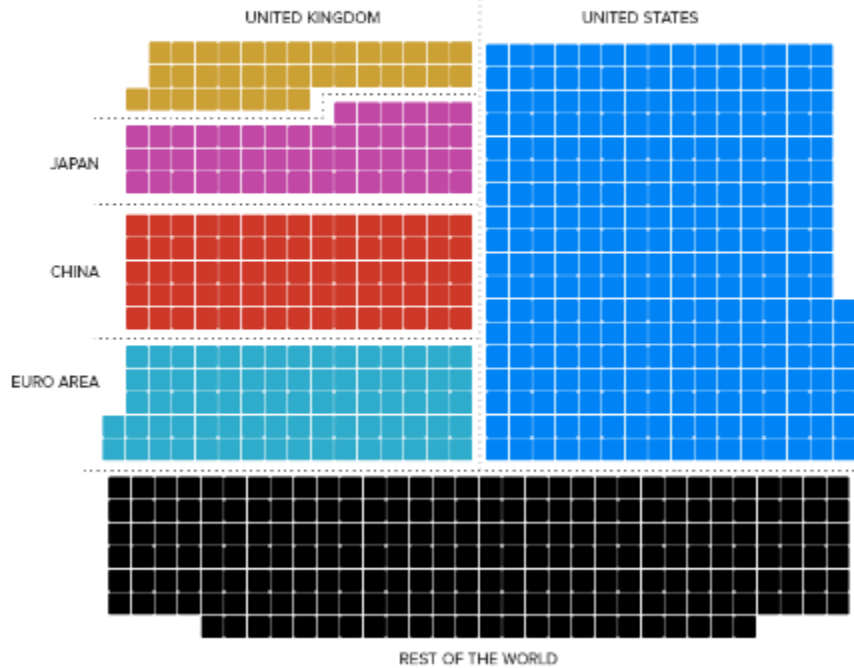
### Cryptocurrency



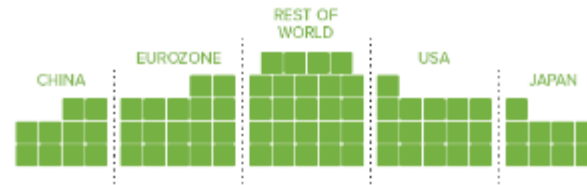
### Biggest Companies



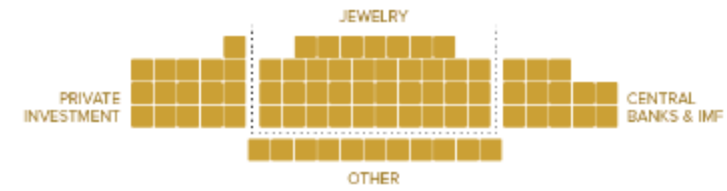
### Stock Markets



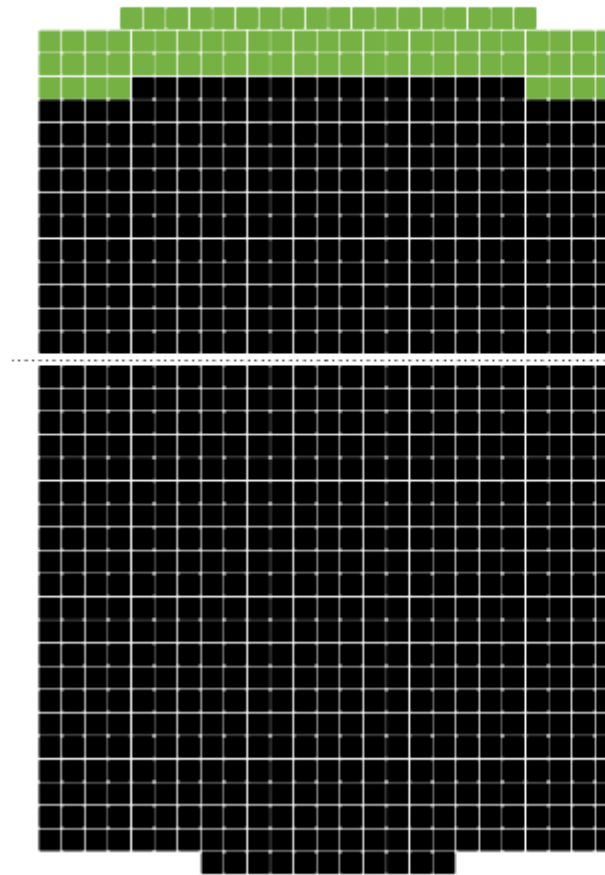
### Currency



### Gold



### Global Money Supply



#### Narrow Money

The total value of the world's easily accessible money is **\$36.8 trillion**. This includes the world's coins, banknotes, and checking deposits.

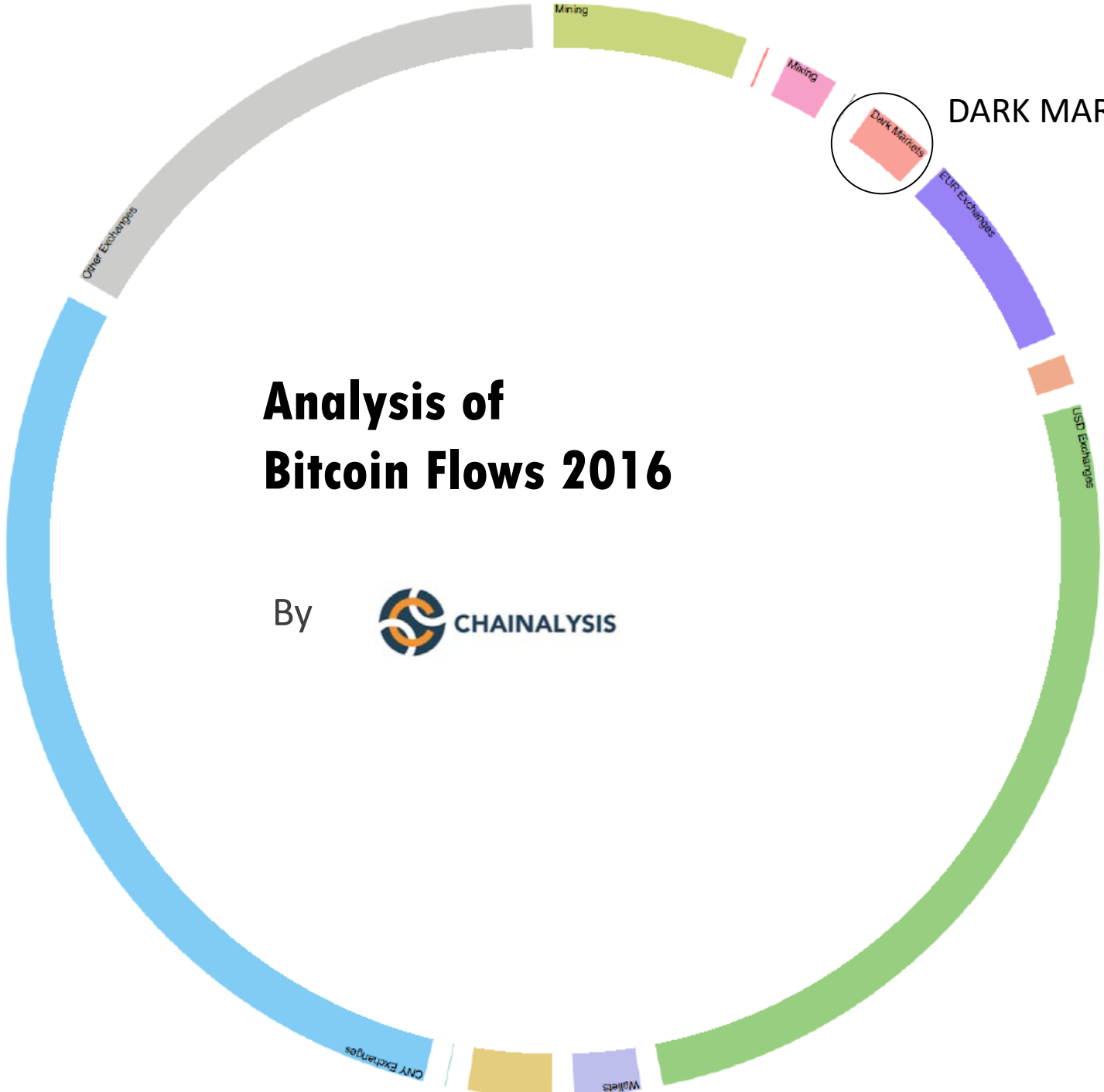
#### Broad Money

The total value of the world's money is **\$90.4 trillion**. This includes coins, banknotes, money market accounts, as well as saving, checking, and time deposits.



# Analysis of Bitcoin Flows 2016

By  CHAINALYSIS





## Effect of the crackdown on darknet drug dealers is not yet clear

In July 2017, police forces from several countries worked together to take down the largest drug-trading platform on the darknet, the part of the “deep web” containing information that is only accessible using special web browsers. Before it was closed, AlphaBay had featured more than 250,000 listings for illegal drugs and chemicals. It had had over 200,000 users and 40,000 vendors during its existence. The authorities also succeeded in taking down the trading platform Hansa, described as the third largest criminal marketplace on the dark web.

It is not yet clear what effect the closures will have. According to an online survey in January 2018, 15 per cent of those who had used darknet sites for purchasing drugs said that they had used such markets less frequently since the closures, and 9 per cent said they had completely stopped. However, more than half did not consider themselves to have been affected by the closures.

Although the scale of drug trafficking on the darknet remains limited, it has shown signs of rapid growth. Authorities in Europe estimated that drug sales on the darknet from 22 November 2011 to 16 February 2015 amounted to roughly \$44 million per year. However, a later study estimated that, in early 2016, drug sales on the darknet were between \$14 million and \$25 million per month, equivalent to between \$170 million and \$300 million per year.

# Share of dark market in global proceeds of crimes

- As of 2011, UNODC estimates the global drug trafficking proceeds as
  - 17% - 25% of total proceeds of crimes
  - 0.6 - 0.9% of global GDP.
- Using the most conservative estimates, in 2018
  - Global drug trafficking market: 520 billion USD
  - Global proceeds of crimes: 2 trillion USD
- Using the most conservative estimates, in 2018\*
  - Suspected dark net transactions/global drug market = 0.057%
  - Suspected dark (virtual asset) market / Global POC = 0.5%

\*Author's own estimation, based on 86 trillion USD Global USD, UNODC estimations, and assumption of 5% dark market share in virtual assets.

# Questions