

# BLOCKCHAINS

MINING NUMBERS NOT GOLD

PRESENTED BY



neuroware

# DESPITE A FAMILY IN FINANCE I'VE MADE ONLY ONE INVESTMENT



**Mark Smalley**

Founder & CEO

Living in Malaysia for 20 Years

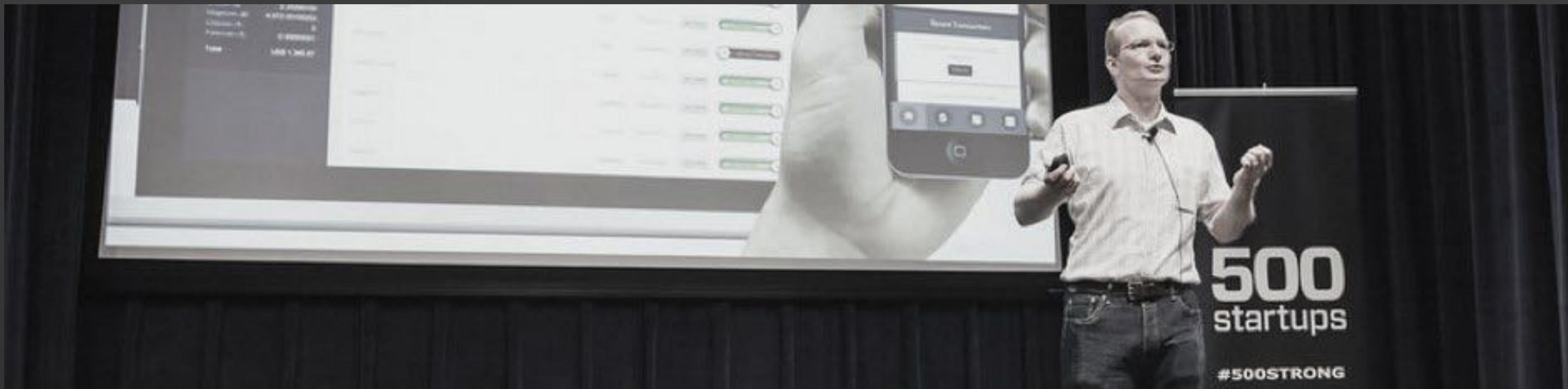
Building Web Applications for 15 Years

Building Tech Communities for 10 Years

Building Blockchain Apps for 5 Years

Working with Banks & Regulators for 3 Years

# WE ARE EXPERIENCED INNOVATORS IN AN EARLY ECOSYSTEM



- **Only Malaysian Company** to Graduate from 500 Startups in Silicon Valley
- **1st Company in Asia** Providing Public Blockchain APIs & Developer Toolkits
- **1st in The World** to Develop Non-Financial Blockchain Agnostic Protocols
- Helped Organize World's 1st Bank-Backed Blockchain Hackathon (DBS)
- Over 15 Years of Collective Blockchain Development Experience

# WE HAVE WORKED WITH INDUSTRY LEADERS

## REGULATORS WE HAVE TRAINED



BANK NEGARA MALAYSIA  
CENTRAL BANK OF MALAYSIA



Suruhanjaya Sekuriti  
Securities Commission  
Malaysia

## INSTITUTIONS INVESTED IN US

**500** startups

coinsilium

## REGULATED INSTITUTIONS WE HAVE DONE BUSINESS WITH



# BLOCKCHAIN EMBASSY OF ASIA

<http://bce.asia>



banking ambassador

LIM JOYAN & CO.  
ADVOCATES | SOLICITORS

legal ambassador



banking ambassador



education ambassador



media ambassador



IoT ambassador



fintech ambassador

CapitalBay

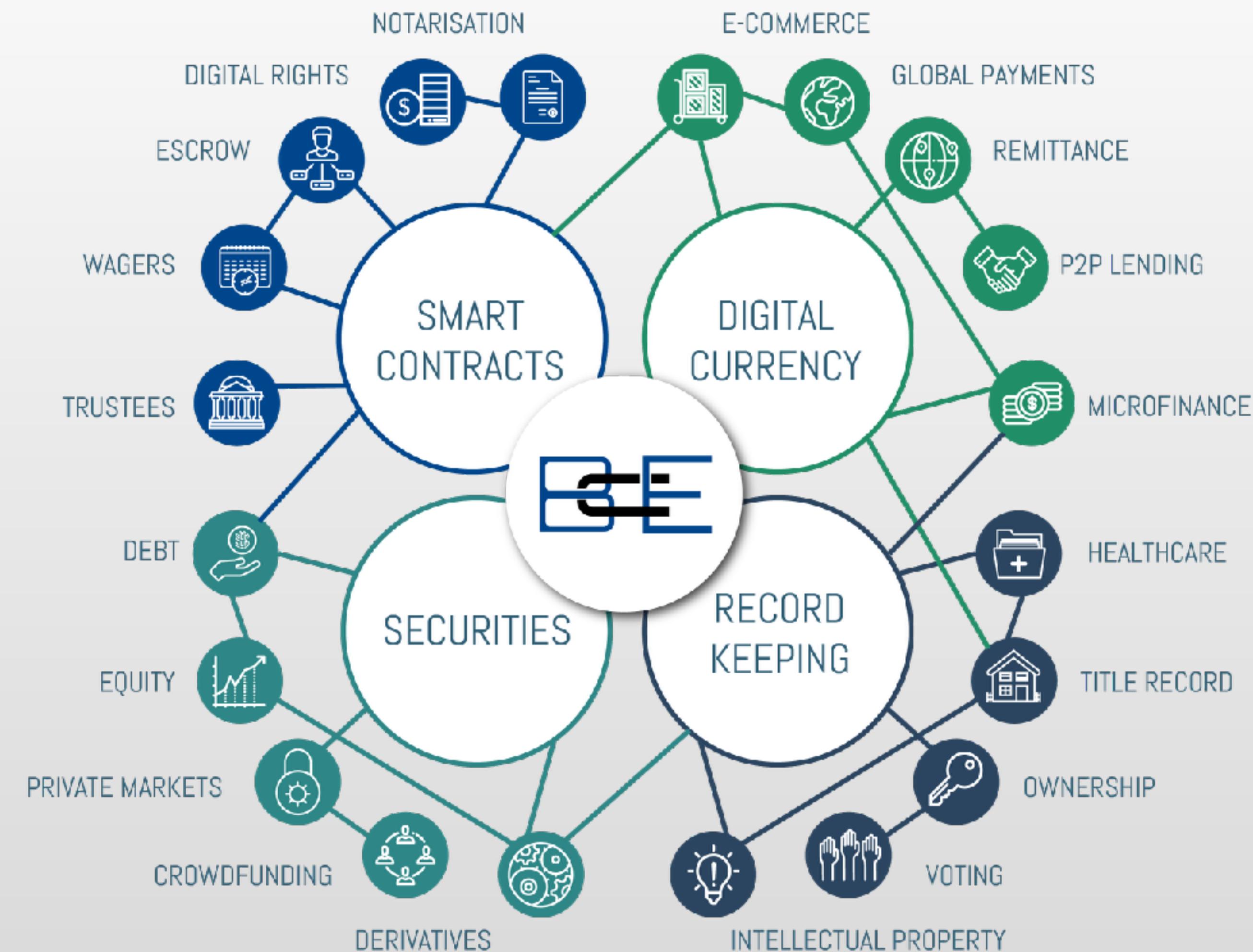
invoice ambassador



tech ambassador

# BIG PROBLEMS INVOLVE MULTIPLE PARTNERS & MOVING PARTS

( BEYOND FINTECH LIES IoT, BIG DATA & HEALTHCARE - WHICH IS WHY WE ARE REGIONAL )



MONEY BEGETS MONEY

WHY DO WE HAVE BLOCKCHAINS?

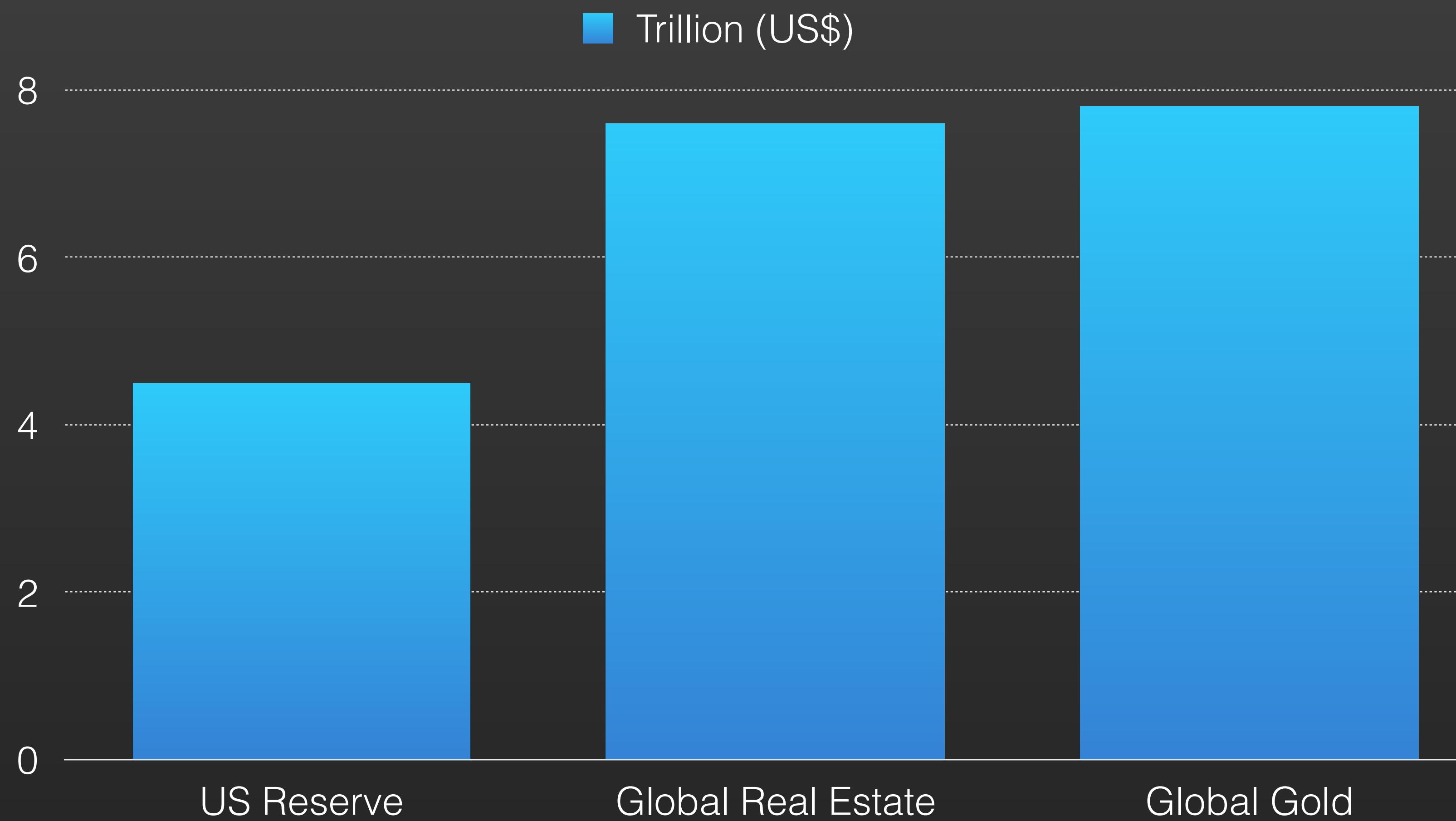
# SETTING THE GOLD STANDARD



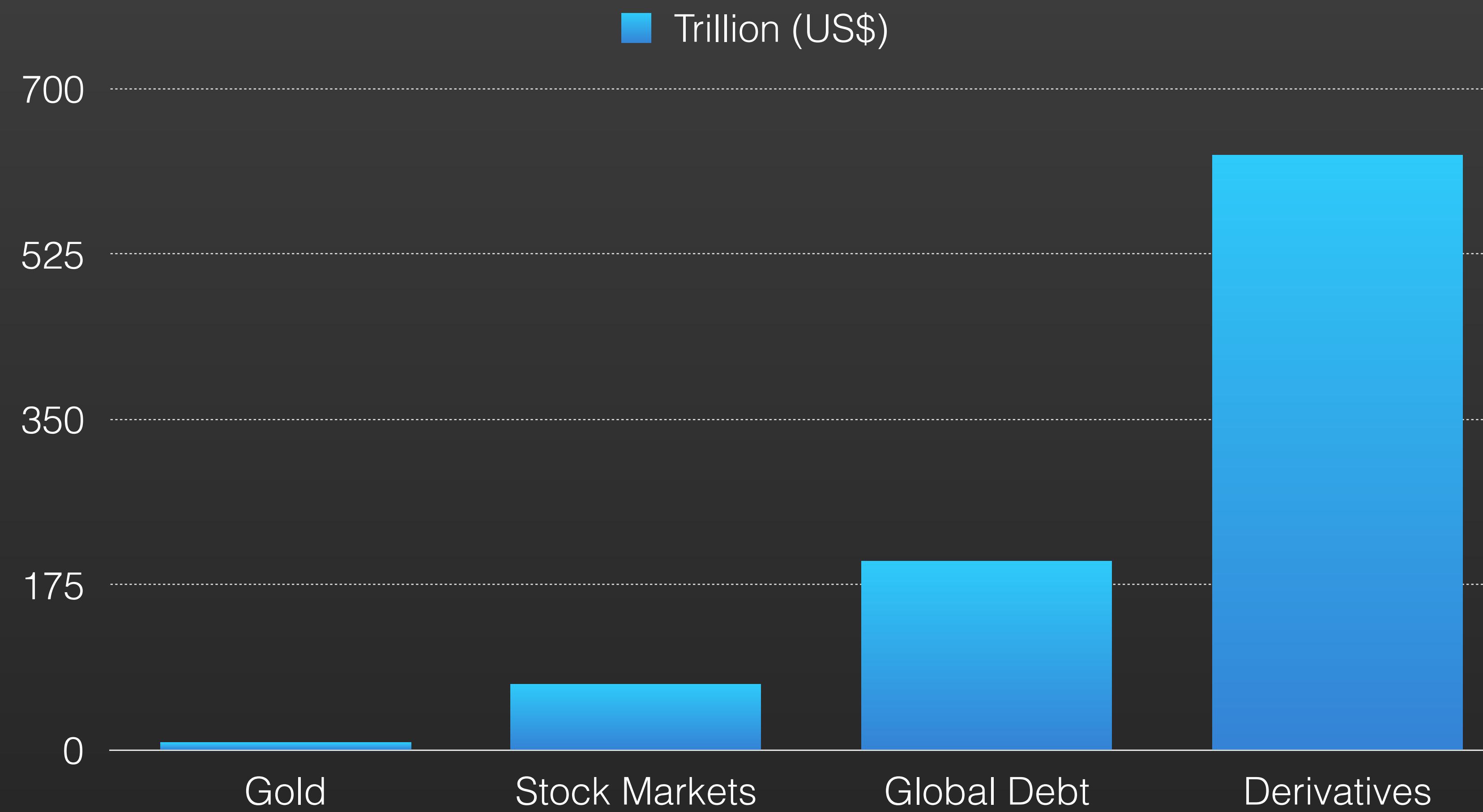
# THE END OF AN ERA - MONEY IS COMPLICATED

- 1873 to 1914 - All major worldwide currencies were 100% backed by gold
- After WW1 ended the USA switched to Fractional Reserve Banking
  - started by printing US\$50 for every US\$20 deposited in gold
- During WW2 the USA accumulated 2/3rd's of all gold, forcing all currencies to switch to fiat-systems pegged to US\$, which was pegged to gold
- 1971 - Richard Nixon ended the gold standard, introducing **petrodollars**

# WHEN WE THINK OF THE US DOLLAR WE THINK OF **REAL MONEY**



# DEBT & CENTRALIZED ASSETS MAKE THE WORLD GO ROUND



# IT ALL ENDS IN TEARS (512 US BANKS CLOSED SINCE 2008)



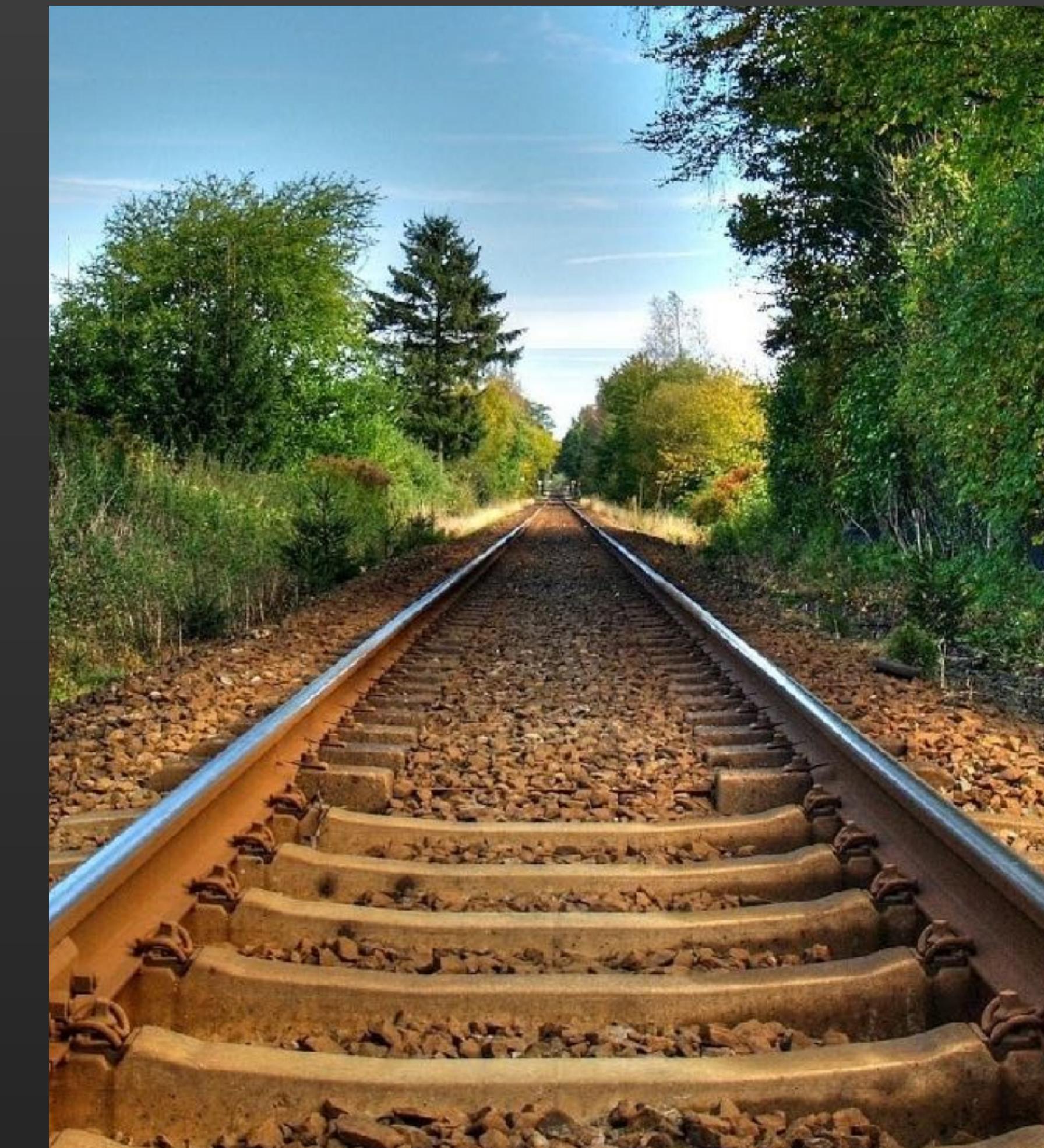
# BITCOIN

Commodity or Currency...?

vs

# BLOCKCHAINS

( the underlying technology - a shared ledger )



# WHAT ARE THE BENEFITS OF DISTRIBUTED **PUBLIC** LEDGERS?

- They provide an **immutable** tamper-proof audit-trail of the truth
- Data can be easily **shared** and independently verified by third-parties
- Vastly increased **security** that is much less vulnerable to attack or outage
- Programmable **contracts** that can radically reduce human errors and costs



“While Fintech Disrupts Banks,  
the Blockchains Disrupt Fintech”

# INTERESTING BITCOIN BLOCKCHAIN FACTS TO REMEMBER

- Bitcoin blockchain released in January 2009 by Satoshi Nakamoto
- We do not know who Satoshi is, or what their religion or political views are
- However, the bailout of 2008 was cited as primary catalyst for its creation
- RM50 per coin in 2013 (when we bought) - now over RM5,000 per coin
- The Bitcoin network is currently processing over 250,000 daily transactions
- The network's market capitalization is currently around RM60 (ish) billion
- 21 million maximum finite supply, decreasingly dispersed every 10 minutes
- **But most importantly of all is the technology behind it...**

# BITCOIN AND BLOCKCHAINS HAVE NO NEW TECHNOLOGY



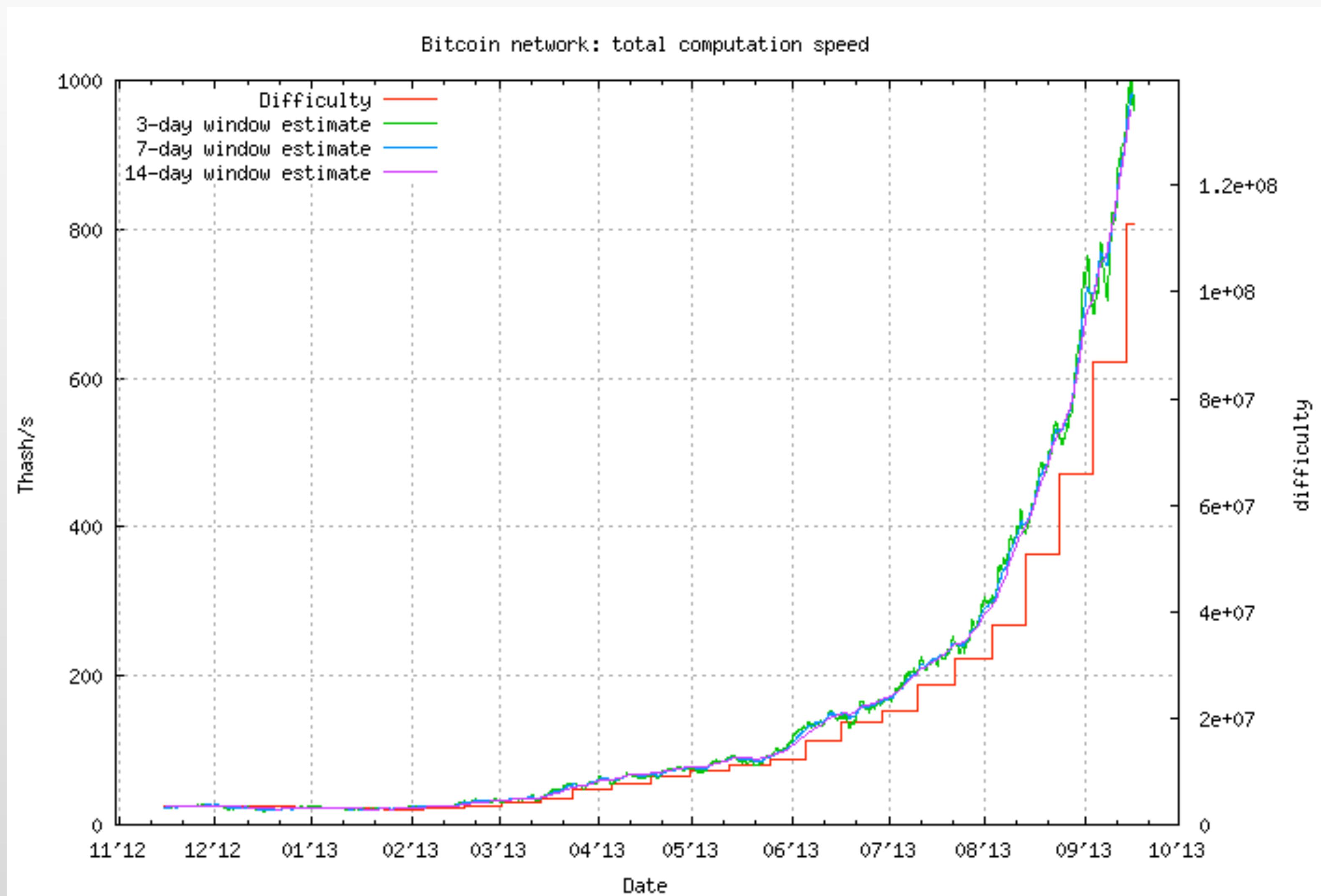
- HASH - Theorized in the 1800s - Coined by IBM in the 1950s
- SHA - Encryption method first introduced by US Navy in 1993
- P2P - Peer to peer protocol popularized by Napster in 1999

# MINING FOR NUMBERS

- To reach **consensus** as to which node has the right to add the next block to the chain, miners compete in a race to solve cryptographic equations
- Miners gather and in-turn verify unconfirmed transactions into blocks
- They then add a nonce (one use number) to the block and hash it
- If the hash has X number of zeros at the beginning it becomes a valid block
- Otherwise the miners increase the nonce and they hash the block again
- Solving these cryptographic equations is becoming increasingly difficult



# THIS IS THE HASHING POWER OF THE NETWORK IN 2013



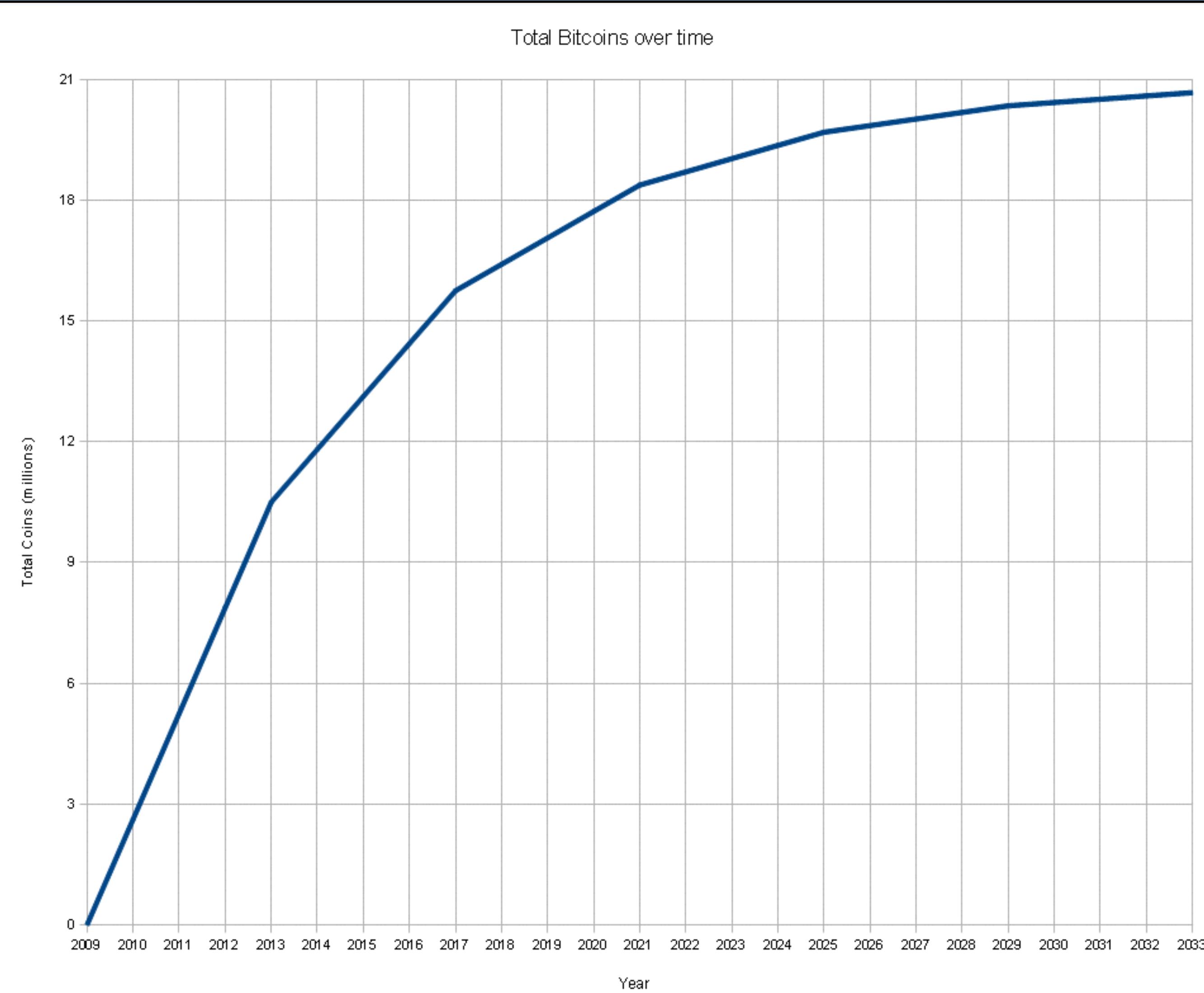


# MINING IS NOW A BILLION DOLLAR BUSINESS





# BITCOIN SUPPLY - 21 MILLION - 2009 to MAY 7th, 2140



# SETTING THE STAGE

Traits of Money	Gold	MYR / Fiat	Bitcoin
Durability		<b>fragile</b>	
Portability	<b>heavy</b>		
Divisibility	<b>difficult</b>	<b>limited</b>	
Uniformity	<b>if processed</b>		
Limited Supply	<b>theoretically</b>	<b>printed at will</b>	
Sunnah Money	Commodities	MYR / Fiat	Bitcoin
Intrinsic Value		<b>representation</b>	
Inflation Proof	<b>unknown</b>	<b>debt based</b>	
Acceptability	<b>limited</b>		<b>growing daily</b>

# FINAL THOUGHTS

Bitcoin is not legal tender and must  
be used at the investors own risk



**BANK NEGARA MALAYSIA**  
CENTRAL BANK OF MALAYSIA

- This is no different to gold, currencies from other countries or commodities
- Although the fate of Bitcoin is uncertain, there will always be public currencies
- The potential for tamper proof data storage is endless and certain ...

# THANK YOU

NOW IS THE TIME TO QUESTION THINGS

LEARN MORE ABOUT



neuroware

<http://neuroware.io>