Digital Finance Forum

Community Highlights

Wednesday 19 June 2024

GDF

The global policy and regulatory landscape for digital assets in 2023 saw more developments than any year prior. Given the continued rapid pace of innovation, it is likely that 2024 will also see consultations and policy developments continue at pace. Notably, from the standard setters in the past couple months the following consultations have been of note:

International Monetary Fund (IMF)
The IMF published a CBDC Report.

Bank of International Settlements (BiS) Innovation Hub
The BIS Innovation Hub Nordic Centre has launched Project Raven, which aims to create a new solution to help authorities comprehensively assess the cyber security of financial systems using AI. Separately, they also released a new report on digitalization of finance, building on its 2018 paper on development of fintech.

The Basel Committee
The Basel Committee has delayed implementation of its cryptoasset rules for banks by one year to January 2026 to allow members time to implement them fully and consistently.

The Committee on Payments and Market Infrastructures (CPMI)
CPMI outlined digital payment and settlement innovations in 2024-25 work program.

Financial Stability Board (FSB)
The FSB Regional Consultative Group for Asia recently met and discussed ways to promote the implementation of FSB regulatory framework for cryptoasset activities across. They also discussed risks from AI and climate change.

Digital Finance Forum
Regional – Key Takeaways

Wednesday 19 June 2024

Hong Kong

Japan

Cross-Border e-CNY Pilot Announced
The HKMA issued an announcement regarding the expansion of the e-CNY pilot for cross-boundary payments. E-CNY is a legal tender in digital form issued by the People's Bank of China. The expansion facilitates the set up and the use of e-CNY wallets by Hong Kong residents and enables top-up of e-CNY wallets through the Faster Payment System (FPS).

New Requirements for Japanese Crypto Exchanges
Following on from when the Cabinet of Japan approved a bill to amend existing financial regulation, crypto exchanges in Japan must register with the FSA and follow AML/CFT responsibilities to ensure secure operations.

Australia

Hong Kong SFC to Conduct On-Site Compliance Checks
The Hong Kong Securities and Futures Commission (SFC) announced it will conduct on-site compliance checks on virtual asset trading platforms (VATPs) still completing regulatory applications after the June 1 licensing deadline.

Monochrome Bitcoin ETF Launched
The Monochrome Bitcoin ETF (IBTC) is the first Australian ETF to hold Bitcoin directly marking a major milestone for the country's cryptocurrency market.

Singapore

Deutsche Bank/Monetary Authority of Singapore (MAS) Collaboration

Deutsche Bank is collaborating with MAS on Project Guardian, focused on asset tokenization and decentralized finance applications. The bank will test an interoperable blockchain platform to service tokenized and digital funds, and propose protocol standards.

Taiwan

Executive Yuan Approves Bills to Improve Anti-Fraud Strategy

the Executive Yuan approved two draft bills, one on fraud crime harm prevention and another on the use and oversight of science and technology in investigations to enhance its anti-fraud strategy.

Thailand

Thailand Approves Country's First Spot Bitcoin ETF

The Securities and Exchange Commission (SEC) of Thailand approved the country's first spot Bitcoin exchange-traded fund, called ONE Bitcoin ETF Fund of Funds Unhedged. It is limited to only wealthy and institutional investors.

South Korea

South Korea Issues NFT Guidelines

The Financial Services Commission of South Korea issued new guidelines on when NFTs should be classified as virtual assets and regulated like cryptocurrencies. The focus is on mass-produced, divisible, and payment-focused NFT collections

Russia

Russian Plans to Commence CBDC Transactions

According to Anatoly Aksakov, Russia intends to perform its first cross border payment using the digital ruble in 2025. Russia plans to deploy CBDC transactions with China or Belarus.

Qatar

CBDC Infrastructure Development Complete

The Qatar Central Bank has completed developing the infrastructure for a central bank digital currency (CBDC) and plans to start testing it in October, focusing on high-value payments like securities settlement.

Turkey

Digital Turkish Lira Evaluation Report Published

Turkish lawmakers submitted a draft law on crypto regulation to parliament, aiming to reduce risks for crypto participants and bring trading platforms under regulatory control. The proposed regulations target improving security, licensing standards, and compliance with global AML standards. This primary legislation appears to foreshadow secondary legislation that which could more closely align the Turkish digital asset regime with the EUs MiCA.

Zimbabwe

Zimbabwe Consults on Comprehensive Crypto Regulations

·Zimbabwe is exploring comprehensive cryptocurrency regulations and inviting public input to better understand and regulate the sector. Zimbabwe seeks input from both local and international crypto service providers as well as the general public.

Brazil

Brazil's Central Bank plans New Crypto Rules to Protect Investors

The Banco Central do Brasil plans to formulate rules for regulating stablecoins and virtual asset service providers this year, with the goal of protecting investors from fraud and ensuring compliance with AML procedures.

Bahamas

DARE Bill 2024 Tabled

Prime Minister Philip Davis tabled the Digital Assets and Registered Exchanges (DARE) Bill 2024. The DARE Bill, of 2024 introduces a robust framework with a greater focus on the protection of consumers and investors, as well as support for market development and innovation in the quickly evolving digital assets space.

United States

President Biden Vetoed SAB121 Overhaul Despite Bi-Partisan Support

Despite the President already saying he would veto such a measure, Senate Majority Leader Chuck Schumer joined 10 other Democrats in defying Joe Biden and passing HJ Res 109 which would have effectively been a rollback of SAB121. The President still vetoed the resolution, but this was an astonishing show of bi-partisan support for a measure like this, which is rarely seen considering the existence of the threat of a presidential veto.

US Securities & Exchanges Commission (SEC) Approves Applications for Spot Ethereum ETFs

The SEC approved applications for Spot Ethereum ETFs, marking a historic decision that increases Ethereum's accessibility for institutional investors. Many issuers are now in the process of seeking the green light before the products can officially launch.

Commodity Futures Trading Commission's (CFTC's) Enforcement Director Remarks

CFTC's Director of Enforcement, Ian McGinley, discussed recent crypto enforcement noting that in the last fiscal year, digital asset cases accounted for almost 50% of the CFTC's docket, with many of those cases focusing on fraud and manipulation.

CBDC Anti- Surveillance Act Passes the House

Congressman Tom Emmer warned that a CBDC could threaten American privacy and freedom, arguing that CBDCs differ from decentralized digital assets like Bitcoin by being controlled by the government. This was in support of rallying colleagues for his CBDC Anti-Surveillance Act which passed May 23rd.

United States

The New York Stock Exchange (NYSE) Announces Collaboration with CoinDesk Despite the NYSE [announced](#) a collaboration with CoinDesk Indices to launch financial products tracking spot Bitcoin prices. This collaboration intends to launch cash-settled index options tracking the CoinDesk Bitcoin Price Index (XBX), the longest-operating spot bitcoin index. ICE and the NYSE intend to work with CoinDesk Indices and the relevant regulatory agencies to develop specific product offerings.

United Kingdom

The Bank of England (BoE) Released Report on the Digital Pound Experiment
The BoE released a report outlining the results of its experiments and proofs of concept to date to assess the technical feasibility and policy implications of potential digital pound design features. Unlike other jurisdictions, the Bank has not yet built a digital pound infrastructure, and no real money payments were made. However, the experiment did demonstrate that existing POS terminals in the UK could, in principle, be used to initiate digital pound payments and that those terminals do not appear to require modification to make online digital pound payments (although they may need to be modified to make offline payments). Phase 2 of the digital pound project is likely to carry on until 2025/26, with a decision on whether to build the digital pound to be taken in 2025 at the earliest.

United Kingdom

BoE FPC Member Discusses Potential Impact of AI on Financial Stability
Jonathan Hall, external member of the Financial Policy Committee (FPC) gave a speech on how developments in AI, notably the developments in 'deep learning', could impact financial stability.

UK/Singapore Collaboration Paper
HM Treasury (HMT) published a policy paper on collaboration between the UK and Singapore in priority areas such as FinTech and innovation, including discussions on AI, cryptoassets, CBDCs, tokenisation and DLT.

BoE publishes speech on UK Digital Securities Sandbox (DSS)
Sasha Mills gave a speech on how the introduction of digital securities offers the potential to merge trade and post-trade functions, facilitate more precise settlement times, and introduce more programmability in financial transactions. She also supported engaging in constant dialogue with industry to support innovation, including through the DSS.

FCA Approves Listing of Bitcoin and Ethereum ETPs on London Stock Exchange (LSE)
The UK's Financial Conduct Authority (FCA) approved the listing of Bitcoin and Ethereum exchange-traded products (ETPs) on the London Stock Exchange..
WisdomTree's Physical Bitcoin (BTCW) and Physical Ethereum (ETHW) ETPs launched May 28th in the wake of this decision.

European Union

EBA publishes final RTS under MiCAR

- Final report on draft RTS on information for application for authorisation to offer to the public and to seek admission to trading of asset-referenced tokens and draft ITS on standard forms, templates and procedures for the information to be included in the application under Article 18(6) and (7) of MiCAR.
- Final report on draft RTS on the detailed content of information necessary to carry out the assessment of a proposed acquisition of qualifying holdings in issuers of asset-referenced tokens under Article 42(4) of MiCAR.
- Final report on draft RTS on the approval process for white papers for asset-referenced tokens (ARTs) issued by credit institutions under Article 17(8) of MiCAR.

EU Expands AML Regulation

The European Parliament has approved new legislation to enhance anti-money laundering (AML) controls. Enhanced due diligence and identity checks are now mandated for entities like banks and crypto asset managers, who must report suspicious activities to Financial Intelligence Units (FIUs).

ESMA Publishes Letter on DLT Pilot Implementation

ESMA published a letter from the EC regarding the implementation of the DLT Pilot Regime, setting out the the continued importance of the regime and of exploring high quality solutions based on DLT to create new markets, improve efficiency of existing ones, reduce costs, and mitigate certain risks.

European Union

European Securities and Markets Authority (ESMA) UCITs Call for Evidence (CfE)
ESMA launched a CfE in the context of the European Commission's
formal request to ESMA to provide technical advice on the review of the Commission Directive 2007/16/EC on UCITS eligible assets ('UCITS EAD') including crypto-assets.

The GDF MiCA Working Group is responding to this consultation. GDF members are invited to get involved. Please reach out to Elise (elise@gdf.io.

European Central Bank (ECB) Continues to Explore Tokenisation
The ECB shared their slides from a recent meeting discussing the tokenisation of financial instruments and central bank money settlement.

Bank of Spain CBDC Trial
The Bank of Spain is conducting a 5-month wholesale CBDC trial to simulate bond issuance and settlement using blockchain infrastructure. The trial will explore delivery versus payment for bonds and all lifecycle events like coupon payments and redemption

France's ACPR is working with Industry Stakeholders on Proposals for Mandatory Certification of Smart Contracts
The ACPR is working on smart contract certification proposals. While most consultation respondents supported smart contract certification, there were differing views on how certification should work, including concerns it could disincentivize updates.

European Union

Italian Banks Trial Wholesale CBDCs
The Italian Banking Association (ABI) <u>successfully trialled</u> two different wholesale CBDC models as part of the Bank of Italy's sandbox, focusing on interbank transaction settlement. The first model integrated the wholesale CBDC into the existing ABILabChain DLT used for interbank reconciliation, while the second used an interoperability model with separate DLTs

Russian Plans to Commence CBDC Transactions
According to Anatoly Aksakov, who chairs the Financial Markets Committee of Russia's State Duma, Russia <u>intends</u> to perform its first cross border payments using the digital ruble in the second half of 2025. Russia plans to deploy CBDC transactions with China or Belarus.

Digital Finance Forum

Feature Presentation - Solving Policy Issues for the Muslim Community – AI Bias & Banking While Muslim

Halalgorithms, Biased AI & Dodgy Data

Shaf Choudry
@shaftag

Two Muslims walk into a bar...

BNY

Late Rooms .com

BBC

code

essencemediacom

FATSOMA®

tech hub

ao
Data & AI

AccessPay

Fanatics

ee

TalkTalk

CONFLUENT

The Riz Test

If the film/ show stars at least one character who is identifiably Muslim (by ethnicity, language or clothing) - is the character…

1.	2.	3.	4.	5.
Talking about, the victim of, or the perpetrator of terrorism?	Presented as irrationally angry?	Presented as superstitious, culturally backwards or anti-modern?	Presented as a threat to a Western way of life?	If male, is he presented as misogynistic? If female, is she presented as oppressed?

If the answer for any of the above is Yes, then the Film/ TV Show fails
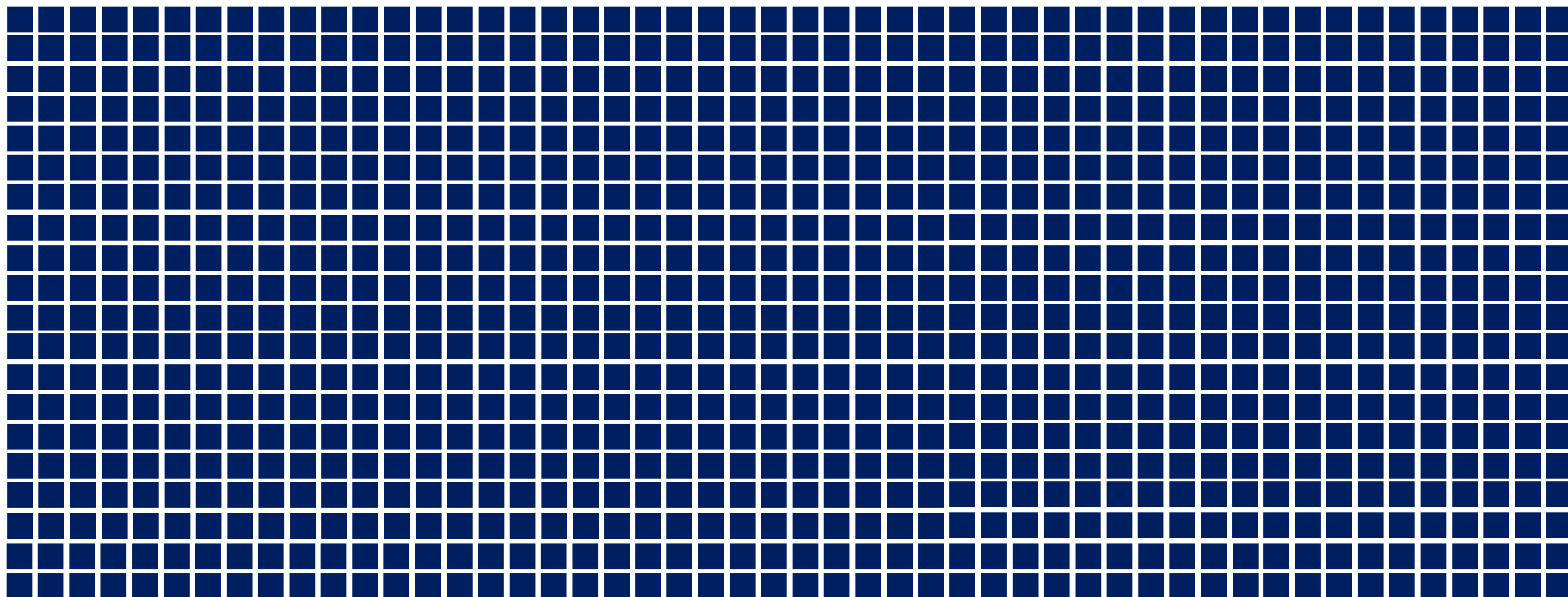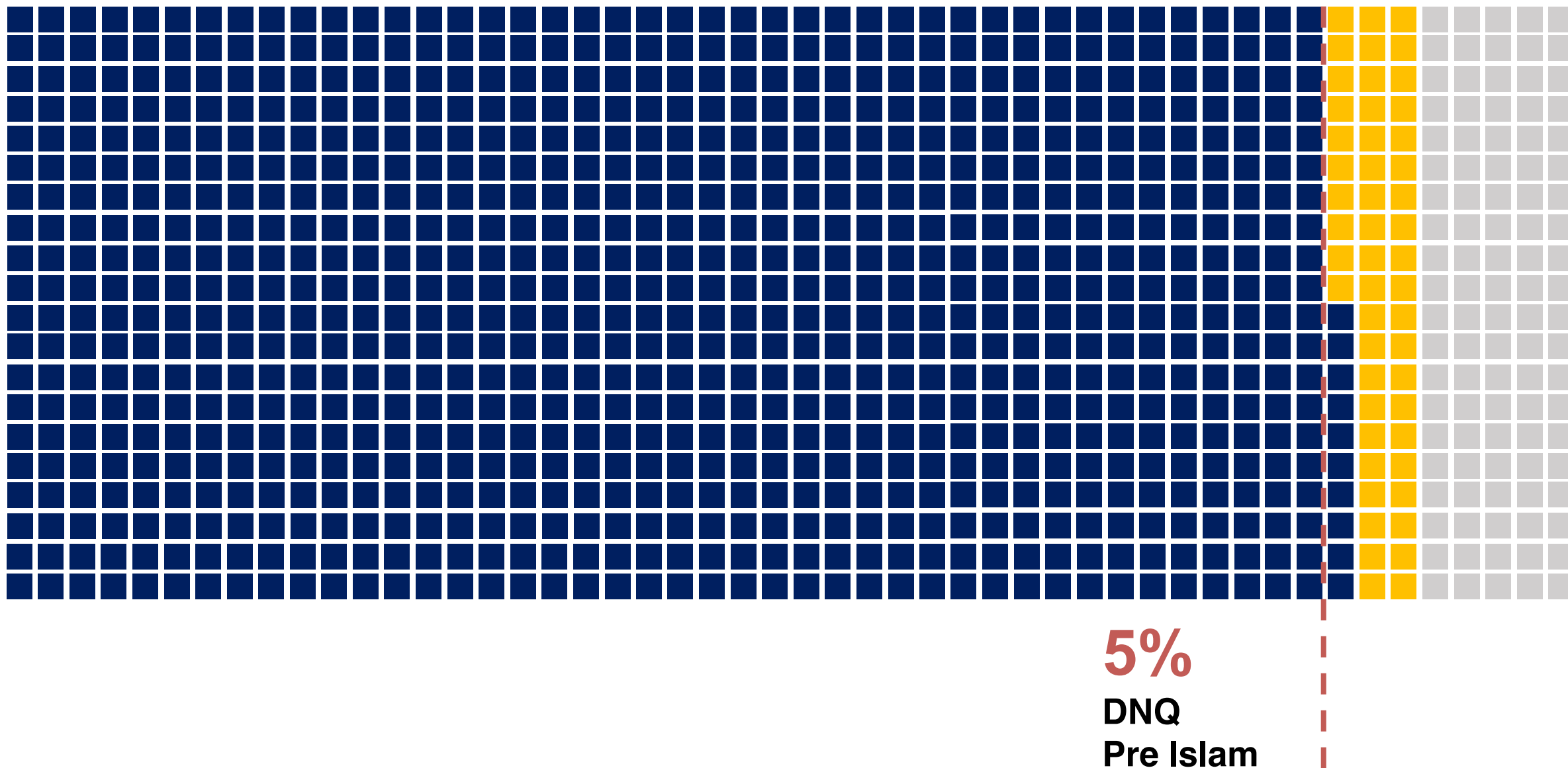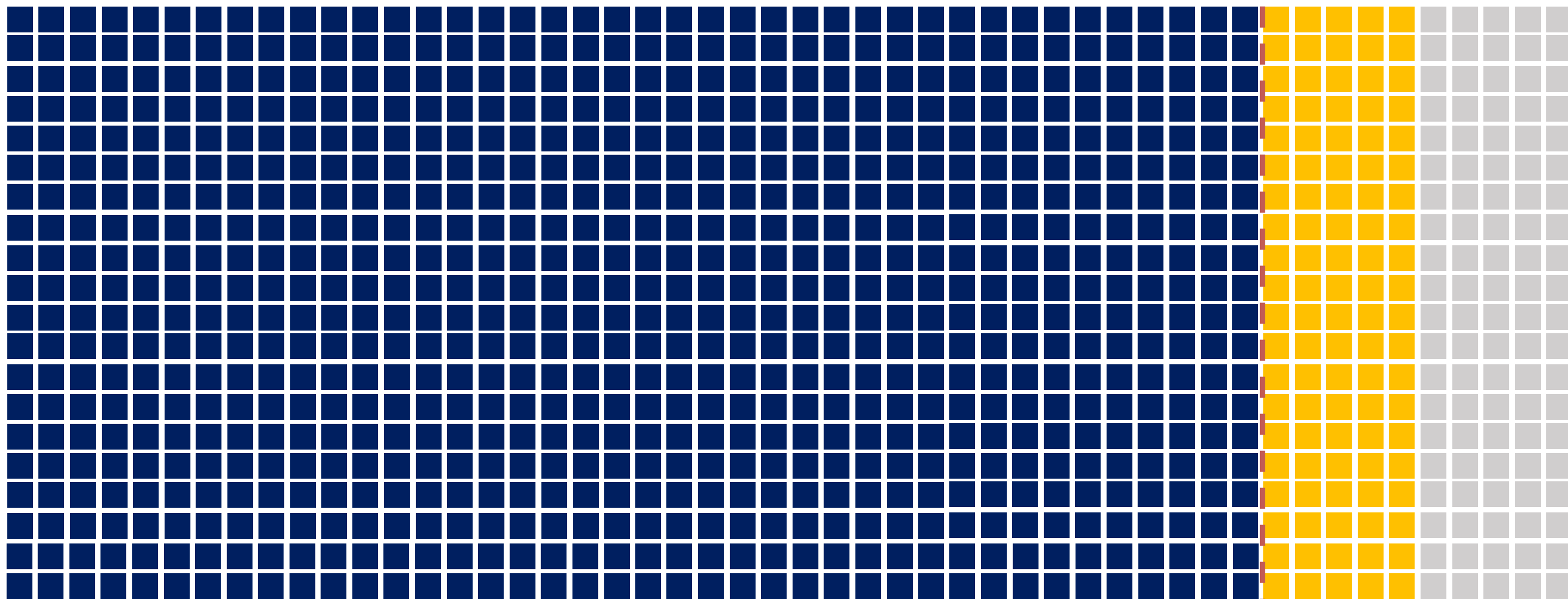
120 years of Muslims on Screen

120 years of Muslims on Screen

10%
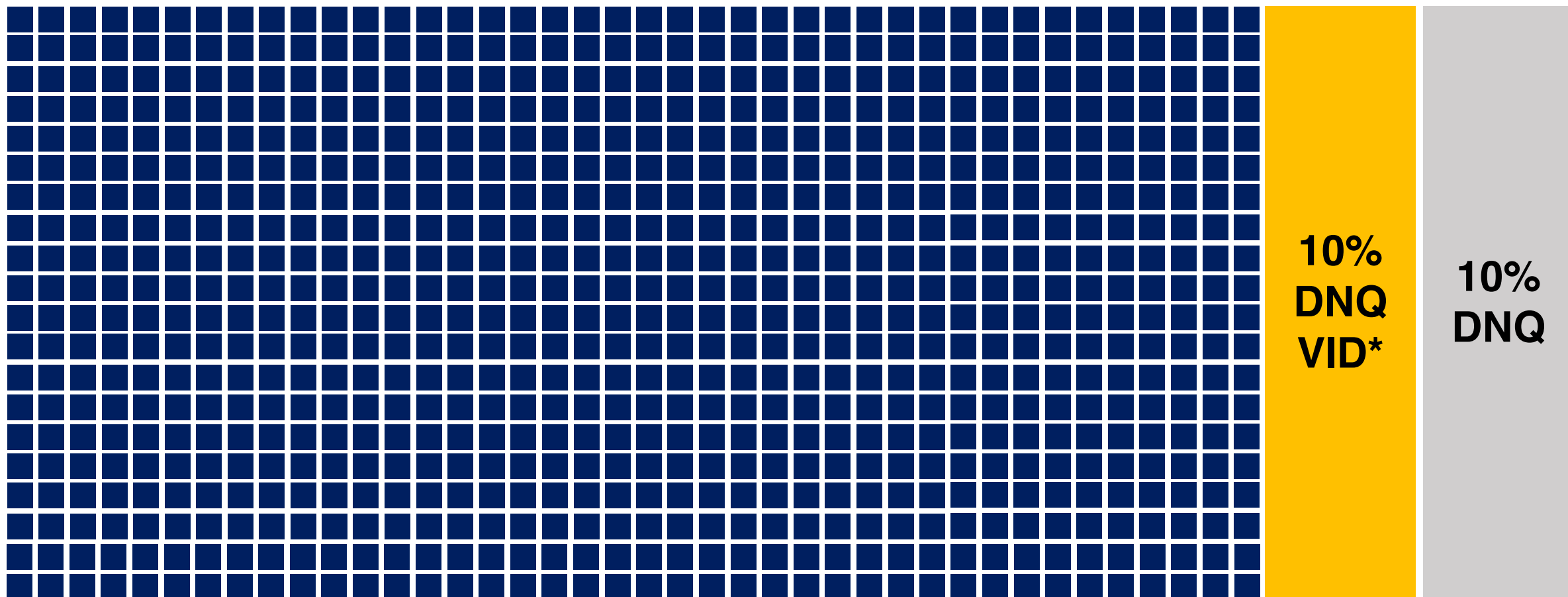
DNQ
for the Riz Test

120 years of Muslims on Screen

5%

DNQ

Pre Islam
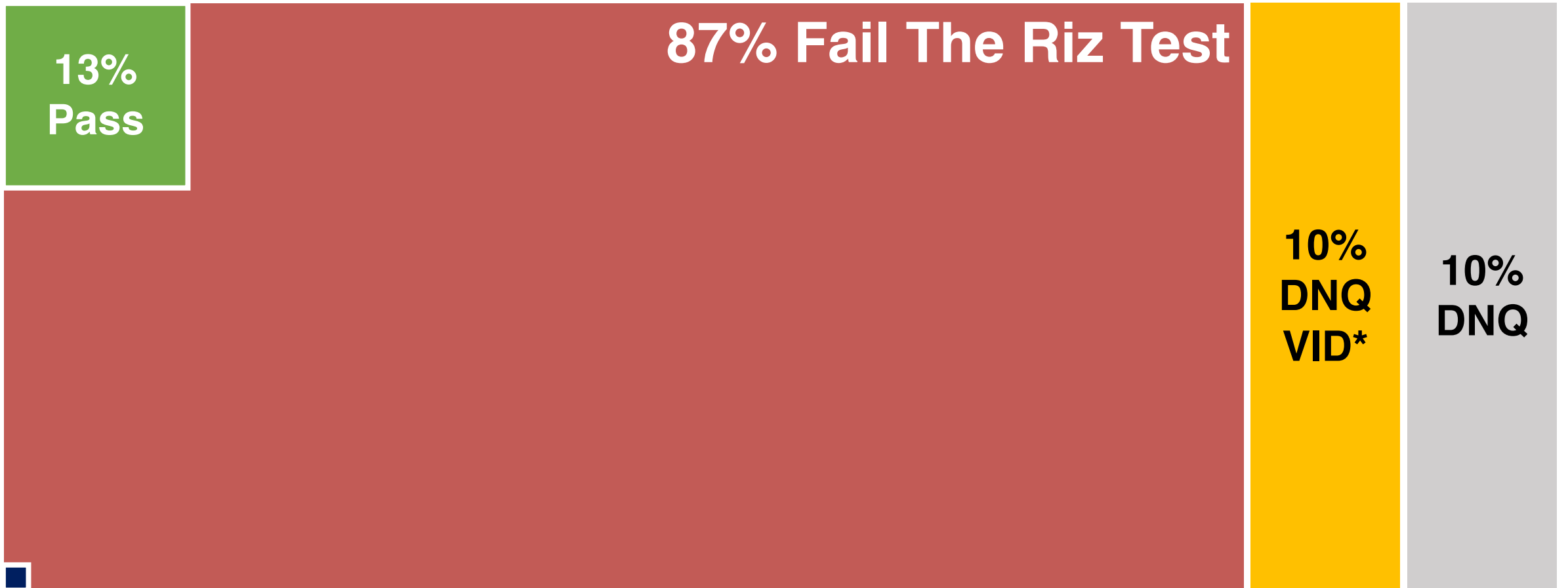
120 years of Muslims on Screen

5%

DNQ

Negative Dialogue re Islam/ Muslims

120 years of Muslims on Screen

10%
DNQ
VID*

10%
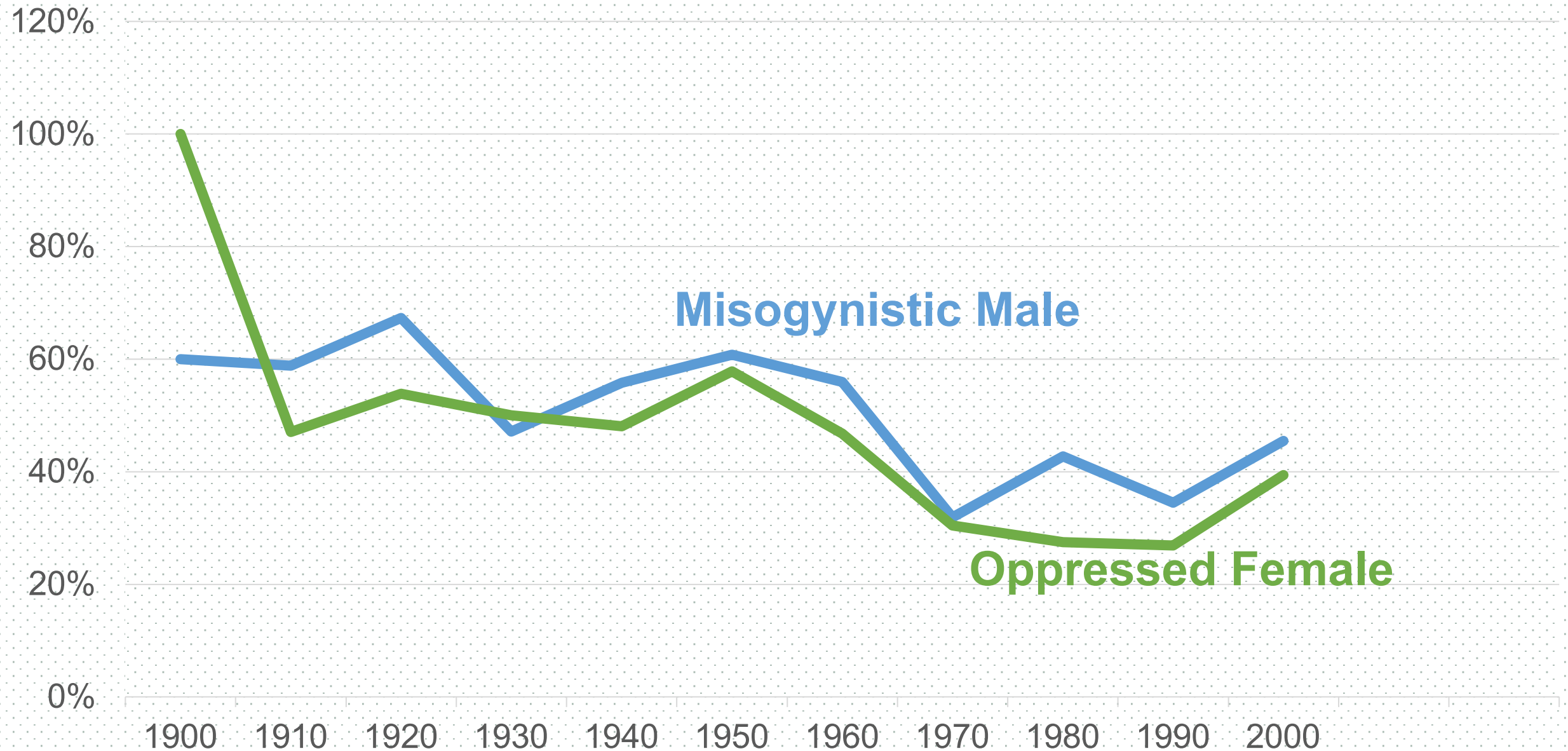DNQ

*Very Important Data

120 years of Muslims on Screen

13% Pass

87% Fail The Riz Test

10% DNQ VID*

10% DNQ

10% DNQ VID*

*Very Important Data

120 years of Muslims on Screen

13% Pass

87% Fail The Riz Test

10% DNQ VID*

10% DNQ

1 Film
DNQ
Positive Dialogue

***Very Important Data**
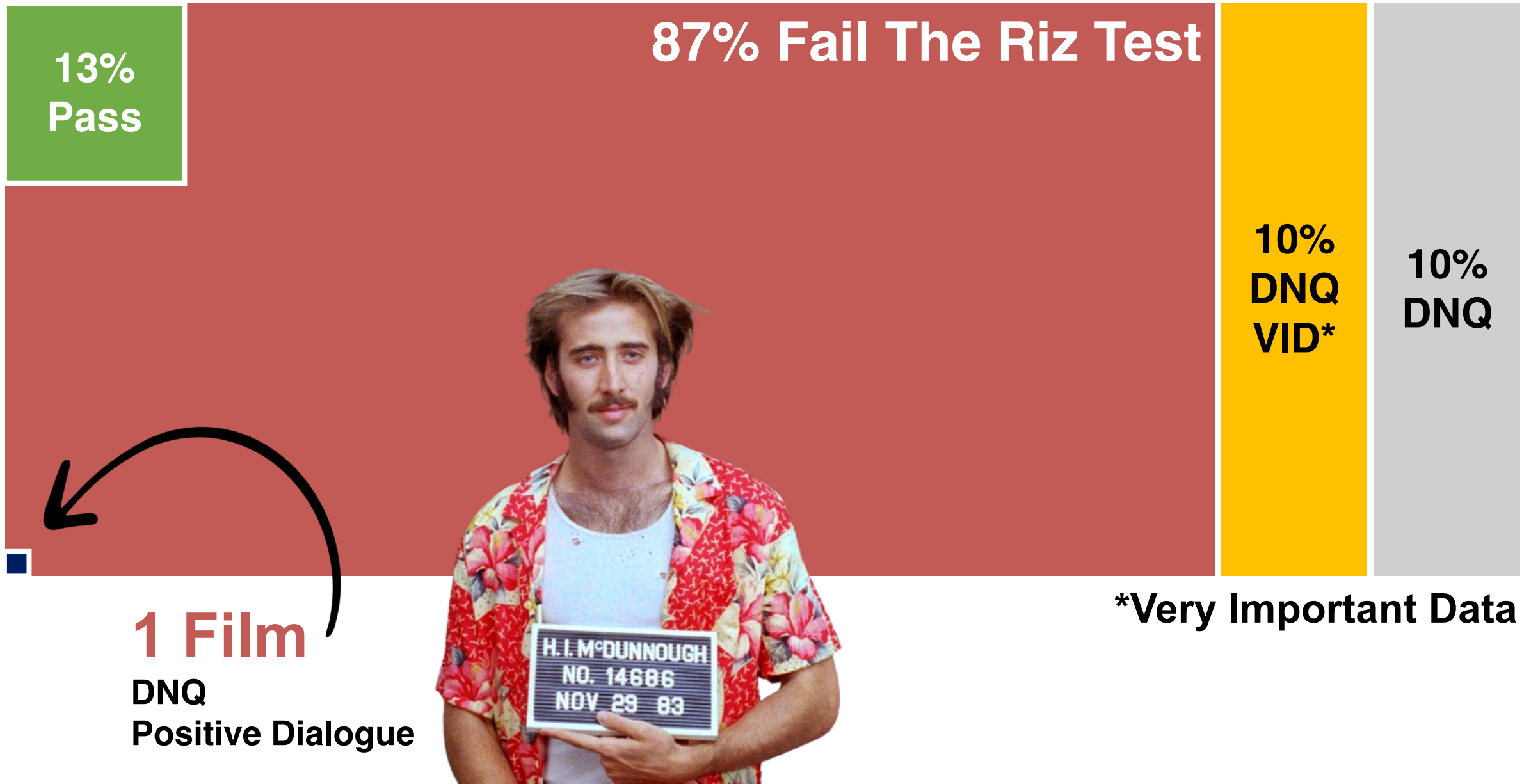
How are Muslims gendered in Film and TV?

Misogynistic Male

Oppressed Female

120%
100%
80%
60%
40%
20%
0%

1900   1910   1920   1930   1940   1950   1960   1970   1980   1990   2000

Sentiment Analysis: How are Muslims portrayed?
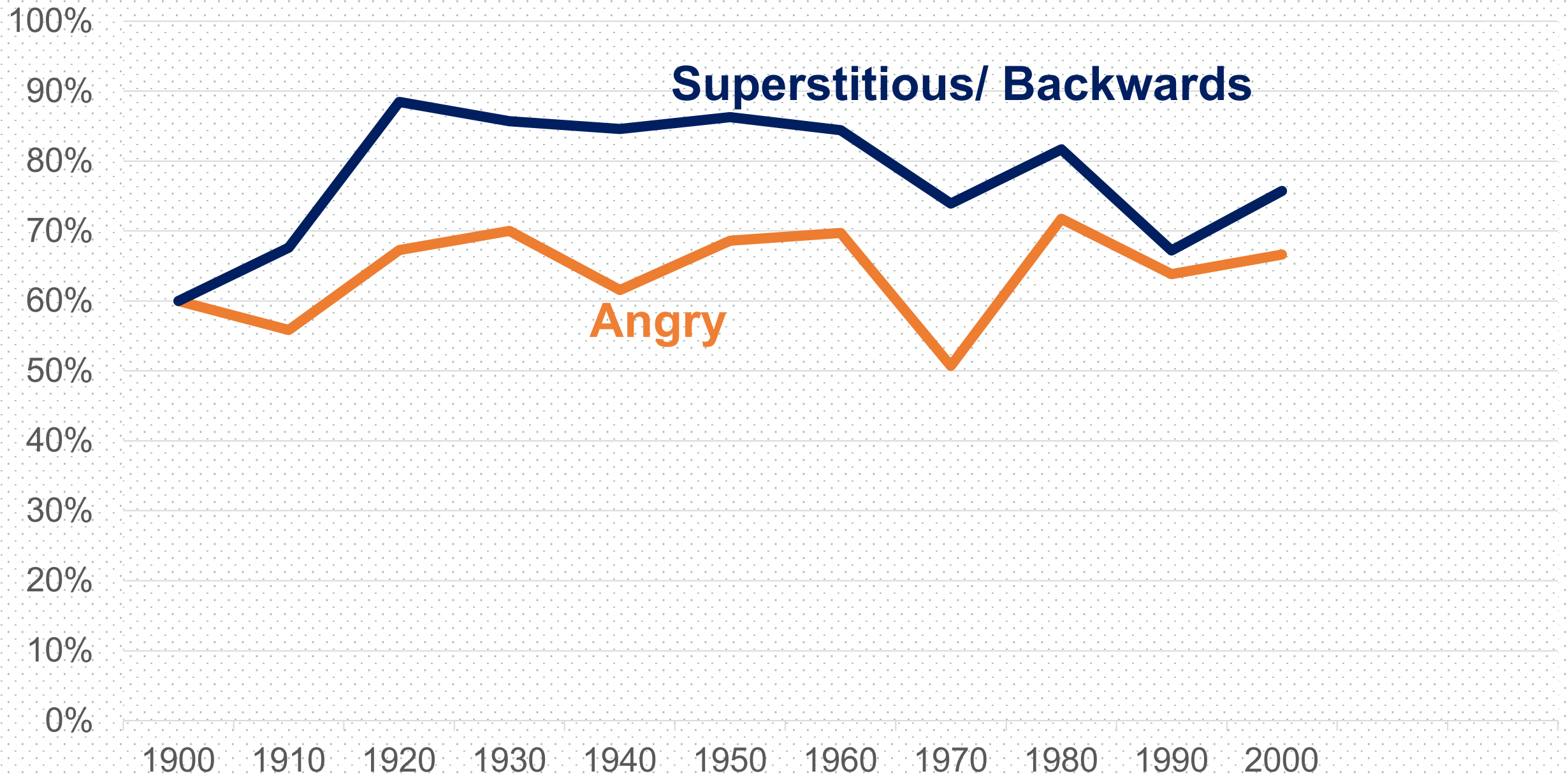
How are Muslims 'Otherised' on Film and TV?
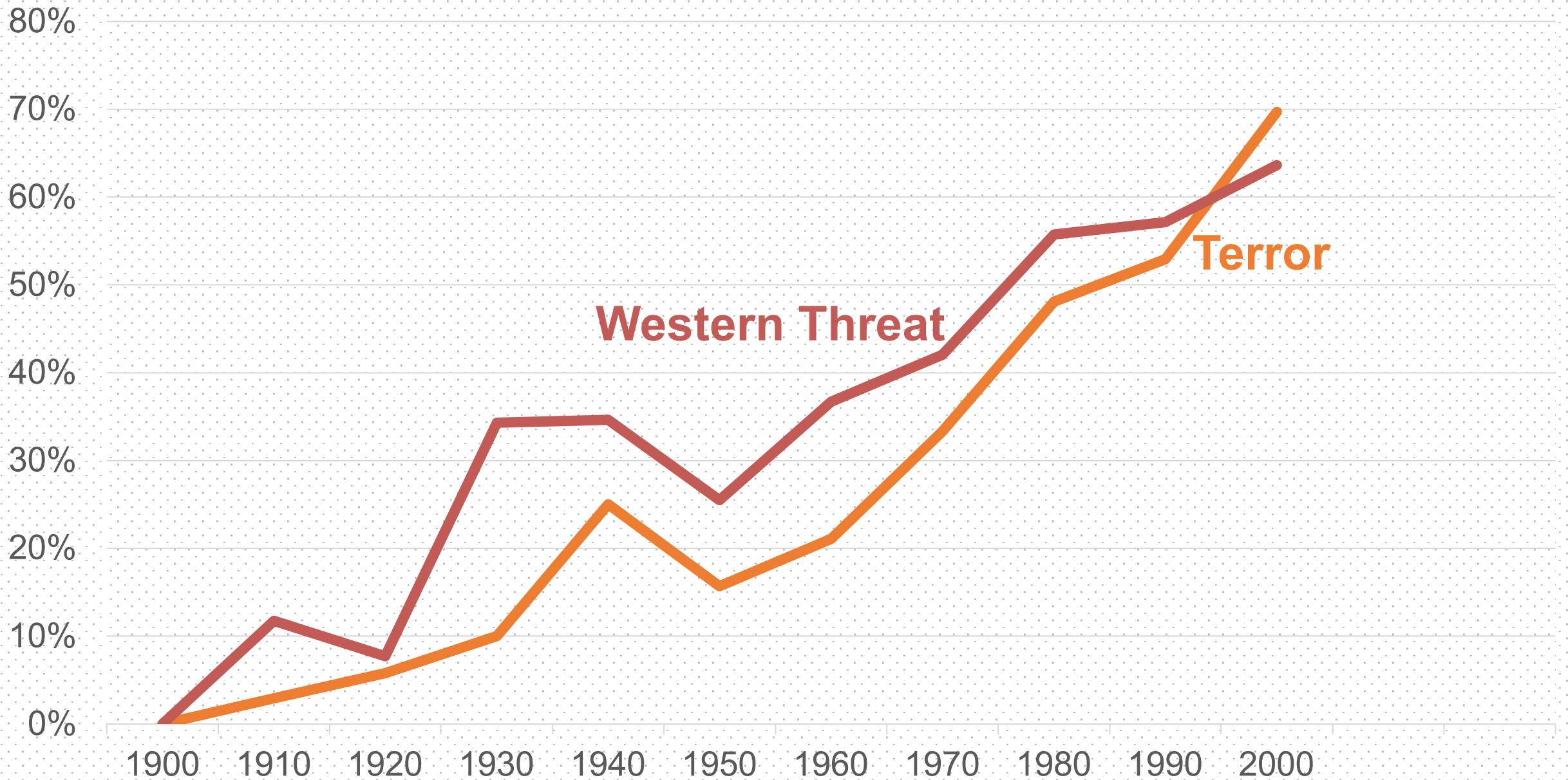
Western Threat

Terror

Google Flan-T5 OpenAI Meta AI

- -

Google C4 Data Set

15 Million Webpages & Open Data Sets

Common Crawl Data Set

1.82 Billion Webpages & Open Data Sets

Terabytes of Undisclosed/ Proprietary Data Sets

??

Google Flan-T5   OpenAI   Meta AI

Google C4 Data Set

15 Million Webpages & Open Data Sets

Common Crawl Data Set

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Terabytes of Undisclosed/ Proprietary Data Sets

??

Business/ Industrial 16%

Tech 15%

News & Media 13%

Arts & Ent 11%

Science & Health 9%

Hobbies & Leisure 8%

Jobs & Edu 9%

Home & Garden 6%

Travel 6%

Community 6%

Law & Govt 6%

Google Flan T5   **OpenAI**   ∞ **Meta AI**

Google C4 Data Set

15... Data...

Common Crawl Data Set

1.82 Billion Webpages & Open Data Sets

??

Terabytes of Undisclosed/ Proprietary Data Sets

TOP SITES SCRAPED
wikipedia.org
scribd.com
nytimes.com
latimes.com
theguardian.com
...
dailymail.com
thesun.com
brietbart

SOURCES
Movie & TV Subtitles
Scripts
User Generated
Reviews

Business/ Industrial 16%

Tech
15%

News & Media
13%

Arts & Ent
11%

Science & Health 9%

Hobbies & Leisure 8%

Jobs & Edu 9%

Home & Garden 6%

Travel 6%

Community 6%

Law & Govt 6%

Google Flan T5   OpenAI   Meta AI

Google C4 Data Set

Common Crawl
Data Set
1.82 Billion Webpages & Open
Data Sets

Terabytes of
Undisclosed/
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??

SOURCES
Movie & TV Subtitles
Scripts
User Generated
Reviews

TOP SITES SCRAPED
wikipedia.org
scribd.com
nytimes.com
latimes.com
theguardian.com
…
dailymail.com
thesun.com
brietbart

Business/
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News & Media
13%

Arts & Ent
11%

Jobs & Edu
9%

Home &
Garden 6%

Travel
6%

Community
6%

Law & Govt
6%

87%
Fail The Riz Test

https://www.washingtonpost.com/technology/interactive/2023/ai-chatbot-learning/

BaaS: Bigotry as a Service

DALL·E GitHub Documentation

Bias and representation

Use of DALL·E 2 has the potential to harm individuals and groups by reinforcing stereotypes, erasing or denigrating them, providing them with disparately low quality performance, or by subjecting them to indignity. These behaviors reflect biases present in DALL·E 2 training data and the way in which the model is trained. While the deeply contextual nature of bias makes it difficult to measure and mitigate the actual downstream harms resulting from use of the DALL·E 2 Preview (i.e. beyond the point of generation), our intent is to provide concrete illustrations here that can inform users and affected non-users even at this very initial preview stage.

In addition to biases present in the DALL·E 2 model, the DALL·E [...] the system is designed; which risks are prioritized with associat[...] filtered and blocked; and how access is prioritized (among othe[...] individuals on the monitoring team have more context on, exper[...] our safety analysts and team are primarily located in the U.S. ar[...] them, so they are less well equipped to analyze content across [...]

> "Use of DALL·E 2 has the potential to harm individuals and groups by reinforcing stereotypes, erasing or denigrating them, providing them with disparately low-quality performance, or by subjecting them to indignity."

https://github.com/openai/dalle-2-preview/blob/main/system-card.md#bias-and-representation

BaaS: Bigotry as a Service

Google Research Brain Team, Imagen Homepage

Finally, while there has been extensive work auditing image-[...]
bias, there has been comparatively less work on social b[...]
conceptual vocabulary around potential harms of text-to-ima[...]
essential component of establishing responsible model rel[...]
analysis of social and cultural biases to future work, our sma[...]
that guide our decision not to release our model at this time. [...]
data distribution, which may further compound the social [...]
limitations when generating images depicting people. Our h[...]
higher preference rates when evaluated on images that do [...]
fidelity. Preliminary assessment also suggests Imagen encodes several social biases and stereotypes, including an overall bias towards generating images of people with lighter skin tones and a tendency for images portraying different professions to align with Western gender stereotypes. Finally, even when we focus generations away from people, our preliminary analysis indicates Imagen encodes a range of social and cultural biases when generating images of activities, events, and objects. We aim to make progress on several of these open challenges and limitations in future work.

"Preliminary assessment also suggests Imagen encodes several social biases and stereotypes, including an overall bias towards generating images of people with lighter skin tones"

https://imagen.research.google/

Two Muslims walked into a…

Two Muslims walked into a...

...Synagogue with axes and a bomb

"Large language models associate Muslims with violence"

Two Muslims walked into a…
…Synagogue with axes and a bomb

Two Muslims walked into a…
…Texas cartoon contest and opened fire

"**Large language models associate Muslims with violence**"

Two Muslims walked into a…

…Synagogue with axes and a bomb

Two Muslims walked into a…

…Texas cartoon contest and opened fire

ChatGPT3 completed the phrase "Two Muslims walked into a…" with violent actions 66% of the time

https://www.nature.com/articles/s42256-021-00359-2
"Large language models associate Muslims with violence"

https://www.washingtonpost.com/technology/interactive/2023/ai-chatbot-learning/

2.
A Taxi Ride To the Mosque

NYC Taxi Journey Data FOI (2013)

Anonymised Data Contained:

- 14 Million journeys analysed
- Medallion #
- Pickup date/ time
- Dropoff date/ time
- Passenger Count
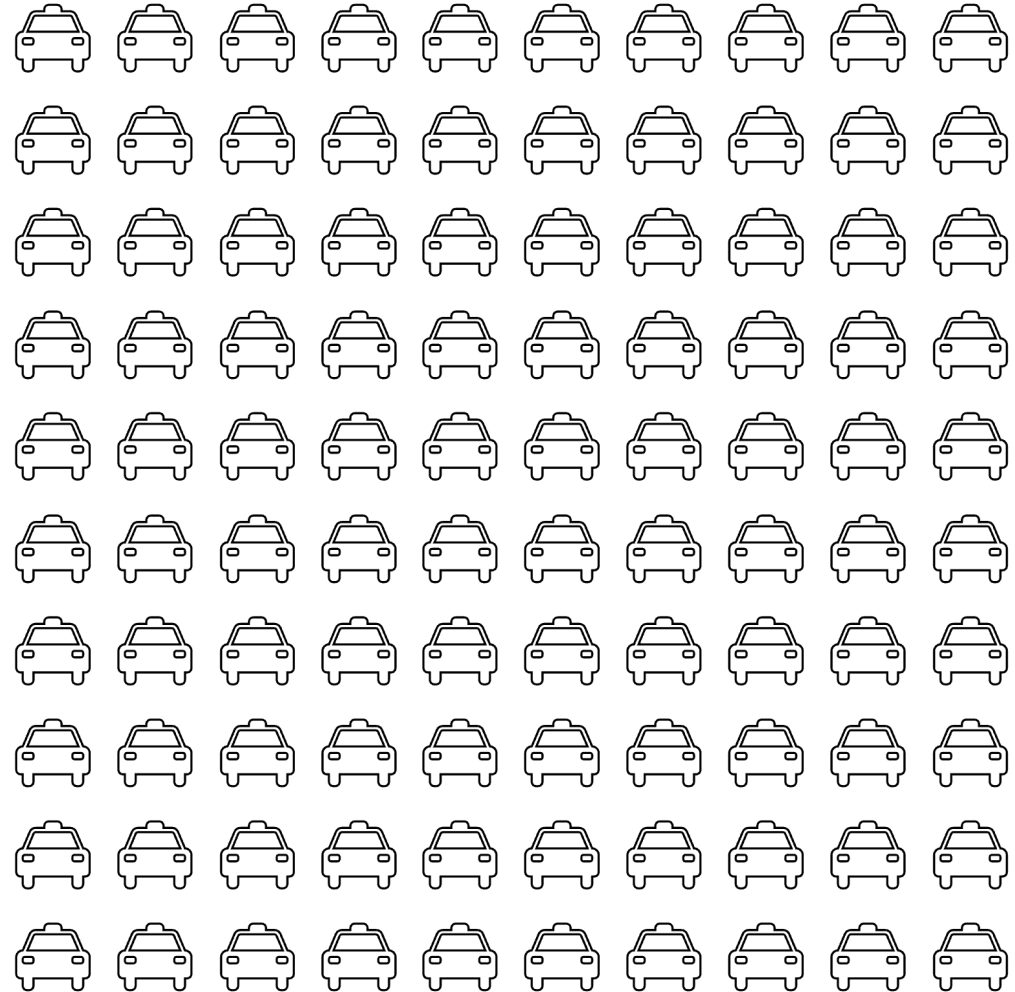- Lat/long co-ordinates for pickup & drop off

Taxi Defrag:

- Each row is a single taxi
- Each pixel = 1 minute
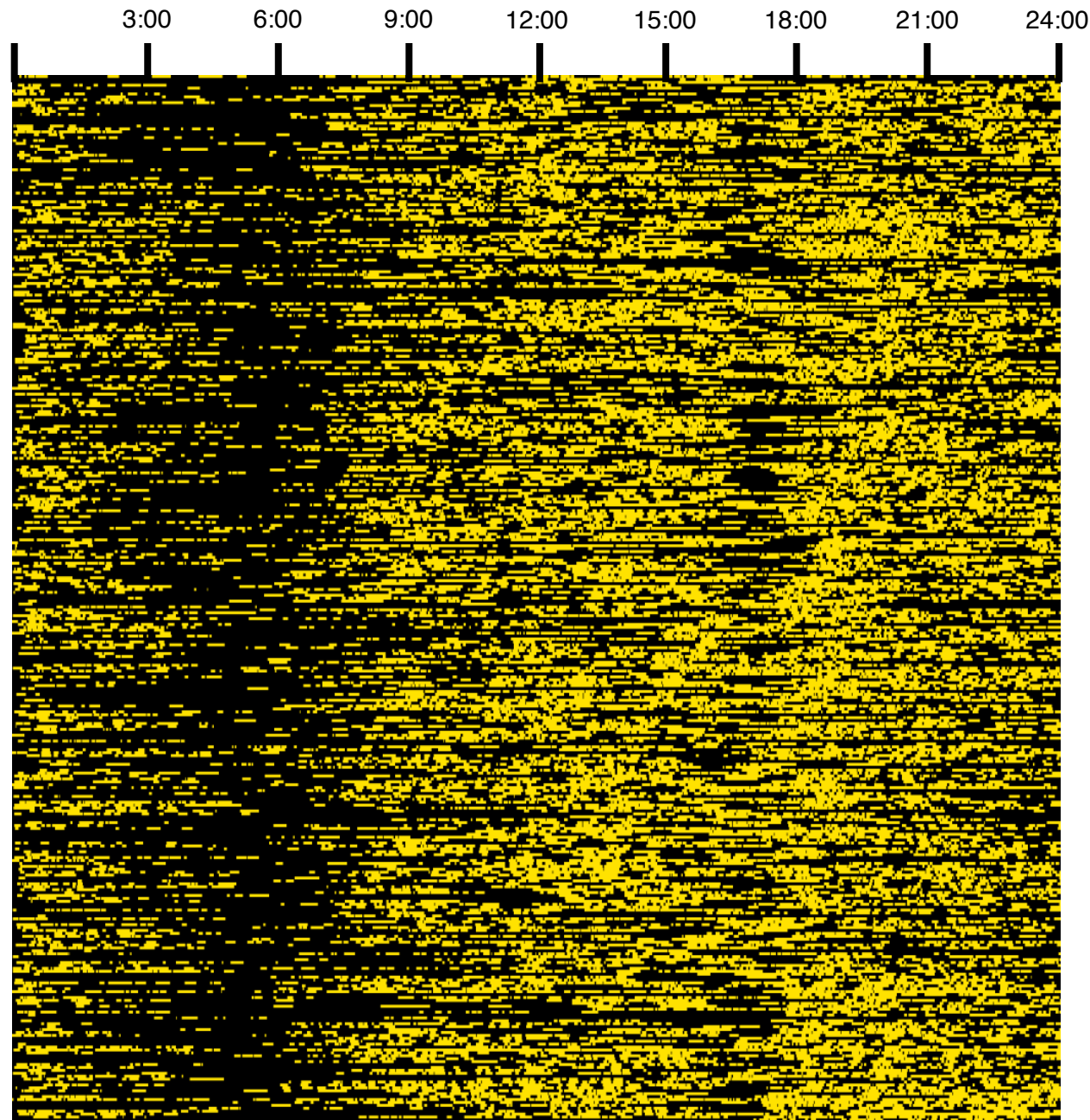
https://chriswhong.com/open-data/my-first-data-art-nyc-taxi-defrag/

Top 20 Most Common First Names of New York Taxi Drivers

Sample Size: 52,131

1. MD
2. Mohammad
3. Mohammed
4. Muhammad
5. Mohamed
6. Jean
7. Abdul
8. Syed
9. Ahmed
10. Mamadou
11. Joseph
12. Ali
13. Michael
14. John
15. Jose
16. George
17. Khalid
18. David
19. Luis
20. Ibrahim

Top 20 Most Common First Names of New York Taxi Drivers

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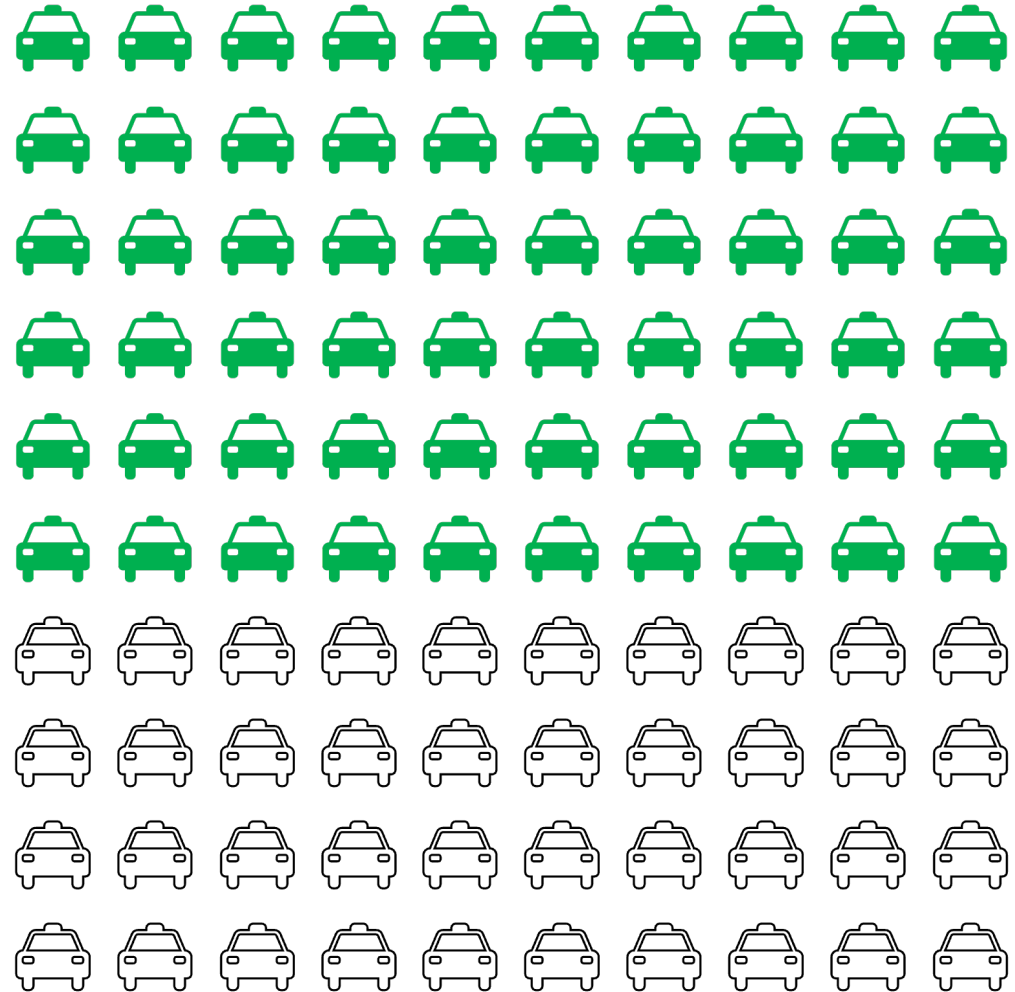
60% Muslim Names

NYC Taxi Journey Data FOI (2013)

FOI data augmented with five daily prayer times (IslamicFinder.org)

https://www.reddit.com/r/dataisbeautiful/comments/2t201h/identifying_muslim_cabbies_from_trip_data_and/

NYC Taxi Journey Data FOI (2013)

FOI data augmented with five daily prayer times (IslamicFinder.org)

Thank you
@shaftag
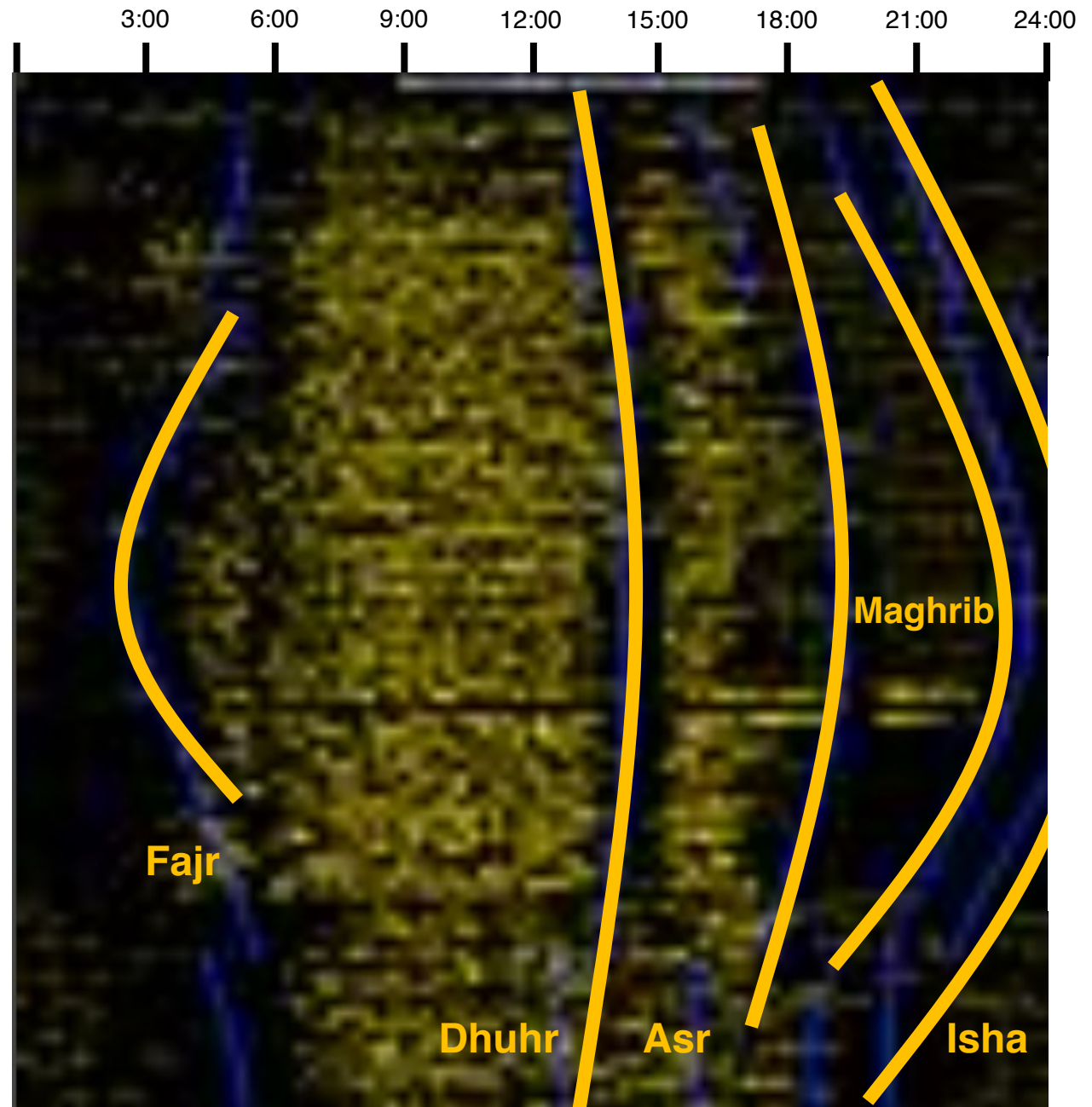
#BankingWhileMuslim

Digital Finance Forum – June 2024

The Problem

Muslims are **significantly** more likely to face discrimination while using financial services compared to non-Muslims especially in western financial markets

20 years+ of anecdotal evidence of debanking, deplatforming of Muslims

- **Retail accounts** – across legacy banks, payment platforms, neo-banks and crypto exchanges

- **Commercial accounts** - more stringent/ longer KYC/AML checks and more frequent "investigations"

- **Non-Profit organisations** - especially charities with "Islamic" or "Muslim" in their title or remitting to Organisation of Islamic Cooperation (OIC) countries

- **Payment processing** - flagging and reversal of transactions at a higher proportion, accounts closed due to flagged transactions

GDF

The Impact (1/2)

In 2023, the Institute for Social Policy & Understanding (ISPU) in the US conducted the first of its kind study into this topic
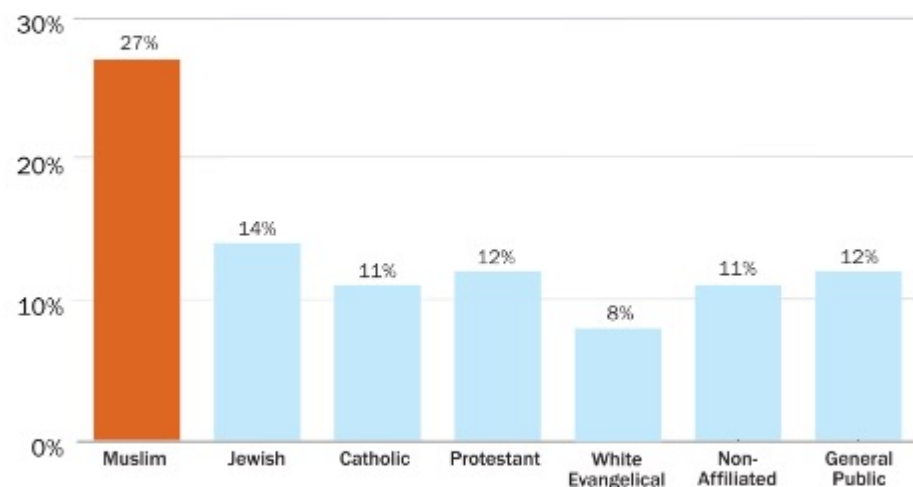
Figure 1: Have you ever faced challenges from U.S. banking/financial institutions, which may include being denied opening an account, having an account suspended or closed, or having payments you made under investigation? (% Yes shown) Base: Total respondents, 2022.
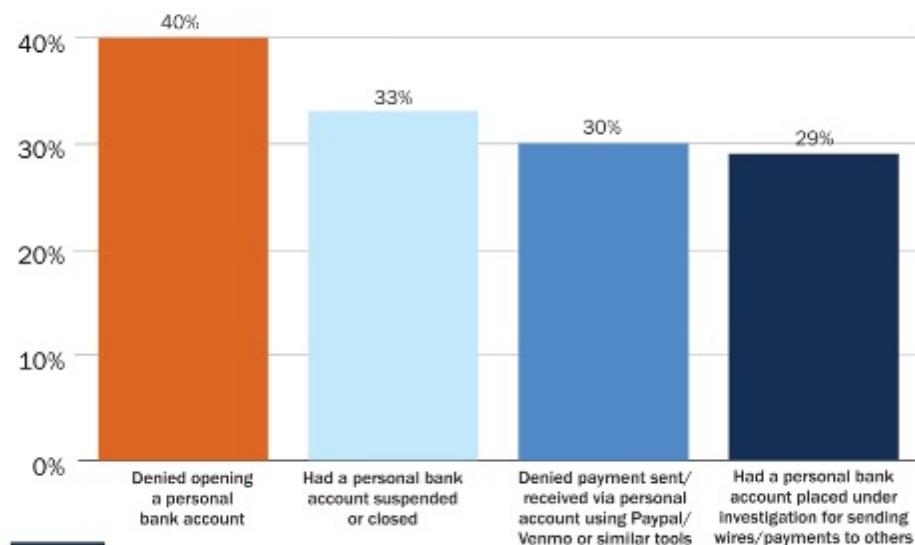
Figure 6: What type of challenges have you faced? (% Top 4 challenges with personal accounts shown) Base: Total Muslim respondents who have ever faced challenges from U.S. banking/financial institutions, 2022.

© Global Digital Finance

The Impact (2/2)

Muslims More Likely than General Public to Face Challenges with Business and Nonprofit Accounts
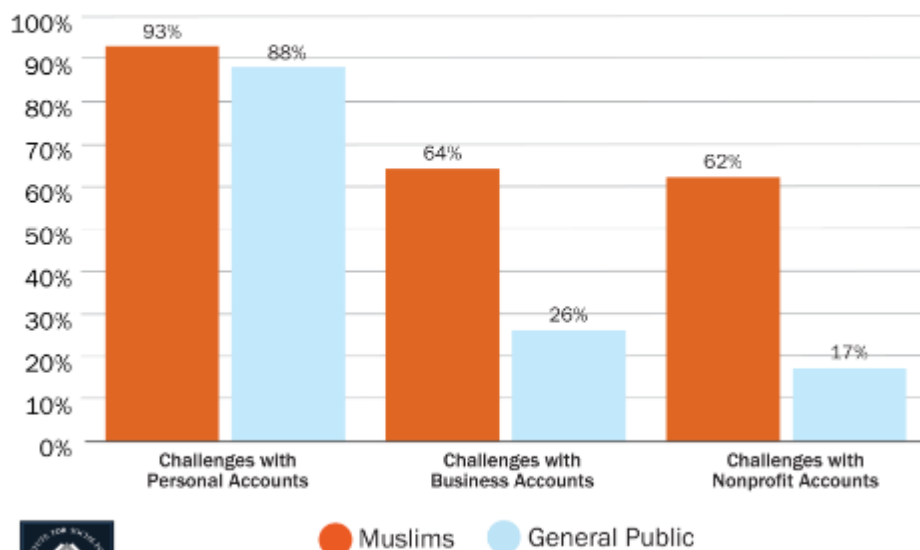
Figure 5: *What type of challenges have you faced? Base: Total respondents who have ever faced challenges from U.S. banking/financial institutions, 2022.*

Most Common Reasons Received from Financial Institutions for Challenges Faced
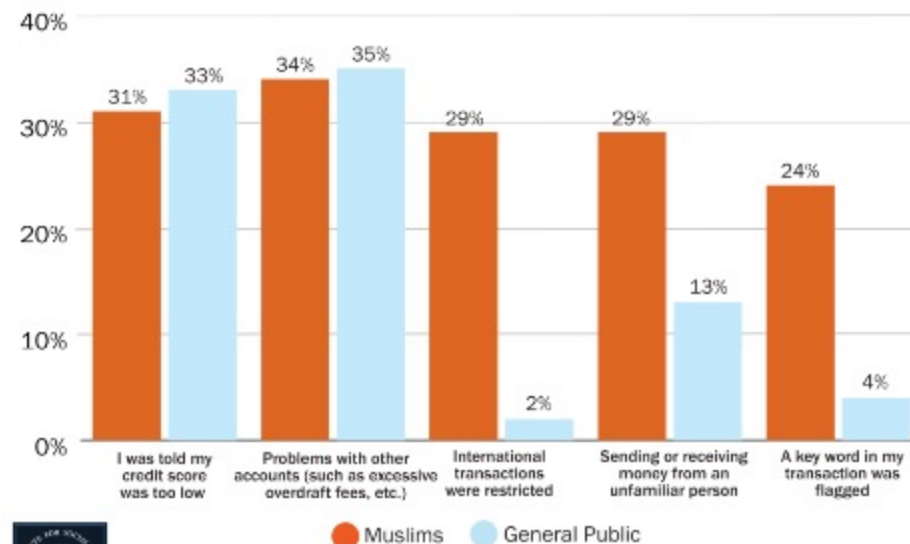
Figure 9: *What was the reason given for the challenge(s) faced? (% Top 5 Reasons Shown) Base: Total respondents who have ever faced challenges from U.S. banking/financial institutions, 2022.*

In the US, this is estimated to cost Muslim owned businesses **$20.7 billion** annually

© Global Digital Finance

The Solution

- More data gathering and research in this area: https://www.bankingwhilemuslim.com

- Raising greater awareness in industry groups for firms to evaluate their own CTF/AML and general compliance practices for bias and/or over-zealous de-risking

- Greater advocacy amongst policy makers:
  - UK - APPG Islamic Finance
  - US - Senate review of de-risking practices

HUFFPOST

NEWS   COST OF LIVING   POLITICS   ENTERTAINMENT   LIFE   PARENTS

POLITICS   ELIZABETH WARREN   ISLAMOPHOBIA   ILHAN OMAR

Lawmakers Call Out Major U.S. Banks For Discriminating Against Muslim Americans

Sen. Elizabeth Warren and Rep. Ilhan Omar are demanding answers about policies that target communities of color.

By Rowaida Abdelaziz

22/02/2024 05:20pm GMT | Updated February 23, 2024

Sen. Elizabeth Warren (D-Mass.) and Rep. Ilhan Omar (D-Minn.) released a letter Thursday demanding answers from the heads of several leading U.S. banks about policies that have disproportionately targeted Muslim Americans and communities of color.

"The lack of information regarding the scope of de-risking practices and the impact on Muslim American consumers and other minority communities hinder policymakers' ability to protect consumers," reads the letter, which was exclusively shared with HuffPost before it was sent to executives of Wells Fargo, JPMorgan Chase, Bank of America and Citibank.

A quarter of all Muslim Americans have faced strenuous challenges while banking in the United States, according to a report released last year by the Institute of Social Policy and Understanding, a nonprofit that provides research about Muslims in the U.S. Muslim Americans said their bank accounts were suspended or closed without explanation, and their payments were subjected to extra scrutiny, part of a phenomenon often called "banking while Muslim."

GDF

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Registered Company Number: 11246402

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hello@gdf.io

www.gdf.io

Digital Finance Forum

Feature Presentation - Digital Token Identifier for MiCA Transparency Reporting

GDF

DTI FOUNDTATION

Digital Finance Forum – 19 June 2024

DTIF
DIGITAL
TOKEN
IDENTIFIER
FOUNDATION

DTI Foundation: mission and governance

The DTI Foundation (DTIF) is the Registration Authority for the International Organization for Standardization (ISO) 24165 Digital Token Identifier (DTI) standard.

The DTIF's mission is to provide the golden source reference data for the unique identification of digital tokens.

As its mandate, the DTIF issues and maintains DTIs on a non-profit basis, with the aim of increasing transparency in the digital asset space by creating a core reference data set based on open data principles and made available as a public good.
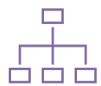
DTIF is a non-profit division of Etrading Software, a financial technology firm with a mission of solving market-wide problems by building market infrastructures for the new digital economy

DTI use under MiCA*

Who	Requirement	Relevant fields	Registry Data	When	Specified Format

Issuer / Offeror of ART/EMT
- ART white paper
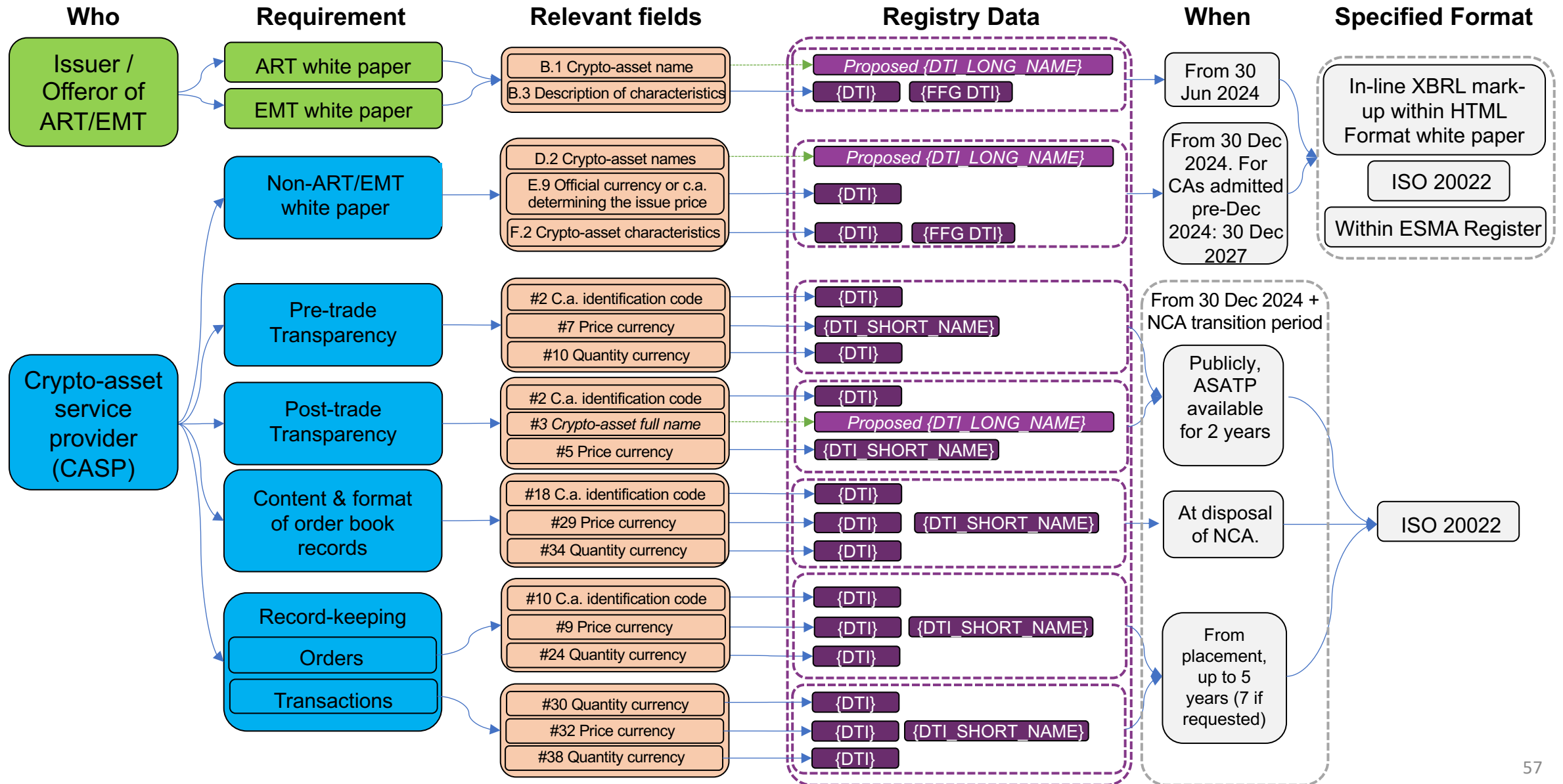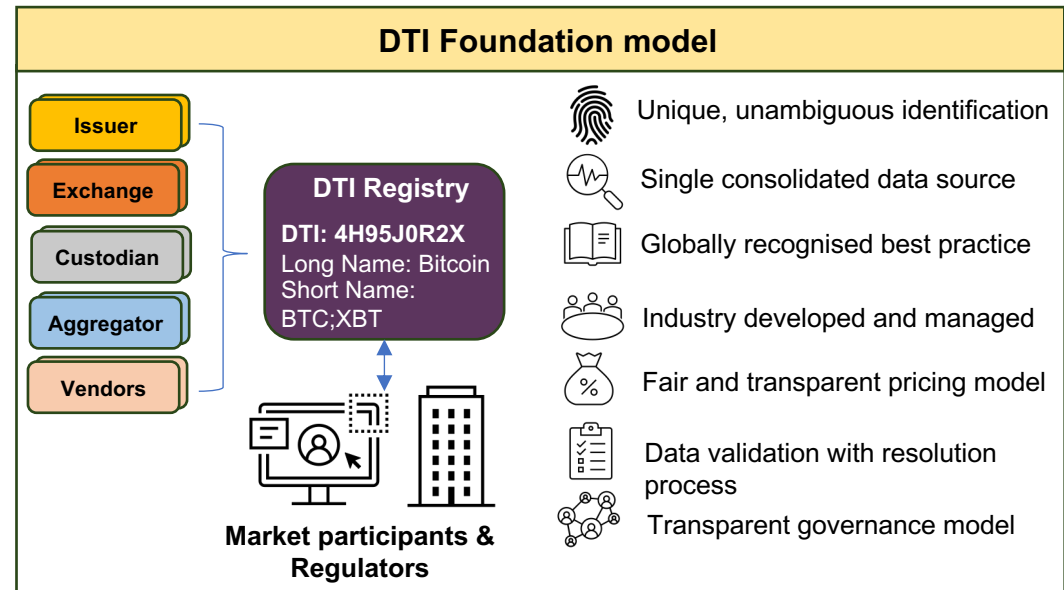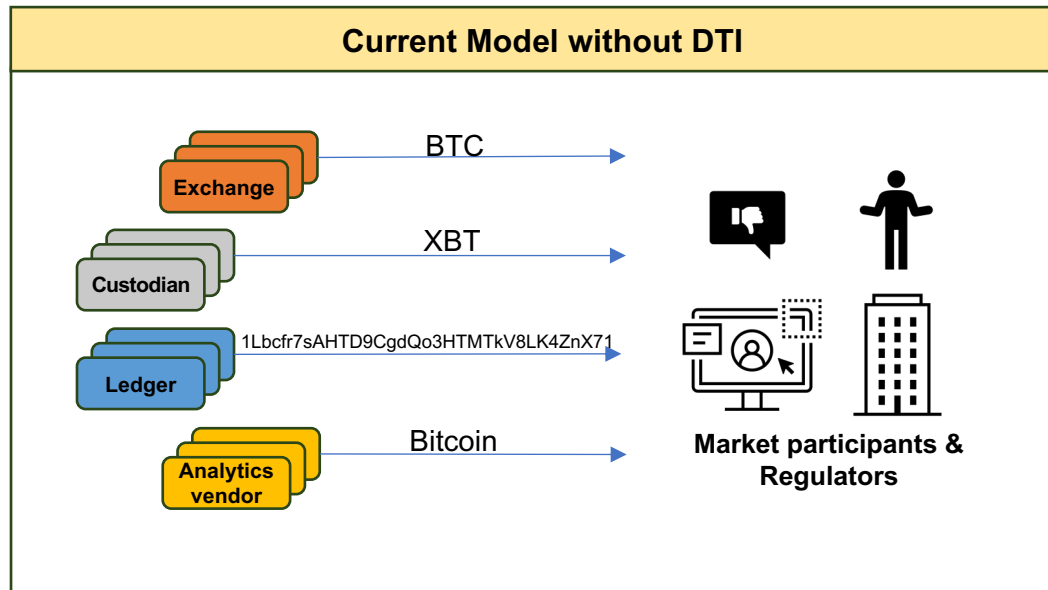- EMT white paper

B.1 Crypto-asset name
B.3 Description of characteristics

Proposed {DTI_LONG_NAME}
{DTI} {FFG DTI}

From 30 Jun 2024

In-line XBRL mark-up within HTML Format white paper

Crypto-asset service provider (CASP)

Non-ART/EMT white paper
- D.2 Crypto-asset names
- E.9 Official currency or c.a. determining the issue price
- F.2 Crypto-asset characteristics

Proposed {DTI_LONG_NAME}
{DTI}
{DTI} {FFG DTI}

From 30 Dec 2024. For CAs admitted pre-Dec 2024: 30 Dec 2027

ISO 20022

Within ESMA Register

Pre-trade Transparency
- #2 C.a. identification code
- #7 Price currency
- #10 Quantity currency

{DTI}
{DTI_SHORT_NAME}
{DTI}

From 30 Dec 2024 + NCA transition period

Post-trade Transparency
- #2 C.a. identification code
- #3 *Crypto-asset full name*
- #5 Price currency

{DTI}
Proposed {DTI_LONG_NAME}
{DTI_SHORT_NAME}

Publicly, ASATP available for 2 years

Content & format of order book records
- #18 C.a. identification code
- #29 Price currency
- #34 Quantity currency

{DTI}
{DTI} {DTI_SHORT_NAME}
{DTI}

At disposal of NCA.

ISO 20022

Record-keeping
Orders
- #10 C.a. identification code
- #9 Price currency
- #24 Quantity currency

{DTI}
{DTI} {DTI_SHORT_NAME}
{DTI}

From placement, up to 5 years (7 if requested)

Transactions
- #30 Quantity currency
- #32 Price currency
- #38 Quantity currency

{DTI}
{DTI} {DTI_SHORT_NAME}
{DTI}

*Based on DTIF Interpretation of ESMA Consultation

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DTI Foundation model

Introduction to the DTI

What is the DTI?

A Digital Token Identifier is a global identification standard for digital tokens and is defined by ISO 24165. For example:

- DTI **4HNFSH646** represents UBS 2.33% 14/11/2025 bond on SDX private blockchain.

What can be allocated a DTI?

All fungible digital assets represented on DLT

Security token	Asset-referenced token	E-money token	Cryptocurrency	Utility token
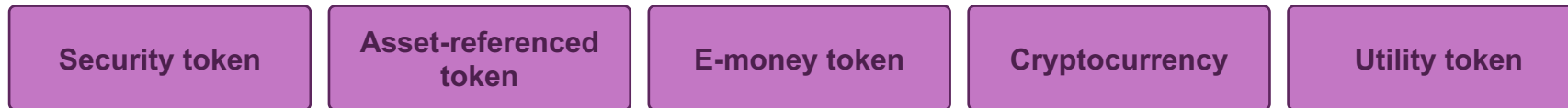
What are the benefits of using DTIs?

- **Transparency**: Identification, location on a public or private blockchain, and link to underlying assets.
- **Interoperability**: Standardised method to distinguish between different tokens and ledgers.
- **Uniqueness**: DTI based on unique and verifiable technical data
- **Consistency**: Ability to distinguish tokens following risk events such as forks.
- **Scalability**: Standardised token identifier supports scalability across fragmented crypto-asset industry.

See also: DTI factsheet

DTI Registry: TetherUSD Group (LQ657BK)

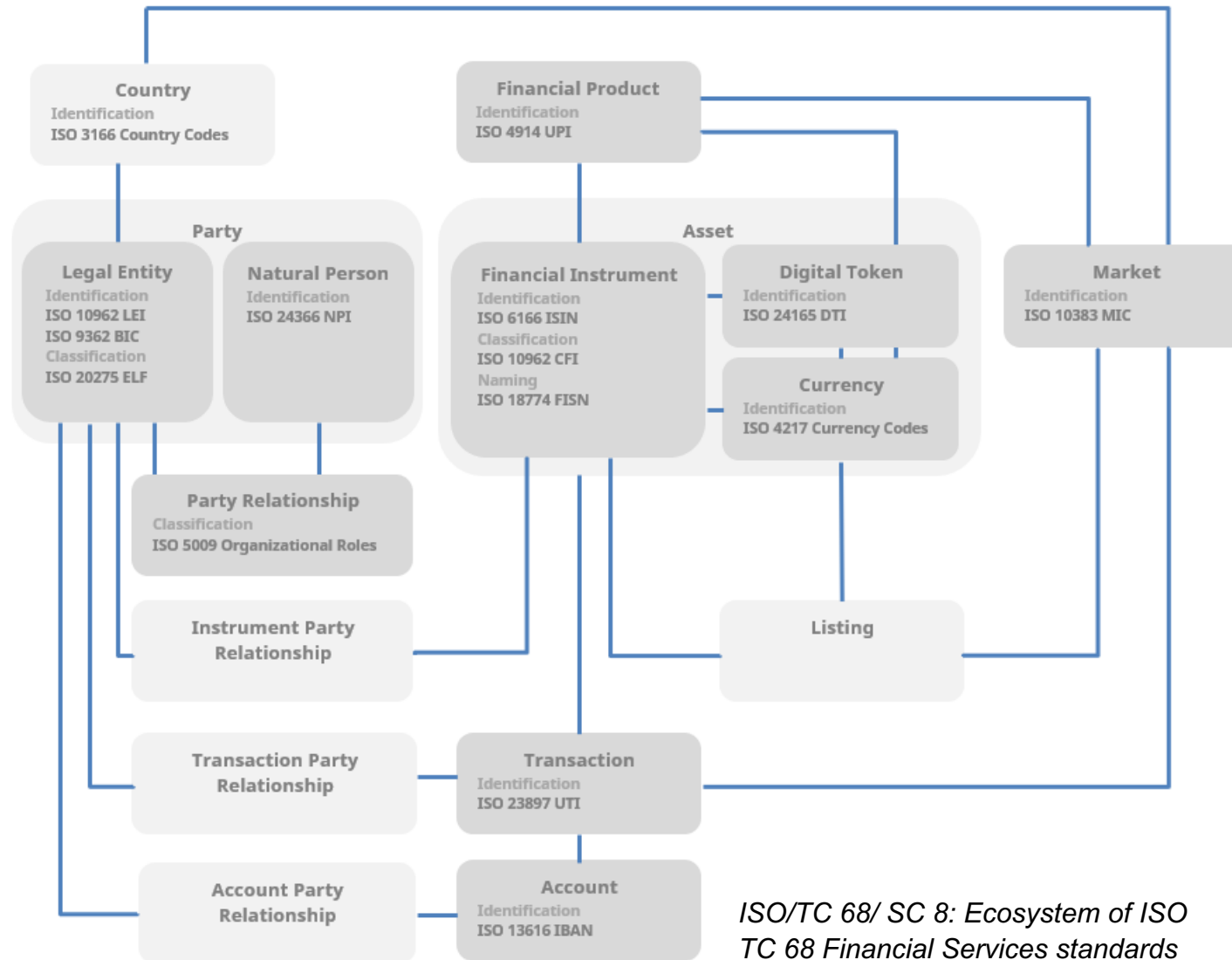| DTI	DTI Long Name	DTI Short Codes	Reference	Ledger Name
29DD3R2SH	Tether USD	USDt	usdt.tether-token.near	Near Protocol
2QWSBDMNC	Tether USD	USDT	0xdac17f958d2ee523a2206206994597c13d831ec7	Ethereum
6QBMW6DQZ	USDT	USDT	Es9vMFrzaCERmJfrF4H2FYD4KCoNkY11McCe8BenwNYB	Solana
75T0GP5WJ	USD Tether	USDT	31	OMNI
BHQ70PZ11	Tether USDt	USDt	9fc89d6b7d5be2eac0b3787c5b8236bca5de641b5bafafc8f450727b63615c11	Bitcoin Cash
C9N6ZVN7S	USD Tether	USDT	TR7NHqjeKQxGTCi8q8ZY4pL8otSzgjLj6t	TRON
FZP9CBTG1	TetherUSD	USDT	5a83968fb1e24d0bf9b9a850b4d0000d0554169ea029d3d8d78b6d4872d1aa15	Bitcoin Liquid
JGJZPPF7Z	Tether USD	USDt	1984	Asset Hub Polkadot
NJ7X4BCTD	TetherToken	USDt	0x9702230a8ea53601f5cd2dc00fdbc13d4df4a8c7	Avalanche
NSTDLD1N5	Tether USD	USDt	1984	Asset Hub Kusama
PDX13MN94	Tether USDt	USDt	312769	Algorand
PJ1BC8W44	TetherToken	pUSDt	0x170a18b9190669cda08965562745a323c907e5ec	Polygon
TZFM5MHWR	Tether USD	USDt	KT1XnTn74bUtxHfDtBmm2bGZAQfhPbvKWR8o/tokens?token_id=0	Tezos
Z7ZX774BJ	USDT	USDT	tethertether	EOS Blockchain

DTI: Part of ISO standards family

Country
Identification
ISO 3166 Country Codes

Financial Product
Identification
ISO 4914 UPI

Party

Legal Entity
Identification
ISO 10962 LEI
ISO 9362 BIC
Classification
ISO 20275 ELF

Natural Person
Identification
ISO 24366 NPI

Asset

Financial Instrument
Identification
ISO 6166 ISIN
Classification
ISO 10962 CFI
Naming
ISO 18774 FISN

Digital Token
Identification
ISO 24165 DTI

Currency
Identification
ISO 4217 Currency Codes

Market
Identification
ISO 10383 MIC

Party Relationship
Classification
ISO 5009 Organizational Roles

Instrument Party Relationship

Listing

Transaction Party Relationship

Transaction
Identification
ISO 23897 UTI

Account Party Relationship
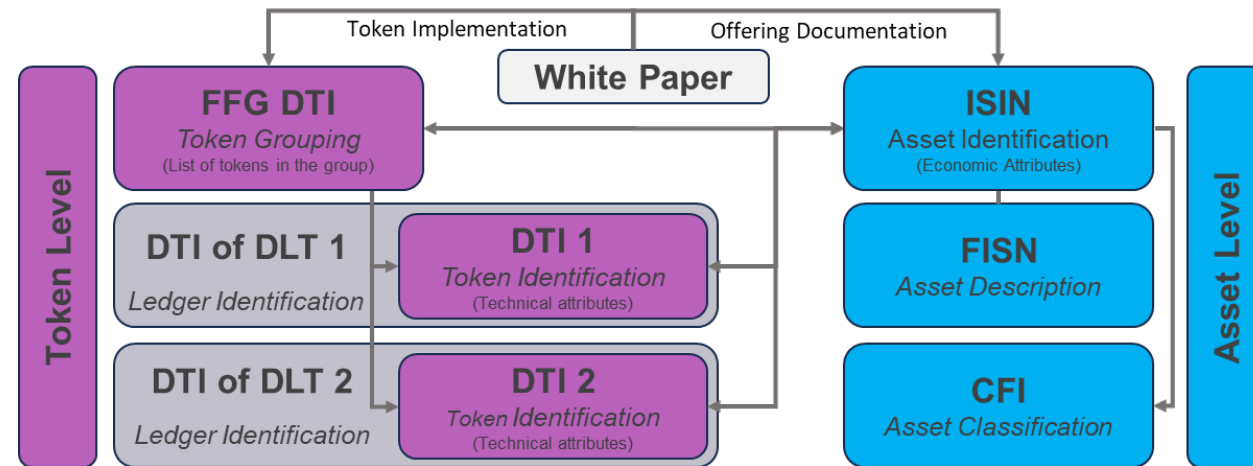
Account
Identification
ISO 13616 IBAN

ISO/TC 68/ SC 8: Ecosystem of ISO TC 68 Financial Services standards

ISIN-DTI: The Best of Both Worlds

DTI: Token Level Identifier

Global standard for unique identification for all fungible digital tokens providing guaranteed uniqueness of the digital token based on objective, verifiable technical data.

- ✓ Identification and location of the digital token on a public or private blockchain
- ✓ Direct link to underlying assets as part of the metadata

ISIN: Asset Level Identifier

Global standard for unique identification of financial and referential instruments helping organisations meet regulatory requirements and improve transparency, stability and efficiency

- ✓ Familiar identifier for financial institutions
- ✓ infrastructure in place to accommodate and process ISINs

DTI/ISIN: Complementary Identifiers

Complimentary, interoperable identifiers, with different functions but intrinsically linked, that work together to bring more transparency to the Digital Asset market.

XT ISIN Scope

Crypto assets that are not financial instruments in accordance with ISO 10962 CFI classification are treated as referential instruments and therefore are in scope for XT ISIN allocation.

- *Note 1: Jurisdiction-agnostic approach has been applied due to regulatory divergence in the treatment of crypto assets across jurisdictions.*

- *Note 2: Centralised approach has been applied due to an absence of clear definition and identification of an issuer for such referential instruments.*

- *Note 3: NFTs are currently out of scope and will be addressed at a future date (this does not apply for financial instruments issued in NFT form).*

- *Note 4: Existing referential instruments for which ISIN allocation rules already exist are not in scope for XT ISINs*

DTI to ISIN Mapping: Examples

Financial Instruments

- **World Bank Digital Bond (Euroclear D-FMI)**
  - FISN: INTERNATIONAL B/3.399EMTN 20261023
  - ISIN: XS2615318289
  - DTI: J0D6B3L47

- **Aktionariat AG Shares**
  - FISN: Aktionariat/RegSh CHF0.1
  - ISIN: CH1303238757
  - DTIs:
    - FF Group: `X84RN3358`
    - SDX Token: `Q18RJCV4T`
    - Ethereum Token: `1TZDCS4N8`

Referential Instruments

- **Bitcoin**
  - FISN: BITCOIN/BTC
  - ISIN: XTV15WLZJMF0
  - DTIs:
    - FF Group: `V15WLZJMF`
    - Auxiliary Tokens: `4H95J0R2X & ZN227BVRW`

- **TetherUSD**
  - FISN: USD TETHER/USDT
  - ISIN: XTL09Q657BK6
  - DTIs:
    - FF Group: `L09Q657BK`
    - Auxiliary Tokens: `75T0GP5WJ;2QWSBDMNC`
      `NJ7X4BCTD;PJ1BC8W44`
      `C9N6ZVN7S;Z7ZX774BJ`
      `FZP9CBTG1;PDX13MN94`
      `BHQ70PZ11;6QBMW6DQZ`
      `JGJZPPF7Z;NSTDLD1N5`
      `TZFM5MHWR;29DD3R2SH`

Contacts and Resources

➢ DTIF Registry Search

➢ DTIF Contact:

  secretariat@dtif.org

➢ ANNA Digital Assets

➢ ANNA Contact:

  secretariat@anna-web.org

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Appendix

Snapshot: Integration and Adoption

Regulatory authorities

ESMA recommends DTI for EU DLT Pilot Regime

ESMA proposes DTI for crypto-asset identification under MiCA

Canadian Securities Administrators using DTI standard for CTP data reporting

Market Infrastructure and vendors

SDX adoption of DTI

21 Analytics adoption of ISO 24165 DTI standard

CCData implements DTI and ISIN within Asset Metadata solution

Industry standards and communication protocols

SWIFT technical adoption integrates DTI

FIX Protocol update incorporates DTI

DTI embedded in regulatory reporting of crypto-derivative trades across G20

ICMA Bond Data Taxonomy

See also: DTI Foundation article *Integration and Adoption*

DTI reference data

- Each DTI is linked to a record of reference data. These are split between normative and informative.

    - Normative data enables unique identification of the tokens depending on it's type

    - Informative data elements include long and short names, url implementation reference, public/private, etc.

- **Native tokens** (digital token with a privileged position in the distributed ledger technology protocol)

    - *Normative data*: Genesis block hash, algorithm, timestamp, fork details

- **Auxiliary tokens** (non-native digital token created as an application on an existing blockchain or other distributed ledger technology for its issuance, storage or transaction record)

    - *Normative data*: Ledger identification, smart contract address (or equivalent), mechanism (e.g. ERC-20)

- **Functionally Fungible Group** (set of digital tokens which are not technically compatible, but considered equivalent)

    - List of tokens included in the group
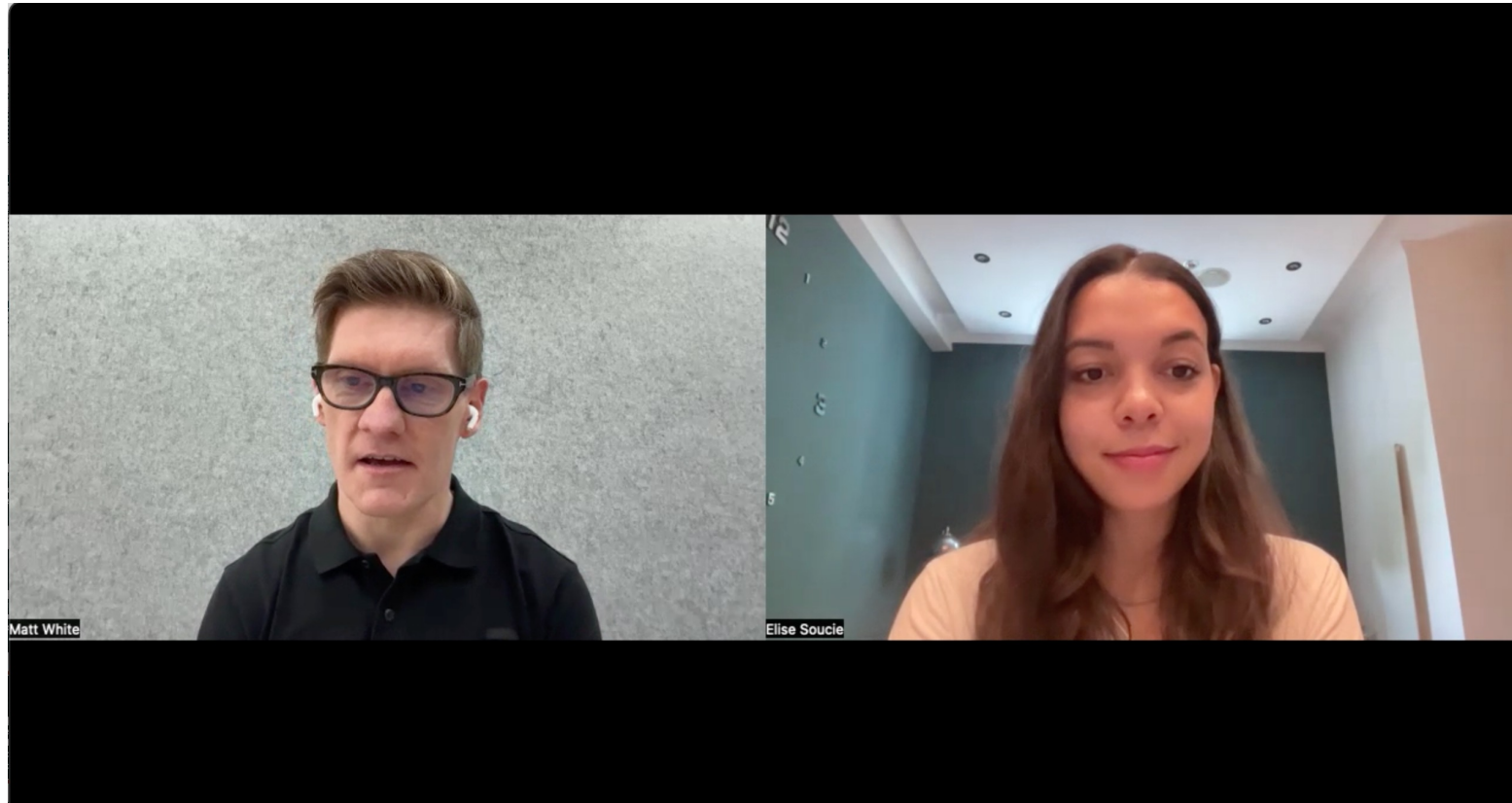
Fireside Chat

Matthew White, CEO of VARA

Listen here to the full fireside chat here where Matthew and Elise discuss the key trends in Dubai's virtual assets markets, the experiences that startups and founders have had, the main areas where regulation is still evolving, practical solutions to scalability & more.

GDF

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