



**BUREAU VAN DIJK**

A Moody's Analytics Company

# Detect fraudulent and illicit trading with advanced analytics and powerful company information

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Welcome to the business of certainty

# Introduction

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1. The scale of fraudulent and illicit activities affecting revenue and customs administrations
2. Advanced data analytics solution to detect fraudulent and illicit trading
3. Takeaways



# The scale of fraudulent activities

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- Money laundering amounts to around \$2.8 trillion, or 5% of global GDP annually

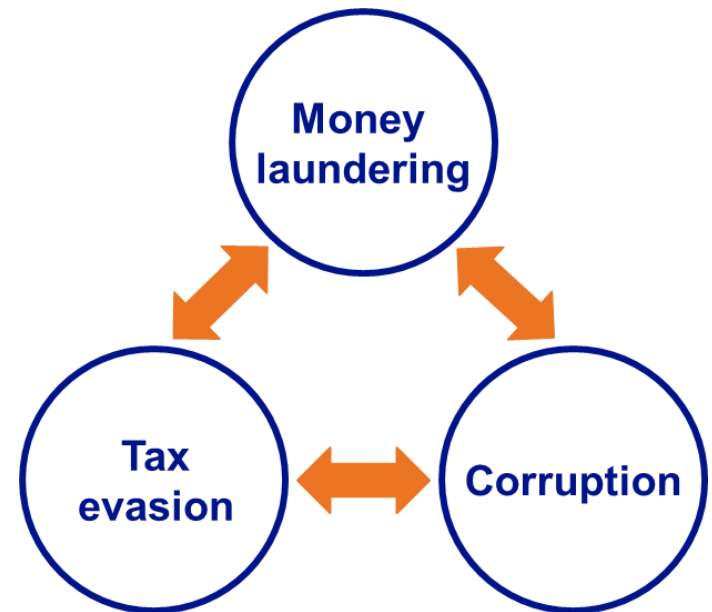
Source: European Parliament, *Offshore activities and money laundering: recent findings and challenges*, 2017

- About \$190 billion of global tax revenue is lost through offshore tax evasion

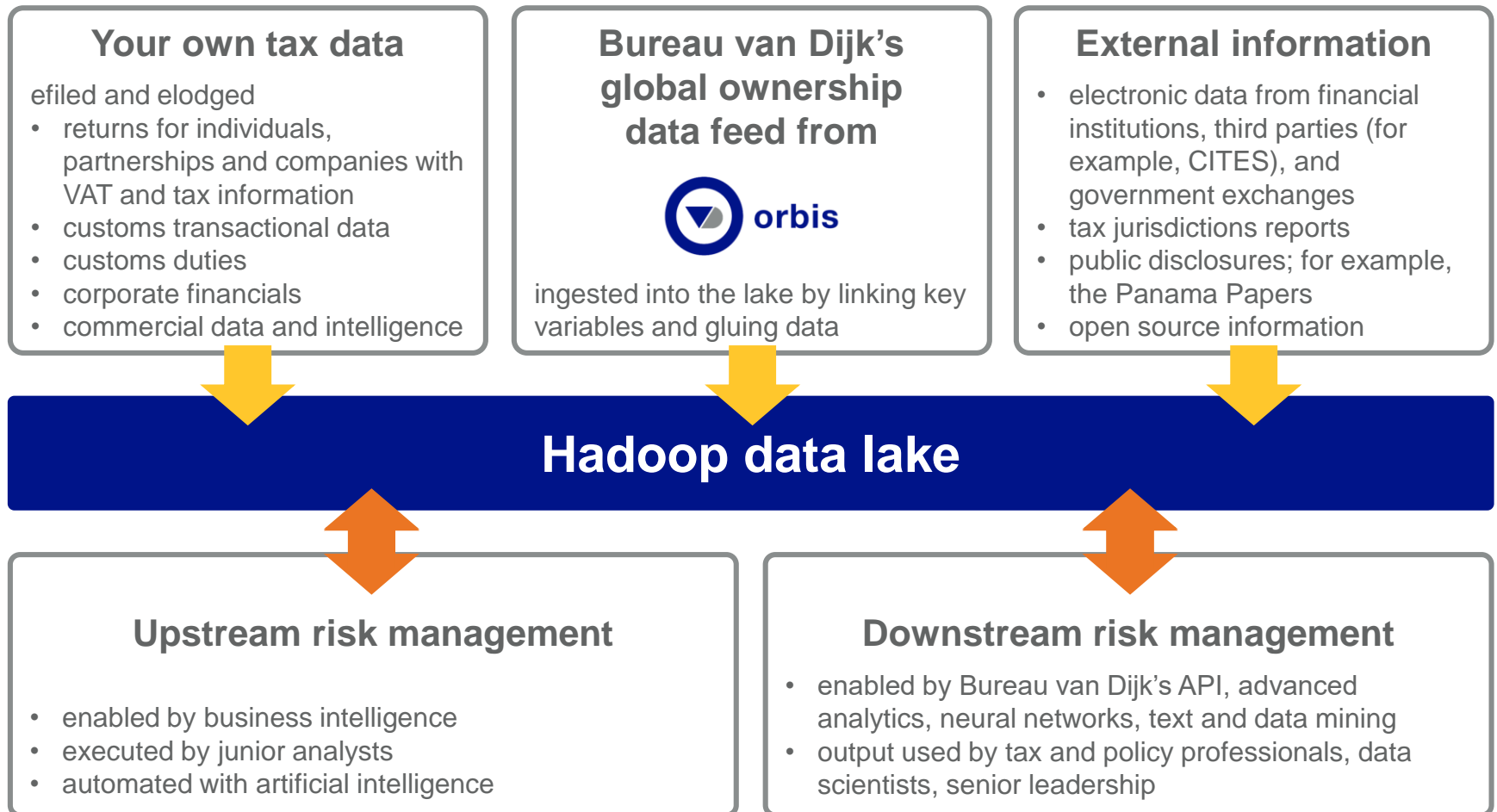
Source: Gabriel Zucman, 2015

- Estimated untaxed wealth of individuals in tax havens is around 10% of global GDP

Source: Business Insider article, 2017



# Example enterprise data architecture to reveal illicit and fraudulent activity



Note: CITES – the Convention on International Trade in Endangered Species of Wild Fauna and Flora

# Example neural network



## Input – Tax and customs administration data

1. tax and VAT returns, and supporting documents
2. tax payments, duties, and PAYE and social security lodgements
3. data from financial institutions, third parties and government exchanges
4. tax jurisdictions cross-border reports



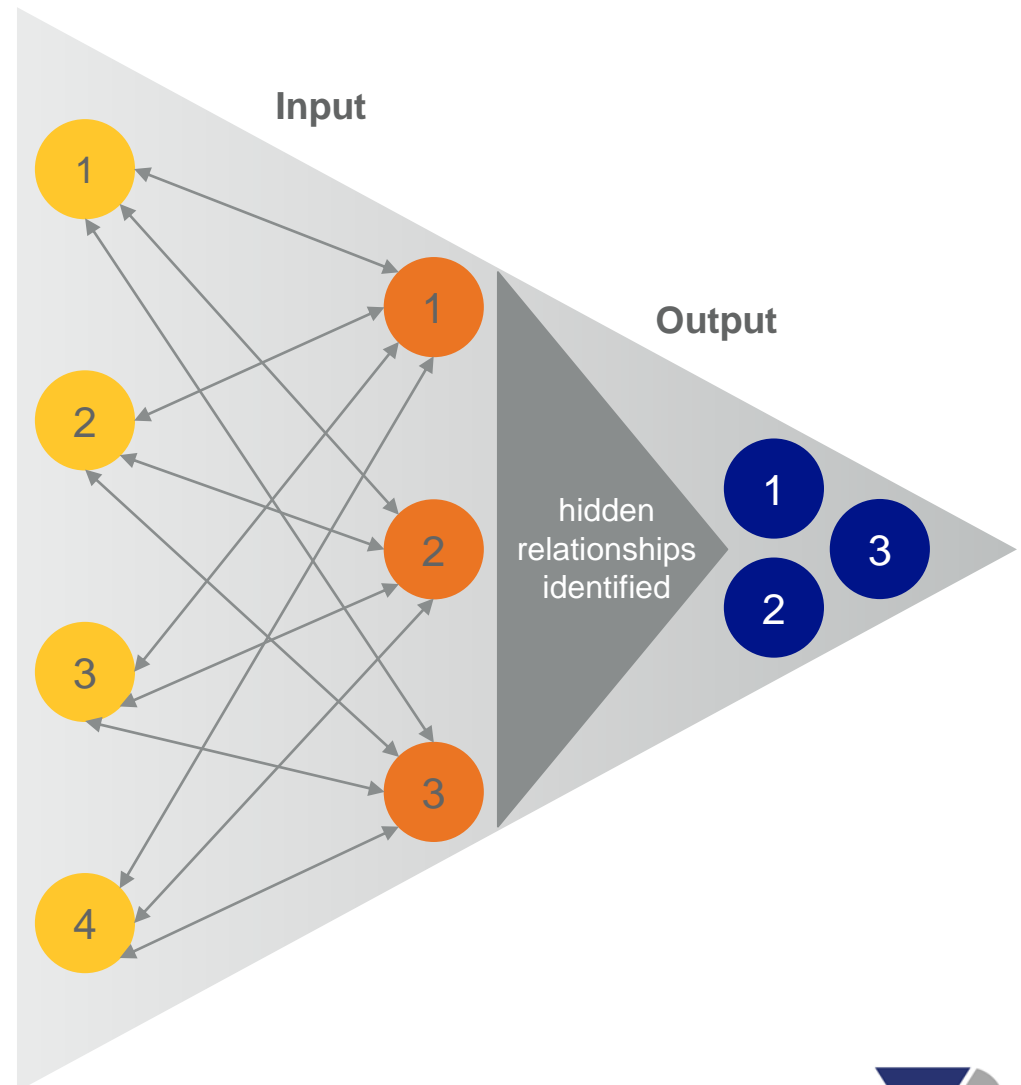
## Input – External information on companies and the individuals they are connected to

1. commercial data; global financials, mergers and acquisitions, links between companies, individuals and beneficial owners (including sanctioned ones) within corporate ownership structure
2. third party disclosures; bank and investment accounts, the Panama Papers
3. information from local registries, internet searches and social media – structural and text data

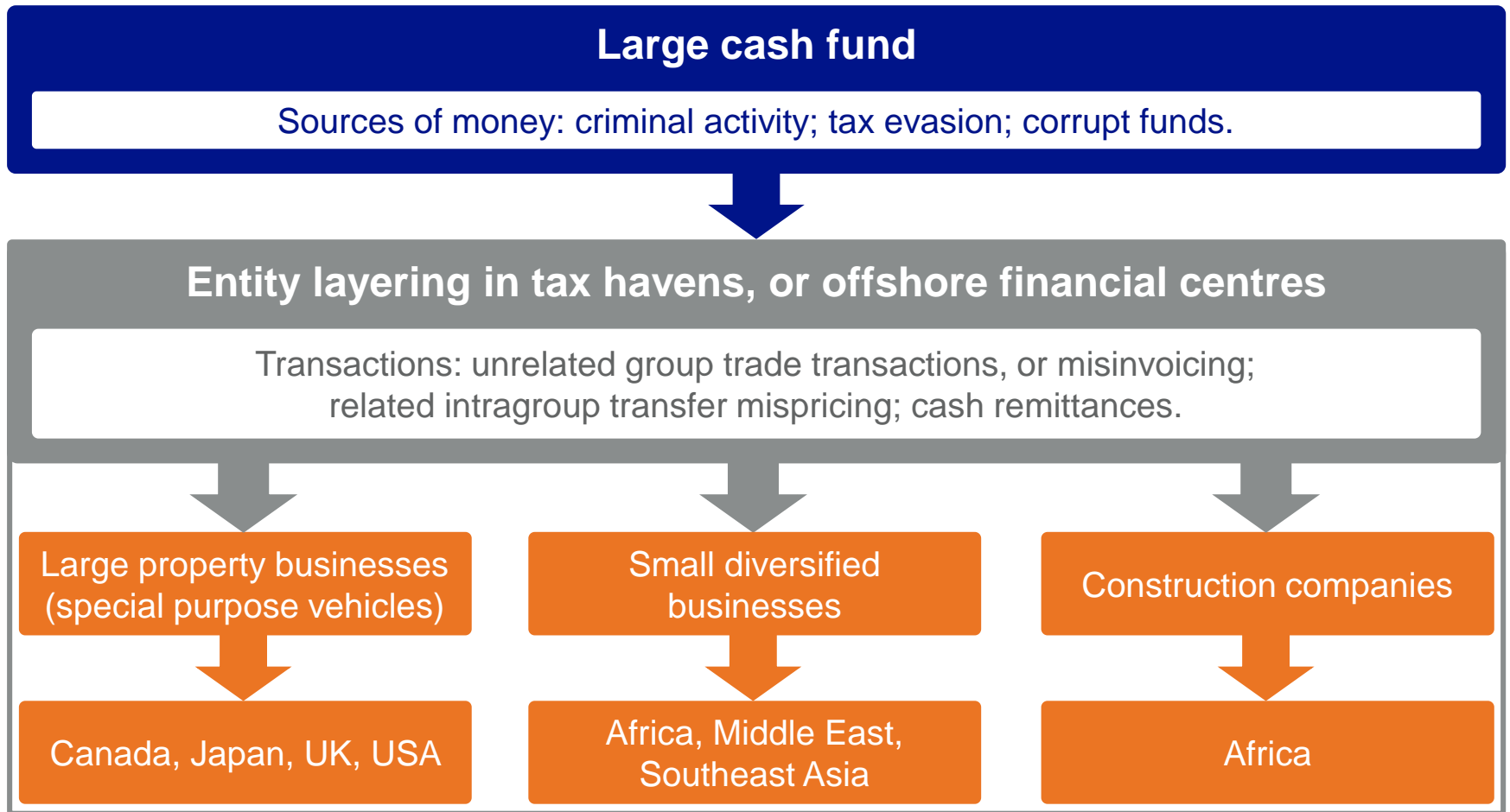


## Output – Data visualisation for downstream risk management

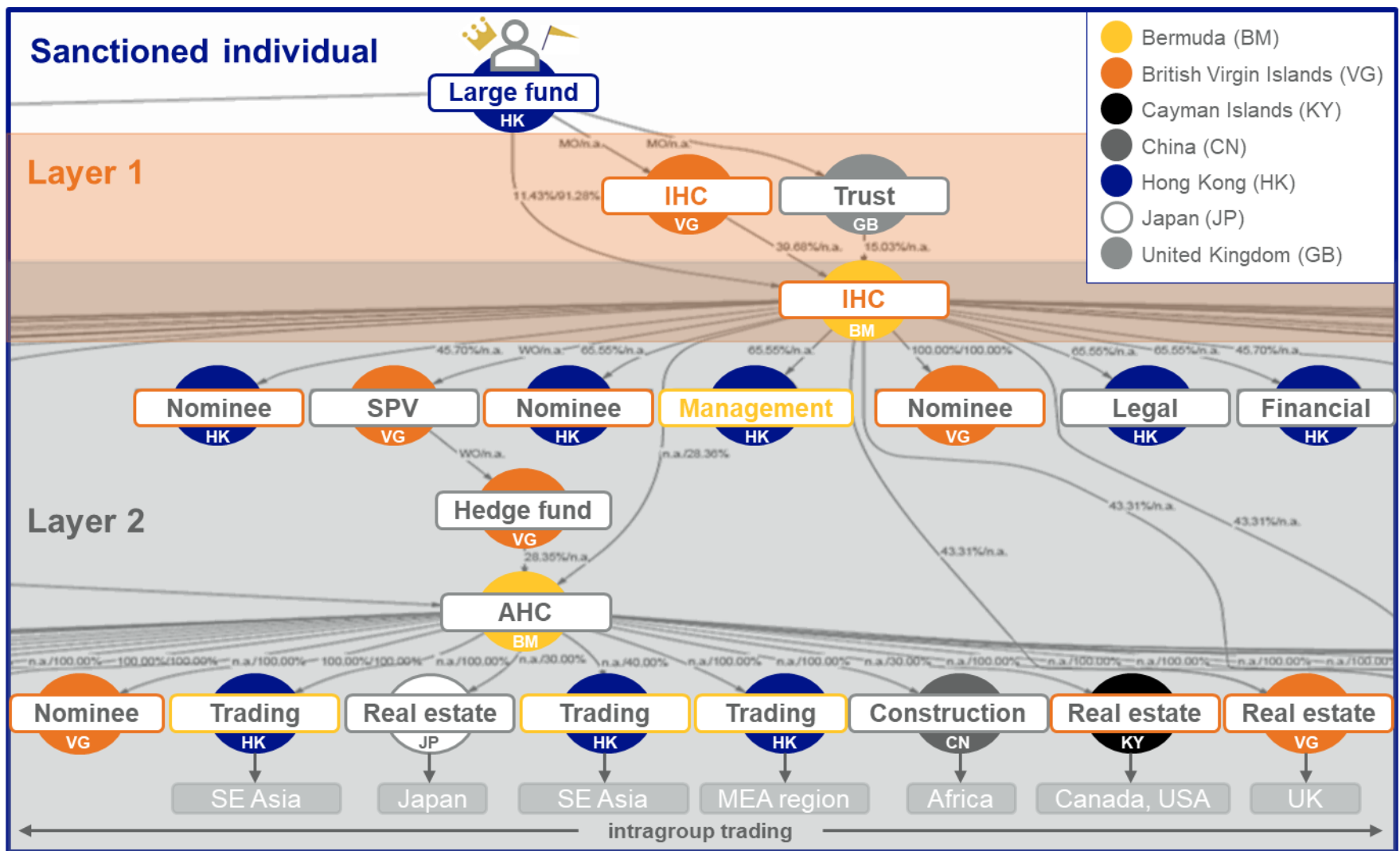
1. Ownership relationships: secretive structure
2. Financial model: illicit sources
3. Timeline modelling: tracking of key individuals



# Output 1: A schematic of illicit financial flows



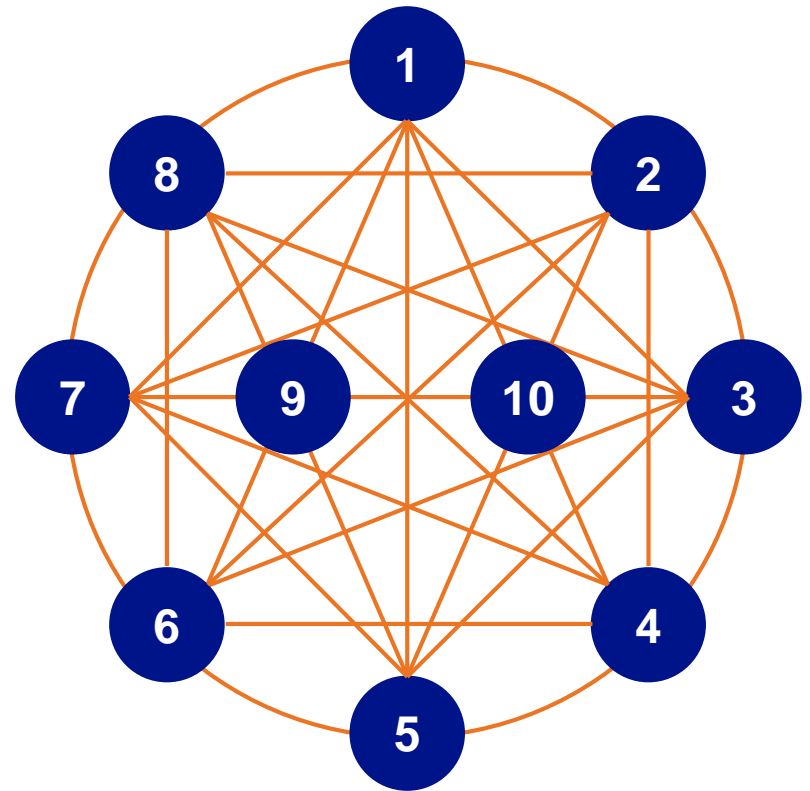
# Example complex secretive structure



Source: Bureau van Dijk's Orbis. Note: AHC/IHC – Asset/Investment Holding Company; Nominee – IHC's nominee officer and shareholder

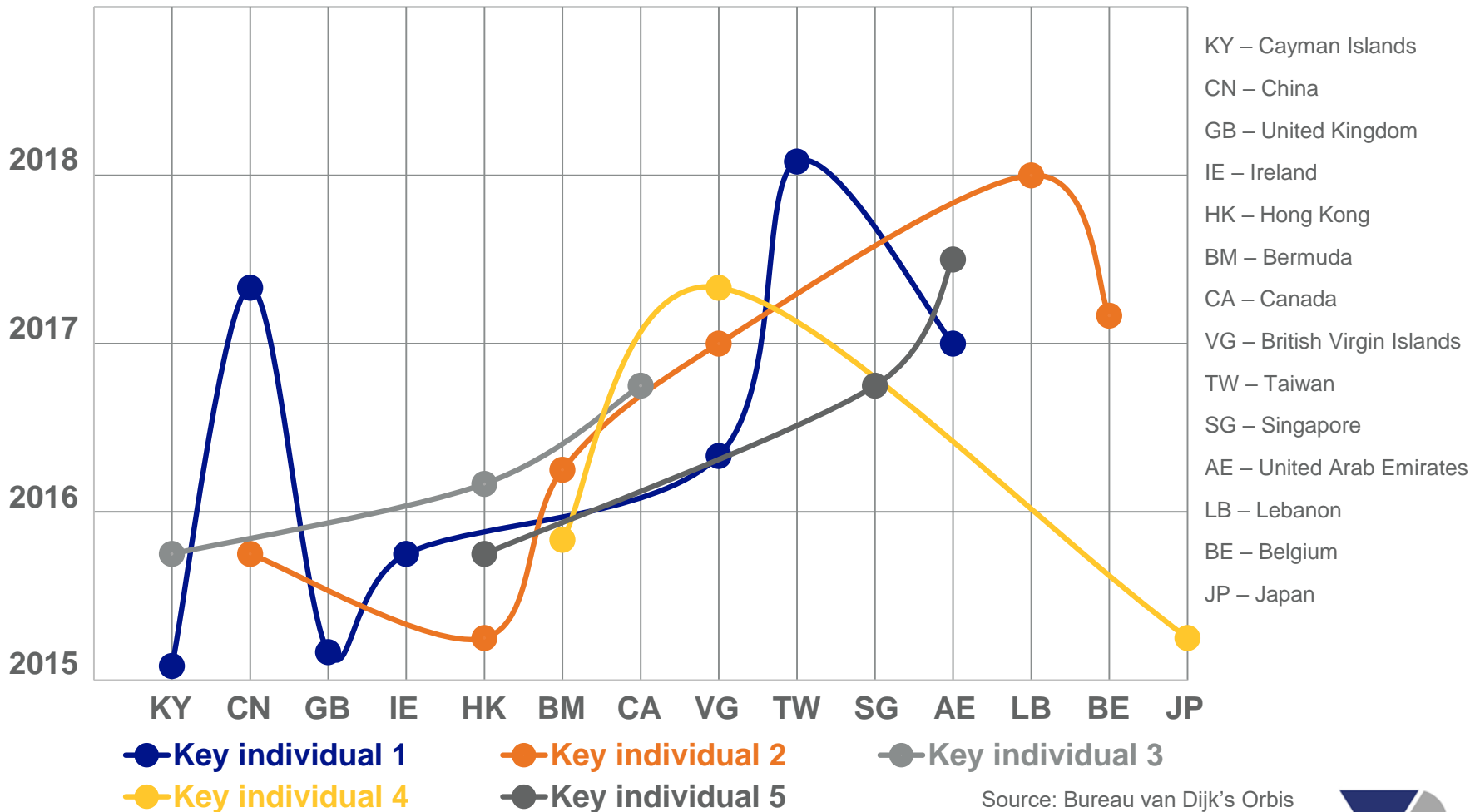
# Output 2: Example neural network model of illicit sources of finance

- 1 Non-transparent ownership structure, including sanctioned individuals and/or those showing non-compliant or criminal behaviour
- 2 High increase in income or profit year over year, or a new very large influx of capital
- 3 Cost and sales ratios of the business not in line with the industry benchmarks
- 4 Sale or purchase of companies with undervalued or overvalued stocks
- 5 Unclear or unverifiable origin of money
- 6 Financial transactions with subsidiaries based in tax havens
- 7 Transactions in goods and services outside the company's normal trading areas
- 8 Large transactions with fictitious companies
- 9 Nominee officers of related offshore companies
- 10 Use of special purpose vehicles for large financial transactions



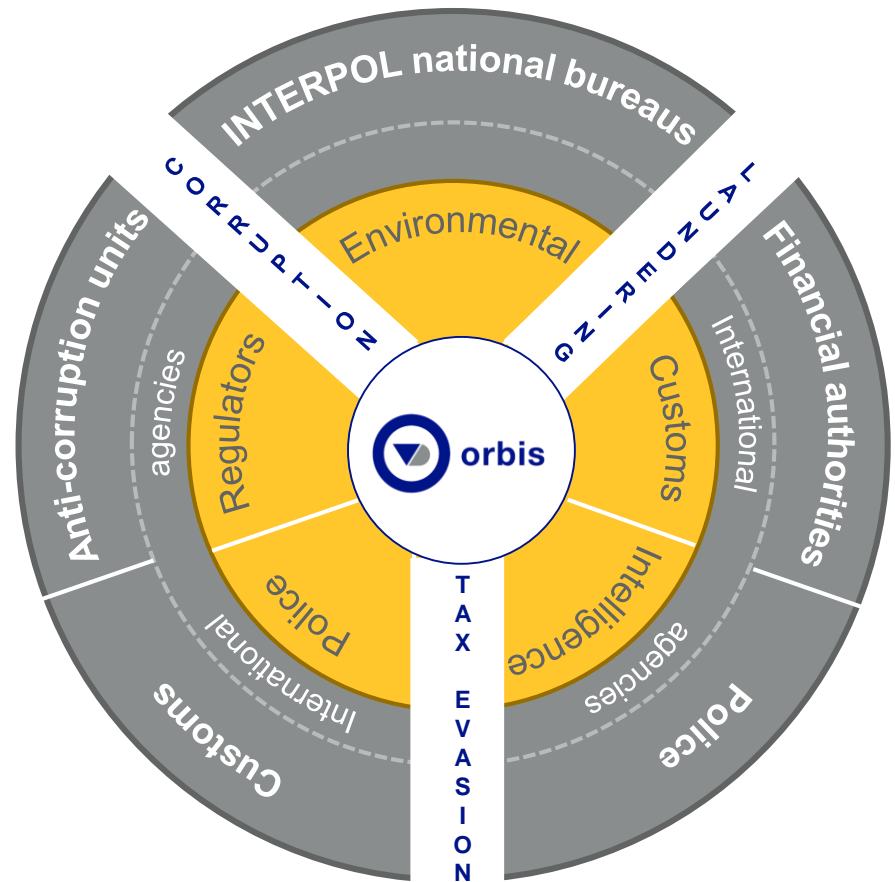


# Output 3: Example gradual corporate formation



The world's most powerful comparable data resource on private companies – and it covers individuals too

- 1 Brings clarity to extensive ownership structures and helps uncover (un)related financial and trade transactions
- 2 Facilitates a single entity view across national government departments
- 3 Enhances multi-agency cooperation and global data sharing



# Takeaways

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- Big data and advanced analytics play an important role.
- Cutting edge technology and sophisticated algorithms produce powerful, efficient neural networks, that reveal income from fraudulent and illicit activities.
- Investment into global company data and a 21st century IT infrastructure will reduce the considerable financial losses to revenue and customs administrations.

This should be an informed investment decision.





**Q&A**



**Thank you**



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