





FINANCIAL CRIME INVESTIGATION: METHODOLOGIES AND TECHNIQUES

Dr. Agus Joko Pramono
Vice Chairman, State Audit Board, Republic of Indonesia

9th International Conference on Governance and Strategic Management - ESG Standards and Securing Strategic Industries

Financial Crime Investigation: Methodologies and Techniques

Dr. Agus Joko Pramono, M.Acc., Ak., CA., CSFA., CPA., CFrA., QGIA., CGCAE. - Vice Chairperson of SAI Indonesia

Burgas Free University, 9th June 2023



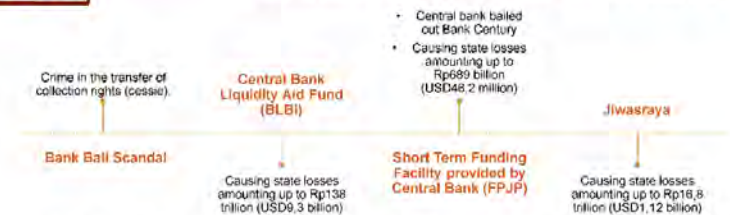
Financial Crime Investigation: Methodologies and Techniques

Agenda



6th International Conference on ICGSM
 “ESG Standards and Securing Strategic Industries”

01 Financial Crime and Mitigating Strategy in The Digital Era



In terms of the value of state losses and the pervasiveness of the financial crimes towards other institutions, the financial crimes are small in quantity but massive in quality.

- Bank Bali scandal only involved Bank Bali.
- BLBI involved recipient banks and The Indonesian Bank Restructuring Agency (BPPN).

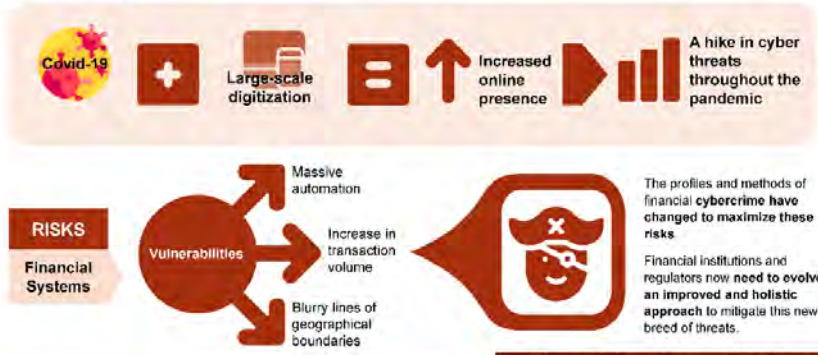
- Central bank bailed out Bank Century
- Causing state losses amounting up to Rp689 billion (USD48.2 million)
- FPJP involved Central Bank (Bank Indonesia), Bank Century, and The Financial System Stability Committee (KKSK).
- Jwasraya involved Asabri and Financial Service Authority (OJK).

Current fraud or financial crime through the intensive use of information technology:

Cryptocurrency

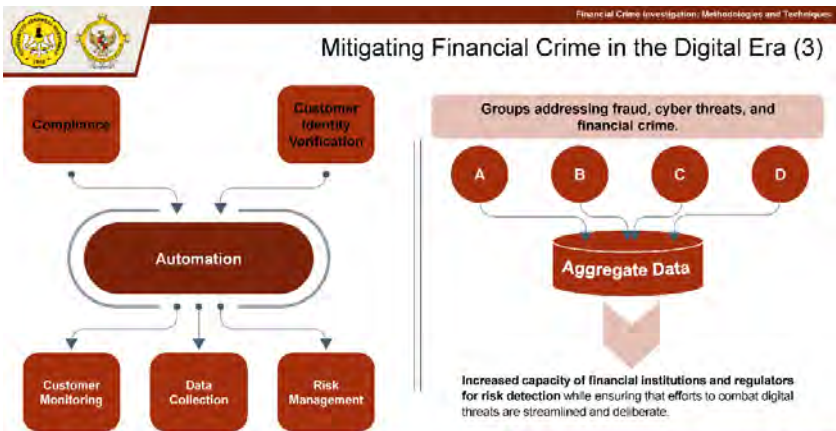
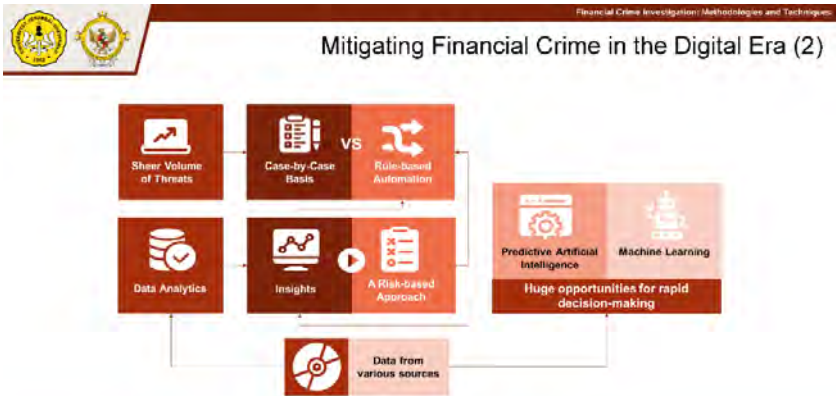
The victims of current fraud or financial crime are not only companies or business organizations, but also individuals who are not tech-savvy.

Financial Crime in the Digital Era

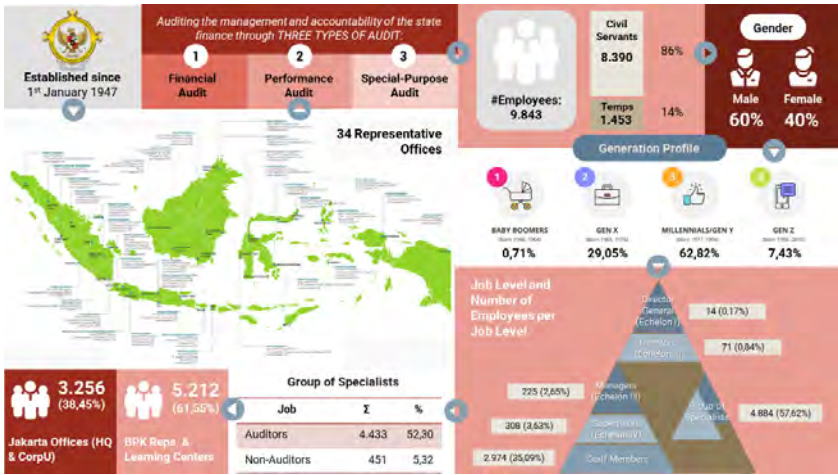


Mitigating Financial Crime in the Digital Era (1)





BPK's Role and Initiatives in Combating Corruption



Financial Crime Investigation: Methodologies and Techniques

BPK's Role in Combating Corruption



Financial Crime Investigation: Methodologies and Techniques

03 Investigation Methodologies and Techniques

6th International Conference on ICGSM “ESG Standards and Securing Strategic Industries”

Financial Crime Investigation: Methodologies and Techniques

BPK: State-losses in Jiwasraya Case Reach Rp16.9 Trillion

Jiwasraya and Asabri cases: Milestone in the fight against corporate graft

Malicious Intent in the Jiwasraya Scandal

3 Facts About Jiwasraya's Scandal

Mega Corruption Cases in the Indonesian Financial Industry in the Last Decade

BPK Will Need 2 Months to Investigate the Asabri Case

Jiwasraya
together for life

ASABRI
Sahabat Angkasa

TEMPO.CO Jakarta — The Supreme Audit Agency (BPK) announced the temporary financial state losses based on the audit on the alleged state-insurance Jiwasraya corruption case, which amounts to Rp16.9 trillion.

TEMPO.CO Jakarta — The Supreme Audit Agency (BPK) plans to conduct a deeper investigation on the Rp16.9 trillion losses reported by state-owned insurance giant Jiwasraya (the former Pertiwi Insurance Share). The investigation is expected to take around two months time.

Burgas Free University, 6th June 2022 Page 15 6th International Conference on Governance and Strategic Management ESG Standards and Securing Strategic Industries

Financial Crime Investigation: Methodologies and Techniques

State Losses

Jiwasraya
together for life

ASABRI
Sahabat Angkasa

USD1,12 billion

Stock Investment: **USD306,6 million**
Mutual Fund Investment: **USD806,6 million**

USD1,52 billion

Stock Investment: **USD715,8 million**
Mutual Fund Investment: **USD806,8 million**

Subtracted by USD2,6 million from stock and mutual fund liquidation

Burgas Free University, 6th June 2022 Page 15 6th International Conference on Governance and Strategic Management ESG Standards and Securing Strategic Industries

Financial Crime Investigation: Methodologies and Techniques

Jiwasraya and Asabri

Jiwasraya and Asabri are companies engaged in insurance and social security whose shares are 100% owned by the Government of the Republic of Indonesia (State-Owned Enterprises).

Jiwasraya engages in the life insurance business for public.

Asabri engages in the insurance and social security business for members of the national army and police.

Jiwasraya - Financial Asset

Year	2017	2018	2019	2020	2021	2022	2023	2024
Mutual Fund	872	988	940	893	1,122	1,015	1,017	1,017
Trading Securities	101	101	101	101	101	101	101	101
Other	138	138	138	138	138	138	138	138
Total Investment	1,111	1,227	1,179	1,132	1,361	1,254	1,256	1,256

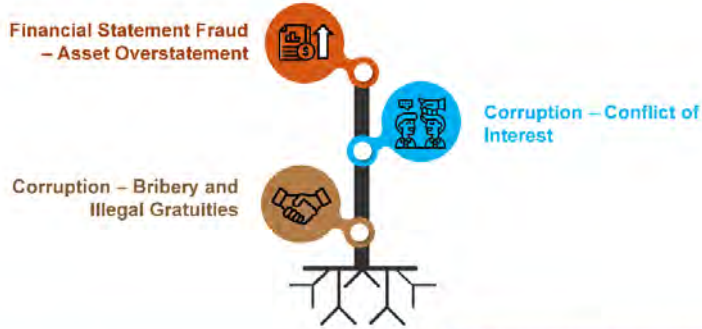
Asabri - Financial Asset

Year	2017	2018	2019	2020	2021	2022	2023	2024
Total Investment	500	700	800	1,000	1,500	1,200	1,200	1,200
Other	100	100	100	100	100	100	100	100
Trading Securities	100	100	100	100	100	100	100	100
Mutual Fund	300	500	600	800	1,300	1,000	1,000	1,000

Burgas Free University, 6th June 2022 Page 17 6th International Conference on Governance and Strategic Management ESG Standards and Securing Strategic Industries



Audit Findings



Fraud Scheme



Audit Challenges

Forms and Types of Data Being Analyzed

- Structured Databases – public company profile, securities transaction, financial transaction, and securities company transaction
- Unstructured Databases – related parties notes, e-mail, and conversation data on cell phones, etc.

Type and Number of Transactions Being Audited

- Stock and mutual fund transactions.
- Financial transaction.
- Very large stock transactions reaching 500 million transaction records.

The Parties Involved

- 19 investment manager companies and more than 50 individuals
- Top management
- Political exposed person
- Former military general who has a strong influence in the military world.
- The capital market fraudsters have a strong influence on the capital market.

Stakeholders in Capital Market
Many stakeholders in the capital market

Long Audit Scope
10 years audit scope from 2008 to 2018.

Financial Crime Investigation: Methodologies and Techniques

Audit Techniques

DIGITAL FORENSIC
 Computer forensic, mobile forensic, e-mail forensic, open-source intelligence

BIG DATA ANALYTICS
 Stock transaction database, investor database, public company profile database

CONFIRMATION

DOCUMENT ANALYSIS

- Investment Submission
- Investment Analysis
- Investment Approval

INQUIRY
 More than 50 related parties (e.g., top management, officers, investors, authorities, etc.)

Surgek Free University, 8th June 2022 Page 21 6th International Conference on Governance and Strategic Management ESG Standards and Securing Strategic Industries

Financial Crime Investigation: Methodologies and Techniques

Big Data Analytics

Investor Database

Public Company Profile Database

Stock Transaction Database

Financial Transaction Database

Computer Server for Processing

Power BI **MySQL** **X**

- Beneficial Owner Analysis
- Fund Flow Analysis
- Stock Price Manipulation Analysis
- Buyer Initiator Up Analysis

Surgek Free University, 8th June 2022 Page 22 6th International Conference on Governance and Strategic Management ESG Standards and Securing Strategic Industries

Financial Crime Investigation: Methodologies and Techniques

Beneficial Owner or Nominee Analysis – Power BI

- Purpose:** Determining the actual owner of several companies and identify the nominees used by the beneficial owner in transactions in the capital market. This is useful in identifying manipulation of stock transactions and price-fixing efforts.
- Method:** Combining the public company profile and investor database and visualized using Power BI.
- Additional Procedure:** Inquiry or confirmation method to clarify.

Surgek Free University, 8th June 2022 Page 23 6th International Conference on Governance and Strategic Management ESG Standards and Securing Strategic Industries



Fund Flow Analysis – Power BI



- ❑ **Purpose:** Tracing money or assets originating from criminal acts to identify the perpetrators of the crime.
- ❑ **Method:** Combining investor, public company profile, and fund database, and data from Indonesia Central Securities Depository (ICSD) and visualized using Power BI
- ❑ **Additional Procedure:** Inquiry or confirmation method to clarify.

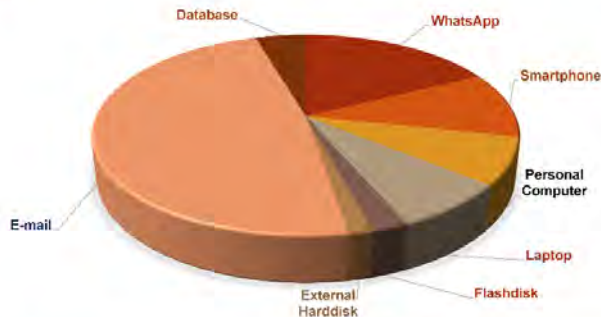
Stock Price Manipulation – Buyer Initiator Up

Date	Nominee/ Investor	Buyer Initiator Up Frequency	Stock	Value
27/07/16	DMM Corp.	7 times	102.700	142.499.000
27/07/16	TIN Corp.	5 times	442.500	600.501.500
27/07/16	DAI Corp.	5 times	593.600	815.091.000
The Amount of Nominee Buyer Initiator Up		17 times	1.139.000	1.558.091.000
The Amount of Buyer Initiator Up in Regular Market		130 times	2.637.800	3.583.387.500
Nominee Buyer Initiator Up Percentage		11,50%	43,15%	43,36%

Date	Nominee/ Investor	Buyer Initiator Up Frequency	Stock	Value
28/07/16	DIP Corp.	10 times	821.100	1.228.474.000
28/07/16	IHH	13 times	63.500	84.468.500
28/07/16	DMM Corp.	10 times	1.330.700	2.964.861.000
28/07/16	DAI Corp.	12 times	777.000	1.154.196.500
28/07/16	DUM Corp.	7 times	66.000	99.000.000
The Amount of Nominee Buyer Initiator Up		47 times	3.058.300	4.240.987.000
The Amount of Buyer Initiator Up in Regular Market		272 times	5.928.900	8.732.712.500
Nominee Buyer Initiator Up Percentage		17,29%	50,01%	50,03%

1. The capital market fraudsters were suspected of conducting purchase transactions that increase XYZ's stock price on 27th and 28th July 2016 after the purchase of XYZ stocks by Jwasraya.
2. Jwasraya and the capital market fraudsters affiliates were suspected of collaborating in influencing the market price of XYZ stocks from Rp1.280,00 per share on 26th July 2016 to Rp1.415,00 per share on 27th July 2016 experiencing an increase of 10.5%. On 28th July 2016, XYZ's stock price increased by 8.13% from the price on 27th July 2016.
3. On 27th and 28th July 2016, the capital market fraudsters and their affiliates dominated XYZ stock trading by 42.77% and 35.30% respectively that day.

Types of Digital Evidence



6th International Conference on ICGSM
 “ESG Standards and Securing Strategic Industries”

Financial Crime Investigation: Methodologies and Techniques

Digital Forensic Steps

Fraud is hidden

- All processes of stock/mutual fund transactions from purchase to execution of transactions **has been digitized**
- All documents for submission, analysis, and approval of stock/mutual fund investments are **made formally**.
- Conspiracy arrangements or manipulation of stock transactions are carried out through **hidden communication tools**.

Digital forensics aimed at **obtaining data or facts** regarding the conspiracy in the manipulation of transactions.

- 01 Planning**
 - Identify the goals and evidence needs.
 - Identify electronic evidence availability through the understanding of business processes.
 - Obtain a search warrant.
- 02 Collection**
 - Prepare administrative and equipment.
 - Collect the digital evidence.
 - Acquire the data.
- 03 Analysis**
 - Hashing, keyword search, metadata analysis, etc.
- 04 Reporting**
 - Assess evidence and case.
 - Prepare the final report.

Burgat Free University, 9th June 2022 Page 27 6th International Conference on Governance and Strategic Management ESG Standards and Securing Strategic Industries

Financial Crime Investigation: Methodologies and Techniques

Digital Forensic Tools

Computer Forensic **Mobile Forensic** **e-mail Forensic** **Open-Source Intelligence**

Burgat Free University, 9th June 2022 Page 28 6th International Conference on Governance and Strategic Management ESG Standards and Securing Strategic Industries

Financial Crime Investigation: Methodologies and Techniques

Lessons Learned for Government and The Financial Services Authority

- NOMINEE**
The Financial Services Authority should formulate and establish regulations that prohibit the use of nominee accounts.
- SOLE OWNERSHIP OF MUTUAL FUND**
The Financial Services Authority need to formulate regulations that stipulate restrictions on investment managers on the management of mutual fund whose participation units are majority owned by one particular investor.
- SINGLE INVESTOR IDENTITY**
The Financial Services Authority need to monitor and encourage the process of correcting invalid Single Investor Identity data.
- INSURANCE POLICY GUARANTEE PROGRAM**
The House of Representatives must immediately establish an insurance policy guarantee program its institutions, and its institutional governance.

Burgat Free University, 9th June 2022 Page 29 6th International Conference on Governance and Strategic Management ESG Standards and Securing Strategic Industries