IN THE NAME OF ALLAH
THE MOST GRACIOUS AND
MOST MERCIFUL
THE RESILIENCE OF ISLAMIC BANKING IN INDONESIA

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FINANCIAL IMPERFECTIONS

Financial imperfections (asymmetric information, market lemons, agency problem, moral hazard, dsb) menyebabkan risk taking behaviour, risiko sistemik (domino effect), dan prosiklisitas intermediasi sistem keuangan.

Risk Taking Behaviour

- Suku Bunga
- Credit Rationing
- "Bad Creditor"
- "Good Creditor"
- Loan Supply
- Loan Demand
- Vol Kredit

Procyclicality

- Upswing ("boom")
- Downswing ("Burst")
- Procyclicality
- Desired economic cycle

Interconnectedness

1985 - 2005

Bank A
Bank B
Systemic Risk
Bank C
Bank D
STAGES OF SYSTEMIC RISK

1. Sources of Systemic Risk
   - Shocks

2. Vulnerability (Risk Profile)
   - Dimension of Risks
     - Cross-Sectional Risk
       - Concentration Risk and Contagion Risk
     - Time-Series Risk
       - Procyclicality Risk
   - Type of Risk
     - Market Risk
     - Credit Risk
     - Liquidity Risk
     - Operational Risk

3. Risk Transmission

4. Risk of Financial System
   - Checking resilient:
     - Liquidity
     - Solvency
     - Capital Buffer

5. Impact
   - No: Systemic Risk
   - Potential Impact
     - Temporary
     - Structural

Source: Bank Indonesia (2016)
DEFINITION OF RESILIENCE

(i) the system’s ability to adapt to shocks without relying on government assistance in response to both short-term shocks and long-term changes in economic and financial conditions; and

(ii) the system’s ability to perform its essential economic functions to serve the real economy, thereby contributing to the entire economy’s productivity and growth.
“Keeping individual financial institutions sound is not enough. A broader approach is needed to safeguard the financial system.”
The main risks in the banking system, including in Islamic banking, are:
1. Credit (credit cycle (Allen and Saunders, 2002) and liquidity risks.
2. A mismatch of balance sheets (Borio, 2010)
3. Funding constraints (Borio, 2004)

To manage risks in the banking system, *credit risk and liquidity risk* should be linked with *the rate of growth of a bank’s aggregate balance sheets* by which *remains surplus (high liquidity borrowers and short-term debt)* (Adrian and Hyun, 2003; Cecchetti et. al, 2010; Tirole, 2011; Drehmann and Nikolaou, 2013).
Farooq and Zaheer (2015), and Abedifar et al. (2013) (Aysan et al., 2015) (Beck et al., 2013), (Ferhi and Chkoundali, 2015), Islamic banking is more resilient due to:

1. being better \textit{capitalized},
2. having lower \textit{loan loss provisioning},
3. having fewer \textit{NPLs},
4. having less \textit{volatile asset returns},
5. having depositor \textit{discipline}
6. having a higher \textit{intermediation ratio}
7. having higher \textit{average efficiency}
8. being less exposed to \textit{liquidity risk} due to being less sensitive to changes in deposits (Zaheer and Farooq, 2014; Akhtar et al., 2011),
9. the risks exposed in Islamic banking not being related to \textit{efficiency} (Ferhi and Chkoundali, 2015).
CONCEPT OF RESILIENCE

Maintaining the level of resilience of Islamic banking. The level of resilience reflects the condition where Islamic banking is able to deal with shocks and stresses, while continuing to function well in terms of its financial services (sharing benefits with its environment).

Source: Kusuma (2016)
CONCEPT OF RESILIENCE

High Return

Tolerable Limits of Shocks (Sustainable)

Turning Point (Outbreak of Crisis)

Materialized Shocks

Deleveting Phase

Negative Gap Return

Strong Risk Management and Oversight

Prudent Risk Management

Strong Risk Management and Oversight

Prudent Risk Management

Weak Risk Management

Vulnerable Banking System:
1. High rate of inflation
2. Fragile nominal exchange rate

Vulnerable Banking System:
1. Low rate of inflation
2. Stable nominal exchange rate

Source: Kusuma (2016)
## Numerical Results for Resilience

<table>
<thead>
<tr>
<th>Tolerable Shocks Limits</th>
<th>Optimum Resilience Level</th>
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<tbody>
<tr>
<td>-1.25 &lt; MVI &lt; 1</td>
<td>-0.272 &lt; IBRI &lt; 1.268</td>
</tr>
<tr>
<td>Nominal Exchange Rate (NER)</td>
<td>Pressure Index</td>
</tr>
<tr>
<td>8895 &lt; NER &lt; 9224</td>
<td>-0.417 &lt; PI &lt; 1.388</td>
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<tr>
<td>Rate of Inflation (INF)</td>
<td>Intermediation Index</td>
</tr>
<tr>
<td>3.55 % &lt; INF &lt; 6.39%</td>
<td>2.413 &lt; II &lt; 1.845</td>
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<td>Efficiency Index</td>
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<td>-0.636 &lt; EI &lt; 1.161</td>
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<td></td>
<td>NPF (%)</td>
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<td>2.86 &lt; NPF &lt; 3.94</td>
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<td></td>
<td>ROA (%)</td>
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<td>1.69 &lt; ROA &lt; 2.05</td>
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<td>CAR (%)</td>
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<td>14.35 &lt; CAR &lt; 19.33</td>
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<td>LA (Ratio)</td>
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<td>0.21 &lt; LA &lt; 0.26</td>
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<td>DRR (%)</td>
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<td>9.28 &lt; DRR &lt; 10.26</td>
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<td>Time Deposit (TD) (%)</td>
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<td>6.42 &lt; TD &lt; 7.19</td>
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<td>Financing Margin (FM)</td>
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<td>16.04 &lt; FM &lt; 17.11</td>
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<td>GFDR (Gap)</td>
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<td>-3.73 &lt; FDR &lt; 2.30</td>
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<td>FDR (%)</td>
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<td>91.36 &lt; FDR &lt; 97.21</td>
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<td>FGDP (Ratio)</td>
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<td>0.12 &lt; FGDP &lt; 0.16</td>
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<td>GGDP (Gap)</td>
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<td>-391.01 &lt; GGDP &lt; -546.22</td>
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<td>NPM (%)</td>
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<td>1.27 &lt; NPM &lt; 1.85</td>
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<td>CIR (%)</td>
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<td>76.69 &lt; CIR &lt; 79.24</td>
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<td>CIR (Ratio)</td>
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<td>0.58 &lt; CIR &lt; 0.63</td>
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<td>OHSCP (Ratio)</td>
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<td>0.05 &lt; OHSCP &lt; 0.06</td>
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Source: Kusuma (2016)
CONCLUSION

1. In the midst of Vulnerability, Uncertainty, Complexity, and Ambiguity (VUCA) World, policy makers should strengthen the resilience of financial institution (Islamic banking) by keeping the soundness of individual institutions and its environment.

2. Discovering the level of resilience is important to have ability in absorbing shocks and remain providing financial services

3. The level of resilience is represented by optimum level (interval) relating to financial ratios of individual institutions and level of macroeconomic indicators.
THANK YOU FOR YOUR PRECIOUS TIME
MAY ALLAH BLESS US WITH KNOWLEDGE AND WISDOM

WASSALAM