Review of E-Money Contribution for a Better Quality of Financial System Stability Measurements in Indonesia

Action Area C. Integrated statistics for integrated analysis (SC4)

Integrated analysis for the 2030 Agenda

Presenter:
Sri Indriyani Siregar
STIS Polytechnic of Statistics, Indonesia
2020 Asia-Pacific Statistics Week

Leaving no one and nowhere behind

ISSK has not involved the dimension of the global economy

Equal-weight AFSI has not involved payment through e-money

AFSI Construction

PROBLEM

RESEARCH OBJECTIVES

To measure the financial system stability through UCM-AFSI & to know its development
To know the contribution of e-money in financial system stability

AFSI CONSTRUCTION

Developing a theoretical framework & selecting variables

E-money transaction ratio

Normalization of data

Min-max method

Weighting for indicators and sub-index

Unobserved Components Model approach

Aggregation and index presentation

Comparing AFSI with and without e-money

Graph: E-money transaction volume in Indonesia

Legend:
- E-money transaction ratio
- Min-max method
- Unobserved Components Model approach

#apstatsweek2020
Comparison of equal AFSI and UCM AFSI Indonesia

UCM-AFSI is better than EQUAL-AFSI
Comparison of AFSI with and without EMTR

The rapid increase in e-money transaction should not be ignored in measuring financial system stability in Indonesia.

Comparison of AFSI compatibility tests

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of observations (n)</td>
<td>40</td>
<td>12</td>
<td>28</td>
</tr>
<tr>
<td>Test statistic values (K)</td>
<td>58.20</td>
<td>12.75</td>
<td>47.30</td>
</tr>
<tr>
<td>Table values</td>
<td>55.76</td>
<td>21.03</td>
<td>41.34</td>
</tr>
<tr>
<td>Decisions</td>
<td>Reject H0</td>
<td>Do Not Reject H0</td>
<td>Reject H0</td>
</tr>
<tr>
<td>Conclusions</td>
<td>Not Compatible</td>
<td>Compatible</td>
<td>Not Compatible</td>
</tr>
</tbody>
</table>
AFSI can be used as an alternative to measuring Indonesia's financial stability.

UCM is better to be used as a weight in the construction of AFSI.

The most influential indicator is market capitalization/GDP & the most influential dimension is the World Economic Climate Index.

The EMTR indicator contributes positively to financial stability and needs to be added in the construction of AFSI.

In monitoring or analyzing financial stability, e-money indicators should be included from now onwards.

To reduce the pressure on the global economy, Indonesia should be improving the quality of domestic goods, human resources, etc.

For further research, we can make AFSI by using different methods of normalization, weighting, aggregation & forecasting AFSI for the next period.