Robust Principal Components of Allocation Fund Weights

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Allocation Fund

- weighted among others by
  - three variates:
    - GDP
    - HDI
    - IKK
HDI

• Measuring standard of living dimension
  – Gross National Income
  – Indonesia uses:
    • Adjusted per capita expenditure

• Contributors of HDI are used
Robust Principal Components

• Robust data set
  – Separate nation capital
  – Separate 24 richest regions
  – Separate 23 most developed regions
  – Separate 34 most expensive regions
  – Remaining regions are subject to outlier detection and exclusion

• Robust Method
  – Iterative projection pursuit
Results

• Examine 410 remaining regions
  • 31 outliers
  • Principal components:
    • Principal Component 1 of 379 regions explains 95.73589 per cent of variance is dominated by IKK.
    • Principal component 2 of 379 regions explains 4.264112 per cent of variance is dominated by life expectancy.
Results

• Examine 350 regions in the middle
  • 38 Outliers
  • Principal components :
    • Principal Component 1 of 313 regions explains 93.82192 per cent of variance is dominated by IKK.
    • Principal component 2 of 313 regions explains 6.178085 per cent of variance is dominated by life expectancy.
Results

• Examine 150 regions in the middle
  • 18 Outliers
  • Principal components :
    • Principal Component 1 of 133 regions explains 95.29271 per cent of variance is dominated by IKK.
    • Principal component 2 of 133 regions explains 4.707291 per cent of variance is dominated by life expectancy.