Table 4. Summary of Statistical Models Used in the Generation of Seasonally Adjusted CPI

(2012=100)

January 2012 – August 2020

| **Series Name/**  **Geographic Area Covered** | | **Statistical Models/Options** | | **Summary Measures** |
| --- | --- | --- | --- | --- |
| All Items – PHILS | | Multiplicative  Model: (2,1,2)(0,1,1)  With transformation - none  F-value: 3.399  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.84  Check: M7, M8, M9, M10, M11 |
| All Items – AONCR | | Additive  Model: (0,1,1)(0,1,1)  With transformation - none  F-value: 3.627  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.83  Check: M4, M7, M8, M9, M10, M11 |
| Food and Non-alcoholic Beverages – PHILS | | Multiplicative  Model: (0,1,1)(0,1,1)  With transformation - none  F-value: 17.312  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.43  Check: M10, M11 |
| Food and Non-alcoholic Beverages – NCR | | Multiplicative  Model: (2,1,2)(0,1,1)  With transformation - none  F-value: 13.112  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.53  Check: M8, M10, M11 |
| Food and Non-alcoholic Beverages – AONCR | | Additive  Model: (0,1,1)(0,1,1)  With transformation - none  F-value: 14.204  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.48 |
| Alcoholic Beverages and Tobacco – PHILS | | Additive  Model: (2,1,0)(0,1,1)  With transformation - none  F-value: 13.266  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.45  Check: M4 |
| Alcoholic Beverages and Tobacco – NCR | | Multiplicative  Model: (2,1,0)(0,1,1)  With transformation - none  F-value: 14.461  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.45  Check: M4 |
| Alcoholic Beverages and Tobacco – AONCR | | Additive  Model: (2,1,0)(0,1,1)  With transformation - none  F-value: 11.818  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.44  Check: M4 |
| Non-Food – PHILS | | Additive  Model: (0,1,2)(0,1,1)  With transformation - none  F-Value: 2.246  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.72  Check: M7, M8, M10, M11 |
| Non-Food – NCR | | Additive  Model: (2,1,2)(0,1,1)  With transformation - none  F-Value: 2.979  MAVS: 3x9 MA  MAVTC: 9-term MA | | Accepted at level 0.60  Check: M6, M7 |
| Non-Food – AONCR | | Additive  Model: (0,1,2)(0,1,1)  With transformation - none  F-Value: 1.648  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.82  Check: M7, M8, M10, M11 |
|  | | | | |
| Clothing and Footwear - PHILS | | Multiplicative  Model: (2,1,0)(0,1,1)  With transformation - none  F-value: 3.982  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.83  Check: M7, M8, M9, M10, M11 | |
| Clothing and Footwear - NCR | | Additive  Model: None  With transformation - none  F-value: 2.806  MAVS: 3X9 MA  MAVTC: 9-term MA | | Accepted at level 0.67  Check: M7, M8, M9, M10, M11 | |
| Housing, Water, Electricity, Gas and Other Fuels - PHILS | | Additive  Model: (0,1,1)(0,1,1)  With transformation - none  F-value: 6.635  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.52  Check: M10, M11 | |
| Housing, Water, Electricity, Gas and Other Fuels - AONCR | | Additive  Model: (0,1,2)(0,1,1)  With transformation - none  F-value: 5.273  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.71  Check: M4, M8, M10, M11 | |
| Furnishing, Household Equipment and Routine Maintenance of the House -PHILS | | Additive  Model: (2,1,0)(0,1,1)  With transformation - none  F-value: 6.614  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.63  Check: M7, M8, M9, M10, M11 | |
| Furnishing, Household Equipment and Routine Maintenance of the House -NCR | | Additive  Model: (0,1,1)(0,1,1)  With transformation – none  F-value: 4.118  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.92  Check: M7, M8, M9, M10, M11 | |
| Furnishing, Household Equipment and Routine Maintenance of the House -AONCR | | Additive  Model: (2,1,2)(0,1,1)  With transformation - none  F-value: 3.780  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.75  Check: M7, M8, M9, M10, M11 | |
| Health – PHILS | | Multiplicative  Model: (2,1,0)(0,1,1)  With transformation – none  F-value: 7.067  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.63  Check: M8, M9, M10, M11 | |
| Health –NCR | | Multiplicative  Model: (0,1,2)(0,1,1)  With transformation - none  F-value: 11.401  MAVS: 3X3 MA  MAVTC: 9-term MA | | Accepted at level 0.70  Check: M4, M8, M9, M10, M11 | |
| Health – AONCR | | Additive  Model: (2,1,2)(0,1,1)  With transformation - none  F-value: 3.370  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.69  Check: M7, M8, M9, M10, M11 | |
| Transport – AONCR | | Multiplicative  Model: (0,1,2)(0,1,1)  With transformation - none  F-value: 1.016  MAVS: 3X5 MA  MAVTC: 13-term MA | | Rejected at level 1.48  Check: M1, M4, M7, M8, M9, M10, M11 | |
| Recreation and Culture - PHILS | | Multiplicative  Model: (0,1,2)(0,1,1)  With transformation – none  F-value: 4.095  MAVS: 3X3 MA  MAVTC: 9-term MA | | Accepted at level 0.86  Check: M7, M8, M9, M10, M11 | |
| Recreation and Culture - NCR | | Additive  Model: (0,1,2)(0,1,1)  With transformation – none  F-value: 6.428  MAVS: 3X3 MA  MAVTC: 9-term MA | | Accepted at level 0.82  Check: M7, M8, M9, M10, M11 | |
| Recreation and Culture - AONCR | | Additive  Model: (0,1,1)(0,1,1)  With transformation – none  F-value: 3.821  MAVS: 3X3 MA  MAVTC: 9-term MA | | Accepted at level 0.82  Check: M7, M8, M9, M10, M11 | |
| Education – PHILS | | Additive  Model: (2,1,2)(0,1,1)  With transformation - none  F-value: 13.328  MAVS: 3X3 MA  MAVTC: 9-term MA | | Accepted at level 0.52  Check: M4, M10, M11 | |
| Education –NCR | | Multiplicative  Model: None  With transformation - none  F-value: 58.127  MAVS: 3X3 MA  MAVTC: 9-term MA | | Accepted at level 0.30  Check: M4 | |
| Education - AONCR | | Additive  Model: (0,1,1)(0,1,1)  With transformation - none  F-value: 8.162  MAVS: 3X3 MA  MAVTC: 9-term MA | | Accepted at level 0.67  Check: M4, M6, M7, M8, M10, M11 | |
| Restaurant and Miscellaneous Goods and Services - PHILS | | Additive  Model: (2,1,2)(0,1,1)  With transformation - none  F-value: 2.022  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.84  Check: M7, M8, M9, M10, M11 | |
| Restaurant and Miscellaneous  Goods and Services – NCR | | Multiplicative  Model: (2,1,2)(0,1,1)  With transformation - none  F-value: 3.914  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.67  Check: M4, M7, M8, M10, M11 | |
| Restaurant and Miscellaneous  Goods and Services – AONCR | | Additive  Model: (2,1,2)(0,1,1)  With transformation - none  F-value: 1.014  MAVS: 3X5 MA  MAVTC: 9-term MA | | Rejected at level 1.17  Check: M7, M8, M9, M10, M11 | |

Source: Philippine Statistics Authority