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

(2012=100)

January 2012 – June 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: 3.988  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.81  Check: M7, M8, M9, M10, M11 |
| All Items – AONCR | | Additive  Model: (0,1,1)(0,1,1)  With transformation - none  F-value: 4.380  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.76  Check: M7, M8, M9, M10, M11 |
| Food and Non-alcoholic Beverages – PHILS | | Multiplicative  Model: (2,1,0)(0,1,1)  With transformation - none  F-value: 20.292  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.39 |
| Food and Non-alcoholic Beverages – NCR | | Multiplicative  Model: (2,1,0)(0,1,1)  With transformation - none  F-value: 14.786  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.50  Check: M8, M10, M11 |
| Food and Non-alcoholic Beverages – AONCR | | Additive  Model: (2,1,2)(0,1,1)  With transformation - none  F-value: 17.264  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.43 |
| Alcoholic Beverages and Tobacco – PHILS | | Additive  Model: (2,1,0)(0,1,1)  With transformation - none  F-value: 12.803  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.49  Check: M4 |
| Alcoholic Beverages and Tobacco – NCR | | Multiplicative  Model: (2,1,0)(0,1,1)  With transformation - none  F-value: 14.324  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.44  Check: M4 |
| Alcoholic Beverages and Tobacco – AONCR | | Additive  Model: (2,1,0)(0,1,1)  With transformation - none  F-value: 11.215  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.47  Check: M4, M10, M11 |
| Non-Food – PHILS | | Additive  Model: (0,1,2)(0,1,1)  With transformation - none  F-Value: 2.295  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.70  Check: M7, M8, M10, M11 |
| Non-Food – NCR | | Additive  Model: (0,1,1)(0,1,1)  With transformation - none  F-Value: 2.782  MAVS: 3x9 MA  MAVTC: 9-term MA | | Accepted at level 0.58  Check: M7 |
| Non-Food – AONCR | | Additive  Model: (0,1,1)(0,1,1)  With transformation - none  F-Value: 1.518  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.88  Check: M4, M7, M8, M10, M11 |
|  | | | | |
| Clothing and Footwear - PHILS | | Multiplicative  Model: (2,1,2)(0,1,1)  With transformation - none  F-value: 3.429  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.92  Check: M7, M8, M9, M10, M11 | |
| Clothing and Footwear - NCR | | Additive  Model: None  With transformation - none  F-value: 2.807  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: (2,1,2)(0,1,1)  With transformation – none  F-value: 6.720  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.53  Check: M10, M11 | |
| Housing, Water, Electricity, Gas and Other Fuels - AONCR | | Additive  Model: (0,1,2)(0,1,1)  With transformation – none  F-value: 5.567  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.72  Check: M4, M8, M10, M11 | |
| Furnishing, Household Equipment and Routine Maintenance of the House -PHILS | | Additive  Model: (0,2,2)(0,1,1)  With transformation – none  F-value: 6.420  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.66  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: 4.064  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: (0,2,2)(0,1,1)  With transformation - none  F-value: 3.633  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.77  Check: M7, M8, M9, M10, M11 | |
| Health – PHILS | | Multiplicative  Model: (2,1,0)(0,1,1)  With transformation – none  F-value: 6.612  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.63  Check: M8, M9, M10, M11 | |
| Health –NCR | | Multiplicative  Model: (2,1,0)(0,1,1)  With transformation - none  F-value: 10.654  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.61  Check: M4, M8, M9, M10, M11 | |
| Health – AONCR | | Additive  Model: (2,1,2)(0,1,1)  With transformation - none  F-value: 3.153  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.70  Check: M7, M8, M9, M10, M11 | |
| Transport – AONCR | | Multiplicative  Model: (0,1,1)(0,1,1)  With transformation - none  F-value: 0.904  MAVS: 3X5 MA  MAVTC: 13-term MA | | Rejected at level 1.52  Check: M1, M4, M7, M8, M9, M10, M11 | |
| Recreation and Culture - PHILS | | Multiplicative  Model: (2,1,0)(0,1,1)  With transformation – none  F-value: 4.534  MAVS: 3X3 MA  MAVTC: 9-term MA | | Accepted at level 0.89  Check: M7, M8, M9, M10, M11 | |
| Recreation and Culture - NCR | | Additive  Model: (0,1,2)(0,1,1)  With transformation – none  F-value: 6.630  MAVS: 3X3 MA  MAVTC: 9-term MA | | Accepted at level 0.82  Check: M7, M8, M9, M10, M11 | |
| Recreation and Culture - AONCR | | Additive  Model: (2,1,0)(0,1,1)  With transformation – none  F-value: 4.380  MAVS: 3X3 MA  MAVTC: 9-term MA | | Accepted at level 0.92  Check: M4, M7, M8, M9, M10, M11 | |
| Education – PHILS | | Additive  Model: (2,1,2)(0,1,1)  With transformation - none  F-value: 12.983  MAVS: 3X3 MA  MAVTC: 9-term MA | | Accepted at the level 0.51  Check: M4, M6, M10, M11 | |
| Education –NCR | | Multiplicative  Model: none  With transformation - none  F-value: 52.957  MAVS: 3X3 MA  MAVTC: 9-term MA | | Accepted at the level 0.29  Check: M4 | |
| Restaurant and Miscellaneous Goods and Services - PHILS | | Additive  Model: (2,1,2)(0,1,1)  With transformation - none  F-value: 2.268  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at the level 0.75  Check: M7, M8, M9, M10, M11 | |
| Restaurant and Miscellaneous  Goods and Services – NCR | | Multiplicative  Model: (0,2,2)(0,1,1)  With transformation - none  F-value: 3.711  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at the level 0.68  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: 0.962  MAVS: 3X5 MA  MAVTC: 9-term MA | | Conditionally Rejected  at the level 1.16  Check: M7, M8, M9, M10, M11 | |

Source: Philippine Statistics Authority