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

(2012=100)

January 2012 – December 2020

| **Series Name/**  **Geographic Area Covered** | | **Statistical Models/Options** | | **Summary Measures** |
| --- | --- | --- | --- | --- |
| All Items – PHILS | | Multiplicative  Model: (0,1,2)(0,1,1)  With transformation - none  F-value: 5.114  MAVS: 3x5 MA  MAVTC: 9-term MA | | Rejected at level 1.01  Check: M7, M8, M9, M10, M11 |
| All Items – AONCR | | Additive  Model: (0,1,2)(0,1,1)  With transformation - none  F-value: 2.130  MAVS: 3x5 MA  MAVTC: 9-term MA | | Rejected at level 1.05  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: 8.482  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.60  Check: M8, M9, M10, M11 |
| Food and Non-alcoholic Beverages – NCR | | Multiplicative  Model: (0,1,2)(0,1,1)  With transformation - none  F-value: 8.245  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.74  Check: M4, M8, M9, M10, M11 |
| Food and Non-alcoholic Beverages – AONCR | | Additive  Model: (0,1,1)(0,1,1)  With transformation - none  F-value: 6.638  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.64  Check: M4, M8, M9, M10, M11 |
| Alcoholic Beverages and Tobacco – PHILS | | Additive  Model: (2,1,0)(0,1,1)  With transformation - none  F-value: 11.462  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.47  Check: M8, M10, M11 |
| Alcoholic Beverages and Tobacco – NCR | | Multiplicative  Model: (2,1,0)(0,1,1)  With transformation - none  F-value: 14.127  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.46  Check: M4, M8, M10, M11 |
| Alcoholic Beverages and Tobacco – AONCR | | Additive  Model: (2,1,2)(0,1,1)  With transformation - none  F-value: 10.590  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.49  Check: M4, M8, M10, M11 |
| Non-Food – PHILS | | Additive  Model: (0,1,1)(0,1,1)  With transformation - none  F-Value: 2.128  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.76  Check: M7, M8, M9, M10, M11 |
| Non-Food – NCR | | Additive  Model: (0,1,2)(0,1,1)  With transformation - none  F-Value: 2.911  MAVS: 3x9 MA  MAVTC: 9-term MA | | Accepted at level 0.57  Check: M6, M7 |
| Non-Food – AONCR | | Additive  Model: (0,1,2)(0,1,1)  With transformation - none  F-Value: 1.423  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.98  Check: M7, M8, M9, M10, M11 |
|  | | | | |
| Clothing and Footwear - PHILS | | Multiplicative  Model: (2,1,0)(0,1,1)  With transformation - none  F-value: 4.466  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.79  Check: M7, M8, M9, M10, M11 | |
| Clothing and Footwear - NCR | | Additive  Model: None  With transformation - none  F-value: 2.639  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.80  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: 7.261  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: (2,1,2)(0,1,1)  With transformation - none  F-value: 5.943  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.69  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: 8.062  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: (2,1,2)(0,1,1)  With transformation – none  F-value: 4.842  MAVS: 3X3 MA  MAVTC: 9-term MA | | Rejected at level 1.05  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: 4.646  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.64  Check: M7, M8, M9, M10, M11 | |
| Health – PHILS | | Multiplicative  Model: (2,1,2)(0,1,1)  With transformation – none  F-value: 7.657  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.59  Check: M8, M9, M10, M11 | |
| Health –NCR | | Multiplicative  Model: (0,1,2)(0,1,1)  With transformation - none  F-value: 12.289  MAVS: 3X3 MA  MAVTC: 9-term MA | | Accepted at level 0.67  Check: M4, M8, M9, M10, M11 | |
| Health – AONCR | | Additive  Model: (0,1,1)(0,1,1)  With transformation - none  F-value: 3.539  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.72  Check: M7, M8, M9, M10, M11 | |
| Transport – AONCR | | Multiplicative  Model: (0,1,2)(0,1,1)  With transformation - none  F-value: 1.106  MAVS: 3X5 MA  MAVTC: 13-term MA | | Rejected at level 1.57  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: 4.403  MAVS: 3X3 MA  MAVTC: 9-term MA | | Accepted at level 0.92  Check: M4, M7, M8, M9, M10, M11 | |
| Recreation and Culture - NCR | | Additive  Model: (0,1,1)(0,1,1)  With transformation – none  F-value: 7.491  MAVS: 3X3 MA  MAVTC: 9-term MA | | Accepted at level 0.73  Check: M7, M8, M9, M10, M11 | |
| Recreation and Culture - AONCR | | Additive  Model: (0,1,1)(0,1,1)  With transformation – none  F-value: 3.722  MAVS: 3X3 MA  MAVTC: 9-term MA | | Accepted at level 0.85  Check: M7, M8, M9, M10 | |
| Education – PHILS | | Additive  Model: (2,1,2)(0,1,1)  With transformation - none  F-value: 13.661  MAVS: 3X3 MA  MAVTC: 9-term MA | | Accepted at level 0.56  Check: M4, M10, M11 | |
| Education –NCR | | Multiplicative  Model: None  With transformation - none  F-value: 57.747  MAVS: 3X3 MA  MAVTC: 9-term MA | | Accepted at level 0.32  Check: M4 | |
| Education - AONCR | | Additive  Model: (2,1,2)(0,1,1)  With transformation - none  F-value: 8.289  MAVS: 3X3 MA  MAVTC: 9-term MA | | Accepted at level 0.69  Check: M7, M8, M9, M10, M11 | |
| Restaurant and Miscellaneous Goods and Services - PHILS | | Additive  Model: (2,1,0)(0,1,1)  With transformation - none  F-value: 2.017  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.83  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: 3.555  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.70  Check: M7, M8, M10, M11 | |
| Restaurant and Miscellaneous  Goods and Services – AONCR | | Additive  Model: (0,1,2)(0,1,1)  With transformation - none  F-value: 1.107  MAVS: 3X5 MA  MAVTC: 9-term MA | | Rejected at level 1.11  Check: M7, M8, M9, M10, M11 | |

Source: Philippine Statistics Authority