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

(2018=100)

December 2022 – December 2023

| **Series Name/**  **Geographic Area Covered** | **Statistical Models/Options** | **Summary Measures** |
| --- | --- | --- |
| All Items – PHILS | Additive  None of the models were chosen.  With transformation - none  F-value: 5.637  MAVS: 3x5 MA  MAVTC: 9-term MA | Conditionally accepted at the level 0.80.  Check: M4, M7, M8, M9, M10, and M11 |
| All Items – AONCR | Multiplicative  Model: (2,1,2)(0,1,1)  With transformation - none  F-value: 5.952  MAVS: 3x5 MA  MAVTC: 9-term MA | Accepted at the level 0.72.  Check: M7, M8, M9, M10, and M11 |
| Food and Non-alcoholic Beverages – PHILS | Multiplicative  Model: (2,1,2)(0,1,1)  With transformation - none  F-value: 13.020  MAVS: 3x5 MA  MAVTC: 9-term MA | Accepted at the level 0.60.  Check: M4, M8, M10, and M11 |
| Food and Non-alcoholic Beverages – NCR | Multiplicative  Model: (2,1,2)(0,1,1)  With transformation - none  F-value: 14.918  MAVS: 3x5 MA  MAVTC: 9-term MA | Accepted at the level 0.53.  Check: M4, M8, M10, and M11 |
| Food and Non-alcoholic Beverages – AONCR | Multiplicative  Model: (2,1,2)(0,1,1)  With transformation - none  F-value: 11.721  MAVS: 3x5 MA  MAVTC: 9-term MA | Accepted at the level 0.63.  Check: M4, M8, M9, M10, and M11 |
| Alcoholic Beverages and Tobacco – PHILS | Additive  Model: (0,1,1)(0,1,1)  With transformation - none  F-value: 12.140  MAVS: 3x5 MA  MAVTC: 9-term MA | Accepted at the level 0.53.  Check: M4, M8, M10, and M11 |
| Alcoholic Beverages and Tobacco – NCR | Additive  Model: (0,1,1)(0,1,1)  With transformation - none  F-value: 12.061  MAVS: 3x5 MA  MAVTC: 9-term MA | Accepted at the level 0.59.  Check: M4, M8, M10, and M11 |
| Alcoholic Beverages and Tobacco – AONCR | Additive  Model: (0,1,1)(0,1,1)  With transformation - none  F-value: 11.463  MAVS: 3x5 MA  MAVTC: 9-term MA | Accepted at the level 0.53.  Check: M4, M8, M10, and M11 |
| Non-Food – PHILS | Additive  Model: (0,1,2)(0,1,1)  With transformation - none  F-Value: 2.646  MAVS: 3x5 MA  MAVTC: 9-term MA | Accepted at the level 0.78.  Check: M4, M7, M8, M10, and M11 |
| Non-Food – NCR | Multiplicative  Model: (0,1,1)(0,1,1)  With transformation - none  F-Value: 2.966  MAVS: 3x5 MA  MAVTC: 9-term MA | Accepted at the level 0.77.  Check: M7, M8, M10, and M11 |
| Non-Food – AONCR | Multiplicative  Model: (0,1,2)(0,1,1)  With transformation - none  F-Value: 2.510  MAVS: 3x5 MA  MAVTC: 9-term MA | Conditionally accepted at the level 0.81.  Check: M7, M8, M9, M10, and M11 |
| Clothing and Footwear - PHILS | Additive  Model: (2,1,0)(0,1,1)  With transformation - none  F-value: 5.241  MAVS: 3X5 MA  MAVTC: 9-term MA | Accepted at the level 0.54.  Check: M7, M8, M10, and M11 |
| Clothing and Footwear - NCR | Additive  None of the models were chosen.  With transformation - none  F-value: 3.341  MAVS: 3X5 MA  MAVTC: 9-term MA | Accepted at the level 0.71.  Check: M7, M8, M10, and M11 |
| Clothing and Footwear - AONCR | Additive  Model: (2,1,0)(0,1,1)  With transformation - none  F-value: 4.058  MAVS: 3X3 MA  MAVTC: 9-term MA | Accepted at the level 0.77.  Check: M7, M8, M9, M10, and M11 |
| Housing, Water, Electricity, Gas and Other Fuels - PHILS | Additive  Model: (0,1,2)(0,1,1)  With transformation - none  F-value: 7.946  MAVS: 3X5 MA  MAVTC: 9-term MA | Accepted at the level 0.59.  Check: M8, M10, and M11 |
| Housing, Water, Electricity, Gas and Other Fuels - NCR | Additive  Model: (2,1,2)(0,1,1)  With transformation - none  F-value: 5.862  MAVS: 3X9 MA  MAVTC: 13-term MA | Conditionally accepted at the level 0.81.  Check: M1, M7, and M10 |
| Housing, Water, Electricity, Gas and Other Fuels - AONCR | Multiplicative  Model: (2,1,2)(0,1,1)  With transformation - none  F-value: 7.148  MAVS: 3X5 MA  MAVTC: 9-term MA | Accepted at the level 0.67.  Check: M4, M8, M10, and M11 |
| Furnishings, Household Equipment and Routine Household Maintenance - PHILS | Multiplicative  Model: (0,1,2)(0,1,1)  With transformation - none  F-value: 10.537  MAVS: 3X5 MA  MAVTC: 9-term MA | Accepted at the level 0.51.  Check: M7, M8, M10 and M11 |
| Furnishings, Household Equipment and Routine Household Maintenance – NCR | Multiplicative  Model: (0,1,1)(0,1,1)  With transformation – none  F-value: 9.014  MAVS: 3X5 MA  MAVTC: 9-term MA | Accepted at the level 0.68.  Check: M7, M8, M9, M10, and M11 |
| Furnishings, Household Equipment and Routine Household Maintenance – AONCR | Additive  Model: (0,1,1)(0,1,1)  With transformation - none  F-value: 6.099  MAVS: 3X5 MA  MAVTC: 9-term MA | Accepted at the level 0.56.  Check: M7, M8, M9, M10 and M11 |
| Health – PHILS | Additive  Model: (2,1,2)(0,1,1)  With transformation – none  F-value: 10.844  MAVS: 3X5 MA  MAVTC: 9-term MA | Accepted at the level 0.43.  Check: M8, M10, and M11 |
| Health – NCR | Additive  None of the models were chosen.  With transformation - none  F-value: 11.295  MAVS: 3X5 MA  MAVTC: 9-term MA | Accepted at the level 0.50.  Check: M8, M10, and M11 |
| Health – AONCR | Multiplicative  Model: (2,1,2)(0,1,1)  With transformation - none  F-value: 6.441  MAVS: 3X5 MA  MAVTC: 9-term MA | Accepted at the level 0.54.  Check: M8, M9, M10, and M11 |
| Information and Communication – AONCR | Additive  Model: (2,1,2)(0,1,1)  With transformation - none  F-value: 3.158  MAVS: 3X5 MA  MAVTC: 9-term MA | Accepted at the level 0.68.  Check: M7, M8, M9, M10, and M11 |
| Recreation, Sport and Culture - NCR | Multiplicative  Model: (2,1,0)(0,1,1)  With transformation - none  F-value: 4.089  MAVS: 3X3 MA  MAVTC: 9-term MA | Conditionally accepted at the level 0.95.  Check: M7, M8, M9, M10, and M11 |
| Education Services – PHILS | Additive  Model: (0,1,1)(0,1,1)  With transformation - none  F-value: 19.683  MAVS: 3X3 MA  MAVTC: 9-term MA | Accepted at the level 0.66.  Check: M4, M8, M10, and M11 |
| Education Services –NCR | Additive  Model: (0,1,2)(0,1,1)  With transformation - none  F-value: 15.363  MAVS: 3X3 MA  MAVTC: 9-term MA | Accepted at the level 0.66.  Check: M4, M8, M10, and M11 |
| Education Services - AONCR | Additive  Model: (0,1,1)(0,1,1)  With transformation - none  F-value: 18.709  MAVS: 3X3 MA  MAVTC: 9-term MA | Accepted at the level 0.69.  Check: M4, M6, M8, M9, M10, and M11 |
| Restaurants and Accommodation Services – AONCR | Additive  None of the models were chosen.  With transformation - none  F-value: 5.496  MAVS: 3X5 MA  MAVTC: 9-term MA | Accepted at the level 0.56.  Check: M7, M8, M9, M10, and M11 |
| Personal Care, and Miscellaneous Goods and Services – PHILS | Additive  Model: (0,1,2)(0,1,1)  With transformation - none  F-value: 7.158  MAVS: 3X5 MA  MAVTC: 9-term MA | Accepted at the level 0.70.  Check: M7, M8, M9, M10, and M11 |
| Personal Care, and Miscellaneous Goods and Services – NCR | Additive  Model: (0,1,2)(0,1,1)  With transformation - none  F-value: 15.927  MAVS: 3X5 MA  MAVTC: 9-term MA | Accepted at the level 0.47.  Check: M4, M10, and M11 |

Source: Philippine Statistics Authority