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

(2018=100)

January 2022 – January 2023

| **Series Name/**  **Geographic Area Covered** | | **Statistical Models/Options** | | **Summary Measures** |
| --- | --- | --- | --- | --- |
| All Items – PHILS | | Additive  Model: (0,1,1)(0,1,1)  With transformation - none  F-value: 4.734  MAVS: 3x5 MA  MAVTC: 9-term MA | | Conditionally accepted at the level 0.82.  Check: M4, M7, M8, M9, M10, and M11 |
| All Items – AONCR | | Multiplicative  Model: (2,1,2)(0,1,1)  With transformation - none  F-value: 5.199  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at the level 0.76.  Check: M4, 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: 10.851  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at the level 0.67.  Check: M4, M8, M9, M10, and M11 |
| Food and Non-alcoholic Beverages – NCR | | Multiplicative  Model: (2,1,2)(0,1,1)  With transformation - none  F-value: 13.045  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at the level 0.59.  Check: M4, M7, M10, and M11 |
| Food and Non-alcoholic Beverages – AONCR | | Multiplicative  Model: (2,1,2)(0,1,1)  With transformation - none  F-value: 9.887  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at the level 0.70.  Check: M4, M8, M9, M10, and M11 |
| Alcoholic Beverages and Tobacco – PHILS | | Additive  Model: (2,1,0)(0,1,1)  With transformation - none  F-value: 12.130  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at the level 0.52.  Check: M4, M8, M10, and M11 |
| Alcoholic Beverages and Tobacco – NCR | | Additive  Model: (0,1,1)(0,1,1)  With transformation - none  F-value: 12.582  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at the level 0.55.  Check: M4, M8, M10, and M11 |
| Alcoholic Beverages and Tobacco – AONCR | | Additive  Model: (2,1,0)(0,1,1)  With transformation - none  F-value: 11.582  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at the level 0.50.  Check: M4, M8, and M10 |
| Non-Food – PHILS | | Additive  None of the models were chosen.  With transformation - none  F-Value: 3.535  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at the level 0.71.  Check: M7, M8, M9, M10, and M11 |
| Non-Food – NCR | | Multiplicative  Model: (0,2,2)(0,1,1)  With transformation - none  F-Value: 3.135  MAVS: 3x9 MA  MAVTC: 9-term MA | | Accepted at the level 0.56.  Check: M7 |
| Non-Food – AONCR | | Multiplicative  Model: (2,1,0)(0,1,1)  With transformation - none  F-Value: 3.556  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at the level 0.72.  Check: M7, M8, M9, M10, and M11 |
|  | | | | |
| Clothing and Footwear - PHILS | | Additive  Model: (0,1,2)(0,1,1)  With transformation - none  F-value: 4.085  MAVS: 3X5 MA  MAVTC: 9-term MA | | Conditionally accepted at the level 0.67.  Check: M7, M8, M9, M10, and M11 | |
| Clothing and Footwear - NCR | | Additive  Model: (2,1,0)(0,1,1)  With transformation - none  F-value: 2.187  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at the level 0.75.  Check: M7, M8, M9, M10, and M11 | |
| Clothing and Footwear - AONCR | | Additive  Model: (0,1,2)(0,1,1)  With transformation - none  F-value: 3.542  MAVS: 3X3 MA  MAVTC: 9-term MA | | Conditionally accepted at the level 0.84.  Check: M7, M8, M9, M10, and M11 | |
| Housing, Water, Electricity, Gas and Other Fuels - PHILS | | Additive  Model: (0,2,2)(0,1,1)  With transformation - none  F-value: 7.364  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at the level 0.52.  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: 4.830  MAVS: 3X9 MA  MAVTC: 13-term MA | | Conditionally accepted at the level 0.85.  Check: M1 and M7 | |
| Housing, Water, Electricity, Gas and Other Fuels - AONCR | | Multiplicative  Model: (0,2,2)(0,1,1)  With transformation - none  F-value: 6.479  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at the level 0.69.  Check: M4, M8, M9, M10, and M11 | |
| Furnishings, Household Equipment and Routine Household Maintenance - PHILS | | Multiplicative  Model: (0,1,1)(0,1,1)  With transformation - none  F-value: 9.119  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at the level 0.53.  Check: M7, M8, M9, M10 and M11 | |
| Furnishings, Household Equipment and Routine Household Maintenance – NCR | | Multiplicative  Model: (0,1,1)(0,1,1)  With transformation – none  F-value: 7.496  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at the level 0.58.  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: 4.895  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at the level 0.61.  Check: M7, M8, M9, M10 and M11 | |
| Health – PHILS | | Additive  Model: (2,1,2)(0,1,1)  With transformation – none  F-value: 10.892  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at the level 0.44.  Check: M8, M10, and M11 | |
| Health – NCR | | Additive  Model: (0,1,1)(0,1,1)  With transformation - none  F-value: 11.482  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at the level 0.45.  Check: M8 | |
| Health – AONCR | | Multiplicative  Model: (0,2,2)(0,1,1)  With transformation - none  F-value: 5.880  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at the level 0.53.  Check: M8, M9, M10, and M11 | |
| Information and Communication – AONCR | | Additive  Model: (2,1,2)(0,1,1)  With transformation - none  F-value: 3.961  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at the level 0.66.  Check: M7, M8, M9, M10, and M11 | |
| Recreation, Sport and Culture - NCR | | Multiplicative  Model: (0,1,1)(0,1,1)  With transformation - none  F-value: 4.325  MAVS: 3X3 MA  MAVTC: 9-term MA | | Accepted at the level 0.94.  Check: M7, M8, M9, M10, and M11 | |
| Education Services – PHILS | | Additive  Model: (0,1,2)(0,1,1)  With transformation - none  F-value: 24.388  MAVS: 3X3 MA  MAVTC: 9-term MA | | Accepted at the level 0.52.  Check: M4, M8, M10, and M11 | |
| Education Services –NCR | | Additive  Model: (0,1,2)(0,1,1)  With transformation - none  F-value: 16.189  MAVS: 3X3 MA  MAVTC: 9-term MA | | Accepted at the level 0.61.  Check: M4, M10, and M11 | |
| Education Services - AONCR | | Additive  Model: (2,1,0)(0,1,1)  With transformation - none  F-value: 24.466  MAVS: 3X3 MA  MAVTC: 9-term MA | | Accepted at the level 0.57.  Check: M4, M8, M10, and M11 | |
| Restaurants and Accommodation Services – AONCR | | Additive  Model: (0,1,2)(0,1,1)  With transformation - none  F-value: 4.354  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at the level 0.65.  Check: M7, M8, M9, M10, and M11 | |
| Personal Care, and Miscellaneous Goods and Services – PHILS | | Additive  Model: (0,1,1)(0,1,1)  With transformation - none  F-value: 3.972  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at the level 0.72.  Check: M7, M8, M9, M10, and M11 | |
| Personal Care, and Miscellaneous Goods and Services – NCR | | Additive  Model: (2,1,2)(0,1,1)  With transformation - none  F-value: 12.828  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at the level 0.48.  Check: M10 and M11 | |

Source: Philippine Statistics Authority