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

(2018=100)

December 2021 – December 2022

| **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: 4.607  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at the level 0.80.  Check: M4, M7, M8, M9, M10, and M11 |
| All Items – NCR | | Additive  Model: (2,1,2)(0,1,1)  With transformation - none  F-value: 1.701  MAVS: 3x5 MA  MAVTC: 9-term MA | | Conditionally rejected at the level 1.04.  Check: M7, M8, M9, M10, and M11 |
| All Items – AONCR | | Multiplicative  Model: (2,1,2)(0,1,1)  With transformation - none  F-value: 4.984  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at the level 0.73.  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: 11.077  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at the level 0.65.  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: 12.512  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at the level 0.60.  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: 10.055  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at the level 0.68.  Check: M4, M8, M9, M10, and M11 |
| Alcoholic Beverages and Tobacco – PHILS | | Additive  Model: (2,1,2)(0,1,1)  With transformation - none  F-value: 13.398  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at the level 0.52.  Check: M4, M10, and M11 |
| Alcoholic Beverages and Tobacco – NCR | | Additive  Model: (0,1,1)(0,1,1)  With transformation - none  F-value: 14.512  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at the level 0.51.  Check: M4, M8, M10, and M11 |
| Alcoholic Beverages and Tobacco – AONCR | | Additive  Model: (2,1,2)(0,1,1)  With transformation - none  F-value: 12.587  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at the level 0.50.  Check: M4 and M10 |
| Non-Food – PHILS | | Multiplicative  Model: (2,1,2)(0,1,1)  With transformation - none  F-Value: 3.243  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at the level 0.69.  Check: M7, M8, M9, M10, and M11 |
| Non-Food – NCR | | Multiplicative  Model: (0,1,1)(0,1,1)  With transformation - none  F-Value: 2.421  MAVS: 3x9 MA  MAVTC: 9-term MA | | Accepted at the level 0.75.  Check: M7, M8, M10, and M11 |
|  | | | | |
| Non-Food – AONCR | | Multiplicative  Model: (0,1,2)(0,1,1)  With transformation - none  F-Value: 3.224  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at the level 0.77.  Check: M7, M8, M9, M10, and M11 | |
| Clothing and Footwear - PHILS | | Additive  Model: (0,1,2)(0,1,1)  With transformation - none  F-value: 3.045  MAVS: 3X5 MA  MAVTC: 9-term MA | | Conditionally accepted at the level 0.81.  Check: M7, M8, M9, M10, and M11 | |
| Clothing and Footwear - NCR | | Additive  Model: (2,1,0)(0,1,1)  With transformation - none  F-value: 2.528  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: 2.586  MAVS: 3X3 MA  MAVTC: 9-term MA | | Conditionally accepted at the level 0.92.  Check: M7, M8, M9, M10, and M11 | |
| Housing, Water, Electricity, Gas and Other Fuels - PHILS | | Multiplicative  Model: (2,1,2)(0,1,1)  With transformation - none  F-value: 6.076  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at the level 0.57.  Check: M4, 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: 4.655  MAVS: 3X9 MA  MAVTC: 13-term MA | | Conditionally accepted at the level 0.80.  Check: M1 and M7 | |
| Housing, Water, Electricity, Gas and Other Fuels - AONCR | | Additive  Model: (0,2,2)(0,1,1)  With transformation - none  F-value: 5.351  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at the level 0.69.  Check: M4, M7, M8, M9, M10, and M11 | |
| Furnishings, Household Equipment and Routine Household Maintenance - PHILS | | Additive  Model: (0,1,1)(0,1,1)  With transformation - none  F-value: 6.269  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at the level 0.54.  Check: M7, M8, M10 and M11 | |
| Furnishings, Household Equipment and Routine Household Maintenance – NCR | | Additive  Model: (0,1,1)(0,1,1)  With transformation – none  F-value: 7.014  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at the level 0.57.  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: 3.020  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at the level 0.73.  Check: M7, M8, M9, M10 and M11 | |
| Health – PHILS | | Additive  Model: (2,1,2)(0,1,1)  With transformation – none  F-value: 10.111  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at the level 0.43.  Check: M8, M10, and M11 | |
| Health – NCR | | Additive  Model: (0,1,1)(0,1,1)  With transformation - none  F-value: 12.277  MAVS: 3X3 MA  MAVTC: 9-term MA | | Accepted at the level 0.43.  Check: M8 | |
| Health – AONCR | | Additive  Model: (2,1,2)(0,1,1)  With transformation - none  F-value: 5.847  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at the level 0.56.  Check: M7, M8, M9, M10, and M11 | |
| Information and Communication – NCR | | Additive  Model: (2,1,2)(0,1,1)  With transformation - none  F-value: 3.064  MAVS: 3X5 MA  MAVTC: 9-term MA | | Conditionally accepted at the level 0.84.  Check: M4, M7, M8, M9, M10, and M11 | |
| Information and Communication – AONCR | | Multiplicative  Model: (2,1,0)(0,1,1)  With transformation - none  F-value: 3.656  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at the level 0.69.  Check: M7, M8, M9, M10, and M11 | |
| Education Services – PHILS | | Additive  Model: (0,1,1)(0,1,1)  With transformation - none  F-value: 23.315  MAVS: 3X3 MA  MAVTC: 9-term MA | | Accepted at the level 0.61.  Check: M4, M8, M10, and M11 | |
| Education Services –NCR | | Additive  Model: (0,1,1)(0,1,1)  With transformation - none  F-value: 16.200  MAVS: 3X3 MA  MAVTC: 9-term MA | | Accepted at the level 0.59.  Check: M4, M10, and M11 | |
| Education Services - AONCR | | Additive  Model: (2,1,2)(0,1,1)  With transformation - none  F-value: 22.537  MAVS: 3X3 MA  MAVTC: 9-term MA | | Accepted at the level 0.64.  Check: M4, M6, M8, M9, M10, and M11 | |
| Restaurants and Accommodation Services - PHILS | | Additive  Model: (0,1,1)(0,1,1)  With transformation - none  F-value: 1.043  MAVS: 3X5 MA  MAVTC: 9-term MA | | Conditionally rejected at the level 1.14.  Check: M7, M8, M9, M10, and M11 | |
| Restaurants and Accommodation Services – NCR | | Multiplicative  Model: (0,1,1)(0,1,1)  With transformation - none  F-value: 1.767  MAVS: 3X5 MA  MAVTC: 9-term MA | | Conditionally rejected at the level 1.05.  Check: M7, M8, M9, M10, and M11 | |
| Restaurants and Accommodation Services – AONCR | | Additive  Model: (2,1,0)(0,1,1)  With transformation - none  F-value: 3.448  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at the level 0.67.  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: 2.938  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at the level 0.75.  Check: M7, M8, M9, M10, and M11 | |
| Personal Care, and Miscellaneous Goods and Services – NCR | | Additive  Model: (2,1,0)(0,1,1)  With transformation - none  F-value: 12.506  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at the level 0.49.  Check: M10 and M11 | |
| Personal Care, and Miscellaneous Goods and Services – AONCR | | Additive  Model: (2,1,0)(0,1,1)  With transformation - none  F-value: 1.200  MAVS: 3X5 MA  MAVTC: 9-term MA | | Conditionally accepted at the level 0.89.  Check: M7, M8, M9, M10, and M11 | |

Source: Retail Price Survey of Commodities for the Generation of Consumer Price Index, Philippine Statistics Authority