Table 4. Summary of Statistical Models Used in the Generation of Seasonally Adjusted CPI (2018=100)

July 2022 – July 2023

Series Name/ Geographic Area Covered	Statistical Models/Options	Summary Measures
All Items – PHILS	Additive Model: (2,1,0)(0,1,1) With transformation - none F-value: 5.669 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: (2,1,0)(0,1,1) With transformation - none F-value: 5.773 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: (0,1,2)(0,1,1) With transformation - none F-value: 12.693 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: (0,1,2)(0,1,1) With transformation - none F-value: 15.080 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at the level 0.58. Check: M4, M8, M10, and M11
Food and Non- alcoholic Beverages – AONCR	Multiplicative Model: (2,1,0)(0,1,1) With transformation - none F-value: 11.539 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at the level 0.68. Check: M4, M8, M9, M10, and M11



Series Name/ Geographic Area Covered	Statistical Models/Options	Summary Measures
Alcoholic Beverages and Tobacco – PHILS	Additive Model: (2,1,0)(0,1,1) With transformation - none F-value: 10.928 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: (2,1,0)(0,1,1) With transformation - none F-value: 12.856 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 None of the models were chosen. With transformation - none F-value: 11.154 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at the level 0.47. Check: M4, M8, and M10
Non-Food – PHILS	Additive Model: (2,1,0)(0,1,1) With transformation - none F-Value: 3.296 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at the level 0.70. Check: M7, M8, M10, and M11
Non-Food – NCR	Multiplicative Model: (2,1,2)(0,1,1) With transformation - none F-Value: 3.152 MAVS: 3x9 MA MAVTC: 9-term MA	Accepted at the level 0.65. Check: M7, M10, and M11
Non-Food – AONCR	Multiplicative Model: (0,1,2)(0,1,1) With transformation - none F-Value: 2.877 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at the level 0.77. Check: M7, M8, M10, and M11



Series Name/ Geographic Area Covered	Statistical Models/Options	Summary Measures
Clothing and Footwear - PHILS	Additive Model: (2,1,0)(0,1,1) With transformation - none F-value: 5.489 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.52. Check: M7, M8, M10, and M11
Clothing and Footwear - NCR	Additive Model: (2,1,0)(0,1,1) With transformation - none F-value: 3.177 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.72. Check: M7, M8, M10, and M11
Clothing and Footwear - AONCR	Additive Model: (2,1,0)(0,1,1) With transformation - none F-value: 4.482 MAVS: 3X3 MA MAVTC: 9-term MA	Accepted at the level 0.75. 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: 8.713 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.56. 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: 5.997 MAVS: 3X9 MA MAVTC: 13-term MA	Accepted at the level 0.76. Check: M1, M7, and M10



Series Name/ Geographic Area Covered	Statistical Models/Options	Summary Measures
Housing, Water, Electricity, Gas and Other Fuels - AONCR	Multiplicative Model: (0,2,2)(0,1,1) With transformation - none F-value: 7.369 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.63. 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: 9.762 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.49. 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: 8.126 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.64. 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: 5.752 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.55. Check: M7, M8, M9, M10 and M11
Health – PHILS	Additive Model: (2,1,0)(0,1,1) With transformation – none F-value: 10.312 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.47. Check: M8, M10, and M11



Series Name/ Geographic Area Covered	Statistical Models/Options	Summary Measures
Health – NCR	Additive None of the models were chosen. With transformation - none F-value: 11.757 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.46. Check: M8, M10, and M11
Health – AONCR	Multiplicative Model: (2,1,0)(0,1,1) With transformation - none F-value: 5.953 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.58. Check: M8, M9, M10, and M11
Information and Communication – AONCR	Additive Model: (0,1,2)(0,1,1) With transformation - none F-value: 3.117 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.70. 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: 4.143 MAVS: 3X3 MA MAVTC: 9-term MA	Conditionally accepted at the level 0.96. Check: M7, M8, M9, M10, and M11
Education Services – PHILS	Additive Model: (2,1,0)(0,1,1) With transformation - none F-value: 19.655 MAVS: 3X3 MA MAVTC: 9-term MA	Accepted at the level 0.66. Check: M4, M6, M8, M10, and M11
Education Services – NCR	Additive Model: (0,1,1)(0,1,1) With transformation - none F-value: 13.371 MAVS: 3X3 MA MAVTC: 9-term MA	Accepted at the level 0.67. Check: M4, M8, M10, and M11



Series Name/ Geographic Area Covered	Statistical Models/Options	Summary Measures
Education Services - AONCR	Additive Model: (2,1,2)(0,1,1) With transformation - none F-value: 18.969 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 Model: (2,1,2)(0,1,1) With transformation - none F-value: 5.270 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.60. 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: 6.325 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.73. Check: M7, M8, M9, M10, and M11
Personal Care, and Miscellaneous Goods and Services – NCR	Additive Model: (0,1,1)(0,1,1) With transformation - none F-value: 14.493 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.48. Check: M4, M10, and M11

Source: Philippine Statistics Authority

