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

September 2021 – September 2022

Series Name/ Geographic Area Covered	Statistical Models/Options	Summary Measures
All Items – PHILS	Multiplicative Model: (2,1,2)(0,1,1) With transformation - none F-value: 4.943 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at the level 0.77. Check: M4, M7, M8, M9, M10, and M11
All Items – NCR	Additive Model: (0,1,1)(0,1,1) With transformation - none F-value: 1.399 MAVS: 3x5 MA MAVTC: 9-term MA	Conditionally rejected at the level 1.09. Check: M7, M8, M9, M10, and M11
All Items – AONCR	Multiplicative Model: (0,1,1)(0,1,1) With transformation - none F-value: 5.125 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at the level 0.71. 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: 11.134 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at the level 0.62. Check: M4, M8, M9, M10, and M11
Food and Non- alcoholic Beverages – NCR	Multiplicative Model: (0,1,1)(0,1,1) With transformation - none F-value: 11.141 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at the level 0.55. Check: M8, M10, and M11

Series Name/ Geographic Area Covered	Statistical Models/Options	Summary Measures
Food and Non- alcoholic Beverages – AONCR	Multiplicative Model: (2,1,2)(0,1,1) With transformation - none F-value: 10.263 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at the level 0.65. 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: 13.710 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at the level 0.49. Check: M4 and M10
Alcoholic Beverages and Tobacco – NCR	Additive Model: (0,1,1)(0,1,1) With transformation - none F-value: 14.923 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at the level 0.49. Check: M4, M8, M10, and M11
Alcoholic Beverages and Tobacco – AONCR	Additive Model: (2,1,2)(0,1,1) With transformation - none F-value: 12.896 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at the level 0.47. Check: M4
Non-Food – PHILS	Multiplicative Model: (2,1,2)(0,1,1) With transformation - none F-Value: 3.449 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: (2,1,2)(0,1,1) With transformation - none F-Value: 2.639 MAVS: 3x9 MA MAVTC: 9-term MA	Accepted at the level 0.69. Check: M7

Series Name/ Geographic Area Covered	Statistical Models/Options	Summary Measures
Non-Food – AONCR	Multiplicative Model: (2,1,0)(0,1,1) With transformation - none F-Value: 3.213 MAVS: 3x5 MA MAVTC: 9-term MA	Conditionally accepted at the level 0.79. Check: M7, M8, M9, M10, and M11
Clothing and Footwear - PHILS	Additive Model: (2,1,0)(0,1,1) With transformation - none F-value: 4.057 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.78. Check: M7, M8, M9, M10, and M11
Clothing and Footwear - NCR	Additive Model: (2,1,2)(0,1,1) With transformation - none F-value: 2.616 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.81. Check: M7, M8, M9, M10, and M11
Clothing and Footwear - AONCR	Additive Model: (0,1,1)(0,1,1) With transformation - none F-value: 3.997 MAVS: 3X3 MA MAVTC: 9-term MA	Conditionally accepted at the level 0.81. Check: M7, M8, M9, M10, and M11
Housing, Water, Electricity, Gas, and Other Fuels - PHILS	Multiplicative Model: (0,1,2)(0,1,1) With transformation - none F-value: 5.635 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.61. Check: M4, M7, M8, M10, and M11
Housing, Water, Electricity, Gas, and Other Fuels - NCR	Additive Model: (2,1,0)(0,1,1) With transformation - none F-value: 4.379 MAVS: 3X9 MA MAVTC: 13-term MA	Conditionally accepted at the level 0.85. Check: M1 and M7

Series Name/ Geographic Area Covered	Statistical Models/Options	Summary Measures
Housing, Water, Electricity, Gas, and Other Fuels - AONCR	Additive Model: (0,1,1)(0,1,1) With transformation - none F-value: 4.816 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.75. 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: 9.541 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.48. Check: 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: 7.391 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.59. 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: 4.788 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.63. Check: M7, M8, M9, M10 and M11

Series Name/ Geographic Area Covered	Statistical Models/Options	Summary Measures
Health – PHILS	Additive Model: (2,1,0)(0,1,1) With transformation – none F-value: 9.863 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.48. Check: M8, M10, and M11
Health – NCR	Additive Model: (0,1,2)(0,1,1) With transformation - none F-value: 13.362 MAVS: 3X3 MA MAVTC: 9-term MA	Accepted at the level 0.42. Check: none
Health – AONCR	Additive Model: (2,1,2)(0,1,1) With transformation - none F-value: 5.871 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.65. Check: M7, M8, M9, M10, and M11
Information and Communication – NCR	Additive Model: (2,1,2)(0,1,1) With transformation - none F-value: 3.023 MAVS: 3X5 MA MAVTC: 9-term MA	Conditionally accepted at the level 0.80. Check: M4, M7, M8, M10, and M11
Information and Communication – AONCR	Multiplicative Model: (2,1,2)(0,1,1) With transformation - none F-value: 3.562 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.72. Check: M7, M8, M9, M10, and M11
Education Services – PHILS	Additive Model: (0,1,1)(0,1,1) With transformation - none F-value: 22.901 MAVS: 3X3 MA	Accepted at the level 0.61. Check: M4, M8, M10, and M11

Series Name/ Geographic Area Covered	Statistical Models/Options	Summary Measures
Education Services – NCR	MAVTC: 9-term MA Additive Model: (0,1,1)(0,1,1) With transformation - none F-value: 16.303 MAVS: 3X3 MA MAVTC: 9-term MA	Accepted at the level 0.55. Check: M7, M10, and M11
Education Services - AONCR	Additive Model: (0,1,1)(0,1,1) With transformation - none F-value: 22.080 MAVS: 3X3 MA MAVTC: 9-term MA	Accepted at the level 0.62. Check: M4, M6, M8, M10, and M11
Restaurants and Accommodation Services - PHILS	Additive Model: (2,1,2)(0,1,1) With transformation - none F-value: 2.051 MAVS: 3X5 MA MAVTC: 9-term MA	Conditionally accepted at the level 0.88. 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: 2.371 MAVS: 3X5 MA MAVTC: 9-term MA	Conditionally rejected at the level 1.09. Check: M7, M8, M9, M10, and M11
Restaurants and Accommodation Services – AONCR	Additive Model: (0,1,1)(0,1,1) With transformation - none F-value: 2.507 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.79. 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: 4.095 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.67. Check: M7, M8, M9, M10, and M11

Series Name/ Geographic Area Covered	Statistical Models/Options	Summary Measures
Personal Care, and Miscellaneous Goods and Services – NCR	Additive Model: (2,1,0)(0,1,1) With transformation - none F-value: 13.286 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.48. Check: M10 and M11
Personal Care, and Miscellaneous Goods and Services – AONCR Source: Philippine Statistics Authors	Additive Model: (2,1,0)(0,1,1) With transformation - none F-value: 1.715 MAVS: 3X5 MA MAVTC: 9-term MA	Conditionally accepted at the level 0.77. Check: M7, M8, M9, M10, and M11