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

July 2021 – July 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: 4.857 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at the level 0.78. Check: M4, M7, M8, M9, M10, and M11
All Items – NCR	Additive Model: (0,1,1)(0,1,1) With transformation - none F-value: 1.055 MAVS: 3x5 MA MAVTC: 9-term MA	Conditionally rejected at the level 1.15. Check: M4, M7, M8, M9, M10, and M11
All Items – AONCR	Multiplicative Model: (2,1,0)(0,1,1) With transformation - none F-value: 5.180 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: 11.058 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: (0,1,1)(0,1,1) With transformation - none F-value: 10.836 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at the level 0.58. 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: 10.099 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at the level 0.64. Check: M8, M9, M10, and M11
Alcoholic Beverages and Tobacco – PHILS	Additive Model: (2,1,2)(0,1,1) With transformation - none F-value: 14.939 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at the level 0.47. Check: M4, M10, and M11
Alcoholic Beverages and Tobacco – NCR	Additive Model: (0,1,1)(0,1,1) With transformation - none F-value: 15.470 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at the level 0.52. Check: M4, M8, M10, and M11
Alcoholic Beverages and Tobacco – AONCR	Additive Model: (2,1,2)(0,1,1) With transformation - none F-value: 14.235 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at the level 0.45. Check: M4
Non-Food – PHILS	Multiplicative Model: (2,1,0)(0,1,1) With transformation - none F-Value: 3.526 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at the level 0.65. Check: M7, M8, M10, and M11
Non-Food – NCR	Multiplicative Model: (0,1,2)(0,1,1) With transformation - none F-Value: 3.274 MAVS: 3x9 MA MAVTC: 9-term MA	Accepted at the level 0.60. Check: M4 and M7

Series Name/ Geographic Area Covered	Statistical Models/Options	Summary Measures
Non-Food – AONCR	Multiplicative Model: (0,1,2)(0,1,1) With transformation - none F-Value: 3.103 MAVS: 3x5 MA MAVTC: 9-term MA	Conditionally accepted at the level 0.81. Check: M4, M7, M8, M9, M10, and M11
Clothing and Footwear - PHILS	Additive Model: (2,1,2)(0,1,1) With transformation - none F-value: 3.998 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.75. Check: M7, M8, M9, M10, and M11
Clothing and Footwear - NCR	Additive Model: none With transformation - none F-value: 2.749 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.78. Check: M7, M8, M9, M10, and M11
Clothing and Footwear - AONCR	Additive Model: (0,1,1)(0,1,1) With transformation - none F-value: 4.384 MAVS: 3X3 MA MAVTC: 9-term MA	Conditionally accepted at the level 0.78. 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: 7.426 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.50. Check: M8 and M10
Housing, Water, Electricity, Gas and Other Fuels - NCR	Additive Model: (2,1,0)(0,1,1) With transformation - none F-value: 4.989 MAVS: 3X9 MA MAVTC: 13-term MA	Conditionally accepted at the level 0.80. Check: M1 and M7

Series Name/ Geographic Area Covered	Statistical Models/Options	Summary Measures
Housing, Water, Electricity, Gas and Other Fuels - AONCR	Additive Model: (2,1,2)(0,1,1) With transformation - none F-value: 6.204 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.64. Check: M4, M8, M10, and M11
Furnishings, Household Equipment and Routine Household Maintenance - PHILS	Additive Model: (0,1,1)(0,1,1) With transformation - none F-value: 9.920 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.43. Check: M8 and M10
Furnishings, Household Equipment and Routine Household Maintenance – NCR	Additive Model: (0,1,1)(0,1,1) With transformation – none F-value: 7.317 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: 5.207 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.50. Check: M7, M8, 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: 9.598 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.48. Check: M8, M10, and M11
Health – NCR	Additive Model: (0,1,1)(0,1,1) With transformation - none F-value: 12.726 MAVS: 3X3 MA MAVTC: 9-term MA	Accepted at the level 0.44. Check: none
Health – AONCR	Additive Model: (2,1,2)(0,1,1) With transformation - none F-value: 5.685 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.66. Check: M7, M8, M9, M10, and M11
Information and Communication – NCR	Additive Model: (2,1,2)(0,1,1) With transformation - none F-value: 2.766 MAVS: 3X5 MA MAVTC: 9-term MA	Conditionally accepted at the level 0.92. Check: M4, M7, M8, M9, M10, and M11
Information and Communication – AONCR	Multiplicative Model: (0,1,1)(0,1,1) With transformation - none F-value: 3.477 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.69. Check: M7, M8, M10, and M11
Education Services – PHILS	Additive Model: (2,1,2)(0,1,1) With transformation - none F-value: 25.693 MAVS: 3X3 MA	Accepted at the level 0.66. Check: M4, M6, M8, M9, M10, and M11

Series Name/ Geographic Area Covered	Statistical Models/Options	Summary Measures
	MAVTC: 9-term MA	
Education Services – NCR	Additive Model: (2,1,2)(0,1,1) With transformation - none F-value: 30.048 MAVS: 3X3 MA MAVTC: 9-term MA	Accepted at the level 0.63. Check: M4, M8, M9, M10 and M11
Education Services - AONCR	Additive Model: (2,1,2)(0,1,1) With transformation - none F-value: 22.755 MAVS: 3X3 MA MAVTC: 9-term MA	Accepted at the level 0.65. Check: M4, M6, M8, M9, M10, and M11
Restaurants and Accommodation Services - PHILS	Additive Model: (2,1,0)(0,1,1) With transformation - none F-value: 3.145 MAVS: 3X5 MA MAVTC: 9-term MA	Conditionally accepted at the level 0.86. Check: M7, M8, M9, M10, and M11
Restaurants and Accommodation Services – NCR	Multiplicative Model: (2,1,0)(0,1,1) With transformation - none F-value: 3.032 MAVS: 3X5 MA MAVTC: 9-term MA	Conditionally rejected at the level 1.11. 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: 3.401 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.77. 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: 5.103 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.59. 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: 14.128 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.50. Check: M10 and M11
Personal Care and Miscellaneous Goods and Services – AONCR	Additive Model: (0,2,2)(0,1,1) With transformation - none F-value: 1.965 MAVS: 3X5 MA MAVTC: 9-term MA	Conditionally accepted at the level 0.81. Check: M7, M8, M9, M10, and M11

Source: Philippine Statistics Authority