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

April 2021 – April 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: 3.894 MAVS: 3x5 MA MAVTC: 9-term MA	Conditionally accepted at the level 0.87. Check: M4, M7, M8, M9, M10, and M11
All Items – NCR	Additive Model: (2,1,2)(0,1,1) With transformation - none F-value: 1.238 MAVS: 3x5 MA MAVTC: 9-term MA	Conditionally rejected at the level 1.13. Check: M7, M8, M9, M10, and M11
All Items – AONCR	Multiplicative Model: (2,1,2)(0,1,1) With transformation - none F-value: 4.039 MAVS: 3x5 MA MAVTC: 9-term MA	Conditionally accepted at the level 0.84. Check: M4, M7, M8, M9, M10, and M11
Food and Non- alcoholic Beverages – PHILS	Multiplicative Model: (2,1,0)(0,1,1) With transformation - none F-value: 8.943 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at the level 0.73. 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: 9.607 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at the level 0.67. Check: M8, M9, M10, and M11

Series Name/ Geographic Area Covered	Statistical Models/Options	Summary Measures
Food and Non- alcoholic Beverages – AONCR	Multiplicative Model: (2,1,0)(0,1,1) With transformation - none F-value: 8.242 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at the level 0.73. Check: M7, M8, M9, M10, and M11
Alcoholic Beverages and Tobacco – PHILS	Additive Model: (2,1,2)(0,1,1) With transformation - none F-value: 13.776 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at the level 0.46. Check: M4, M10, and M11
Alcoholic Beverages and Tobacco – NCR	Additive Model: (0,1,1)(0,1,1) With transformation - none F-value: 14.643 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at the level 0.50. Check: M4, M8, M10, and M11
Alcoholic Beverages and Tobacco – AONCR	Additive Model: (2,1,2)(0,1,1) With transformation - none F-value: 13.057 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at the level 0.47. Check: M4, M10, and M11
Non-Food – PHILS	Multiplicative Model: (2,1,2)(0,1,1) With transformation - none F-Value: 3.025 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at the level 0.69. Check: M7, M8, M10, and M11
Non-Food – NCR	Multiplicative Model: (2,1,2)(0,1,1) With transformation - none F-Value: 3.344 MAVS: 3x9 MA MAVTC: 9-term MA	Accepted at the level 0.55. Check: M6 and M7

Series Name/ Geographic Area Covered	Statistical Models/Options	Summary Measures
Non-Food – AONCR	Multiplicative Model: (2,1,2)(0,1,1) With transformation - none F-Value: 2.482 MAVS: 3x5 MA MAVTC: 9-term MA	Conditionally accepted at the level 0.83. Check: M4, M7, M8, M9, M10, and M11
Clothing and Footwear - PHILS	Additive Model: (0,1,1)(0,1,1) With transformation - none F-value: 4.294 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.70. Check: M7, M8, M9, M10, and M11
Clothing and Footwear - NCR	Additive Model: none With transformation - none F-value: 2.624 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: 3.750 MAVS: 3X3 MA MAVTC: 9-term MA	Conditionally accepted at the level 0.85. 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: 7.704 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.49. Check: M4
Housing, Water, Electricity, Gas and Other Fuels - NCR	Additive Model: (0,1,2)(0,1,1) With transformation - none F-value: 5.055 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: 7.058 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.62. Check: M4, M8, M10, and M11
Furnishing, Household Equipment and Routine Maintenance of the House - PHILS	Additive Model: (0,1,1)(0,1,1) With transformation - none F-value: 10.605 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.43. Check: none
Furnishing, Household Equipment and Routine Maintenance of the House -NCR	Additive Model: (0,1,1)(0,1,1) With transformation – none F-value: 6.906 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.62. Check: M7, M8, M9, M10, and M11
Furnishing, Household Equipment and Routine Maintenance of the House -AONCR	Additive Model: (0,2,2)(0,1,1) With transformation - none F-value: 5.491 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.47. Check: M7, M8, and M10
Health – PHILS	Additive Model: (0,2,2)(0,1,1) With transformation – none F-value: 9.395 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.50. Check: M8, M9, M10, and M11

Series Name/ Geographic Area Covered	Statistical Models/Options	Summary Measures
Health – NCR	Additive Model: (0,1,1)(0,1,1) With transformation - none F-value: 15.611 MAVS: 3X3 MA MAVTC: 9-term MA	Accepted at the level 0.41. Check: none
Health – AONCR	Additive Model: (0,2,2)(0,1,1) With transformation - none F-value: 5.125 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.71. Check: M7, M8, M9, M10, and M11
Information and Communication – NCR	Additive Model: (0,1,2)(0,1,1) With transformation - none F-value: 4.399 MAVS: 3X5 MA MAVTC: 9-term MA	Conditionally accepted at the level 0.83. Check: M4, M7, M8, M9, M10, and M11
Information and Communication – AONCR	Multiplicative Model: (2,1,2)(0,1,1) With transformation - none F-value: 3.416 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.72. Check: M7, M8, M10, and M11
Education Services – PHILS	Additive Model: (2,1,2)(0,1,1) With transformation - none F-value: 33.690 MAVS: 3X3 MA MAVTC: 9-term MA	Accepted at the level 0.58. Check: M4, M8, M10, and M11
Education Services – NCR	Additive Model: (0,1,2)(0,1,1) With transformation - none F-value: 39.969 MAVS: 3X3 MA MAVTC: 9-term MA	Accepted at the level 0.49. Check: M4, M10, and M11

Series Name/ Geographic Area Covered	Statistical Models/Options	Summary Measures
Education Services - AONCR	Additive Model: (0,1,2)(0,1,1) With transformation - none F-value: 28.684 MAVS: 3X3 MA MAVTC: 9-term MA	Accepted at the level 0.53. Check: M4, M10, and M11
Restaurants and Accommodation Services - PHILS	Additive Model: (0,1,1)(0,1,1) With transformation - none F-value: 3.735 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.73. Check: M7, M8, M9, M10, and M11
Restaurants and Accommodation Services – NCR	Multiplicative Model: none With transformation - none F-value: 2.428 MAVS: 3X5 MA MAVTC: 9-term MA	Conditionally rejected at the level 1.03. 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: 4.144 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.73. Check: M7, M8, M9, M10, and M11
Personal Care, Social Protection and Miscellaneous Goods and Services – PHILS	Additive Model: (0,1,0)(0,1,1) With transformation - none F-value: 4.701 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.65. Check: M7, M8, M9, M10, and M11
Personal Care, Social Protection and Miscellaneous Goods and Services – NCR	Additive Model: (2,1,2)(0,1,1) With transformation - none F-value: 13.378 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.49. Check: M8, M10, and M11

Series Name/ Geographic Area Covered	Statistical Models/Options	Summary Measures
Personal Care, Social	Additive	Conditionally accepted
Protection and	Model: (0,1,1)(0,1,1)	at the level 0.96.
Miscellaneous Goods	With transformation - none	Check: M7, M8, M9,
and Services –	F-value: 1.637	M10, and M11
AONCR	MAVS: 3X5 MA	
	MAVTC: 9-term MA	

Source: Philippine Statistics Authority