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

October 2021 - October 2022

Series Name/ Geographic Area Covered	Statistical Models/Options	Summary Measures
All Items – PHILS	Multiplicative Model: (0,1,1)(0,1,1) With transformation - none F-value: 4.711 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: 1.430 MAVS: 3x5 MA MAVTC: 9-term MA	Conditionally rejected at the level 1.11. Check: M7, M8, M9, M10, and M11
All Items – AONCR	Multiplicative Model: (2,1,2)(0,1,1) With transformation - none F-value: 4.992 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: 10.727 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at the level 0.65. Check: M8, M9, M10, and M11
Food and Non- alcoholic Beverages – NCR	Multiplicative Model: (2,1,2)(0,1,1) With transformation - none F-value: 10.869 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at the level 0.63. Check: M4, M8, M9, M10, and M11

Series Name/ Geographic Area Covered	Statistical Models/Options	Summary Measures
Food and Non- alcoholic Beverages – AONCR	Multiplicative Model: (0,1,1)(0,1,1) With transformation - none F-value: 10.130 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: 13.425 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at the level 0.49. Check: M4
Alcoholic Beverages and Tobacco – NCR	Additive Model: (0,1,1)(0,1,1) With transformation - none F-value: 14.710 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: 12.656 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at the level 0.45. Check: M4
Non-Food – PHILS	Multiplicative Model: (2,1,2)(0,1,1) With transformation - none F-Value: 3.187 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: 2.403 MAVS: 3x9 MA MAVTC: 9-term MA	Accepted at the level 0.70. Check: M7, M10, and M11

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: 3.262 MAVS: 3x5 MA MAVTC: 9-term MA	Conditionally accepted at the level 0.78. Check: M7, M8, M9, M10, and M11
Clothing and Footwear - PHILS	Additive Model: (2,1,2)(0,1,1) With transformation - none F-value: 3.610 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.80. Check: M7, M8, M9, M10, and M11
Clothing and Footwear - NCR	Additive Model: (2,1,0)(0,1,1) With transformation - none F-value: 2.636 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.82. Check: M7, M8, M9, M10, and M11
Clothing and Footwear - AONCR	Additive Model: (0,1,1)(0,1,1) With transformation - none F-value: 3.270 MAVS: 3X3 MA MAVTC: 9-term MA	Conditionally accepted at the level 0.88. 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: 5.302 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: (2,1,2)(0,1,1) With transformation - none F-value: 4.367 MAVS: 3X9 MA MAVTC: 13-term MA	Conditionally accepted at the level 0.83. Check: M1 and M7

Series Name/ Geographic Area Covered	Statistical Models/Options	Summary Measures
Housing, Water, Electricity, Gas and Other Fuels - AONCR	Additive Model: (0,2,2)(0,1,1) With transformation - none F-value: 5.668 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.70. Check: M4, 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: 8.797 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.49. 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: 7.367 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.58. 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: 4.109 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.64. Check: M7, M8, M9, M10 and M11

Series Name/ Geographic Area Covered	Statistical Models/Options	Summary Measures
Health – PHILS	Additive Model: (2,1,2)(0,1,1) With transformation – none F-value: 9.765 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: 12.990 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: 5.723 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.62. Check: M7, M8, M9, M10, and M11
Information and Communication – NCR	Additive Model: (2,1,2)(0,1,1) With transformation - none F-value: 3.088 MAVS: 3X5 MA MAVTC: 9-term MA	Conditionally accepted at the level 0.79. Check: M4, M7, M8, M10, and M11
Information and Communication – AONCR	Multiplicative Model: (2,1,2)(0,1,1) With transformation - none F-value: 3.606 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: 23.394 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: 16.641 MAVS: 3X3 MA MAVTC: 9-term MA	Accepted at the level 0.55. Check: M4, M7, M10, and M11
Education Services - AONCR	Additive Model: (0,1,1)(0,1,1) With transformation - none F-value: 22.478 MAVS: 3X3 MA MAVTC: 9-term MA	Accepted at the level 0.63. Check: M4, M6, M8, M10, and M11
Restaurants and Accommodation Services - PHILS	Additive Model: (0,2,2)(0,1,1) With transformation - none F-value: 2.429 MAVS: 3X5 MA MAVTC: 9-term MA	Conditionally accepted at the level 0.82. Check: M7, M8, M9, M10, and M11
Restaurants and Accommodation Services – NCR	Multiplicative Model: (0,2,2)(0,1,1) With transformation - none F-value: 2.016 MAVS: 3X5 MA MAVTC: 9-term MA	Conditionally rejected at the level 1.04. Check: M7, M8, M9, M10, and M11
Restaurants and Accommodation Services – AONCR	Additive Model: (2,1,2)(0,1,1) With transformation - none F-value: 2.721 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.76. 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: 3.719 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at the level 0.66. 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: 13.377 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 Auth	Additive Model: (0,1,1)(0,1,1) With transformation - none F-value: 1.541 MAVS: 3X5 MA MAVTC: 9-term MA	Conditionally accepted at the level 0.77. Check: M7, M8, M9, M10, and M11