Table 4. Summary of Statistical Models Used in the Generation of Seasonally Adjusted CPI
(2012=100)

January 2012 – December 2021

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: 3.345 MAVS: 3x5 MA MAVTC: 9-term MA	Conditionally accepted at level 0.99 Check: M4, M7 M8, M9, M10, M11
All Items – NCR	Additive Model: (2,1,2)(0,1,1) With transformation - none F-value: 1.720 MAVS: 3x5 MA MAVTC: 9-term MA	Conditionally rejected at level 1.14 Check: M7, M8, M9, M10, M11
All Items – AONCR	Multiplicative Model: (0,1,2)(0,1,1) With transformation - none F-value: 3.361 MAVS: 3x5 MA MAVTC: 9-term MA	Conditionally accepted at level 0.98 Check: M4, M7, M8, M9, M10, M11
Food and Non-alcoholic Beverages – PHILS	Multiplicative Model: (0,1,1)(0,1,1) With transformation - none F-value: 7.738 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at level 0.77 Check: M7, M8, M9, M10, M11
Food and Non-alcoholic Beverages – NCR	Multiplicative Model: (2,1,2)(0,1,1) With transformation - none F-value: 7.756 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at level 0.86 Check: M4, M7, M8, M9, M10, 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: 7.201 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at level 0.81 Check: M7, M8, M9, M10, M11
Alcoholic Beverages and Tobacco – PHILS	Additive Model: (0,2,2)(0,1,1) With transformation - none F-value: 12.887 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at level 0.50 Check: M4, M10, M11
Alcoholic Beverages and Tobacco – NCR	Multiplicative Model: (2,1,2)(0,1,1) With transformation - none F-value: 15.585 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at level 0.45 Check: M4, M10, M11
Alcoholic Beverages and Tobacco – AONCR	Additive Model: (0,2,2)(0,1,1) With transformation - none F-value: 14.352 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at level 0.43 Check: M4, M10, M11
Non-Food – PHILS	Additive Model: (2,1,2)(0,1,1) With transformation - none F-Value: 1.588 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at level 0.89 Check: M7, M8, M9, M10, M11
Non-Food – NCR	Additive Model: (0,1,1)(0,1,1) With transformation - none F-Value: 2.066 MAVS: 3x9 MA MAVTC: 9-term MA	Accepted at level 0.66 Check: M7

Series Name/ Geographic Area Covered	Statistical Models/Options	Summary Measures
Non-Food – AONCR	Additive Model: (2,1,2)(0,1,1) With transformation - none F-Value: 1.194 MAVS: 3x5 MA MAVTC: 9-term MA	Conditionally rejected at level 1.05 Check: M7, M8, M9, M10, M11
Clothing and Footwear - PHILS	Multiplicative Model: (2,1,2)(0,1,1) With transformation - none F-value: 4.531 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.76 Check: M7, M8, M9, M10, M11
Clothing and Footwear - NCR	Additive Model: None With transformation - none F-value: 2.620 MAVS: 3X5 MA MAVTC: 9-term MA	Conditionally accepted at level 0.81 Check: M7, M8, M9, M10, M11
Clothing and Footwear - AONCR	Additive Model: (0,1,2)(0,1,1) With transformation - none F-value: 4.109 MAVS: 3X3 MA MAVTC: 9-term MA	Conditionally accepted at level 0.83 Check: M7, M8, M9, M10, M11
Housing, Water, Electricity, Gas and Other Fuels - PHILS	Additive Model: (2,1,2)(0,1,1) With transformation - none F-value: 6.107 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.54 Check: M8, M10, M11
Housing, Water, Electricity, Gas and Other Fuels - NCR	Additive Model: (2,1,2)(0,1,1) With transformation - none F-value: 4.875 MAVS: 3X9 MA MAVTC: 13-term MA	Accepted at level 0.88 Check: M1, M4, 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: 5.840 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.69 Check: M4, M8, M9, M10, M11
Furnishing, Household Equipment and Routine Maintenance of the House -PHILS	Additive Model: (2,1,2)(0,1,1) With transformation - none F-value: 8.827 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.52 Check: M7, M8, M10, M11
Furnishing, Household Equipment and Routine Maintenance of the House -NCR	Additive Model: (0,1,1)(0,1,1) With transformation – none F-value: 6.063 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.78 Check: M7, M8, M9, M10, M11
Furnishing, Household Equipment and Routine Maintenance of the House -AONCR	Additive Model: (0,1,1)(0,1,1) With transformation - none F-value: 5.637 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.56 Check: M7, M8, M10, M11
Health – PHILS	Multiplicative Model: (0,1,1)(0,1,1) With transformation – none F-value: 9.461 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.59 Check: M8, M9, M10, M11
Health –NCR	Multiplicative	Accepted at level 0.55

Series Name/ Geographic Area Covered	Statistical Models/Options	Summary Measures
	Model: (0,1,2)(0,1,1) With transformation - none F-value: 14.986 MAVS: 3X3 MA MAVTC: 9-term MA	Check: M8, M10, M11
Health – AONCR	Additive Model: (0,1,1)(0,1,1) With transformation - none F-value: 4.353 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.73 Check: M7, M8, M9, M10, M11
Transport – NCR	Multiplicative Model: (2,1,2)(0,1,1) With transformation - none F-value: 3.212 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.90 Check: M4, M7, M8, M10, M11
Recreation and Culture - PHILS	Multiplicative Model: (0,1,1)(0,1,1) With transformation – none F-value: 3.866 MAVS: 3X3 MA MAVTC: 9-term MA	Conditionally accepted at level 0.95 Check: M4, M7, M8, M9, M10, M11
Recreation and Culture - NCR	Additive Model: (2,1,2)(0,1,1) With transformation – none F-value: 7.184 MAVS: 3X3 MA MAVTC: 9-term MA	Accepted at level 0.75 Check: M7, M8, M9, M10, M11
Recreation and Culture - AONCR	Additive Model: (0,1,1)(0,1,1) With transformation –none F-value: 3.417 MAVS: 3X3 MA MAVTC: 9-term MA	Conditionally accepted at level 0.96 Check: M7, M8, M9, M10, M11
Education – PHILS	Additive Model: (2,1,2)(0,1,1)	Accepted at level 0.62 Check: M4, M8, M10,

Series Name/ Geographic Area Covered	Statistical Models/Options	Summary Measures
	With transformation - none F-value: 11.594 MAVS: 3X3 MA MAVTC: 9-term MA	M11
Education –NCR	Multiplicative Model: (0,1,1)(0,1,1) With transformation - none F-value: 34.607 MAVS: 3X3 MA MAVTC: 9-term MA	Accepted at level 0.44 Check: M4
Education - AONCR	Additive Model: (2,1,2)(0,1,1) With transformation - none F-value: 7.380 MAVS: 3X3 MA MAVTC: 9-term MA	Accepted at level 0.70 Check: M4, M7, M8, M9, M10, M11
Restaurant and Miscellaneous Goods and Services - PHILS	Additive Model: (2,1,0)(0,1,1) With transformation - none F-value: 3.016 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.71 Check: M7, M8, M9, M10, M11
Restaurant and Miscellaneous Goods and Services – NCR	Multiplicative Model: (0,1,1)(0,1,1) With transformation - none F-value: 3.462 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.76 Check: M7, M8, M9, M10, M11
Restaurant and Miscellaneous Goods and Services – AONCR	Additive Model: (2,1,2)(0,1,1) With transformation - none F-value: 2.374 MAVS: 3X5 MA MAVTC: 9-term MA	Conditionally accepted at level 0.89 Check: M7, M8, M9, M10, M11

Source: Philippine Statistics Authority