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

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: 3.496 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at level 0.91 Check: M4, M7, M8, M9, M10, M11
All Items – NCR	Additive Model: (2,1,2)(0,1,1) With transformation - none F-value: 1.464 MAVS: 3x5 MA MAVTC: 9-term MA	Conditionally rejected at level 1.06 Check: M7, M8, M9, M10, M11
All Items – AONCR	Multiplicative Model: (0,1,1)(0,1,1) With transformation - none F-value: 3.442 MAVS: 3x5 MA MAVTC: 9-term MA	Conditionally rejected at level 0.93 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: 8.440 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at level 0.71 Check: M8, M9, M10, M11
Food and Non- alcoholic Beverages – NCR	Multiplicative Model: (2,1,2)(0,1,1) With transformation - none F-value: 7.801 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at level 0.79 Check: M4, M7, M8, M9, M10, M11

January 2012 - September 2021

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: 7.748 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at level 0.72 Check: M4, M8, M9, M10, M11
Alcoholic Beverages and Tobacco – PHILS	Additive Model: (0,2,2)(0,1,1) With transformation - none F-value: 12.329 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: 15.495 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at level 0.47 Check: M4, M10, M11
Alcoholic Beverages and Tobacco – AONCR	Additive Model: (0,2,2)(0,1,1) With transformation - none F-value: 13.468 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at level 0.45 Check: M4, M10, M11
Non-Food – PHILS	Additive Model: (2,1,2)(0,1,1) With transformation - none F-Value: 2.247 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at level 0.81 Check: M7, M8, M9, M10, M11
Non-Food – NCR	Additive Model: (0,1,1)(0,1,1) With transformation - none F-Value: 2.330 MAVS: 3x9 MA MAVTC: 9-term MA	Accepted at level 0.65 Check: M7

Series Name/ Geographic Area Covered	Statistical Models/Options	Summary Measures
Non-Food – AONCR	Additive Model: (2,1,0)(0,1,1) With transformation - none F-Value: 1.587 MAVS: 3x5 MA MAVTC: 9-term MA	Conditionally accepted at level 0.91 Check: M7, M8, M9, M10, M11
Clothing and Footwear - PHILS	Multiplicative Model: (2,1,0)(0,1,1) With transformation - none F-value: 4.324 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.80 Check: M7, M8, M9, M10, M11
Clothing and Footwear - NCR	Additive Model: None With transformation - none F-value: 2.544 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.80 Check: M7, M8, M9, M10, M11
Clothing and Footwear - AONCR	Additive Model: (0,1,2)(0,1,1) With transformation - none F-value: 3.790 MAVS: 3X3 MA MAVTC: 9-term MA	Conditionally accepted at level 0.87 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: 6.031 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.59 Check: M8, M10, M11
Housing, Water, Electricity, Gas and Other Fuels - NCR	Additive Model: (2,1,0)(0,1,1) With transformation - none F-value: 4.654 MAVS: 3X9 MA MAVTC: 13-term MA	Accepted at level 0.95 Check: M1, M7

Series Name/ Geographic Area Covered	Statistical Models/Options	Summary Measures
Housing, Water, Electricity, Gas and Other Fuels - AONCR	Additive Model: (2,1,0)(0,1,1) With transformation - none F-value: 5.405 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.73 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: 7.785 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.54 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: 5.526 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.89 Check: M7, M8, M9, M10, M11
Furnishing, Household Equipment and Routine Maintenance of the House -AONCR	Additive Model: (0,2,2)(0,1,1) With transformation - none F-value: 4.970 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.57 Check: M7, M8, M10, M11
Health – PHILS	Multiplicative Model: (2,1,0)(0,1,1) With transformation – none F-value: 9.207 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.56 Check: M8, M9, M10, M11

Series Name/ Geographic Area Covered	Statistical Models/Options	Summary Measures
Health –NCR	Multiplicative Model: (2,1,0)(0,1,1) With transformation - none F-value: 15.119 MAVS: 3X3 MA MAVTC: 9-term MA	Accepted at level 0.55 Check: M8, M10, M11
Health – AONCR	Additive Model: (2,1,0)(0,1,1) With transformation - none F-value: 4.273 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.69 Check: M7, M8, M9, M10, M11
Transport – NCR	Multiplicative Model: (2,1,0)(0,1,1) With transformation - none F-value: 2.890 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.92 Check: M4, M7, M8, M10, M11
Recreation and Culture - PHILS	Multiplicative Model: (0,1,2)(0,1,1) With transformation – none F-value: 3.715 MAVS: 3X3 MA MAVTC: 9-term MA	Conditionally accepted at level 0.92 Check: M4, M7, M8, M9, M10
Recreation and Culture - NCR	Additive Model: (2,1,2)(0,1,1) With transformation – none F-value: 7.093 MAVS: 3X3 MA MAVTC: 9-term MA	Accepted at level 0.73 Check: M7, M8, M9, M10, M11
Recreation and Culture - AONCR	Additive Model: (0,1,1)(0,1,1) With transformation –none F-value: 3.260 MAVS: 3X3 MA MAVTC: 9-term MA	Conditionally accepted at level 0.94 Check: M7, M8, M9, M10, M11

Series Name/ Geographic Area Covered	Statistical Models/Options	Summary Measures
Education – PHILS	Additive Model: (2,1,0)(0,1,1) With transformation - none F-value: 11.148 MAVS: 3X3 MA MAVTC: 9-term MA	Accepted at level 0.63 Check: M4, M8, M10, M11
Education –NCR	Multiplicative Model: (2,1,0)(0,1,1) With transformation - none F-value: 33.378 MAVS: 3X3 MA MAVTC: 9-term MA	Accepted at level 0.45 Check: M4
Education - AONCR	Additive Model: (0,1,2)(0,1,1) With transformation - none F-value: 7.105 MAVS: 3X3 MA MAVTC: 9-term MA	Conditionally accepted at level 0.71 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: 2.235 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.72 Check: M7, M8, M9, M10, M11
Restaurant and Miscellaneous Goods and Services – NCR	Multiplicative Model: (2,1,2)(0,1,1) With transformation - none F-value: 3.241 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.72 Check: M7, M8, M9, M10, M11
Restaurant and Miscellaneous Goods and Services – AONCR Source: Philippine Statistics Auth	Additive Model: (2,1,2)(0,1,1) With transformation - none F-value: 1.903 MAVS: 3X5 MA MAVTC: 9-term MA	Conditionally accepted at level 0.92 Check: M7, M8, M9, M10, M11

Source: Philippine Statistics Authority