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

January 2012 - August 2021

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: 3.598 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at level 0.94 Check: M4, M7, M8, M9, M10, M11
All Items – NCR	Additive Model: (0,1,1)(0,1,1) With transformation - none F-value: 1.230 MAVS: 3x5 MA MAVTC: 9-term MA	Rejected at level 1.34 Check: M1, M4, M7, M8, M9, M10, M11
All Items – AONCR	Multiplicative Model: (0,1,1)(0,1,1) With transformation - none F-value: 2.161 MAVS: 3x5 MA MAVTC: 9-term MA	Conditionally rejected at level 1.18 Check: M4, M7, M8, M9, M10, M11
Food and Non- alcoholic Beverages – PHILS	Multiplicative Model: (2,1,2)(0,1,1)) With transformation - none F-value: 8.735 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at level 0.70 Check: M8, M9, M10, M11
Food and Non- alcoholic Beverages – NCR	Multiplicative Model: (2,1,2)(0,1,1) With transformation - none F-value: 6.913 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at level 0.88 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: (2,1,2)(0,1,1) With transformation - none F-value: 5.499 MAVS: 3x5 MA MAVTC: 9-term MA	Conditionally accepted at level 0.82 Check: M1, M7, M8, M9, M10, M11
Alcoholic Beverages and Tobacco – PHILS	Additive Model: (0,2,2)(0,1,1) With transformation - none F-value: 14.081 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at level 0.45 Check: M4, M10, M11
Alcoholic Beverages and Tobacco – NCR	Multiplicative Model: (2,1,2)(0,1,1) With transformation - none F-value: 10.862 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at level 0.64 Check: M4, M9, M10, M11
Alcoholic Beverages and Tobacco – AONCR	Additive Model: (0,1,2)(0,1,1) With transformation - none F-value: 9.156 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at level 0.56 Check: M4, M8, M10, M11
Non-Food – PHILS	Additive Model: (0,1,1)(0,1,1) With transformation - none F-Value: 2.143 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: 1.944 MAVS: 3x9 MA MAVTC: 9-term MA	Accepted at level 0.84 Check: M1, M4, M6, M7

Series Name/ Geographic Area Covered	Statistical Models/Options	Summary Measures
Non-Food – AONCR	Additive Model: (0,1,1)(0,1,1) With transformation - none F-Value: 1.135 MAVS: 3x5 MA MAVTC: 9-term MA	Conditionally accepted at level 1.07 Check: M4, M7, M8, M9, M10, M11
Clothing and Footwear - PHILS	Multiplicative Model: (0,1,2)(0,1,1) With transformation - none F-value: 4.363 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.79 Check: M7, M8, M9, M10, M11
Clothing and Footwear - NCR	Additive Model: None With transformation - none F-value: 1.737 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.97 Check: M4, M7, M8, M9, M10, M11
Clothing and Footwear - AONCR	Additive Model: (0,1,2)(0,1,1) With transformation - none F-value: 2.873 MAVS: 3X3 MA MAVTC: 9-term MA	Conditionally accepted at level 0.97 Check: M7, M8, M9, M10, M11
Housing, Water, Electricity, Gas and Other Fuels - PHILS	Additive Model: (0,1,2)(0,1,1) With transformation - none F-value: 4.832 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.81 Check: M1, M4, M7
Housing, Water, Electricity, Gas and Other Fuels - NCR	Additive Model: (0,1,1)(0,1,1) With transformation - none F-value: 4.719 MAVS: 3X9 MA MAVTC: 13-term MA	Accepted at level 0.99 Check: M1, M4, M6, M7

Series Name/ Geographic Area Covered	Statistical Models/Options	Summary Measures
Housing, Water, Electricity, Gas and Other Fuels - AONCR	Additive Model: (0,1,2)(0,1,1) With transformation - none F-value: 3.906 MAVS: 3X5 MA MAVTC: 9-term MA	Conditionally accepted at level 0.88 Check: M1, M4, M7, 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: 6.040 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.56 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: 3.347 MAVS: 3X5 MA MAVTC: 9-term MA	Conditionally rejected at level 1.01 Check: M4, 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: 2.952 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.70 Check: M7, M8, M10, M11
Health – PHILS	Multiplicative Model: (2,1,0)(0,1,1) With transformation – none F-value: 7.165 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.59 Check: M8, M9, M10, M11

Series Name/ Geographic Area Covered	Statistical Models/Options	Summary Measures
Health –NCR	Multiplicative Model: (0,1,2)(0,1,1) With transformation - none F-value: 12.684 MAVS: 3X3 MA MAVTC: 9-term MA	Accepted at level 0.53 Check: M8, M10, M11
Health – AONCR	Additive Model: (2,1,0)(0,1,1) With transformation - none F-value: 3.301 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.72 Check: M7, M8, M9, M10, M11
Transport – NCR	Multiplicative Model: (2,1,0)(0,1,1) With transformation - none F-value: 2.191 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.92 Check: M1, M4, M6, M7
Recreation and Culture - PHILS	Multiplicative Model: (2,1,2)(0,1,1) With transformation – none F-value: 3.168 MAVS: 3X3 MA MAVTC: 9-term MA	Conditionally rejected at level 1.11 Check: M4, M7, M8, M9, M10
Recreation and Culture - NCR	Additive Model: (2,1,2)(0,1,1) With transformation – none F-value: 6.049 MAVS: 3X3 MA MAVTC: 9-term MA	Accepted at level 0.78 Check: M4, M7, M8, M9, M10, M11
Recreation and Culture - AONCR	Additive Model: (2,1,2)(0,1,1) With transformation –none F-value: 2.743 MAVS: 3X3 MA MAVTC: 9-term MA	Conditionally accepted at level 0.99 Check: M4, 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: 9.994 MAVS: 3X3 MA MAVTC: 9-term MA	Accepted at level 0.72 Check: M4, M8, M9, M10, M11
Education –NCR	Multiplicative Model: (2,1,0)(0,1,1) With transformation - none F-value: 29.338 MAVS: 3X3 MA MAVTC: 9-term MA	Accepted at level 0.59 Check: M4
Education - AONCR	Additive Model: (0,1,2)(0,1,1) With transformation - none F-value: 6.335 MAVS: 3X3 MA MAVTC: 9-term MA	Conditionally accepted at level 0.81 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: 1.924 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.73 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: 2.597 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.89 Check: M1, 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: 1.396 MAVS: 3X5 MA MAVTC: 9-term MA	Conditionally accepted at level 0.98 Check: M7, M8, M9, M10, M11

Source: Philippine Statistics Authority