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

January 2012 - July 2021

Series Name/ Geographic Area Covered	Statistical Models/Options	Summary Measures
All Items – PHILS	Multiplicative Model: (2,1,0)(0,1,1) With transformation - none F-value: 3.435 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at level 0.93 Check: M7, M8, M9, M10, M11
All Items – NCR	Additive Model: (0,1,2)(0,1,1) With transformation - none F-value: 1.474 MAVS: 3x5 MA MAVTC: 9-term MA	Rejected at level 1.09 Check: M7, M8, M9, M10, M11
All Items – AONCR	Multiplicative Model: (2,1,0)(0,1,1) With transformation - none F-value: 3.347 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at level 0.95 Check: M4, M7, M8, M9, M10, M11
Food and Non- alcoholic Beverages – PHILS	Multiplicative Model: (2,1,0)(0,1,1) With transformation - none F-value: 7.875 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at level 0.72 Check: M8, M9, M10, M11
Food and Non- alcoholic Beverages – NCR	Multiplicative Model: (0,1,1)(0,1,1) With transformation - none F-value: 8.756 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at level 0.79 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: 7.179 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at level 0.75 Check: M4, M7, M8, M9, M10, M11
Alcoholic Beverages and Tobacco – PHILS	Additive Model: (0,2,2)(0,1,1) With transformation - none F-value: 13.557 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at level 0.45 Check: M4, M10, M11
Alcoholic Beverages and Tobacco – NCR	Multiplicative Model: (2,1,0)(0,1,1) With transformation - none F-value: 14.843 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at level 0.45 Check: M8, M10, M11
Alcoholic Beverages and Tobacco – AONCR	Additive Model: (0,1,2)(0,1,1) With transformation - none F-value: 12.471 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at level 0.47 Check: M4, M10, M11
Non-Food – PHILS	Additive Model: (0,1,2)(0,1,1) With transformation - none F-Value: 2.111 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at level 0.81 Check: M7, M8, M9, M10, M11
Non-Food – NCR	Additive Model: (2,1,2)(0,1,1) With transformation - none F-Value: 2.456 MAVS: 3x9 MA MAVTC: 9-term MA	Accepted at level 0.67 Check: 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: 1.545 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at level 0.89 Check: M7, M8, M9, M10, M11
Clothing and Footwear - PHILS	Multiplicative Model: (0,2,2)(0,1,1) With transformation - none F-value: 4.446 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: 2.586 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.79 Check: M7, M8, M9, M10, M11
Clothing and Footwear - AONCR	Additive Model: (2,1,0)(0,1,1) With transformation - none F-value: 3.679 MAVS: 3X3 MA MAVTC: 9-term MA	Accepted at level 0.88 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: 6.718 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.57 Check: M8, M10, M11
Housing, Water, Electricity, Gas and Other Fuels - NCR	Additive Model: (0,1,1)(0,1,1) With transformation - none F-value: 4.762 MAVS: 3X9 MA MAVTC: 13-term MA	Accepted at level 0.98 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: (2,1,2)(0,1,1) With transformation - none F-value: 5.839 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.70 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: 7.523 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.59 Check: M7, M8, M9, M10, M11
Furnishing, Household Equipment and Routine Maintenance of the House -NCR	Additive Model: (2,1,2)(0,1,1) With transformation – none F-value: 5.382 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.81 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: 4.957 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.55 Check: M7, M8, M10, M11
Health – PHILS	Multiplicative Model: (2,1,0)(0,1,1) With transformation – none F-value: 9.274 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.54 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: 14.521 MAVS: 3X3 MA MAVTC: 9-term MA	Accepted at level 0.58 Check: M4, M8, M10, M11
Health – AONCR	Additive Model: (2,1,0)(0,1,1) With transformation - none F-value: 4.336 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.66 Check: M7, M8, M9, M10, M11
Transport – NCR	Multiplicative Model: (0,1,2)(0,1,1) With transformation - none F-value: 2.787 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.92 Check: M4, M7, M8, M10, M11
Recreation and Culture - PHILS	Multiplicative Model: (2,1,2)(0,1,1) With transformation – none F-value: 3.672 MAVS: 3X3 MA MAVTC: 9-term MA	Accepted at level 0.95 Check: M4, M7, M8, M9, M10
Recreation and Culture - NCR	Additive Model: (2,1,2)(0,1,1) With transformation – none F-value: 7.024 MAVS: 3X3 MA MAVTC: 9-term MA	Accepted at level 0.72 Check: M7, M8, M9, M10, M11
Recreation and Culture - AONCR	Additive Model: (2,1,2)(0,1,1) With transformation –none F-value: 3.227 MAVS: 3X3 MA MAVTC: 9-term MA	Accepted at level 0.95 Check: M7, M8, M9, M10

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: 11.302 MAVS: 3X3 MA MAVTC: 9-term MA	Accepted at level 0.62 Check: M4, M8, M10, M11
Education –NCR	Multiplicative Model: (2,1,2)(0,1,1) With transformation - none F-value: 32.810 MAVS: 3X3 MA MAVTC: 9-term MA	Accepted at level 0.46 Check: M4
Education - AONCR	Additive Model: (2,1,0)(0,1,1) With transformation - none F-value: 7.212 MAVS: 3X3 MA MAVTC: 9-term MA	Accepted at level 0.69 Check: M4, M7, M8, M9, M10, M11
Restaurant and Miscellaneous Goods and Services - PHILS	Additive Model: (2,1,2)(0,1,1) With transformation - none F-value: 2.456 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.69 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: 3.046 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.75 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: 2.184 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.88 Check: M7, M8, M9, M10, M11

Source: Philippine Statistics Authority