

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

January 2012 – March 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: 3.077 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at level 0.97 Check: M7, M8, M9, M10, M11
All Items – NCR	Additive Model: (0,1,2)(0,1,1) With transformation - none F-value: 1.269 MAVS: 3x5 MA MAVTC: 9-term MA	Rejected at level 1.12 Check: M7, M8, M9, M10, M11
All Items – AONCR	Multiplicative Model: (0,1,1)(0,1,1) With transformation - none F-value: 3.007 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at level 0.97 Check: M4, M7, M8, M9, M10, M11
Food and Non- alcoholic Beverages – PHILS	Multiplicative Model: (0,1,2)(0,1,1) With transformation - none F-value: 8.014 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at level 0.65 Check: M8, M9, M10, M11
Food and Non- alcoholic Beverages – NCR	Multiplicative Model: (0,1,2)(0,1,1) With transformation - none F-value: 8.215 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at level 0.76 Check: M7, M8, M9, M10, M11

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Food and Non- alcoholic Beverages – AONCR	Multiplicative Model: (0,1,2)(0,1,1) With transformation - none F-value: 7.272 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at level 0.69 Check: M7, M8, M9, M10, M11
Alcoholic Beverages and Tobacco – PHILS	Additive Model: (2,1,0)(0,1,1) With transformation - none F-value: 12.515 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at level 0.48 Check: M4, M10, M11
Alcoholic Beverages and Tobacco – NCR	Multiplicative Model: (0,1,2)(0,1,1) With transformation - none F-value: 14.231 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at level 0.45 Check: M8, M10, M11
Alcoholic Beverages and Tobacco – AONCR	Additive Model: (0,1,1)(0,1,1) With transformation - none F-value: 11.244 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at level 0.51 Check: M4, M10, M11
Non-Food – PHILS	Additive Model: (0,1,2)(0,1,1) With transformation - none F-Value: 2.475 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at level 0.71 Check: M7, M8, M10, M11
Non-Food – NCR	Additive Model: (0,1,2)(0,1,1) With transformation - none F-Value: 2.627 MAVS: 3x9 MA MAVTC: 9-term MA	Accepted at level 0.60 Check: 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: 1.709 MAVS: 3x5 MA MAVTC: 9-term MA	Accepted at level 0.85 Check: M7, M8, M9, M10, M11
Clothing and Footwear - PHILS	Multiplicative Model: (2,1,0)(0,1,1) With transformation - none F-value: 4.643 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: 2.640 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.78 Check: M7, M8, M9, M10, M11
Clothing and Footwear - AONCR	Additive Model: (0,1,2)(0,1,1) With transformation - none F-value: 3.658 MAVS: 3X3 MA MAVTC: 9-term MA	Accepted at level 0.90 Check: M7, M8, M9, M10, M11
Housing, Water, Electricity, Gas and Other Fuels - PHILS	Additive Model: (0,1,1)(0,1,1) With transformation - none F-value: 7.798 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.52
Housing, Water, Electricity, Gas and Other Fuels - NCR	Additive Model: (0,1,1)(0,1,1) With transformation - none F-value: 5.763 MAVS: 3X9 MA MAVTC: 13-term MA	Accepted at level 0.80 Check: M1, M6, M7

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Housing, Water, Electricity, Gas and Other Fuels - AONCR	Additive Model: (0,1,2)(0,1,1) With transformation - none F-value: 6.820 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.66 Check: M4, M8, M10, M11
Furnishing, Household Equipment and Routine Maintenance of the House -PHILS	Additive Model: (0,1,1)(0,1,1) With transformation - none F-value: 8.168 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.58 Check: M7, M8, M9, 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: 5.201 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.84 Check: M7, M8, M9, M10, M11
Furnishing, Household Equipment and Routine Maintenance of the House -AONCR	Additive Model: (2,1,2)(0,1,1) With transformation - none F-value: 4.460 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.70 Check: M7, M8, M9, M10, M11
Health – PHILS	Multiplicative Model: (2,1,0)(0,1,1) With transformation – none F-value: 7.982 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.59 Check: M8, M9, M10, M11

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Health –NCR	Multiplicative Model: (0,1,1)(0,1,1) With transformation - none F-value: 12.895 MAVS: 3X3 MA MAVTC: 9-term MA	Accepted at level 0.61 Check: M4, M8, M10, M11
Health – AONCR	Additive Model: (2,1,0)(0,1,1) With transformation - none F-value: 3.773 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.66 Check: M7, M8, M9, M10, M11
Transport – NCR	Multiplicative Model: (2,1,2)(0,1,1) With transformation - none F-value: 2.563 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.96 Check: M4, M7, M8, M10, M11
Recreation and Culture - PHILS	Multiplicative Model: (0,1,2)(0,1,1) With transformation – none F-value: 4.232 MAVS: 3X3 MA MAVTC: 9-term MA	Accepted at level 0.84 Check: M4, M7, M8, M9, M10
Recreation and Culture - NCR	Additive Model: (2,1,0)(0,1,1) With transformation – none F-value: 7.814 MAVS: 3X3 MA MAVTC: 9-term MA	Accepted at level 0.70 Check: M7, M8, M9, M10, M11
Recreation and Culture - AONCR	Additive Model: (2,1,0)(0,1,1) With transformation –none F-value: 3.762 MAVS: 3X3 MA MAVTC: 9-term MA	Accepted at level 0.82 Check: M7, M8, M9, M10

Series Name/ Geographic Area Covered	Statistical Models/Options	Summary Measures
Education – PHILS	Additive Model: (2,1,2)(0,1,1) With transformation - none F-value: 14.042 MAVS: 3X3 MA MAVTC: 9-term MA	Accepted at level 0.54 Check: M4, M10, M11
Education –NCR	Multiplicative Model: None With transformation - none F-value: 54.552 MAVS: 3X3 MA MAVTC: 9-term MA	Accepted at level 0.34 Check: M4
Education - AONCR	Additive Model: (2,1,2)(0,1,1) With transformation - none F-value: 8.569 MAVS: 3X3 MA MAVTC: 9-term MA	Accepted at level 0.68 Check: M4, M7, M8, M10, M11
Restaurant and Miscellaneous Goods and Services - PHILS	Additive Model: (0,2,2)(0,1,1) With transformation - none F-value: 2.276 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.74 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: 2.925 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.76 Check: M4, M7, M8, M10, M11
Restaurant and Miscellaneous Goods and Services – AONCR	Additive Model: (2,1,2)(0,1,1) With transformation - none F-value: 1.866 MAVS: 3X5 MA MAVTC: 9-term MA	Accepted at level 0.99 Check: M7, M8, M9, M10, M11

Source: Philippine Statistics Authority