Table 4. Summary of Statistical Models Used in the Generation of Seasonally Adjusted CPI

(2012=100)

January 2012 – May 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: 3.260  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.96  Check: M7, M8, M9, M10, M11 |
| All Items – NCR | | Additive  Model: (2,1,2)(0,1,1)  With transformation - none  F-value: 1.302  MAVS: 3x5 MA  MAVTC: 9-term MA | | Rejected at level 1.14  Check: M7, M8, M9, M10, M11 |
| All Items – AONCR | | Multiplicative  Model: (0,1,1)(0,1,1)  With transformation - none  F-value: 3.102  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.96  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: 7.854  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: (0,1,1)(0,1,1)  With transformation - none  F-value: 8.348  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.78  Check: M4, M8, M9, M10, M11 |
| Food and Non-alcoholic Beverages – AONCR | | Multiplicative  Model: (0,1,1)(0,1,1)  With transformation - none  F-value: 7.321  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.73  Check: M4, M7, M8, M9, M10, M11 |
| Alcoholic Beverages and Tobacco – PHILS | | Additive  Model: (0,1,2)(0,1,1)  With transformation - none  F-value: 13.046  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.45  Check: M4, M10, M11 |
| Alcoholic Beverages and Tobacco – NCR | | Multiplicative  Model: (0,1,2)(0,1,1)  With transformation - none  F-value: 14.602  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.46  Check: M4, M8, M10, M11 |
| Alcoholic Beverages and Tobacco – AONCR | | Additive  Model: (0,1,2)(0,1,1)  With transformation - none  F-value: 11.997  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.48  Check: M4, M10, M11 |
| Non-Food – PHILS | | Additive  Model: (2,1,2)(0,1,1)  With transformation - none  F-Value: 2.274  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.77  Check: M7, M8, M10, M11 |
| Non-Food – NCR | | Additive  Model: (0,1,2)(0,1,1)  With transformation - none  F-Value: 2.311  MAVS: 3x9 MA  MAVTC: 9-term MA | | Accepted at level 0.66  Check: M6, M7 |
|  | | | | |
| Non-Food – AONCR | | Additive  Model: (2,1,2)(0,1,1)  With transformation - none  F-Value: 1.667  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.83  Check: M7, M8, M9, M10, M11 | |
| Clothing and Footwear - PHILS | | Multiplicative  Model: (0,2,2)(0,1,1)  With transformation - none  F-value: 4.629  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.77  Check: M7, M8, M9, M10, M11 | |
| Clothing and Footwear - NCR | | Additive  Model: None  With transformation - none  F-value: 2.485  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.80  Check: M7, M8, M9, M10, M11 | |
| Clothing and Footwear - AONCR | | Additive  Model: (2,1,0)(0,1,1)  With transformation - none  F-value: 3.763  MAVS: 3X3 MA  MAVTC: 9-term MA | | Accepted at level 0.89  Check: M7, M8, M9, M10, M11 | |
| Housing, Water, Electricity, Gas and Other Fuels - PHILS | | Additive  Model: (2,1,0)(0,1,1)  With transformation - none  F-value: 7.657  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.54  Check: M8, M10 | |
| Housing, Water, Electricity, Gas and Other Fuels - NCR | | Additive  Model: (0,1,2)(0,1,1)  With transformation - none  F-value: 5.317  MAVS: 3X9 MA  MAVTC: 13-term MA | | Accepted at level 0.87  Check: M1, M7 | |
| Housing, Water, Electricity, Gas and Other Fuels - AONCR | | Additive  Model: (2,1,2)(0,1,1)  With transformation - none  F-value: 6.901  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: (2,1,0)(0,1,1)  With transformation - none  F-value: 8.228  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.54  Check: M7, M8, M9, M10, M11 | |
| Furnishing, Household Equipment and Routine Maintenance of the House -NCR | | Additive  Model: (0,1,2)(0,1,1)  With transformation – none  F-value: 5.038  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.82  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: 4.926  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.60  Check: M7, M8, M9, M10, M11 | |
| Health – PHILS | | Multiplicative  Model: (0,1,1)(0,1,1)  With transformation – none  F-value: 8.474  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.54  Check: M8, M9, M10, M11 | |
| Health –NCR | | Multiplicative  Model: (2,1,0)(0,1,1)  With transformation - none  F-value: 13.485  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.56  Check: M4, M8, M10, M11 | |
| Health – AONCR | | Additive  Model: (0,1,1)(0,1,1)  With transformation - none  F-value: 3.990  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.64  Check: M7, M8, M9, M10, M11 | |
| Transport – NCR | | Multiplicative  Model: (0,1,2)(0,1,1)  With transformation - none  F-value: 2.635  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.93  Check: M4, M7, M8, M10, M11 | |
| Recreation and Culture - PHILS | | Multiplicative  Model: (0,1,2)(0,1,1)  With transformation – none  F-value: 4.136  MAVS: 3X3 MA  MAVTC: 9-term MA | | Accepted at level 0.86  Check: M4, M7, M8, M9, M10 | |
| Recreation and Culture - NCR | | Additive  Model: (2,1,2)(0,1,1)  With transformation – none  F-value: 7.357  MAVS: 3X3 MA  MAVTC: 9-term MA | | Accepted at level 0.75  Check: M7, M8, M9, M10, M11 | |
| Recreation and Culture - AONCR | | Additive  Model: (0,1,2)(0,1,1)  With transformation –none  F-value: 3.693  MAVS: 3X3 MA  MAVTC: 9-term MA | | Accepted at level 0.84  Check: M7, M8, M9, M10 | |
| Education – PHILS | | Additive  Model: (2,1,2)(0,1,1)  With transformation - none  F-value: 14.838  MAVS: 3X3 MA  MAVTC: 9-term MA | | Accepted at level 0.52  Check: M4, M10, M11 | |
| Education –NCR | | Multiplicative  Model: None  With transformation - none  F-value: 57.389  MAVS: 3X3 MA  MAVTC: 9-term MA | | Accepted at level 0.33  Check: M4 | |
| Education - AONCR | | Additive  Model: (2,1,2)(0,1,1)  With transformation - none  F-value: 9.021  MAVS: 3X3 MA  MAVTC: 9-term MA | | Accepted at level 0.65  Check: M4, M7, M8, M10, M11 | |
| Restaurant and Miscellaneous Goods and Services - PHILS | | Additive  Model: (2,1,2)(0,1,1)  With transformation - none  F-value: 2.109  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: 2.854  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: (0,2,2)(0,1,1)  With transformation - none  F-value: 1.811  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.98  Check: M7, M8, M9, M10, M11 | |

Source: Philippine Statistics Authority