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

(2012=100)

January 2012 – February 2021

| **Series Name/**  **Geographic Area Covered** | | **Statistical Models/Options** | | **Summary Measures** |
| --- | --- | --- | --- | --- |
| All Items – PHILS | | Multiplicative  Model: (0,1,2)(0,1,1)  With transformation - none  F-value: 3.035  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.96  Check: M7, M8, M9, M10, M11 |
| All Items – NCR | | Additive  Model: (0,1,2)(0,1,1)  With transformation - none  F-value: 1.086  MAVS: 3x5 MA  MAVTC: 9-term MA | | Rejected at level 1.19  Check: M7, M8, M9, M10, M11 |
| All Items – AONCR | | Multiplicative  Model: (0,1,2)(0,1,1)  With transformation - none  F-value: 2.976  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.94  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: 8.035  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.67  Check: M8, M9, M10, M11 |
| Food and Non-alcoholic Beverages – NCR | | Multiplicative  Model: (0,1,2)(0,1,1)  With transformation - none  F-value: 8.326  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.74  Check: M8, M9, M10, M11 |
| Food and Non-alcoholic Beverages – AONCR | | Multiplicative  Model: (0,2,2)(0,1,1)  With transformation - none  F-value: 7.929  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.63  Check: M8, M9, M10, M11 |
| Alcoholic Beverages and Tobacco – PHILS | | Additive  Model: (0,1,2)(0,1,1)  With transformation - none  F-value: 12.046  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.46  Check: M8, M10, M11 |
| Alcoholic Beverages and Tobacco – NCR | | Multiplicative  Model: (0,1,2)(0,1,1)  With transformation - none  F-value: 14.211  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: 10.890  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.51  Check: M4, M8, M10, M11 |
| Non-Food – PHILS | | Additive  Model: (0,1,2)(0,1,1)  With transformation - none  F-Value: 2.089  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.73  Check: M7, M8, M10, M11 |
| Non-Food – NCR | | Additive  Model: (2,1,2)(0,1,1)  With transformation - none  F-Value: 2.871  MAVS: 3x9 MA  MAVTC: 9-term MA | | Accepted at level 0.60  Check: M4, M6, M7 |
|  | | | | |
| Non-Food – AONCR | | Additive  Model: (0,1,2)(0,1,1)  With transformation - none  F-Value: 1.468  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.93  Check: M7, M8, M9, M10, M11 | |
| Clothing and Footwear - PHILS | | Multiplicative  Model: (2,1,0)(0,1,1)  With transformation - none  F-value: 4.290  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: 2.685  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: 3.466  MAVS: 3X3 MA  MAVTC: 9-term MA | | Accepted at level 0.91  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: 7.921  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.51 | |
| Housing, Water, Electricity, Gas and Other Fuels - NCR | | Additive  Model: (0,1,1)(0,1,1)  With transformation - none  F-value: 6.019  MAVS: 3X9 MA  MAVTC: 13-term MA | | Accepted at level 0.80  Check: M1, M6, M7 | |
| Housing, Water, Electricity, Gas and Other Fuels - AONCR | | Additive  Model: (2,1,2)(0,1,1)  With transformation - none  F-value: 6.804  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.65  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: 7.895  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.60  Check: M7, M8, M9, M10, M11 | |
| Furnishing, Household Equipment and Routine Maintenance of the House -NCR | | Additive  Model: (2,1,0)(0,1,1)  With transformation – none  F-value: 5.074  MAVS: 3X3 MA  MAVTC: 9-term MA | | Accepted at level 0.97  Check: M7, M8, M9, M10, M11 | |
| Furnishing, Household Equipment and Routine Maintenance of the House -AONCR | | Additive  Model: (2,1,0)(0,1,1)  With transformation - none  F-value: 4.343  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.73  Check: M7, M8, M9, M10, M11 | |
| Health – PHILS | | Multiplicative  Model: (2,1,0)(0,1,1)  With transformation – none  F-value: 7.892  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.59  Check: M8, M9, M10, M11 | |
| Health –NCR | | Multiplicative  Model: (0,1,2)(0,1,1)  With transformation - none  F-value: 12.776  MAVS: 3X3 MA  MAVTC: 9-term MA | | Accepted at level 0.62  Check: M4, M8, M10, M11 | |
| Health – AONCR | | Additive  Model: (2,1,0)(0,1,1)  With transformation - none  F-value: 3.708  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.68  Check: M7, M8, M9, M10, M11 | |
| Transport – NCR | | Multiplicative  Model: (0,1,1)(0,1,1)  With transformation - none  F-value: 2.492  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.95  Check: M4, M7, M8, M10, M11 | |
| Recreation and Culture - PHILS | | Multiplicative  Model: (0,1,1)(0,1,1)  With transformation – none  F-value: 4.225  MAVS: 3X3 MA  MAVTC: 9-term MA | | Accepted at level 0.86  Check: M4, M7, M8, M9, M10 | |
| Recreation and Culture - NCR | | Additive  Model: (0,1,2)(0,1,1)  With transformation – none  F-value: 7.830  MAVS: 3X3 MA  MAVTC: 9-term MA | | Accepted at level 0.70  Check: M7, M8, M9, M10, M11 | |
| Recreation and Culture - AONCR | | Additive  Model: (0,1,1)(0,1,1)  With transformation –none  F-value: 3.764  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: 13.845  MAVS: 3X3 MA  MAVTC: 9-term MA | | Accepted at level 0.56  Check: M4, M10, M11 | |
| Education –NCR | | Multiplicative  Model: None  With transformation - none  F-value: 54.124  MAVS: 3X3 MA  MAVTC: 9-term MA | | Accepted at level 0.35  Check: M4 | |
| Education - AONCR | | Additive  Model: (2,1,2)(0,1,1)  With transformation - none  F-value: 8.442  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: (2,1,2)(0,1,1)  With transformation - none  F-value: 2.847  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.70  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: 3.496  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.71  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: 1.855  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.99  Check: M7, M8, M9, M10, M11 | |

Source: Philippine Statistics Authority