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

(2012=100)

January 2012 – July 2020

| **Series Name/**  **Geographic Area Covered** | | **Statistical Models/Options** | | **Summary Measures** |
| --- | --- | --- | --- | --- |
| All Items – PHILS | | Multiplicative  Model: (2,1,2)(0,1,1)  With transformation - none  F-value: 4.045  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.81  Check: M7, M8, M9, M10, M11 |
| All Items – AONCR | | Additive  Model: (0,1,1)(0,1,1)  With transformation - none  F-value: 4.463  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.76  Check: M7, M8, M9, M10, M11 |
| Food and Non-alcoholic Beverages – PHILS | | Multiplicative  Model: (0,1,1)(0,1,1)  With transformation - none  F-value: 19.219  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.41  Check: M4 |
| Food and Non-alcoholic Beverages – NCR | | Multiplicative  Model: (2,1,2)(0,1,1)  With transformation - none  F-value: 14.216  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.52  Check: M8, M10, M11 |
| Food and Non-alcoholic Beverages – AONCR | | Additive  Model: (0,1,2)(0,1,1)  With transformation - none  F-value: 16.613  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.45  Check: M6 |
| Alcoholic Beverages and Tobacco – PHILS | | Additive  Model: (2,1,0)(0,1,1)  With transformation - none  F-value: 11.629  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.47  Check: M4, M10, M11 |
| Alcoholic Beverages and Tobacco – NCR | | Multiplicative  Model: (2,1,0)(0,1,1)  With transformation - none  F-value: 13.892  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.44 |
| Alcoholic Beverages and Tobacco – AONCR | | Additive  Model: (2,1,0)(0,1,1)  With transformation - none  F-value: 10.456  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.53  Check: M4, M10, M11 |
| Non-Food – PHILS | | Additive  Model: (0,1,2)(0,1,1)  With transformation - none  F-Value: 1.799  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.79  Check: M7, M8, M9, M10, M11 |
| Non-Food – NCR | | Additive  Model: (2,1,2)(0,1,1)  With transformation - none  F-Value: 2.783  MAVS: 3x9 MA  MAVTC: 9-term MA | | Accepted at level 0.61  Check: M6, M7 |
| Non-Food – AONCR | | Additive  Model: (2,1,2)(0,1,1)  With transformation - none  F-Value: 1.471  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.86  Check: M7, M8, M10, M11 |
|  | | | | |
| Clothing and Footwear - PHILS | | Multiplicative  Model: (2,1,0)(0,1,1)  With transformation - none  F-value: 3.548  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.91  Check: M7, M8, M9, M10, M11 | |
| Clothing and Footwear - NCR | | Additive  Model: None  With transformation - none  F-value: 2.786  MAVS: 3X9 MA  MAVTC: 9-term MA | | Accepted at level 0.68  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: 6.468  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.54  Check: M10, M11 | |
| Housing, Water, Electricity, Gas and Other Fuels - AONCR | | Additive  Model: (0,1,1)(0,1,1)  With transformation – none  F-value: 4.769  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.73  Check: M4, M7, 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: 6.695  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.64  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: 4.094  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.92  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: 3.409  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.78  Check: M7, M8, M9, M10, M11 | |
| Health – PHILS | | Multiplicative  Model: (2,1,0)(0,1,1)  With transformation – none  F-value: 6.985  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.63  Check: M8, M9, M10, M11 | |
| Health –NCR | | Multiplicative  Model: (0,1,2)(0,1,1)  With transformation - none  F-value: 11.140  MAVS: 3X3 MA  MAVTC: 9-term MA | | Accepted at level 0.71  Check: M4, M8, M9, M10, M11 | |
| Health – AONCR | | Additive  Model: (2,1,0)(0,1,1)  With transformation - none  F-value: 3.343  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.67  Check: M7, M8, M9, M10, M11 | |
| Transport – AONCR | | Multiplicative  Model: (0,1,2)(0,1,1)  With transformation - none  F-value: 0.939  MAVS: 3X5 MA  MAVTC: 13-term MA | | Rejected at level 1.56  Check: M1, M4, M7, M8, M9, M10, M11 | |
| Recreation and Culture - PHILS | | Multiplicative  Model: (0,1,2)(0,1,1)  With transformation – none  F-value: 4.462  MAVS: 3X3 MA  MAVTC: 9-term MA | | Accepted at level 0.87  Check: M7, M8, M9, M10, M11 | |
| Recreation and Culture - NCR | | Additive  Model: (2,1,2)(0,1,1)  With transformation – none  F-value: 6.365  MAVS: 3X3 MA  MAVTC: 9-term MA | | Accepted at level 0.84  Check: M7, M8, M9, M10, M11 | |
| Recreation and Culture - AONCR | | Additive  Model: (0,1,2)(0,1,1)  With transformation – none  F-value: 4.357  MAVS: 3X3 MA  MAVTC: 9-term MA | | Accepted at level 0.87  Check: M7, M8, M9, M10, M11 | |
| Education – PHILS | | Additive  Model: (2,1,2)(0,1,1)  With transformation - none  F-value: 13.112  MAVS: 3X3 MA  MAVTC: 9-term MA | | Accepted at the level 0.52  Check: M4, M10, M11 | |
| Education –NCR | | Multiplicative  Model: None  With transformation - none  F-value: 58.318  MAVS: 3X3 MA  MAVTC: 9-term MA | | Accepted at the level 0.31  Check: M4 | |
| Education - AONCR | | Additive  Model: (0,1,1)(0,1,1)  With transformation - none  F-value: 8.035  MAVS: 3X3 MA  MAVTC: 9-term MA | | Accepted at the level 0.67  Check: M4, M6, 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: 1.785  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at the level 0.85  Check: M7, M8, M9, M10, M11 | |
| Restaurant and Miscellaneous  Goods and Services – NCR | | Multiplicative  Model: (0,2,2,2)(0,1,1)  With transformation - none  F-value: 3.747  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at the level 0.67  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: 0.868  MAVS: 3X5 MA  MAVTC: 9-term MA | | Rejected at the level 1.20  Check: M7, M8, M9, M10, M11 | |

Source: Philippine Statistics Authority