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

(2012=100)

January 2012 – September 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: 3.456  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.84  Check: M7, M8, M9, M10, M11 |
| All Items – AONCR | | Additive  Model: (0,1,1)(0,1,1)  With transformation - none  F-value: 3.619  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.81  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: 15.950  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.45  Check: M10, M11 |
| Food and Non-alcoholic Beverages – NCR | | Multiplicative  Model: (2,1,2)(0,1,1)  With transformation - none  F-value: 12.764  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.53  Check: M8, M9, M10, M11 |
| Food and Non-alcoholic Beverages – AONCR | | Additive  Model: (0,1,1)(0,1,1)  With transformation - none  F-value: 12.915  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.49  Check: M10, M11 |
| Alcoholic Beverages and Tobacco – PHILS | | Additive  Model: (2,1,0)(0,1,1)  With transformation - none  F-value: 13.647  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.44  Check: M4 |
| Alcoholic Beverages and Tobacco – NCR | | Multiplicative  Model: (2,1,0)(0,1,1)  With transformation - none  F-value: 14.618  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.45  Check: M4 |
| Alcoholic Beverages and Tobacco – AONCR | | Additive  Model: (2,1,0)(0,1,1)  With transformation - none  F-value: 12.270  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.41 |
| Non-Food – PHILS | | Additive  Model: (0,1,2)(0,1,1)  With transformation - none  F-Value: 1.979  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: 2.888  MAVS: 3x9 MA  MAVTC: 9-term MA | | Accepted at level 0.56  Check: M6, M7 |
| Non-Food – AONCR | | Additive  Model: (0,1,1)(0,1,1)  With transformation - none  F-Value: 1.231  MAVS: 3x5 MA  MAVTC: 9-term MA | | Accepted at level 0.99  Check: M7, M8, M9, M10, M11 |
|  | | | | |
| Clothing and Footwear - PHILS | | Multiplicative  Model: (2,1,0)(0,1,1)  With transformation - none  F-value: 4.253  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.81  Check: M7, M8, M9, M10, M11 | |
| Clothing and Footwear - NCR | | Additive  Model: None  With transformation - none  F-value: 2.848  MAVS: 3X9 MA  MAVTC: 9-term MA | | Accepted at level 0.66  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: 6.832  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.52  Check: M10, M11 | |
| Housing, Water, Electricity, Gas and Other Fuels - AONCR | | Additive  Model: (2,1,0)(0,1,1)  With transformation - none  F-value: 5.497  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.70  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: 6.329  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.63  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: 4.080  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.94  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: 4.005  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.72  Check: M7, M8, M9, M10, M11 | |
| Health – PHILS | | Multiplicative  Model: (2,1,0)(0,1,1)  With transformation – none  F-value: 7.041  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.64  Check: M8, M9, M10, M11 | |
| Health –NCR | | Multiplicative  Model: (0,1,1)(0,1,1)  With transformation - none  F-value: 11.679  MAVS: 3X3 MA  MAVTC: 9-term MA | | Accepted at level 0.70  Check: M4, M8, M9, M10, M11 | |
| Health – AONCR | | Additive  Model: (2,1,0)(0,1,1)  With transformation - none  F-value: 3.354  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.71  Check: M7, M8, M9, M10, M11 | |
| Transport – AONCR | | Multiplicative  Model: (0,1,2)(0,1,1)  With transformation - none  F-value: 1.003  MAVS: 3X5 MA  MAVTC: 13-term MA | | Rejected at level 1.54  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: 4.339  MAVS: 3X3 MA  MAVTC: 9-term MA | | Accepted at level 0.91  Check: M4, M7, M8, M9, M10, M11 | |
| Recreation and Culture - NCR | | Additive  Model: (2,1,2)(0,1,1)  With transformation – none  F-value: 7.073  MAVS: 3X3 MA  MAVTC: 9-term MA | | Accepted at level 0.77  Check: M7, M8, M9, M10, M11 | |
| Recreation and Culture - AONCR | | Additive  Model: (0,1,1)(0,1,1)  With transformation – none  F-value: 3.715  MAVS: 3X3 MA  MAVTC: 9-term MA | | Accepted at level 0.82  Check: M7, M8, M9, M10, M11 | |
| Education – PHILS | | Additive  Model: (2,1,0)(0,1,1)  With transformation - none  F-value: 13.287  MAVS: 3X3 MA  MAVTC: 9-term MA | | Accepted at level 0.53  Check: M4, M10, M11 | |
| Education –NCR | | Multiplicative  Model: None  With transformation - none  F-value: 58.814  MAVS: 3X3 MA  MAVTC: 9-term MA | | Accepted at level 0.31  Check: M4 | |
| Education - AONCR | | Additive  Model: (0,1,1)(0,1,1)  With transformation - none  F-value: 8.108  MAVS: 3X3 MA  MAVTC: 9-term MA | | Accepted at level 0.66  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: 2.093  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.82  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: 4.002  MAVS: 3X5 MA  MAVTC: 9-term MA | | Accepted at level 0.66  Check: M4, M7, M8, M10, M11 | |
| Restaurant and Miscellaneous  Goods and Services – AONCR | | Additive  Model: (2,1,0)(0,1,1)  With transformation - none  F-value: 0.997  MAVS: 3X5 MA  MAVTC: 9-term MA | | Rejected at level 1.18  Check: M7, M8, M9, M10, M11 | |

Source: Philippine Statistics Authority