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

(2018=100)

December 2021 – December 2022

| **Series Name/****Geographic Area Covered** | **Statistical Models/Options** | **Summary Measures** |
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| All Items – PHILS | MultiplicativeModel: (0,1,2)(0,1,1)With transformation - noneF-value: 4.607MAVS: 3x5 MAMAVTC: 9-term MA | Accepted at the level 0.80.Check: M4, M7, M8, M9, M10, and M11 |
| All Items – NCR | AdditiveModel: (2,1,2)(0,1,1)With transformation - noneF-value: 1.701MAVS: 3x5 MAMAVTC: 9-term MA | Conditionally rejected at the level 1.04.Check: M7, M8, M9, M10, and M11 |
| All Items – AONCR | MultiplicativeModel: (2,1,2)(0,1,1)With transformation - noneF-value: 4.984MAVS: 3x5 MAMAVTC: 9-term MA | Accepted at the level 0.73.Check: M4, M7, M8, M9, M10, and M11 |
| Food and Non-alcoholic Beverages – PHILS | MultiplicativeModel: (2,1,2)(0,1,1)With transformation - noneF-value: 11.077MAVS: 3x5 MAMAVTC: 9-term MA | Accepted at the level 0.65.Check: M4, M8, M9, M10, and M11 |
| Food and Non-alcoholic Beverages – NCR | MultiplicativeModel: (2,1,2)(0,1,1)With transformation - noneF-value: 12.512MAVS: 3x5 MAMAVTC: 9-term MA | Accepted at the level 0.60.Check: M4, M8, M10, and M11 |
| Food and Non-alcoholic Beverages – AONCR | MultiplicativeModel: (2,1,2)(0,1,1)With transformation - noneF-value: 10.055MAVS: 3x5 MAMAVTC: 9-term MA | Accepted at the level 0.68.Check: M4, M8, M9, M10, and M11 |
| Alcoholic Beverages and Tobacco – PHILS | AdditiveModel: (2,1,2)(0,1,1)With transformation - noneF-value: 13.398MAVS: 3x5 MAMAVTC: 9-term MA | Accepted at the level 0.52.Check: M4, M10, and M11 |
| Alcoholic Beverages and Tobacco – NCR | AdditiveModel: (0,1,1)(0,1,1)With transformation - noneF-value: 14.512MAVS: 3x5 MAMAVTC: 9-term MA | Accepted at the level 0.51.Check: M4, M8, M10, and M11 |
| Alcoholic Beverages and Tobacco – AONCR | AdditiveModel: (2,1,2)(0,1,1)With transformation - noneF-value: 12.587MAVS: 3x5 MAMAVTC: 9-term MA | Accepted at the level 0.50.Check: M4 and M10 |
| Non-Food – PHILS | MultiplicativeModel: (2,1,2)(0,1,1)With transformation - noneF-Value: 3.243MAVS: 3x5 MAMAVTC: 9-term MA | Accepted at the level 0.69.Check: M7, M8, M9, M10, and M11 |
| Non-Food – NCR | MultiplicativeModel: (0,1,1)(0,1,1)With transformation - noneF-Value: 2.421MAVS: 3x9 MAMAVTC: 9-term MA | Accepted at the level 0.75.Check: M7, M8, M10, and M11 |
|  |
| Non-Food – AONCR | MultiplicativeModel: (0,1,2)(0,1,1)With transformation - noneF-Value: 3.224MAVS: 3x5 MAMAVTC: 9-term MA | Accepted at the level 0.77.Check: M7, M8, M9, M10, and M11 |
| Clothing and Footwear - PHILS | AdditiveModel: (0,1,2)(0,1,1)With transformation - noneF-value: 3.045MAVS: 3X5 MAMAVTC: 9-term MA | Conditionally accepted at the level 0.81.Check: M7, M8, M9, M10, and M11 |
| Clothing and Footwear - NCR | AdditiveModel: (2,1,0)(0,1,1)With transformation - noneF-value: 2.528MAVS: 3X5 MAMAVTC: 9-term MA | Accepted at the level 0.75.Check: M7, M8, M9, M10, and M11 |
| Clothing and Footwear - AONCR | AdditiveModel: (0,1,2)(0,1,1)With transformation - noneF-value: 2.586MAVS: 3X3 MAMAVTC: 9-term MA | Conditionally accepted at the level 0.92.Check: M7, M8, M9, M10, and M11 |
| Housing, Water, Electricity, Gas and Other Fuels - PHILS | MultiplicativeModel: (2,1,2)(0,1,1)With transformation - noneF-value: 6.076MAVS: 3X5 MAMAVTC: 9-term MA | Accepted at the level 0.57.Check: M4, M8, M10, and M11 |
| Housing, Water, Electricity, Gas and Other Fuels - NCR | AdditiveModel: (2,1,2)(0,1,1)With transformation - noneF-value: 4.655MAVS: 3X9 MAMAVTC: 13-term MA | Conditionally accepted at the level 0.80.Check: M1 and M7 |
| Housing, Water, Electricity, Gas and Other Fuels - AONCR | AdditiveModel: (0,2,2)(0,1,1)With transformation - noneF-value: 5.351MAVS: 3X5 MAMAVTC: 9-term MA | Accepted at the level 0.69.Check: M4, M7, M8, M9, M10, and M11 |
| Furnishings, Household Equipment and Routine Household Maintenance - PHILS | AdditiveModel: (0,1,1)(0,1,1)With transformation - noneF-value: 6.269MAVS: 3X5 MAMAVTC: 9-term MA | Accepted at the level 0.54.Check: M7, M8, M10 and M11 |
| Furnishings, Household Equipment and Routine Household Maintenance – NCR | AdditiveModel: (0,1,1)(0,1,1)With transformation – noneF-value: 7.014MAVS: 3X5 MAMAVTC: 9-term MA | Accepted at the level 0.57.Check: M7, M8, M9, M10, and M11 |
| Furnishings, Household Equipment and Routine Household Maintenance – AONCR | AdditiveModel: (0,1,1)(0,1,1)With transformation - noneF-value: 3.020MAVS: 3X5 MAMAVTC: 9-term MA | Accepted at the level 0.73.Check: M7, M8, M9, M10 and M11 |
| Health – PHILS | AdditiveModel: (2,1,2)(0,1,1)With transformation – noneF-value: 10.111MAVS: 3X5 MAMAVTC: 9-term MA | Accepted at the level 0.43.Check: M8, M10, and M11 |
| Health – NCR | AdditiveModel: (0,1,1)(0,1,1)With transformation - noneF-value: 12.277MAVS: 3X3 MAMAVTC: 9-term MA | Accepted at the level 0.43.Check: M8 |
| Health – AONCR | AdditiveModel: (2,1,2)(0,1,1)With transformation - noneF-value: 5.847MAVS: 3X5 MAMAVTC: 9-term MA | Accepted at the level 0.56.Check: M7, M8, M9, M10, and M11 |
| Information and Communication – NCR | AdditiveModel: (2,1,2)(0,1,1)With transformation - noneF-value: 3.064MAVS: 3X5 MAMAVTC: 9-term MA | Conditionally accepted at the level 0.84.Check: M4, M7, M8, M9, M10, and M11 |
| Information and Communication – AONCR | MultiplicativeModel: (2,1,0)(0,1,1)With transformation - noneF-value: 3.656MAVS: 3X5 MAMAVTC: 9-term MA | Accepted at the level 0.69.Check: M7, M8, M9, M10, and M11 |
| Education Services – PHILS | AdditiveModel: (0,1,1)(0,1,1)With transformation - noneF-value: 23.315MAVS: 3X3 MAMAVTC: 9-term MA | Accepted at the level 0.61.Check: M4, M8, M10, and M11 |
| Education Services –NCR | AdditiveModel: (0,1,1)(0,1,1)With transformation - noneF-value: 16.200MAVS: 3X3 MAMAVTC: 9-term MA | Accepted at the level 0.59.Check: M4, M10, and M11 |
| Education Services - AONCR | AdditiveModel: (2,1,2)(0,1,1)With transformation - noneF-value: 22.537MAVS: 3X3 MAMAVTC: 9-term MA | Accepted at the level 0.64.Check: M4, M6, M8, M9, M10, and M11 |
| Restaurants and Accommodation Services - PHILS | AdditiveModel: (0,1,1)(0,1,1)With transformation - noneF-value: 1.043MAVS: 3X5 MAMAVTC: 9-term MA | Conditionally rejected at the level 1.14.Check: M7, M8, M9, M10, and M11 |
| Restaurants and Accommodation Services – NCR | MultiplicativeModel: (0,1,1)(0,1,1)With transformation - noneF-value: 1.767MAVS: 3X5 MAMAVTC: 9-term MA | Conditionally rejected at the level 1.05.Check: M7, M8, M9, M10, and M11  |
| Restaurants and Accommodation Services – AONCR | AdditiveModel: (2,1,0)(0,1,1)With transformation - noneF-value: 3.448MAVS: 3X5 MAMAVTC: 9-term MA | Accepted at the level 0.67.Check: M7, M8, M9, M10, and M11 |
| Personal Care, and Miscellaneous Goods and Services – PHILS | AdditiveModel: (0,1,1)(0,1,1)With transformation - noneF-value: 2.938MAVS: 3X5 MAMAVTC: 9-term MA | Accepted at the level 0.75.Check: M7, M8, M9, M10, and M11 |
| Personal Care, and Miscellaneous Goods and Services – NCR | AdditiveModel: (2,1,0)(0,1,1)With transformation - noneF-value: 12.506MAVS: 3X5 MAMAVTC: 9-term MA | Accepted at the level 0.49.Check: M10 and M11 |
| Personal Care, and Miscellaneous Goods and Services – AONCR | AdditiveModel: (2,1,0)(0,1,1)With transformation - noneF-value: 1.200MAVS: 3X5 MAMAVTC: 9-term MA | Conditionally accepted at the level 0.89.Check: M7, M8, M9, M10, and M11 |

Source: Retail Price Survey of Commodities for the Generation of Consumer Price Index, Philippine Statistics Authority