COVID-19

‘MODIFIED’ Control Chart Analysis

As of Friday 5/01/2020, 5:00PM HST
**USA**

### ‘Modified’ Control Chart Analysis:

- **Two points, out of three successive points, are on the same side of the centerline in Zone A or beyond.**
  - The last two points (4/30/20 and 5/1/20) are both above the control line, which suggests a bad ‘out-of-control’ pattern for COVID-19 cases in USA.

- **Four points, out of five successive points, are on the same side of the centerline in Zone B or beyond.**
  - Four points (4/26/20 – 4/29/20) are below the control line, which suggests a good ‘out-of-control’ pattern for COVID-19 cases in USA during this period.
Spain

‘Modified’ Control Chart Analysis:

- Two points, out of three successive points, are on the same side of the centerline in Zone A or beyond.
  - The last three points (4/29/20 – 5/1/20) are all below the control line, which suggests a good ‘out-of-control’ pattern for COVID-19 cases in Spain.

- Four points, out of five successive points, are on the same side of the centerline in Zone B or beyond.
  - The last five points (4/27/20 – 5/1/20) are all below the control line, which suggests a good ‘out-of-control’ pattern for COVID-19 cases in Spain during this period.

- Nine successive points are on one side of the centerline.
  - Nine consecutive points (3/28/20 - 4/05/20) are all on one side (above) of the centerline. This was a bad ‘out-of-control’ pattern.
Italy

‘Modified’ Control Chart Analysis:

• Two points, out of three successive points, are on the same side of the centerline in Zone A or beyond.
  
  o The last three points (4/29/20 – 5/1/20) are below the control line, which suggests a good ‘out-of-control’ pattern for COVID-19 cases in Italy.

• Four points, out of five successive points, are on the same side of the centerline in Zone B or beyond.
  
  o The last five points (4/27/20 – 5/1/20) are all below the control line, which suggests a good ‘out-of-control’ pattern for COVID-19 cases in Italy.

• Nine successive points are on one side of the centerline.
  
  o The nine consecutive points (4/23/20 – 5/1/20) are all on one side (below) of the centerline. This good ‘out-of-control’ pattern indicates that the daily COVID-19 cases in Italy are stabilizing in a positive direction.
France

'Modified' Control Chart Analysis:

- Two points, out of three successive points, are on the same side of the centerline in Zone A or beyond.
  - The last three points (4/29/20 – 5/1/20) are below the control line, which suggests a good ‘out-of-control’ pattern for COVID-19 cases in France.

- Four points, out of five successive points, are on the same side of the centerline in Zone B or beyond.
  - The last five points (4/27/20 – 5/1/20) are all below the control line, which suggests a good ‘out-of-control’ pattern for COVID-19 cases in France.

- Nine successive points are on one side of the centerline.
  - The nine consecutive points (4/23/20 – 5/1/20) are all on one side (below) of the centerline. This good ‘out-of-control’ pattern indicates that the daily COVID-19 cases in France are stabilizing in a positive direction.
Germany

'Modified' Control Chart Analysis:

- Two points, out of three successive points, are on the same side of the centerline in Zone A or beyond.
  - The last three points (4/29/20 – 5/01/20) are below the control line, which suggests a good 'out-of-control' pattern for COVID-19 cases in Germany. Also, the linear trendline has a downward slope.

- Four points, out of five successive points, are on the same side of the centerline in Zone B or beyond.
  - The last five points (4/27/20 – 5/1/20) are all below the control line, which suggests a good 'out-of-control' pattern for COVID-19 cases in Germany.

- Nine successive points are on one side of the centerline.
  - The nine consecutive points (4/23/20 – 5/1/20) are all on one side (below) of the centerline. This good 'out-of-control' pattern indicates that the daily COVID-19 cases in Germany are stabilizing in a positive direction.

- There are six consecutive points, increasing or decreasing.
  - There are six consecutive points (4/8/20 – 4/15/20) decreasing which indicates a good 'out-of-control' sign.
Russia

'Modified' Control Chart Analysis:

- Two points, out of three successive points, are on the same side of the centerline in Zone A or beyond.
  - The last two points (4/30/20 and 5/1/20) are both above the control line, which suggests a bad 'out-of-control' pattern for COVID-19 cases in Russia.

- Four points, out of five successive points, are on the same side of the centerline in Zone B or beyond.
  - Four points (4/26/20 – 4/28/20 and 4/30/20) are all above the control line, which suggests a bad 'out-of-control' pattern for COVID-19 cases in Russia.
Brazil

'Modified' Control Chart Analysis:

- Two points, out of three successive points, are on the same side of the centerline in Zone A or beyond.
  - The last three points (April 29, 2020 – May 1, 2020) are all above the control line, which suggests a bad 'out-of-control' pattern for COVID-19 cases in Brazil.

- Four points, out of five successive points, are on the same side of the centerline in Zone B or beyond.
  - The last five points (April 27, 2020 – May 1, 2020) are all above the control line, indicating that there is a bad 'out-of-control' pattern for COVID-19 cases in Brazil.

- Nine successive points are on one side of the centerline.
  - The nine consecutive points (April 23, 2020 – May 1, 2020) are all on one side (above) of the centerline. This bad 'out-of-control' pattern indicates that the daily COVID-19 cases in Brazil are stabilizing in a bad direction.
‘Modified’ Control Chart Analysis:

- Two points, out of three successive points, are on the same side of the centerline in Zone A or beyond.
  - The last three points (4/29/20 – 5/1/20) are both above the control line, which suggests a bad ‘out-of-control’ pattern for COVID-19 cases in Canada.

- Four points, out of five successive points, are on the same side of the centerline in Zone B or beyond.
  - The last four points (4/28/20 – 5/1/20) are all above the control line, which suggests a bad ‘out-of-control’ pattern for COVID-19 cases in Canada.
Belgium

‘Modified’ Control Chart Analysis:
• Two points, out of three successive points, are on the same side of the centerline in Zone A or beyond.
  - The last three points (4/29/20 – 5/1/20) are all below the control line, which suggests a good ‘out-of-control’ pattern for COVID-19 cases in Belgium.
• Four points, out of five successive points, are on the same side of the centerline in Zone B or beyond.
  - The last five points (4/27/20 – 5/1/20) are all below the control line, which suggests a good ‘out-of-control’ pattern for COVID-19 cases in Belgium.
Switzerland

'Modified' Control Chart Analysis:

- Two points, out of three successive points, are on the same side of the centerline in Zone A or beyond.
  - The last three points (4/29/20 – 5/1/20) are below the control line, which suggests a good ‘out-of-control’ pattern for COVID-19 cases in Switzerland.

- Four points, out of five successive points, are on the same side of the centerline in Zone B or beyond.
  - The last five points (4/27/20 – 5/1/20) are all below the control line, which suggests a good ‘out-of-control’ pattern for COVID-19 cases in Switzerland.

- Nine successive points are on one side of the centerline.
  - The nine consecutive points (4/23/20 – 5/1/20) are all on one side (below) of the centerline. This is a good ‘out-of-control’ pattern and indicates that the COVID-19 cases in Switzerland are stabilizing in a positive direction.
Austria

‘Modified’ Control Chart Analysis:
- Two points, out of three successive points, are on the same side of the centerline in Zone A or beyond.
  - The last three points (4/29/20 – 5/1/20) are below the control line, which suggests a good ‘out-of-control’ pattern for COVID-19 cases in Austria.
- Four points, out of five successive points, are on the same side of the centerline in Zone B or beyond.
  - The last five points (4/27/20 – 5/1/20) are all below the control line, which suggests a good ‘out-of-control’ pattern for COVID-19 cases in Austria. Also, a remarkable linear trend line with a downward slope can be observed from 3/26/20.
- Nine successive points are on one side of the centerline.
  - Nine consecutive points (4/23/20 – 5/1/20) are all on one side (below) of the centerline. This good ‘out-of-control’ pattern suggests that the daily COVID-19 cases in Austria are stabilizing in a positive direction.
‘Modified’ Control Chart Analysis:

- Two points, out of three successive points, are on the same side of the centerline in Zone A or beyond.
  - The last three points (4/29/20 – 5/1/20) are both below the control line, which suggests a good ‘out-of-control’ pattern for COVID-19 cases in Israel.

- Four points, out of five successive points, are on the same side of the centerline in Zone B or beyond.
  - The last five points (4/27/20 – 5/1/20) are all below the control line, which suggests a good ‘out-of-control’ pattern for COVID-19 cases in Israel.

- Nine successive points are on one side of the centerline.
  - Nine consecutive points (4/23/20 – 5/1/20) are all on one side (below) of the centerline. This good ‘out-of-control’ pattern suggests that the daily COVID-19 cases in Israel are stabilizing in a positive direction.
Australia

'Modified' Control Chart Analysis:

- Two points, out of three successive points, are on the same side of the centerline in Zone A or beyond.
  - The last three points (4/29/20 – 5/1/20) are below the control line, which suggests a good ‘out-of-control’ pattern for COVID-19 cases in Australia.

- Four points, out of five successive points, are on the same side of the centerline in Zone B or beyond.
  - The last five points (4/27/20 – 5/1/20) are all below the control line, which suggests an ‘out-of-control’ pattern for COVID-19 cases in Australia. A good ‘out-of-control’ sign. Also, a remarkable linear trend line with a downward slope can be observed from 3/22/20.

- Nine successive points are on one side of the centerline.
  - Nine consecutive points (4/23/20 – 5/1/20) are all on one side (below) of the centerline. This good ‘out-of-control’ pattern suggests that the daily COVID-19 cases in Australia are stabilizing in a positive direction.
Cyprus

'Modified' Control Chart Analysis:

- Two points, out of three successive points, are on the same side of the centerline in Zone A or beyond.
  - The last three points (4/29/20 – 5/1/20) are below the control line, which suggests a good ‘out-of-control’ pattern for COVID-19 cases in Cyprus.

- Four points, out of five successive points, are on the same side of the centerline in Zone B or beyond.
  - The last five points (4/27/20 – 5/1/20) are all below the control line, which suggests a good ‘out-of-control’ pattern for COVID-19 cases in Cyprus. A good ‘out-of-control’ sign. Also, a linear trend line with a downward slope can be observed from 4/1/20.

- Nine successive points are on one side of the centerline.
  - Nine consecutive points (4/23/20 – 5/1/20) are all on one side (below) of the centerline. This good ‘out-of-control’ pattern suggests that the daily COVID-19 cases in Cyprus are stabilizing in a positive direction.