## **U.S. Personal Income MoM**

Haawks ID: | Symbol: USDJPY | Importance: \* | Positive Deviation: bullish

## **Description:**

Personal Income measures the change in the total value of income received from all sources by consumers. Income is closely correlated with consumer spending, which accounts for a majority of overall economic activity. A higher than expected reading should be taken as positive/bullish for the USD, while a lower than expected reading should be taken as negative/bearish for the USD.

## Note:

The data below was calculated using historic news & tick data of 74 releases from 2017-01-30 to 2023-02-24.

It combines the data from releases with positive deviations and releases with negative deviations. For the releases with negative deviations, the pip movements were multiplied by -1 to conform with the data from positive deviations. If a higher deviation is bullish for the trading symbol, a positive number signifies movement in the expected direction and a negative number signifies movement in the opposite direction. If a higher deviation is bearish then the opposite is true.

## Key:

| Name                      | Meaning   |
|---------------------------|---|
| Time Delta                | The amount of time elapsed after the news release                                   |
| Range                     | The range of the pip movements  |
| Mean                      | The mean average of the pip movements for all releases for each trigger             |
| Median                    | The median average of the pip movements of all releases for each trigger            |
| Correlation 1 Score (c_1) | Percentage of how many times the asset moved in the expected direction              |
| Correlation 2 Score (c_2) | Percentage of pips which moved in the expected direction vs. the opposite direction |
| Correlation 3 Score (c_3) | The mean average of the Correlation 1 & 2 scores                                    |

Trigger 1: +-0.1%

| time_delta | range            | mean | median | c1   | c2   | сЗ   | c1_ema5 | c2_ema5 | c3_en |
|------------|------------------|------|--------|------|------|------|---------|---------|-------|
| 1s         | (-1.1,<br>6.4)   | 0.4  | -0.0   | 42.9 | 77.7 | 60.3 | 52.9    | 65.8    | 59.4  |
| 2s         | (-2.9,<br>6.5)   | 0.8  | 0.1    | 57.1 | 77.0 | 67.0 | 58.8    | 75.0    | 66.9  |
| 3s         | (-4.2,<br>7.0)   | 0.9  | 0.4    | 66.7 | 74.1 | 70.4 | 64.7    | 72.2    | 68.4  |
| 4s         | (-4.8,<br>7.3)   | 0.8  | 0.7    | 61.9 | 71.4 | 66.7 | 64.7    | 70.7    | 67.7  |
| 5s         | (-6.5,<br>17.4)  | 1.1  | 0.2    | 57.1 | 70.2 | 63.7 | 58.8    | 64.3    | 61.6  |
| 10s        | (-10.1,<br>21.2) | 2.4  | 0.8    | 66.7 | 77.9 | 72.3 | 70.6    | 77.3    | 73.9  |
| 15s        | (-15.5,<br>21.8) | 0.4  | 0.8    | 57.1 | 54.4 | 55.8 | 58.8    | 46.7    | 52.8  |
| 20s        | (-24.5,<br>19.4) | -0.1 | 0.8    | 57.1 | 49.2 | 53.2 | 52.9    | 41.9    | 47.4  |
| 25s        | (-24.7,<br>19.5) | 0.8  | 0.7    | 52.4 | 57.8 | 55.1 | 47.1    | 53.0    | 50.0  |
| 30s        | (-30.2,<br>17.2) | 0.4  | 0.6    | 52.4 | 53.8 | 53.1 | 52.9    | 52.4    | 52.6  |
| 45s        | (-24.7,<br>23.0) | 0.4  | 0.3    | 52.4 | 53.2 | 52.8 | 47.1    | 48.1    | 47.6  |
| 1m         | (-30.4,<br>25.1) | 0.5  | 0.0    | 47.6 | 53.5 | 50.5 | 47.1    | 50.6    | 48.8  |
| 2m         | (-23.7,<br>24.4) | 0.9  | 2.1    | 61.9 | 56.0 | 59.0 | 58.8    | 54.4    | 56.6  |
| 3m         | (-18.4,<br>32.8) | 2.9  | 1.8    | 61.9 | 66.3 | 64.1 | 64.7    | 63.7    | 64.2  |

| time_delta         | range            | mean | median | c1   | c2   | сЗ   | c1_ema5 | c2_ema5 | c3_en |
|--------------------|------------------|------|--------|------|------|------|---------|---------|-------|
| 4m                 | (-13.0,<br>43.5) | 4.8  | 4.1    | 66.7 | 74.2 | 70.5 | 70.6    | 70.4    | 70.5  |
| 5m                 | (-11.9,<br>35.4) | 4.7  | 4.0    | 66.7 | 75.9 | 71.3 | 70.6    | 74.6    | 72.6  |
| 10m                | (-11.6,<br>19.7) | 3.0  | 2.6    | 61.9 | 69.8 | 65.8 | 58.8    | 68.5    | 63.6  |
| 15m                | (-26.0,<br>22.5) | 1.4  | 0.5    | 57.1 | 58.7 | 57.9 | 52.9    | 55.8    | 54.4  |
| Total/<br>Averages | (-30.4,<br>43.5) | 1.5  | 1.1    | 58.2 | 65.1 | 61.6 | 58.5    | 61.4    | 59.9  |

Trigger 2: +-0.2%

| time_delta | range          | mean | median | <b>c</b> 1 | c2   | c3   | c1_ema5 | c2_ema5 | c3_ |
|------------|----------------|------|--------|------------|------|------|---------|---------|-----|
| 1s         | (-0.8,<br>0.9) | 0.1  | 0.0    | 50.0       | 65.4 | 57.7 | 75.0    | 60.4    | 67. |
| 2s         | (-1.5,<br>2.5) | 0.2  | -0.1   | 50.0       | 62.7 | 56.4 | 50.0    | 43.4    | 46. |
| 3s         | (-1.0,<br>4.3) | 0.4  | -0.1   | 50.0       | 70.9 | 60.5 | 25.0    | 42.8    | 33. |
| 4s         | (-1.0,<br>3.8) | 0.4  | -0.1   | 50.0       | 68.8 | 59.4 | 50.0    | 43.6    | 46. |
| 5s         | (-1.8,<br>4.0) | 0.2  | -0.2   | 37.5       | 59.8 | 48.6 | 25.0    | 29.0    | 27. |
| 10s        | (-1.2,<br>6.9) | 0.6  | -0.3   | 50.0       | 73.1 | 61.5 | 25.0    | 42.4    | 33. |
| 15s        | (-1.5,<br>8.3) | 0.8  | -0.6   | 50.0       | 72.3 | 61.1 | 25.0    | 41.6    | 33. |
| 20s        | (-2.5,<br>5.4) | 0.2  | -0.3   | 37.5       | 57.0 | 47.2 | 25.0    | 25.3    | 25. |

| time_delta         | range           | mean | median | c1    | c2    | с3    | c1_ema5 | c2_ema5 | c3_ |
|--------------------|-----------------|------|--------|-------|-------|-------|---------|---------|-----|
| 25s                | (-2.7,<br>6.3)  | 0.4  | -0.5   | 50.0  | 59.9  | 55.0  | 25.0    | 29.4    | 27. |
| 30s                | (-4.6,<br>9.5)  | 0.2  | -0.4   | 50.0  | 54.2  | 52.1  | 25.0    | 24.1    | 24. |
| 45s                | (-3.8,<br>7.7)  | 0.9  | -0.5   | 50.0  | 65.6  | 57.8  | 50.0    | 47.5    | 48. |
| 1m                 | (-3.4,<br>8.9)  | 0.6  | -0.8   | 37.5  | 60.1  | 48.8  | 25.0    | 30.1    | 27. |
| 2m                 | (-1.3,<br>5.6)  | 2.6  | 2.6    | 87.5  | 94.4  | 91.0  | 100.0   | 100.0   | 100 |
| 3m                 | (0.2,<br>8.4)   | 4.0  | 2.2    | 100.0 | 100.0 | 100.0 | 100.0   | 100.0   | 100 |
| 4m                 | (1.4,<br>11.6)  | 5.4  | 2.2    | 100.0 | 100.0 | 100.0 | 100.0   | 100.0   | 100 |
| 5m                 | (1.8,<br>12.2)  | 5.8  | 4.1    | 100.0 | 100.0 | 100.0 | 100.0   | 100.0   | 100 |
| 10m                | (-0.1,<br>26.1) | 8.6  | 5.9    | 87.5  | 99.9  | 93.7  | 100.0   | 100.0   | 100 |
| 15m                | (-1.4,<br>27.5) | 8.6  | 7.0    | 87.5  | 98.0  | 92.8  | 100.0   | 100.0   | 100 |
| Total/<br>Averages | (-4.6,<br>27.5) | 2.2  | 1.1    | 62.5  | 75.7  | 69.1  | 56.9    | 58.9    | 57. |

Trigger 3: +-0.3%

| time_delta | range          | mean | median | <b>c1</b> | c2   | c3   | c1_ema5 | c2_ema5 | c3_en |
|------------|----------------|------|--------|-----------|------|------|---------|---------|-------|
| 1s         | (-1.3,<br>0.8) | -0.5 | -0.6   | 14.3      | 16.7 | 15.5 | 0.0     | 0.0     | 0.0   |
| 2s         | (-1.6,<br>0.4) | -0.5 | -0.0   | 28.6      | 15.2 | 21.9 | 0.0     | 0.0     | 0.0   |

| time_delta | range           | mean | median | c1   | c2   | сЗ   | c1_ema5 | c2_ema5 | c3_en |
|------------|-----------------|------|--------|------|------|------|---------|---------|-------|
| 3s         | (-1.6,<br>1.6)  | -0.1 | -0.0   | 42.9 | 46.2 | 44.5 | 33.3    | 23.4    | 28.4  |
| <b>4</b> s | (-2.2,<br>2.0)  | -0.1 | -0.1   | 42.9 | 44.7 | 43.8 | 33.3    | 14.5    | 23.9  |
| 5s         | (-2.3,<br>1.8)  | -0.0 | -0.1   | 42.9 | 49.4 | 46.1 | 33.3    | 19.6    | 26.4  |
| 10s        | (-1.0,<br>6.9)  | 1.5  | 1.1    | 57.1 | 86.7 | 71.9 | 66.7    | 94.4    | 80.6  |
| 15s        | (-1.0,<br>10.7) | 2.1  | 1.1    | 57.1 | 89.4 | 73.2 | 66.7    | 94.8    | 80.8  |
| 20s        | (-2.2,<br>10.7) | 1.6  | -0.4   | 42.9 | 81.0 | 62.0 | 66.7    | 66.9    | 66.8  |
| 25s        | (-1.8,<br>4.3)  | 0.4  | -0.2   | 28.6 | 64.0 | 46.3 | 33.3    | 31.3    | 32.3  |
| 30s        | (-3.7,<br>3.7)  | 0.1  | -0.2   | 28.6 | 52.7 | 40.7 | 33.3    | 24.1    | 28.7  |
| 45s        | (-24.0,<br>2.2) | -3.6 | -0.2   | 42.9 | 14.0 | 28.4 | 0.0     | 0.0     | 0.0   |
| 1m         | (-14.2,<br>2.4) | -2.0 | -0.6   | 42.9 | 21.7 | 32.3 | 33.3    | 5.4     | 19.3  |
| 2m         | (-16.6,<br>4.7) | -3.7 | -2.9   | 14.3 | 13.3 | 13.8 | 0.0     | 0.0     | 0.0   |
| 3m         | (-9.4,<br>3.8)  | -2.3 | -1.6   | 28.6 | 23.0 | 25.8 | 0.0     | 0.0     | 0.0   |
| 4m         | (-12.6,<br>4.5) | -2.8 | -2.8   | 28.6 | 23.9 | 26.2 | 0.0     | 0.0     | 0.0   |
| 5m         | (-15.2,<br>7.1) | -3.4 | -4.6   | 28.6 | 24.0 | 26.3 | 0.0     | 0.0     | 0.0   |
| 10m        |                 | -0.9 | -1.4   | 42.9 | 41.7 | 42.3 | 33.3    | 3.5     | 18.4  |

| time_delta         | range            | mean | median | c1   | c2   | <b>c</b> 3 | c1_ema5 | c2_ema5 | c3_en |
|--------------------|------------------|------|--------|------|------|------------|---------|---------|-------|
|                    | (-7.8,<br>7.8)   |      |        |      |      |            |         |         |       |
| 15m                | (-9.2,<br>7.4)   | -1.9 | -2.2   | 42.9 | 31.6 | 37.2       | 0.0     | 0.0     | 0.0   |
| Total/<br>Averages | (-24.0,<br>10.7) | -0.9 | -0.9   | 36.5 | 41.1 | 38.8       | 24.1    | 21.0    | 22.5  |

Trigger 4: +-0.4%

| time_delta | range            | mean | median | c1   | c2   | <b>c</b> 3 | c1_ema5 | c2_ema5 | c3_en |
|------------|------------------|------|--------|------|------|------------|---------|---------|-------|
| 1s         | (-3.2,<br>0.6)   | -0.3 | -0.1   | 30.0 | 16.5 | 23.2       | 25.0    | 10.7    | 17.8  |
| 2s         | (-3.5,<br>0.8)   | -0.6 | -0.2   | 20.0 | 10.5 | 15.2       | 18.8    | 3.9     | 11.4  |
| 3s         | (-4.4,<br>0.9)   | -0.8 | -0.3   | 25.0 | 9.7  | 17.4       | 18.8    | 4.2     | 11.5  |
| 4s         | (-3.9,<br>1.2)   | -0.6 | -0.2   | 20.0 | 12.3 | 16.1       | 18.8    | 4.2     | 11.5  |
| 5s         | (-15.0,<br>26.4) | 0.1  | -0.2   | 20.0 | 51.3 | 35.6       | 18.8    | 20.0    | 19.4  |
| 10s        | (-4.2,<br>18.2)  | 0.5  | -0.2   | 35.0 | 61.7 | 48.4       | 37.5    | 39.2    | 38.4  |
| 15s        | (-5.2,<br>24.7)  | 1.1  | -0.5   | 25.0 | 69.9 | 47.5       | 31.2    | 42.0    | 36.6  |
| 20s        | (-5.7,<br>31.7)  | 0.9  | -0.7   | 25.0 | 63.0 | 44.0       | 25.0    | 31.3    | 28.2  |
| 25s        | (-7.2,<br>28.4)  | 0.1  | -0.9   | 25.0 | 52.2 | 38.6       | 25.0    | 20.7    | 22.8  |
| 30s        | (-22.7,<br>25.0) | -0.9 | -0.9   | 25.0 | 38.4 | 31.7       | 18.8    | 15.6    | 17.2  |

| time_delta         | range            | mean | median | <b>c1</b> | c2   | c3   | c1_ema5 | c2_ema5 | c3_en |
|--------------------|------------------|------|--------|-----------|------|------|---------|---------|-------|
| 45s                | (-7.2,<br>33.6)  | 0.4  | -1.0   | 30.0      | 54.9 | 42.5 | 25.0    | 26.1    | 25.6  |
| 1m                 | (-19.5,<br>38.1) | 0.3  | -1.2   | 40.0      | 53.4 | 46.7 | 37.5    | 33.0    | 35.2  |
| 2m                 | (-18.0,<br>37.5) | 0.4  | -0.2   | 50.0      | 53.6 | 51.8 | 43.8    | 36.6    | 40.2  |
| 3m                 | (-12.7,<br>29.1) | -0.0 | -1.4   | 35.0      | 49.8 | 42.4 | 37.5    | 29.2    | 33.4  |
| 4m                 | (-8.9,<br>25.0)  | -0.6 | -2.0   | 30.0      | 44.1 | 37.0 | 25.0    | 21.8    | 23.4  |
| 5m                 | (-14.4,<br>27.7) | -0.5 | -2.3   | 35.0      | 45.5 | 40.2 | 31.2    | 24.6    | 27.9  |
| 10m                | (-17.7,<br>31.5) | -0.5 | -1.3   | 40.0      | 46.3 | 43.1 | 31.2    | 23.4    | 27.3  |
| 15m                | (-19.9,<br>17.1) | -2.0 | -3.1   | 40.0      | 33.7 | 36.9 | 31.2    | 19.5    | 25.4  |
| Total/<br>Averages | (-22.7,<br>38.1) | -0.2 | -0.9   | 30.6      | 42.6 | 36.6 | 27.8    | 22.6    | 25.2  |