SEASONAL ADJUSTMENT OF BANKING STATISTICS

An article in the June issue of this *Bulletin* described the method by which the Bank of England now adjust the London clearing banks' figures for seasonal influences, and gave tables of seasonal variations and of seasonally-

adjusted changes in the banks' net deposits and advances up to March 1963. Provisional estimates for subsequent months are given below; they are also being published each month in *Financial Statistics*.

£

M. A

F

A

N

A

A

N

LONDON CLEARING BANKS
CHANGES FROM MAKE-UP DATE IN PREVIOUS MONTH

| | | CHANGES | FRUM MAKE- | UP DATE IN | FREVIOUS | MONTH | |
|----------|-------|---------------------|------------------------|------------------------------------|---------------------|------------------------|------------------------------------|
| £ millio | ns | | Net deposits | | Advanc | es and other ac | counts* |
| | | Original figures | Seasonal variations | Seasonally- adjusted figures | Original figures | Seasonal variations | Seasonally- adjusted figures |
| 1963 Ap | oril | - 94† | + 5 | - 99† | +28 | -15 | +43 |
| M | ay | +148† | <u> </u> | +148† | +42 | – 5 | +47 |
| Ju | ne | +106 | +100 | + 6 | +20 | +20 | - |
| Ju | ly | + 58 | + 40 | + 18 | +62 | +30 | +32 |
| Aı | ugust | + 34 | - 50 | + 84 | + 8 | -55 | +63 |

^{*}Excluding items in transit and advances to the nationalised industries.

BRITISH BANKERS' ASSOCIATION QUARTERLY ANALYSIS OF ADVANCES

Thanks to the further co-operation of the Central Statistical Office, the Bank have recently estimated seasonal movements in the quarterly analysis of advances published by the British Bankers' Association,(a) using, on the War Office computer, the same modified version of Census Method II that was used to adjust the London clearing banks' figures. Quarterly changes in the original figures, both in total and for some of the twenty-seven groups given in the analysis, are set out at the end of this note, together with the seasonal variations calculated by the computer and the changes in the seasonally-adjusted series. The groups chosen for adjustment, and shown in the following tables, together account for some 80% of the total.

The tables show a marked seasonal pattern in bank advances as a whole, with slightly

differing patterns for some of the groups. In manufacturing industries collectively, advances usually rise in the quarters ended February and May and fall in the following six months. A similar movement is shown by "building and contracting" and, more markedly, by "retail trade". In the "other financial" and "personal and professional" groups the upward movement lingers into the quarter ended August, with a correspondingly sharp drop in the following quarter. A noticeable exception to this pattern is "agriculture", where the seasonal increase takes place in the quarters ended May and August, from seed-time to harvest, and is followed by a decrease in the two remaining quarters. "Engineering, etc.", to a lesser extent, is also an exception to the general pattern.

The tables also show that the seasonal variations have tended to become larger over

[†]Net deposits fell in April because, with the banks' make-up date immediately following Easter, there was a sharp rise in credits in course of transmission: these credits, which are not published separately, are included in the "other accounts" and are thereby excluded from net deposits, whereas the corresponding debits are not. The movement was reversed in May.

⁽a) The analysis is reproduced in Table 10 of the Statistical Annex; and a brief description of it is given in the Additional Notes, page 243.

the years; this is partly because many of the original figures have increased substantially between 1958 and 1963, and partly perhaps because there may have been changes during this period in the seasonal pattern itself.

Although a seasonally-adjusted series helps in interpreting the quarterly statistics, it should be emphasised that it is unwise to rely too much on the adjustments for any single quarter.

BRITISH BANKERS' ASSOCIATION QUARTERLY ANALYSIS OF ADVANCES CHANGES FROM PREVIOUS QUARTER

£ millions

| Original figures | | | | | | | Se | easonal | variati | ons | | Seasonally-adjusted figures | | | | | | | |
|------------------|------|------|------|------|------|------|------|---------|---------|------|------|-----------------------------|------|------|------|------|------|--|--|
| 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | | |

TOTAL (EXCLUDING ADVANCES TO THE NATIONALISED INDUSTRIES)

TOTAL MANUFACTURING INDUSTRIES(a)

| Feb. | + 3 | +48 | +47 +104 | +84 | +95 | +22 +23 | +27 | +40 | +56 +67 | -19 | +25 | +20 | +64 | +28 | +28 |
|------|-----|-----|----------|------------|-----|----------|-------------|------------|-------------|-----|-----|-----|-----|-----|-----|
| May | +33 | +42 | +41 + 60 | +32 | +29 | +14 +13 | +14 | +14 | +12 +13 | +19 | +29 | +27 | +46 | +20 | +16 |
| Aug. | + 3 | + 9 | +20 - 10 | +15 | | -17 -21 | —23 | -24 | — 21 | +20 | +30 | +43 | +14 | +36 | |
| Nov. | +16 | +21 | +57 - 33 | -48 | | -18 - 17 | - 26 | -42 | - 56 | +34 | +38 | +83 | + 9 | + 8 | |

ENGINEERING, ETC.(b)

| Feb. | + 8 | +24 | +23 | +55 | +33 | +26 | + 9 | + 9 | +12 | +17 | +21 | +23 | - 1 | +15 | +11 | +38 | +12 | + 3 |
|------|-----|-----|-----|------------|------------|-------------|-----|------------|------------|-------------|------------|-----|-----|-----|-----|-----|-----|------------|
| May | _ | + 3 | +14 | + 9 | + 8 | - 19 | - 4 | - 6 | - 9 | -10 | -10 | -10 | + 4 | + 9 | +23 | +19 | +18 | - 9 |
| Aug. | +10 | +20 | +47 | +13 | + 4 | | + 3 | + 5 | + 5 | + 3 | | | + 7 | +15 | +42 | +10 | + 4 | |
| Nov. | + 9 | _ | +35 | - 2 | - 4 | | - 8 | - 9 | -10 | — 13 | -12 | | +17 | + 9 | +45 | +11 | + 8 | |

FOOD, DRINK AND TOBACCO(b)

⁽a) Includes the following groups: chemicals, iron and steel and allied trades, non-ferrous metals, engineering, etc., cotton, wool, other textiles, leather and rubber, and food, drink and tobacco.

⁽b) Included in "total manufacturing industries".

BRITISH BANKERS' ASSOCIATION QUARTERLY ANALYSIS OF ADVANCES (Continued) CHANGES FROM PREVIOUS QUARTER

| £ | millions |
|---|----------|

| Original figures | | | | | | | Seasonal variations | | | | | | Seasonally-adjusted figures | | | | | | | |
|------------------|------|------|------|------|------|------|---------------------|------|------|------|------|------|-----------------------------|------|------|------|------|--|--|--|
| 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | | | |

BUILDING AND CONTRACTING(a)

AGRICULTURE

RETAIL TRADE

| Feb. | + 2 | +34 | +36 | + 7 | +26 | +48 | + 1 | + 4 | + 8 | +13 | +16 +21 | + 1 | +30 | +28 | - 6 | +10 | +27 |
|------|------------|-----|-----|-------------|-----|-----|-----|-------------|-------------|------------|---------|-----|-----|-----|------------|-----|-----|
| May | +18 | +20 | +31 | +14 | +25 | +25 | +10 | +11 | +14 | +12 | +15 +17 | + 8 | + 9 | +17 | + 2 | +10 | + 8 |
| Aug. | - 9 | +14 | -11 | - 16 | -18 | | -14 | — 18 | — 23 | -22 | -26 | + 5 | +32 | +12 | + 6 | + 8 | |
| Nov. | +25 | +33 | + 5 | -13 | +12 | | + 1 | | - 2 | - 6 | - 8 | +24 | +33 | + 7 | - 7 | +20 | |

OTHER FINANCIAL

PERSONAL AND PROFESSIONAL

Feb.
$$+ 3 + 54 + 57 + 9 + 8 + 45 + 4 + 5 + 6 + 6 + 5 + 2 - 1 + 49 + 51 + 3 + 3 + 43$$

May $+ 4 + 50 + 42 + 14 + 14 + 57 + 2 + 3 + 7 + 10 + 11 + 14 + 2 + 47 + 35 + 4 + 3 + 43$
Aug. $+ 12 + 57 + 11 - + 36 + 3 + 5 + 4 + 5 + 5 + 5 + 9 + 52 + 7 - 5 + 31$
Nov. $+ 47 + 37 - 9 - 41 + 27 - 10 - 15 - 19 - 21 - 20 + 57 + 52 + 10 - 20 + 47$

⁽a) Includes the following groups: builders and contractors, and building materials.