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# Mining

## TABLES Q1–Q9

Whenever two entries are made for 1934 the first is comparable with those for preceding years in that the *Statistics of Income* data used are based on the old industrial classification; the second is comparable with those for succeeding years in that the *Statistics of Income* data used are based on the new industrial classification.

Net savings and net income, adjusted, exclude gains and losses from sales of capital assets, 1929–38, and from changes in inventory valuation, 1919–38. Net savings and net income without any specific designation are unadjusted, i.e., include these two types of gain and loss.

## Q 1   Gross Income (millions of dollars)

| | COAL Anth. | COAL Bit. | METAL | OIL & GAS | OTHER | TOTAL |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| 1919 | 364 | 1,146 | 549 | 890 | 206 | 3,155 |
| 1920 | 433 | 2,110 | 716 | 1,513 | 295 | 5,068 |
| 1921 | 451 | 1,192 | 267 | 938 | 230 | 3,079 |
| 1922 | 273 | 1,269 | 406 | 1,052 | 273 | 3,275 |
| 1923 | 505 | 1,512 | 625 | 1,156 | 351 | 4,152 |
| 1924 | 476 | 1,064 | 513 | 1,210 | 362 | 3,626 |
| 1925 | 327 | 1,064 | 578 | 1,517 | 387 | 3,875 |
| 1926 | 473 | 1,191 | 591 | 1,708 | 400 | 4,365 |
| 1927 | 420 | 1,039 | 516 | 1,419 | 401 | 3,796 |
| 1928 | 392 | 945 | 547 | 1,333 | 396 | 3,615 |
| 1929 | 384 | 966 | 628 * | 1,596 | 413 * | 3,989 |
| 1930 | 354 | 805 | 413 | 1,345 | 360 | 3,278 |
| 1931 | 296 | 595 | 235 | 731 | 261 | 2,119 |
| 1932 | 222 | 409 | 116 | 828 | 166 | 1,744 |
| 1933 | 206 | 448 | 166 | 759 | 182 | 1,763 |
| 1934 | 244 | 630 | 215 | 1,071 | 226 | 2,389 |
| 1935 | 210 | 658 | 285 | 1,142 | 254 | 2,551 |
| 1936 | 227 | 771 | 426 | 1,403 | 313 | 3,142 |
| 1937 | 197 | 864 | 578 | 1,733 | 326 | 3,701 |
| 1938 | 180 | 655 | 351 | 1,579 | 288 | 3,054 |

* Comparable with the figures for 1930–38. Since several of the minor metals were classified with non-metals in the 1935 Census the 1929 figures also were reclassified. The 1929 figures comparable with those for 1919–28 are Metal, 633; 'Other' mining, 407.

## Q 2   Total Payments by Type (millions of dollars)

| | WAGES | SALARIES | EMPL. COMP. | ENTREP. WITHDR. | DIVI- DENDS | INTER- EST | PROP. INCOME | PAY. TO INDI- VIDUALS |
|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| 1919 | 1,322 | 156 | 1,479 | 30.9 | 194 | 23.3 | 217 | 1,727 |
| 1920 | 1,817 | 218 | 2,035 | 39.7 | 209 | 30.4 | 240 | 2,315 |
| 1921 | 1,412 | 145 | 1,557 | 32.1 | 193 | 38.3 | 231 | 1,820 |
| 1922 | 1,256 | 151 | 1,407 | 29.5 | 139 | 33.2 | 172 | 1,609 |
| 1923 | 1,792 | 188 | 1,980 | 31.7 | 223 | 37.3 | 260 | 2,273 |
| 1924 | 1,529 | 175 | 1,705 | 28.0 | 212 | 51.3 | 263 | 1,997 |
| 1925 | 1,407 | 180 | 1,588 | 26.3 | 269 | 53.9 | 323 | 1,937 |
| 1926 | 1,647 | 199 | 1,846 | 25.6 | 326 | 46.5 | 373 | 2,245 |
| 1927 | 1,476 | 193 | 1,669 | 24.4 | 278 | 43.7 | 321 | 2,015 |
| 1928 | 1,303 | 178 | 1,481 | 22.9 | 253 | 42.0 | 295 | 1,800 |
| 1929 | 1,336 | 193 | 1,530 | 21.4 | 365 | 44.7 | 410 | 1,962 |
| 1930 | 1,148 | 176 | 1,325 | 20.8 | 249 | 44.5 | 293 | 1,639 |
| 1931 | 820 | 142 | 962 | 18.6 | 188 | 41.7 | 180 | 1,160 |
| 1932 | 555 | 108 | 664 | 15.1 | 81.6 | 39.5 | 121 | 800 |
| 1933 | 570 | 96.7 | 666 | 14.3 | 75.3 | 34.1 | 109 | 790 |
| 1934 | 761 | 114 | 875 | 14.9 | 114 | 30.0 | 144 | 1,035 |
| 1934 | 761 | 114 | 875 | 14.9 | 190 | 39.2 | 229 | 1,120 |
| 1935 | 804 | 127 | 932 | 15.5 | 185 | 37.0 | 222 | 1,170 |
| 1936 | 940 | 140 | 1,080 | 16.5 | 215 | 40.6 | 255 | 1,352 |
| 1937 | 1,067 | 156 | 1,223 | 18.2 | 295 | 35.8 | 331 | 1,573 |
| 1938 | 850 | 142 | 992 | 18.3 | 204 | 31.4 | 236 | 1,247 |

## Q 3  Net Income Originating (millions of dollars)

| | PAY. TO INDIVIDUALS | NET SAVINGS | | | NET INCOME | NET SAVINGS, ADJUSTED | | | NET INCOME, ADJ. |
| | | Entrep. | Corp. | Total | | Entrep. | Corp. | Total | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|------|------|------|------|------|------|------|------|------|------|
| 1919 | 1,727 | 8.1 | —12.9 | —4.8 | 1,723 | 10.1 | 14.1 | 24.2 | 1,752 |
| 1920 | 2,315 | 25.1 | 147 | 172 | 2,488 | 14.1 | —6.5 | 7.7 | 2,323 |
| 1921 | 1,820 | —19.2 | —449 | —468 | 1,352 | 0.8 | —155 | —154 | 1,666 |
| 1922 | 1,609 | —0.3 | —153 | —153 | 1,456 | —8.3 | —269 | —277 | 1,332 |
| 1923 | · 2,273 | —6.4 | —291 | —297 | 1,975 | —3.4 | —243 | —246 | 2,026 |
| 1924 | 1,997 | —4.0 | —295 | —299 | 1,697 | —3.0 | —287 | —290 | 1,706 |
| 1925 | 1,937 | 18.6 | —69.4 | —50.7 | 1,886 | 15.6 | —114 | —98.7 | 1,838 |
| 1926 | 2,245 | 24.7 | —97.9 | —73.2 | 2,172 | 23.7 | —111 | —88.2 | 2,157 |
| 1927 | 2,015 | 7.2 | —273 | —266 | 1,749 | 14.2 | —174 | —160 | 1,855 |
| 1928 | 1,800 | 15.9 | —154 | —138 | 1,661 | 13.9 | —175 | —161 | 1,638 |
| 1929 | 1,962 | 24.9 | —166 | —141 | 1,821 | 21.8 | —178 | —156 | 1,805 |
| 1930 | 1,639 | —15.7 | —304 | —320 | 1,319 | —12.4 | —245 | —258 | 1,381 |
| 1931 | 1,160 | —29.9 | —392 | —422 | 738 | —24.1 | —311 | —335 | 825 |
| 1932 | 800 | —31.5 | —306 | —337 | 463 | —29.5 | —290 | —319 | 480 |
| 1933 | 790 | —23.5 | —253 | —277 | 513 | —25.2 | —286 | —311 | 479 |
| 1934 | 1,035 | —6.4 | —119 | —125 | 910 | —13.4 | —190 | —203 | 831 |
| 1934 | 1,120 | —9.0 | —213 | —222 | 898 | —14.2 | —286 | —300 | 819 |
| 1935 | 1,170 | —9.5 | —210 | —220 | 950 | —11.7 | —236 | —248 | 922 |
| 1936 | 1,352 | —0.4 | —142 | —142 | 1,210 | —2.9 | —176 | —179 | 1,173 |
| 1937 | 1,573 | 6.2 | —138 | —132 | 1,440 | 3.5 | —177 | —173 | 1,399 |
| 1938 | 1,247 | 6.1 | —153 | —147 | 1,099 | 5.4 | —156 | —150 | 1,096 |

# MINING

## Q 4 Wages and Salaries (millions of dollars)

| | WAGES | | | | | | SALARIES | | | | | |
| | COAL | | Metal | Oil & gas | Other | Total | COAL | | Metal | Oil & gas | Other | Total |
| | Anth. (1) | Bit. (2) | (3) | (4) | (5) | (6) | Anth. (7) | Bit. (8) | (9) | (10) | (11) | (12) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *1919* | 211 | 684 | 209 | 135 | 82.5 | 1,322 | 13.0 | 68.9 | 24.4 | 33.9 | 15.9 | 156 |
| *1920* | 237 | 1,008 | 220 | 229 | 122 | 1,817 | 15.0 | 103 | 28.3 | 49.5 | 22.0 | 218 |
| *1921* | 283 | 791 | 119 | 131 | 85.6 | 1,412 | 18.4 | 60.8 | 16.1 | 31.7 | 17.8 | 145 |
| *1922* | 165 | 717 | 121 | 155 | 96.2 | 1,256 | 17.3 | 57.5 | 18.2 | 39.8 | 18.9 | 151 |
| *1923* | 289 | 1,016 | 172 | 174 | 139 | 1,792 | 20.3 | 77.7 | 25.6 | 41.1 | 23.8 | 188 |
| *1924* | 319 | 737 | 172 | 159 | 141 | 1,529 | 21.8 | 63.0 | 25.7 | 39.2 | 26.0 | 175 |
| *1925* | 206 | 691 | 178 | 189 | 142 | 1,407 | 21.7 | 64.4 | 26.4 | 42.0 | 25.5 | 180 |
| *1926* | 311 | 765 | 184 | 238 | 147 | 1,647 | 22.8 | 71.7 | 24.6 | 53.9 | 26.1 | 199 |
| *1927* | 274 | 682 | 170 | 212 | 135 | 1,476 | 23.7 | 61.3 | 26.3 | 49.7 | 32.0 | 193 |
| *1928* | 258 | 581 | 163 | 172 | 127 | 1,303 | 22.3 | 56.7 | 25.8 | 42.0 | 31.5 | 178 |
| *1929* | 233 | 575 | 178 * | 231 | 118 * | 1,336 | 21.6 | 58.8 | 27.2 * | 54.0 | 32.3 * | 193 |
| *1930* | 223 | 477 | 144 | 198 | 105 | 1,148 | 20.1 | 49.7 | 25.7 | 47.0 | 34.0 | 176 |
| *1931* | 178 | 352 | 86.4 | 124 | 78.0 | 820 | 18.5 | 43.1 | 13.7 | 33.1 | 28.7 | 142 |
| *1932* | 129 | 237 | 43.2 | 98.8 | 46.5 | 555 | 14.3 | 32.0 | 11.3 | 29.9 | 21.0 | 108 |
| *1933* | 113 | 261 | 42.7 | 110 | 42.8 | 570 | 12.2 | 29.0 | 10.1 | 27.0 | 18.3 | 96.7 |
| *1934* | 138 | 368 | 57.3 | 142 | 55.3 | 761 | 12.5 | 35.8 | 11.7 | 34.9 | 19.8 | 114 |
| *1935* | 120 | 403 | 75.3 | 144 | 61.5 | 804 | 12.2 | 39.1 | 14.5 | 41.1 | 20.9 | 127 |
| *1936* | 114 | 475 | 107 | 164 | 78.0 | 940 | 12.1 | 42.7 | 18.2 | 43.1 | 24.0 | 140 |
| *1937* | 107 | 509 | 164 | 194 | 91.0 | 1,067 | 11.6 | 47.0 | 23.7 | 47.8 | 26.2 | 156 |
| *1938* | 87.9 | 390 | 112 | 189 | 70.4 | 850 | 10.7 | 42.7 | 19.8 | 46.1 | 22.8 | 142 |

* Comparable with the figures for 1930–38. Since several of the minor metals were classified with non-metals in the 1935 Census the 1929 figures also were reclassified. The 1929 figures comparable with those for 1919–28 are: Wages: metal, 179; 'other' mining, 117; Salaries: metal, 27.7; 'other' mining, 31.8.

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## Q 5 Dividends and Interest (millions of dollars)

| | DIVIDENDS | | | | | | INTEREST | | | | | |
| | COAL | | Metal | Oil & gas | Other | Total | COAL | | Metal | Oil & gas | Other | Total |
| | Anth. (1) | Bit. (2) | (3) | (4) | (5) | (6) | Anth. (7) | Bit. (8) | (9) | (10) | (11) | (12) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *1919* | | | | | | 194 | | | | | | 23.3 |
| *1920* | | | | | | 209 | | | | | | 30.4 |
| *1921* | | | | | | 193 | | | | | | 38.3 |
| *1922* | | | | | | 139 | | | | | | 33.2 |
| *1923* | | | | | | 223 | | | | | | 37.3 |
| *1924* | | | | | | 212 | | | | | | 51.3 |
| *1925* | | | | | | 269 | | | | | | 53.9 |
| *1926* | 53.2 [1] | .... [2] | 86.3 | 135 | 51.8 | 326 | 21.8 [1] | .... [2] | 5.2 | 9.7 | 9.9 | 46.5 |
| *1927* | 47.0 [1] | .... [2] | 78.2 | 103 | 49.8 | 278 | 21.1 [1] | .... [2] | 4.6 | 9.0 | 9.1 | 43.7 |
| *1928* | 13.7 | 20.0 | 98.5 | 69.8 | 51.4 | 253 | 20.1 [1] | .... [2] | 3.7 | 9.4 | 8.8 | 42.0 |
| *1929* | 15.6 | 26.8 | 195 | 69.4 | 58.4 | 365 | 8.0 | 15.4 | 2.2 | 9.4 | 9.7 | 44.7 |
| *1930* | 13.2 | 24.0 | 92.6 | 79.0 | 40.2 | 249 | 8.2 | 15.0 | 3.2 | 8.9 | 9.2 | 44.5 |
| *1931* | 9.4 | 15.6 | 37.8 | 37.2 | 38.5 | 138 | 9.3 | 12.8 | 4.5 | 9.5 | 5.7 | 41.7 |
| *1932* | 6.1 | 6.7 | 11.1 | 36.4 | 21.2 | 81.6 | 10.1 | 11.1 | 5.5 | 9.6 | 3.2 | 39.5 |
| *1933* | 0.8 | 4.2 | 13.3 | 38.1 | 18.9 | 75.3 | 9.9 | 9.0 | 5.5 | 7.9 | 1.9 | 34.1 |
| *1934* | 1.4 | 18.6 | 16.7 | 60.6 | 17.4 | 114 | 9.6 | 6.8 | 4.8 | 7.2 | 1.6 | 30.0 |
| *1934* | 2.7 | 28.1 | 31.6 | 97.3 | 30.7 | 190 | 11.1 | 8.7 | 4.1 | 12.2 | 3.0 | 39.2 |
| *1935* | 2.7 | 11.0 | 42.3 | 72.8 | 56.6 | 185 | 10.6 | 7.7 | 4.5 | 10.1 | 4.2 | 37.0 |
| *1936* | 3.1 | 16.4 | 79.5 | 69.6 | 46.5 | 215 | 10.4 | 7.4 | 7.8 | 9.9 | 5.0 | 40.6 |
| *1937* | 1.1 | 11.7 | 128 | 91.6 | 62.4 | 295 | 9.1 | 6.5 | 6.6 | 8.8 | 4.8 | 35.8 |
| *1938* | 0.5 | 8.8 | 75.3 | 70.8 | 49.4 | 204 | 8.8 | 5.7 | 5.5 | 6.6 | 4.7 | 31.4 |

1 Including figures for bituminous.   2 Included with figures for anthracite.

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## Q 6 Employee Compensation and Property Income (millions of dollars)

|  | EMPLOYEE COMPENSATION | | | | | | PROPERTY INCOME | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | COAL | | Metal | Oil & gas | Other | Total | COAL | | Metal | Oil & gas | Other | Total |
|  | Anth. (1) | Bit. (2) | (3) | (4) | (5) | (6) | Anth. (7) | Bit. (8) | (9) | (10) | (11) | (12) |
| 1919 | 224 | 753 | 233 | 169 | 98.4 | 1,479 |  |  |  |  |  | 217 |
| 1920 | 252 | 1,111 | 248 | 278 | 144 | 2,035 |  |  |  |  |  | 240 |
| 1921 | 301 | 852 | 136 | 163 | 103 | 1,557 |  |  |  |  |  | 231 |
| 1922 | 182 | 774 | 139 | 195 | 115 | 1,407 |  |  |  |  |  | 172 |
| 1923 | 309 | 1,093 | 198 | 216 | 163 | 1,980 |  |  |  |  |  | 260 |
| 1924 | 341 | 800 | 198 | 198 | 167 | 1,705 |  |  |  |  |  | 263 |
| 1925 | 228 | 755 | 204 | 231 | 168 | 1,588 |  |  |  |  |  | 323 |
| 1926 | 334 | 837 | 209 | 291 | 173 | 1,846 | 75.0[2] | [3] | 91.5 | 145 | 61.6 | 373 |
| 1927 | 298 | 744 | 196 | 262 | 167 | 1,669 | 68.1[2] | [3] | 82.8 | 112 | 58.9 | 321 |
| 1928 | 280 | 638 | 189 | 214 | 159 | 1,481 | 53.9[2] | [3] | 102 | 79.2 | 60.1 | 295 |
| 1929 | 254 | 634 | 205[1] | 284 | 151[1] | 1,530 | 23.6 | 42.2 | 197 | 78.8 | 68.1 | 410 |
| 1930 | 243 | 527 | 170 | 245 | 139 | 1,325 | 21.4 | 39.0 | 95.7 | 88.0 | 49.5 | 293 |
| 1931 | 197 | 395 | 105 | 157 | 106 | 962 | 18.7 | 28.4 | 42.2 | 46.7 | 44.1 | 180 |
| 1932 | 144 | 269 | 54.5 | 128 | 67.4 | 664 | 16.2 | 17.9 | 16.6 | 46.0 | 24.4 | 121 |
| 1933 | 125 | 290 | 52.9 | 137 | 61.1 | 666 | 10.7 | 13.2 | 18.8 | 46.0 | 20.8 | 109 |
| 1934 | 150 | 404 | 69.1 | 177 | 75.1 | 875 | 11.0 | 25.4 | 21.6 | 67.8 | 18.9 | 144 |
| 1934 |  |  |  |  |  |  | 13.8 | 36.8 | 35.7 | 109 | 33.7 | 229 |
| 1935 | 132 | 442 | 89.8 | 185 | 82.4 | 932 | 13.3 | 18.7 | 46.7 | 82.9 | 60.7 | 222 |
| 1936 | 126 | 518 | 125 | 207 | 102 | 1,080 | 13.6 | 23.8 | 87.3 | 79.5 | 51.4 | 255 |
| 1937 | 119 | 556 | 188 | 242 | 117 | 1,223 | 10.2 | 18.3 | 135 | 100 | 67.2 | 331 |
| 1938 | 98.6 | 433 | 132 | 235 | 93.2 | 992 | 9.3 | 14.5 | 80.8 | 77.4 | 54.0 | 236 |

[1] Comparable with the figures for 1930–38. Since several of the minor metals were classified with non-metals in the 1935 Census the 1929 figures also were reclassified. The 1929 figures comparable with those for 1919–28 are Metal, 207; 'Other' mining, 149.

[2] Including figures for bituminous.

[3] Included with figures for anthracite.

## Q 7  Total payments to Individuals (millions of dollars)

| | COAL | | METAL | OIL & GAS | OTHER | TOTAL |
| | Anth. | Bit. | | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) |
|---|---|---|---|---|---|---|
| 1919 | | | | | | 1,727 |
| 1920 | | | | | | 2,315 |
| 1921 | | | | | | 1,820 |
| 1922 | | | | | | 1,609 |
| 1923 | | | | | | 2,273 |
| 1924 | | | | | | 1,997 |
| 1925 | | | | | | 1,937 |
| 1926 | 1,251 [1] | ... [2] | 301 | 454 | 238 | 2,245 |
| 1927 | 1,115 [1] | ... [2] | 280 | 390 | 228 | 2,015 |
| 1928 | 977 [1] | ... [2] | 291 | 309 | 221 | 1,800 |
| 1929 | 278 | 680 | 403 | 379 | 221 | 1,962 |
| 1930 | 264 | 569 | 266 | 348 | 190 | 1,639 |
| 1931 | 215 | 426 | 147 | 218 | 152 | 1,160 |
| 1932 | 160 | 289 | 71.5 | 186 | 93.0 | 800 |
| 1933 | 136 | 305 | 71.9 | 194 | 83.0 | 790 |
| 1934 | 161 | 431 | 91.0 | 256 | 95.3 | 1,035 |
| 1934 | 164 | 442 | 105 | 298 | 110 | 1,120 |
| 1935 | 145 | 462 | 136 | 280 | 144 | 1,170 |
| 1936 | 139 | 544 | 213 | 300 | 155 | 1,352 |
| 1937 | 129 | 576 | 323 | 357 | 186 | 1,573 |
| 1938 | 108 | 449 | 213 | 327 | 148 | 1,247 |

## Q 8  Total Net Savings (millions of dollars)

| | COAL | | CORPORATE | | | | ENTREP. | TOTAL |
| | Anth. | Bit. | Metal | Oil & gas | Other | Total | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
|---|---|---|---|---|---|---|---|---|
| 1919 | | | | | | —12.9 | 8.1 | —4.8 |
| 1920 | | | | | | 147 | 25.1 | 172 |
| 1921 | | | | | | —449 | —19.2 | —468 |
| 1922 | | | | | | —153 | —0.3 | —153 |
| 1923 | | | | | | —291 | —6.4 | —297 |
| 1924 | | | | | | —295 | —4.0 | —299 |
| 1925 | | | | | | —69.4 | 18.6 | —50.7 |
| 1926 | —20.3 [1] | ... [2] | —37.8 | —36.9 | —3.0 | —97.9 | 24.7 | —73.2 |
| 1927 | —70.8 [1] | ... [2] | —45.0 | —140 | —16.7 | —273 | 7.2 | —266 |
| 1928 | —8.9 | —44.3 | —14.9 | —74.7 | —11.5 | —154 | 15.9 | —138 |
| 1929 | —13.3 | —39.4 | —45.8 | —48.6 | —19.1 | —166 | 24.9 | —141 |
| 1930 | —5.5 | —66.0 | —113 | —94.5 | —25.2 | —304 | —15.7 | —320 |
| 1931 | —11.2 | —62.2 | —107 | —157 | —54.0 | —392 | —29.9 | —422 |
| 1932 | —22.6 | —56.8 | —88.7 | —83.8 | —54.0 | —306 | —31.5 | —337 |
| 1933 | —11.8 | —51.0 | —49.9 | —82.1 | —59.0 | —253 | —23.5 | —277 |
| 1934 | —11.8 | —28.6 | —1.6 | —56.1 | —20.9 | —119 | —6.4 | —125 |
| 1934 | —10.9 | —37.1 | —25.7 | —102 | —37.3 | —213 | —9.0 | —222 |
| 1935 | —18.6 | —27.8 | —15.8 | —83.8 | —64.5 | —210 | —9.5 | —220 |
| 1936 | —14.4 | —30.8 | —18.0 | —48.6 | —30.2 | —142 | —0.4 | —142 |
| 1937 | —20.7 | —21.6 | —6.7 | —53.2 | —36.5 | —138 | 6.2 | —132 |
| 1938 | —28.2 | —21.6 | —18.5 | —51.5 | —33.9 | —153 | 6.1 | —147 |

[1] Including figures for bituminous.  [2] Included with figures for anthracite.

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## Q 9 Persons Engaged (thousands)

| | WAGE EARNERS | | | | | | SALARIED EMPLOYEES | | | | | | ENTRE-PRENEURS |
| | COAL | | | | | | COAL | | | | | | |
| | Anth. (1) | Bit. (2) | Metal (3) | Oil & gas (4) | Other (5) | Total (6) | Anth. (7) | Bit. (8) | Metal (9) | Oil & gas (10) | Other (11) | Total (12) | Total (13) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1919 | 147 | 547 | 135 | 93.7 | 76.3 | 1,001 | 7.4 | 33.7 | 10.8 | 18.0 | 7.9 | 77.7 | 22.3 |
| 1920 | 139 | 630 | 133 | 114 | 92.4 | 1,109 | 7.5 | 40.3 | 10.3 | 19.8 | 9.6 | 87.5 | 21.6 |
| 1921 | 159 | 439 | 71.9 | 84.9 | 73.1 | 829 | 8.3 | 25.4 | 6.1 | 12.9 | 7.8 | 60.5 | 20.4 |
| 1922 | 96.2 | 430 | 95.8 | 106 | 84.1 | 813 | 7.7 | 25.3 | 7.2 | 17.5 | 8.3 | 66.1 | 20.1 |
| 1923 | 150 | 552 | 121 | 111 | 102 | 1,037 | 8.8 | 31.4 | 9.4 | 19.6 | 9.8 | 79.0 | 19.7 |
| 1924 | 158 | 460 | 119 | 102 | 101 | 942 | 9.1 | 26.0 | 9.4 | 17.7 | 10.2 | 72.4 | 18.2 |
| 1925 | 102 | 494 | 123 | 118 | 102 | 941 | 9.0 | 27.3 | 9.9 | 18.1 | 10.1 | 74.3 | 17.2 |
| 1926 | 153 | 545 | 123 | 149 | 102 | 1,073 | 9.5 | 30.3 | 9.2 | 22.8 | 10.2 | 82.0 | 16.6 |
| 1927 | 157 | 481 | 112 | 131 | 101 | 984 | 9.7 | 25.4 | 9.6 | 20.6 | 11.7 | 77.1 | 15.8 |
| 1928 | 150 | 445 | 108 | 104 | 98.9 | 908 | 8.7 | 23.0 | 9.2 | 17.5 | 11.5 | 70.0 | 15.0 |
| 1929 | 144 | 459 | 115 * | 139 | 96.5 * | 956 | 8.5 | 23.7 | 9.7 * | 23.6 | 11.7 * | 77.3 | 14.1 |
| 1930 | 137 | 441 | 101 | 118 | 90.7 | 890 | 8.4 | 21.7 | 9.8 | 20.8 | 12.7 | 73.3 | 14.0 |
| 1931 | 121 | 408 | 76.0 | 81.6 | 80.0 | 767 | 7.7 | 19.7 | 7.5 | 14.9 | 11.5 | 61.3 | 14.1 |
| 1932 | 98.1 | 350 | 49.4 | 76.3 | 63.6 | 638 | 6.2 | 16.8 | 5.1 | 14.2 | 9.9 | 52.2 | 13.6 |
| 1933 | 85.4 | 367 | 49.1 | 90.3 | 63.2 | 655 | 6.0 | 16.4 | 5.2 | 13.2 | 10.1 | 50.8 | 13.4 |
| 1934 | 99.4 | 424 | 61.8 | 112 | 74.3 | 772 | 5.9 | 18.9 | 5.7 | 17.1 | 10.5 | 58.1 | 13.2 |
| 1935 | 92.4 | 436 | 73.3 | 108 | 75.0 | 785 | 5.8 | 19.3 | 6.7 | 20.3 | 10.5 | 62.6 | 12.8 |
| 1936 | 89.3 | 448 | 93.5 | 119 | 80.7 | 830 | 5.8 | 20.7 | 8.0 | 21.1 | 10.8 | 66.4 | 12.8 |
| 1937 | 86.0 | 456 | 119 | 126 | 83.8 | 872 | 5.7 | 21.5 | 10.0 | 22.5 | 10.9 | 70.6 | 12.8 |
| 1938 | 74.7 | 398 | 91.5 | 119 | 69.0 | 753 | 5.2 | 20.0 | 8.6 | 21.2 | 10.1 | 65.1 | 12.8 |

*Comparable with the figures for 1930–38. Since several of the minor metals were classified with non-metals in the 1935 Census the 1929 figures also were reclassified. The 1929 figures comparable with those for 1919–28 are: Wage earners: metal, 116; 'other' mining, 95.5; Salaried employees: metal, 9.9; 'other' mining, 11.5.

TABLE Q 1

Gross Income

*Col. 1 and 2 Coal:* data for 1919 and 1929 are from the *Census of Mines and Quarries* and for 1935 from mimeographed reports of the *Census of Business.* Interpolation between Census years is by Bureau of Mines value of production figures *(Mineral Resources* and the *Minerals Yearbook).* This series is used also for the 1936–38 estimates.

*Col. 3 Metal:* for 1919–29 the metals covered are those classified as such in the *Census of Mines and Quarries* for 1919 and 1929. Interpolation between Census years is by Bureau of Mines value of metal production figures.

For 1930–38 five minor metals are included with non-metals: manganese, molybdenum, titanium, tungsten, and vanadium. The 1929 figure is adjusted (see the notes to col. 5) to exclude these five metals. Interpolation between the adjusted and the 1935 figure (reported in the *Census of Business)* and the extrapolation for 1936–38 are by Bureau of Mines value of production figures.

*Col. 4 Oil and gas:* Bureau of Mines figures on the value of petroleum, natural gas, and natural gasoline. The values are those at the wells and differ in this respect from those in the summary table in the *Minerals Yearbook.*

*Col. 5 Other mining:* for 1919–29 'other' mining covers the mining of non-metals classified as such in the 1929 *Census of Mines and Quarries.* For 1929 and later years 'other' mining includes, in addition to the non-metal total reported in the 1929 Census, manganese, molybdenum, titanium, tungsten, and vanadium. The 1935 *Census of Business* covers in its non-metal section all the items included in 1929 except titanium, vanadium, tungsten, sulphur and pyrites which we estimate for 1935 as follows:

*a) Titanium and vanadium:* from the 1929 *Census of Mines and Quarries* combined total for molybdenum, titanium, and vanadium we subtract the value of molybdenum *(Mineral Resources)* to obtain the value of titanium and vanadium in 1929. Their value in 1935 is estimated by multiplying tonnage produced by the price per ton. Tonnage production of vanadium and titanium in 1929 and 1935 is derived on the basis of data for other years and of text discussion on activity in this field in the *Minerals Yearbook.* It is

used to extrapolate the 1929 Census quantity figure (after subtracting molybdenum as reported by the Bureau of Mines). The price
per ton in 1929 is derived from the Census; for 1935 it is estimated
on the basis of the change from 1929 to 1935 in the price per ton
of tungsten.

b) *Tungsten:* the value of tungsten produced in 1929 is reported
in the *Census of Mines and Quarries;* for 1935 it is estimated on the
basis of the change from 1929 to 1935 in the value of concentrated
tungsten ores produced, as reported by the Bureau of Mines.

c) *Sulphur and pyrites:* the value and quantity of sulphur and
pyrites produced in 1929 are reported in the *Census of Mines and
Quarries.* The quantity figure is estimated for 1935 on the basis of
the change from 1929 to 1935 in production as reported by the
Bureau of Mines; and to it is applied the price per ton as derived
from the 1929 data to obtain value in 1935. According to the
Bureau of Mines, the price of crude sulphur f.o.b. mines remained
constant over the period; and although the price of pyrites declined slightly from 1929 to 1935, this change in price is disregarded since the value of pyrites is less than 2 per cent of the total
value of sulphur and pyrites in 1929.

Interpolation for all other mining for 1920–28 and 1930–34 and
extrapolation for 1936–38 are by Bureau of Mines figures on the
value of non-metallic production other than coal, petroleum,
natural gas, and natural gasoline *(Mineral Resources* and the
*Minerals Yearbook).*

*Col. 6 Total mining:* sum of col. 1–5.

### TABLE Q 2

#### Total Payments by Type

*Col. 1 and 2 Wages and salaries:* see the notes to Table Q 4.
*Col. 3 Employee compensation:* sum of col. 1 and 2.
*Col. 4 Entrepreneurial withdrawals:* sum of entrepreneurial withdrawals for each industrial subgroup, obtained by multiplying the
average wage in the field by the estimated number of entrepreneurs
(see the notes to Tables Q 4 and Q 9).
*Col. 5 and 6 Dividends and interest:* see the notes to Table Q 5.
*Col. 7 Property income:* sum of col. 5 and 6.
*Col. 8 Total payments:* sum of col. 3, 4, and 7.

TABLE Q 3

Net Income Originating

*Col. 1 Total payments:* see the notes to Table Q 2, col. 8.
*Col. 2 Entrepreneurial net savings:* see the notes to Table Q 8, col. 7.
*Col. 3 Corporate net savings:* see the notes to Table Q 8.
*Col. 4 Total net savings:* sum of col. 2 and 3.
*Col. 5 Net income originating:* sum of col. 1 and 4.

TABLE Q 4

Wages and Salaries

WAGES

*Col. 1 Anthracite:* payments to contract and to non-contract
workers. Wages to non-contract workers in 1919 and 1929 are from
the *Census of Mines and Quarries,* and in 1935, from the *Census
of Business.* The latter reports also wages paid under contract work
in 1935. The sum of the various costs under contract work as re-
ported in the *Census of Business* is raised to the total value of con-
tract work in 1935 by the ratio of the cost of goods sold to total
sales of anthracite corporations filing income tax returns. The ratio
of contract wages to value of contract work is derived for 1935,
extrapolated for 1919 and 1929 by the corresponding ratio for non-
contract work, and applied to the value of contract work, as re-
ported in the *Census of Mines and Quarries,* for those years to
obtain wages paid under contract work. Interpolation of total
wages between 1919 and 1929 is by total wages, recorded annually
in the Pennsylvania *Report on Productive Industries, Public
Utilities and Miscellaneous Statistics.* Interpolation between 1929
and 1935 and extrapolation for 1936–38 are by the BLS payrolls
index.
*Col. 2 Bituminous:* wages in producing and in non-producing
mines, basic data for which are reported in the *Census of Mines and
Quarries* for 1919 and 1929 and in the *Census of Business* for 1935,
and estimated wages paid under contract work. For 1919 and 1929
the latter are obtained by applying to the value of contract work,
as reported in the Census, the ratio of contract wages to the value
of contract work. This ratio is estimated on the assumption that
its relation to the similar ratio for non-contract work is the same

as for anthracite coal. The 1935 Census covers producing mines alone. Estimates of wages paid in non-producing mines and under contract work are based on their ratios to the 1929 producing mines figures.

Estimates for 1920–28 are based on the ratio of wages to value of product, derived for Census years and interpolated by the average ratio for Ohio, Pennsylvania, Tennessee, and Indiana. For all four states the value of product is from *Mineral Resources*. The Pennsylvania wage data are from the Pennsylvania *Report on Productive Industries,* the Ohio data from *Statistics of Ohio Coal Mines and Quarries,* the Tennessee data from the *Annual Report of the Mineral Resources of Tennessee* and the *Annual Report of the Department of Labor* of that state, and the Indiana data from the Indiana *Year Book.* Interpolation between 1929 and 1935 and extrapolation for 1936–38 are by the BLS payrolls index.

*Col. 3 Metal:* wages in producing and in non-producing mines, reported in the 1919 and 1929 *Census of Mines and Quarries* and in the 1935 *Census of Business,* and wages paid under contract work. The 1929 figure comparable with that for 1919 covers all the metals classified as such in the 1929 Census. The 1929 figure comparable with that for 1935 excludes manganese, molybdenum, tungsten, titanium, and vanadium.

Wages paid under contract work in 1935 are covered in total wages reported, as are wages in non-producing mines. For 1919 and 1929 wages paid under contract work are obtained by applying to the value of contract work, as reported in the Census, the ratio of contract wages to the value of contract work. This ratio is estimated on the assumption that its relation to the similar ratio for non-contract work is the same as for anthracite coal.

Total wages, 1920–28, are the product of the number of man-shifts and the average wage per man-shift. The number of man-shifts in metal mines is reported annually by the Bureau of Mines in *Metal-Mine Accidents.* The average wage per man-shift in Census years, obtained by dividing the total wage bill by the number of man-shifts, is interpolated by the average daily wage in iron mines in Itasca County, Minnesota (*Biennial Report of the Department of Labor and Industry* of Minnesota). Interpolation of total wages between 1929 and 1935 and extrapolation for 1936–38 are by the BLS payrolls index.

*Col. 4 Oil and gas:* basic data, covering petroleum, natural gas, and natural gasoline producing and non-producing wells, for 1919 are from the *Census of Mines and Quarries,* and for 1935 from the *Census of Business.* The 1935 wage figure is extrapolated to 1933 by the BLS payrolls index. From 1933 to 1929 the estimate is extrapolated by wages paid by sample companies reporting to the Bureau of Foreign and Domestic Commerce, National Income Division, raised by the ratio of the total value of product to the value of product for the sample companies.

Interpolation between the 1919 and the estimated 1929 figures is by applying, to the total value of product, the ratio of wages to value of product. The ratio of wages to value of product is derived from Census data for 1919 and 1929 and interpolated by the similar ratio for petroleum refining. The 1936–38 estimates are the product of the number of wage earners (see the notes to Table Q 9) and the average wage. The average wage in 1935, derived from the Census, is extrapolated by the ratio of the BLS payrolls index to its employment index.

*Col. 5 Other mining:* wages in producing and in non-producing mines, reported in the 1919 and 1929 *Census of Mines and Quarries,* and in the 1935 *Census of Business,* and wages paid under contract work. The 1929 figure comparable with that for 1919 covers the non-metals listed as such in the 1929 Census. The 1929 figure comparable with that for 1935 includes the five metals that were not segregable in 1935: manganese, molybdenum, tungsten, titanium, and vanadium. The 1919 figure includes an estimate for wages in the sand and gravel, glass and molding sand industries which were canvassed in 1929 but not in 1919. This estimate is obtained by applying, to the value of product reported in the 1929 Census and extrapolated by the Bureau of Mines value of production figure, the ratio of wages to value of product derived from the 1929 Census and extrapolated by the ratio for Pennsylvania; the latter ratio was computed from data recorded in the Pennsylvania *Report on Productive Industries, Public Utilities and Miscellaneous Statistics.* Wages paid under contract work are included in the 1935 Census wage figure and are estimated for 1919 and 1929 by the procedure described for col. 3.

Wages for the total 'other' mining group, 1920–28, are obtained by multiplying the value of product by the ratio of wages to it. The

ratio of wages to value of product is derived from Census data for 1919 and 1929 and interpolated by the corresponding ratio for Pennsylvania and Tennessee for 1919–29; for 1921–29 Wisconsin is added: for 1924–29 Ohio is added. The Pennsylvania, Tennessee and Ohio data are from the sources cited in the notes to col. 2. The Wisconsin wage figure is the 1929 Census figure extrapolated by an index derived from month to month percentage changes for stone crushing and quarrying (*Wisconsin Labor Market*).

The 1935 figure as reported in the *Census of Business* does not include sulphur and pyrites, tungsten, titanium, and vanadium. Estimates for these items are based on their ratio of wages to value of product in 1929, adjusted by the percentage change in the ratio for non-metals covered in both 1929 and 1935. Interpolation between 1929 and 1935 and extrapolation for 1936–38 are by the BLS payrolls index.

*Col. 6 Total mining:* sum of col. 1–5.

### SALARIES

*Col. 7 Anthracite:* basic data for 1919 and 1929 are from the *Census of Mines and Quarries,* for 1935 from the *Census of Business,* and cover salaries paid in producing mines, central administrative offices, and under contract work. Salaries paid under contract work are reported for 1935 in the Census and estimated, for 1919 and 1929 by applying to the estimated wages paid under contract work the ratio of salaries to wages paid under contract work in 1935, extrapolated by the ratio of salaries to wages for non-contract work. Interpolation for 1920–28 and 1930–34 and extrapolation for 1936–38 are by salaries recorded in the Pennsylvania *Report on Productive Industries, Public Utilities and Miscellaneous Statistics.*

*Col. 8 Bituminous:* basic data are from the sources cited for col. 2 and cover salaries paid in producing and in non-producing mines, central administrative offices, and under contract work. Salaries paid under contract work in 1919, 1929, and 1935 are estimated by applying, to estimated contract wages, the ratio of contract salaries to contract wages. This ratio is derived on the assumption that its relation to the similar ratio for non-contract work is the same as for anthracite coal.

Total salaries in intercensal years and 1936–38 are obtained by

multiplying the average salary by the estimated number of salaried employees (see the notes to Table Q 9). The average salary is derived for Census years and interpolated by the average salary computed from data in the Pennsylvania *Report on Productive Industries, Public Utilities and Miscellaneous Statistics.*

*Col. 9 Metal:* basic data are from the sources cited for col. 3 and cover salaries paid in producing and in non-producing mines, central administrative offices, and under contract work. For the adjustment of the 1929 figure for comparability with the 1935 see the notes to col. 3. The 1935 figure, as reported, covers all the above items except salaries at central administrative offices. The latter are estimated by applying to other salaries their 1929 ratio to other salaries. Salaries paid under contract work in 1919 and 1929 are derived by the method described for bituminous coal.

Total salaries in intercensal years and 1936–38 are obtained by multiplying the average salary by the number of salaried employees (see the notes to Table Q 9). The average salary is derived for Census years and interpolated by the weighted average salary for anthracite, bituminous, and 'other' mining.

*Col. 10 Oil and gas:* basic data for 1919 are from the *Census of Mines and Quarries,* for 1935 from the *Census of Business,* and cover salaries at producing wells and central administrative offices. For 1935 the salaries paid at central administrative offices are given for only some natural gasoline plants. The ratio of the average salary at the central administrative offices to the average salary at the wells for these plants is applied to the average salary excluding central administrative offices for the entire oil and gas field. The product of the resulting average and the estimated number of salaried employees in central administrative offices (see the notes to Table Q 9) is the estimated salary bill for these offices.

Total salaries, 1920–34 and 1936–38, are obtained by multiplying the average salary by the estimated number of salaried workers (see the notes to Table Q 9). The average salary is derived for 1919 and 1935 and interpolated and extrapolated by the average salary paid in petroleum refining.

*Col. 11 Other mining:* basic data are from the sources cited for col. 5 and cover salaries paid in producing and in non-producing mines, central administrative offices, and under contract work. The 1919 figure is raised to include salaries in the sand and gravel, glass and

molding sand industries, which are the product of the estimated number of salaried employees and the average salary. The latter is computed for 1929 and estimated for 1919 on the basis of the percentage change from 1919 to 1929 in the average salary paid in these industries in Pennsylvania. The 1935 figure, as reported, covers all the above items except salaries at central administrative offices, which are estimated by the procedure outlined for col. 9. The 1935 figure is raised further to include an estimate of salaries for sulphur and pyrites, titanium, tungsten, and vanadium (not covered by the Census in that year). This adjustment is made by applying to the estimated wages for these items in 1935 their 1929 ratio of salaries to wages, modified by the percentage change in the ratio of salaries to wages of the other non-metals from 1929 to 1935. Salaries paid under contract work in 1919 and 1929 are estimated by the method described for col. 8.

Total salaries in intercensal years and 1936–38 are obtained by multiplying the average salary by the number of salaried employees (see the notes to Table Q 9). The average salary is derived for Census years and interpolated by the average salary in Pennsylvania mines other than coal, as estimated from data in the Pennsylvania *Report on Productive Industries, Public Utilities and Miscellaneous Statistics*. Extrapolation of the average salary for 1936–38 is by the Pennsylvania data and, in addition, Ohio data, published annually in *Statistics of Ohio Coal Mines and Quarries*.
*Col. 12 Total mining:* sum of col. 7–11.

## TABLE Q 5
### Dividends and Interest

*Col. 1–6 Dividends:* net originating in the industry, the difference between total dividends paid and dividends received. The division of the total into five subgroups for 1928–37 and into four for 1926 and 1927 is from the special tabulation of *Statistics of Income* data. The 1926–33 and 1934 (new classification) –37 figures are taken directly from these tabulation sheets. The 1938 estimates are extrapolated from 1937 by the corporate samples for the five subgroups.

For 1922–25 both dividends paid and received are reported for the entire mining industry in *Statistics of Income*. Dividends paid, 1919–21, are extrapolated from 1922 by dividend payments of a

corporate sample for the industry. Dividends received, 1919–21, are extrapolated from 1922 by dividend receipts of all corporations as reported in *Statistics of Income.*

*Col. 7–12 Interest:* net originating in the industry, the difference between estimated interest paid on long term debt and interest received on holdings of government obligations.

For 1919–28 interest is estimated for the mining industry as a whole. From the capital stock tax returns published in *Statistics of Income* long term debt is obtained for December 31, 1921, 1923, and 1924. The 1921 figures are assumed to be complete. The figures for 1923 and 1924 are raised by the ratio of the fair value of total stock to the fair value of the stock of corporations submitting statements of assets and liabilities, to yield total long term debt. Long term debt outstanding at the end of each year, 1926–28, reported in *Statistics of Income,* is raised by the 1931 ratio of total compiled receipts to compiled receipts of corporations reporting balance sheet items. Interpolation for the December 31, 1922 and 1925 figures is by the long term debt of a corporate sample for the industry. To the average of the final December 31 figures are applied the interest rates derived from sample corporations. The 1922 interest figure is extrapolated to 1919 by the long term interest payments of the corporate sample for the industry.

The division for 1926–28 of total interest paid by mining into the industrial subgroups is derived from the percentage distributions of preliminary estimates. The latter are based on the par value of long term debt outstanding, available by subgroups for 1924 from capital stock tax returns, and for 1929 as described below. Long term debt for the subgroups, 1926–28, is obtained by multiplying total long term debt for mining by the ratios of the subgroups to it. The ratios, calculated for 1924 and 1929, are interpolated along a straight line for the intervening years. The interest rates applied to these estimates of long term debt are those for the industrial subgroups in 1929 extrapolated by the change in the rate for all mining. The percentage distributions of these estimates for 1926, 1927, and 1928 are applied to the estimated total for all mining to yield total interest paid by the subgroups.

Interest received on tax-exempt obligations is reported for total mining for 1922–25 in *Statistics of Income* and for 1926–28 in the

special tabulation of *Statistics of Income* data. For 1919–21 it is extrapolated from 1922 by total tax-exempt interest received by all corporations as reported in *Statistics of Income*.

For 1929–36 the procedure is similar to that for the earlier period for total mining, except that the estimates are made for the minor industrial divisions directly. The 1929 value of long term debt outstanding for each subgroup is assumed to be the same percentage of the total for all mining as in 1930. The 1930–33 and 1934 (new classification)–36 data are taken from the special tabulation of *Statistics of Income* data, which gives total long term debt on December 31 of each year for the companies that report assets and liabilities. These are raised by the ratio, for the entire mining group, of compiled receipts of all companies to compiled receipts of companies reporting assets and liabilities, to yield total long term debt. The December 31, 1934 figures comparable with the reported 1933 figures and the December 31, 1933 figures comparable with the reported 1934 figures are based on the percentage change in corporate sample data for the industry. The December 31 figures are averaged to yield the average outstanding during the year, to which the average interest rate of the corporate sample for the industry is applied to obtain total long term interest paid.

Interest received on tax-exempt obligations by minor industrial divisions also is reported for 1929–33 and 1934 (new classification)–37 in the special tabulation of *Statistics of Income* data.

The estimates of interest paid, 1937 and 1938, and of interest received, 1938, are extrapolated from 1936 and 1937 by the corporate samples for the five subdivisions.

### TABLE Q 6

#### Employee Compensation and Property Income

*Col. 1–6 Employee compensation:* see the notes to Table Q 4.
*Col. 7–12 Property income:* see the notes to Table Q 5.

### TABLE Q 7

#### Total Payments to Individuals

Sum of employee compensation (Table Q 4), property income (Table Q 5), and entrepreneurial withdrawals (Table Q 2, col. 4).

TABLE Q 8

Total Net Savings

*Col. 1–6 Corporate net savings:* for 1919–25, estimated for mining as a whole; for 1926–38, for the minor industrial divisions.

Corporate net savings are the difference between net profits after taxes and total dividends paid. For the derivation of dividends paid, see the notes to Table Q 5. Net profits after taxes are reported for 1922–37 in *Statistics of Income* and in the special tabulation of *Statistics of Income* data. For 1919–21 they are the sum of statutory net income after taxes *(Statistics of Income)* and interest and dividends received (see the notes to Table Q 5). For 1938, except in the case of bituminous coal, they are extrapolated from 1937 by the corporate sample for the industries. Corporate net savings for bituminous coal in 1938 are assumed to be the same as in 1937.

*Col. 7 Entrepreneurial net savings:* difference between entrepreneurial net income and withdrawals (see the notes to Table Q 2, col. 4). Net income is derived by applying an estimated net income ratio to the non-corporate value of product.

*a) Non-corporate value of product:* the 1919 and 1929 figures are derived from data on the character of ownership in the *Census of Mines and Quarries.* The ratio of non-corporate to total value of product in the oil and gas field, from the Census for 1919, is extrapolated to 1929 by the percentage change in the ratio for the other mining divisions. The ratio for sand and gravel, from the Census for 1929, is estimated for 1919 by the same procedure. The resulting ratio for mining as a whole is interpolated along a straight line between 1919 and 1929, then kept constant. Non-corporate value of product is estimated by applying to the total value of product the ratio so derived.

*b) Net income ratio:* on the basis of corporate data a preliminary net income ratio is estimated as the ratio of statutory net income before taxes (from *Statistics of Income*) plus officers' compensation (from *Statistics of Income*) plus total long term interest (see the notes to Table Q 5) to gross sales (from *Statistics of Income*). Officers' compensation, not reported for 1925–27, is estimated by the ratio to gross sales in 1924 and 1928, interpolated along a straight line. Gross sales, not reported for 1919–21, are extrapolated from

1922 by corporate gross income for the industry (from *Statistics of Income*). The net income ratio so derived is applied to the non-corporate value of product to yield entrepreneurial net income. This method is used for 1919–37, except that to derive a figure for 1934 comparable with that for 1933 the 1933 ratio is extrapolated by the percentage change in the similar ratio for corporations filing unconsolidated returns in 1933 and 1934.

Since, for 1919–29, the results obtained by the method outlined above seemed unreasonably low, they were raised in each year by the average of the difference for the 11 years between this estimate and a second, based on net income from the mining business reported on individual income tax returns in *Statistics of Income*, which for 1919–25 cover all returns, and for later years cover only those with net incomes of $5,000 and over. For 1925 and 1928 both the total and those with incomes of $5,000 and over are reported. The 1926, 1927, and 1929 figures as reported are raised to the totals on the basis of the 1925 and 1928 ratios. To the resulting net income figure we apply a raising ratio—the ratio of the final estimate for entrepreneurial net income in printing for 1919–29 (see the notes to Table M 18) to the entrepreneurial net income in printing estimated from individual income tax returns, for the same period. The printing industry is selected because average value of production per entrepreneur is approximately the same as in mining.

Entrepreneurial net income in 1938 is assumed to be the same as in 1937.

*Col. 8 Total net savings:* sum of col. 6 and 7.


TABLE Q 9

Persons Engaged

Sources for the basic data for employees are the same as those cited in the notes to Table Q 4 and cover the same items. For all industrial divisions for the three Census years, except anthracite coal in 1935, the number of wage earners and salaried employees under contract work is obtained by dividing total contract pay by the average pay of those working directly for the mine, on the assumption that the average compensation of contract and non-contract workers is the same. For anthracite coal in 1935 the number of employees under contract work is reported in the Census.

WAGE EARNERS

*Col. 1 Anthracite:* interpolation for 1920–28 is by the number of wage earners recorded in the Pennsylvania *Report on Productive Industries, Public Utilities and Miscellaneous Statistics.* That for 1929–35 and extrapolation for 1936–38 are by the BLS employment index.

*Col. 2 Bituminous:* interpolation for 1920–28 is by the product of the number of underground and surface employees and of days the mine operates. Both series are from *Mineral Resources.* Interpolation between 1929 and 1935 and extrapolation for 1936–38 are by the BLS employment index.

*Col. 3 Metal:* interpolation for 1920–28 is by Bureau of Mines figures for 300-day workers in metal mines (*Metal-Mine Accidents*). Interpolation between 1929 and 1935 and extrapolation for 1936–38 are by the BLS employment index.

*Col. 4 Oil and gas:* the 1935 figure is extrapolated to 1933 and 1934 by the BLS employment index. The 1933 figure is extrapolated to 1929 by a preliminary estimate, based on the data for the sample companies reporting to the Bureau of Foreign and Domestic Commerce, National Income Division, raised by the ratio of total value of product to the value of product of reporting companies. Estimates for 1920–28 are obtained by dividing the total wage bill (see the notes to Table Q 4) by the estimated average wage. The average wage is derived from Census data for 1919 and 1929 and interpolated by the average wage paid in petroleum refining.

The estimates for 1936 and 1937 are based on the number of workers in the field, reported in *Recent Trends in Employment and Productivity in the Oil and Gas Fields* (Bureau of Mines, Mineral Market Report 728) and adjusted to exclude salaried employees. The 1938 figure is extrapolated from 1937 by the BLS employment index.

*Col. 5 Other mining:* for 1919–29 estimates are made separately for non-metals other than sand and gravel and for sand and gravel. Interpolation for non-metals other than sand and gravel is by Bureau of Mines figures on 300-day workers in non-metal mines and in quarries (*Metal-Mine Accidents* and *Quarry Accidents*). The number of wage earners in sand and gravel is reported for 1929 and is estimated for the earlier years on the basis of output

and the ratio of the number of wage earners to it. The 1929 ratio is extrapolated by the ratio for Pennsylvania and Ohio. Pennsylvania wage earners in glass sand and sand and gravel are from the Pennsylvania *Report on Productive Industries, Public Utilities and Miscellaneous Statistics;* Ohio wage earners in sand and gravel excavation are from BLS Bulletin 553. Output for Pennsylvania and Ohio as well as for the United States is from *Mineral Resources.*

The 1935 figure as reported in the Census is adjusted to include wage earners producing the minerals not covered, by applying the ratio of wage earners to output, as reported in the 1929 Census, to output as estimated from Bureau of Mines data for the specific minerals. Interpolation between 1929 and 1935 and extrapolation for 1936–38 are by the BLS employment index.
*Col. 6 Total:* sum of col. 1–5.

### SALARIED EMPLOYEES AND ENTREPRENEURS

*Col. 7 Anthracite:* interpolation between 1919 and 1929, 1929 and 1935, and extrapolation for 1936–38 are by the number of salaried employees as recorded in the Pennsylvania *Report on Productive Industries, Public Utilities and Miscellaneous Statistics.*
*Col. 8 Bituminous:* estimates for intercensal years are the product of the number of wage earners and the ratio of salaried employees to wage earners. This ratio is derived from Census data and interpolated by the similar ratio for Pennsylvania, West Virginia, and Illinois. The Pennsylvania data appear in the Pennsylvania *Report on Productive Industries, Public Utilities and Miscellaneous Statistics;* the West Virginia data in the *Annual Report of the Department of Mines* of that state; and the Illinois data in the *Coal Report of Illinois.* For 1923 and 1924 Illinois data are not available. For 1936–38 the basic data include figures for Ohio reported in the *Statistics of Ohio Coal Mines and Quarries.*
*Col. 9 Metal:* estimates for intercensal years are the product of the number of wage earners and the ratio of salaried employees to wage earners. For 1920–28 this ratio is interpolated by the ratio for iron and steel manufacturing. It is interpolated for 1930–34 and extrapolated for 1936–38 by the ratio for 'other' mining.
*Col. 10 Oil and gas:* the number of salaried employees in the 1935 Census is adjusted to include central administrative employees

by applying to total salaried employees, excluding those at central administrative offices, reported for petroleum, natural gas, and natural gasoline the ratio, for natural gasoline plants reporting, of salaried employees at central administrative offices to other salaried employees. Estimates for 1920–34 are the product of the number of wage earners and the ratio of salaried employees to wage earners. The ratio is interpolated by the ratio of salaried employees to wage earners in petroleum refining.

The 1936 and 1937 estimates are extrapolated from 1935 by the number of salaried employees in the field, obtained by subtracting the number of wage earners from the total in the Bureau of Mines report cited in the notes to col. 4. The 1938 figure is extrapolated from 1937 by the BLS employment index.

*Col. 11 Other mining:* estimates for intercensal years are the product of the number of wage earners and the ratio of salaried employees to wage earners. The ratio is interpolated by the ratio derived from data in the Pennsylvania *Report on Productive Industries, Public Utilities and Miscellaneous Statistics* and extrapolated for 1936–38 by the ratio for Pennsylvania and Ohio. The Ohio data are reported in *Statistics of Ohio Coal Mines and Quarries.*

*Col. 12 Total:* sum of col. 7–11.

*Col. 13 Entrepreneurs, total:* sum of the estimates for the minor divisions.

a) *Anthracite:* data for 1919 and 1929 are from the *Census of Mines and Quarries,* and for 1935 from the NRP report, *Employment and Related Statistics of Mines and Quarries, 1935: Coal.* Interpolation is by the number of establishments in Pennsylvania (*Report on Productive Industries, Public Utilities and Miscellaneous Statistics*). Since 1935 the number of entrepreneurs has been kept constant.

b) *Bituminous:* the sources of the basic data are the same as for (a). Interpolation for 1920–28 is by the number of commercial mines in operation, and for 1930–34 by the number of Class 5 mines. The number of mines is recorded in *Mineral Resources* and the *Minerals Yearbook.* Since 1935 the number of entrepreneurs has been kept constant.

c) *Metal:* data for 1919 and 1929 are from the *Census of Mines and Quarries.* Interpolation between 1919 and 1929 and

extrapolation through 1934 are by the number of active operators of metal mines as reported in *Metal-Mine Accidents*. Since 1934 the number of entrepreneurs has been kept constant.

*d) Oil and gas:* the figure for 1919 is from the *Census of Mines and Quarries,* that for 1929, from the 1930 *Census of Population,* Vol. V. Interpolation between 1919 and 1929 is along a straight line. Since 1929 the number of entrepreneurs has been kept constant.

*e) Other mining:* data for 1919 and 1929 are from the *Census of Mines and Quarries.* Interpolation between 1919 and 1929 and extrapolation through 1934 are by the sum of non-metal mine operators *(Metal-Mine Accidents)*, and of quarry operators *(Quarry Accidents)*. Since 1934 the number of entrepreneurs has been kept constant.