| Ergod    | Ergodid evolution conformation to US Fed national household flows and stocks for 4Q 1989 and 4Q 2019 |        |        |        |        |        |        |       |       |       |   |       |  |  |  |
|----------|--|--------|--------|--------|--------|--------|--------|-------|-------|-------|---|-------|--|--|--|
| Factor   | Count/   | Caput* | Tier   | Tier   | Tier   | Tier   | Cauda  | Tier  | # "/o | Avg>1 | # | Avg<1 |  |  |  |
| = 0 to 1 | Sum  | m₅0₀ = | m501 = | m502 = | m503 = | m504 = | m505 = | тм0м  | M00   |       |   |       |  |  |  |
|          |  | 1      | 5      | 10     | 10     | 5      | 1      | ratio |       |       |   |       |  |  |  |

| 4Q 1989                       | 4Q 1989* US Households – Income and Net Worth  |              |         |         |         |            |                 |         |               |            |  |              |           |       |  |  |
|-------------------------------|--|--------------|---------|---------|---------|------------|-----------------|---------|---------------|------------|--|--------------|-----------|-------|--|--|
| 50%                           | 100%   | 23.7%        | 39.5%   | 6       | 26.3%   | 8.9%       | % 1             | .5%     | 0.1%          | 1/3        | 5  | 39.5%        | 26        | 36.8% |  |  |
| The 50% e                     | The 50% ergodid configuration conforms to the income flow distribution of this data as adjusted. |              |         |         |         |            |                 |         |               |            |  |              |           |       |  |  |
| Adjusted 23.7% 37.2% 25.8% 10 |  |              |         |         |         |            | 10.4% 2.8% 0.2% |         |               |            | m₅0₀ constrained, 20-80 apportioned by 1/3 |              |           |       |  |  |
| Income*                       | 17.3%  | 43.6         | % 1     | 6.5%    | 12.     | 3%         | 7.4%            |         | 3.0%          |            |  |              |           |       |  |  |
|                               | Top 19   | 6 80-99      | 9% 60   | -80%    | 40-6    | 50%        | 20-40%          |         | 0-20%         |            |  |              |           |       |  |  |
| Income to                     | Income to Net Worth Ratios: Top 1% = 0.73, Next 49% = 0.93, Bottom 50% = 3.9                     |              |         |         |         |            |                 |         |               |            |  |              |           |       |  |  |
| Net<br>Worth*                 |  |              | 3%      | 35.2%   |         | 3.9%       |                 |         |               |            |  |              |           |       |  |  |
|                               | Top 19   | 6 90-9       | 9%      | 50-9    | 0%      |            | Botton          | n 50%   | ,<br>)        |            |  |              |           |       |  |  |
| Adjus                         | ted  | 33.6%        | 41.3%   | 2       | 1.2%    | 3.5%       | 0.4             | %       | 0.0%          | 14% shi    | ft from 50-9                               | 0 to 90-99 & | 1% for r  | n500  |  |  |
| The 60% e                     | rgodid cor   | figuration c | onforms | o the r | net wor | th as capi | tal stock c     | listrib | ution of this | data, a 20 | 0% spread b                                | etween flows | s and sto | ocks. |  |  |
| 60%                           | 100%   | 32.8%        | 40.9%   | 5       | 20.6%   | 5.0        | % 0.            | 6%      | 0.0%          | 1/4        | 5  | 40.9%        | 26        | 26.3% |  |  |

| 4Q 2019   | 4Q 2019* US Households – Income and Net Worth  |               |             |          |            |                |          |           |        |   |                                     |              |       |    |       |  |
|-----------|--|---------------|-------------|----------|------------|----------------|----------|-----------|--------|---|-------------------------------------|--------------|-------|----|-------|--|
| 60%       | 100%   | 32.8%         | 40.99       | 6        | 20.6%      | 5.             | 0%       | 0.6       | 5%     | 0.0%  | 1/4                                 | 4 5 40.9% 26 |       |    |       |  |
| The 60% e | The 60% ergodid configuration conforms to the income flow distribution of this data. (unrelated to 1989) |               |             |          |            |                |          |           |        |   |                                     |              |       |    |       |  |
| Adjus     | Adjusted   |               | 32.8% 40.0% |          | 20.1% 5.2% |                | 6        | 1.8% 0.1% |        | $m_5 O_0$ constrained, 20-80 apportioned by 1/4 |                                     |              |       |    |       |  |
| Income*   | 25.9   | % 46.8        | % 1         | .4.6%    | 6.9        | 9%             | 3.9      | 9%        |        | 1.8%  |                                     |              |       |    |       |  |
|           | Top 1  | % 80-99       | 9% 6        | 0-80%    | 40-6       | 50%            | 20-4     | 10%       |        | 0-20%   |                                     |              |       |    |       |  |
| Income to | Net Worth  | n Ratios: Top | o 1% = 0.   | 79, Next | t 49% =    | 0.99, Bc       | ottom    | 50% =     | 6.2    |   |                                     |              |       |    |       |  |
| Net       | 32.7%  | 37.2          | 2%          | 28.7%    |            |                |          | 1.4%      | %      |   |                                     |              |       |    |       |  |
| Worth*    |  |               |             |          |            |                |          |           |        |   |                                     |              |       |    |       |  |
|           | Top 19   | 6 90-9        | 9%          | 50-9     | 0%         |                | В        | ottom     | 50%    | ,<br>)  |                                     |              |       |    |       |  |
| Adjus     | Adjusted 48.7% 37.2%   |               |             |          |            | 1.2% 0.2% 0.0% |          |           |        | 0.0%  | 16% shift from 50-90 to 1% for m₅0₀ |              |       |    |       |  |
| The 72% e | godid con  | figuration c  | onforms     | to the r | net wor    | th as cap      | oital si | tock di   | istrib | ution of this                                   | s data, also                        | o a 20% spre | ad.   |    |       |  |
| 72%       | 100%   | 47.1%         | 38.3%       | 6        | 12.5%      | 1.             | .9%      | 0.        | 2%     | 0%  | 1/6                                 | 5            | 38.3% | 26 | 14.6% |  |

| Projecte   | Projected US Households if current trends continue, based on 1989 & 2019 figures   |   |       |       |      |      |    |      |   |       |    |       |  |  |  |
|------------|--|---|-------|-------|------|------|----|------|---|-------|----|-------|--|--|--|
| 72%        | 100%   | 47.1%   | 38.3% | 12.5% | 1.9% | 0.2% | 0% | 1/6  | 5 | 38.3% | 26 | 14.6% |  |  |  |
| If the 72% | If the 72% ergodid configuration were to conform to the income distribution of a future national data set, based on a 20% spread |   |       |       |      |      |    |      |   |       |    |       |  |  |  |
| 86.4%      | 100%   | 70.3%   | 25.6% | 3.8%  | 0.3% | 0%   | 0% | 1/14 | 5 | 25.6% | 26 | 4.1%  |  |  |  |
| the 86.4%  | ergodid co   | the 86.4% ergodid configuration should conform to the capital stock distribution. |       |       |      |      |    |      |   |       |    |       |  |  |  |

| 92.8%      | 100%   | 83.2% | 15.6% | 1.2% | 0% | 0% | 0% | 1/27  | 5 | 15.6% | 26 | 1.2% |  |  |
|------------|--|-------|-------|------|----|----|----|-------|---|-------|----|------|--|--|
| 100%       | 100%   | 100%  | 0%    | 0%   | 0% | 0% | 0% | 1/inf | 0 |       | 31 | 0%   |  |  |
| *"Distribu | *"Distributional National Accounts". federalreserve.gov. June 19, 2020. Retrieved August 20, 2020. |       |       |      |    |    |    |       |   |       |    |      |  |  |