Chapter 5 The United States

ABSTRACT

This chapter applies the ψ model to the United States of America. By assuming that the US is a 'world-system,' we can measure the economic efficiency of each state (and the District of Columbia). The model predicts an output floor based on the inputs of land and people as per-unit energy-equivalents. This expected output is then compared to the actual Gross State Product (GSP) as a per-unit energy-equivalent. States that are economically efficient register a positive residual, and hence a positive ψ score. However, given potential measurement inaccuracies, states with low negative scores are also added to this efficient tier.

INTRODUCTION

Figure 1 shows the 'efficient' US states in dark green. These states are considered 'sinks' in that they are able to absorb and accumulate capital. The rest (the 'sources') are shown in a (decreasing efficiency) gradient from light green to yellow, and finally dark red.

Table 1 provides the actual scores for the four tiers in Figure 1. A detailed analysis of the 50 states and the District of Columbia can be found in the appendix to this chapter.

The highest-ranking states are divided into two tiers, each having the same number of states (with the District of Columbia going to the first tier). According to the model, in 2015, there were only seven states with positive scores. However, there are another six states that received scores very close Figure 1. A 2015 efficiency map of the US states; highest efficiency scores are in dark green.

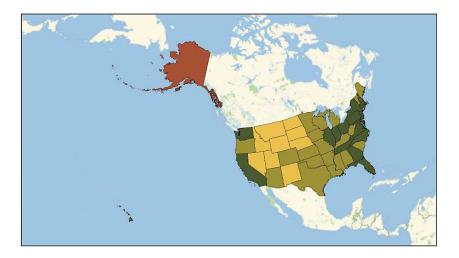


Table 1. A breakdown of the four efficiency tiers in Figure 1

| 1 District of Columbia | 0.97 | 22 Texas | (0.58) | 42 Utah | (2.27) | 51 Alaska | (8.31) |
|------------------------|--------|-------------------|--------|-----------------|--------|-----------|--------|
| 2 Connecticut | 0.55 | 23 Wisconsin | (0.69) | 43 Nebraska | (2.40) | | |
| 3 Massachusetts | 0.42 | 24 South Carolina | (0.75) | 44 Nevada | (2.66) | | |
| 4 New Jersey | 0.39 | 25 Michigan | (0.76) | 45 Idaho | (3.34) | | |
| 5 Maryland | 0.31 | 26 Louisiana | (0.80) | 46 New Mexico | (3.52) | | |
| 6 New York | 0.28 | 27 Minnesota | (0.84) | 47 North Dakota | (3.61) | | |
| 7 Rhode Island | 0.04 | 28 Missouri | (0.86) | 48 South Dakota | (3.93) | | |
| 8 Virginia | (0.03) | 29 Vermont | (0.88) | 49 Wyoming | (4.91) | | |
| 9 California | (0.04) | 30 Kentucky | (0.88) | 50 Montana | (5.14) | | |
| 10 Pennsylvania | (0.07) | 31 Alabama | (0.98) | | | | |
| 11 Illinois | (0.07) | 32 Iowa | (1.12) | | | | |
| 12 Delaware | (0.08) | 33 Colorado | (1.16) | | | | |
| 13 New Hampshire | (0.08) | 34 West Virginia | (1.20) | | | | |
| 14 Florida | (0.26) | 35 Oklahoma | (1.28) | | | | |
| 15 Hawaii | (0.32) | 36 Arizona | (1.45) | | | | |
| 16 Ohio | (0.32) | 37 Mississippi | (1.51) | | | | |
| 17 Washington | (0.43) | 38 Arkansas | (1.60) | | | | |
| 18 Indiana | (0.50) | 39 Oregon | (1.81) | | | | |
| 19 North Carolina | (0.52) | 40 Kansas | (1.84) | | | | |
| 20 Tennessee | (0.53) | 41 Maine | (1.87) | | | | |
| 21 Georgia | (0.56) | | | | | | |
| 1 | 1 | I | 1 | 1 | , | 1 | |
| γγ | | γ | | γ | | γ | |
| Dark Green | | Light Green | | Yellow | | Dark Red | |

to zero. States with 'equilibrium' band scores $(-0.5 \le \psi \le 0.5)$ were also added to this tier. The total number of states in this tier is 20. Note how most of these states are on the East Coast. The rest (California and Washington)

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