Change in Capacity Factor, 1997, 2008 & 2021 (Generation Output/Potential Output)

Figure 12 of The Great Divergence

Source: EIA-860, EIA-923

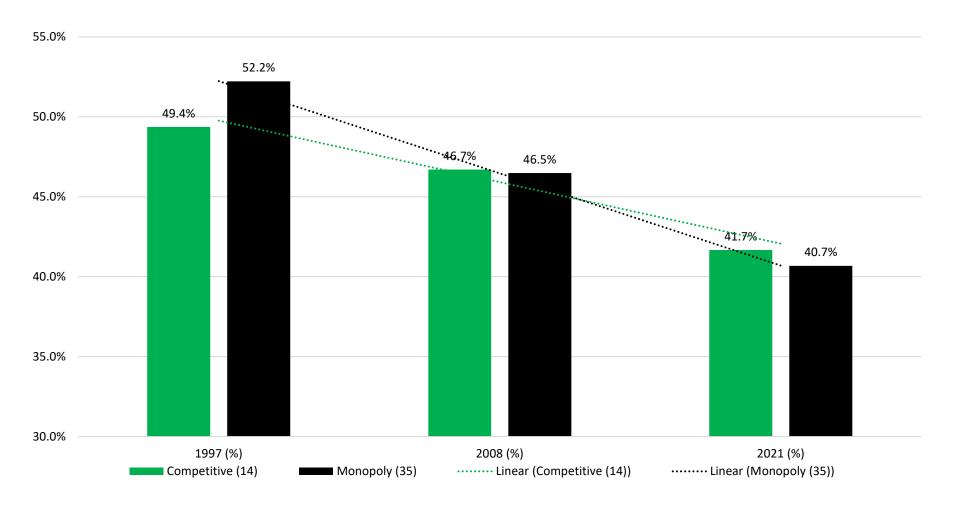




Figure 12 (page 8) of The Great Divergence and Figure 19 (page 22) of Restructuring Recharged – Updated through CY2021

The explanation of the Great Divergence between the monopoly states and competitive jurisdictions is <u>not</u> to be found in the similar trend lines moving from coal to gas and negligible differences in patterns of renewables and nuclear resources. There is, however, a knock-on effect that may partially explain the Great Divergence in price direction. Monopoly regulation and competitive markets accord fundamentally different treatment to power plant utilization. The decline in power plant portfolio capacity factor has been larger, both nominally and proportionally, in the 35 monopoly states than in the 14 competitive states/jurisdictions, as shown in this figure (note the increased slope of the black dotted line compared to the green dotted line).

The Capacity Factor in the 35 monopoly states declined from 52.2% in 1997 to 40.7% in 2021 (the most recent year for which EIA data are available). That is more than a one-fifth decrease compared to the much more modest decline in Capacity Factor in the 14 competitive states/jurisdictions from 49.4% in 1997 to 41.7% in 2020, a proportional reduction of about one-seventh. Plant utilization, as measured by the Capacity Factor, has declined in far greater proportion in the group of monopoly states than in competitive states/jurisdictions due in great part to the shift from coal toward gas. However, as long as rate-based generation assets are considered "used and useful"—even if underutilized—full cost recovery is accorded in the Monopoly States, with consumers absorbing those costs; in contrast, underutilized or uneconomic generation assets in the 14 competitive states/jurisdictions will tend to experience adverse financial consequences under the same conditions. The difference is that investors, not customers, bear the risk of changing market fundamentals.

