Term Project Milestone 1

Brian Reppeto

Bellevue University

DSC 640

Catherine Williams

December 8, 2024

Term Project Milestone 1

**Summary of Analysis**

The dataset consists of childcare costs for infants, toddlers, and preschoolers across the U.S., and includes median household income (MHI). Utilizing this data, I explored trends, geographic disparities, and the relationship between childcare costs and household income. The findings highlight significant financial burdens faced by families and provides insights into the inequalities across regions and age groups.

**Findings**

1. **Geographic Disparities**:
   * States like California and New York have the highest average infant care costs, while states like Alabama and Mississippi have the lowest.
   * Urban areas generally exhibit higher childcare costs than rural areas.

A graph of blue and orange bars

Description automatically generated

1. **Temporal Trends**:
   * Childcare costs for all age groups have steadily increased over the years, with infant care consistently being the most expensive.
   * The gap in cost between infants, toddlers, and preschoolers has widened, reflecting higher resource demands for infant care.

A graph of growth in different colors

Description automatically generated with medium confidence

1. **Cost-to-Income Ratios**:
   * In some states, infant childcare costs account for over 20% of median household income, underscoring the financial strain on families.
   * States with higher household incomes often have higher childcare costs, but the relationship is not linear, as affordability varies significantly.

A graph of different colored bars

Description automatically generated

1. **Correlations**:
   * A positive correlation exists between MHI and childcare costs, indicating that higher-income states also tend to have higher childcare costs. However, disparities in affordability persist even within high-income regions.

A screenshot of a graph

Description automatically generated

**Assumptions**

1. Data completeness and accuracy are assumed; missing values were dropped to maintain consistency in analysis.
2. Childcare costs are assumed to reflect true averages, unaffected by temporary subsidies or anomalies.
3. Costs are considered in nominal terms unless explicitly stated; adjustments for inflation were not performed due to dataset limitations.

**Items That Still Need Clarification**

1. Are the childcare cost values adjusted for inflation, or do they reflect nominal amounts?
2. How do urban and rural classifications specifically impact cost disparities?
3. What factors, such as government subsidies or private investment, contribute to lower costs in certain regions?

**Direction of Story/Plan of Attack/Message**

The story will focus on the growing financial burden of childcare costs and their inequitable impact on families, especially in states with lower household incomes. This analysis will underscore the need for targeted policy solutions, such as subsidies, price regulations, or investments in childcare infrastructure, particularly in underserved regions.

**Key Messages**:

1. Childcare costs are rising faster than household income in many states, making childcare increasingly unaffordable.
2. Families in low-income states face disproportionate financial burdens, despite lower nominal childcare costs.
3. Policymakers must address these inequities by ensuring affordable childcare for all families.

**Target Audience**

1. **Policymakers**:
   * They require actionable insights and clear data visualization to craft interventions like subsidies or cost caps.
2. **Parents and Families**:
   * They need relatable, concise information to understand how costs compare to household income and advocate for policy changes.
3. **Advocacy Organizations**:
   * They benefit from detailed statistical insights to support campaigns for equitable childcare policies.

**Mediums**

1. **Interactive Dashboard**:
   * A tool for policymakers to explore childcare cost trends by state, year, and age group, with filters for household income.
2. **Infographic**:
   * A single-page summary for parents, highlighting geographic disparities, cost-to-income ratios, and the need for affordable childcare.
3. **Formal Report**:
   * A comprehensive document for advocacy groups, including detailed charts, correlations, and policy recommendations.