

# Texas Marketplace Health Insurance: Affordability & Coverage Fairness (2015-2016)

BA775: Business Analytics Toolbox  
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# Goal & Data Preprocessing

## Goal:

- Analyzed 2015–2016 U.S. Marketplace health insurance data with a focus on Texas, examining premiums, age-based pricing, insurer competition, and cost-sharing structures.
- Project is motivated by ACA-era shifts, rising premiums, and consumer confusion; aims to understand factors driving unequal financial burdens and affordability challenges.

## Data Preprocessing:

- Removed empty or unreliable fields and keeping only consistent, useful variables for accurate joining.
- Filtered data to 2015–2016 and confirmed all states, including Texas, were fully represented.



# Data Sources

## 01. Rate PUF

**Description:** Plan-level data on rates including subscriber age and geographic location.

[Link](#) (CSV, 1.97 GB)

## 02. Benefits and Cost Sharing PUF

**Description:** Plan-level data on essential health benefits, coverage limits and cost sharing.

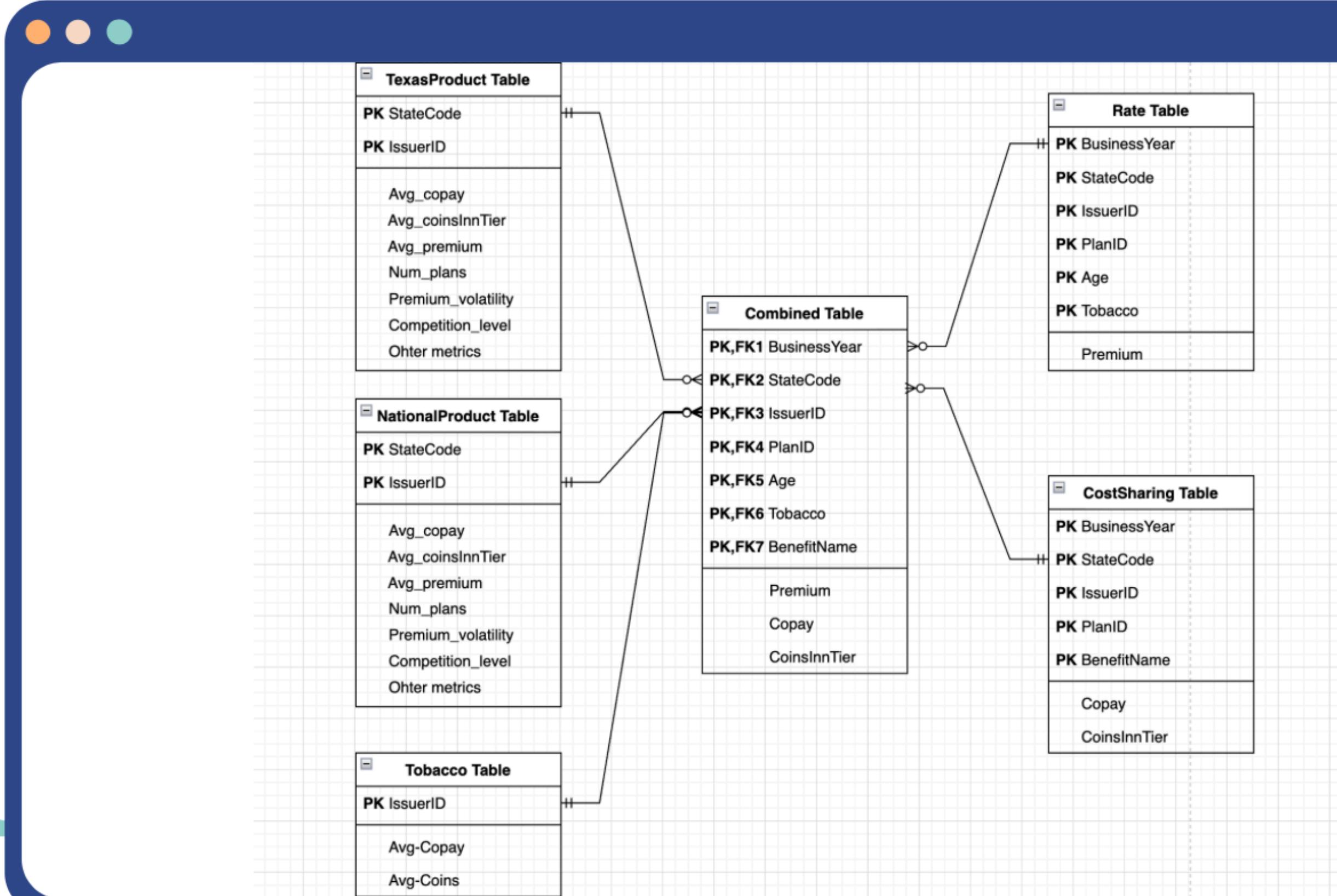
[Link](#) (CSV, 1.33 GB)

## 03. State-level Economic Indicators

**Description:** Median household income, healthcare spending per capita, poverty rate by state

[Link](#)

# ERD

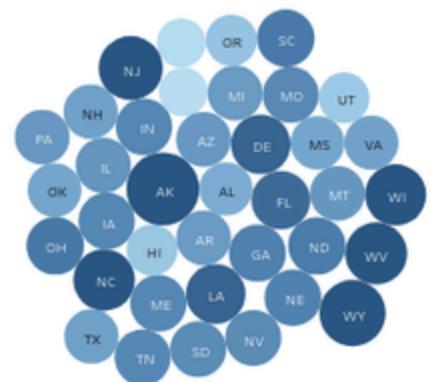


# 01

## Core Metrics & Rate



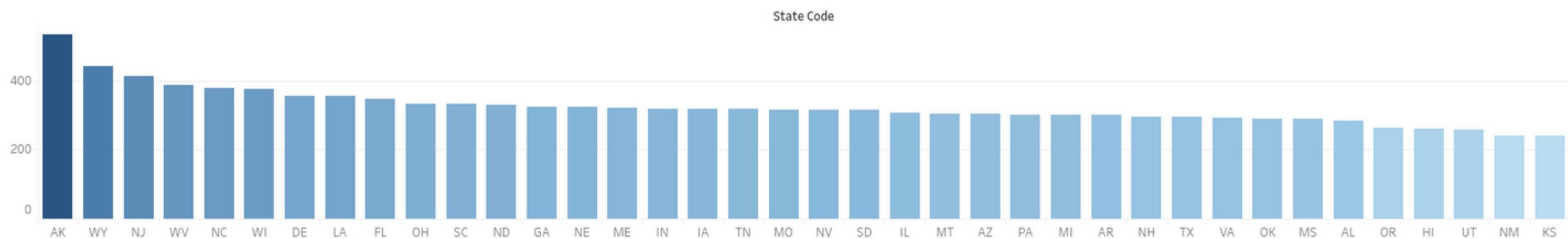
## Age Banding Factor by State



State Code

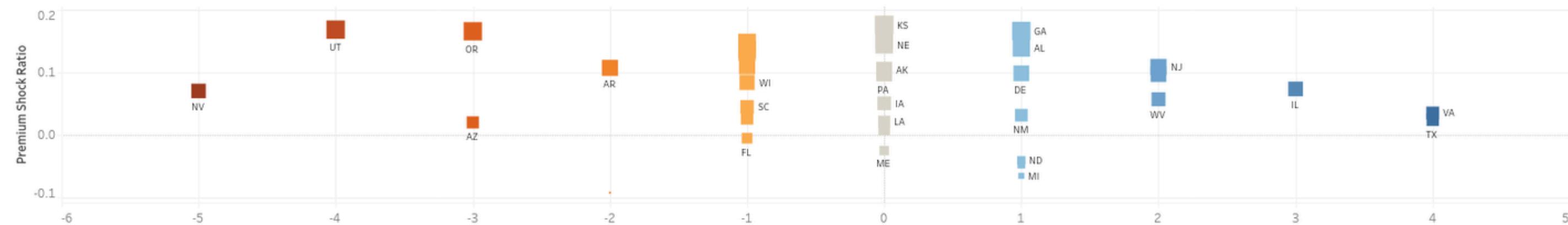
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## Median Standardized Premiums by State



State Code

## InsurerExits vs.PremiumShock



zoom 1

zoom 2

zoom 3

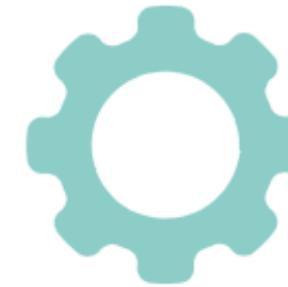
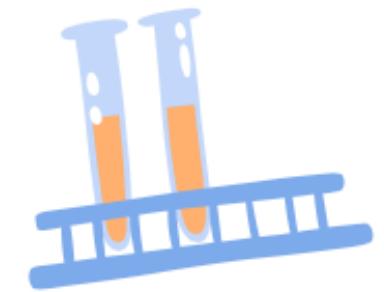
zoom 4

zoom 5

# Advanced Market Insights



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2



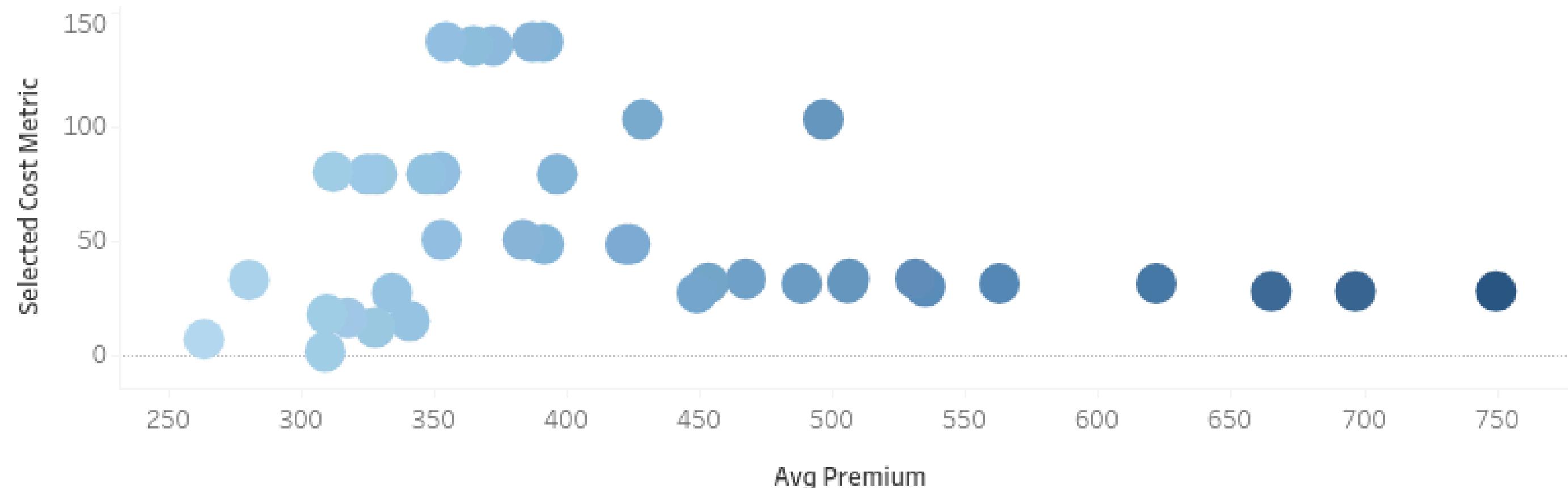
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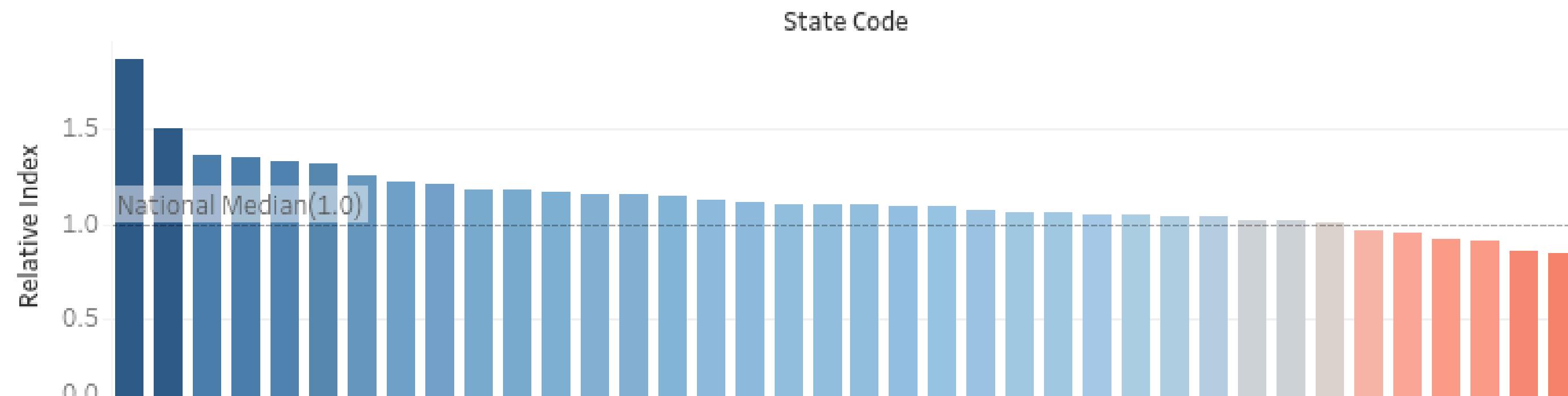
## Average Premium vs In-Network Copay



Avg Premium



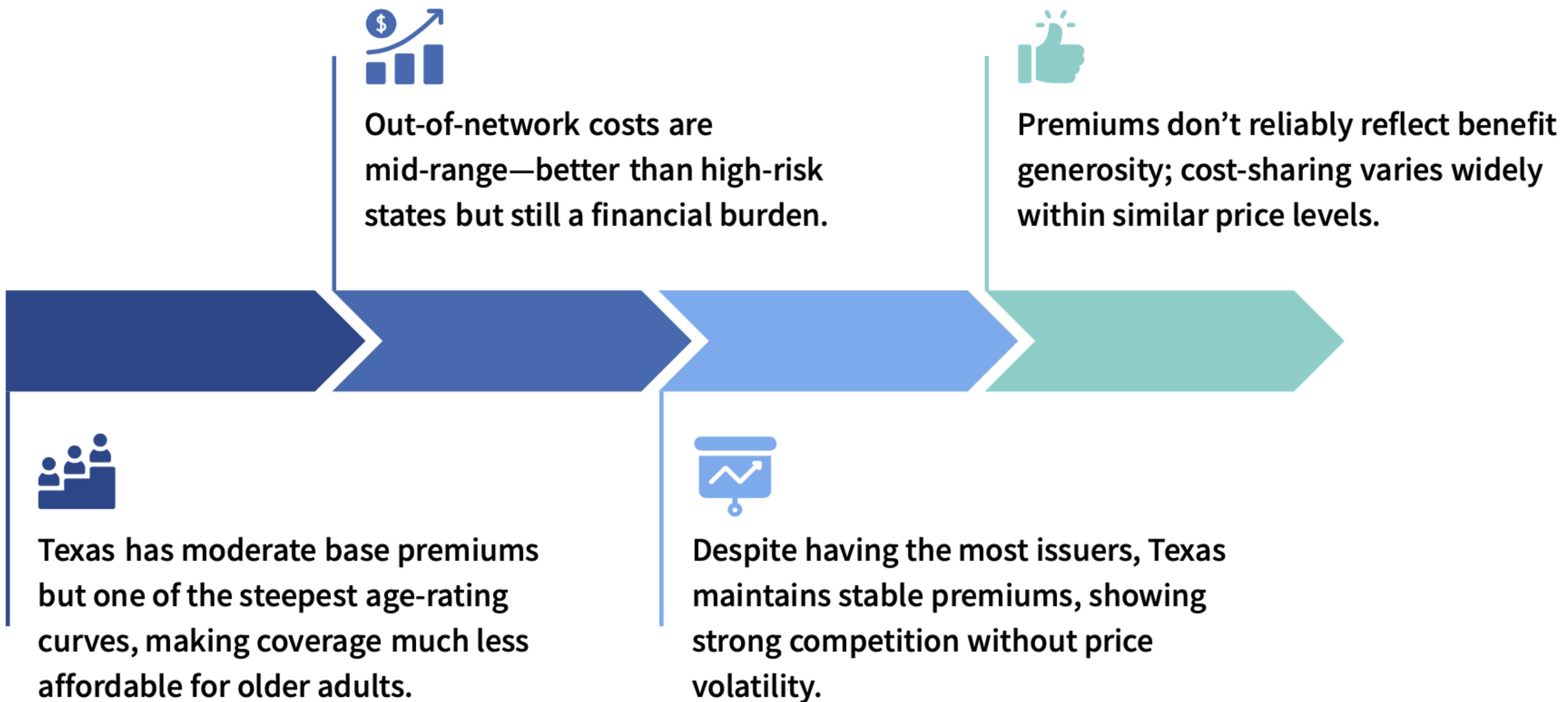
## Relative Index Bar Chart(States vs National Median Indicator)



# **Takeaway & Next Steps**



# Main Conclusions & Implications





# THANK YOU!