

Data Interpretation

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Economics Made Easy: A Journalism Workshop

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THE FEDERAL RESERVE BANK OF RICHMOND

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Numbers Do Not Speak for Themselves

- Timeliness of information
 - Dealing with data lags
- Bringing analysis to the local level
 - Lack of coverage
 - Seasonality
- Movements in data
 - Levels, absolute change, and percentage change
- Beyond the limits of the data
 - Correlation versus causation



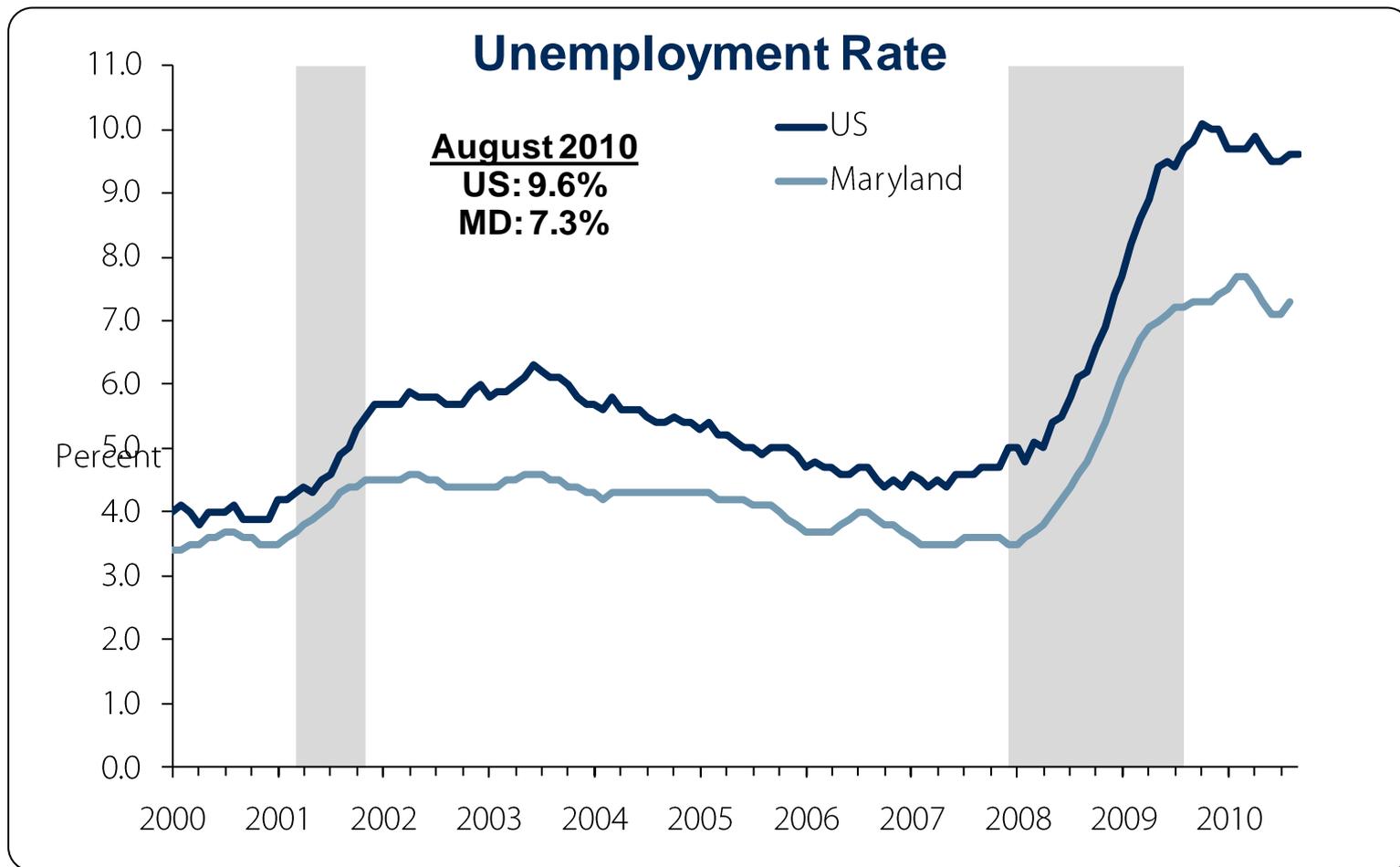


“A judicious man uses statistics, not to get knowledge, but to save himself from having ignorance foisted upon him.”

Thomas Carlyle
Scottish Historian

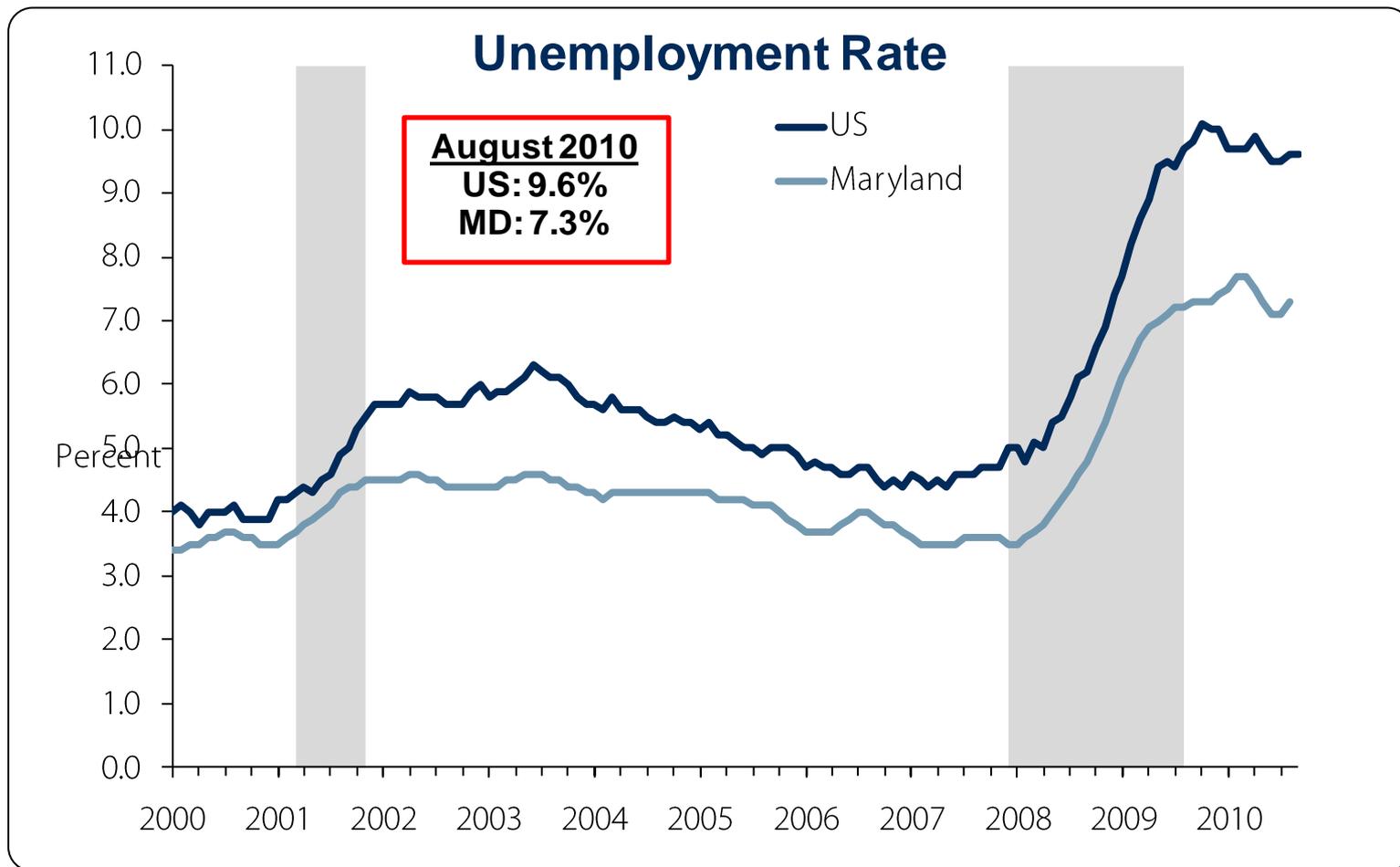


Timeliness of Information – Release Times Vary



Source: Bureau of Labor Statistics/Haver Analytics

Timeliness of Information – Release Times Vary



Source: Bureau of Labor Statistics/Haver Analytics



Timeliness of Information – Release Times Vary

Data as of September 7, 2010

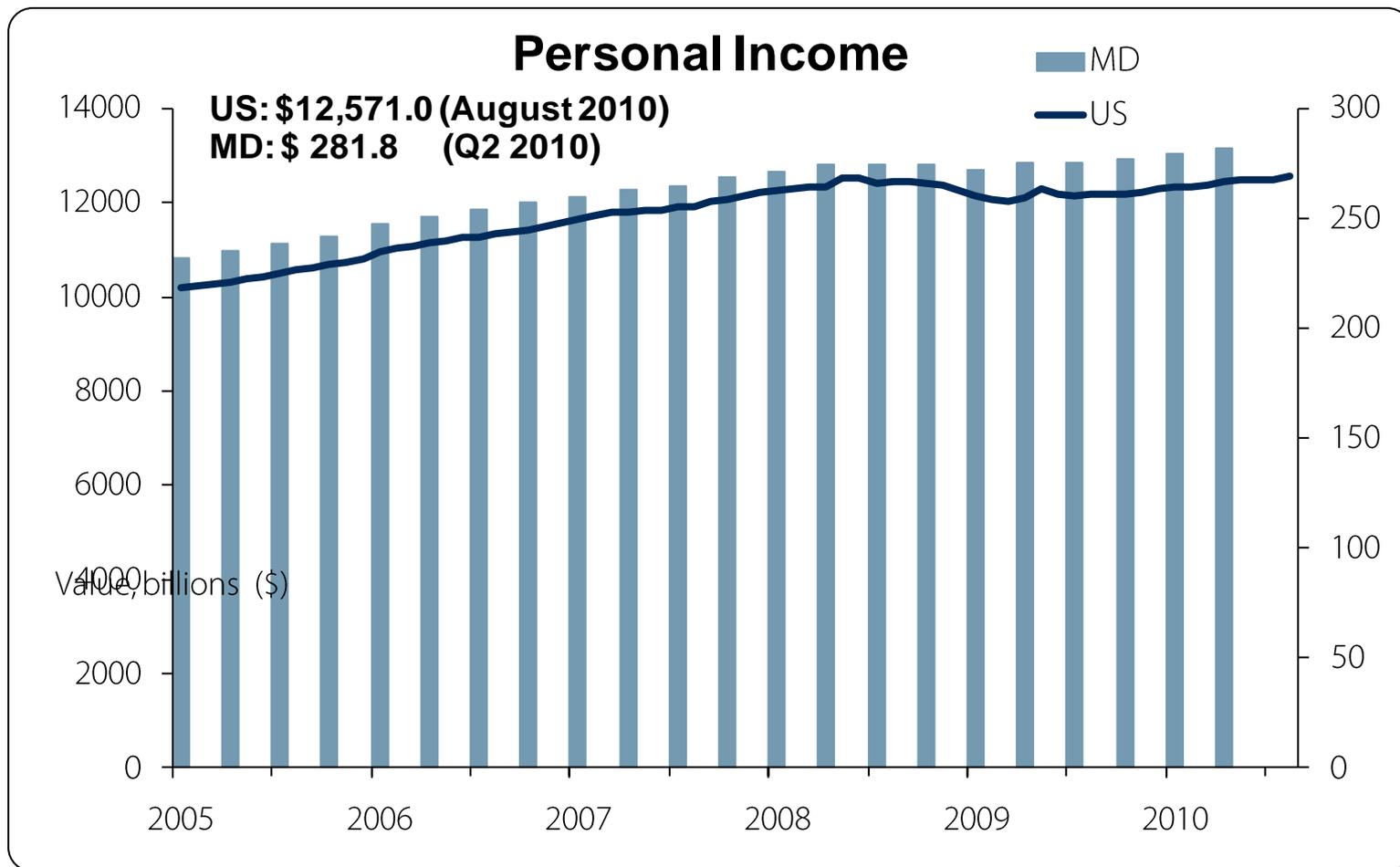
Region	“Current” Unemployment Rate	Release Date
US	9.6% (Aug.)	9/3/10
Maryland	7.1% (Jul.)	8/20/10
Washington Metro Area	6.3% (Jul.)	9/1/10
Prince George’s County	7.6% (Jul.)	9/1/10

Note: All data subject to revision

Source: Bureau of Labor Statistics/Haver Analytics

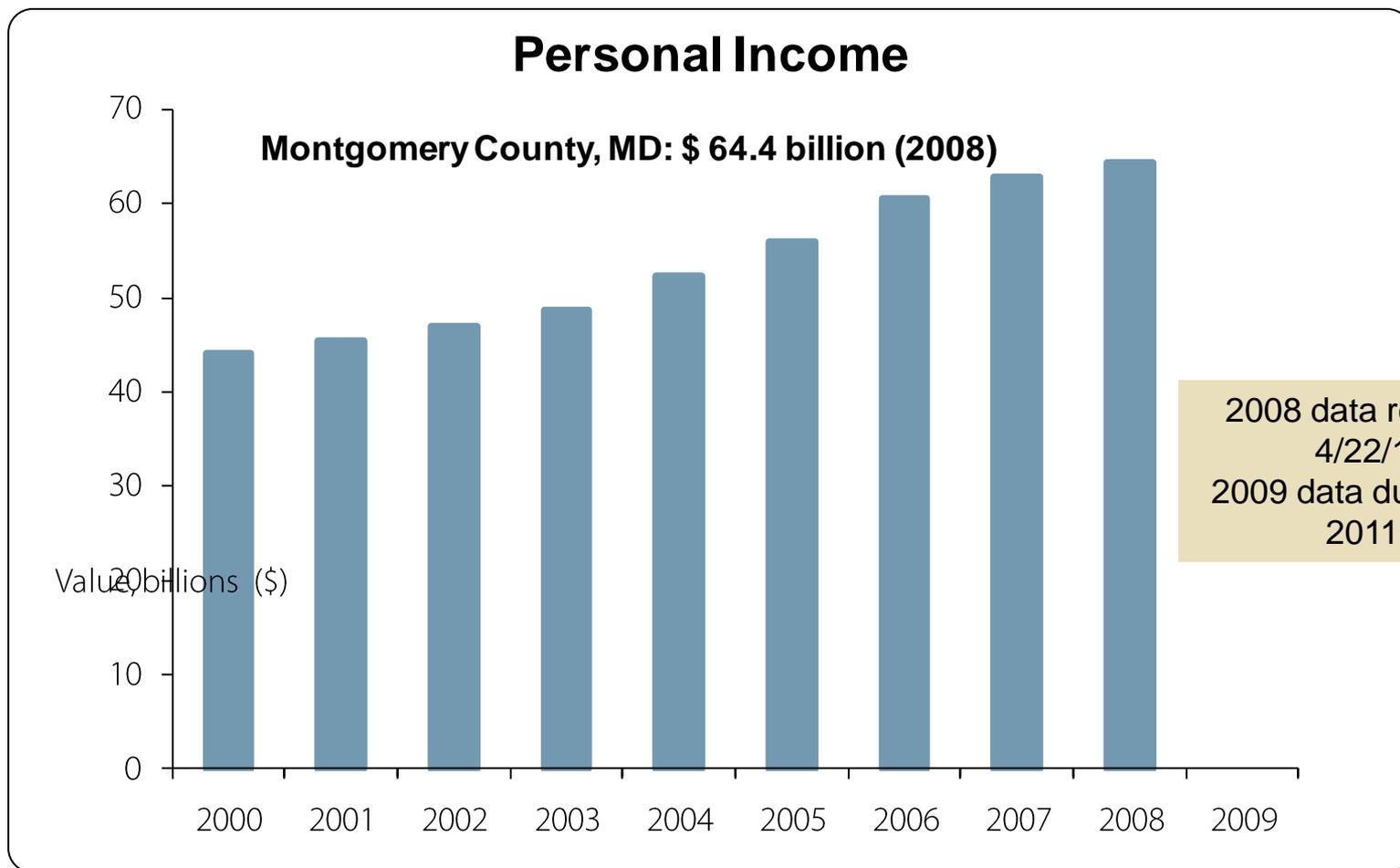


Timeliness of Information – Frequency of Data



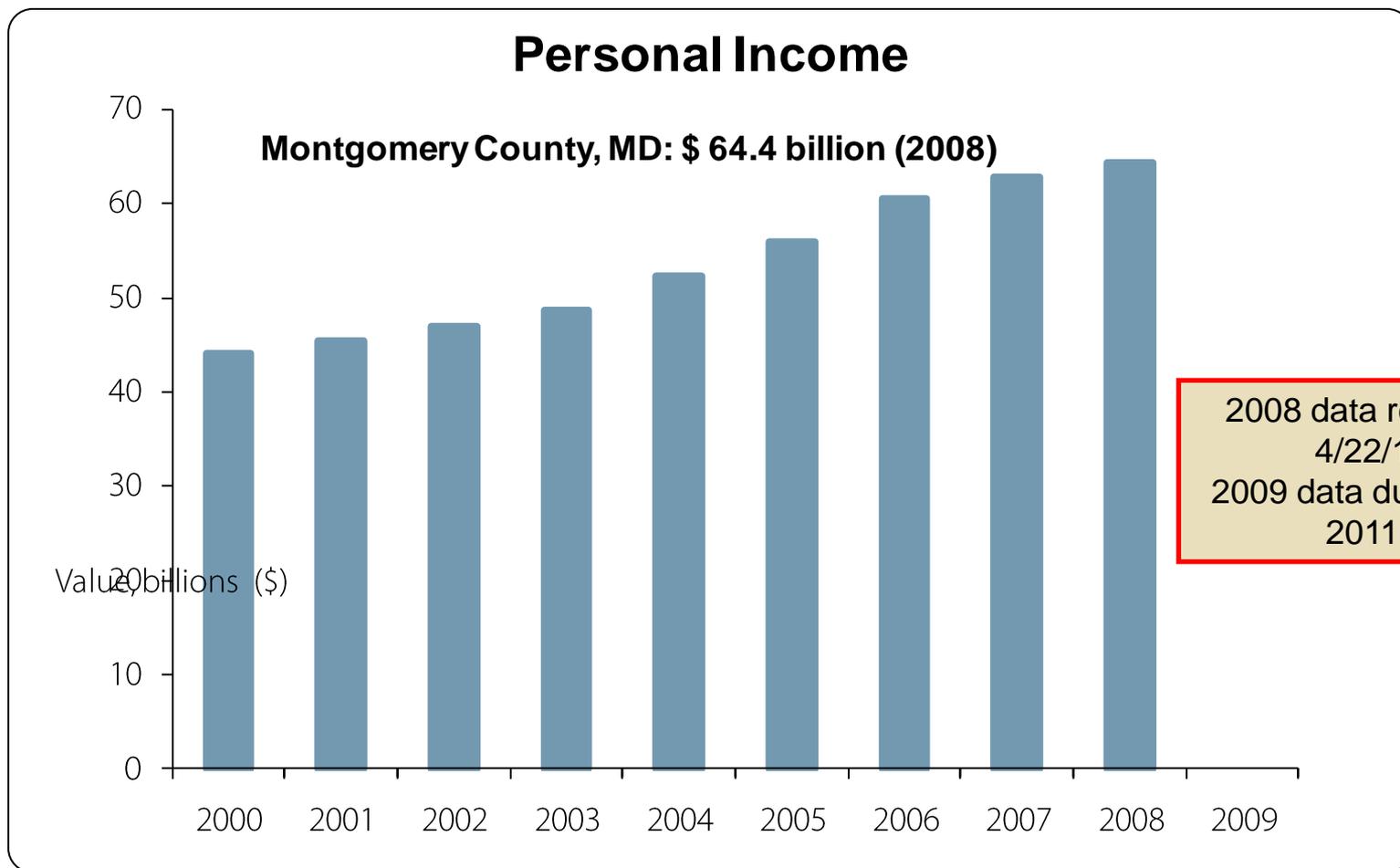
Source: Bureau of Economic Analysis/Haver Analytics

Timeliness of Information – Frequency of Data



Source: Bureau of Economic Analysis/Haver Analytics

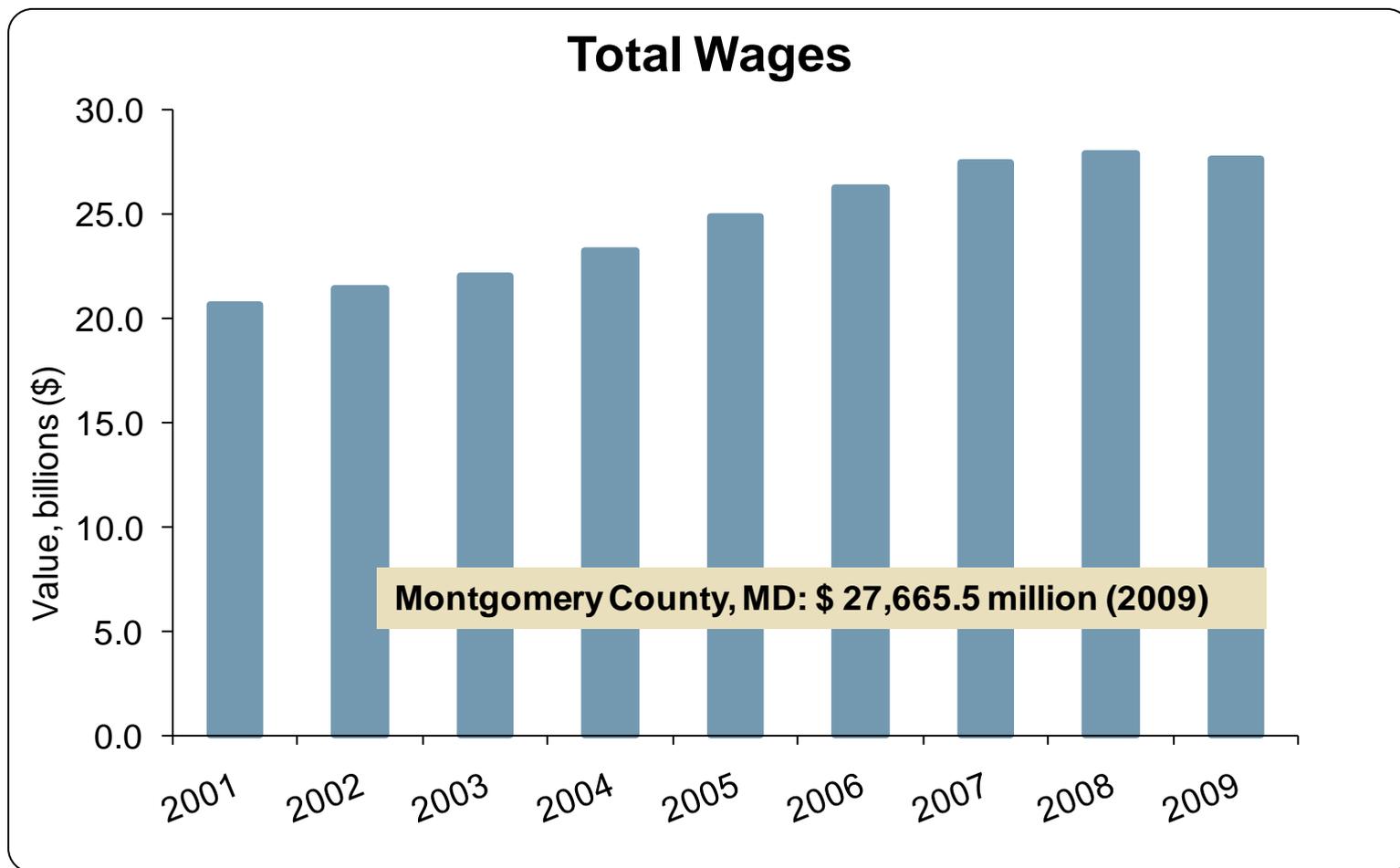
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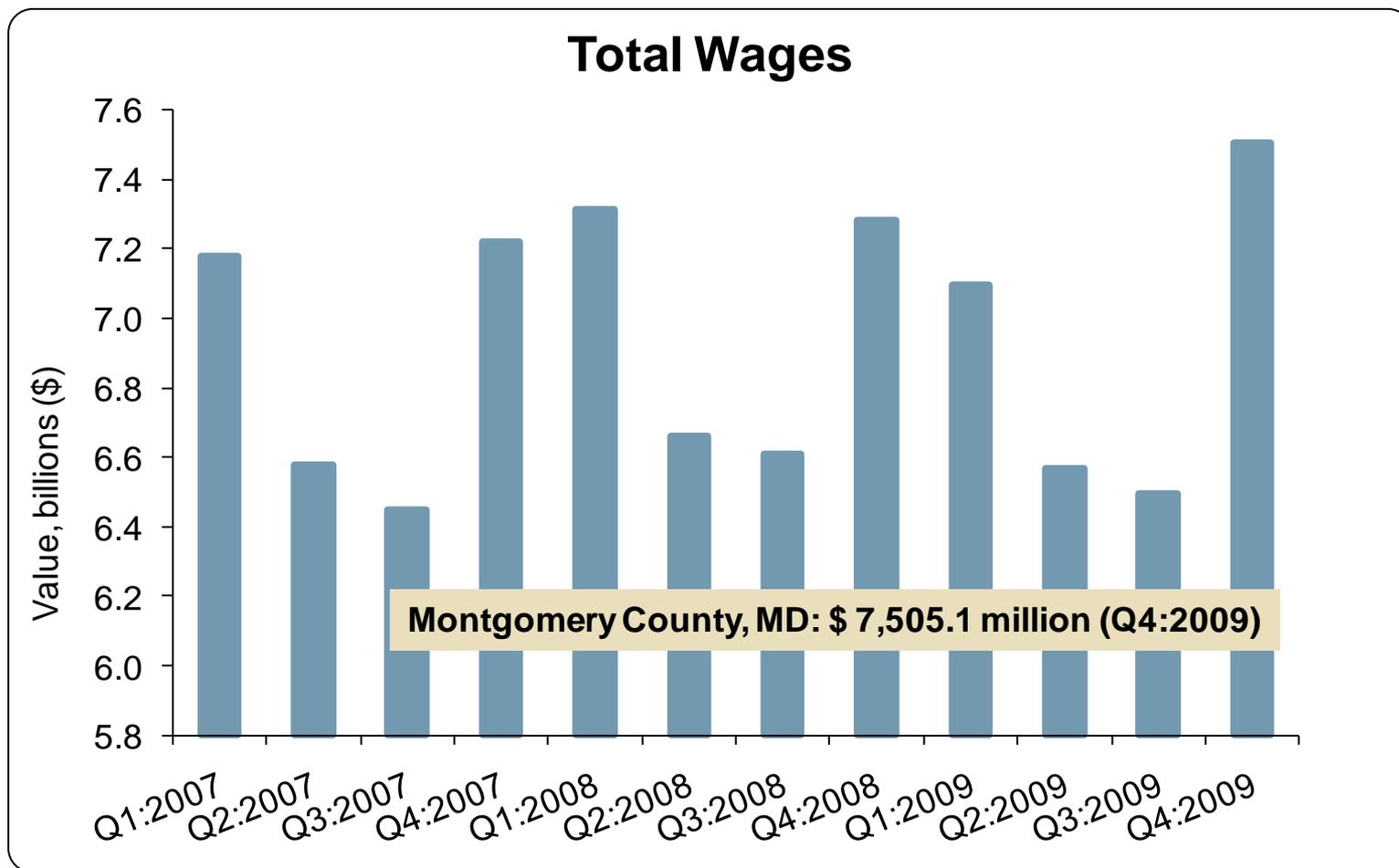
Timeliness of Information – Frequency of Data



Sources: Bureau of Economic Analysis, Bureau of Labor Statistics/Haver Analytics



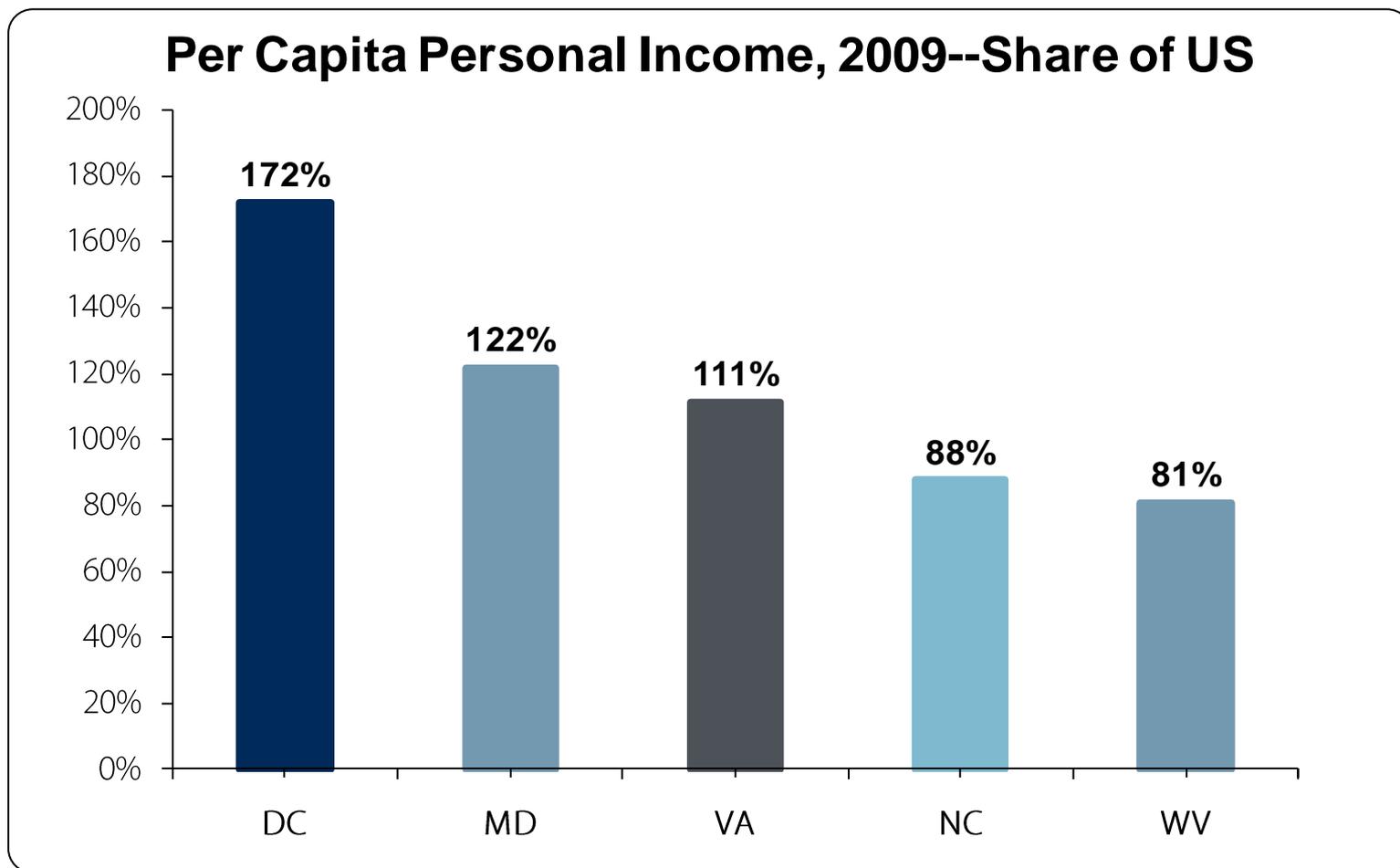
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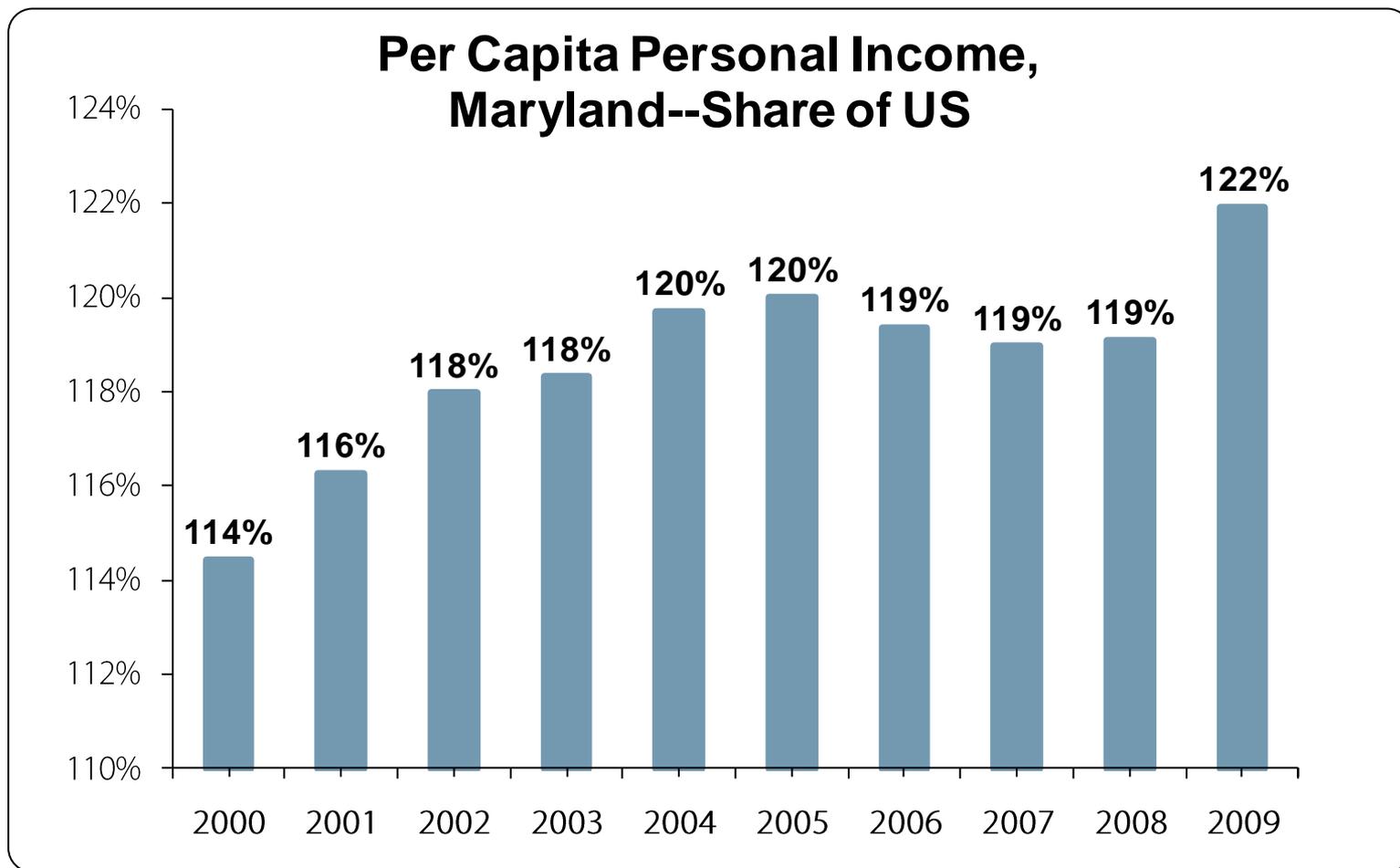


Source: Bureau of Economic Analysis/Haver Analytics





Timeliness of Information – Frequency of Data



Source: Bureau of Economic Analysis/Haver Analytics





Bringing Analysis to the Local Level





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How is the local economy doing by the broadest measure?

Prefer to look at production as a measure of economic activity:

Nationally → GDP (quarterly)
County → Nonexistent





Bringing Analysis to the Local Level

How is the local economy doing by the broadest measure?

What are the fastest growing manufacturing industries in the county?

Prefer to look at production as a measure of economic activity:

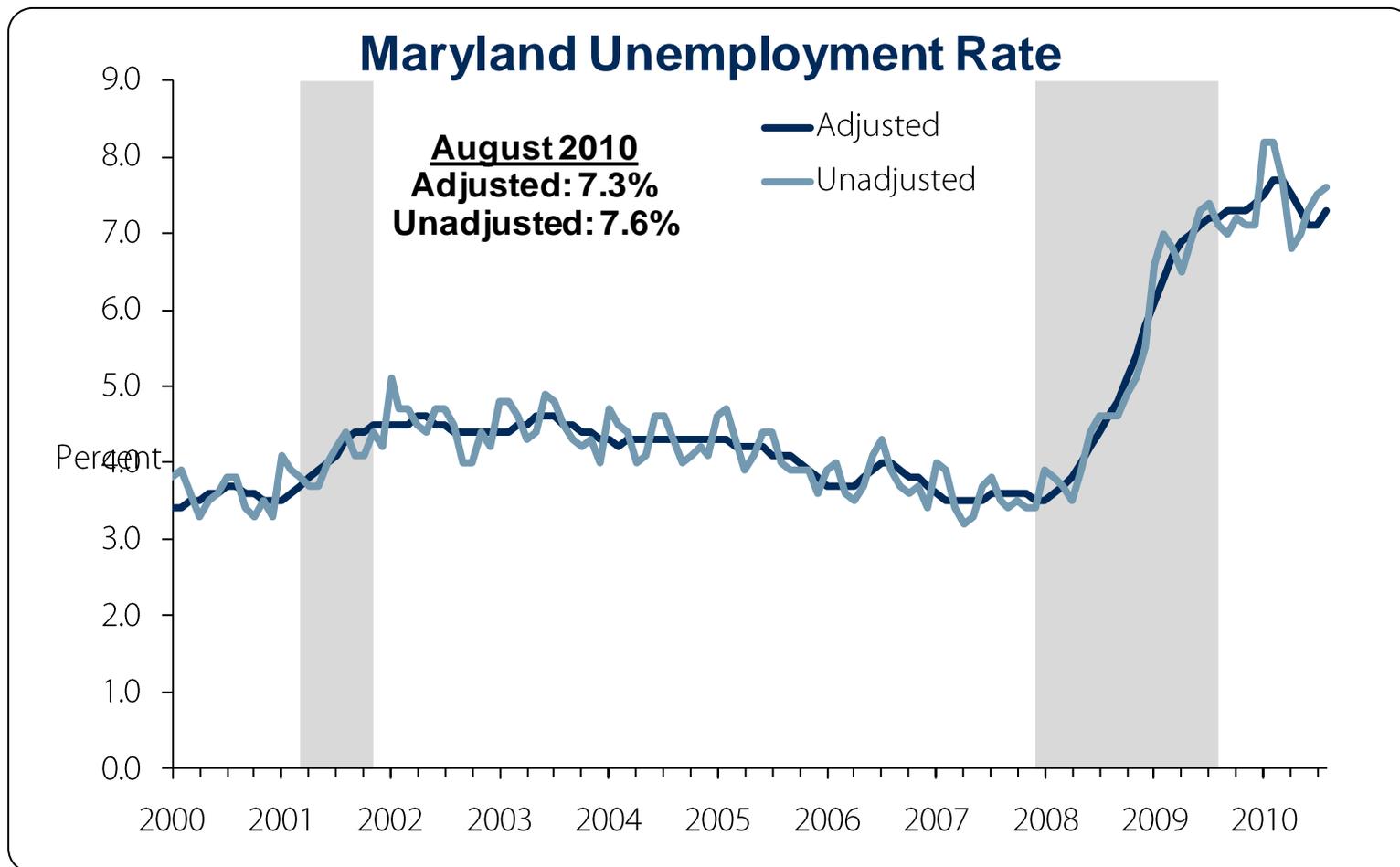
Nationally → GDP (quarterly)
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The smaller the geographic unit, the less we know due to confidentiality concerns:

Mfg detail such as plate work metal → SUPPRESSED

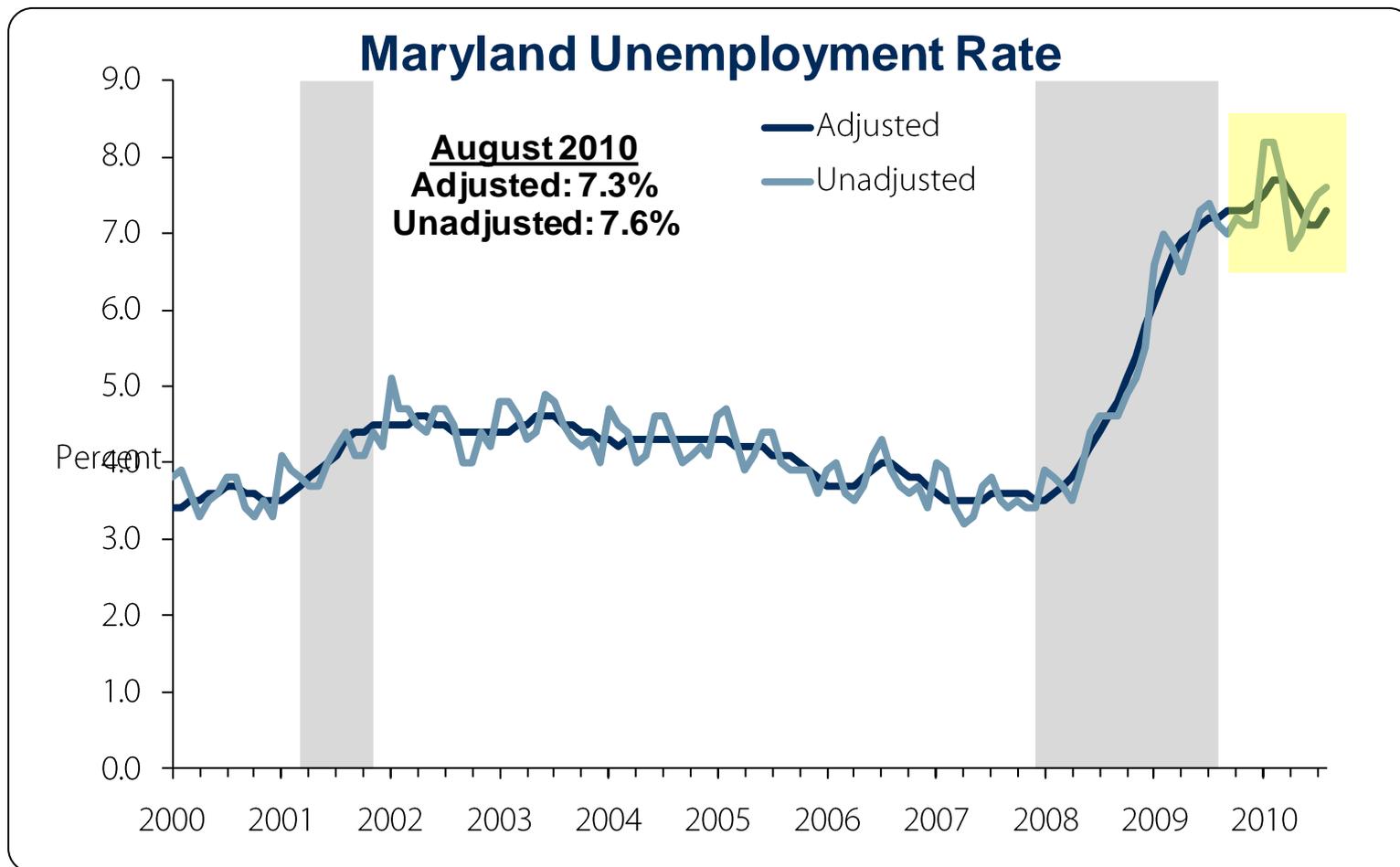


Seasonality – Local Unadjusted Data



Source: Bureau of Labor Statistics/Haver Analytics

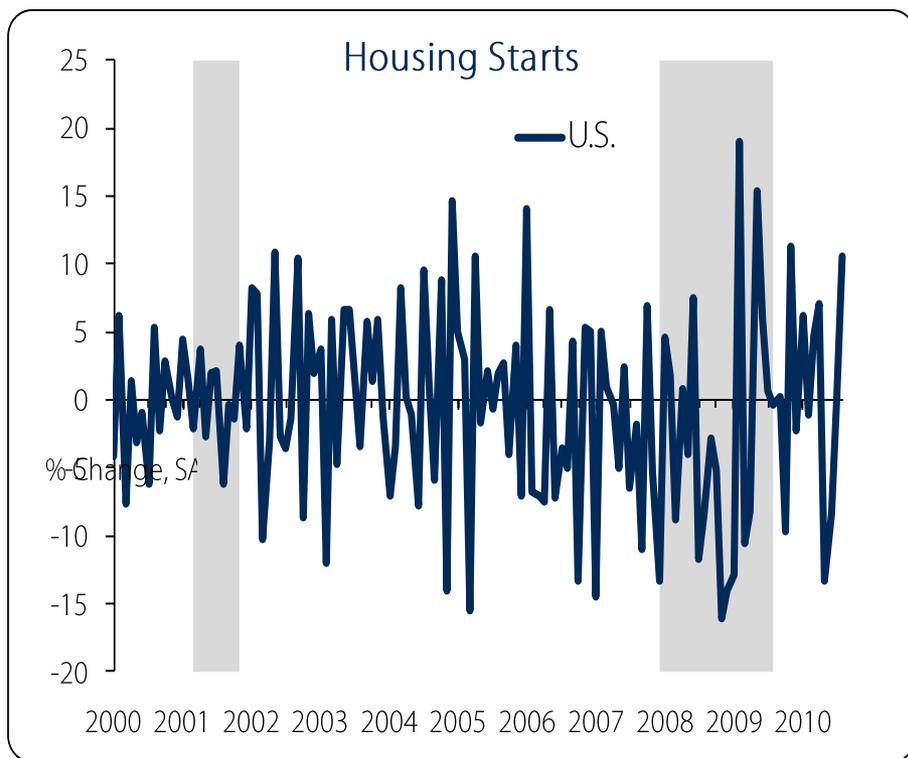
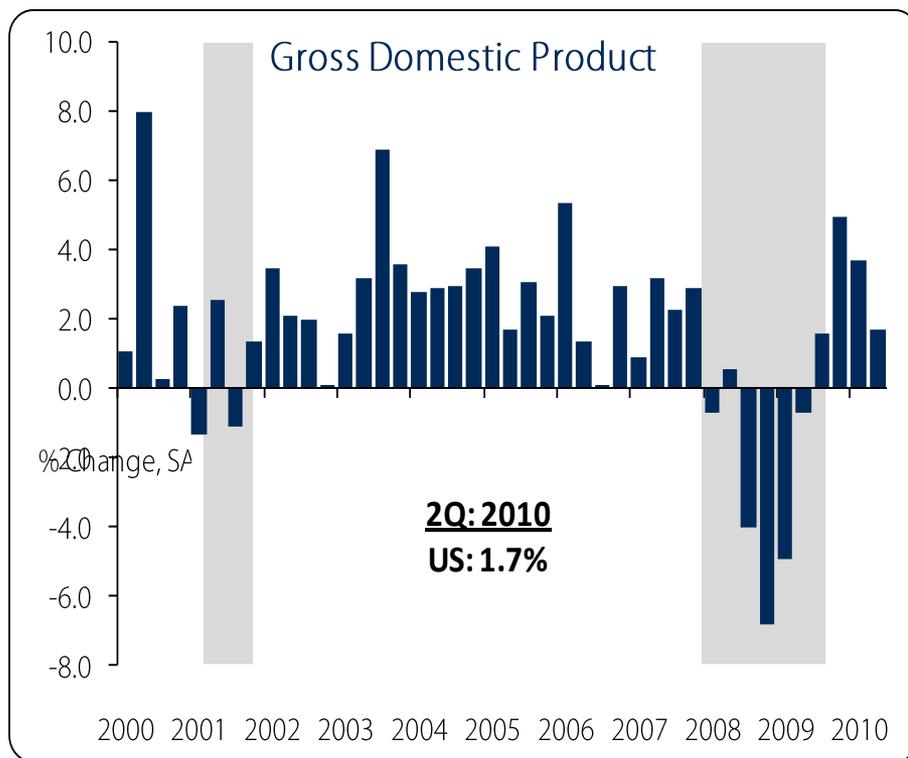
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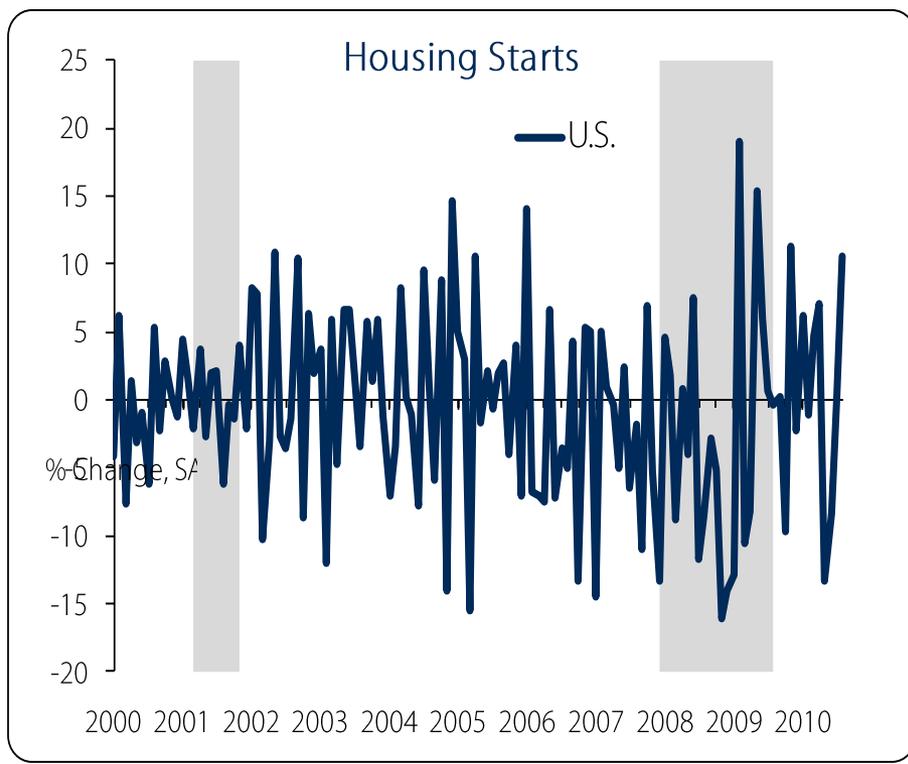
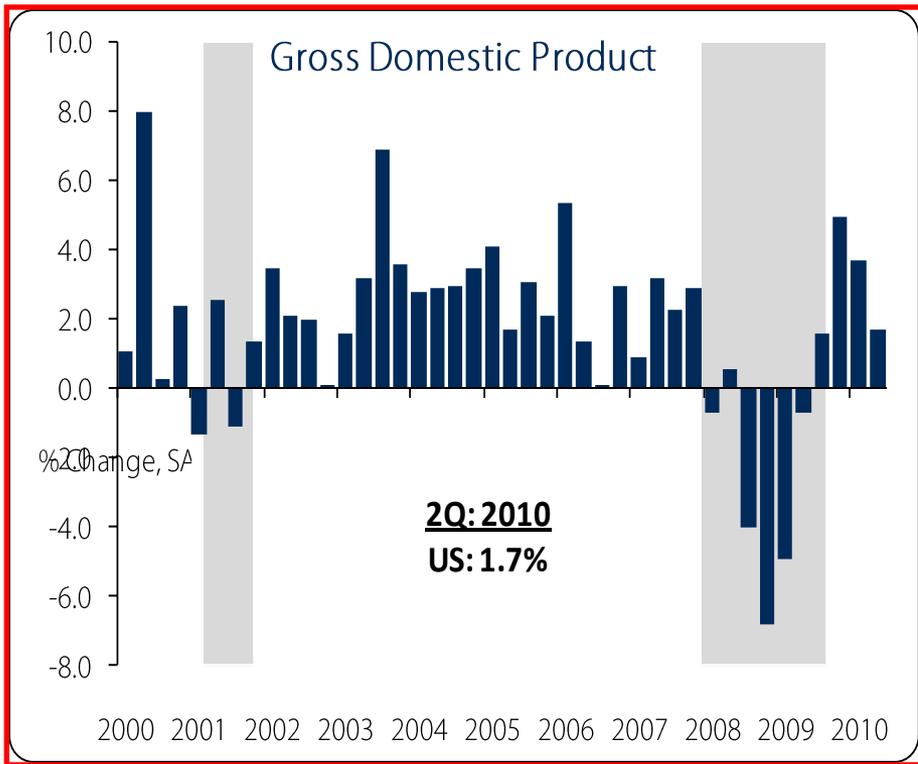
Movements in Data – Percent Changes



Sources: Bureau of Economic Analysis, Bank of Tokyo-Mitsubishi UFG, Haver Analytics

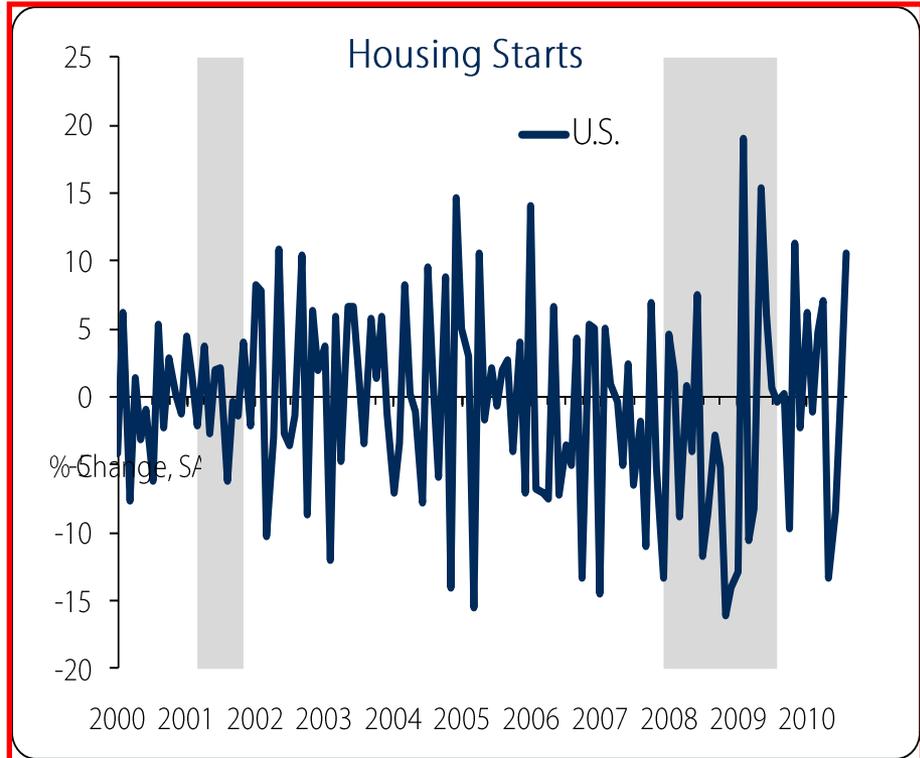
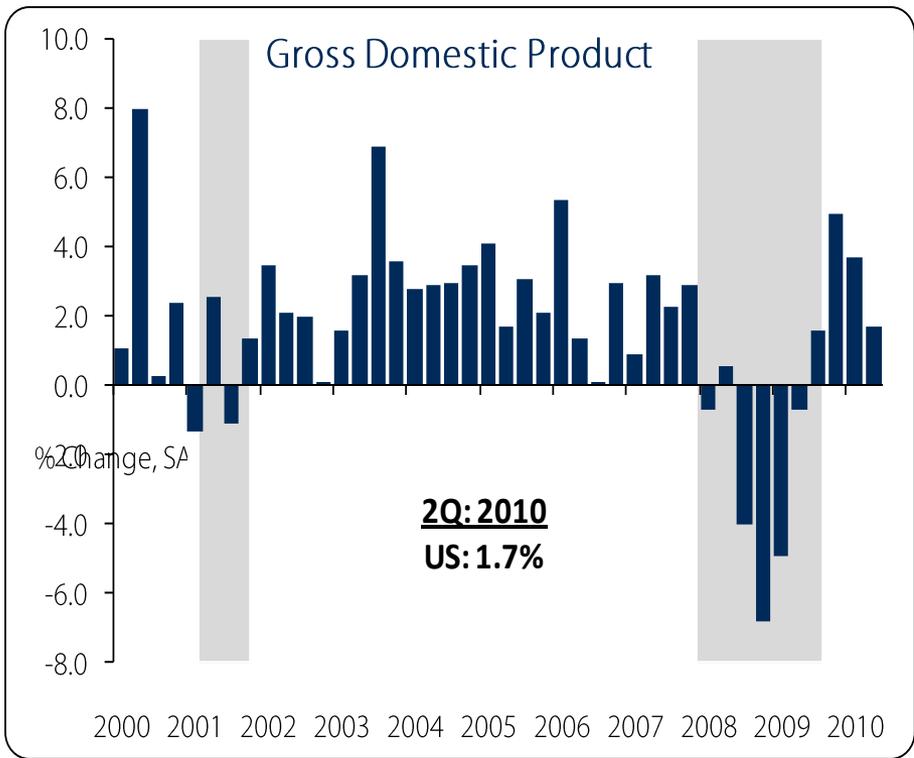


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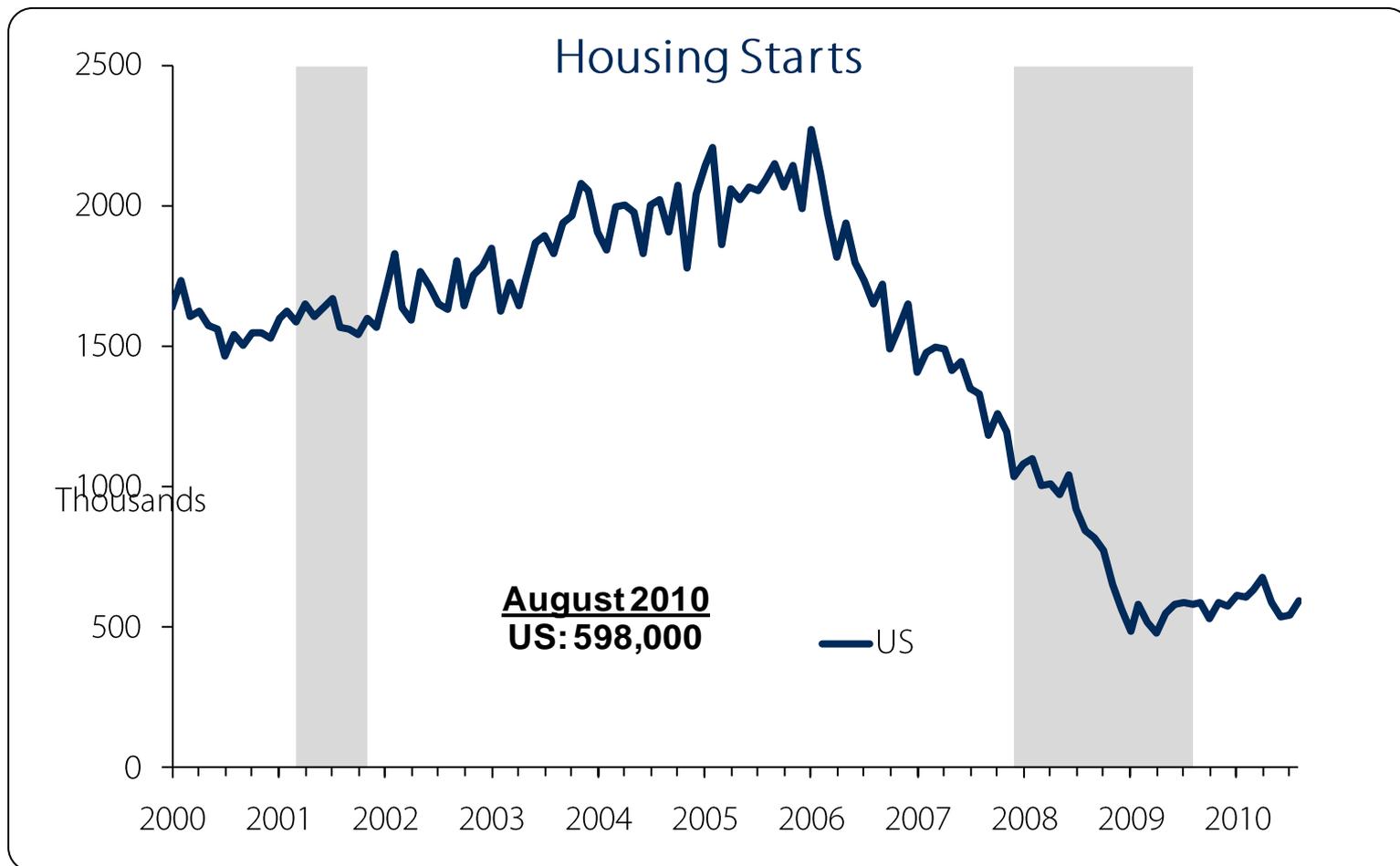
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Movements in Data – Levels

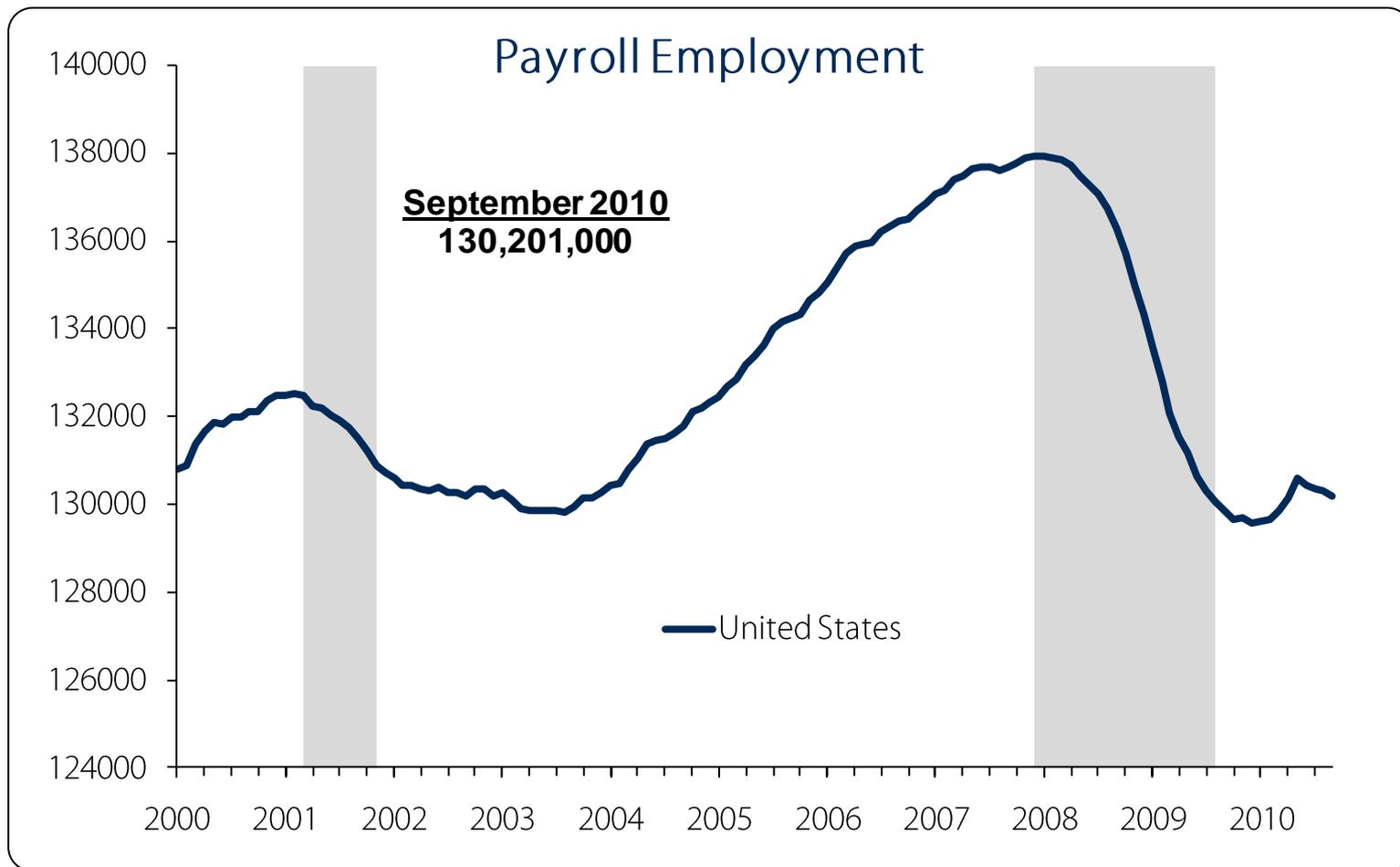


Source: Bank of Tokyo-Mitsubishi UFJ/Haver Analytics





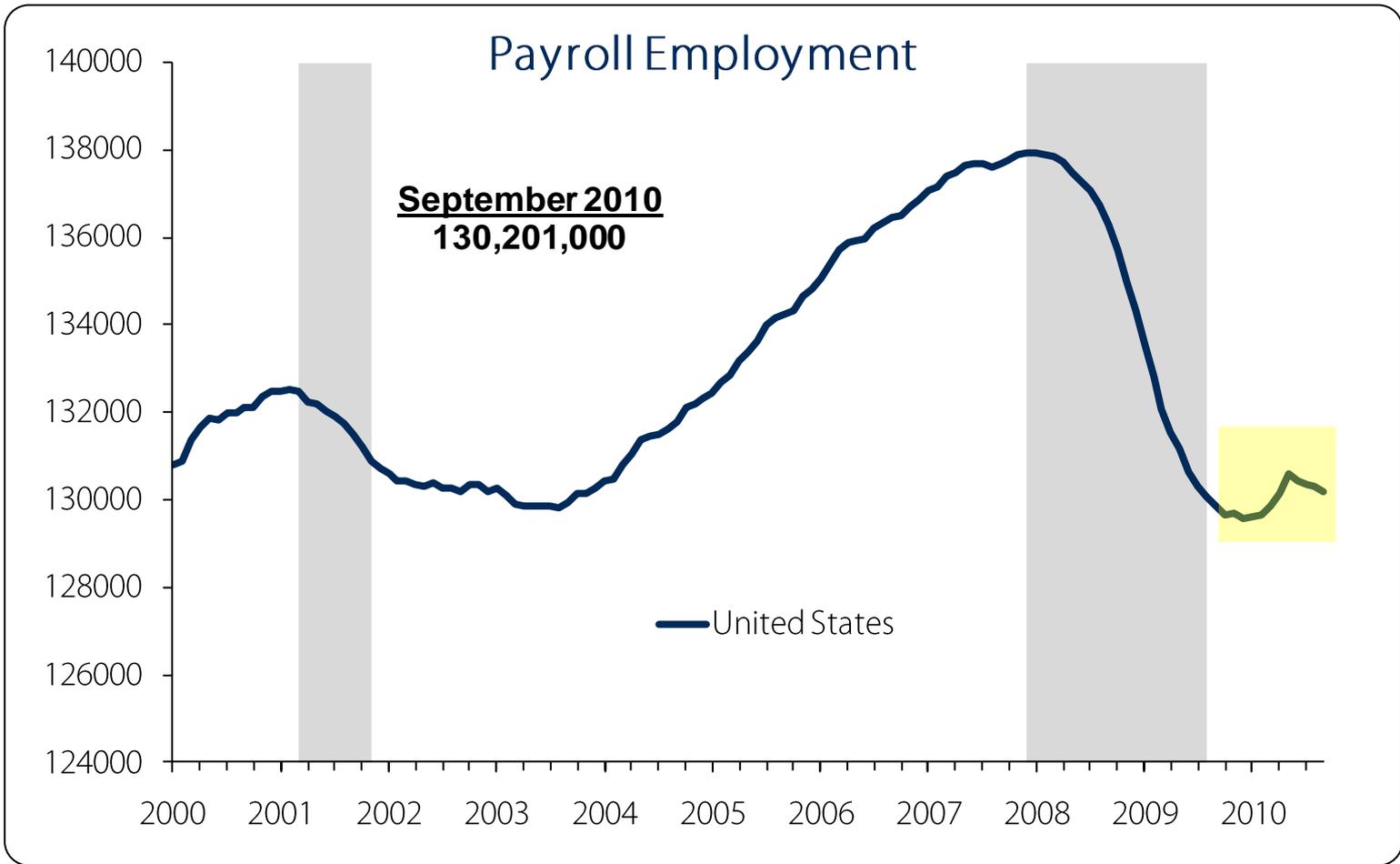
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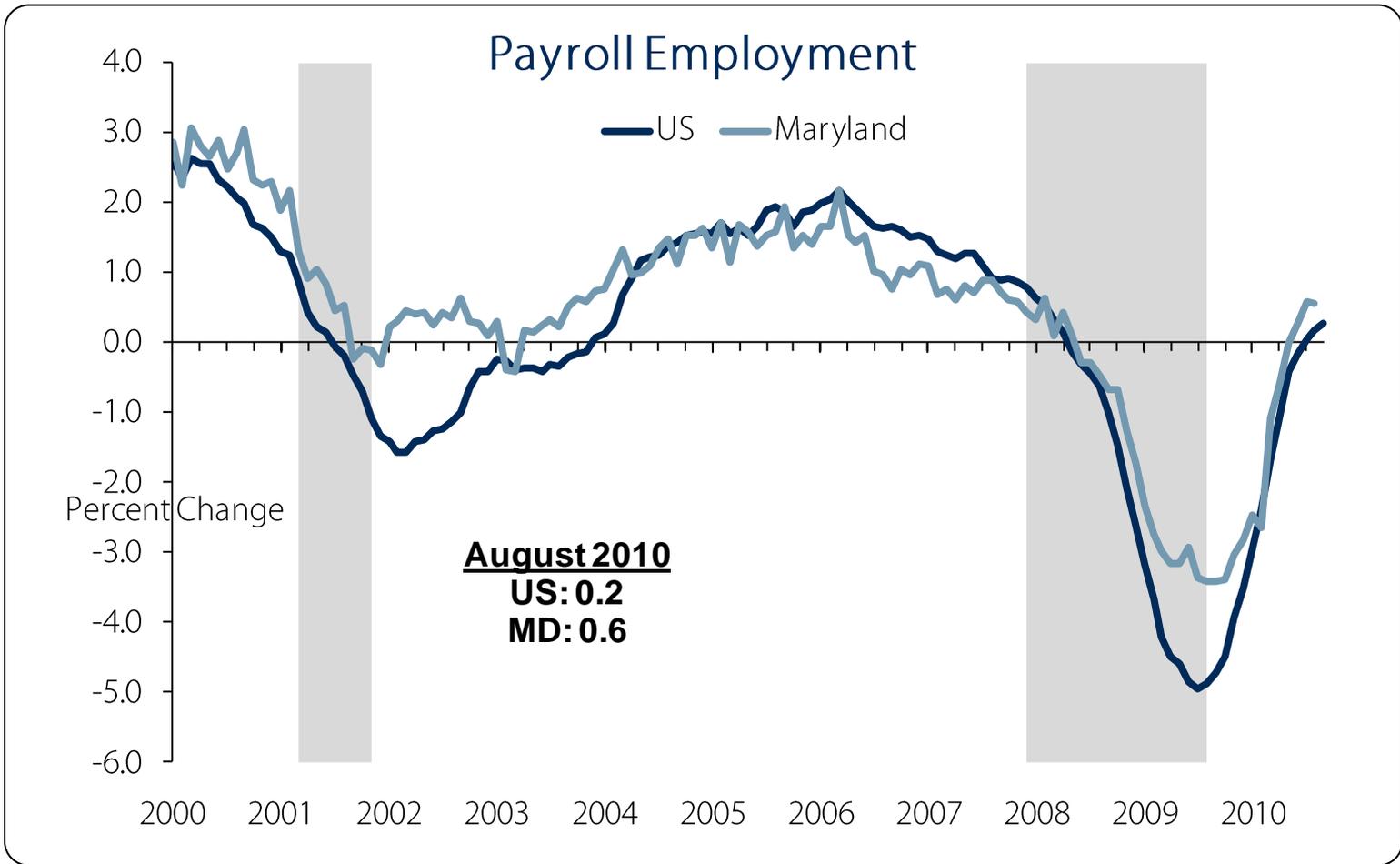


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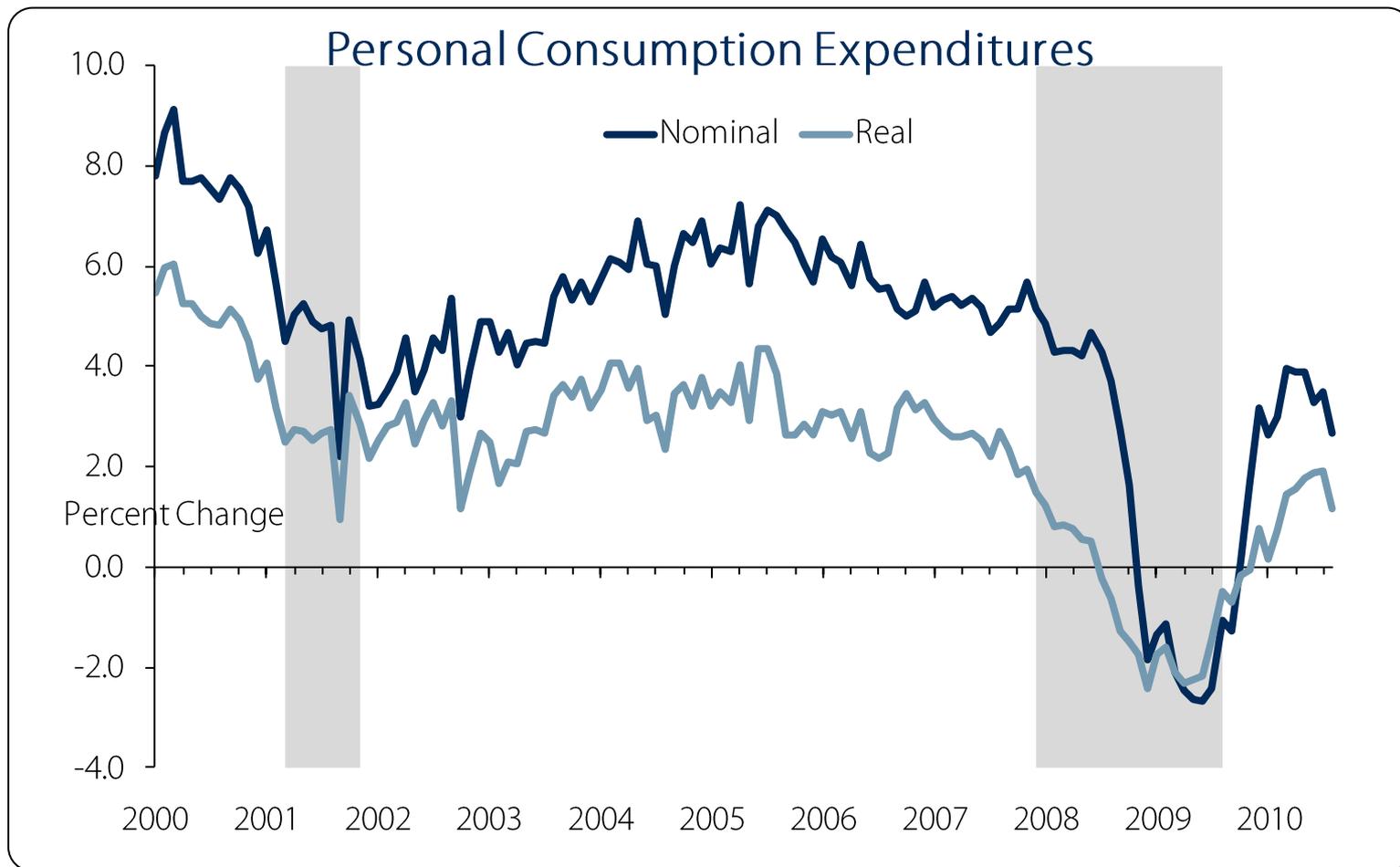
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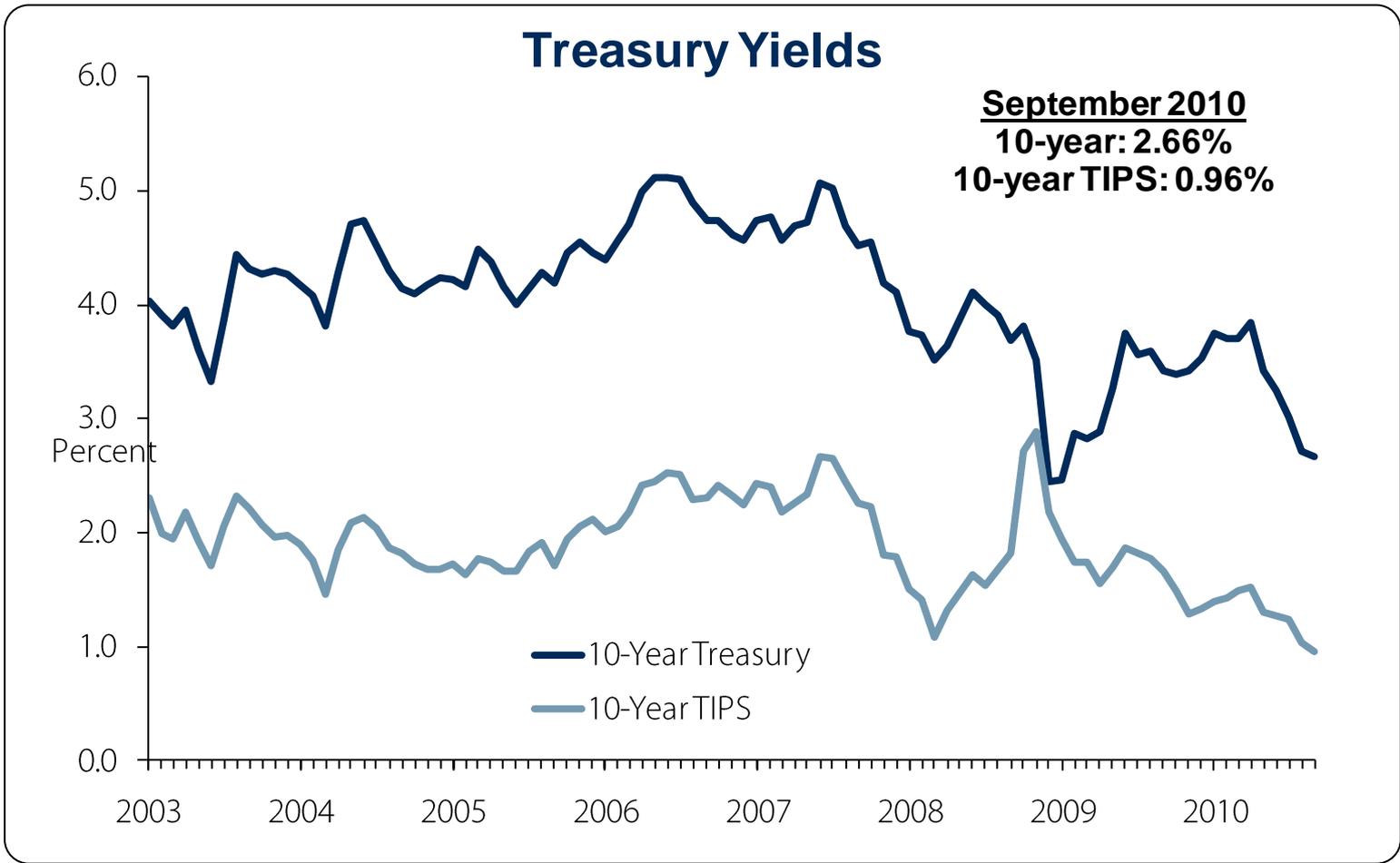


Real vs. Nominal Values



Source: Bureau of Labor Statistics/Haver Analytics

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Beyond the Limits of Data

Correlation vs. Causation

Statistically Based Relationships

Over-Interpretation





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