

# It's the *World* Economy, Stupid!

## International Economic Cycles and Presidential Popularity

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# Outline

## The Argument

Puzzle

Argument

## Preliminary Evidence

The International Variables

Election Outcomes

## Research Design

Dependent Variable

Explanatory Variables

Modeling Strategy

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Predicting Popularity

International Models

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Conclusions

# Puzzle

## What we know about economic voting

- Economic performance → performance of incumbents
- Voters hold government responsible for economic events
  - “Good” economy → reward the incumbent
  - “Bad” economy → punish the incumbent

# Puzzle

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- Economic performance → performance of incumbents
- Voters hold government responsible for economic events
  - “Good” economy → reward the incumbent
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## Question

- What if “good” and “bad” are determined exogenously?

# International Economic Cycles in Latin America

## The Argument

- Good and bad economic times are *mostly* exogenously determined
  - Commodity exports → intrn'l commodity prices matter
  - Low domestic savings → intrn'l interest rates matter
- Voters don't distinguish between the origin of economic performance
- Presidents' popularity is determined by the *world* economy

# International Economic Cycles in Latin America

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- *Corollary:* President's popularity can be predicted *without any* domestic economic variable

# International Economic Cycles in Latin America

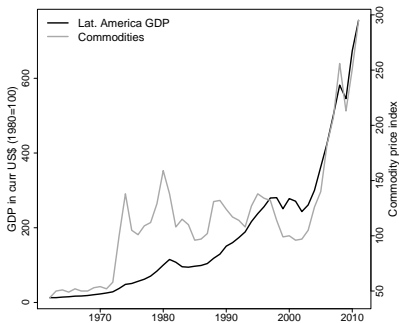
## Hypothesis

- International economic variables alone predict of support for governments in the region
- *Corollary:* President's popularity can be predicted *without any* domestic economic variable
- *Implication:* Presidents are evaluated by results beyond their control (blind retrospection)

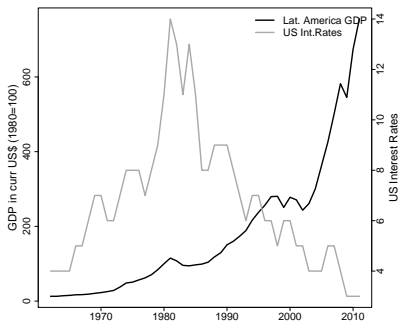


# International Factors and GDP

## Commodity Prices



## US Interest Rates



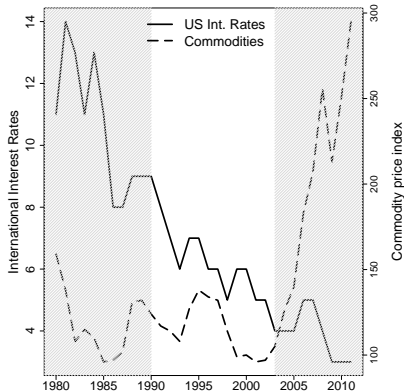
# International Factors “Explain” The Domestic Economy

Regression of GDP on Commodity Index and Interest Rates

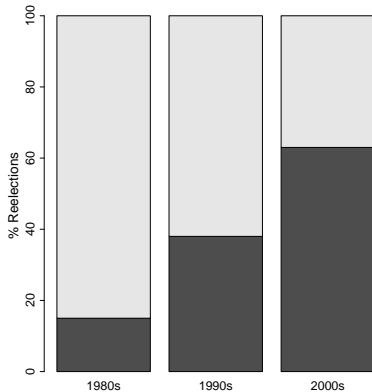
|           | Commodities | US Int. Rates | R <sup>2</sup> |
|-----------|-------------|---------------|----------------|
| Argentina | 1.9         | -14.8         | 0.64           |
| Bolivia   | 1.6         | -8.6          | 0.87           |
| Brasil    | 3.7         | -29.0         | 0.91           |
| Chile     | 3.2         | -31.4         | 0.91           |
| Colombia  | 3.6         | -32.1         | 0.90           |
| Ecuador   | 2.1         | -15.9         | 0.88           |
| Mexico    | 2.4         | -23.8         | 0.78           |
| Paraguay  | 1.5         | -8.1          | 0.85           |
| Peru      | 2.9         | -26.9         | 0.90           |
| Uruguay   | 1.5         | -12.0         | 0.77           |
| Venezuela | 2.1         | -13.6         | 0.86           |

# International Factors and Election Outcomes

## Commodities and Int. Rates



## Reelections



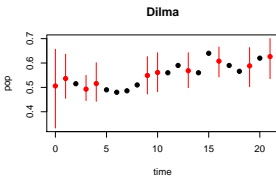
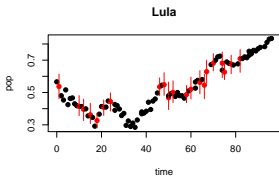
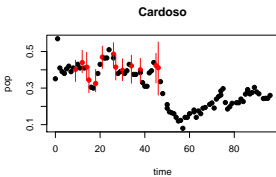
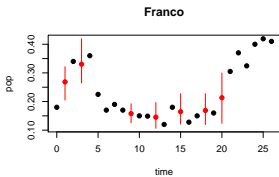
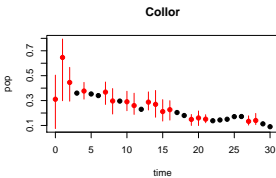
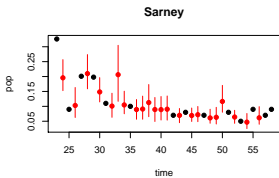
# Research Design

## Time Series Analysis of Popularity of Brazilian Presidents

### Dep. Variable: Presidential popularity

- Share evaluating president as “good” or “excellent”
- 307 months: Mar 1987–Sep 2012 (six presidents)
- 374 observations from four pollsters, averaged by month
- 217 actual monthly observations
- Multiple imputation of 90 missing observations

# Imputation of Dependent Variable



# Research Design

## Time Series Analysis of Popularity of Brazilian Presidents

### Explanatory Variables

- Commodity prices index
- US Interest rates
- Controls
  - Political crisis dummy
  - Pollster fixed effects
  - Time in office (or “honeymoon dummy”)

### Also: Domestic Model

- Growth, Inflation, Unemployment, Exchange Rate, Income

# Research Design

## Time Series Analysis of Popularity of Brazilian Presidents

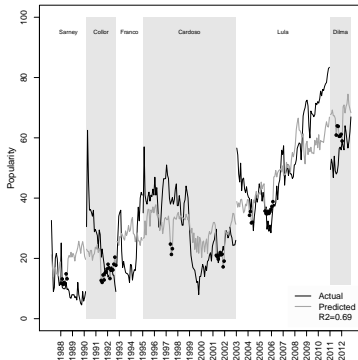
### Modeling Strategy

- OLS for initial diagnostics
- Correct for time structure/stationary issues
  - AR-1 and/or ARMA(1,1) processes
  - Lag DV
  - Lag DV + AR-1 correction (“best”)
- Average estimates across 5 Amelia data-sets

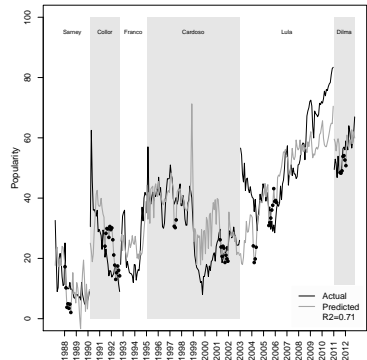
# Predicting Presidential Popularity

Based on OLS models without lag-DV and corrections

## International ( $R^2 = 0.69$ )



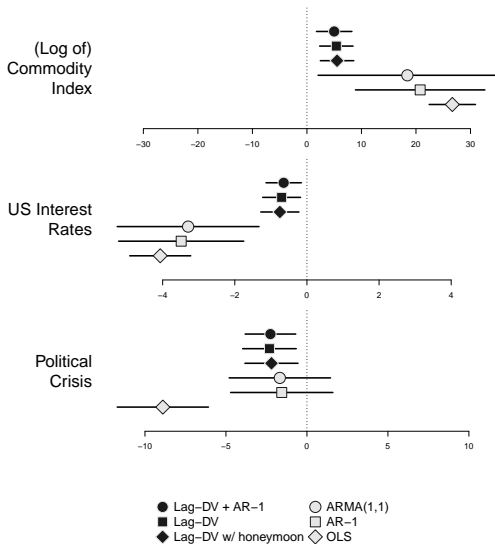
## Domestic ( $R^2 = 0.71$ )





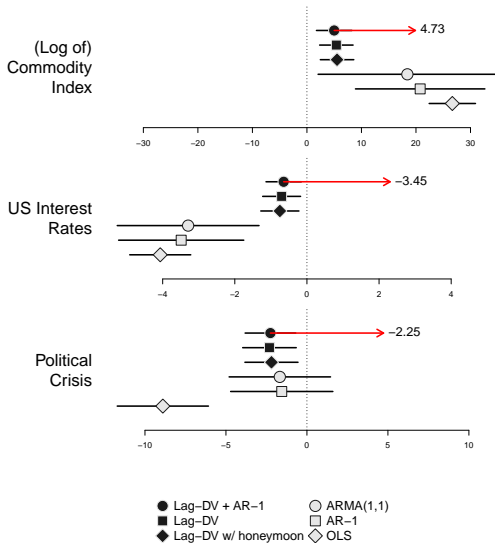
# International Factors and Presidential Popularity

Coefficients estimated by six different model specifications



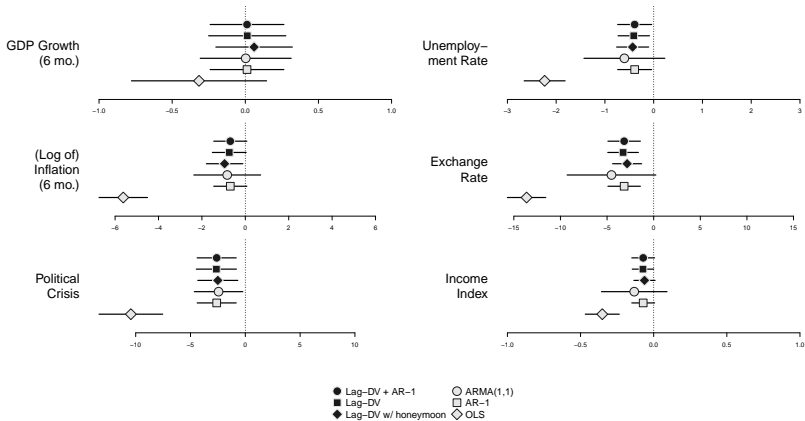
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# Domestic Factors and Presidential Popularity

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# Punchlines

## It's the *world* economy!

- Voters respond to *exogenously-determined* "good" and "bad" times
  - High commodity & low int. rates → High support & reelection
  - Low commodity & high int. rates → Low support & no-reelection

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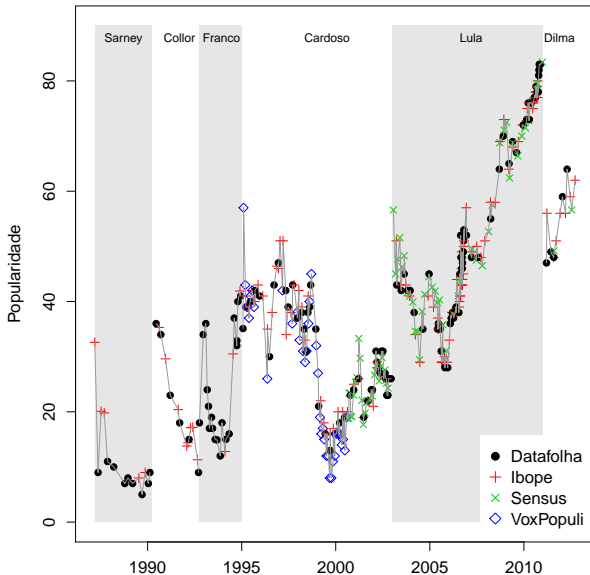
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  - High commodity & low int. rates → High support & reelection
  - Low commodity & high int. rates → Low support & no-reelection
- Domestic political factors matter as well
- **Domestic economic factors are not needed**

## Next Steps

- Expand empirical scope of the paper
  - Attempt to collect missing data for Brazil
  - Collect data on other Latin American countries
  - Estimate hierarchical time-series models
- Investigate theoretical nuances
  - Are international economic factors mediated by “exposure”?
  - Can countercyclical policies reduce impact of international factors (e.g. Chile)?
- Probe scope conditions: The US is completely different!

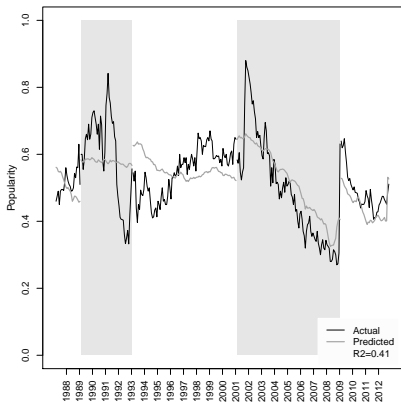
# The Raw Popularity Data





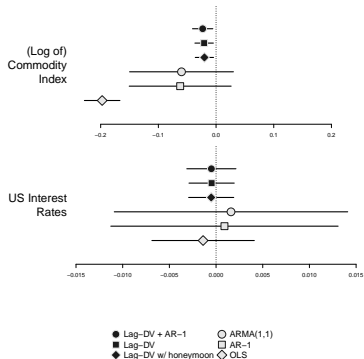
# International Factors and Popularity of US Presidents

## Predicting Popularity



Essentially just “time in office”

## Variable Coefficients



Orders of magnitude smaller!