FISCAL RULE STRETCHING DURING FINANCIAL MARKET STRESS AND CRISIS

Christopher Gandrud and Mark Hallerberg

11 December 2015

City University London, Hertie School of Governance

ELECTIONS & FISCAL STATISTICS

ELECTIONS AND FISCAL STATISTICS

Governments create **opportunistic political business and budget cycles** around **elections**.

These can be both **real** (e.g. Nordhaus 1975 and Clark 2003) and by **manipulating the data** (e.g. Alt, Lassen, and Wehner 2014 and De Castro et al. 2013).

Too difficult to time pumping the **real** economy/budget before **endogenous** elections (Kayser 2005).

So...

Second best, **manipulate the data**.

DO VOTERS CARE?

The media and **voters** typically **don't observe** revisions/don't use revisions in voting decision-making (Kayser and Leininger 2015, Kayser and Peress 2015).

FISCAL ACCOUNTING IN EUROPE

Stability & Growth Pact

Stability and Growth Pact (SGP) sets deficit and debt limits.

Created an enforceable European government finance accounting regime, with **common rules** (European System of Accounts) and a **common monitoring institution–Eurostat** (Savage 2005).

IMPLICATIONS

Comparable fiscal statistics.

Difficult to simply **fabricate** the government's fiscal position.

However …

FISCAL RULE STRETCHING IN EU

MEMBER STATES

Member states have **first mover advantage**.

Debt and deficit figures are **first published by member states**. They have first crack at **classifying** a policy with **seemingly ambiguous** budgetary effects.

Eurostat **scrutinises and revises** published figures **post hoc**.

FISCAL RULE STRETCHING

Because, governments

- have **strong electoral incentives** to present the best possible statistics,

FISCAL RULE STRETCHING

Because, governments

- have **strong electoral incentives** to present the best possible statistics,

- have **first mover advantage** in interpreting policies with seemingly ambiguous effects, and

FISCAL RULE STRETCHING

Because, governments

- have **strong electoral incentives** to present the best possible statistics,
- have **first mover advantage** in interpreting policies with seemingly ambiguous effects, and
- **voters don't really care** about revisions...

FISCAL RULE STRETCHING

Because, governments

- have **strong electoral incentives** to present the best possible statistics,
- have **first mover advantage** in interpreting policies with seemingly ambiguous effects, and
- **voters don't really care** about revisions...
- ...governments have strong incentives to **rule stretch**.

Fiscal rule stretching: if the fiscal implications of a policy are potentially ambiguous, then a decision is made to minimise its debt and/or debt implications

ACCOUNTING POLICY RESPONSES TO FINANCIAL CRISES

FINANCIAL CRISES AND VOTERS

Voters want **financial stability**.

But...

Restoring stability is **expensive**, which **voters dislike**.

AMBIGUITIES AND POLICY RESPONSES TO CRISES

At the same time, policy responses to financial market stress and crisis are:

- rarely used (before 2008)
- often have **ambiguous debt and deficit implications**,
  - E.g. bad banks, liquidity assistance.
  - Are they contingent or immediately realised liabilities? Are they purchase or financial transactions?

HYPOTHESES

HYPOTHESES

- H_1: Debt revisions will be smaller for years further from national government elections.

HYPOTHESES

- H_1: Debt revisions will be smaller for years further from national government elections.

- H_2: Debt revisions will be greater for years when there are endogenous elections.

HYPOTHESES

- H_1: Debt revisions will be smaller for years further from national government elections.
- H_2: Debt revisions will be greater for years when there are endogenous elections.
- H_3: The effects predicted by H_1 and H_2 will be stronger when a country also has high financial market stress.

EMPIRICS: SETUP

DEPENDENT VARIABLE

Dependent variable: cumulative revisions made by **Eurostat** to government debt and deficit statistics (% of GDP) over the 3 years from initial publication. Revisions occur bi-annually (April & October).

Revisions to data for 2003-2013.

Cumulative **debt** revisions: [−1.1, 12.7] % of GDP

Cumulative **deficit** revisions: [−4.5, 1.1] % of GDP

Unit of analysis: Eurostat revision for a given year.

- There are typically 7 observations per publication year. The first in October of the publication year + twice a year for the subsequent 3.

DEPENDENT VARIABLE

Note: Changes due to GDP revisions are **not included**.

RIGHT-HAND SIDE

- Years to election (Gandrud 2015)
- Election type: no election, predetermined election, endogenous election (Hallerberg and Wehner)
- FinStress (Gandrud & Hallerberg, in development)

Previously, most research on financial crisis used either Reinhart & Rogoff (2010) or Laeven & Valencia (2012). But,

Previously, most research on financial crisis used either Reinhart & Rogoff (2010) or Laeven & Valencia (2012). But,

- binary, no indication of intensity,

Previously, most research on financial crisis used either Reinhart & Rogoff (2010) or Laeven & Valencia (2012). But,

- binary, no indication of intensity,
- created post hoc, not real-time. Policy-makers might perceive something different in real-time.

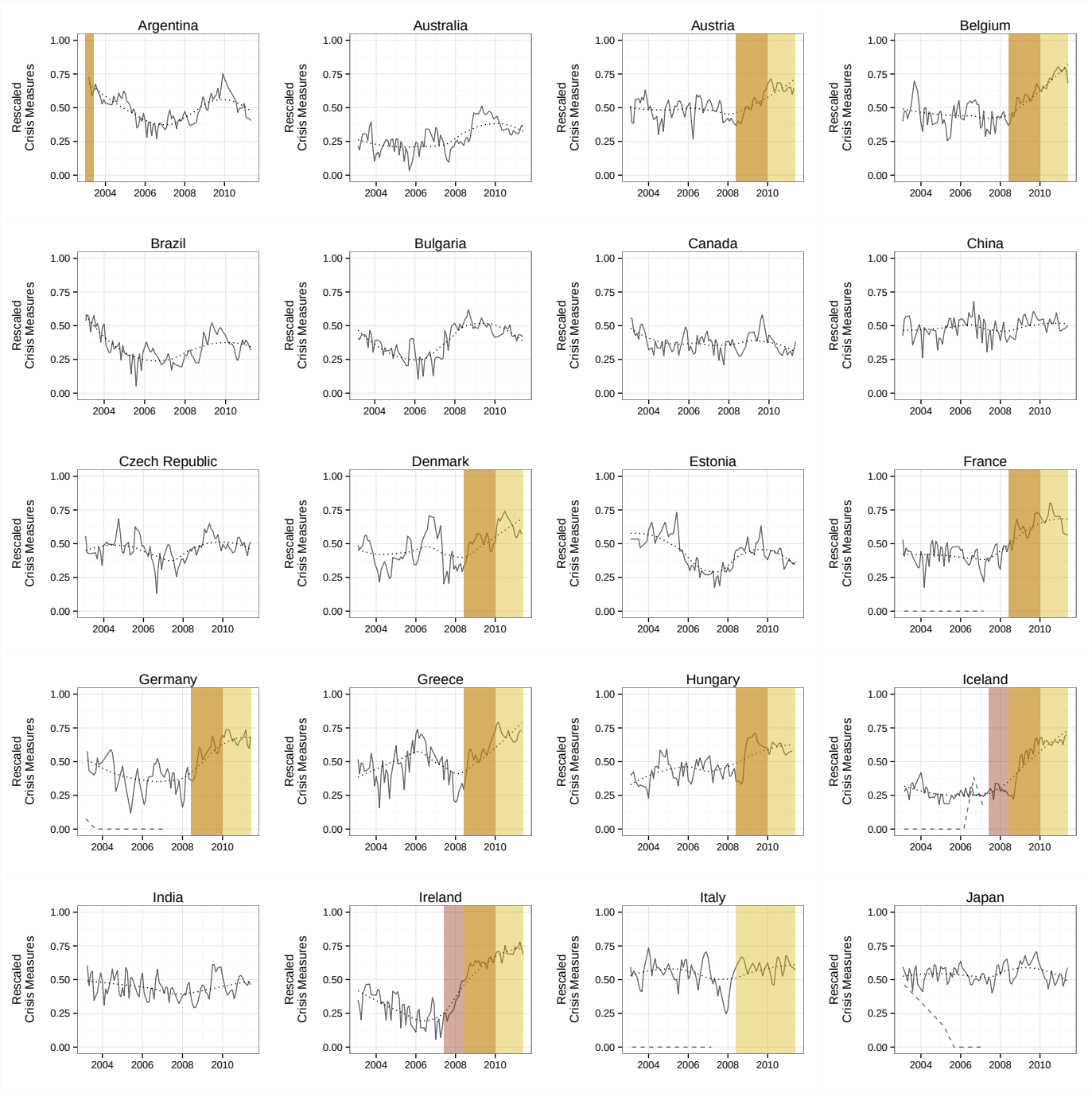
Kernel Principal Component Analysis of $> 12,000$ Economist Intelligence Unit **monthly** country reports on financial markets.

- $>$ 180 countries
- 2003–2011

creating ...

FinStress: continuous [0, 1] indicator of real-time perceived credit provision stress.

Here, we use country-year means.


Argentina
Australia
Austria
Belgium
Brazil
Bulgaria
Canada
China
Czech Republic
Denmark
Estonia
France
Germany
Greece
Hungary
Iceland
India
Ireland
Italy
Japan
Rescaled Crisis Measures
1.00
0.75
0.50
0.25
0.00
2004
2006
2008
2010

CREDIT PROVISION VS. FINANCIAL MARKET STRESS

Why credit provision stress, not financial market stress more broadly?

In general, **politicians care** about financial market stress to the extent that it **hits credit provision to the real economy**.

INTERACTIONS

Hypothesise that election variables have a **larger impact** on revisions during **high stress**.

so

Focus on **interactions** between election variables and FinStress.

RIGHT-HAND SIDE

Also:

- Years since publication
- Eurozone membership
- Exchange rate (vs. USD)
- Absolute gross debt & deficit levels (2015 vintage)
- Country-varying intercepts

EMPIRICS: (PRELIMINARY) RESULTS

Figure: Marginal Effect of Election Timing (years to election) at Various Levels of Financial Market Stress on **Debt** Revisions

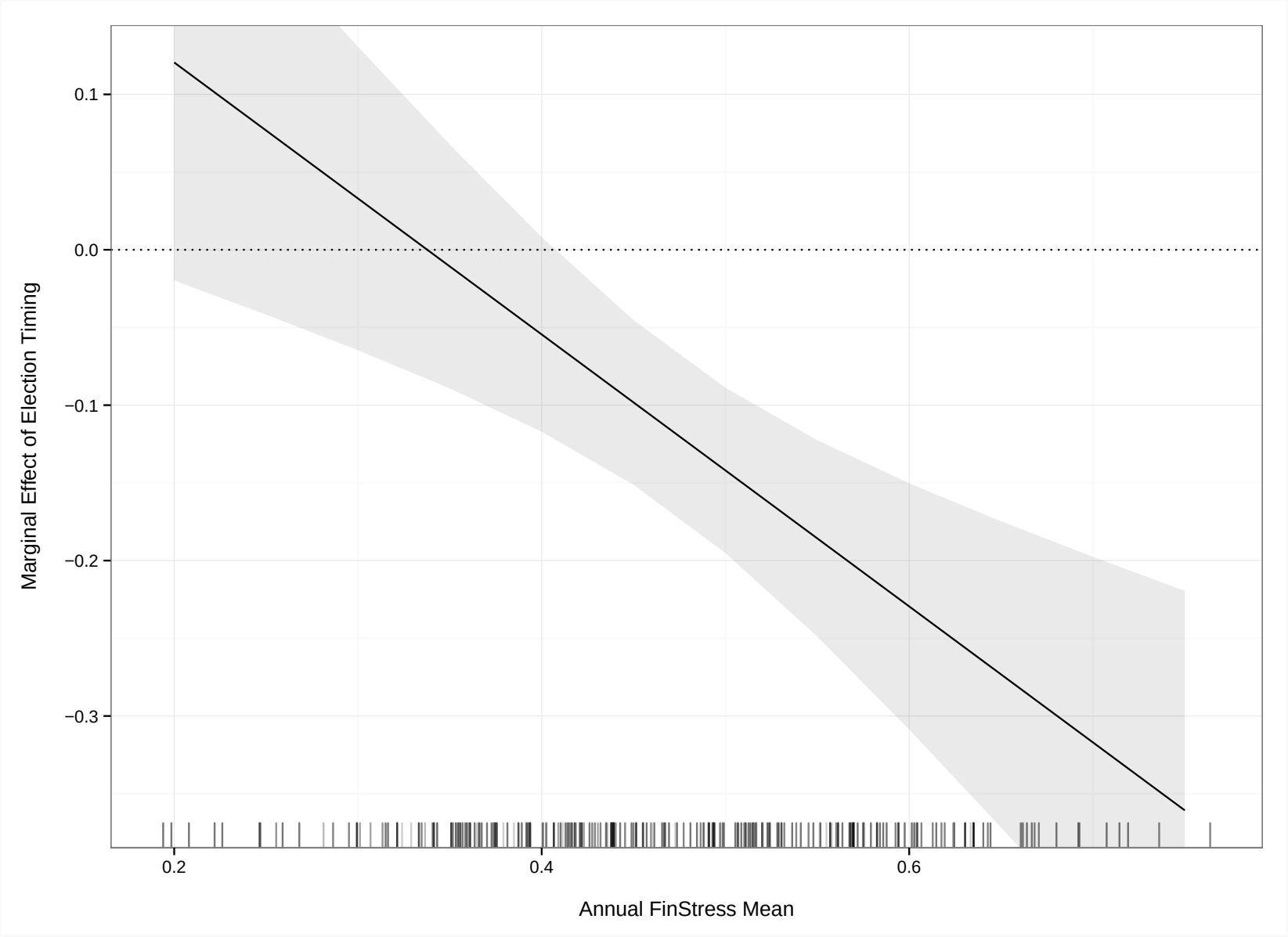


Figure: Marginal Effect of an Endogenous Election at Various Levels of Financial Market Stress on **Debt** Revisions

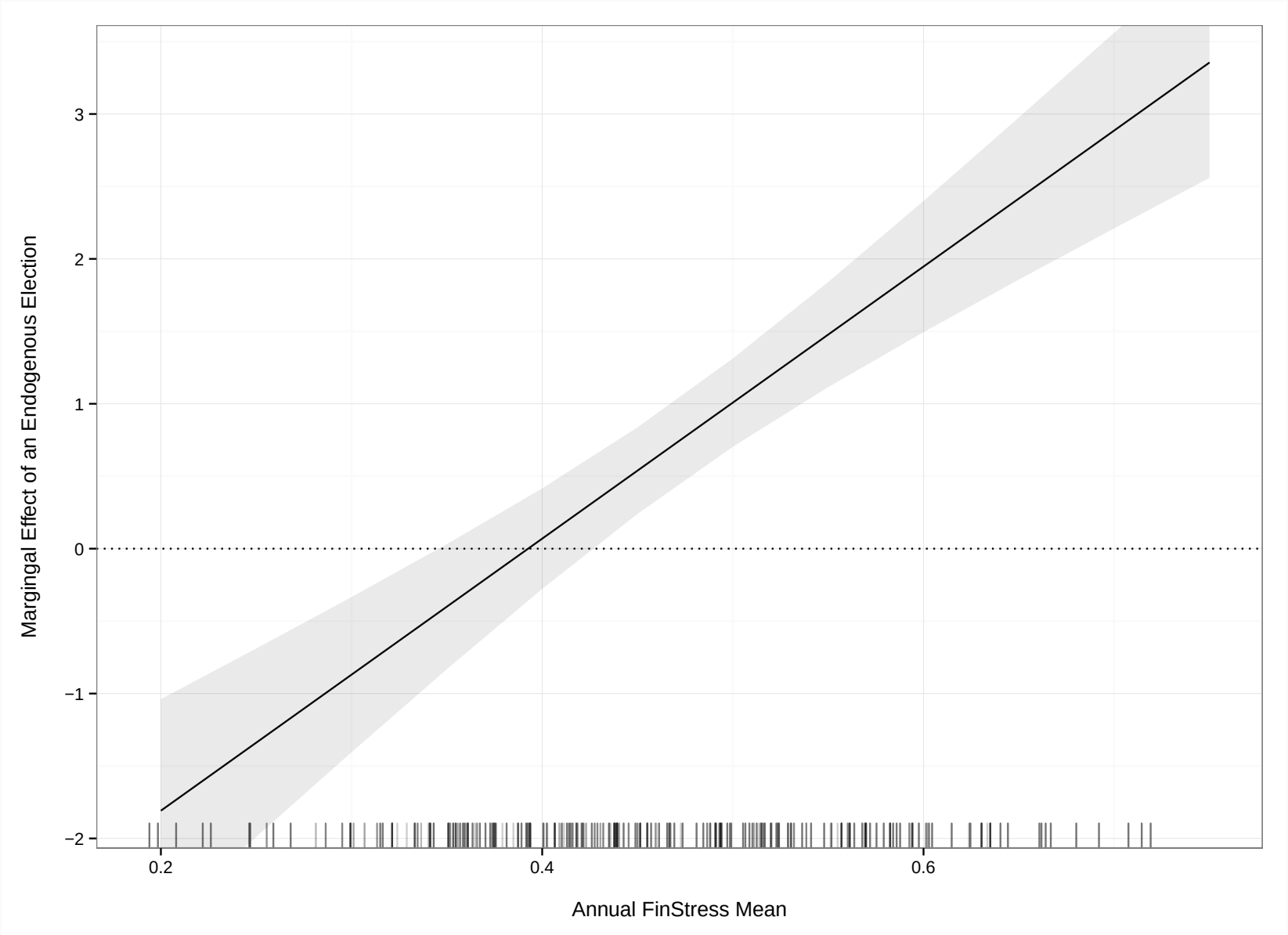


Figure: Predicted **Debt** Revisions in Four Years After Publication for Years with Different Election Types/Non-election Years

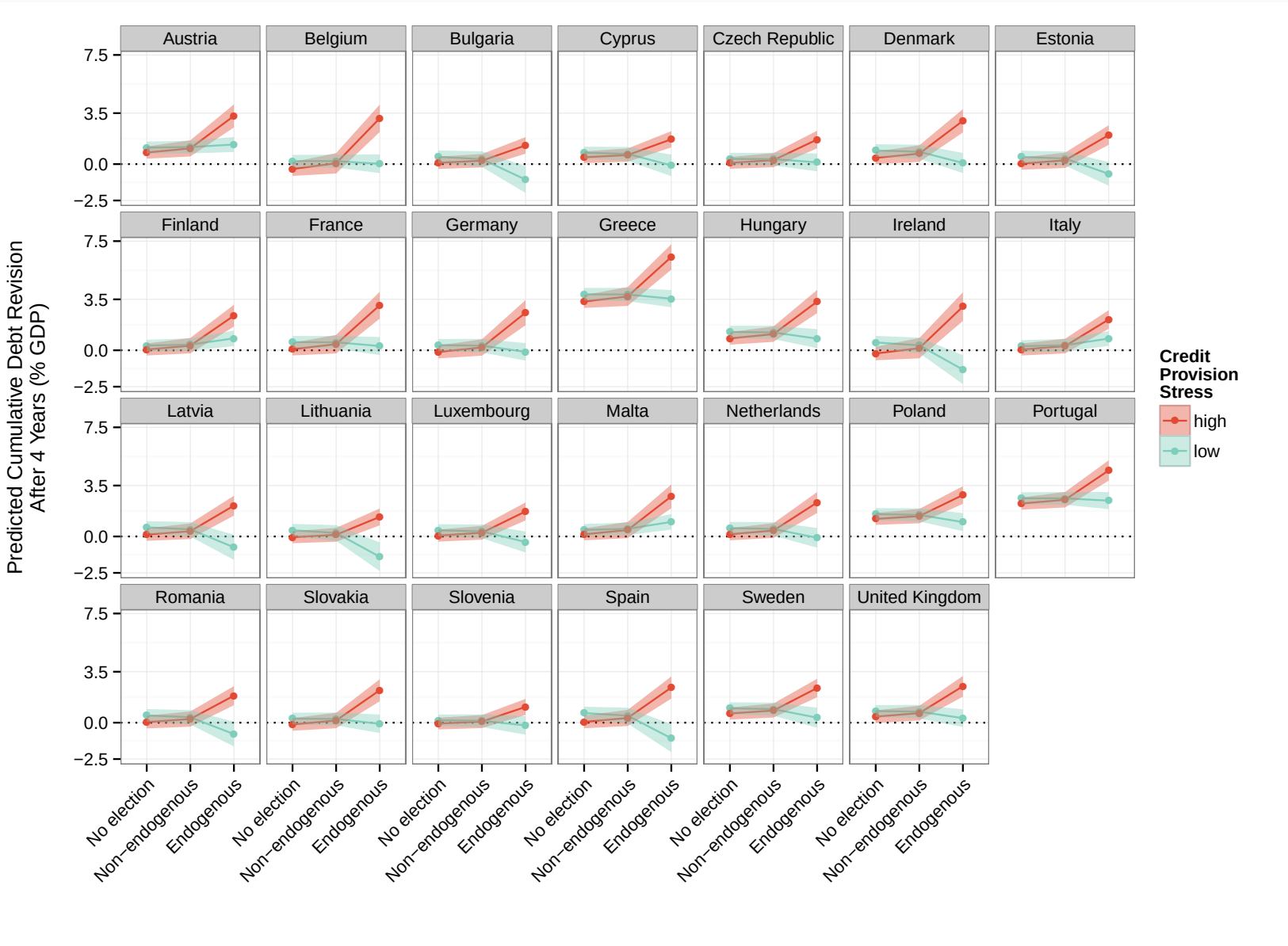
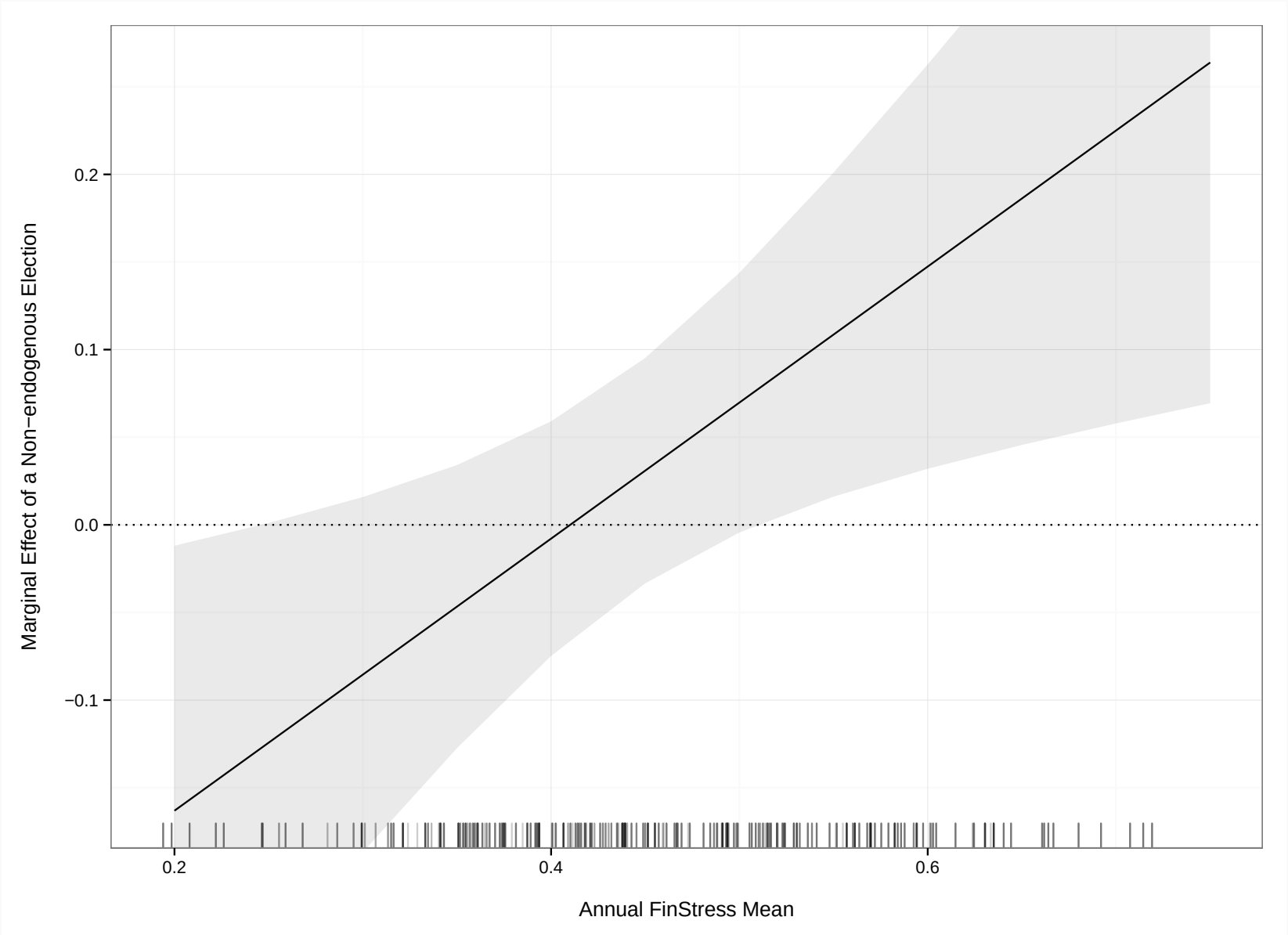


Figure: Marginal Effect of a Non-Endogenous Election at Various Levels of Financial Market Stress on **Deficit** Revisions



CONCLUSION/STILL TO DO

TO-DO: EMPIRICAL

Omitted variables?:

- independence of national accounting agency.
- SGP enforcement actions (not just eurozone membership)
- Others?

Model choice: normal linear regression with many 0s?

TO-DO: THEORETICAL

- Understand interaction between scheduled elections and FinStress on deficit revisions.