The Political Economy of Fiscal Procyclicality

Jamus J. Lim*  

*ESSEC Business School  

August 2019  
2nd Political Economy of Public Policy Conference
Is there any economic idea about which these two gentlemen would wholeheartedly agree?
The economic logic of countercyclical fiscal policy

- Neoclassical theory predicts either countercyclical or (at least) acyclical fiscal policy
  - Shocks to the tax base should be offset by adjustments to fiscal balances, since constant expected tax rates enable intertemporal smoothing
  - Even without shocks, Ricardian equivalence suggests public expenditure would be offset by private demand

- Keynesian theory also implies countercyclical fiscal policy
  - Optimal fiscal policy entails return of post-shock economies to equilibrium via automatic stabilizers
  - Slow adjustment may be further facilitated by discretionary countercyclical expenditures
The economic logic of countercyclical fiscal policy

- Neoclassical theory predicts either countercyclical or (at least) acyclical fiscal policy
  - Shocks to the tax base should be offset by adjustments to fiscal balances, since constant expected tax rates enable intertemporal smoothing
  - Even without shocks, Ricardian equivalence suggests public expenditure would be offset by private demand
- Keynesian theory also implies countercyclical fiscal policy
  - Optimal fiscal policy entails return of post-shock economies to equilibrium via automatic stabilizers
  - Slow adjustment may be further facilitated by discretionary countercyclical expenditures
Yet we still routinely observe procyclical policy, even in advanced economies.
Two schools of thought to explain procyclicality

- Constraints to financial access (e.g. Aizenman et al. 2000; Cuadra et al. 2010)
  - Credit frictions or incomplete markets mean inability to borrow during downturn to finance stimulus
  - During booms, governments exploit improved financial access leads to more borrowing than otherwise

- BUT why don’t debtor government self-insure, or creditor government fund recession-busting policy that would ensure repayment?

- Political economy distortions (e.g. Ilzetski 2011; Alesina et al. 2008)
  - Sociopolitical polarization promotes expenditure excess to entice voters
  - Common-pool problem incites special interest rent-seeking of fiscal transfers
Two schools of thought to explain procyclicality

- Constraints to financial access (e.g. Aizenman *et al.* 2000; Cuadra *et al.* 2010)
  - Credit frictions or incomplete markets mean inability to borrow during downturn to finance stimulus
  - During booms, governments exploit improved financial access leads to more borrowing than otherwise

- **BUT** why don’t debtor government self-insure, or creditor government fund recession-busting policy that would ensure repayment?

- Political economy distortions (e.g. Ilzetski 2011; Alesina *et al.* 2008)
  - Sociopolitical polarization promotes expenditure excess to entice voters
  - Common-pool problem incites special interest rent-seeking of fiscal transfers
Two schools of thought to explain procyclicality

- **Constraints to financial access** (e.g. Aizenman *et al.* 2000; Cuadra *et al.* 2010)
  - Credit frictions or incomplete markets mean inability to borrow during downturn to finance stimulus
  - During booms, governments exploit improved financial access leads to more borrowing than otherwise

- **BUT** why don’t debtor government self-insure, or creditor government fund recession-busting policy that would ensure repayment?

- **Political economy distortions** (e.g. Ilzetski 2011; Alesina *et al.* 2008)
  - Sociopolitical polarization promotes expenditure excess to entice voters
  - Common-pool problem incites special interest rent-seeking of fiscal transfers
Distinguishing between competing explanations

Existing empirical approaches suffer from several shortcomings

1. Discrete partitions of data to yield correlations over a given time period
   - Partitions are arbitrary and results are sensitive to sampling frame

2. Static coefficient estimates obtained from regressions of policy on output gap
   - Endogeneity from reverse causality, unobserved heterogeneity, or measurement error
   - Imprecise *correlation* estimates since heteroskedasticity due to business-cycle volatility biases second moments

3. Most papers do not *simultaneously* assess relative contributions of political economy and financial access to procyclicality
Distinguishing between competing explanations

Existing empirical approaches suffer from several shortcomings

1. Discrete partitions of data to yield correlations over a given time period
   - Partitions are arbitrary and results are sensitive to sampling frame

2. Static coefficient estimates obtained from regressions of policy on output gap
   - Endogeneity from reverse causality, unobserved heterogeneity, or measurement error
   - Imprecise correlation estimates since heteroskedasticity due to business-cycle volatility biases second moments

3. Most papers do not simultaneously assess relative contributions of political economy and financial access to procyclicality
Distinguishing between competing explanations

Existing empirical approaches suffer from several shortcomings

1. Discrete partitions of data to yield correlations over a given time period
   - Partitions are arbitrary and results are sensitive to sampling frame
2. Static coefficient estimates obtained from regressions of policy on output gap
   - Endogeneity from reverse causality, unobserved heterogeneity, or measurement error
   - Imprecise correlation estimates since heteroskedasticity due to business-cycle volatility biases second moments
3. Most papers do not simultaneously assess relative contributions of political economy and financial access to procyclicality
Distinguishing between competing explanations

- Existing empirical approaches suffer from several shortcomings
  1. Discrete partitions of data to yield correlations over a given time period
     - Partitions are arbitrary and results are sensitive to sampling frame
  2. Static coefficient estimates obtained from regressions of policy on output gap
     - Endogeneity from reverse causality, unobserved heterogeneity, or measurement error
     - Imprecise correlation estimates since heteroskedasticity due to business-cycle volatility biases second moments
  3. Most papers do not simultaneously assess relative contributions of political economy and financial access to procyclicality
Using dynamic conditional correlations to evaluate procyclicality

- Dynamic conditional correlations (DCC) offer several advances
  - Dynamic estimates allow evolution of cyclicality, rather than a static snapshot that may well have changed over time (Frankel et al. 2013)
  - Conditionality allows us to sidestep endogeneity question by asking whether correlations are significantly affected by politics or finance, rather than focus on whether these cause procyclicality
Does political economy or financial access better explain procyclicality?

- Apply two-step approach to evaluate contributors to procyclicality
  1. Extract dynamic conditional correlations using a DCC-GARCH model
  2. Analyze contribution of polity and debt in a panel with two-dimensional FEs and multiway clustering
Does political economy or financial access better explain procyclicality?

- Apply two-step approach to evaluate contributors to procyclicality
  1. Extract dynamic conditional correlations using a DCC-GARCH model
  2. Analyze contribution of polity and debt in a panel with two-dimensional FEs and multiway clustering
Does political economy or financial access better explain procyclicality?

- Apply two-step approach to evaluate contributors to procyclicality
  
  1. Extract dynamic conditional correlations using a DCC-GARCH model
  2. Analyze contribution of polity and debt in a panel with two-dimensional FEs and multiway clustering
Procyclicality shows up routinely in the data

- Old political business cycles literature suggests these exist (Andrikopoulos et al. 2004; Castro & Martins 2018; Drazen 2000)
  - BUT incomplete: business cycles usually less (more) frequent than elections in advanced (developing) economies
- Empirical work that assesses procyclicality directly verify its prevalence
  - Pervasive in developing economies (Alesina et al. 2008; Frankel et al. 2013)
  - ...though not uncommon in advanced economies either (Gali et al. 2003; Lane 2003)
  - BUT these are essentially essentially from a static, averaged relationship over time
Procyclicality shows up routinely in the data

- Old political business cycles literature suggests these exist (Andrikopoulos et al. 2004; Castro & Martins 2018; Drazen 2000)
  - BUT incomplete: business cycles usually less (more) frequent than elections in advanced (developing) economies

- Empirical work that assesses procyclicality directly verify its prevalence
  - Pervasive in developing economies (Alesina et al. 2008; Frankel et al. 2013)...
  - ...though not uncommon in advanced economies either (Gali et al. 2003; Lane 2003)
  - BUT these are essentially essentially from a static, averaged relationship over time
Procyclicality shows up routinely in the data

- Old political business cycles literature suggests these exist (Andrikopoulos et al. 2004; Castro & Martins 2018; Drazen 2000)
  - **BUT** incomplete: business cycles usually less (more) frequent than elections in advanced (developing) economies
- Empirical work that assesses procyclicality directly verify its prevalence
  - Pervasive in developing economies (Alesina et al. 2008; Frankel et al. 2013)...
  - ...though not uncommon in advanced economies either (Gali et al. 2003; Lane 2003)
  - **BUT** these are essentially essentially from a static, averaged relationship over time
Procyclicality shows up routinely in the data

- Old political business cycles literature suggests these exist (Andrikopoulos et al. 2004; Castro & Martins 2018; Drazen 2000)
  - **BUT** incomplete: business cycles usually less (more) frequent than elections in advanced (developing) economies
- Empirical work that assesses procyclicality directly verify its prevalence
  - Pervasive in developing economies (Alesina et al. 2008; Frankel et al. 2013) . . .
  - . . . though not uncommon in advanced economies either (Gali et al. 2003; Lane 2003)
  - **BUT** these are essentially essentially from a static, averaged relationship over time
Procyclicality appears to be driven by *both* finance and politics

- Financial access is often an important channel...
  - Procyclicality of *both* fiscal policy and capital inflows (Kaminsky *et al.* 2005)
  - More indebted countries spend more in good times and *vice versa* (Aizenman *et al.* 2019)

- ...but so is political economy
  - Political competition is associated with procyclicality (Lane 2003)
  - Procyclicality is exacerbated by corruption (Alesina *et al.* 2008)
  - Generally, institutional quality is important (Calderon *et al.* 2016)

- **BUT** which is more relevant?
Procyclicality appears to be driven by both finance and politics

- Financial access is often an important channel...
  - Procyclicality of both fiscal policy and capital inflows (Kaminsky et al. 2005)
  - More indebted countries spend more in good times and vice versa (Aizenman et al. 2019)

- ...but so is political economy
  - Political competition is associated with procyclicality (Lane 2003)
  - Procyclicality is exacerbated by corruption (Alesina et al. 2008)
  - Generally, institutional quality is important (Calderon et al. 2016)

- BUT which is more relevant?
Procyclicality appears to be driven by *both* finance and politics

- Financial access is often an important channel. . .
  - Procyclicality of *both* fiscal policy and capital inflows (Kaminsky *et al.* 2005)
  - More indebted countries spend more in good times and *vice versa* (Aizenman *et al.* 2019)

- . . . but so is political economy
  - Political competition is associated with procyclicality (Lane 2003)
  - Procyclicality is exacerbated by corruption (Alesina *et al.* 2008)
  - Generally, institutional quality is important (Calderon *et al.* 2016)

- **BUT** which is more relevant?
Unconditional measures of procyclicality

- Unconditional correlation coefficient
  \[ \rho_{i,t,t+n}^u = \frac{\text{cov}(G_i, Y_i)}{\sqrt{\sigma^2_{G_i} \sigma^2_{Y_i}}} \]
  - Biased with heteroskedasticity (Boyer et al. 1997)

- Rolling (regression) correlation coefficient
  \[ G_{i,t} = \alpha_i + \rho_{i,t,t+n}^r Y_{i,t} + X'_{i,t} \beta_i + \epsilon_{i,t} \]
  - Obtained from regression using overlapping subsamples...
  - ...or applying moving windows to the static correlation
  - Biased due to heteroskedasticity and serial correlation (sans adjustment)
Conditional measures of procyclicality

- **DCC-GARCH model**

\[ Z_{i,t} = X'_{i,t} \Gamma + \epsilon_{i,t}, \]
\[ \epsilon_{i,t} = \eta_{i,t}^{1/2} \nu_{i,t}, \]
\[ \eta_{i,t} = \delta_{i,t}^{1/2} \rho_{i,t}^{c} \delta_{i,t}^{1/2}, \]
\[ \rho_{i,t}^{c} = \text{diag} (\theta_{i,t})^{-1/2} \theta_{i,t} \text{diag} (\theta_{i,t})^{-1/2}, \]
\[ \theta_{i,t} = (1 - \lambda_1 - \lambda_2) \rho_{i,t}^{c} + \lambda_1 \tilde{\epsilon}_{i,t-1} \tilde{\epsilon}'_{i,t-1} + \lambda_2 \theta_{i,t-1}, \]

- Static conditional (quasi)correlations recoverable from model
- Dynamic conditional correlations can also be obtained from fitted model
On average, advanced and emerging economies tend to be procyclical

- Advanced economies exhibit more stability but are nevertheless procyclical

Source: Author's calculations.
Notes: Shaded area represents the upper (75th) and lower (25th) percentile, and solid (dashed) line represents the median (mean), in the distribution of the conditional correlations between primary expenditure and GDP growth, for any given year.
On average, advanced and emerging economies tend to be procyclical

- Developing economies are *even* more procyclical and have become more so over time

Source: Author's calculations.
Notes: Shaded area represents the upper (75th) and lower (25th) percentile, and solid (dashed) line represents the median (mean), in the distribution of the conditional correlations between primary expenditure and GDP growth, for any given year.
But distinct patterns are difficult to pin down at the country level

- Advanced economies can occasionally be procyclical...
But distinct patterns are difficult to pin down at the country level.

... while developing economies can also be countercyclical.

---

**DCC of Government Expenditure**
Paraguay, 1980-2018

---

Source: Author's calculations, from IMF WEO (2018)
But distinct patterns are difficult to pin down at the country level

- Over long periods, countries can exhibit phases...
But distinct patterns are difficult to pin down at the country level.

...as well as trends.
Estimation and methodology

- Two-dimensional FE with multiway clustering
  \[ \rho_{i,t}^m = \chi_0 + \chi_t + \chi_i + W'\chi + \chi_P PolEc_{i,t-1} + \chi_F FinAcc_{i,t-1} + \varepsilon_{i,t}, \quad m \in \{u, r, c, d\} \]

- Estimates from cross-section ($\rho^u$, $\rho^c$) or panel ($\rho^d$)
- Consider three alternative government spending measures
  - Government consumption ($G_c$)
  - Government expenditure ($G_e$)
  - Primary expenditure share of GDP ($G_p$)
Data and sources

- Fiscal and macro data from three main sources
  - World Development Indicators
  - World Economic Outlook
  - Mauro et al. fiscal prudence (2015) dataset


- Financial Access: Public debt/GDP (Abbas et al. 2011), Debt/Revenue, Private Credit
A cross-sectional benchmark

<table>
<thead>
<tr>
<th></th>
<th>( G_c ) (C1)</th>
<th>( G_c ) (C2)</th>
<th>( G_c ) (C3)</th>
<th>( G_c ) (C4)</th>
<th>( G_p ) (C5)</th>
<th>( G_p ) (C6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polity</td>
<td>-0.041</td>
<td>-0.005</td>
<td>-0.043</td>
<td>-0.031</td>
<td>-0.012</td>
<td>0.003</td>
</tr>
<tr>
<td></td>
<td>(0.013)**</td>
<td>(0.012)</td>
<td>(0.025)*</td>
<td>(0.013)**</td>
<td>(0.012)</td>
<td>(0.020)</td>
</tr>
<tr>
<td>Debt</td>
<td>-0.143</td>
<td>-0.028</td>
<td>0.035</td>
<td>0.013</td>
<td>-0.049</td>
<td>-0.093</td>
</tr>
<tr>
<td></td>
<td>(0.046)***</td>
<td>(0.028)</td>
<td>(0.066)</td>
<td>(0.029)</td>
<td>(0.029)*</td>
<td>(0.046)**</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>( G_c ) (C7)</th>
<th>( G_c ) (C8)</th>
<th>( G_c ) (C9)</th>
<th>( G_c ) (C10)</th>
<th>( G_p ) (C11)</th>
<th>( G_p ) (C12)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polity</td>
<td>-0.045</td>
<td>-0.041</td>
<td>-0.008</td>
<td>-0.039</td>
<td>-0.013</td>
<td>-0.024</td>
</tr>
<tr>
<td></td>
<td>(0.022)**</td>
<td>(0.034)</td>
<td>(0.028)</td>
<td>(0.041)</td>
<td>(0.010)</td>
<td>(0.016)</td>
</tr>
<tr>
<td>Debt</td>
<td>-0.075</td>
<td>-0.010</td>
<td>0.066</td>
<td>0.061</td>
<td>0.023</td>
<td>0.031</td>
</tr>
<tr>
<td></td>
<td>(0.068)</td>
<td>(0.054)</td>
<td>(0.077)</td>
<td>(0.065)</td>
<td>(0.028)</td>
<td>(0.039)</td>
</tr>
</tbody>
</table>

- Neither political economy nor financial access appear to be important
- When coefficients are significant, signs are inconsistent with theory and intuition
Political economy now appears to matter relatively more than financial access

Switch in signs for the debt constraint could imply countercyclical public investment

Placing greater weight on time-series methods implies less diversified sample (29–44 Adv/Dev)
Endogeneity concerns

- **DCC-GARCH and panel FEs** account for measurement error and unobserved heterogeneity, not reverse causality
  - Lagged *PolEc* and *FinAcc* proxies should alleviate immediate concerns about simultaneity
  - Slow-evolving nature of both variables (stocks not flows) also limits reverse causality

- **IV techniques** are one potential strategy
  - Even if able to find instruments that satisfy exclusion restriction, these are generally not long-dated

- Sidestep problem by asking whether politics or finance affects the variance-covariance matrix of errors
  - Ask how correlations change after including our variables of interest directly into multivariate GARCH
  - Calculate $\rho^d$ with and without polity/debt in specification
Endogeneity concerns

- DCC-GARCH and panel FE account for measurement error and unobserved heterogeneity, not reverse causality
  - Lagged PolEc and FinAcc proxies should alleviate immediate concerns about simultaneity
  - Slow-evolving nature of both variables (stocks not flows) also limits reverse causality
- IV techniques are one potential strategy
  - Even if able to find instruments that satisfy exclusion restriction, these are generally not long-dated
- Sidestep problem by asking whether politics or finance affects the variance-covariance matrix of errors
  - Ask how correlations change after including our variables of interest directly into multivariate GARCH
  - Calculate $\rho^d$ with and without polity/debt in specification
Comparing deviations in conditional correlations

<table>
<thead>
<tr>
<th></th>
<th>Political economy</th>
<th></th>
<th></th>
<th>Financial access</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$G_c$</td>
<td>$G_e$</td>
<td>$G_P$</td>
<td>$G_c$</td>
<td>$G_e$</td>
<td>$G_P$</td>
</tr>
<tr>
<td></td>
<td>Diff.</td>
<td>Sig. (%)</td>
<td>Diff.</td>
<td>Sig. (%)</td>
<td>Diff.</td>
<td>Sig. (%)</td>
</tr>
<tr>
<td>All</td>
<td>-0.008</td>
<td>59</td>
<td>-0.028</td>
<td>57</td>
<td>-0.380</td>
<td>90</td>
</tr>
<tr>
<td>Advanced</td>
<td>-0.013</td>
<td>60</td>
<td>-0.016</td>
<td>60</td>
<td>-0.467</td>
<td>88</td>
</tr>
<tr>
<td>Developing</td>
<td>-0.002</td>
<td>58</td>
<td>-0.039</td>
<td>50</td>
<td>-0.292</td>
<td>100</td>
</tr>
</tbody>
</table>

- Including polity/debt often results in significant changes in DCCs
- Overall, political economy appears to matter more than financial access
- Financial access drive government consumption procyclicality in developing countries, while political economy drives government expenditure procyclicality
A multivariate model with polity and debt can alter correlations!

- DCC for Greece with little separation after including polity/debt

Source: Author's calculations.
Notes: DCC computed from predicted in-sample conditional variance-covariance matrix for bivariate GARCH of cyclical components of real government consumption and GDP, or multivariate GARCH further including either polity or debt.
A multivariate model with polity and debt can alter correlations!

- Separation of DCC for Finland when financial access included

Source: Author’s calculations.
Notes: DCC computed from predicted in-sample conditional variance-covariance matrix for bivariate GARCH of cyclical components of real government consumption and GDP, or multivariate GARCH further including either polity or debt.
A multivariate model with polity and debt can alter correlations!

- DCCs can converge over time, as in Chile

Source: Author's calculations.
Notes: DCC computed from predicted in-sample conditional variance-covariance matrix for bivariate GARCH of cyclical components of real government consumption and GDP, or multivariate GARCH further including either polity or debt.
Contrasting procyclicality in advanced vs developing economies

### Table: Fiscal Procyclicality

<table>
<thead>
<tr>
<th></th>
<th>Advanced</th>
<th>Developing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$G_c$ (S1)</td>
<td>$G_c$ (S4)</td>
</tr>
<tr>
<td>Polity</td>
<td>0.019 (0.007)**</td>
<td>0.003 (0.013)</td>
</tr>
<tr>
<td></td>
<td>$G_e$ (S2)</td>
<td>$G_e$ (S5)</td>
</tr>
<tr>
<td>Debt</td>
<td>0.033 (0.012)**</td>
<td>0.022 (0.009)**</td>
</tr>
<tr>
<td></td>
<td>0.005 (0.004)</td>
<td>0.011 (0.013)</td>
</tr>
<tr>
<td></td>
<td>$G_p$ (S3)</td>
<td>$G_p$ (S6)</td>
</tr>
<tr>
<td></td>
<td>0.034 (0.041)</td>
<td>-0.011 (0.045)</td>
</tr>
<tr>
<td></td>
<td>-0.046 (0.045)</td>
<td>0.010 (0.035)</td>
</tr>
<tr>
<td></td>
<td>-0.037 (0.009)**</td>
<td>0.010 (0.045)</td>
</tr>
</tbody>
</table>

**Fixed effects:**
- **Time?** Yes, Yes, Yes
- **Country?** Yes, Yes, Yes

- Political economy seems to matter more in advanced (and financial access mitigates procyclical expenditure in developing)
- Partial validation of political business cycle theories
- Some evidence of developing graduation (post 2000), but inconsistent and weak
Conditioning on corruption and private credit

<table>
<thead>
<tr>
<th>Political economy</th>
<th>Financial access</th>
</tr>
</thead>
<tbody>
<tr>
<td>$G_c$ (I1)</td>
<td>$G_c$ (I4)</td>
</tr>
<tr>
<td>$G_e$ (I2)</td>
<td>$G_e$ (I5)</td>
</tr>
<tr>
<td>$G_p$ (I3)</td>
<td>$G_p$ (I6)</td>
</tr>
<tr>
<td>Polity</td>
<td>0.019</td>
</tr>
<tr>
<td>Corruption</td>
<td>-0.173</td>
</tr>
<tr>
<td>Polity x corruption</td>
<td>0.003</td>
</tr>
<tr>
<td>Debt</td>
<td>0.016</td>
</tr>
<tr>
<td>Pte credit</td>
<td>0.471</td>
</tr>
<tr>
<td>Debt x pte credit</td>
<td>0.503</td>
</tr>
</tbody>
</table>

- **Corruption**: +ve level (corruption facilitates procyclicality), -ve interaction (less corruption mitigates procyclical tendency)

- **Private credit**: +ve level (financial development enables procyclicality), -ve interaction (overextended private sector induces restraint)
Are fiscal rules a panacea?

- Fiscal rules are *ipso facto* associated with *greater* procyclicality.
- Conditioning polity and debt on rules *exacerbates* effects.

### Table: Fiscal Procyclicality

<table>
<thead>
<tr>
<th></th>
<th>Rules only</th>
<th>Conditioned on rules</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$G_c$ (F1)</td>
<td>$G_e$ (F2)</td>
</tr>
<tr>
<td>Fiscal rules</td>
<td>0.031</td>
<td>0.046 (0.014)**</td>
</tr>
<tr>
<td></td>
<td>(0.024)</td>
<td>(0.014)**</td>
</tr>
<tr>
<td>Polity</td>
<td>0.017</td>
<td>0.026 (0.010)**</td>
</tr>
<tr>
<td></td>
<td>(0.017)</td>
<td>(0.010)**</td>
</tr>
<tr>
<td>Debt</td>
<td>0.035</td>
<td>-0.027 (0.040)</td>
</tr>
<tr>
<td></td>
<td>(0.075)</td>
<td>(0.040)</td>
</tr>
<tr>
<td>Rules × polity</td>
<td>-0.002</td>
<td>0.012 (0.003)**</td>
</tr>
<tr>
<td>Rules × debt</td>
<td>0.018</td>
<td>0.033 (0.019)*</td>
</tr>
<tr>
<td></td>
<td>(0.033)</td>
<td>(0.019)*</td>
</tr>
</tbody>
</table>

**Fixed effects:**
- Time?: Yes, Yes, Yes
- Country?: Yes, Yes, Yes
Apply time-series techniques to obtain dynamic conditional correlations to evaluate fiscal procyclicality and its drivers

Political economy factors tend to be more relevant than financial access constraints

Implication: The PBC is alive and well: to contain procyclicality, focus on mitigating electoral effects
Apply time-series techniques to obtain dynamic conditional correlations to evaluate fiscal procyclicality and its drivers

Political economy factors tend to be more relevant than financial access constraints

Implication: The PBC is alive and well: to contain procyclicality, focus on mitigating electoral effects
Apply time-series techniques to obtain dynamic conditional correlations to evaluate fiscal procyclicality and its drivers.

Political economy factors tend to be more relevant than financial access constraints.

**Implication**: The PBC is alive and well: to contain procyclicality, focus on mitigating electoral effects.