

Discussion
Exchange Controls As A Fiscal Instrument
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This Paper

▶ **Motivation**

- ▶ Dual exchange rates/exchange control regimes
Argentina: “Cepo cambiario” \Rightarrow calibration
- ▶ Tax on net exports

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▶ **This paper**

- ▶ Interesting question
- ▶ Elegant modeling
- ▶ Careful quantification

Clear Takeaways

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1. Inflation tax (seignorage) is better:
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2. Better *not* to distort imports
 - ▶ Other interesting results
 1. Exchange rate controls require both legal and illegal trade
 2. Strong (arbitrage) force to overstate official imports
 - ▶ There is a lot in the paper

Model: Households

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- ▶ No access to financial markets
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but for interest payments of predetermined foreign currency debt
- ▶ Standard (representative) household side

$$\sum_{t=0}^{\infty} \beta^t U(c_t, h_t)$$

$$\left[1 + \underbrace{s(v_t)}_{\text{transaction cost}}\right] c_t + \frac{i_t}{1+i_t} m_t + \frac{a_t}{1+i_t} = w_t h_t + \tau_t + \underbrace{\phi_t}_{\text{profit}} + \frac{a_{t-1}}{1+\pi_t}$$

- ▶ **Money Demand** + Consumption/Leisure + Euler

Model: Firms

- ▶ Economic profits: non-tradable

$$\phi_t^e = \underbrace{F(h_t, q_t^n)}_{\text{non-tradable output}} - w_t h_t + \frac{\mathcal{E}_t}{P_t} (- (q_t^n + \dots))$$

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- ▶ where

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- ▶ Mechanism: vary $\mathcal{E}_t^o \Rightarrow$ firms' behavior + fiscal revenue
- ▶ To guarantee $s_t > 0$
 - ▶ $\mathcal{E}_t > \mathcal{E}_t^o$ ($\gamma_t = \frac{\mathcal{E}_t - \mathcal{E}_t^o}{\mathcal{E}_t^o} > 0$) (appreciated official exchange rate)
 - ▶ $p_t^x x_t^o - q_t^o > 0$ (positive net *official* exports)

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- ▶ Exchange controls (γ_t, ρ_t)
 - ▶ can generate revenue
 - ▶ reduce welfare

Ramsey Policy

- ▶ Standard + Timeless Ramsey problems
- ▶ Choose to maximize welfare
 1. γ_t (official exchange rate)
 2. ρ_t (rationing)
 3. i_t (interest rate)
- ▶ subject to 1 implementability condition
intertemporal gov't budget constraint
given external prices (p_t^x and i_t^*) and τ_t (fiscal need)
- ▶ Benchmarks
 - ▶ No exchange rate controls
 - ▶ Minimal inflation

Comments/Remarks

1. Different angle from *corrective* role of exchange rates

- ▶ Prominent existing work
 - ▶ Sudden stops, macroprudential policy, pecuniary externalities, AD externalities, etc.
 - ▶ Capital controls
- ▶ This paper \Rightarrow Friedman Rule tradition
Schmitt-Grohé/Uribe 2011: "Optimal Rate of Inflation"
Handbook of Monetary Economics
- ▶ Correcting distortions vs. Minimizing distortions (hitting revenue target)
 - ▶ This economy is efficient absent government

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- ▶ Maybe useful to integrate both views?
 - ▶ "Double dividend"
- ▶ "Cepo cambiario" seems driven by reserve management
 - ▶ Nontrivial interactions
 - ▶ Exchange control on imports $\neq 0 \Rightarrow$ does this mean that exchange controls are not designed to maximize revenue?

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2. Primary deficit taken as given (“chronic fiscal deficits”)

- ▶ Friedman rule is ruled out
- ▶ What if the government had (distortionary) labor taxes?
- ▶ *Distortionary taxes* vs. Inflation vs. Exchange controls
- ▶ Maybe not for Argentina... but conceptually

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- 3. Ultimate sources of welfare losses induced by exchange rate controls**
 - ▶ Aggregate factor efficiency (h_t)
 - ▶ Cross-sectional input efficiency (non-tradable vs. exports)
Language from: *Welfare Accounting*, Davila/Schaab 2023
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- 4. Can richer production structure impact the results?**
 - ▶ Importance of importers vs. exporters
 - ▶ Similar with household side heterogeneity

5. Key calibration inputs

- ▶ Money demand (estimated) $m = c \left[\frac{A}{D} - \frac{1}{D} \left(\frac{i}{D(1+i)} \right)^{\frac{1}{B}} \right]$
 - ▶ Strong currency substitution can change policy prescription
- ▶ Evasion $C(z, \kappa) = \frac{\kappa}{2} z^2$
 - ▶ Easy evasion makes controls ineffective
 - ▶ Current costs of evasion do not depend on exchange rate gap γ_t directly

Conclusion

- ▶ Very interesting analysis of exchange controls as fiscal tool
- ▶ Clear normative prescriptions
- ▶ Scope to do more work on this area!