

Development from post-Keynesian and Institutionalist Perspectives

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Outline

1. Thirlwall's Balance of Payments Constrained Growth (BPCG) Model
 - Background
 - The model
 - Policy implications
 - Extensions
 - Critiques with a focus on the role of the real exchange rate policy
2. Alternative Views on the Real Exchange Rate Policy
 - Economics of RER undervaluation
 - Data & stylised facts
 - Political economy considerations
 - New perspectives on exchange rate scepticism

1. Thirlwall's Balance of Payments Constrained Growth (BPCG) Model

Background (1/2)

- One of the most used approaches to modelling long-run growth among post-Keynesian economists.
- Popular approach to study development issues and (the lack of) convergence of developing countries to the per capita income levels achieved by advanced economies.
- Why do countries grow at different rates?
- Thirlwall shares **the post-Keynesian** belief that **AD** is paramount in determining a country's growth rate even in **the long-run**.
- What constraints demand in open economies?
- The key idea:

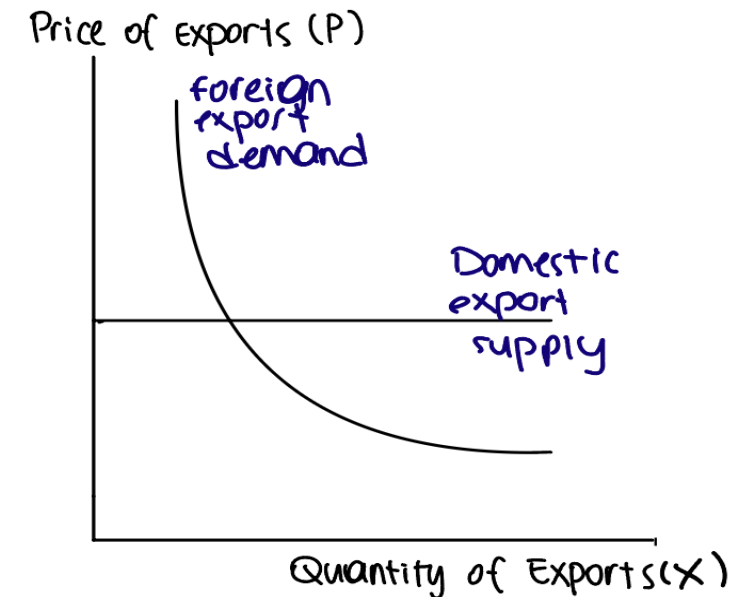
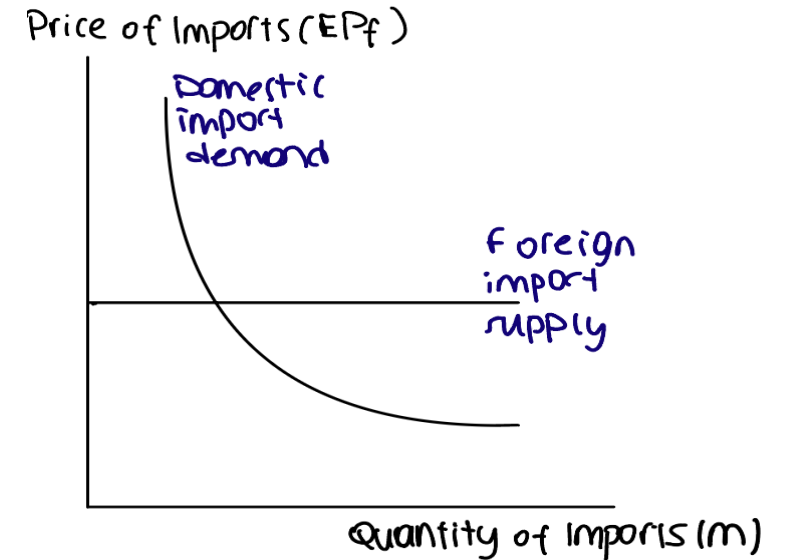
Assuming balanced trade in the LR, national income cannot grow faster than the rate which makes imports increase at the same pace as exports.

Under certain assumptions,

$$g_{bop} = \frac{\textit{the growth rate of exports}}{\textit{income elasticity of demand for imports}}$$

Background (2/2)

- Two goods:
 - A domestically produced good (can be purchased at home or exported)
 - A foreign produced import good
- Imperfect substitutes
- The 'law of one price' does not apply
- Supplies of exports and imports are infinitely elastic
- The quantities traded are uniquely determined by the demand for each.
- **Do you find these assumptions convincing?**



The Model (1/3)

- Export demand:

$$X = X_0 \left(\frac{EP_f}{P} \right)^{\varepsilon_X} Y_f^{\eta_X}; \quad \varepsilon_X > 0; \eta_X > 0 \quad (1)$$

- Import demand:

$$M = M_0 \left(\frac{EP_f}{P} \right)^{-\varepsilon_M} Y^{\eta_M}; \quad \varepsilon_M > 0; \eta_M > 0 \quad (2)$$

- Balance of payments (assuming no net financial flows in the LR)

$$PX = EP_f M \quad (3)$$

- Expressing in the growth-rate form:

$$\hat{P} + x = \hat{E} + \hat{P}_f + m \quad (4)$$

$$x = \varepsilon_X (\hat{E} + \hat{P}_f - \hat{P}) + \eta_X y_f \quad (5)$$

$$m = -\varepsilon_M (\hat{E} + \hat{P}_f - \hat{P}) + \eta_M y \quad (6)$$

- Substituting (5)-(6) into (4)

$$(\varepsilon_X - \varepsilon_M - 1)(\hat{E} + \hat{P}_f - \hat{P}) - \eta_M y + \eta_X y_f = 0 \quad (7)$$

The Model (2/3)

$$(\varepsilon_X - \varepsilon_M - 1)(\hat{E} + \hat{P}_f - \hat{P}) - \eta_M y + \eta_X y_f = 0 \quad (7)$$

- **Which variables adjust to make this equilibrium hold in the LR?**
 - ε_i and η_i ($i = X, M$) are exogenously given
 - y_f is exogenously given
 - Three possibilities: (1) y , (2) $(\hat{E} + \hat{P}_f - \hat{P})$, or (3) a combination of (1) and (2)
- Thirlwall assumed that income (or output) is the adjusting variable, not RER.

$$y_B = \frac{(\varepsilon_X - \varepsilon_M - 1)(\hat{E} + \hat{P}_f - \hat{P}) + \eta_X y_f}{\eta_M} \quad (8)$$

The Model (3/3)

$$y_B = \frac{(\varepsilon_X - \varepsilon_M - 1)(\hat{E} + \widehat{P}_f - \hat{P}) + \eta_X y_f}{\eta_M} \quad (8)$$

i. Mixed empirical support for the ML condition

- ‘Elasticity pessimism’
- $\varepsilon_X + \varepsilon_M \approx 1$, then;

$$y_B = \frac{\eta_X y_f}{\eta_M} \quad (9)$$

The strong form of Thirlwall's Law

ii. Even if $\varepsilon_X + \varepsilon_M > 1$, we can assume $(\hat{E} + \widehat{P}_f - \hat{P}) = 0$

- Constant RER in the long-run
- Substituting $(\hat{E} + \widehat{P}_f - \hat{P}) = 0$ into the export demand function ($x = \varepsilon_X(\hat{E} + \widehat{P}_f - \hat{P}) + \eta_X y_f$)

$$y_B = \frac{x}{\eta_M} \quad (10)$$

The weak form of Thirlwall's Law

Policy Implications (1/2)

- Exports are important.
- **Why?**
- To offset imports
 - “It maybe possible to initiate a consumption-led, investment-led or government expenditure-led growth, for a short time, but each of these components of demand has an import component. ... If there are no export earnings to pay for the import content of other components of expenditure demand will have to be constrained.” (Thirlwall 2002, p. 53)*
- Thirlwall’s Model & PK approach of demand-driven growth
 - Broadly consistent
 - Focus on the constraints imposed by investment demand vs. exports (relative to the propensity to import)
- **Are there any supply-side policy implications following from this model?**
 - How to achieve a high η_X ?
 - Composition of exports matters.
 - Education, infrastructure, R&D

Policy Implications (2/2)

- Policy implications of elasticity pessimism
 - What matters is the **non-price competitiveness** of a country's goods.
 - Cost competitiveness is unimportant.
 - **How do we square this with the mounting evidence on the growth-inducing effects of competitive RER policies?** (Rodrik 2008, Razmi et al. 2012, etc.)
- Does not support a blanket protectionist policy or 'trade war' approach.
- A cautious approach to trade liberalisation

Extensions

The Thirlwall's basic model is extended in various directions:

- International financial flows (Thirlwall and Hussain 1982)
- Multi-sectoral models with structural change (Araujo and Lima 2007)
- Imports of intermediate goods (Blecker and Ibarra 2013)
- Partial pass-through (Setterfield and Blecker, 2019, section 9.4.1)
- Cumulative causation and Verdoorn's Law (Setterfield and Blecker, 2019, section 9.4.2)

Critiques

- Testing a near-tautology? (Clavijo and Ros, 2015; Razmi, 2016)
- Foreign income growth and domestic capital accumulation
- Country size
- Endogeneity of income elasticities (Krugman 1989)
- Level versus rates of change in relative prices
 - Mixed empirical evidence on the ML condition $\varepsilon_X + \varepsilon_M > 1$
 - Evidence on $(\hat{E} + \widehat{P}_f - \hat{P}) = 0$ assumption (in the LR) is more solid
 - Even if RER don't change continuously in the LR, this does not imply that the level of the RER cannot affect the growth rate.
 - Rodrik (2008), Eichengreen (2007), Razmi et al. (2012), Razmi (2016)

2. Alternative Views on Real Exchange Rate Policy

Economics of RER Undervaluation

- Large body of theoretical and empirical research on the benefits of undervalued RER (see Demir and Razmi 2021 for an overview)
 - Shifting resources into higher productivity tradable sector (Rodrik 2008)
 - Reaping immediate productivity gains and jumpstarting growth in low income countries (Eichengreen 2007)
 - Diminishing the dependence on foreign capital inflows
 - Positive effects on investment (Razmi et al. 2012; Libman et al. 2019)
 - Positive gender outcomes (Erten and Metzger, 2019)
- Lessons for the Thirlwall's BPCGM literature

Data and Stylised Facts

Historically, RER has been on average overvalued in Latin America and undervalued in East Asia.

Region	1960s	1970s	1980s	1990s	2000s	2010s	1960-2019
East Asia and Pacific	-0.0865	0.149	0.193	0.0586	0.157	0.0924	0.104
Europe and Central Asia	-0.0281	-0.165	-0.108	0.0902	-0.0333	0.0288	-0.0153
Latin America and Caribbean	0.0895	-0.00774	-0.00529	-0.0987	-0.140	-0.198	-0.0712
Middle East and North Africa	-0.172	0.137	-0.0431	-0.0643	0.113	0.179	0.0447
North America	-0.169	-0.209	-0.198	-0.322	-0.376	-0.402	-0.280
South Asia	0.187	0.111	0.294	0.395	0.382	0.378	0.296
Sub-Saharan Africa	0.00626	-0.0716	-0.0615	-0.0705	-0.0137	-0.0397	-0.0424

Source: Ugurlu and Razmi (2023)

Note: Negative (positive) values indicate overvalued (undervalued) RER

Political Economy Considerations

- Why is the RER more overvalued in Latin America? Any thoughts?
 - Structural reasons?
 - Natural resource endowment
 - Political economy reasons?
 - Import dependence and liability dollarisation making undervaluation undesirable even for export industries
 - Exchange rate populism; desire to tame inflationary pressures
 - Intellectual reasons?
 - ECLAC
 - Belief in elasticity pessimism

New Perspectives on Exchange Rate Policy

- Competing visions of newer forms of Latin American developmentalism
 - Social Developmentalism
 - New Developmentalism
- Fritz et al. (2022), “*Developmentalism at the periphery: addressing global financial asymmetries*”

	Classical Developmentalism	Social Developmentalism	New Developmentalism
Key Strategy /vision	Import Substitution Industrialisation	Structural transformation through income redistribution	Export Oriented Industrialisation
Targets	<ul style="list-style-type: none"> - Expanded domestic markets (through stimulating consumption) - Increased industrial production - Balanced trade 	<ul style="list-style-type: none"> - Reduced inequality - Expanded domestic markets (consumption) - Balanced trade 	<ul style="list-style-type: none"> - Increased industrial production - Trade surplus
Tools	<p>Active Industrial policy through public investment; State-owned enterprises</p> <p>Trade policy: Trade protectionism; Overvalued Real Exchange Rate (RER)</p>	<p>Social policy: income transfers</p> <p>Wage policy: real increases in minimum wage</p> <p>Fiscal policy: Emphasis on social transfers</p> <p>Trade policy: Moderate trade protectionism</p>	<p>Trade policy: Competitive RER policy; Industrial policy for export promotion</p> <p>Fiscal policy: Long-term balance with room for counter-cyclicality; Progressive tax reforms</p>

Source: My elaborations based on Fritz *et al.* (2022)

Concluding remarks

- According to the Thirlwall's BPCGM;
 - increasing the growth rate of exports is key to raising the long run growth rate.
 - policies that increase the income elasticity of export demand or lower the income elasticity of import demand can permit faster growth in the long run.
 - the exchange rate policy is not likely to have a significant impact in the long run.
- Extensions; large empirical literature testing the law; criticisms
- RER has been historically overvalued in L. America. This could partly be explained by 'elasticity pessimism' and the intellectual biases of the L. American structuralist tradition.
- The thinking on the exchange rate policy has been changing.

Thank you!

If you have any other questions, you can email me @
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