Regímenes de Crecimiento, Cambio Estructural y Transformación Social: Uruguay y Suecia entre 1890 y 1939

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The argument: PK and Structuralist models of growth and distribution

- Bhaduri and Marglin (1990) started a conversation on demand-led growth models: wage-led, profit-led, conflictive, but they did not discuss the sustainability of those regimes in open economies
- The Structuralist tradition (Rdríguez 2006) and PK economists (Thirlwall, 2011 and Blecker, 2000) provide more systematic discussion of the role of the external sector, which is the basis of this discussions, especially regrading the transition towards external equilibrium
- Hein (2022) developed a taxonomy of growth regimes looking at the external sector: mercantilism, weak mercantilism, domestic demand-led and debt-led. The possibility of crises and switching regimes is there, but interactions with and implications for income distribution ate not discussed
- We suggest a typology of growth regimes in the long run based on how income distribution and international competitiveness interact
- Model illustrated by the growth trajectories of Sweden and Uruguay

The main argument

- Abramovitz's social capabilities and Gerschenkron's advantages of backwardness
- The social capabilities that will be stressed in our work are equality and human capabilities. These dimensions are central to the ability of a society to absorb technology and change the pattern of specialization, i.e. they are preconditions for reaping the Gerschenkron's benefits of backwardness.
- We will argue that the interaction between structural change and social capabilities may be one of mutual reinforcement or one in which negative feedback prevails. The intensity and direction of these interactions determine the emerging growth regime and its sustainability.

MODEL: SHORT RUN

Short-run output, investment and two types of international competitiveness

$$\boldsymbol{C + I + G + X^{n} = Y = W + R + T}$$

$$\boldsymbol{Y} = \frac{G_0 - a_3 r + vX_0 + X(h,q)}{1 - [c_W(1-\pi)(1-t_W) + c_R\pi(1-t_R) + a_1\pi + a_2] + qm}$$

Consumption and taxes

$$C = C_0 + [c_W(1-\pi)(1-t_W) + c_R\pi(1-t_R)]Y$$
$$T = [t_W(1-\pi) + t_R\pi]Y$$

with $c_W \gg c_R$

Investment

$$I = I_0 + a_1\pi Y + a_2 Y - a_3 r$$

Net exports

$$X^{n} = vX_0 + X(h,q) - qm(h,q)Y$$

Autonomous demand, distribution, the interest rate and external competitiveness jointly determine Y.

Price and systemic competitiveness

- $X^n = vX_0 + X(h,q) - qm(h,q)Y, X_q > 0, X_h > 0, m > 0$
- vX_0 represents exports of natural resources
- $v = \frac{P^{NR}E}{P}$ is the price of the commodity in units of the domestic good, P^{NR} is the price of the natural resource in the international market in US dollars
- E is the nominal exchange rate (the price of the US dollar in units of the domestic currency), and P is the price of the domestic good denominated in the domestic currency
- $X(h,q)$ represents exports of manufactured goods; the parameter m is the economy's propensity to import, which also depends on price and systemic competitiveness.
- systemic competitiveness h: technological intensity and variety of export structure

MODEL: EXTERNAL EQUILIBRIUM

Output consistent with the BOP constraint

$$\boldsymbol{Y^B = [vX_0 + X(h,q)] / [qm(h,q)]}$$

Commodity channel

Higher v or X_0 temporarily relaxes the constraint.

Price channel

A higher q improves trade if Marshall–Lerner holds.

Structural channel

A higher h expands manufactured exports and can reduce import dependence.

$Y > Y^B \Rightarrow$ current-account deficit and mounting adjustment pressure

Real wages and the real exchange rate

- $P = z(\frac{W}{a})$
- W is the nominal wage, $a = Y/L$ is labor productivity (L is total employment) and z is the markup.
- Workers consume imported goods and hence theprice of the workers' consumption basket is $P^C = (P^*E)^m P^{1-m}$
- We assume that workers have the same import propensity m as the economy as a whole. The real wage in terms of the consumption basket of workers will then be:
- $w = \frac{W}{P^C} = \frac{W}{(P^*E)^m P^{1-m}}$
- Since $q = \frac{P^*E}{P} = \frac{P^*E}{z(\frac{W}{a})}$ gives:
- $w = \frac{a}{zq^m}$

MODEL: DISTRIBUTIVE CONFLICT

Bargaining power, conflicting claims and income distribution: real wages depend on employment, institutions…and monopoly power

$$w^T = Y^{w1} N^{-w2} a^{-w3} j^{w4}$$

Y ↑
Tighter labor market strengthens workers.

N ↑
Greater labor supply weakens workers.

a ↑
Higher labor productivity reduces labor demand at given Y.

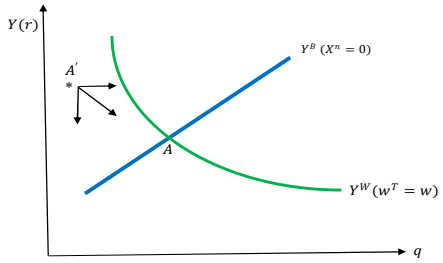
j ↑
Social capabilities and decommodification strengthen bargaining power.

Nominal wages adjust when $w^T \neq w$, moving q toward the workers' target.

Medium-run “equilibrium” (indeed a transitory truce, Caserta and Setterfield)

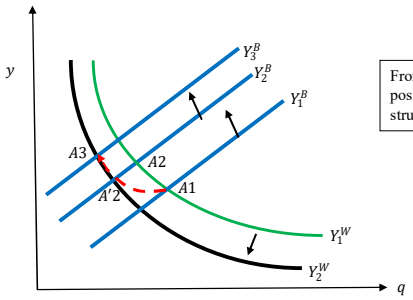
- $\dot{r} = \tilde{\gamma}(Y^B - Y)$: The central bank reacts to a deficit in current account
- $-\hat{q} = \emptyset\left(Y^{w_1}N^{-w_2}a^{-w_3}j^{w_4} - \frac{a}{zq^m}\right)$: When the real wage target is higher tan the effective real wage, wage demands increases, domestic inflation increases and the real exchange rate appreciates
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Figure 1. Equilibrium in the external sector and the labor market



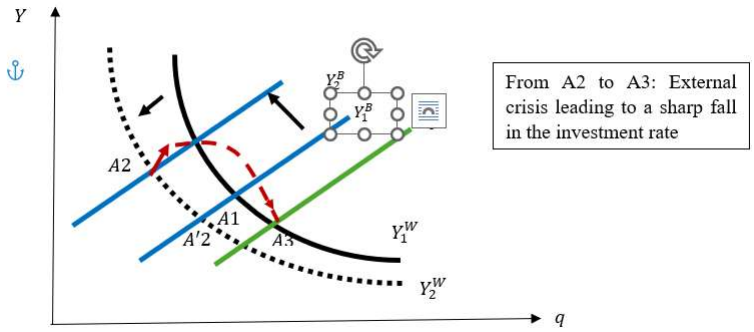
Nordic regime: when structural change and social change go hand in hand

Figure 2. Nordic Regime: a virtuous combination of industrial policies and welfare policies



From A2 to A3: Recurrent positive feedback in social and structural transformation

Truncated regime: truncated welfare state, truncated industrialization



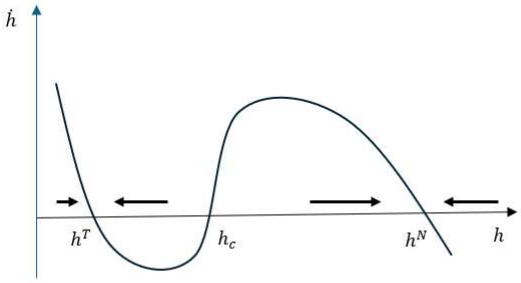
The interaction between productive and social capabilities

- The regime is called truncated because it is limited by two barriers.
- On one hand, the lack of industrial policies and the negative effects of Dutch-disease phenomena (associated with temporary booms in exports of natural resources) lead to what Fernando Fajnzylber called the 'truncated industrialization of Latin America' (Fajnzylber, 1983), a reference to the region's failure to upgrade its technological capabilities.
- On the other hand, there is a "segmented social state" (Filgueira, 2005) or a "truncated welfare state" (Holland, 2018) in the sense that social policies are not comprehensive and protect a relatively small share of the total workforce

Multiple equilibria in structural competitiveness

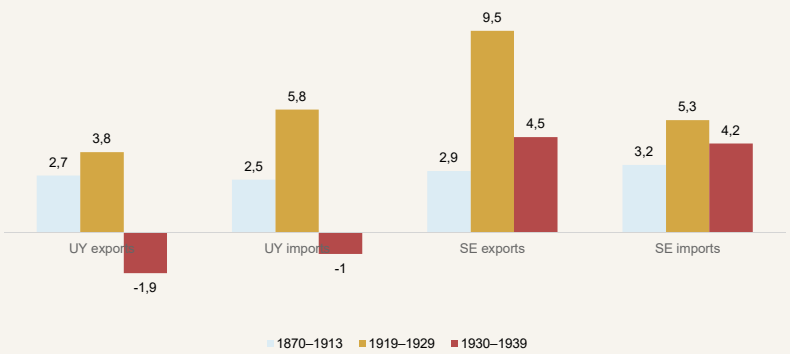
- D.1. $G^*(h) = n_0 + n_1 h - n_2 h^2$
- D.2. $\dot{h} = a_1 L G^* - a_2 h + a_3\, j\, h$
- D.3. $j(G^*) = j_0 + j_1(1 - L)G^*$

Figure D.1. The diagram phase of the structural competitiveness



EVIDENCE: EXPORTS AND IMPORTS

Sweden maintained trade dynamism through the 1930s

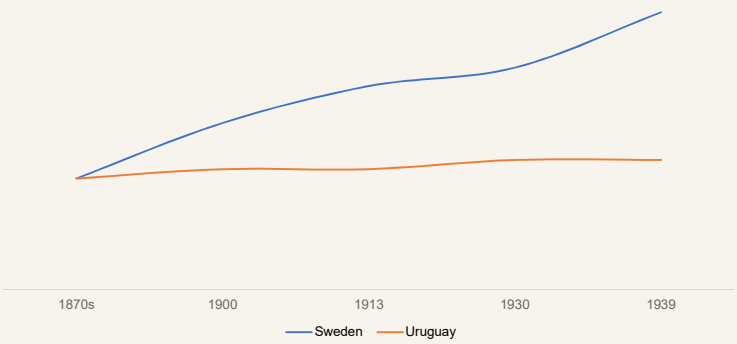


Resilience test

In the 1930s, Swedish exports and imports remained positive; both contracted in Uruguay, with exports falling more sharply.

EVIDENCE: STRUCTURAL CHANGE

Manufacturing became a much larger part of Sweden's economy



Schematic values reconstructed from the paper's Figure 4 and text

Sweden

Manufacturing rose from roughly 12% to 30% of GDP.

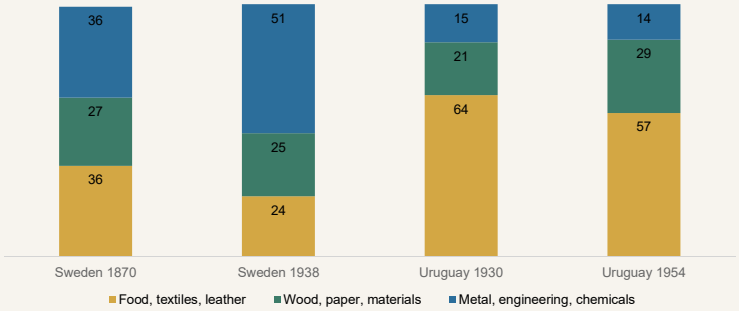
Uruguay

The share remained near 12–14% over most of the period.

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EVIDENCE: INDUSTRIAL COMPOSITION

Sweden diversified toward engineering and chemicals



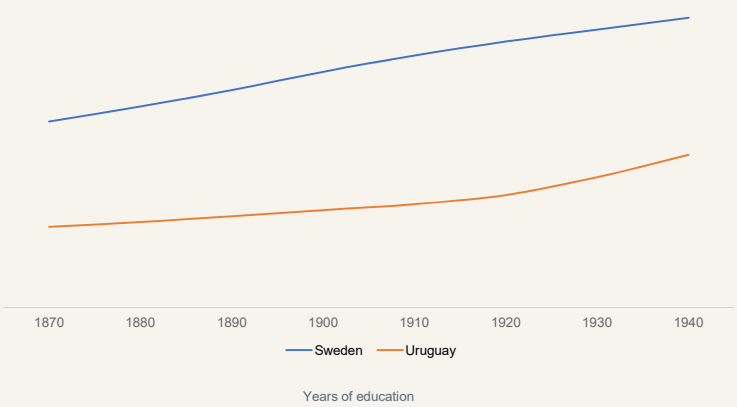
Key contrast

By 1938, metal, engineering and chemicals represented 51% of Swedish manufacturing. Even in 1954, Uruguay's comparable share was only 14%.

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EVIDENCE: SOCIAL CAPABILITIES

Sweden held a persistent lead in education



Average years of education

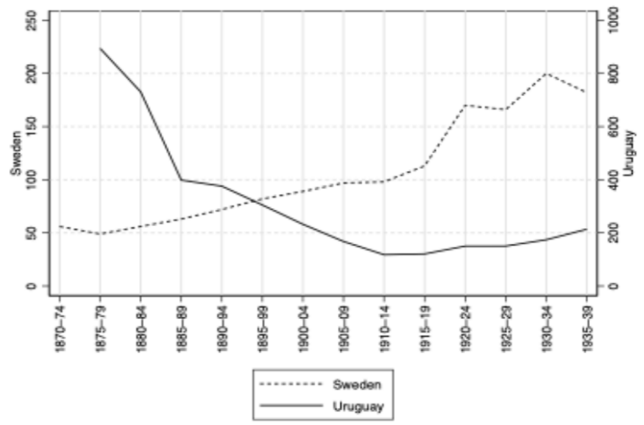
Both improved, but the initial gap remained large. By 1940: Sweden 7.28 years; Uruguay 3.83.

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Gini coefficient in Sweden and Uruguay



The wage/rental ratio



EVIDENCE: DISTRIBUTION AND DEVELOPMENT

Social indicators moved in different directions

INEQUALITY

Sweden's rescaled Gini declined throughout the period. Uruguay's inequality rose sharply in the late nineteenth century and then flattened.

WAGE / LAND RENT

Swedish wages rose faster than land prices. In Uruguay, land prices outpaced wages until World War I.

HUMAN DEVELOPMENT

In 1940 the HDI was 0.344 in Sweden versus 0.231 in Uruguay.

Structural change generated better-paid industrial and office jobs in Sweden.

SYNTHESIS

Two paths from the same peripheral starting point

SWEDEN		URUGUAY
Early social-capability advantage		Concentrated agrarian rents
Industrial diversification		Primary-export persistence
Export resilience	h ⇄ j	Vulnerability to backlash
Inclusive political coalition		Conflict and institutional rupture
Nordic feedback loop		Truncated development trap

Concluding remarks

- The key concern is with the building of social capabilities in a peripheral economy—more specifically, we focus on increasing equality and human capabilities—and its interaction with structural change.
- We consider a short run, a medium run and a long run, which give rise to “transitory” or “conditional” equilibria, driven by different variables: the expansion of income in the short run, changes in the real exchange rate and the real interest rate in the medium run, and changes in social capabilities and specialization in the long run.
- The diversification of the production structure is key to preventing external constraints from hindering economic growth. In the long run, export growth is driven by the political economy that shapes the interplay between structural and social change.