Comments on ECLAC Concept Note

Vanus James, 23/07/2022

1. The basic concern of the Concept Note and its flagship CRF is with the level of indebtedness of Caribbean economies.
2. The CRF is the innovative financing mechanism to support efforts aimed at growing climate resilience and driving down indebtedness in the long run.
3. The comments below consider three matters arising from the Concept Note:
    a. Basic considerations of causation between indebtedness and growth.
    b. The relationship between country competitive strategy and growth.
    c. Implications for the design and implementation of the CRF.

Basic Considerations of Causation

4. Let D be the level of country debt and Y be GDP.
5. Indebtedness is measured as $a_y = \frac{D}{Y}$, so $\frac{da_y}{a_y} = g_d - g_y$, where $g_d = \frac{dD}{D}$ is the rate of growth of debt and $g_y = \frac{dY}{Y}$ is the rate of growth of the economy.
6. The direction of causation between g_y and a_y matters greatly when making policy.
7. Without persuasive evidence, the Concept Note appears to assume causation running from a_y to g_y.
8. However, causation can run in the other direction. Policy interventions reflect what countries deem feasible and achievable, consistent with their obligations to compete for development opportunity in the global marketplace.
9. In particular, with sound policies in place, debt itself can be used to cause $g_y > g_d$ and lower a_y. This is what competitive strategy is all about.
10. To consider the targets of competitive strategy, recall that since Domar (1944)[1] it has been known that the interest cost on debt (i) matters, and that a_y depends on ($g_y - i$) and other key variables that are the subject of policy interventions, specifically: (i) the balance of trade $\left(\varepsilon p_j J - p_x X\right)$; (ii) the primary budget balance ($G - T$); and (iii) the level of seigniorage generated from growth of the money supply, $\frac{dM^s}{dt}$.
11. In particular, it can be shown that, in the long run,

    1. $a_y = \frac{(\varepsilon p_j J - p_x X) + [(G - T) - \frac{dM^s}{dt}]}{(g_y - i)Y}$

12. Equation (1) accounts for causation running from $g_y - i$ to a_y with other policy-sensitive variables playing a role. If competitive strategy can be designed to grow $g_y - i$, grow exports relative to imports, grow revenues relative to expenditure and grow supporting seigniorage, then a_y will necessarily fall and the problem of indebtedness correspondingly addressed.

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[1] Domar, E. (1944). The Burden of Public Debt and National Income. *American Economic Review.* 34 (4). 798–827.

Competitive Strategy and Growth

13. So, what are the core elements of the required strategy?
14. Available empirical evidence suggests that competitive strategy to increase g_y can be identified in the context of global market imperatives.
15. For L the population size, what is required is use of cross-country data to do sound causal modeling of GDP per capita ($y_l = \frac{Y}{L}$) and forecasts of population growth.
16. To proceed, use the other identity:

2. $g_y = g_{y_l} + g_l$

where $g_l = \frac{dL}{L}$ is the rate of population growth.

17. Define the core elements of **integrated** competitive strategy in terms of the foundations of every society:
    a. k_y - the capital share of GDP, the main indicator of the structure of production.
    b. h_y - the quality of institutions, with particular regard to:
        i. The rule of law
        ii. The quality of business regulations
        iii. The business environment
    c. ϕ_y - the level of technology of production.

18. Assuming an underlying multivariate power law for y_l, estimate the following log-linear triangular cross-country model of the outcome of competitive strategy:

3.
$$\ln y_{li} = \alpha_0 + \alpha_1 \ln k_{yi} + \alpha_2 \ln h_{yi} + \alpha_3 \ln \phi_{yi} + u_i$$
$$\ln \phi_{yi} = \beta_0 + \beta_1 \ln q_i + \beta_2 \ln c_i + \beta_3 \ln m_i + v_i$$

where ϕ_y is assumed to be endogenous and is instrumented by
q – the quality of manufactured output.
c – the quality of creative service output
m – the level of development of the market as an instituted process, including the capacity to provide credit to the market.

19. Here, α_1, α_2 and α_3 are elasticities to be estimated. They link the elements of competitive growth strategy, $\frac{dk_y}{k_y}$, $\frac{dh_y}{h_y}$ and $\frac{d\phi}{\phi}$, to $g_y - g_p$.
20. Note too that $\frac{d\phi}{\phi}$ is the measure of the capacity to innovate and bring new solutions to problems thrown up by the marketplace. Development of this capacity in the capital service sectors is a major key to success.
21. Equations (1) to (3) can be treated as a development model that explains how competitiveness and indebtedness are related and that can guide country-level policy design. It is straightforward to add considerations of inflation.

22. Based on data for 128 countries up to 2019, estimates of the parameters of equation (3) developed by James and Hamilton (2022) yield: $\alpha_1 = 2.27$; $\alpha_2 = 1.57$; $\alpha_3 = 1.91$.[2]

23. The fact that the elasticities are individually and collectively greater than 1 is a measure of the enormous competitive advantage in the development process achieved and continuously accumulated by the countries that invest in joint improvement of the strategic factors.

24. The size of the elasticities also indicates the corresponding tendency for the countries that do not invest in the simultaneous improvements of the strategic factors to lose competitive advantage over time.

25. Further, James and Hamilton (2022) used counterfactual (Rubin causal) modeling to show empirically that equation (3) describes a causal process that applies across all countries. So, the growth rates $\frac{dk_y}{k_y}$, $\frac{dh_y}{h_y}$ and $\frac{d\phi}{\phi}$ cause $g_y - g_p$.

26. It can also be shown that competitive strategy drives y_l through productivity, the rate of profit, savings and related reinvestment capacity. It generates growth of $g_y - i$, growth of exports relative to imports, growth of revenues relative to expenditure and supporting growth of seigniorage.

27. Finally, it can be shown that successful implementation of competitive strategy simultaneously drives climate resilience. This is because it drives up innovations, productivity, and savings to validate continuous investment on a scale sufficient to recover quickly from a climate-related shock or the ability to withstand it.

Implications for the Design and Implementation of the CRF

28. The foregoing model has several implications for the approach to the CRF.

29. First, competitive strategy to control the path of a_y should be treated as a substantive complement of the Growth and Competitiveness Window of the CRF.

30. Second, for any partner country, data allowing, annual efforts should be made to forecast g_p, the rate of growth of the population, and then use these with equation (2) to estimate the effect of competitive strategy on g_y based on its effect on g_{y_l} as determined by the estimates of α_1, α_2 and α_3.

31. Data are also available to estimate the impact of targeted investment projects on $\frac{dk_y}{k_y}$, $\frac{dh_y}{h_y}$ and $\frac{d\phi}{\phi}$, and hence on g_y.

32. The effects on a_y can then be projected using equation (1) and available projections of the average cost of debt, the balance of trade, the budget balance and the rate of growth of the money supply.

33. Next, as the Concept Note recognizes, the lender/donor community is reluctant to support policy interventions that actively reduce D as distinct from raising g_y to

[2] Vanus James and Rosalea Hamilton (2022). Strategic Factors in Economic Development Revisited. *Development Essays*, Issue 1, No. 1.

reduce a_y. The general model of international cooperation favoured by international financiers is still extraction and repatriation of surplus, including as interest on debt.

34. In that context, it makes sense for the CRF to be designed to win international collaboration to finance and implement the competitive strategy through projects that drive up g_{y_l} and hence both growth and resilience.

35. The elasticities of equation (3) should be updated annually and used to update the projected growth rates and associated rates of return that emerge from strategic spending on investment projects under the Growth and Competitiveness Window.

36. This should be treated and marketed as the main pillar of the CRF.

37. To get the CRF under way in practice in the pilot countries, country technical (Ministry) staff and external consultants from ECLAC and its international partners should be assigned to:

    a. Design investment projects appropriately scaled under each country's strategy, with the medium-term investment components clearly identified and with outputs, outcomes (including rates of return), impacts (including reduction of indebtedness), and feasibility properly documented. Templates are available for this work.

    b. Market and promote the projects to the international investment community as targets for:

        i. Portfolio investment, including long-term development bonds sold to the Diaspora.

        ii. Regional and foreign direct investment.

38. For the targeted pilot countries, some of the investment projects should focus on development of the capital services sectors to diversify and develop the tourism sector, with medium-term collaborative financing from the Growth and Competitiveness Window of the CRF, as envisaged in some of ECLAC's development projects.

39. There should be a market for such investment projects, since the promised return is profit at a higher rate than can be earned under the high/rising wage conditions currently emerging in North Atlantic labour-scarce countries.

40. On this strategy, the CRF will grow on merit - i.e., based on projects that achieve the targeted profit rate through demonstrated development, productivity, and financial (savings) performance.

41. Performance monitoring and reporting can be achieved through collaboration among the partners.