

# Discussion on 'Public Investment in Resource-Abundant Low Income Countries'

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# A very brief summary;

- Attempts to answer the key question of ‘ how best to utilize natural resource revenues in resource-rich low income countries’.
- Analyzes this question within the framework of a DSGE model featuring a small open economy.
- The model also features a closed capital account; the government cannot borrow but can hold international financial assets.

# A very brief summary cont.

- Two competing policy strategies regarding the use of the resource windfall;

➤ Saving- SWF



➤ Investing in public capital



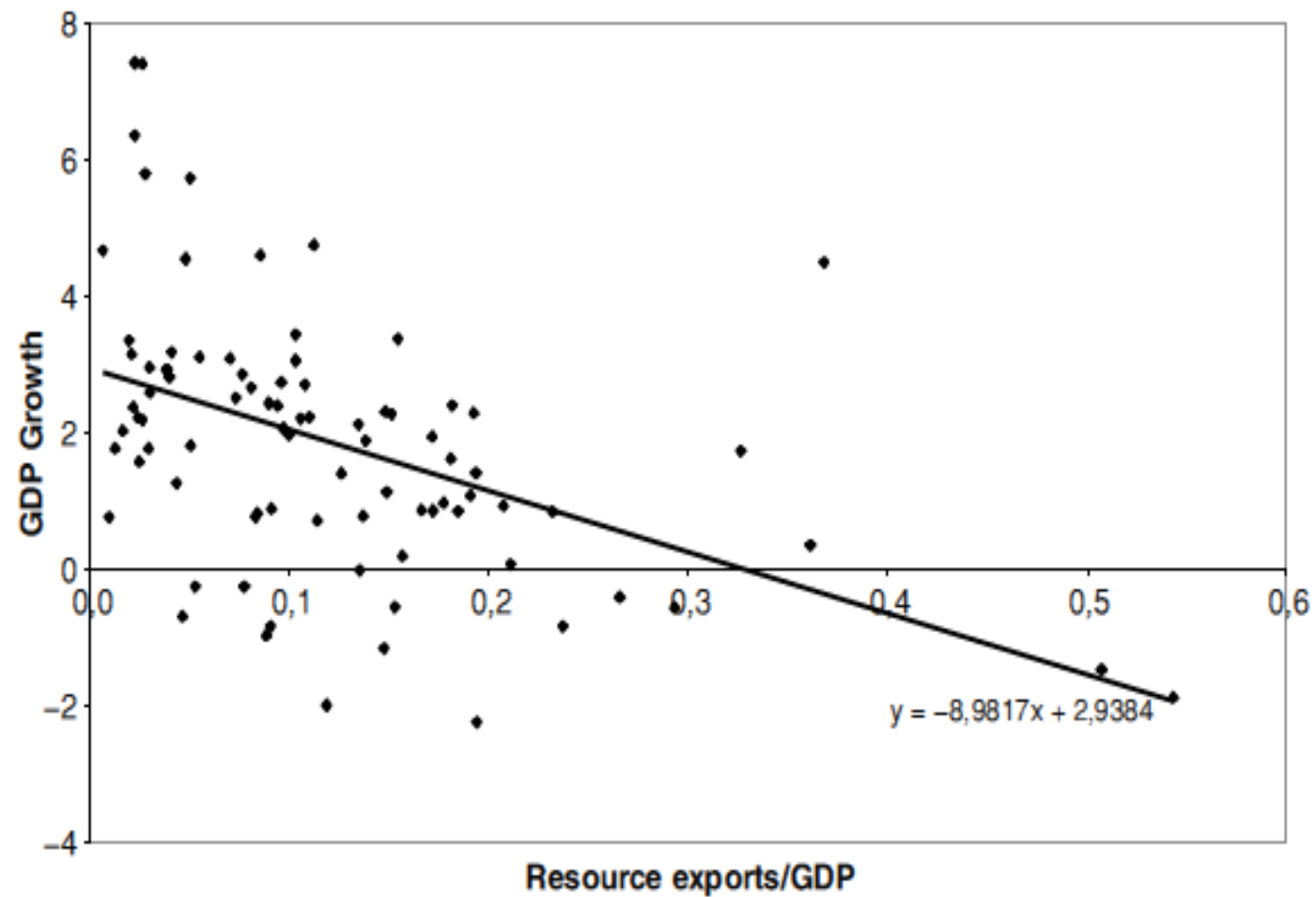
# Why does it matter?

- Over 2000-2005, in **45 countries** mineral and hydrocarbon resources generated more than **25% of exports** or more than **25% of fiscal revenue** (Venables, 2010).
- In **24 countries** resources accounted more than **70 % of exports** and in a further **13 countries 40 % of exports**.
- These magnitudes were even greater following the commodity boom of 2006-2008.
- Windfall revenues matter.

# Why does it matter? cont.

- Natural resources can be a curse as much as a blessing.
- For example, in Nigeria oil revenues per capita rose ten-fold between 1965 and 2000 but income per capita remained the same. Other oil exporters such as Iran, Venezuela and Libya experienced negative growth during the last few decades.
- On the other hand, countries such as Norway and Botswana did much better out of their resource revenues.

**Figure 1:** Resource abundance and growth

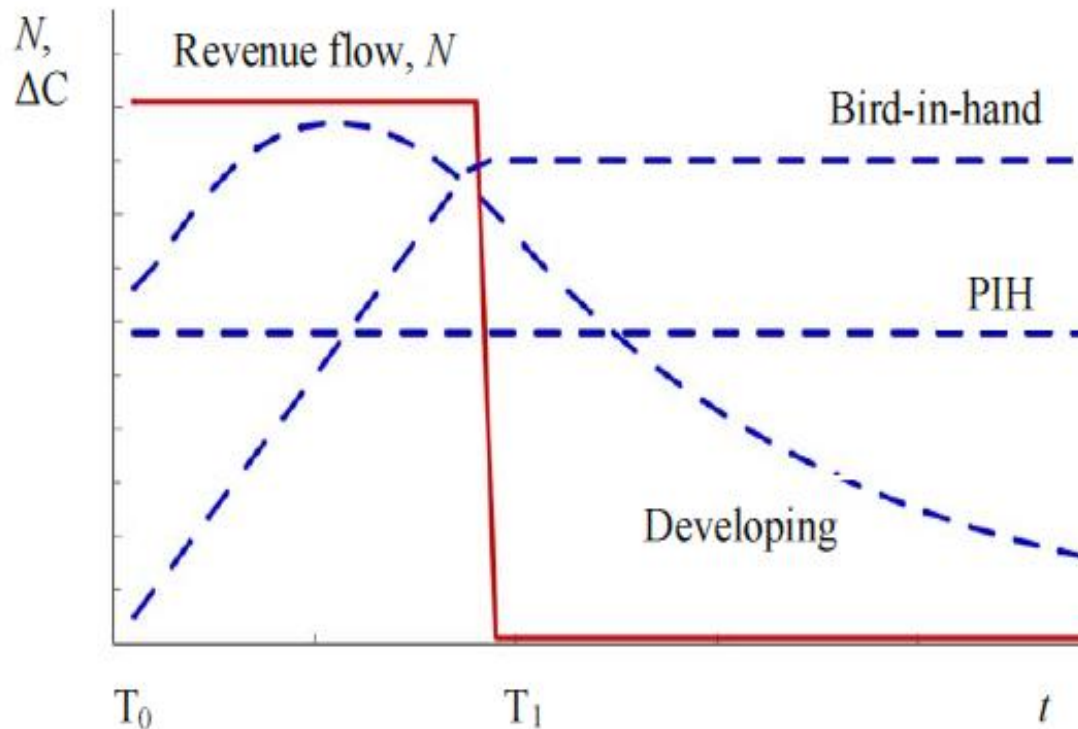


Source: Data used in Mehlum *et al.* (2006).

Thus, more often than not natural resource have been a curse. Why?

- Dutch disease.
- Worse in more volatile countries with bad institutions.
- Resource booms induce rent-grabbing and civil conflict at the expense of more productive activities reducing the total factor productivity.
- Resource rich economies find it difficult to convert their exhaustible resources into productive assets – the focus of this paper.

# How best to use resource windfall revenues?



**Fig. 1.** *Alternative prescriptions; incremental consumption and revenue flow*  
The solid line is the assumed flow of revenue, and dashed lines are the consequent increment to consumption under different policy rules.



# What does the paper add to this?

- SWF → minimum macro volatility, consumption is permanently higher, very slight decline in non-resource output.
- Investing in public capital → macroeconomic responses are large, economy returns to the pre-windfall steady-state. Public capital increases, raises the productivity of private capital, consumption increases much more than under SWF but temporarily. However, traded good sector shows symptoms of the Dutch disease. Negative labour response (wealth effect).
- Overall, 'capital-scarce' countries are better off going for public investment to improve the living conditions of the current generation.

# Are these results robust?

- No, the welfare ranking is driven by the productivity of public investment versus the return to domestic and foreign assets.
- The superiority of investing in public capital is largely driven by rate of return on public capital as well as absorptive capacity constraints (determining effective investment - proper project evaluation crucial).
- Unless public capital is very productive, investment strategy only generate short-term effects.

# A hybrid formulation- sustainable investment approach

- An investment fund to store part of the windfall to finance the recurrent costs of public investment.
- Converts resource wealth into permanently higher capital stock.
- Dutch disease relieved.
- Consumption is permanently higher.
- Better than both SWF/ investing in public capital **BUT the productivity of public capital is still key driver of the rankings.**

# Issues/questions?

- Are there any policies adopted in practice that mimics the formulation suggested here?
- Political feasibility of the sustainable investment strategy – discretion versus commitment?
- Uncertainty regarding the life of resource extraction ?
- What if the non-resource income is used to maintain public investment?

# Issues/questions? cont.

- Why does the change in the proportion of credit-constrained consumers not alter the results?
- Why does it take very long to observe the full consequences of a windfall in almost all simulations?
- Country-specific nature of the problem. What is appropriate for a capital-scarce country is unlikely to be appropriate for a capital-abundant one.