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**Fiscal Policies of Commodity Exporters
and the Role of Fiscal Rules and Resource Funds**

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Overview

- Part I: Fiscal Policies of Oil-Exporting Countries
 - Challenges posed by resource revenues to fiscal management
 - Oil prices
 - Overall fiscal balances during the 2003-08 boom
 - Use of increased oil revenue during the boom
 - The fiscal stance during the 2009 downturn
 - Cyclicity of fiscal policy
- Part II: Fiscal Rules and Resource Funds
 - Fiscal rules: design and performance
 - Resource funds: design and performance



Part I
Recent Fiscal Policies
of Oil-Exporting Countries

The Management of Fiscal Revenue from Nonrenewable Resources (1)

- Dependence on resource revenues poses challenges to fiscal policy.
 - Resource revenues are highly volatile and uncertain => fiscal management, budget planning, efficiency
 - They largely originate from abroad => macroeconomic stability, competitiveness
 - The underlying natural resources are exhaustible => long-term fiscal sustainability and intergenerational welfare

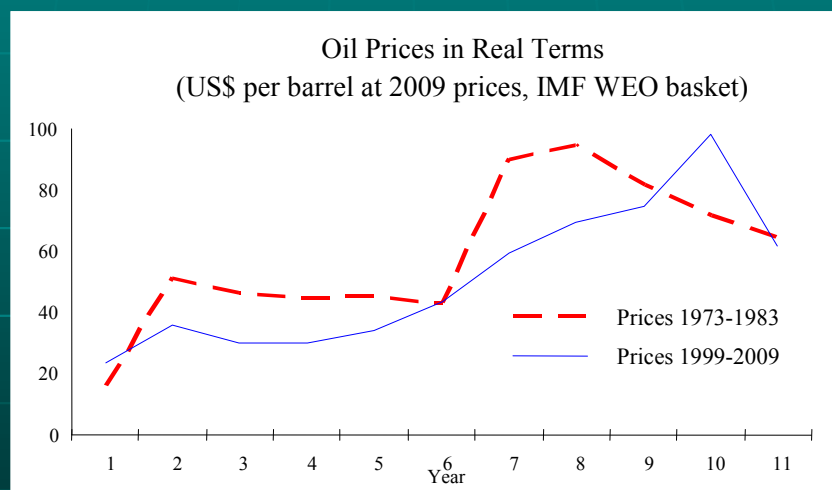
The Management of Fiscal Revenue from Nonrenewable Resources (2)

- Macroeconomic and fiscal arguments for decoupling public spending from volatile and uncertain resource revenues in the short term.
 - Macroeconomic: volatility and long-term growth
 - Fiscal management:
 - Large fluctuations in public spending can affect the quality and efficiency of spending
 - Expenditure programs are difficult to contain/streamline following expansions
 - Increases in spending can raise fiscal vulnerability (the nonresource fiscal position is more exposed to resource price falls)

Recent Studies of Fiscal Policies of Nonrenewable Resource Exporters

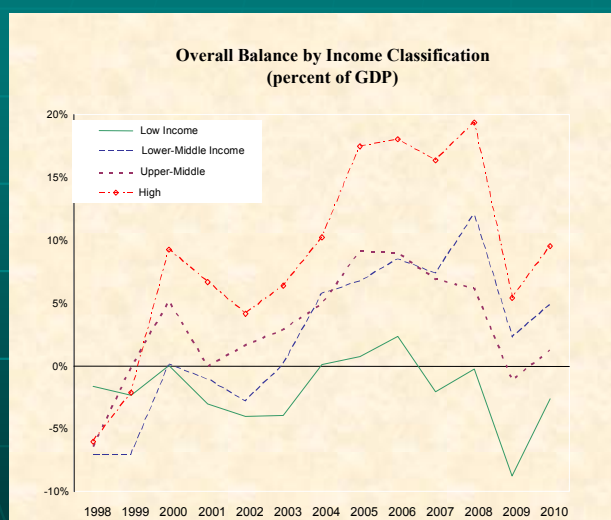
- Villafuerte and López Murphy (2010): 31 oil-exporting countries (OECs) from around the world
- Villafuerte, López Murphy and Ossowski (2010): 7 Latin American nonrenewable resource-exporting countries (RECs)
- Sturm, Gurtner and González Alegre (2009): 4 major OECs in EU neighbouring regions
- York and Zhan (2009): 8 African OECs.

Oil Prices: Comparing Two Cycles (1999-2009 and 1973-1983)



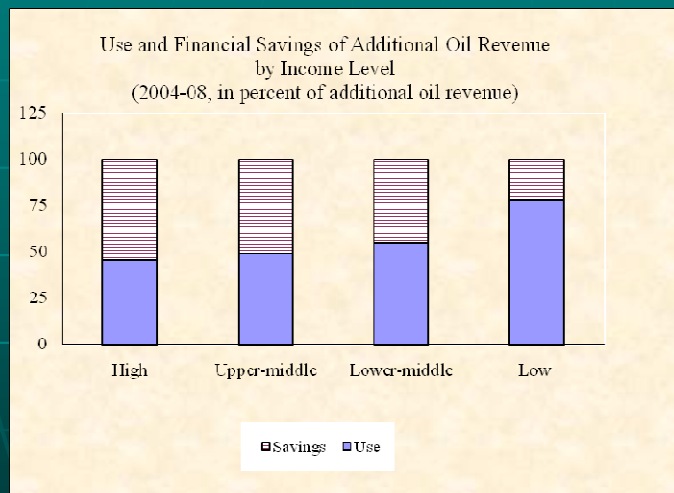
- Overall oil price increase in real terms of similar magnitude in both booms.
- But increase in oil prices during the 2000s more gradual and sustained.

Overall Fiscal Balances of OECs during the Boom



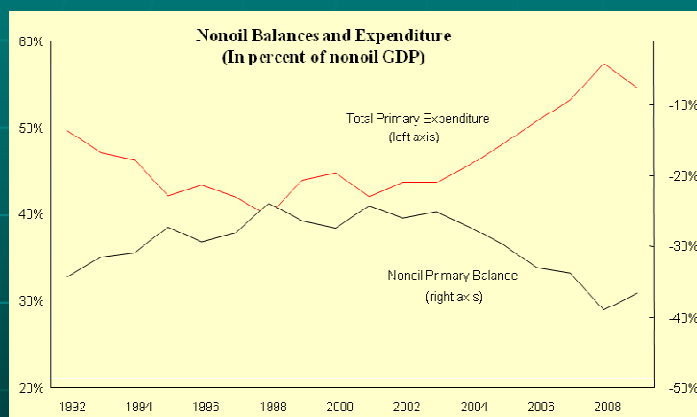
- Most countries improved their overall fiscal positions. They reduced public debt and accumulated financial assets.
- High-income countries had the largest improvements in fiscal balances and recorded the largest surpluses.
- Low-income countries barely improved their fiscal positions and recorded overall deficits during part of the period.

Use of Increased Oil Revenue during the Boom



- Governments “used” on average about half of the oil revenue windfall during the boom, in the form of higher nonoil deficits. The other half was saved in the form of reductions of the public debt and/or accumulation of financial assets.
- Use of the windfall was negatively correlated with income levels.
 - On average, the rate of use of the oil revenue windfall was lowest among high-income countries, and highest among low-income countries.

Higher Nonoil Deficits and Spending during the Boom



- The average nonoil primary deficit increased sharply since 2004. The larger nonoil deficits are explained by higher primary spending.
- The increase in primary spending in real terms accelerated in the latter years of the boom.
- Increases in capital expenditure were an important factor in many countries.
- But in low-income countries the key driving factor was current spending.
 - In many low- and lower-middle income OPCs, indices of government effectiveness are rather low, and hence the quality of spending may be an issue.

The Fiscal Stance during the 2009 Downturn

- In 2009 oil prices fell by a third and the world economy moved into recession.
- Overall fiscal balances deteriorated markedly in OPCs.
 - In about half of the countries in the sample, the fiscal position moved from surplus to deficit.
- But important differences across country income levels:
 - High-income countries *expanded* their nonoil deficits despite the fall in oil revenues. Many had accumulated substantial financial assets during the boom.
 - Low- and lower-middle income countries *contracted* their nonoil deficits through reductions in spending. Lack of financing was a key factor. A number of these countries were running overall deficits before the crisis and their net asset positions at the onset of the crisis were precarious.

Fiscal Policy of OECs over the Economic Cycle

- Fiscal policies in OPCs were generally procyclical during the economic cycle.
 - This finding arises from an analysis of the cyclically-adjusted nonoil balance and changes in the nonoil output gap.
- On average, the lower the income level of countries, the higher the degree of fiscal policy procyclicality.
 - High-income countries conducted an expansionary fiscal policy during the boom, and the stance of their fiscal policies was neutral on average in 2009.
 - Fiscal policy in low- and lower-middle income countries was significantly procyclical during the boom and in 2009, when a number of countries implemented negative fiscal impulses.



Part II

Fiscal Rules and Resource Funds

Fiscal Rules (1)

- Fiscal rules (FRs): standing commitments to specified numerical targets in some key fiscal aggregates.
- Use of FRs in RECs has been limited. Design has varied greatly.
- Fiscal indicators targeted under FRs in RECs:
 - Overall balance (Canadian Province of Alberta, Indonesia, Mexico, Peru)
 - Current balance (Venezuela)
 - Structural balance adjusted for nonrenewable resource prices (Chile)
 - Nonresource balance (Azerbaijan, Ecuador, Timor-Leste)
 - Structural nonresource balance (Norway)
 - Expenditure (rate of growth or level) (Chad, Ecuador, Equatorial Guinea, Peru, Venezuela)
 - Public debt ratio to GDP (Alberta, Ecuador, Venezuela)

Fiscal Rules (2)

- Few econometric studies of the effectiveness of FRs in RECs.
 - Ossowski et al (2008): no statistically significant impact of FRs on fiscal policy in OECs. Rather, liquidity conditions seem to be the key factor shaping fiscal policies.
 - Arezki and Ismail (2010): little impact of FRs on reducing the increase of current spending during booms, but effect on reducing capital spending during downturns.

Fiscal Rules (3)

- In some RECs, FRs may have contributed to more prudent fiscal policies. But the design and implementation of FRs has been challenging for many RECs:
 - It's proved difficult to set up FRs that can withstand the uncertainty and volatility of resource revenue and changing economic environments.
 - Political economy of spending resource rents: consensus and political commitment to the rules sometimes lacking.
 - Preconditions such as sound PFM, fiscal transparency, and monitoring and enforcement procedures have often not been there.
- In many RECs, FRs have been changed over time, sometimes frequently. There have been recurrent compliance problems. In some cases the FRs have been suspended, ignored, or were abolished.

Fiscal Rules (4)

- Experience during the boom 2003-08 and the slump in 2009.
 - With abundant liquidity during the boom, some FRs were tested by the political economy of spending as expenditure pressures mounted. Some FRs were weakened, not complied with, not implemented, or ignored. Others were observed but they allowed procyclical fiscal responses as revenues surged.
 - The downturn also put pressure on FRs in RECs. Several FRs were modified or suspended.

Fiscal Rules (5)

- Tentative lessons for FR design and implementation in RECs.
 - The overall balance is not a good candidate for targeting under a FR. It's procyclical and transmits resource volatility to fiscal policy.
 - Better to target the nonresource balance. Decouples fiscal policy from resource revenues in the short run. If the initial fiscal position is weak, the target should incorporate feedback loops from the debt or the overall balance.
 - If technical capacity exists, the nonresource balance adjusted for the nonresource cycle could be targeted.
 - The target must take into account long-term fiscal sustainability and vulnerability to resource shocks.
 - Important to incorporate some flexibility and escape clauses.
 - Need strong PFM and fiscal transparency.
 - Consensus and political commitment to the rule are key.

Resource Funds (1)

- In response to the challenges that resource revenues pose to fiscal management, many RECs have established resource funds (RFs).
- Unlike FRs, RFs do not place formal restrictions on overall fiscal policy.
- Most RFs have rigid operational rules that are often motivated by political economy considerations.
 - Stabilization funds: typically rigid *contingent* accumulation and withdrawal rules. Trigger price or revenue levels are specified.
 - Savings funds: typically rigid *noncontingent* accumulation rules. Shares of revenue or types of revenue are specified.
 - Some funds combine stabilization and savings objectives.

Resource Funds (2)

- Evidence on the effectiveness of RFs with rigid rules is mixed.
 - Difficulties in specifying/implementing financially and politically sustainable RF rules. What should the cut-off resource price be? How much should be put into a savings fund year in and year out? Political pressures can become overwhelming.
 - Sometimes difficult to achieve consistency between the operations mandated by RF rules and overall fiscal policy/asset management.
 - In a number of cases, rigid RF rules have been changed, bypassed, suspended, or the RF was abolished.
 - Money is fungible!
- Financing funds – RFs with built-in flexibility – do not try to “discipline” spending. Very few such funds (Norway, Chile), but they have worked better.

Thank you

References

- Mauricio Villafuerte and Pablo López-Murphy, *Fiscal Policy in Oil Producing Countries During the Recent Economic Cycle* (IMF Working Paper WP/10/28, 2010)
- Mauricio Villafuerte, Pablo López-Murphy and Rolando Ossowski, *Riding the Roller Coaster: Fiscal Policies of Nonrenewable Resource Exporters in Latin America and the Caribbean* (IMF Working Paper WP/10/251, 2010)
- Rolando Ossowski, Mauricio Villafuerte, Paulo Medas and Theo Thomas, *Managing the Oil Revenue Boom: The Role of Fiscal Institutions* (IMF Occasional Paper 260, 2008)
- Teresa Ter-Minassian, *Preconditions for a Successful Introduction of Structural Fiscal Balance-Based Rules in Latin America and the Caribbean*, unpublished manuscript