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# Managing Resource Revenues in Developing Economies

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## Notes

1. Democracy and resource rents also appear to interact badly ([Collier and Hoeffler, 2009](#)). Democracies with no natural resource rents tend to grow more rapidly than autocracies, resource-rich democracies grow more slowly than autocracies. The degree of electoral competition determines the process by which a government acquires power, whereas the number of checks and

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4. An implication of this result is sometimes known as the [Hartwick \(1977\)](#) rule. Saving the whole of the revenue from a depletable asset will (if there is no population growth or technical change) results in a constant path of consumption, that is, intertemporal egalitarianism.
5. And if  $r^D=r^*$  we return to the world of the permanent income hypothesis.
6. Only if the resource discovery is very large will it also be optimal to build up a permanent savings fund which will be smaller than under the permanent income hypothesis.
7. This section draws on [Commission on Growth Development \(2008\)](#).

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11. They let the welfare loss of public spending be given by a quadratic, so that marginal benefit of spending declines and beyond a certain level (say, 40 percent of nonoil GDP) becomes negative.
12. If the interest rate and rate of time preferences are zero and the utility function displays constant absolute risk aversion, then a back of the envelope calculation shows that the optimal share of windfall revenue to save is  $\varepsilon v^2/2$ , where  $\varepsilon$  is the coefficient of relative risk aversion and  $v$  the coefficient of variation of oil prices. The 95 percent confidence interval for the predicted oil prices of [Hamilton \(2008\)](#) suggest mean oil price of \$137 per barrel and a standard deviation of \$37.5, so that  $v=0.27$  over a one-year period. Given that a reasonable range for  $\varepsilon$  is 1–2, it is optimal to save between 3.75 and 7.5 percent of the windfall. If the windfall is expected to last much longer

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\*Paul Collier, Rick van der Ploeg, and Anthony J. Venables are professors of economics at the University of Oxford. Michael Spence is a professor of economics at Stanford University and a Nobel Laureate in Economics. This paper was supported by the BP funded Oxford Centre for the Analysis of Resource Rich Economies and by the Centre for the Study of African Economies. The authors thank Rolando Ossowski for sharing his data on fiscal policies and hydrocarbon revenues with us, and thank Nicolas van de Sijpe for his able research assistance.

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