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MACRO POLICY RESPONSES TO NATURAL RESOURCE WINDFALLS AND THE CRASH IN COMMODITY PRICES

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Abstract

Policy prescriptions for managing natural resource windfalls are based on the permanent income hypothesis: none of the windfall is invested at home and saving in an intergenerational SWF is dictated by smoothing consumption across different generations. Furthermore, with Dutch disease effects the optimal response is to intertemporally smooth the real exchange rate, smooth public and private consumption, and limit sharp fluctuations in the intersectoral allocation of production factors. We show that these prescriptions need to be modified for the following reasons. First, to cope with volatile commodity prices precautionary buffers should be put in a stabilisation fund. Second, with imperfect access to capital markets the windfall must be used to curb capital scarcity, invest domestically and bring consumption forward. Third, with real wage rigidity consumption must also be brought forward to mitigate transient unemployment. Fourth, the real exchange rate has to temporarily appreciate to signal the need to invest in the domestic economy to gradually improve the ability to absorb the extra spending from the windfall. Fifth, with finite lives the timing of handing back the windfall to the private sector matters and consumption and the real exchange rate will be volatile. Finally, with nominal wage rigidity we show that a Taylor rule is a better short-run response to a crash in commodity prices than a nominal exchange rate peg.

Keywords: Dutch disease, permanent income, volatility, capital scarcity, domestic investment, absorption constraints, overlapping generations, nominal wage rigidity

JEL codes: E60, F34, F35, F43, H21, H63, O11, Q33

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