**Policy brief**
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# The twin deficits hypothesis in developing countries

## Empirical evidence for Ghana

## In brief

- The Ghanaian economy has for years been characterized by both fiscal and current account deficits. While the increasing fiscal deficit is attributed to government's inability to raise sufficient revenue internally to finance its expenditure, the increasing current account deficit is often attributed to the rising oil import bill.
- This project investigated whether Ghana's fiscal deficit has contributed significantly to its current account deficit. If so, what are the likely implications of such a relationship for macroeconomic stability and sustained economic growth?
- In trying to answer these questions, researchers find that fiscal deficit improves the current account deficit. Further evidence indicates that an increase in domestic interest rate and real income improves the current account deficit.
- From a policy oriented point of view, this research presents a case for (i) increased government spending on productive sectors of the economy for net employment benefits and (ii) tax cuts (incentives) to private sector firms, particularly the export oriented ones.

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## Policy motivation

The issue of whether the long-run relationship between fiscal and current account deficits follow the tenets of the twin deficits hypothesis, the Ricardian equivalence, or the twin divergence hypothesis, has in recent years become debatable both in developed and, mainly, in developing countries. This debate has arisen because persistent fiscal and current account deficits, if unattended, could serve as a deterrent to prospective foreign investors and donors to the country. Deficits paint a gloomy picture about the state of the economy, which may eventually affect its growth performance.

Ghana is a typical developing country worth mentioning with regard to the simultaneous occurrence of persistent fiscal and current account deficits. While the increasing fiscal deficit is attributed to government's inability to raise sufficient revenue internally to finance its expenditure, the increasing current account deficit is often attributed to the rising oil import bill. As a result of the country's deteriorating fiscal strength and huge debt, international rating agencies such as Standard and Poor's, Fitch Ratings, and Moody's Investors Service have in recent times downgraded the country's credit rating (worthiness).

In considering this topic for Ghana, the likely research questions worth investigating are whether Ghana's fiscal deficit has contributed significantly to its current account deficit. If so what are the likely implications of such a relationship, if any or otherwise, for macroeconomic stability and sustained economic growth?

In trying to answer these questions, this research employed relatively novel estimation techniques, namely co-integration techniques with allowance for structural break.

## Key findings

Contrary to the assertion of the twin deficits hypothesis, the results of this research reveal a significant negative long-run relationship between fiscal and current account deficits. The results lend support to the twin divergence hypothesis and indicate that an increase in fiscal deficit improves the current account deficit. This outcome is not surprising as empirically, evidence for the twin divergence hypothesis have been found by several authors for developing countries.

*'The results of this research reveal a significant negative long-run relationship between fiscal and current account deficits'*

As the government of Ghana is well noted to finance its fiscal deficit largely through domestic borrowing, a probable reason for this outcome might be due to an investment- crowding out effect. In borrowing from the domestic market, the government competes with the private sector for scarce financial resources. This leads to an increase in the domestic interest rate, which even though stimulates private saving, crowds out private investment. The reduction in private investment and the resulting increase in private saving leads to a fall in aggregate demand, which includes the demand for foreign (imported) goods. The reduction in the demand for imported goods leads to an improvement in the current account deficit.

The study also found:

- An increase in domestic interest rate and real income has a significant long-run negative impact on the current account deficit. This result indicates that

an increase in domestic interest rate and real income improves the current account deficit.

- Because the current account deficit is matched by equal net capital inflows, an increase in domestic interest rate would have implied a surge in capital inflows and worsening of the current account deficit.
- Likewise, because most of the capital and consumable goods in Ghana are imported, an increase in real income would have implied increased imports of these goods and worsening of the current account deficit. The outcome of this research however indicates otherwise.
- These results might be explained by the impact an increase in domestic interest rate has on private consumption and investment, instead of foreign capital inflows and the impact the consumption-smoothing role of the current account balance has on private saving.
- Generally speaking, interest rate in Ghana is noted to be very high. High interest rate implies a high cost of borrowing, which discourages investment. This outcome leads to a fall in aggregate demand, which includes the demand for foreign imported goods.
- An increase in domestic interest rate de-motivates people from borrowing to fund current private consumption. Since a very large component of goods consumed in Ghana is imported, a reduction in private consumption would imply an improvement in the current account deficit.
- Within the framework of the inter-temporal approach to the balance of payments, the current account balance plays a consumption-smoothing role and acts as a buffer against transitory changes in domestic productivity and hence, income levels.
- While the growth in productivity increases exports, it reduces consumption in households and heightens their saving rate in anticipation of a slump in future levels of domestic income.

## Policy implications

The findings of this research provide important policy implications the Ministry of Finance and Economic Planning, the Ministry of Trade and Industry, and the Bank of Ghana may consider in their policy reforms.

As the findings of this research have shown, an increase in fiscal deficit improves the current account deficit. Does it necessarily mean that government should continuously increase fiscal deficit to eliminate the current account deficit? Given the potential ills that this action might create for the economy in the long run, especially when it comes to financing the deficit, this option may not be ideal if seen as a long-term policy.

*'It will instead be wise for policymakers to focus on addressing the impact of the current account deficit on net employment'*

However, given the implications fiscal and current account deficits have for economic prosperity of developing countries, it will instead be wise for policymakers to focus on addressing the impact of the current account deficit on net employment (i.e., the difference between jobs lost from trade deficit and jobs created from foreign capital inflows). This is crucial as the net employment effect may not favour the Ghanaian economy, which is import dependent. Jobs created from foreign capital inflows may not necessarily match job losses from export competing firms as workers get displaced by increased imports and closure of these domestic firms.

With these effects in mind, reducing the fiscal deficit may not necessarily resolve the current account deficit problem as wealth is transferred to foreigners with repercussions for future generations.

A case is therefore made for increased government spending, if and only if it is seen as a short-run phenomenon, and the purpose is to spend on productive sectors of the economy for net employment benefits, and tax cuts (incentives) to private sector firms, particularly export-oriented ones that aim at expanding their businesses by creating jobs for Ghanaians. All other things being equal, government, by lowering taxes, ends up running fiscal deficits without necessarily increasing its spending.

The former policy option could be achieved through:

- The provision of infrastructure (transportation, telecommunication, health, education, etc.) relevant for growth and development,
- A conducive business environment for private sector development given the potential crowding out effect of real interest rate increases – particularly if the recent increases in the policy rate by the Bank of Ghana is to achieve the intended purpose, and
- The facilitation of trade (particularly exports) to boost the exports performance and trade revenues of the country.

The third policy option could be achieved through policies that target export-oriented firms, aimed at expanding their businesses by creating jobs for Ghanaians. The resultant tax cuts will boost private sector investment, improve the country's external competiveness as these firms correspondingly reduce the final price of their products, and eventually raise both domestic and foreign demand for locally produced goods and services.

As private sector investment, employment and exports improve, it is envisaged that, these policies if effectively implemented will go a long way to reduce the domestic hardships caused by the worsening of the current account deficit and improve the country's external trade position over time.

## Further reading

Abell, J. (1990), "Twin Deficits during the 1980s: An Empirical Investigation", *Journal of Macroeconomics*, 12:81-96.

Holmes, M. J. (2010), "A reassessment of the Twin Deficits Relationship", *Applied Economics Letters,* 17(12): 1209-1212.

Alam, K. J., Ghosh, B. C., Islam, S. and Hossain, E. (2014), "Empirical Analysis of Twins' Deficits in Bangladesh", *Journal of Humanities and Social Science*, 19(1): 65-72.

Algieri, B. (2013), "An Empirical Analysis of the nexus between External Balance and Government Budget Balance: The case of the GIIPS Countries", *Economic Systems* 37:233–253.