

The effectiveness of fiscal policy
in Australia - selected issues

By Comley, B. Anthony, S. and Ferguson, B.

Outline

- Background
- Brief summary
- Main points & findings
- Conclusion
- Strengths & Weaknesses

Background

- Australian fiscal policy is based on a medium-term framework designed to ensure budget balance over the cycle
- The paper does not attempt to ascertain the total effectiveness of fiscal policy
- It focuses on private sector saving offsets and interest rate effects which may reduce the effectiveness of policy

Brief summary

- This article examines the appropriate use of fiscal policy in the presence of private savings and interest rate offsets.
- Fiscal policy and Savings offsets
 - Ricardian equivalence
- Fiscal policy and interest rates
 - Conventional view of the effect of fiscal policy

Main points & findings

- In “fiscal policy and savings offset” section
 - Testing Ricardian equivalence:
 - private savings & government savings
 - 1. private savings offset of around 1/3 to short-term changes in general government savings.
 - 2. Long-term statistically relationship could not be established between the two variables

Evidence

Table 1: Results from basic private savings model

Dependent variable: D private saving: 1981:1 - 2001:2

| | Coefficient (t statistic) | L.T. Coefficient ^(a) (t statistic) |
|---|---------------------------------|--|
| Explanatory variables: Short run | | |
| Constant | 6.43 (4.82) | |
| D Unemployment _t | -1.19 (-3.83) | |
| D Deregulation _t | -0.03 (-4.84) | |
| D Government saving _t | -0.34 (-3.36) | |
| Explanatory variables: Long run | | |
| Private saving _{t-1} | -0.5 (-5.30) | |
| Deregulation _{t-1} | -0.003 (-4.14) | -0.006 |
| Government saving _{t-1} | -0.08 (-1.08) ^(b) | -0.16 |
| Major diagnostics | | |
| | R-Bar-Squared | 0.59 |
| | DW Stat | 2.35 |

(a) The long-term coefficients in the table above are calculated by dividing the coefficients for the relevant variables by the coefficient on the error correction term (lagged value of the dependent variable).

(b) Redundant variable test for the inclusion of GS_{t-1}: F statistic = 1.18 Prob = 0.281, Log Likelihood Ratio = 1.279 Prob = 0.258

- In “fiscal policy and savings offset” section
 - Testing: are Structural or Cyclical changes more pronounced?
 - 1. Structural changes aimed at influencing aggregate demand are likely to be offset somewhat by private sector savings responses.
 - 2. Cyclical changes is unlikely to provoke private savings offsets
 - => Cyclical changes are more pronounced.

Evidence

Table 2: Results from disaggregated government model

| Dependent variable: D private saving: 1981:1 - 2001:2 | | |
|---|---------------------------------|--|
| | Coefficient (t statistic) | L.T. Coefficient ^(a) (t statistic) |
| Explanatory variables: Short run | | |
| Constant | 7.8 (5.21) | |
| D Unemployment _t | -0.82 (-2.10) | |
| D Deregulation _t | -0.03 (-4.37) | |
| D National government structural saving _t | -0.35 (-3.29) | |
| D National government cyclical saving _t | 0.92 ^(b) (1.33) | |
| D State & local government saving _t | -0.33 (-2.07) | |
| Explanatory variables: Long run | | |
| Private saving _{t-1} | -0.68 (-6.18) | |
| Deregulation _{t-1} | -0.004 (-4.48) | -0.01 |
| National government structural saving _{t-1} | -0.27 (-2.44) | -0.40 |
| National government cyclical saving _{t-1} | 0.73 (-2.06) | 1.07 |
| State & local government saving _{t-1} | -0.19 ^(b) (-1.01) | -0.28 |
| Major diagnostics | | |
| | R-Bar-Squared | 0.59 |
| | DW Stat | 2.14 |

Main points & findings

- In “fiscal policy and interest rates” section
- 1. For the long-term levels component the fiscal stock variable (for example, stock of public debt) and real GDP growth were large enough to suggest there may exist a ‘meaningful’ relationship between these variables and the interest margin.
- 2. For the short-term changes component, only the fiscal flow variables (for example headline balance or structural balance) were statistically significant.

Evidence

Table 3: Interest margin model

| Dependent variable: D 10-year bond real interest margin 1985: 1 - 2001:2 | | |
|--|--|--|
| | Simple model (HB) Coefficient (<i>t</i> statistic) | Simple model (SB) Coefficient (<i>t</i> statistic) |
| Explanatory variables: | | |
| Short run | | |
| Constant | -0.265 (1.09) | -0.279 (1.17) |
| D Interest margin _{t-1} | -0.327 (2.35) | 0.296 (2.16) |
| D Structural balance _t | | -0.319 (2.96) |
| D Headline balance _t | -0.200 (2.64) | |
| Explanatory variables: | | |
| Long run | | |
| Interest margin _{t-1} | -0.407 (3.68) | -0.395 (3.63) |
| Public debt _{t-1} | 0.059 (2.83) | 0.060 (2.92) |
| Inflation _{t-1} | 0.145 0.041 ^(b) (1.81) | 0.152 0.042 ^(c) (1.85) |
| Real GDP growth _{t-1} | 0.101 -0.125 (2.74) | 0.106 -0.116 (2.55) |
| Current account _{t-1} | -0.307 -0.071 ^(b) (1.67) | -0.294 -0.062 ^(c) (1.48) |
| | -0.174 | -0.157 |
| R-bar-squared | 0.22 | 0.24 |
| DW stat | 1.91 | 2.21 |

Conclusion

- Based on above finding:
 - Private sector savings offsets effect and
 - Increasing interest rates in response to higher budget deficits
- it can conclude - fiscal policy is less effective

Strengths

- Enough evidence to prove the existence of a substantial private savings offset.

Weaknesses

- Coefficients belong to an era of higher debt, lack low debt discussion.