THE MACROECONOMIC IMPACT OF IMF-SUPPORTED PROGRAMMES IN SMALL OPEN ECONOMIES: THE CASE OF BARBADOS

By

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STRUCTURE

- Introduction
- Literature Review
- Macroeconomic Trends & Performance
- Model Specification
- Results & Discussion
- Summary & Conclusion

INTRODUCTION

- IMF plays an important role in international financial affairs, particularly in providing support to countries experiencing macroeconomic imbalances
- The conditionalities imposed on the countries caused much hardship and often fail to achieve their intended objective
- Barbados' own economic circumstances have forced it to use Fund resources on three occasions, in 1977, 1982-84 and 1992-93

LITERATURE REVIEW

- No consensus has been reached with respect to whether fund-supported programmes improve or worsen the economic conditions of its recipients
- There is little agreement in the profession about how to measure the macroeconomic effects of fund-supported programmes
- Compare the macroeconomic performance under the programme to the macroeconomic performance that would have occurred in the absence of the programme, known as the ‘counterfactual’ (see Guiti 1981).

LITERATURE REVIEW CONT'D

- Before-after approach - compares the macroeconomic performance before and during the programme
- With-without approach - compares the macroeconomic performance of countries with the programme to the performance of countries without the programme
- Actual-versus-target approach - compares the actual macroeconomic performance with its pre-defined (targeted) performance

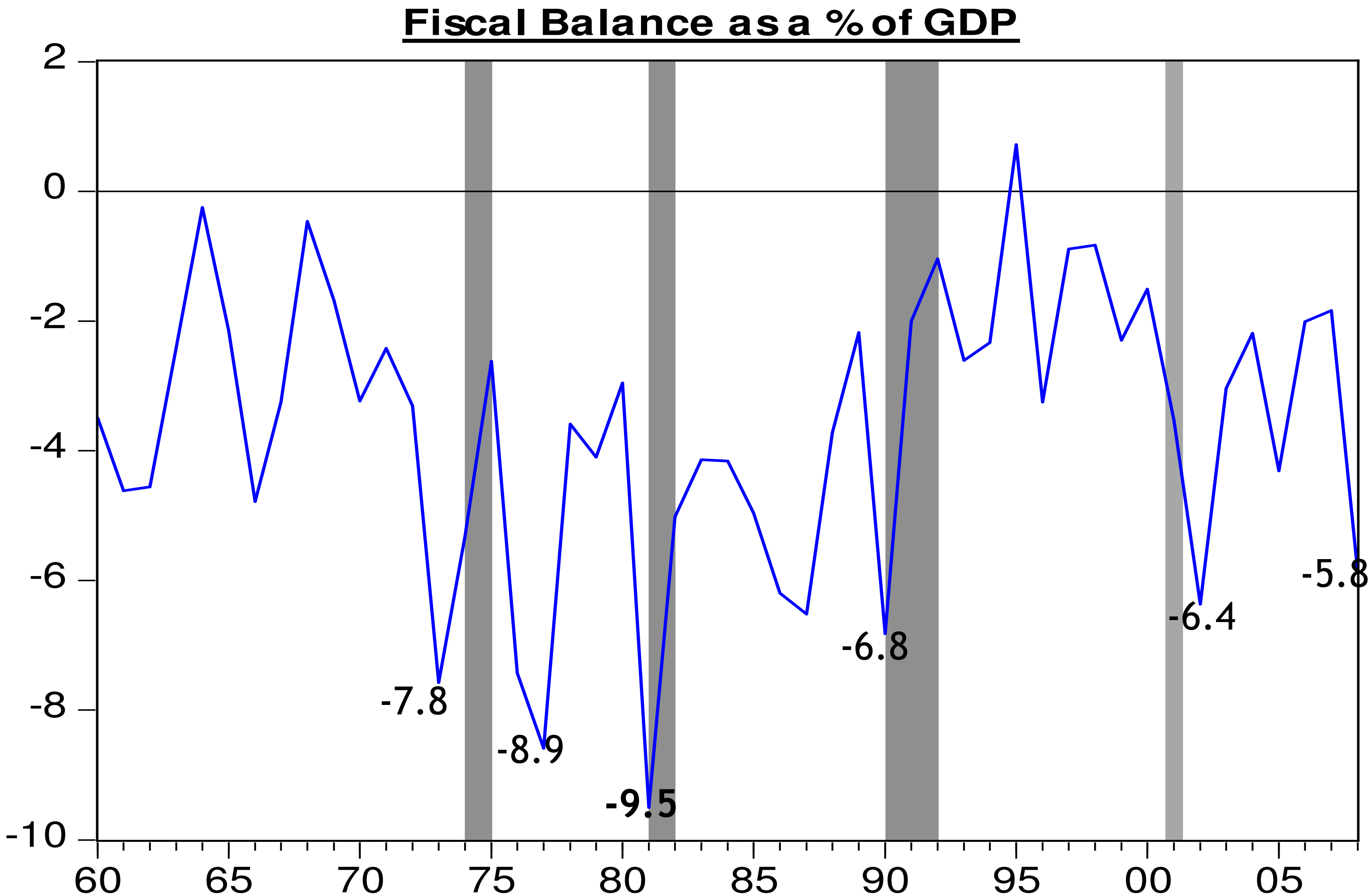
LITERATURE REVIEW CONT'D

- Comparison-of-simulations approach - compares the simulated performance of the fund-supported programme with the simulated performance of alternative policy packages
- Generalised evaluation approach - establishes a link between the targeted variables, external variables and the programme with the view of estimating the direct effect of the fund-supported programme

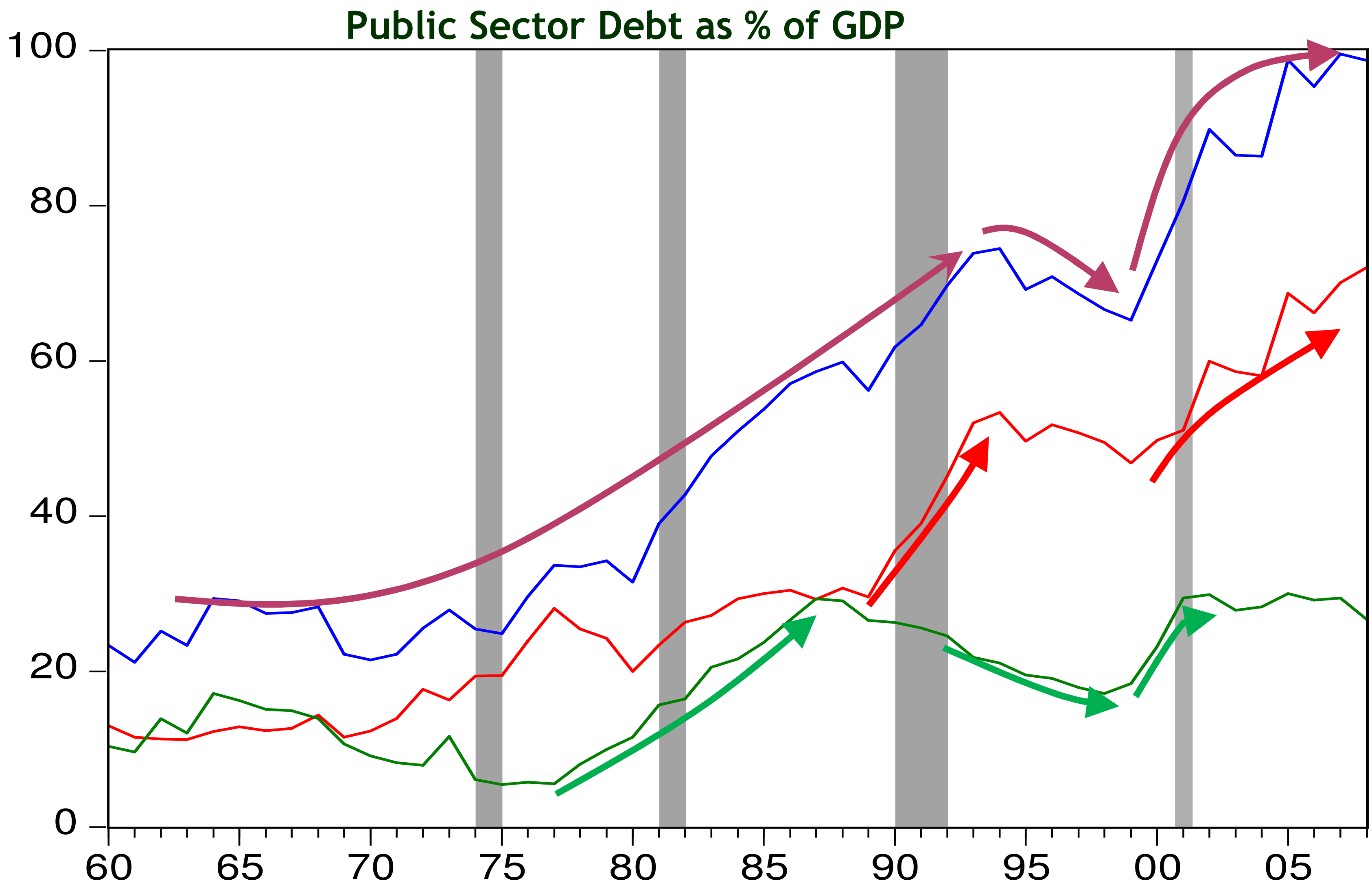
LITERATURE REVIEW CONT'D

Author	Approach	Period	Sample	Findings
Connors (1979)	Before-After Approach	1973-77	31 programmes in 23 countries	• Fund-supported programmes had negligible effects on final growth, inflation and current account deficit targets or on intermediate targets such as the fiscal deficit to gross domestic product (GDP) ratio
Gylfason (1987)	With-Without Approach	1977-79	78 programmes	• Balance of payments and current account positions of the programme countries improved relative to the control group in both time horizons (one and three-year). • The increase in inflation in programme countries remained half that of the control group during the one-year comparison and dropped to a third of the control group's in the three-year comparisons. • The rate of GDP growth for programme countries fell by more than the average decline for the control group in the one-year comparisons but by less in the three-year comparison period.
Goldstein and Montiel (1986)	Generalised-Evaluation Approach	1974-81	68 fund-supported 58 developing countries	• No improvement in the current account • A larger deterioration in the balance of payments • Increased inflationary pressures • A decline in growth rates.

MACROECONOMIC TRENDS



MACROECONOMIC TRENDS



MACROECONOMIC TRENDS CONT'D

- 1983 -1990
  - Inflationary pressures were more subdued,
  - Growth averaged approximately 4%
  - The balance of payments pressures that had persisted throughout the mid to the late 1980s, in part due to continued fiscal expansion
  - Increased fiscal deficits were increasingly been financed via Central Bank accommodation

MACROECONOMIC TRENDS CONT'D

- 1991-1992 Recession
  - Government implemented an eighteen-month stabilization programme during the fourth quarter of 1991 with the support of the IMF

  Objective:
    - Improve current account through reductions in the fiscal deficit and private sector credit

MACROECONOMIC TRENDS CONT'D

Fiscal:

- decrease in the wages bill of all public sector entities
- a cut-back in spending on capital projects
- lower transfers to statutory corporations
- increased taxation

Monetary:

- monetary policy was tightened
  - the Central Bank's discount rate was raised
  - commercial banks were required to hold a higher proportion of deposits in government securities
  - global credit limits were imposed on commercial banks but the ceiling on the banks' average lending rate was removed

MODEL SPECIFICATION

- Generalised evaluation approach was used
  - attempts to estimate the effect of policy, exogenous shocks and other variables on specific macroeconomic targets taking into account how policies would have evolved in the absence of the programme.
  - As such, the model includes a reaction function to account for differences between targeted and actual outcomes.

MODEL SPECIFICATION CONT'D

Targeted Variable

Foreign Exogenous Variables

Error Term

$$y_i = \beta_1 + \beta_2 x_{it} + \beta_3 w_{it} + \beta^{IMF} d_t + \varepsilon_t$$

Vector of Policy Instruments

Dummy

MODEL SPECIFICATION CONT'D

Policy Instrument

$$\Delta x_i = \gamma\left[y_i^d - y_{i-1}\right] + \eta_i$$

Desired Value of Target Variable

Actual Value of Target Variable

MODEL SPECIFICATION CONT'D

Targeted Variable

Actual Value of Policy Instrument

Foreign Exogenous Variables

$$\Delta y_{it} = \beta_{0i} - (\gamma\beta_2 + 1) y_{t-1} + \beta_2 x_{t-1} + \beta_3 w + \beta^{IMF} d + (\varepsilon_t + \beta_2 \eta)$$

Actual Value of Targeted Variable

Dummy

Error Term

MODEL SPECIFICATION CONT'D

Targeted Variable

DC
REEF
FD/Y

TOT
Trend

$$\Delta y_{it} = \beta_{0i} - (\gamma\beta_2 + 1)y_{t-1} + \beta_2 x_{t-1} + \beta_3 w + \beta^{IMF} d + (\varepsilon_t + \beta_2 \eta)$$

BOP
CA
Π
g

Dummy

Error Term

RESULTS & DISCUSSION

	$\Delta(BOP/Y)$	$\Delta(CA/Y)$	$\Delta(\pi)$	$\Delta(g)$
Constant	-2.705 (-0.816)	0.624 (0.145)	0.7769 (0.197)	4.289* (1.879)
$(BOP/Y)_{t-1}$	-0.320* (-1.789)	-0.151 (-0.642)	0.024 (0.178)	0.500* (1.789)
$(CA/Y)_{t-1}$	-0.389** (-2.223)	0.273* (1.783)	0.120 (0.774)	0.103 (0.650)
π_{t-1}	0.035 (0.222)	0.251* (1.989)	-0.657*** (-6.853)	-0.272*** (-2.988)
g_{t-1}	0.069 (0.300)	0.287 (1.489)	0.597** (2.324)	-0.655*** (-4.093)
ΔDC_{t-1}	-0.021** (-0.182)	-0.175 (-1.198)	0.201** (2.779)	0.051 (0.624)
$REER_{t-1}$	-0.148** (-2.435)	-0.296*** (-3.814)	0.066 (0.863)	0.148* (1.846)
$(FD/Y)_{t-1}$	0.493 (1.354)	0.844** (2.119)	0.115 (0.521)	-0.380* (-1.637)
TOT_{t-1}	-0.630** (2.098)	-0.643*** (-2.998)	0.332*** (-2.929)	-0.268 (-1.279)
Trend	0.377** (2.078)	0.541*** (3.186)	-0.166 (-0.877)	-0.387** (-2.478)
Fund Dummy	1.783 (0.851)	3.813** (2.541)	2.913* (1.809)	0.221** (2.897)
Dummy	-12.141*** (-3.864) *2004*			-9.043*** (-5.768) 2001
R^2	0.728	0.803	0.800	0.717
DW	2.03	1.98	1.93	2.05
AR	0.456[0.639]	0.181[0.835]	0.125[0.883]	0.576[0.571]
RESET	0.308[0.584]	0.739[0.400]	0.142[0.709]	0.414[0.527]
Norm	1.340[0.512]	0.028[0.986]	0.646[0.724]	0.811[0.667]
ARCH	0.251[0.621]	0.209[0.653]	0.427[0.521]	0.010[0.920]
HET	0.459[0.898]	0.209[0.994]	0.400[0.929]	0.133[0.998]

SUMMARY & CONCLUSIONS

- The overall programme appeared to have been successful in laying the foundation for sustained growth within an environment of stable prices, especially in the immediate decade or so after the implementation of the 1992 programme
- The stabilisation programme did impact a measure of stability to the macro-economic variables examined
- Careful attention must be paid to the steadily increasing fiscal deficit and the accompanying increase in the public debt to GDP ratio

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THANK YOU