

Determinants of Targeted and Actual Fiscal Adjustment

This annex presents details of regression analyses that underlay some of the results discussed in Chapter 4. The regressions were based on data from 88 new arrangements approved by the IMF under either the ESAF or the PRGF during 1995–2003; 47 of the arrangements were approved as ESAFs and the rest as PRGFs.

Methodology

In order to examine the relative importance of various factors in the setting of targets for fiscal adjustment in ESAF- and PRGF-supported programs, we estimated a regression model of the size of the targeted change in the government balance excluding grants, over the first and first two years of the program—that is, changes between $T-1$ and T , and between $T-1$ and $T+1$, respectively. We used the following as regressors: (i) the initial level of the government balance [$g_{bal}(T-1)$]; (ii) the targeted change in the external current account balance [Δcab]; (iii) the initial level of grants in the government budget [grants ($T-1$)]; (iv) the projected change in the level of grants [$\Delta grants$]; and (v) projected growth [$growth$].¹

We postulated a two-way relationship between targeted fiscal adjustment and targeted external cur-

rent account adjustment, and employed two-stage least squares (with robust standard errors) to account for the endogeneity of the targeted change in the external current account.

We replicated the regressions using outturn data in place of targeted/projected data in order to compare the determinants of targeted and actual fiscal adjustment.

Results

We obtained broadly similar results for targeted fiscal adjustment under ESAFs and PRGFs over a two-year horizon: the targeted magnitude of fiscal adjustment was inversely related to the initial level of the fiscal balance and to the projected change in the level of grants (top half of Table A7.1). Specifically, over the two-year horizon, the targeted fiscal adjustment reflected a near-halving of the initial fiscal deficit and a full adjustment to projected change in the availability of grants.

The estimations using outturn data indicated significant influence of the initial fiscal balance and change in the level of grants as determinants of actual fiscal adjustment, but only for the initial program year of ESAFs (bottom half of Table A7.1). The limited number of observations for outturns under the PRGF suggest caution in interpreting the results for the PRGF, but the influence of the initial level of fiscal balance is no longer significant.

¹All variables were measured as ratios to GDP, except growth, which was measured in percent a year.

Table A7.1. Determinants of Targeted and Actual Fiscal Adjustment in ESAFs and PRGFs

	ESAFs		PRGFs	
	Horizon <i>T</i>	Horizon <i>T+1</i>	Horizon <i>T</i>	Horizon <i>T+1</i>
Dependent variable: targeted fiscal adjustment				
Constant	-1.60*	-2.6	0.56	2.53
<i>gbal (T-1)</i>	-0.25**	-0.46***	-0.29	-0.52**
Δcab	0.33	0.32*	0.52	0.22
$\Delta grants$	-0.43**	-0.98**	-1.04*	-1.11***
<i>grants (T-1)</i>	-0.16	-0.51**	-0.43	0.65
<i>growth (T)</i>	0.19	-0.08	-0.08	0.48
<i>growth (T+1)</i>		0.47		-0.96
N	44	43	40	39
Dependent variable: actual fiscal adjustment				
Constant	-1.6**	-1.97	-5.15	-6.37
<i>gbal (T-1)</i>	-0.32**	-0.14	-0.60	-0.31
Δcab	-0.13	-0.36	1.02	0.89
$\Delta grants$	-0.46**	-0.52	1.23	0.32
<i>grants (T-1)</i>	-0.27	-0.11	-0.20	0.46
<i>growth (T)</i>	0.13	-0.06	0.14	0.14
<i>growth (T+1)</i>		0.29		0.29*
N	45	45	32	23

Note: The asterisks denote levels of statistical significance: * = 10 percent, ** = 5 percent, and *** = 1 percent.