ANNEX

9 Additional Information on Links Between the FSAP and IMF-Supported Programs

This annex presents further details on the econometric evidence on the links between FSAPs and IMF-supported programs, discussed in Chapter 5, section on "Links with IMF-Supported Programs," of the main report.

The analysis examined the relationship between FSAPs and the total number of program conditions (prior actions, structural performance criteria, and benchmarks) on financial sector issues for all programs approved between 1995 and 2003. There were 93 programs approved over the period, of which 23 had FSAPs undertaken up to two years prior to the start of the program. This time frame was chosen to capture the notion that at least some of the FSAP's finding become dated after a few years and hence the relevance to guide program design on financial sector issues wanes over time.

FSAPs have been undertaken both in countries with relatively sound financial systems and countries whose financial systems would require significant reforms to improve their soundness and foster their development. To help distinguish between different types of countries, we use an index of financial liberalization. This index was developed by the IMF Research Department and it attempts to capture the extent of distortions in the operating framework of financial systems by assessing various characteristics (e.g., government-mandated credit allocation regulations, banking sector entry barriers).[1] The value of the index is normalized to the [0, 1] range, with 0 being a fully repressed system and 1 a fully liberalized system. Some properties of the data are presented in Table A9.1.

The econometric results are presented in Table A9.2. They show that both the FSAP and the combined variable FSAP*FSLI are statistically significant at the 90th percentile. In principle, having an FSAP would tend to increase the number of program conditions on financial sector issues. However, this effect would decline, and could in fact be reversed for those countries whose financial systems are less distorted. In other words, the fact that a country has undertaken an FSAP tends to result in one or more structural conditions in subsequent programs for countries with

[1]See Abiad and Mody (2003) for an explanation on a precursor to the index used in the regression reported in Table 2. The financial liberalization index covers such issues as the extent of free determination of interest rates, credit allocation by intermediaries, and entry barriers, certain features of the regulatory and supervisory frameworks, and capital account transactions regulations.

Table A9.1. FSAPs, Financial Liberalization, and Program Conditionality: Data Properties

	Number of Program Conditions[1]		Financial Sector Liberalization Index[2]	
	All programs	Of which: with FSAPs[3]	All programs	Of which: with FSAPs[3]
Maximum	48	20	0.90	0.90
Minimum	0	0	0.05	0.42
Mean	9.33	6.52	0.59	0.65
Median	6	4	0.61	0.61
75th percentile	13	10	0.72	0.77
Number of observations	93	23	93	23

Source: Internal IMF database (MONA).
[1]Number of program conditions on financial sector areas.
[2]Value of the index in the year preceding the start of the program.
[3]Data attributes for which there is both an FSAP and a value for the financial sector liberalization index.

Table A9.2. FSAPs, Financial Liberalization, and Program Conditionality: Estimation Results

Number of Program Conditions[1]	Coefficient	Robust Standard Error	z	P> |z|	[95 Percent	Confidence Interval]
FSLI[2]	0.54	0.72	0.76	0.448	–0.86	1.96
FSAP	1.39	0.77	1.81	0.070	–0.11	2.90
FSAP*FSLI	–2.99	1.29	–2.32	0.020	–5.51	–0.46
Constant	2.01	0.42	4.73	0.000	1.18	2.84

Poisson regression	Wald $Chi^2(3) = 8.4$	Pseudo $R^2 = 0.042$
Number of observations = 93	Prob > $Chi^2 = 0.039$	

Source: IEO staff calculations.
[1]Number of program conditions on financial sector areas.
[2]Financial sector liberalization index = FSLI.

highly repressed financial systems, whereas there is no increase in structural conditionality following an FSAP in countries with more liberalized systems; indeed, for countries that already have open financial systems with few distortions, a previous FSAP is associated with fewer structural conditions. This could be interpreted as reflecting the fact that, in such circumstances, the FSAP contributes to greater understanding of the financial system and judgments that structural conditionality is not warranted.