of TA provided through regional TA centers, TA in AML/CFT, and TA in support of countries undergoing trade reform.

27. A series of initiatives have been taken individually by functional departments (Appendix 1, Tables A1.1—A1.4) to make the process of departmental TA allocation more strategic and to improve tracking during delivery. Various functional departments created department-specific monitoring systems, undertook a number of in-depth evaluations, produced numerous country strategy papers or briefs, and adopted more systematic internal procedures to identify TA needs and allocate TA resources.

#### 3. TRENDS AND PATTERNS IN THE ALLOCATION OF TA RESOURCES

28. In this chapter, we analyze major trends and patterns in the allocation of TA resources as defined by different accounting systems and definitions within the institution. We look at the FY1998–2004 period, for which consistent and comparable data on TA inputs can be obtained. We examine first the evolution of aggregate TA resources, and then identify patterns according to functional departments, regional groupings, and policy initiatives (as defined by the IMF's TA Policy Statement). We also explore the factors that determine the allocation of TA among and within countries.

### A. TA Resources at the Aggregate Level

- 29. How many resources (both external and internal) have been devoted to TA as a share of the IMF's total administrative expenditures? To address this question we looked at alternative measures of TA resources.
- 30. The narrowest definition focuses exclusively on time spent in the field (in the respective country) by functional department TA missions, by TA resident experts, and by experts working from regional TA centers. This is based on the TIMS database.
- 31. A broader definition also includes time at headquarters devoted to backstopping resident experts, to preparing TA missions, papers, and reports, as well as the direct administrative and management time to support TA activities. This is the Budget Reporting System (BRS) concept of resource costs, or the direct cost of TA activities.
- 32. Finally, the broadest definition includes also a pro rata allocation of the fixed costs of the administrative and management departments of the IMF, other than those providing TA. We refer to this as the "direct plus allocated fixed cost" definition.
- 33. Table 1 shows the resources devoted to TA in FY2004 using these three definitions, including the external training activities of the INS. Under the broadest definition, TA amounts to 23 percent of the total IMF administrative budget, compared with 12 percent if the fixed costs of the rest of the institution are not included. Field work resources are equal to 7 percent of the budget.

34. How have these magnitudes evolved over time? Figure 3.1 shows trends from FY1998 for which comparable data are available. After peaking in FY1999, resources devoted to TA stabilized as a share of the total budget during the last four years. The FY1999 peak is largely explained by a significant increase in TA activities associated with IMF-supported programs in the context of the 1997–99 capital account crises.

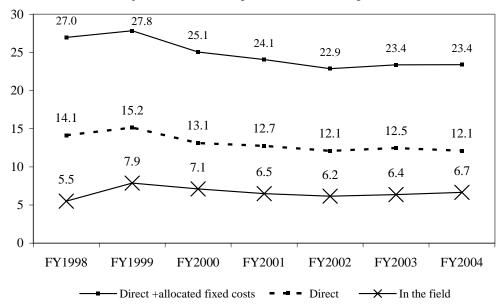
Table 3.1. TA Budget in FY2004 1/

	Person- Years	In Millions of U.S. Dollars	Percent of IMF Administrative Budget
Broadest definition (direct plus allocated fixed costs)	709	189	23
Direct costs (BRS)	367	98	12
Field activity only (TIMS)	201	54	7
Memorandum item:			
Total gross administrative budget	3,032	806	100

Sources: OTM and BRS.

1/ INS is included. Without the INS, the BRS and TIMS dollar amounts are equivalent to \$80 million and \$49 million, respectively.

Figure 3.1. TA Budget (In percent of total Fund's gross administrative budget)



Sources: OTM and BRS.

# **B.** Overall Resources Used by the Functional Departments

35. Figure 3.2 shows that after a temporary decline, the volume of direct TA services measured in staff years has increased. This is largely explained by an increase in externally-financed TA, which today represents over 30 percent of total TA resources (BRS definition). IMF-financed TA in these departments has declined slightly due to a shift in resources toward surveillance activities, such as ROSCs and FSAPs (not included in the definition of TA), but this decline has been more than offset by the increase in externally-financed TA.<sup>16</sup>

350 301 296 290 278 300 277 271 102 250 90 75 73 90 79 200 150 206 204 203 200 199 100 192 50 0 FY1999 FY2000 FY2003 FY2001 FY2002 FY2004

Figure 3.2. Direct TA Services Delivered by Source of Funding, Excluding INS (BRS Concept) (In person-years)

### C. Distribution of TA by Per Capita Income Level and Region

■ Externally financed

36. Overall IMF TA is concentrated in low-income countries (Table 3.2). About 90 percent of TA is provided to countries with less than \$3,000 per capita income. About 71 percent is allocated to countries with less than \$1,000 per capita income, and about 65 percent goes to PRGF-eligible countries.

■ IMF financed

Source: OTM.

<sup>16</sup> International Monetary Fund, "Supplement to the Review of Technical Assistance," (2004f).

<sup>17</sup> Table 3.2 shows the distribution of TA field activities to countries by per capita income groups. If the functional departments' TA activities in headquarters are distributed to countries in proportion to TA field activities (not an unreasonable assumption), the table would also show the distribution of the direct cost of the TA (or the BRS concept, defined above).

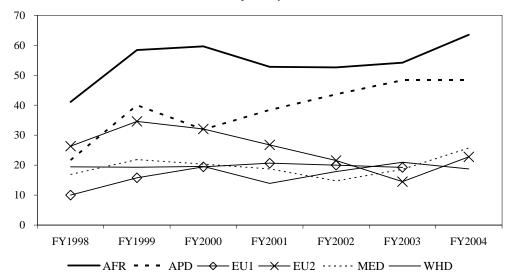
Table 3.2. Allocation of TA by Country Grouping According to Per Capita Income (FY2002–03 average)

Per Capita Income Groups (GNI Per Capita 2002, Atlas Method World Bank)	Percentage Distribution of TA in the Field 1/		
Less than \$1,000	70.9		
\$1,000–\$2,000	13.8		
\$2,001–\$3,000	5.5		
\$3,001–\$4,000	1.5		
\$4,001–\$5,000	2.3		
\$5,001–\$7,000	1.0		
\$7,001–\$9,000	1.3		
More than \$9,000	3.7		
Total	100.0		
Memorandum item: Share of TA to PRGF-eligible countries	65.0		

1/ TA delivered to the regional technical centers, regional organizations (including regional central banks in Africa), and countries without GNI figures (such as post-conflict economies), is included in the less than \$1,000 group.

37. Figures 3.3 and 3.4 show regional trends and the concentration of TA field activities. Africa and Asia Pacific are the regions receiving most TA, accounting for about 60 percent of the total TA. Not surprisingly, 9 out of the 14 largest TA recipients were located in these two regions.

Figure 3.3. TA by Regions, Excluding INS 1/ (In person-years)



Source: OTM.

1/ TA delivered in the field including regional centers.

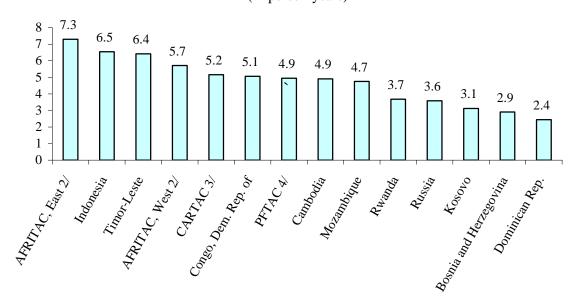


Figure 3.4. Main Recipients of TA in FY2004, Excluding INS 1/ (In person-years)

Source: OTM.

- 1/ TA delivered in the field.
- 2/ African Regional Technical Assistance Center.
- 3/ Caribbean Regional Technical Assistance Center.
- 4/ Pacific Financial Technical Assistance Center.

*Africa* (*AFR*). TA has increased over time, with a mild decline toward FY2001–03, mainly because of instability in some of the largest beneficiaries and slow economic reform in others.<sup>18</sup>

Asia and Pacific (APD). TA provided to this region increased sharply starting in FY1998, mostly as a result of the emphasis in MFD on capacity building in post-crisis South-East Asia. It is also explained by sharp increases in TA to Timor-Leste and Cambodia, and a more general increase in the availability of external financing.<sup>19</sup>

*Europe I (EU1)*. TA to this regional grouping, which encompasses the transition countries of Central Europe and the Balkans, has remained relatively constant, with most of it being provided to post-conflict economies such as Bosnia and Herzegovina, Serbia and Montenegro, and Kosovo.

<sup>&</sup>lt;sup>18</sup> IMF (2004f).

<sup>&</sup>lt;sup>19</sup> Asia-Pacific is the region that has benefited the most from the TA financed by the Government of Japan.

*Europe II (EU2).*<sup>20</sup> TA to this regional grouping, which originally covered most of the transition countries, has been reduced by half since its peak in FY1999, driven by a sharp reduction of TA provided to Ukraine, Georgia, Tajikistan, Azerbaijan, and the Baltic countries. A more active role by other TA providers, particularly the European Union, is an important cause of this decline.<sup>21</sup>

Middle East and Central Asia (MED). TA provided to this region has also remained fairly constant, with Afghanistan, Kuwait, Yemen, and the West Bank accounting for most of it.

Western Hemisphere (WHD). TA provided to this region has remained relatively constant. The most noticeable development has been the creation of the Caribbean Regional TA Centre (CARTAC), which accounts for about 25 percent of total TA to this region.

# D. Trends by Functional Departments and Policy Initiatives

- 38. Two functional departments, FAD and MFD, are the largest providers of TA, accounting for over 70 percent of total TA delivery over the years. However, this share has declined slightly since FY2000, mostly as a result of a reduction in TA provided by FAD to the transition economies, and sharp increases in TA by the Statistics (STA) and Legal (LEG) Departments (Figure 3.5). The main underlying factors explaining these trends are:<sup>22</sup>
- TA provided by STA has almost doubled during the last four years driven by a sharp increase in externally financed TA. Donors—mostly Japan and the United Kingdom—have supported the movement toward participation in the General Data Dissemination Standard (GDDS) as a mechanism to strengthen countries' statistical capacity.
- Provision of TA by LEG has also doubled from FY2001, although from a low base. This increase reflects work on AML/CFT activities, which were initiated in FY2002 and expanded rapidly thereafter.
- MFD's TA reached its peak in the aftermath of the Asian crisis and then declined in FY2001 as a result of new resource demands imposed by FSAPs. Since then, TA delivery has recovered as a result of an increase in follow up TA activities associated

<sup>&</sup>lt;sup>20</sup> On November 1, 2003, the European Department (EUR) was created by merging the former European I Department (EUI) with seven countries of the dissolved European II Department (EU2).

<sup>&</sup>lt;sup>21</sup> IMF (2004f).

<sup>&</sup>lt;sup>22</sup> IMF (2004d).

with FSAP and other surveillance initiatives such as AML/CFT and offshore financial center (OFC) assessments.<sup>23</sup>

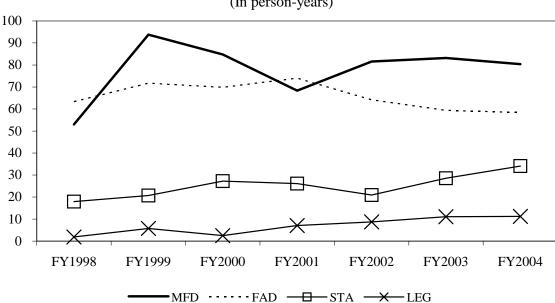


Figure 3.5. TA by Functional Departments 1/ (In person-years)

Source: OTM. 1/ TA delivered in the field.

### E. Modes of Delivery

- 39. A persistent theme addressed by different TA evaluations has been the relative effectiveness of alternative means of providing TA, in particular between the use of long-term resident experts versus short-term experts' visits or peripatetic modalities.
- 40. Figure 3.6 shows trends in these modalities. The most salient feature has been the sharp reduction in the use of resident experts and the growing reliance on regional experts associated with RTCs. Up to FY2001, long-term experts were by far the major component, accounting for half of total field TA. By FY2004, this share had fallen to around 40 percent. Since FY2001, the share of TA delivered by regional, peripatetic, and short-term experts has grown rapidly, while TA missions have remained relatively stable. The substitution of resident experts by regional experts is the result of the increasing importance of regional centers (Table 3.3).

<sup>&</sup>lt;sup>23</sup> IMF (2004f).

120 100 80 60 40 20 0 FY1998 FY1999 FY2000 FY2002 FY2003 FY2004 FY2001 <del>□</del>TA missions Long-term resident experts △ Long-term regional experts Short-term resident experts ---- Peripatetic experts

Figure 3.6. TA by Modes of Delivery, Excluding INS 1/ (In person-years)

Source: OTM.

1/ Resident experts are those residing in a country for six months or longer. Peripatetic experts are experts who visit the same country in a series of short-term missions. Long-term regional experts are based in the region and divide their time between a group of countries.

Table 3.3. TA Delivered by Regional Centers (Sum of person-years)

TA Regional Centers	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004
East Africa Regional Technical Assistance Center (East							
AFRITAC)	0.0	0.0	0.0	0.0	0.0	2.8	7.2
West AFRITAC	0.0	0.0	0.0	0.0	0.0	0.1	5.7
CARTAC Pacific Financial TA Centre	0.0	0.0	0.0	0.0	2.6	6.7	5.1
(PFTAC)	3.7	4.2	4.0	4.2	4.6	4.4	4.9
Grand total (Percent of total TA in the field)	3.7 2.7	4.2 2.2	4.0 2.2	4.2 2.4	7.2 4.1	14.0 7.7	23.1 12.5

Source: OTM.

# F. Variables Influencing the Allocation of TA to Countries

- 41. What makes a country more likely to receive IMF TA? We explore different country features that may affect how TA is allocated, such as country size, per capita income, and the presence of an IMF-supported program. Lower-income countries generally have more severe capacity constraints and one might expect that the IMF would incorporate this factor in TA allocation decisions. A common claim is that the presence of an IMF-supported program increases the likelihood that a country will receive TA. The existence of a program may call for additional TA to support the policy dialogue and program design, as well as medium-term institutional developments necessary to implement the program.
- 42. To examine these hypotheses, we use a panel of 150 non-industrial economies between FY1998 and FY2004 where the dependent variable is the annual volume of TA received in the field by the country (Table 3.4).<sup>24</sup> The first regression combines both cross-section and time series analysis. The second focuses on the variability observed within a country over the period studied. The third regression is a variant of the second incorporating further statistical corrections. Most of the results are similar and stable in different specifications.
- Gross domestic product (GDP) per capita. We found a negative association with the amount of TA provided. A doubling of per capita income reduces the yearly level of TA between 0.20 and 0.65 person-years. This is magnified by the indirect effects of per capita income as explained below.
- Population.<sup>25</sup> Larger countries receive more TA—a doubling of population size increases TA by about 0.06 person-years. While statistically significant, the sensitivity of TA to population is very small.
- Existence of a program. The volume of TA is significantly associated with the presence of PRGF- or EFF-supported programs. The direct effect of having a PRGFsupported program is an increase in the yearly volume of TA by two or three personyears. Similarly, having an EFF increases yearly TA by one person-year. In contrast, Stand-By Arrangements (SBAs) are not significantly associated with the volume of TA. It is likely that medium-term programs incorporating more structural reforms may require more extensive TA to support the policy dialogue, program design, and the institutional capacity needed for implementation.

<sup>&</sup>lt;sup>24</sup> This panel does not include TA delivered by regional centers since information on the country allocation of this TA was not available.

<sup>&</sup>lt;sup>25</sup> Since population is a variable that changes slowly across time, its impact in the fixed-effect specification is absorbed by the inclusion of country dummy variables. Hence, the impact of population is assessed making use of robust ordinary least squares.

- The stronger impact of a PRGF-supported program on the volume of TA is consistent with the notion that the IMF is devoting greater TA resources to strengthening institutional capacity in PRGF countries than in non-PRGF countries. In addition, we found the effect on the level of TA provided under a PRGF-supported program becomes stronger when per capita income (a proxy for institutional capacity) is lower, as shown by a negative coefficient for the interaction term between having a PRGFsupported program and the level of per capita income (PRGF\*per capita GDP).
- Regional Central Bank. Countries that are members of regional monetary unions and do not have a separate central bank appear to receive less TA from the IMF because most of that TA tends to be provided directly to the regional central bank.

Table 3.4. Summary of Panel Data Regression Results 1/

	Robust OLS (1)	Robust Fixed Effects (2)	Fixed Effects AR (3)
Constant	2.1581 3/	3.8311 3/	5.5590 3/
Per capita GDP	-0.1975 3/	-0.4218 2/	-0.6590 3/
PRGF	2.1588 2/	3.1849 3/	1.9512 2/
PRGF* per capita GDP	-0.3002 2/	-0.4985 3/	-0.3057 2/
EFF	1.2430 3/	0.9499 3/	1.0335 3/
SBA	0.16 28	-0.0445	0.0347
FY1999	0.2598 2/	0.2349 3/	0.2048 3/
Regional central bank	-0.6738 3/		
Ln population	0.0592 3/		
N	1,049	1,049	1,049
Prob > F	0.0000	0.0000	0.0000

Source: TIMS.

1/Robust OLS (1) is an ordinary least squares regression with robust standard errors. Robust fixed effects (2) is equivalent to adding a dummy variable for each country in the panel, and then using robust standard errors to correct for the presence of heteroskedasticity. As a result, the fixed-effects specification captures the variation "within" countries, and controls for most time-invariant country heterogeneity. The cost of this specification is that the impact of variables that change slowly across time, that is, population, is absorbed by the country dummies. Fixed effects auto regressive (3) corrects for the presence of serial correlation of order 1.

- 2/ Significant at a 95 percent level of confidence.
- 3/ Significant at a 99 percent level of confidence.

#### G. Countries Above and Below the Estimated Regression

43. As shown in Table 3.5, there are some countries that received significantly more (less) TA than predicted, suggesting the need to explore additional factors that may influence the amount of TA received. Thus, we examine countries exhibiting the largest absolute deviations from their predicted values to identify additional factors that may influence the

allocation of TA among countries. This is done for two periods, FY1998–2000 (closer to the East Asia crisis) and FY2001–04.

Table 3.5. Countries Ranked by Their Absolute Deviation from Predicted Annual Values of TA 1/

Period FY1998–2000			Pe	eriod FY200	1–04		
	(Average annual person-years)			(Average annual person-year		rson-years)	
	Actual	Predicted	Absolute		Actual	Predicted	Absolute
	TA	TA	deviation		TA	TA	deviation
Indonesia	6.48	2.82	3.66	Indonesia	6.97	1.93	5.04
Haiti	4.73	1.15	3.57	Cambodia	5.35	1.46	3.89
Russia	4.32	1.15	3.17	Bosnia and Herzegovina	3.50	0.79	2.70
Yemen	6.28	3.44	2.84	Russia	3.24	0.98	2.27
Ukraine	5.05	2.53	2.52	Congo, Dem. Rep. of	3.14	1.22	1.91
Georgia	3.53	1.08	2.46	Rwanda	3.54	1.69	1.84
Thailand	3.05	0.89	2.16	Azerbaijan	2.69	1.05	1.64
Angola	3.19	1.15	2.03	Mongolia	2.64	1.25	1.39
Lesotho	2.84	1.15	1.68	Botswana	1.96	0.60	1.36
Moldova	2.83	1.15	1.68	Mozambique	2.49	1.24	1.24
Nepal	0.36	1.40	-1.04	Guinea-Bissau	0.14	1.05	-0.92
India	0.17	1.39	-1.22	Burkina Faso	0.06	1.00	-0.95
Sierra Leone	0.13	1.40	-1.28	Pakistan	0.68	1.64	-0.96
Gambia, The	0.28	1.60	-1.32	Peru	0.38	1.35	-0.98
Burundi	0.01	1.44	-1.43	Madagascar	0.57	1.58	-1.01
Myanmar	0.04	1.53	-1.49	Kazakhstan	0.48	1.63	-1.16
Argentina	0.52	2.27	-1.75	India	0.10	1.39	-1.30
Panama	0.29	2.14	-1.85	Myanmar	0.01	1.34	-1.33
Pakistan	0.57	3.37	-2.80	Colombia	0.30	1.66	-1.36

Source: IMF.

1/Predicted values using the robust OLS specification as defined in Table 3.4. There are economies, such as Afghanistan, Timor-Leste, or the West Bank and Gaza Strip that received high volumes of TA but are not included in this table because of the lack of per capita GDP figures to obtain predicted values.

- 44. Countries overcoming years of civil war or political instability have particularly acute TA needs. Frequently, the most basic functions of government need to be rebuilt in the context of very low human capital and/or profound economic and institutional dislocations. The IMF has often been called upon to provide quick and significant volumes of TA in these circumstances. For instance, this explains the high and volatile level of TA received by Angola, Bosnia, Cambodia, the Democratic Republic of Congo, Haiti, Herzegovina, and Rwanda during the period under study.
- 45. The most salient common factor among countries with the largest positive deviations is the relative abundance of externally-financed TA. As shown in Figure 3.7, in these countries, around 60 percent of total TA was externally financed, whereas in the remaining countries around 44 percent of total TA was financed by external donors.

- 40 -

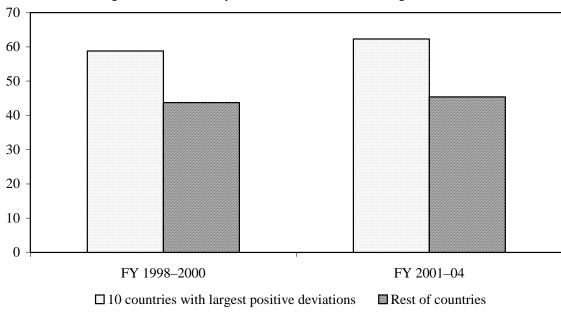


Figure 3.7. Externally Financed TA as a Percentage of  $\,$  Total TA  $\,1/\,$ 

Source: OTM.

1/ These calculations are based on TA in the field only.

- 46. While Japan has been the largest donor, there are other external donors that have also played a key role in financing IMF TA in particular countries: The United Nations Development Program (UNDP) in Yemen, Denmark in Mozambique, the Netherlands in Indonesia, and the United Kingdom in Cambodia, <sup>26</sup> all of which had a clear impact on the amount of the TA provided by the IMF to these countries. Access to externally-financed TA interacts with other factors—such as capital account crisis, or being a post conflict country—and may explain why some countries obtain significantly more TA than predicted by our simple model.
- 47. One factor that explains why some countries apparently received less TA than predicted is the growing relevance of regional TA centers. In 2002, the West AFRITAC was opened with the objective of strengthening capacity building in several West African countries, including Guinea-Bissau and Burkina Faso. As a result, TA destined for these two countries was delivered mostly via West AFRITAC and not directly to them. Therefore, direct TA figures underestimate the overall TA efforts.

<sup>&</sup>lt;sup>26</sup> While some donors have demonstrated a preference for delivering much of their TA through the IMF (e.g., Japan), others have tended to provide their TA directly. In this regard, we would expect to see an emphasis on IMF TA to countries of greater interest to the former group. This does not, in itself, imply that other countries are neglected as TA recipients.

# **Summary**

- 48. The following conclusions can be derived from the earlier analysis:
- After a temporary decline in early 2000, the resources devoted to TA and training stabilized during FY2003–04, largely as a result of an increase in externally financed TA. IMF-financed TA has remained basically constant.
- IMF TA seems to be well targeted toward the low-income countries in the membership. About 70 percent of TA field activities are provided to countries with per capita income below \$1,000.
- The Africa and Asia-Pacific regions received most TA—accounting for 60 percent of total TA and an even higher share of externally financed TA. TA to the transition countries of Europe and Central Asia has sharply declined from its peak in FY1999.
- FAD TA has gradually declined during the last four years, while TA provided by STA and LEG has increased.
- The trends show a decline in the TA provided through long-term experts. This may be explained by the increased importance of regional TA centers becoming a hub for shorter missions, the adoption of the priority filters that encourage use of less expensive short-term TA (to be discussed later), and the growing relevance of new IMF initiatives described above (e.g., FSAPs, ROSCs), which may call for more focused and specialized TA provided by shorter missions.
- The statistical results show that lower per capita income influences positively the amount of TA. They also show a significant positive impact of having a PRGF or an EFF arrangement. In contrast, there is no evidence that countries with SBAs receive more TA. Thus—whether the focus of IMF TA is on shorter-term diagnostics or on longer-term capacity building—it does seem to be concentrated on poorer countries and on those judged to have longer-term structural adjustment needs.
- Not surprisingly, the examination of countries that are significantly above the (regression) norm suggests that economies where donors tend to finance a significant amount of TA provided by the IMF receive larger volumes of TA from the institution.<sup>27</sup>
- There is evidence that the volume of IMF TA fluctuates sharply in response to crises (e.g., capital account crises or countries emerging from conflict). This suggests

<sup>&</sup>lt;sup>27</sup> There is also evidence that IMF-financed TA is positively correlated with externally financed TA, although the regression results suggest the effects are small.

- 42 -

significant flexibility, but also raises questions about whether the conditions that will determine the success of such rapidly expanding TA can be assessed adequately—an issue to which we will return.

#### 4. IDENTIFYING TA NEEDS AND THE ALLOCATION OF TA RESOURCES

#### A. What Is Classified as TA?

- 49. As noted, the stated objective of IMF TA is to (a) assist countries in the design of appropriate macroeconomic and structural reforms, and (b) to strengthen members' capacity to formulate and implement growth-oriented and poverty reducing policies. These are broad objectives, which in turn have been used to define a wide set of TA activities, including fact finding and analytical work to enhance the IMF's knowledge in its policy dialogue and program design. These activities may include short-term TA to advise on particular policy issues or crisis situations. At the other end of the spectrum—and depending on the degree of institutional development—they may comprise longer-term TA using resident experts to improve a country's capacity to diagnose problems and design and implement policies.
- 50. Present budgetary classifications tend to mask these distinctions, limiting the ability of management and the Board to assess the true effort of the IMF in medium-term institution building. This becomes important because—as discussed later in the report—there may be some factors that tend to bias the identification of TA needs toward short-term TA.
- 51. We recognize that these short-term activities are critical for the functioning of the IMF and for its capacity to advise and to design programs. In fact, the World Bank explicitly recognizes this through a special budget item called "Country Economic and Sector Work." However, it is important to recognize that many of these activities are different from those aimed at improving countries' own institutional capacities to diagnose problems and design, and implement policies. It is not easy to derive the total amount of IMF TA devoted to these short-term diagnostic activities relative to institutional capacity building. Our best estimate is that about one-third of TA may consist of short-term diagnostic or policy advice activities.<sup>28</sup>

<sup>&</sup>lt;sup>28</sup> This is an indicative figure and is calculated as follows: about 46 percent of TA is accounted for by regional and resident experts providing TA; this can be classified as being predominantly institution building. About 18 percent of TA is short-term missions, which we classify as providing policy advice. There are two budgetary items that must be allocated, namely, peripatetic experts (a set of several visits by a particular expert), and TA work at headquarters. Each of these amounts to 10 percent and 27 percent of TA activities, respectively. If we allocate half of the total to short-term TA and half to long-term capacity-building TA, we arrive at an estimate of 36 percent of total TA being associated with short-term and policy advice activities.