

**The Global War on Terror and U.S. Development
Assistance: USAID allocation by country, 1998-2005**
By Todd Moss, David Roodman, Scott Standley

Abstract

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The Global War on Terror and U.S. Development Assistance: USAID allocation by country, 1998-2005

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Summary. The launch of the Global War on Terror (GWOT) soon after September 11, 2001 has been predicted to fundamentally alter U.S. foreign aid programs. In particular, there is a common expectation that development assistance will be used to support strategic allies in the GWOT, perhaps at the expense of anti-poverty programs. In this paper we assess changes in country allocation by USAID over 1998-2001 versus 2002-05. In addition to standard aid allocation variables, we add several proxies for the GWOT, including the presence of foreign terrorist groups, sharing a border with a state sponsor of terrorism, troop contribution in Iraq, and relative share of Muslim population. We find that any major changes in aid allocation related to the GWOT appear to be affecting only a handful of critical countries, namely, Iraq, Afghanistan, Jordan, and the Palestinian Territories. The extra resources to these countries also seem to be coming from overall increases in the bilateral aid envelope, combined with declines in aid to Israel, Egypt, and Bosnia and Herzegovina. We do not find that any of our GWOT proxies (or their interactions) are significantly correlated with changes in country allocation of aid flows to the rest of the world, including to sub-Saharan African countries. Concerns that there is a large and systematic diversion of U.S. foreign aid from fighting poverty to fighting the GWOT do not so far appear to have been realized.

1. Introduction and rationale

The Global War on Terror (GWOT) following the terrorist attacks of 9/11 has been predicted to fundamentally shift the role of development assistance as a tool of U.S. foreign policy. The administration of President George W. Bush, which had initially been somewhat skeptical of foreign aid, has since become a strong advocate for development assistance and significantly boosted the U.S. foreign aid budget. This new enthusiasm is partly justified by the belief that aid can be a powerful instrument in a broader campaign against global terrorism. But foreign aid is also supposed to serve other purposes, such as helping the fight against global poverty. This raises a fundamental question: How has the GWOT affected where the U.S. allocates its aid?

The conventional wisdom is that the GWOT has changed everything. Large increases in U.S. aid to Iraq and Afghanistan following American military invasions are obvious examples of the GWOT's influence on aid allocation. But what about increases in other countries that may be

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considered on the frontlines in the GWOT, such as allies facing attacks by foreign terrorists, those with large Muslim populations, or those in strategically important locations? And consider the flip-side: are low-income countries that are not central to the GWOT losing out?

The U.S. has always used foreign aid strategically. The Marshall Plan, the first major U.S. foreign aid program, was motivated largely by concerns over national security and the desire to prevent Soviet expansion in Europe. During the Cold War, aid was allocated to anti-communist allies, with South Korea, South Vietnam, and Zaire among the largest recipients. Aid has also been used to promote regional security agendas, such as for Egypt and Israel in support of the Camp David Accords. But in recent years, aid may have taken on a broader strategic significance, as U.S. policymakers drew links between security, global poverty, and weak states.² The 2002 National Security Strategy claims that “poverty, weak institutions, and corruption can make weak states vulnerable to terrorist networks and drug cartels within their borders,” and it commits the U.S. to “actively work to bring the hope of democracy, development, free markets, and free trade to every corner of the world.” This has helped justify increases in the U.S. development assistance budget.³

The higher profile and broader mission for foreign assistance has also likely affected the allocation of resources. According to the 2004 overview of international assistance programs conducted by the Office of Management and Budget, the U.S. “will provide extensive assistance to states on the front lines of the anti-terror struggle, both in terms of financial assistance and training and support for allied governments.”⁴ The U.S. is not the only country dealing with these new strategic priorities. In a study of the politics of foreign aid since 9/11, Ngaire Woods found that in the U.K., “the strain on DFID’s [Department for International Development] resources and mandate to reduce poverty posed by the war on terror and the war in Iraq is already noticeable.”⁵ Some critics, most notably advocacy non-governmental organizations, have argued that such strategic priorities, if they do indeed now dominate aid allocation decisions, actually hurt the world’s poorest. According to a recent Oxfam report, for example, the GWOT “will divert aid away from the poorest countries and communities, and weaken donors’ commitment to poverty reduction.”⁶

The GWOT could affect U.S. development assistance in multiple ways, including shifts between countries or sectors, and substantive changes in activities within sectors. This paper focuses exclusively on country allocation. Specifically, it analyzes the allocation of development assistance provided by the United States Agency for International Development (USAID) from 1998 to 2005. We are most concerned with changes in flows intended to impact development (as opposed to other categories of assistance such as foreign military assistance or anti-narcotics aid), and USAID allocation should reflect U.S. development priorities in low-income countries reasonably well. According to testimony in 2004 by the USAID Administrator, Andrew Natsios,

² For an overview of how aid policies of the U.S., U.K., Japan, and the E.U. have changed in response to the challenges posed by new security priorities, see Woods (2005).

³ See Goldstein and Moss (2005) for a discussion of the historical impact of U.S. political parties on aid to Africa.

⁴ 2004 U.S. Budget, Office of Management and Budget (2004), www.whitehouse.gov/omb/budget/fy2004/state.html. According to the document, such frontline states include “Afghanistan, Colombia, Jordan, Pakistan, and Turkey.”

⁵ Woods (2005).

⁶ Oxfam (2005).

before the House of Representatives, 9/11 and the war on terrorism have led “to a broadening of USAID’s mandate, thrusting us into situations that go beyond our traditional role.” As such, USAID has assumed a “higher profile in [U.S.] foreign policy initiatives since the war on terror began.”⁷

Although more than 40 U.S. government agencies give “foreign aid” of some kind,⁸ we study USAID for two reasons. First, we have better country allocation data for the eight-year time period, including USAID budget allocation estimates for 2005.⁹ More importantly, USAID is the U.S. government’s primary aid organization charged with fighting poverty and promoting economic development overseas. USAID data captures a large portion of aid flows that may be unambiguously considered “development assistance,” including such categories as Child Survival and Health (CSH), Development Assistance (DA), the Economic Support Fund (ESF), and food aid (PL 480, Title II).¹⁰ These USAID flows currently account for about half of total U.S. bilateral aid, according to statistics from the Organization for Economic Cooperation and Development’s Development Assistance Committee (OECD/DAC), the most commonly used international source for development assistance data.¹¹ While it is possible that the changes in U.S. foreign aid policy related to the GWOT are mainly in other types of aid, any shift in allocation variables and aid strategy of flows specifically intended to fight poverty in the world’s poorest countries due to new GWOT priorities should be observable in USAID activity.

In section 2 we look at aid trends and changes in allocation to some critical GWOT countries. In section 3 we analyze the data further through a set of regressions that allows us to test possible determinants of changes in USAID flows since the start of the GWOT. Section 4 looks specifically at aid to sub-Saharan Africa. Section 5 summarizes our conclusions.

2. Aid trends

An initial look at the USAID data shows four main trends in aid flows. First, there has been an overall increase in real terms, with annual flows rising from about \$5 billion in 1998 to a peak of about \$8 billion in 2003, then dropping to \$6.3 billion in 2005 (all figures in constant 1995 US\$). This results in a post-9/11 total of \$27.5 billion for the four years between 2002 and 2005, or a 39 percent increase over the \$19.8 billion cumulatively spent between 1998 and 2001.

⁷ Testimony before the Subcommittee on Foreign Operations, Committee on Appropriations, U.S. House of Representatives, April 1, 2004.

⁸ According to the OECD/DAC’s peer review of the U.S., “the growing number of official United States Government (USG) entities that deliver foreign aid (perhaps as many as fifty separate government units) operate with considerable autonomy.” See OECD/DAC (2002).

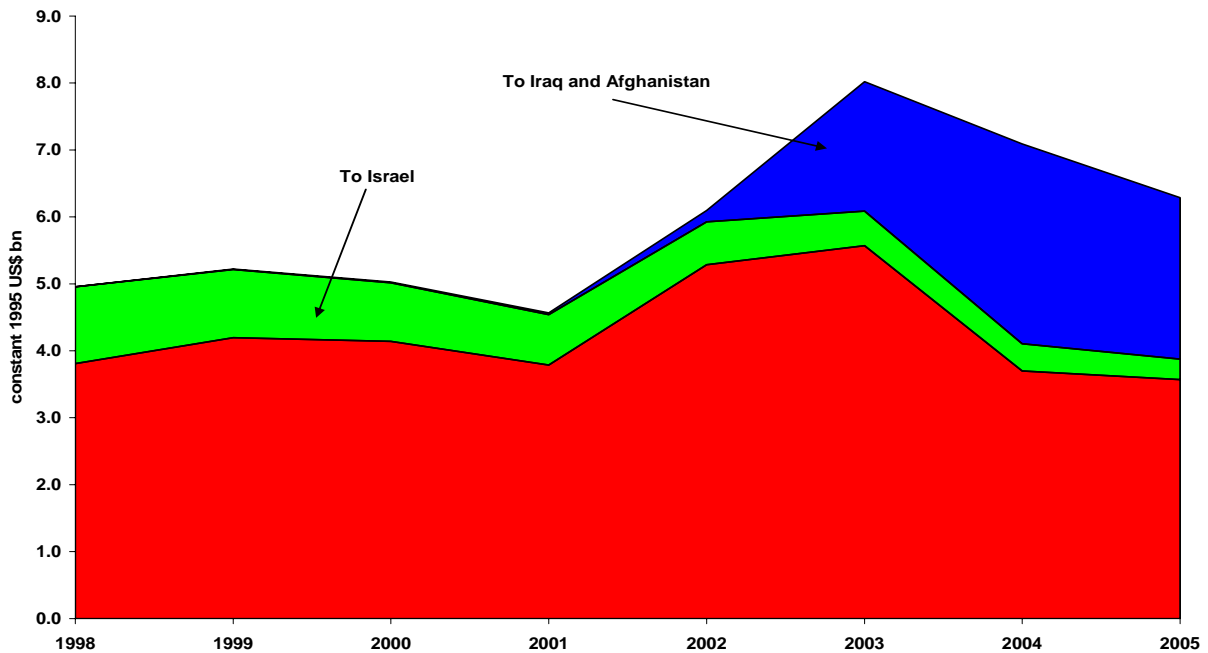
⁹ Most analyses of foreign aid use the OECD/DAC database which employs a broad measure of overseas development assistance and captures aid from U.S. agencies besides USAID. But this dataset is only up to 2003, leaving too few years for any preliminary analyses of aid trends after 2001. See Appendix 5 for more detail on data.

¹⁰ We also include Assistance to Eastern Europe and the Baltic States (AEEB) and Assistance for the Independent States of the Former Soviet Union (FSA). For more information on data, see Appendix 5.

¹¹ For example, total U.S. bilateral aid in 2003, according to the OECD/DAC database, was \$17 billion while total USAID assistance the same year was \$8 billion (figures in constant 1995 US\$).

Second, Iraq and Afghanistan appear to account for almost all of this increase (Figure 1). Indeed, total aid, excluding these countries, remains nearly unchanged at \$20 billion.¹²

Figure 1: Total USAID flows, 1998-2005



The third obvious trend is a decline in aid to Israel. As the single largest USAID recipient, Israel accounted for nearly 20 percent of total aid between 1998 and 2001. But in the post-9/11 period, Israel saw a decline in USAID flows of 50 percent in real terms, and dropped into third place behind Iraq and Egypt with only 7 percent of the total. While this might seem to be an unexpected result of the GWOT given Israel’s critical role in Middle East conflicts, the U.S. had planned to gradually reduce aid to Israel well before 2001.¹³

Lastly, a glance at the list of countries with the biggest changes in aid allocation over this period reveals a possible trend of increases in GWOT-relevant countries such as Pakistan, Jordan, and Turkey, and decreases in the amounts to more traditional U.S. allies in the Middle East, Europe, and Latin America that had received substantial aid in the 1990s (Table 1).

¹² Because of the use of supplemental appropriations for Iraq and Afghanistan, 2005 aid data for the two countries is based on estimates detailed in Appendix 5. The estimates used are conservative and, if anything, likely understate aid to these two countries.

¹³ For example, American and Israeli leaders met in 1998 to negotiate a reduction in Israel’s annual economic aid to zero over a 10-year period. See CRS Issue Brief for Congress IB85066 (2002), “Israel: U.S. Foreign Assistance.”

Table 1

Largest net changes in USAID assistance (4-yr period total; constant 1995 US\$)						
	Total aid (\$ million)			Average aid per capita (\$)		
	1998-01	2002-05	net change	1998-01	2002-05	net change
1 Iraq	0	5,710	+5,710	0.00	50.78	+50.78
2 Afghanistan	45	1,793	+1,748	0.47	15.88	+15.41
3 Turkey	11	1,173	+1,162	0.05	4.12	+4.07
4 Pakistan	18	1,136	+1,119	0.03	1.87	+1.83
5 Jordan	589	1,544	+955	29.93	70.74	+40.81
6 West Bank and Gaza	349	565	+216	27.95	40.88	+12.93
7 Sudan	198	365	+167	1.53	2.59	+1.06
8 Ethiopia	508	627	+119	1.87	2.11	+0.24
9 Congo, Dem. Rep.	70	180	+110	0.35	0.82	+0.47
10 Uzbekistan	74	179	+104	0.76	1.73	+0.98
Top 10 subtotal	1,863	13,272	+11,410			
	Total aid (\$ million)			Average aid per capita (\$)		
	1998-01	2002-05	net change	1998-01	2002-05	net change
145 Israel	3,790	1,868	-1,923	158.18	71.88	-86.30
144 Egypt	2,651	2,081	-570	10.00	7.26	-2.74
143 Bosnia and Herz.	619	165	-454	41.55	10.52	-31.03
142 Ukraine	661	371	-290	3.35	1.96	-1.39
141 Russia	633	382	-251	1.08	0.66	-0.42
140 Peru	418	233	-185	4.06	2.14	-1.93
139 Haiti	324	196	-127	10.30	5.89	-4.41
138 Colombia	129	6	-123	0.77	0.03	-0.73
137 India	562	465	-97	0.14	0.11	-0.03
136 Bolivia	319	228	-91	9.67	6.42	-3.25
Bottom 10 subtotal	10,106	5,995	-4,112			
Total (all 145 countries)	19,769	27,494	+7,725			

Strikingly, the cumulative increases by the top ten gainers is over \$11 billion, or much greater than the nearly \$8 billion total increase to all countries. If we add the \$4 billion net loss by the bottom ten, the sums are nearly equivalent. This initially suggests that two-thirds of the additional aid received by the ten biggest gainers has come from an increase in the aid budget and one-third from a shift in resources from the bottom ten.

This may explain some of the large swings in aid, but has there been an underlying structural change in country allocation globally, beyond the obvious winners and losers? What about shifts in aid allocation to the other 125 countries? To more systematically assess the aid trend, we run some simple regressions to try to assess the significance of several proxies for the GWOT.

3. Aid regression: Global

In this section we examine USAID flows to 145 recipient countries between 1998 and 2005. Since we are fundamentally concerned with changes since 2001 to see whether the GWOT has systematically altered the allocation of bilateral aid flows, we have divided our aid data into two four-year periods, 1998-01 and 2002-05, and used the change in aid per capita between the two periods as the dependent variable.

There is a large literature on the determinants of country aid allocation.¹⁴ Most studies model individual country aid receipts as a function of several determinants that capture a recipient's level of need and its strategic value. While there is a large variation in behavior among bilateral donors, some patterns can be discerned. First, more populous countries tend to receive less aid per capita. Second, though some studies do find a negative relationship between recipient income and aid levels, strategic factors tend to explain more of bilateral aid allocation than does poverty, especially in the case of the U.S.

Similar to some previous studies, we include as independent variables a measure of country size (log initial population), income (log initial GDP per capita), and a measure of democracy (a dummy variable for countries that are “free,” according to the Freedom House rating of civil liberties and political rights). We also include initial aid level to control for inertia in aid allocation.¹⁵ As mentioned above, past studies of aid allocation have also tested whether the strategic importance of recipient countries might also influence aid flows, using such proxies as U.N. voting patterns, colonial history, trade relationship, existence of a security alliance, or recipient military spending. Recognizing the possible influence of the GWOT on U.S. foreign assistance patterns, we introduce some GWOT-related potential determinants of aid allocation in the years between 2002 and 2005:

- **GWOT border.** We add a dummy for countries that share an immediate land border with either Iraq or Afghanistan. (See Appendix 1 for a country list.)
- **Foreign terrorist target.** We add a dummy for countries that the State Department defines as home to, or target of, foreign terrorist organizations. (See Appendix 2.)
- **“Coalition of the willing.”** Since the U.S. has said it will increase “assistance to countries around the world that have joined us in the war on terrorism,”¹⁶ we add a dummy for countries that contributed troops to the war in Iraq. (See Appendix 3.)
- **Border shared with state sponsor of terrorism.** We add a dummy for any country that shares a land border with a country listed by the U.S. State Department as a “state sponsor of terrorism.” (See Appendix 4 for list.)
- **Muslim population.** Some U.S. policymakers have expressed the view that aid can be a particularly useful tool of foreign policy in countries with large Muslim populations because assistance can be used to reduce the appeal of radical Islamist violence or

¹⁴ For examples see, among others, Dollar and Levin (2004), Schraeder, Hook, and Taylor (1998), Burnside and Dollar (2000), and Alesina and Dollar (1998).

¹⁵ We also run all of our tests with an additional dummy for the 15 focus countries of the President's Emergency Plan for AIDS Relief (PEPFAR). The coefficient on the PEPFAR dummy is insignificant in all of our regressions and does not change any of our results.

¹⁶ Office of Management and Budget 2004, www.whitehouse.gov/omb/budget/fy2004/state.html.

enhance U.S. soft power.¹⁷ With this in mind, we include the Muslim share of a country's population.

- **GWOT interactions.** We also interact all the GWOT proxies with each other to test combinations of factors. Those that fully overlap are dropped.

In addition, we add regional dummies to test whether there has been any shift in the regional allocation of USAID flows since the beginning of the GWOT.

Table 2 gives results from five regressions.

Table 2: Regression results

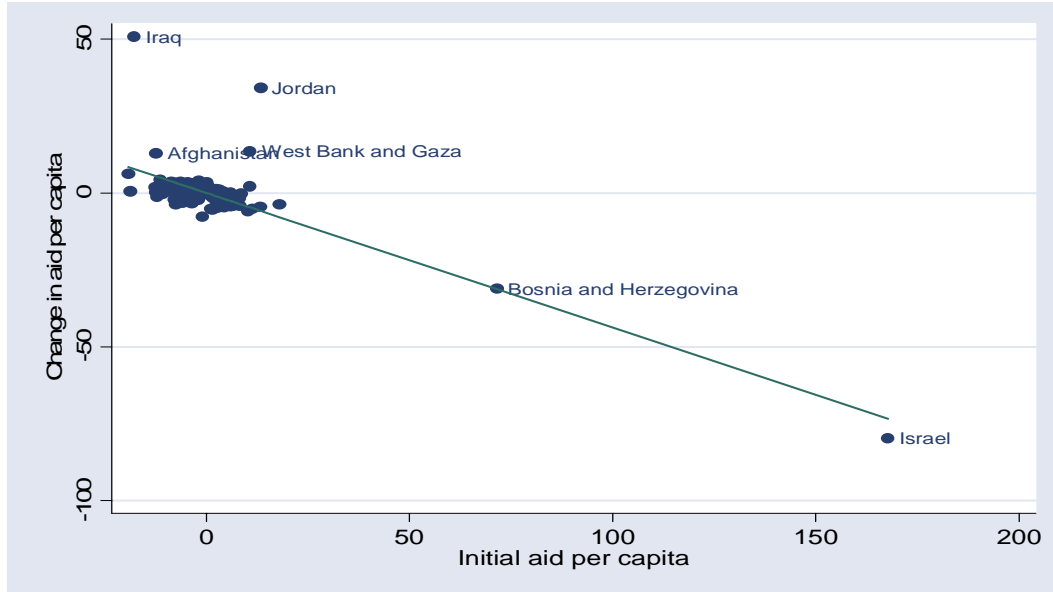
		(1)	(2)	(3)	(4)	(5)
Dependent Variable: Change in aid per capita		OLS	OLS	OLS	OLS	OLS
	Log initial income	-0.500 (-0.14)	-0.147 (-0.42)	-0.040 (-0.39)	-0.012 (-0.08)	-0.061 (-0.62)
	Initial aid per capita	-0.437** (-11.51)	-0.416** (-13.04)	-0.161** (-3.21)	-0.164** (-3.05)	-0.162** (-3.23)
	Log Population	-0.353** (-2.35)	-0.260** (-2.07)	-0.066* (-1.65)	-0.072* (-1.72)	-0.067 (-1.50)
	Freedom House dummy	-0.019 (-0.04)	-0.145 (-0.30)	0.090 (0.42)	0.085 (0.39)	0.084 (0.37)
	Muslim population	0.022* (1.69)	0.013 (1.54)	0.003 (1.19)	0.004 (1.33)	0.002 (0.88)
GWOT proxies	GWOT border	1.884 (0.30)	4.695 (0.83)	0.122 (0.19)	-0.094 (-0.15)	-1.731 (-0.24)
	Target of foreign terrorist org.	1.615 (0.49)	-0.443 (-0.16)	0.371 (0.98)	0.479 (1.20)	0.043 (0.11)
	Iraq contribution	0.489 (0.73)	0.439 (0.79)	-0.245 (-0.78)	-0.640 (-1.20)	-0.245 (-0.70)
	State sponsor border	4.617* (1.72)	2.477 (1.48)	0.545 (1.45)	0.511 (1.32)	0.398 (0.94)
	SSA				0.077 (0.27)	
Regional dummies	MENA				-0.371 (-0.68)	
	ECA				0.492 (0.96)	
	EAP				-0.033 (-0.12)	
	SASIA				0.047 (0.13)	
	Iraq excluded	No	Yes	Yes	Yes	Yes
Israel, Afghanistan, Jordan, West Bank/Gaza, and Bosnia/Herz. excluded	No	No	Yes	Yes	Yes	
GWOT Interactions	No	No	No	No	Yes	
Observations	145	144	139	139	139	
R-squared	0.65	0.75	0.32	0.34	0.36	

robust *t* statistics in parentheses. **=significant at 5%; *=significant at 10%.
OLS: ordinary least squares estimations.

¹⁷ For example, *The Transatlantic Dialogue on Terrorism*, CSIS (2004), concludes that “a new emphasis on development assistance can minimize the appearance of American hubris and help promote a positive, multilateral agenda for the Muslim world.”

Regression 1 tests whether some standard aid allocation variables and our GWOT proxies explain the variation in average annual aid per capita between 1998-01 and 2002-05. Analysis of this baseline regression reveals the need for additional specifications. Figure 2 gives a partial scatterplot of initial aid per capita. Six outlier countries emerge as possible drivers of our results.

Figure 2: Partial scatterplot of initial aid per capita



Adjusting our regressions to account for the influence of these six countries also makes intuitive sense. Aid to Iraq and Afghanistan, two countries invaded by the U.S. military, is clearly viewed by policymakers as part of the GWOT. Aid to Jordan and the Palestinian Territories may be too. Therefore we run regressions excluding each of these to control for the possibility that large increases in GWOT-related aid to these individual countries may drive the overall results.¹⁸ Meanwhile, Israel has traditionally been one of the largest recipients of U.S. foreign aid, and a gradual phase-out of economic assistance had been planned well before the GWOT.¹⁹ In Bosnia and Herzegovina, the NATO military operation resulted in an influx of aid in the years after, which later declined following the end of the immediate reconstruction period. So we also exclude these countries from the regressions. It would be almost equivalent to simply include dummies for each of these countries, but we are interested in whether other determinants can explain allocation to these countries, rendering the dummies insignificant.²⁰

¹⁸ A similar case may be made for aid to Pakistan and Turkey. As a check, we ran all of our regressions excluding these countries in addition to those identified in Figure 2. But the exclusion of Pakistan or Turkey, or both, from the regressions had no effect on our results.

¹⁹ Similarly, Egypt has traditionally received a high amount of U.S. aid. But as with Pakistan and Turkey, running the regressions both with and without Egypt produced the same overall result.

²⁰ As another check, we ran all our regressions on the full sample with dummies for each critical country. As expected, the coefficients on the dummies for each of our six countries were significant at the 5 percent level in every regression. Of our other three examined countries, the coefficients on Egypt and Turkey were significant at the 5 percent level in most regressions but, somewhat surprisingly, the coefficient on Pakistan was insignificant at the 10 percent level in each regression. Meanwhile, the coefficients and t-statistics for each of the other independent variables were nearly identical to those resulting from regressions without the critical countries.

As such, the rest of our regressions exclude influential countries from the dataset. We begin in regression 2 by excluding only Iraq. In regression 3, we restrict the dataset further by excluding all six critical countries. Finally, we add regional dummies in regression 4, and interactions between each of the GWOT proxies in regression 5, to our restricted dataset.

It is worth emphasizing that we do not attempt to model USAID bilateral flows *in toto*. Rather, the use of *change* in aid between the two periods bracketing 9/11 as the dependent variable allows focus on any structural breaks at that time. With this in mind, several key results emerge from our regressions.²¹

1. **There is a strong inertia in USAID flows.** Among the aid allocation variables, only initial aid is significant at the 5 percent level. This suggests that USAID country allocations have not changed in the post-9/11 period based on income level, country size, or democracy. There may also be strong, slowly changing determinants of aid which we are not controlling for. If so, these are likely picked up by the initial aid level. While there is some weak evidence of an increased country size bias since 2001, this result is not significant when the interaction variables are included. Instead, aid allocations for most countries in the world are driven by previous aid levels. Moreover, a higher initial aid level in 1998 is associated with a decline in aid during the post-9/11 period.
2. **GWOT proxies are not major determinants of aid allocation.** We do not find significant correlations between the change in aid per capita and any of the five GWOT proxies when all five are entered together. We also find no significant correlation with any combination of interacted GWOT proxies.²²
3. **No regional pattern change post-9/11.** The regional dummies for sub-Saharan Africa, Middle East/North Africa, Europe/Central Asia, East Asia/Pacific, and South Asia are all insignificant (relative to Latin America/Caribbean, which is the excluded regional dummy), suggesting that there is no significant change in regional allocation in the post-9/11 period.
4. **A small group of countries drive post-GWOT changes.** The most interesting results are among a small group of individual countries. Excluding our six critical countries from the dataset leads to very little overall variation in aid per capita in the rest of the world from 1998-2001 to 2002-2005. Except for initial aid level, none of our possible determinants of post-9/11 changes in aid per capita are significant. The same is true when these six countries are included in the dataset. Moreover, when run with country dummies instead of being excluded, the coefficient on the dummy variable for each country is highly significant. As expected, both Iraq and Afghanistan are highly significant with relatively large coefficients on the change in aid per capita since 9/11.²³

²¹ Regressions were also run excluding 2002 from the GWOT period as a robustness check and to test for any pipeline effect since aid allocation often takes longer than one year (2002 aid allocation decisions could already have been in place at the onset of the GWOT in late 2001). But this change did not affect the results.

²² Though the coefficients are not listed in Table 2, none of the interaction variables were significant in regressions 3 and 4.

²³ We also ran all of the regressions with varying levels of aid for Iraq in 2005: \$0, \$0.5 billion, \$1 billion, and \$2.4 billion. None of these variations changed the results.

Israel is highly significant with a negative coefficient (illustrative of the downward trend of overall aid to Israel), as is Bosnia and Herzegovina (reflecting the end of major post-conflict reconstruction efforts). Finally, Jordan and the Palestinian Territories, with high levels of aid per capita in both periods, became even more important after 9/11.

Entered as a group, the GWOT proxies are essentially insignificant. Although none of the proxies is highly collinear with other variables (no variance inflation factors exceed three), the possibility remains that partial collinearity and small sample are combining to obscure a real pattern. For this reason, we also run regressions (like regression 3) with the GWOT proxies entered one at a time, then two at a time, then three at a time. Three of the four dummies are significant at 10 percent when entered alone, but nearly all dummies lose significance in groups of three.²⁴ But no other GWOT proxy is as strong as Muslim population. In pairwise competition, Muslim population consistently “wins,” driving out the other dummies. The relative significance of Muslim population could be a statistical artifact, but given the small sample, the possibility cannot be dismissed that weak statistical power actually explains its loss of significance in regressions with all dummies.

Entered alone, Muslim population receives a coefficient of 0.007, which is significant at 5 percent. Is that large? The sample average for the variable is 28 percent. The model implied by the regression results says that a country such as Senegal, with a 94 percent Muslim population, received $0.7\% \times (94\% - 28\%) = 46\%$ more per capita per year in aid from 2002 to 2005 than it would have if its Muslim population were the sample average. In this manner, and leaving aside the major exceptions of Iran, Syria, and Saudi Arabia (which are clearly not receiving more aid by virtue of their Muslim population ratio), we estimate that the coefficient of 0.007 corresponds to a reallocation of U.S. foreign aid toward more-Muslim countries of \$401 million, compared to total annual aid in the period to all countries (excluding the six outliers) of \$4 billion. In sum, there is tentative evidence that, outside the handful of countries that are either major allies or major “enemies,” about 10 percent of U.S. aid has shifted to more-Muslim countries.

These results fit with some of the analysis presented in section 2. A few large aid recipients central to the GWOT seem to be driving most of the changes in country allocation, namely, large increases to Iraq, Afghanistan, Jordan, and the West Bank/Gaza, combined with large decreases in aid to Israel, Egypt,²⁵ and Bosnia and Herzegovina. The absence of any significant GWOT proxies, however, suggests that there is not a broad or structural shift within USAID to direct aid to other countries as part of the GWOT.

Table 3 illustrates the dominance of these countries in aid allocation since the GWOT. Between 1998 and 2001, these countries, along with Pakistan and Turkey, accounted for \$8 billion (41 percent) of total USAID flows. But from 2002 to 2005, the same nine countries accounted for \$16 billion in aid—\$5 billion more than the other 136 countries combined. In the rest of the world, overall aid levels remained relatively stable, declining slightly from \$11.7 billion to \$11.5 billion. The reallocation of aid since the start of the GWOT also appears to have been largely

²⁴ The only exception is when two dummies are paired with Iraq contribution.

²⁵ Like Israel, the decline in aid to Egypt was planned before 9/11. According to the USAID/Egypt Strategic Plan: 2000-2009 (2000), the U.S. planned to gradually scale down foreign aid to Egypt by 5 percent every year from 2000, www.usaid-eg.org.

confined to this select group of countries. Only 10 countries overall experienced a reallocation of their share of total USAID flows greater than 1 percentage point in either direction.²⁶

Table 3.

Changes in USAID bilateral assistance to selected countries (in constant 1995 US\$)							
	1998-2001		2002-2005		Net Change		
	real aid	% of total	real aid	% of total	real aid	% of total	
Iraq	0	0%	5,710	21%	+5,710	+21%	
Afghanistan	45	0%	1,793	7%	+1,748	+6%	
Turkey	11	0%	1,173	4%	+1,162	+4%	
Pakistan	18	0%	1,136	4%	+1,119	+4%	
Jordan	589	3%	1,544	6%	+955	+3%	
West Bank and Gaza	349	2%	565	2%	+216	0%	
Bosnia and Herz.	619	3%	165	1%	-454	-3%	
Egypt	2,651	13%	2,081	8%	-570	-6%	
Israel	3,790	19%	1,868	7%	-1,923	-12%	
Sample Sub-total (9 countries)	8,072	41%	16,035	58%	+7,963	17%	
Rest of World (136 countries)	11,697	59%	11,459	42%	-238	-17%	
Total World (145 countries)	19,769		27,494		+7,725		

A review of actual per capita aid received in some key countries also helps to illustrate these results (Table 4). Iraq and Afghanistan went from receiving virtually zero aid before the GWOT to receiving two of the largest per capita allocations following 9/11. Jordan, already a major recipient, more than doubled its aid per capita from USAID. Meanwhile, Israel's per capita aid allocation remained the highest in the post-9/11 period, yet dropped by more than half from the previous four-year period.

Table 4: U.S. bilateral aid patterns in selected countries
(average annual aid per capita in constant 1995 US\$)

	1998-01	2002-05	Change (%)
Iraq	0.00	50.78	na
Afghanistan	0.47	15.88	+3296
Jordan	29.93	70.74	+136
Israel	158.18	71.88	-55
Turkey	0.05	4.12	+9050
Pakistan	0.03	1.87	+5638
Tajikistan	2.49	6.07	+144
Uzbekistan	0.76	1.73	+129
Turkmenistan	1.37	1.26	-8

²⁶ It should be noted that the share of total USAID flows allocated to both Russia and Ukraine declined by 2 percent.

4. Aid regression: Sub-Saharan Africa

Sub-Saharan Africa is the region most dependent on development assistance, and USAID allocations to African countries are arguably the most clearly intended for development purposes. Therefore any shift in allocation because of the GWOT might have a much greater impact on development in Africa than on any other region. At the same time, the U.S. embassy bombings by Al-Qaeda in Kenya and Tanzania and the known presence of Al-Qaeda-linked groups in Somalia and Ethiopia, suggest that Africa is not immune to GWOT influences. Many African countries, including Nigeria, Tanzania, South Africa, and much of the Sahel, have also seen a rise in the presence of Islamic radicalism. We therefore run a separate regression using only USAID allocation to 47 African countries to see what changes there may have been since 9/11. The variables used are the same as the global regression, but three of our original GWOT proxies are no longer applicable; we use only Muslim population and those bordering state sponsors of terrorism (in this case, sub-Saharan African countries sharing a border with Libya or Sudan).

Restricting our sample to sub-Saharan Africa does not significantly change our results (Table 5). Initial aid per capita remains highly significant with a negative coefficient. However, Freedom House's measure of democracy is significant only at the 10 percent level, suggesting that democracy has not been as important a determinant of aid allocation during the GWOT as before. Finally, unlike our results from the full dataset, there is no evidence of a change in aid per capita to African countries with large Muslim populations. Perhaps not surprising given the small sample, the coefficient on Muslim population is insignificant in each of our regressions. All of this suggests that there has not been any fundamental shift in USAID allocation to African countries since 9/11.

Table 5: Regression results for sub-Saharan Africa

Dependent Variable: Change in aid per capita	OLS
Log initial income	0.113 (1.63)
Initial aid per capita	-0.102** (-2.98)
Log population	0.035 (0.57)
Freedom House dummy	-0.277* (-1.86)
Muslim population	0.001 (0.27)
State sponsor border	0.344 (0.85)
Muslim pop*State sponsor border	0.008 (0.68)
Observations	47
R-Squared	.33

robust *t* statistics in parentheses. **=significant at 5%; *=significant at 10%.

5. Conclusion

Before drawing any conclusions about the impact of the GWOT on aid flows, several important caveats are required. First, we have only looked at the provision of development assistance, which is but one aspect of U.S. foreign policy. Second, our measure of U.S. development assistance has been circumscribed by using only bilateral aid from only one U.S. agency. Third, we have only looked at total aggregate flows to countries and not at the composition of flows by sector or other substantive category. Fourth, we have also chosen five particular GWOT proxies, but many others could be envisioned. Lastly, it may simply be too early to pick up any significant differences in aid allocation. Changes in allocation criteria and systems may take years to become established and refined, and the pipeline effect for aid is well documented, often requiring several years for actual changes to occur.

Despite these caveats, one conclusion, even if only preliminary, does emerge from the data: any major changes in aid allocation due to the GWOT appear to be affecting only a handful of critical countries, namely, Iraq, Afghanistan, Jordan, and the Palestinian Territories. The extra resources to these countries also seem to be coming from overall increases in the bilateral aid envelope, combined with declines in aid to Israel, Egypt, and Bosnia and Herzegovina. Since the aid curtailments to Israel and Egypt were planned well before 2001, and the decline to Bosnia and Herzegovina is the result of the end of the immediate post-conflict reconstruction phase having nothing to do with the GWOT, this increased availability of funds may be a coincidence, but also is clearly an enabling factor to allow aid to be channeled elsewhere. There may also have been a subtle shift outside such countries toward those with higher shares of Muslim population. Time may tell whether this is the beginning of a larger trend. But at this point, concerns that there is a large and systematic diversion of U.S. foreign aid from fighting poverty to fighting the GWOT do not appear to have been realized.

Appendix 1: Shared land border with Iraq or Afghanistan

Iran
Jordan
Pakistan
Saudi Arabia
Syria
Tajikistan
Turkey
Turkmenistan
Uzbekistan

Appendix 2: Countries home to, or targets of, foreign terrorist organizations

Afghanistan	Kazakhstan	Sri Lanka
Algeria	Kyrgyzstan	Syria
Colombia	Lebanon	Tajikistan
Egypt	Libya	Thailand
India	Malaysia	Turkey
Indonesia	Pakistan	Uzbekistan
Iran	Peru	West Bank/Gaza
Iraq	Philippines	Yemen
Israel	Saudi Arabia	

Source: *Patterns of Global Terrorism*, U.S. Department of State, April 2004, www.state.gov.

Appendix 3: Countries contributing to Iraq Multi-National Force as of January 2005

Albania	Georgia	Mongolia
Azerbaijan	Hungary	Moldova
Bulgaria	Kazakhstan	Poland
Czech Republic	Latvia	Romania
El Salvador	Lithuania	Slovakia
Estonia	Macedonia	Ukraine

Source: *Iraq Year in Review: 2004 Fact Sheet*, U.S. Department of Defense, January 2005, www.defense.gov.

Appendix 4: Shared land border with state sponsors of terrorism

Libya: Tunisia, Algeria, Niger, Chad, Egypt (Sudan)
Sudan: Egypt, Chad, Central African Republic, Democratic Republic of Congo, Uganda, Kenya, Ethiopia, Eritrea, (Libya)
North Korea: South Korea, China, Russia
Iran: Turkmenistan, Pakistan, Turkey, Armenia, Azerbaijan, Iraq, Afghanistan
Syria: Turkey, Jordan, Lebanon, Israel, Iraq
Cuba: none

Appendix 5: Data description

Dependent Variable

- **Change in aid per capita (constant 1995 US\$).** Total USAID country allocations from 1998 to 2003, according to annual USAID budget allocation summaries. Figures for 2004-2005 are allocation estimates taken from USAID budget appropriations. We define USAID development assistance as the sum of allocations in the following categories: Child Survival and Health (CSH), Development Assistance (DA), Economic Support Fund (ESF), food aid (PL 480, Title II), Assistance to Eastern Europe and the Baltic States (AEEB), and Assistance for the Independent States of the Former Soviet Union (FSA). Population data taken from the UN Population Division's *World Population Prospects: The 2004 Revision Population Database*.²⁷

Independent Variables

- **Log initial income (GDP/capita in constant 1995 US\$).** GDP per capita in 1998, the first year of our sample. Real GDP data taken from the 2004 World Bank *World Development Indicators* database. Population data taken from the UN Population Division's *World Population Prospects: The 2004 Revision Population Database*.²⁸
- **Log initial population (millions).** Population in 1998, the first year of our sample. UN Population Division's *World Population Prospects: The 2004 Revision Population Database* (1998-2005).
- **“Free.”** Dummy proxy for institutional quality and level of democracy. Ratings determined by Freedom House's *Freedom in the World 2004*, with ratings of “Not Free” and “Partly Free” coded as “not free” (1998-2004). Results for 2004 assumed for 2005.
- **Initial aid per capita (constant 1995 US\$).** USAID flows per capita in 1998, the first year of the sample.
- **Foreign Terrorist Target.** Dummy variable for countries that are home to, or targets of, a foreign terrorist organization, based on end-2004 U.S. State Department summary of foreign terrorist group operations.²⁹
- **Muslim population.** Muslim share of the total population. Estimates taken from the U.S. State Department *International Religious Freedom Report* for 2004³⁰ and CIA *The World Factbook 2004*.³¹
- **Iraq contribution.** Dummy variable measuring a country's alliance with the U.S. in the war in Iraq. Considered a contributor if a country retained a troop commitment in Iraq as of the January 2005 summary of troop contributions to the Multi-National Force. (Only gives credit if troop contribution is ongoing.)³²
- **Regional dummies.** Based on World Bank regional classifications: Sub-Saharan Africa, East and Central Asia, East Asia/Pacific, Latin American/Caribbean, Middle East/North Africa, and South Asia.

²⁷ See www.usaid.org and www.unpopin.org.

²⁸ See www.unpopin.org.

²⁹ *Patterns of Global Terrorism*, U.S. State Department (2004), www.state.gov.

³⁰ See www.state.gov.

³¹ See www.cia.gov.

³² Iraq Year in Review: 2004 Fact Sheet, www.defense.gov.

- **GWOT country dummies.** Dummies for each of the leading outposts in the GWOT: Iraq, Afghanistan, Pakistan, Turkey, and Jordan.
- **Traditional aid recipient dummies.** Dummies for Israel and Egypt, traditionally the largest recipients of U.S. foreign aid.
- **GWOT border.** Dummy variable for countries bordering Iraq or Afghanistan: Turkey, Pakistan, Jordan, Tajikistan, Uzbekistan, Iran, Saudi Arabia, Syria, and Turkmenistan.³³
- **Border of state sponsor of terrorism.** Dummy for countries bordering official state sponsors of terror according to U.S. State Department: Cuba, Iran, Iraq, Libya, North Korea, Sudan, and Syria.
- **Outlier dummies.** Dummy variable for Bosnia and Herzegovina and for West Bank and Gaza, identified as additional outliers.

USAID flows to Iraq in 2005

It should be noted that the 2005 estimates described earlier may not end up representing true 2005 aid levels, as the GWOT has been largely funded through supplemental appropriations rather than through the regular budget process. This type of supplemental funding gives special Congressional authority to allocate money to emergencies deemed too urgent to be postponed until the following year's regular appropriations act. Most of the reconstruction finance for Iraq and Afghanistan has been authorized in this manner. As such, the 2005 USAID budget request does not include any additional funding for Iraq. But this prospect is highly unlikely, so we assume USAID funding to Iraq in 2005 to be equal to its obligation for 2004 (\$2.4 billion). As described earlier, this assumption does not alter the overall analysis. Even assuming no additional funding for Iraq in 2005, total flows for 2002-2005 would still be more than double that of the second highest recipient. Moreover, the only countries with aid flows likely to change significantly in 2005 due to the supplemental funding process are conflict countries such as Iraq and Afghanistan. Aid allocation to the rest of the world is unlikely to change from the 2005 budget estimates.

³³ Kuwait not included because of its high income and lack of U.S. aid.

References

- Alesina, Alberto and David Dollar (1998). "Who Gives Foreign Aid to Whom and Why?" NBER Working Paper 6612, Cambridge, MA.
- Burnside, Craig and David Dollar (2000). "Aid, Policies and Growth," *The American Economic Review*, 90 (4): 847-68.
- Center for Strategic and International Studies (2004). *The Transatlantic Dialogue on Terrorism*, Washington, DC, www.csis.org.
- Central Intelligence Agency (2004). *The World Factbook 2004*, Washington, DC, www.cia.gov.
- Congressional Research Service (2002). "Israel: U.S. Foreign Assistance," Issue Brief for Congress IB85066, Washington, DC.
- Dollar, David and Victoria Levin (2004). "The Increasing Selectivity of Foreign Aid, 1984–2002," World Bank Policy Research Working Paper Series 3299, Washington, DC.
- Freedom House (2004). *Freedom in the World 2004*, Washington, DC, www.freedomhouse.org.
- Goldstein, Markus and Todd Moss (2005). "Compassionate Conservatives or Conservative Compassionates? US Political Parties and Foreign Aid to Africa," *Journal of Development Studies*, Volume 41, No. 7 (forthcoming October). Originally released as "The Surprise Party: An Analysis of U.S. ODA Flows to Africa," Center for Global Development Working Paper 30, Washington, DC, July 2003.
- Natsios, Andrew (2004). Testimony of USAID Administrator, Andrew S. Natsios, before the Subcommittee on Foreign Operations, Committee on Appropriations, U.S. House of Representatives, April 1, 2004.
- Organization for Economic Cooperation and Development/Development Assistance Committee (2002). "Development Cooperation Review: United States," Paris, www.oecd.org.
- Oxfam (2005). *Paying the Price: Why rich countries must invest now in a war on poverty*, Oxford, UK, www.oxfam.org.
- Schraeder, Peter J., Steven W. Hook, and Bruce Taylor (1998). "Clarifying the Foreign Aid Puzzle: A Comparison of American, Japanese, French, and Swedish Aid Flows," *World Politics* 50 (2): 294-323.
- United Nations Population Division (2004). *World Population Prospects: The 2004 Revision Population Database*, www.unpopin.org.
- United States Agency for International Development (2005). Congressional Budget Justification FY 2005, Washington, DC, www.usaid.gov.

- United States Agency for International Development (2004). Congressional Budget Justification FY 2004, Washington, DC, www.usaid.gov.
- United States Agency for International Development (2003). Congressional Budget Justification FY 2003, Washington, DC, www.usaid.gov.
- United States Agency for International Development (2002). Congressional Budget Justification FY 2002, Washington, DC, www.usaid.gov.
- United States Agency for International Development (2001). Congressional Budget Justification FY 2001, Washington, DC, www.usaid.gov.
- United States Agency for International Development (2000). USAID/Egypt Strategic Plan: 2000-2009, Washington, DC, www.usaid-eg.org.
- United States Department of Defense (2004). Iraq Year in Review: 2004 Fact Sheet, Washington, DC, www.defense.gov.
- United States National Security Council (2002). U.S. National Security Strategy, Washington, DC, www.whitehouse.gov/nsc/nss.
- United States Office of Management and Budget (2004). U.S. 2004 Budget, Washington, DC, www.whitehouse.gov/omb/budget/fy2004/state.html.
- United States State Department (2004a). *Patterns of Global Terrorism*, Washington, DC, www.state.gov.
- United States State Department (2004b). *International Religious Freedom Report for 2004*, Washington, DC, www.state.gov.
- Woods, Ngaire (2005). "The shifting politics of foreign aid," *International Affairs* 81 (2): 393-409.
- World Bank (2004). *World Development Indicators* database.