Diamonds have not made Angola rich. Oil has not delivered prosperity to the República Bolivariana de Venezuela. Rich reserves of coltan (a mineral used in mobile phones) have fed war in the Democratic Republic of Congo. Indeed, countries with large primary export sectors (oil, rubber, diamonds, minerals) often, though not always, grow more slowly than their peers—a phenomenon recognized in mainstream economics as the “resource curse.” Yet for many countries the key resource is not oil or minerals but foreign aid. Does foreign aid cause problems too? If so, why, and what can be done to prevent them?

How the resource curse works
Natural resource exports may damage economies in several ways (Harford 2003; Sala-i-Martin and Subramanian 2003). First, they create volatility in government revenues that, if poorly managed, will lead to inflation and boom-and-bust cycles in government spending. Second, they produce foreign currency earnings that, if not neutralized by monetary policy, will raise the real exchange rate, undermining the competitiveness of other sectors. Third, they can damage institutions (including governance and the legal system) indirectly—by removing incentives to reform, improve infrastructure, or even establish a well-functioning tax bureaucracy—as well as directly—by provoking a fight to control resource rents.

Although research is inconclusive, there is growing evidence that the third effect is the most problematic. (For reviews of the literature, see Sala-i-Martin and Subramanian 2003 or Djankov, Montalvo, and Reynal-Querol 2005.) There are both theoretical and empirical reasons to believe this. First, both volatility and exchange rate appreciation should be manageable with reasonable institutions and some political will. Second, “point source” natural resources like oil and diamonds—resources that are more easily controlled by an
elite and do not need widespread labor, the rule of law, or infrastructure such as roads—have much more severe effects than other natural resources, such as agricultural products (Isham and others 2003). The implication is that it is not the volatility or the exchange rates that matter, but the fact that countries with point-source resources have weak institutions. Third, Sala-i-Martin and Subramanian (2003) show that natural resources appear to cause no direct drag on growth; the negative effects, while severe, are indirect and operate through the weakness of economic institutions.

**Aid, oil, and institutions: new evidence**

Might aid also damage institutions? Given the evidence on natural resource revenues, this possibility must be taken seriously. Several studies have shown that some aid money goes missing before reaching the intended recipients, and this money may well have properties similar to those of natural resource revenues, and for very similar reasons.

Knack (2000) reports evidence supporting this gloomy hypothesis. His econometric analysis shows that aid flows (relative to GDP and to government spending) are significantly correlated with a worsening of political risks for external investors, implying a deterioration in economic institutions (box 1).

Marshaling fresh evidence on the effect of both foreign aid and oil revenues, Djankov, Montalvo, and Reynal-Querol (2005) study changes in the quality of political rather than economic institutions. The results of their econometric analysis parallel those of Knack (2000): both aid and oil rents have a statistically significant and negative effect on democratic institutions. On average, countries with above-average aid receipts relative to GDP promptly show a political deterioration. The effect of aid over the long run is substantial. A country receiving more foreign aid than three-quarters of the countries in the sample, over a period of five years, would expect to see a decline in the index of democracy by 0.6–1 point on a scale of 1–10.

Cases since the 1960s illustrate the effect (figure 1). The 10 biggest deteriorations in democratic institutions are associated with large aid inflows in the previous year, averaging 4 percent of GDP, well above the mean. In contrast, countries with the 10 biggest improvements in democratic institutions received modest aid flows in the previous year, averaging around 1 percent of GDP. And the 15 episodes in which a country received one of the largest annual inflows of aid relative to GDP saw an average deterioration in the democracy index of 28 percentage points over the following year.

**How aid might damage institutions and growth**

Brautigam and Knack (2004) discuss several plausible explanations for the effects discovered in these econometric studies:

- Aid can support poor governments and remove the pressure to reform. The end of U.S. aid to the Republic of Korea and Taiwan (China) has

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**Box: How to measure institutional damage?**

Although often closely correlated, the available indicators of institutional effectiveness measure different things. Knack (2000) uses indexes from the International Country Risk Guide (ICRG), a commercial service providing subjective information on political risks facing overseas investors—in other words, the quality of economic institutions (http://www.prsgroup.com/icrg/icrg.html).

Sala-i-Martin and Subramanian (2003) use an index produced by Daniel Kaufmann, Aart Kraay, and Massimo Mastruzzi on the basis of perception-based surveys of economic institutions such as the rule of law and the protection of property rights (http://www.worldbank.org/wbi/governance/govdata2002/).

Djankov, Montalvo, and Reynal-Querol (2005) use measures of political institutions: three indexes from the Polity IV database (http://www.cidcm.umd.edu/inscr/polity/) and the checks and balances measure from the Database of Political Institutions (http://www.worldbank.org/wbi/governance/pubs/wps2283.html). Two of the Polity IV indexes, democracy and autocracy, capture as objectively as possible political details: the competitiveness and the openness of executive recruitment, constraints on the chief executive, and the competitiveness of political participation. The third Polity IV index, polity, is simply democracy minus autocracy. Checks and balances reflects the number of veto players in a political system—the key decisionmakers whose agreement is needed before policies can be changed. Djankov, Montalvo, and Reynal-Querol produce similar results when they use the ICRG measures of economic institutions rather than their measures of political institutions.
been credited with their reforms in the 1960s. Large aid flows may eliminate the need to create a responsive, tax-collecting civil service, while a need to collect taxes enhances the capability and accountability of government. Aid-dependent governments are accountable to donors, not to their population.

- **The Samaritan’s dilemma.** Aid creates a “moral hazard” problem, meaning that governments can spend money without a firm budget constraint, confident that donors will bail them out of any difficulty. Donors, who want to help (or are committed to send money for other reasons), may indeed be forced to oblige.

- **Aid siphons skilled workers away from government.** By paying big salary premiums, large donor projects can “poach” good people away from government, weakening its institutions.

- **Recipients overstretch themselves.** In a situation where focusing on priorities is important, recipients will often prefer to expand their operations to cover whatever projects donors wish to fund, especially since such funding often creates perks for officials.

- **Aid fuels patronage and sparks fights over rents.** Natural resources have provoked many wars—Iraq’s invasion of Kuwait, the Biafran war in Nigeria, civil war in Angola, and the recent war in the Democratic Republic of Congo—but fights over aid are usually less obvious. Somalia’s civil wars have been characterized as a fight for control of massive food aid, but most aid is not a physical resource that can be fought over and captured. Rent seeking presumably takes place at the level of political infighting, fraud, and theft.

Other explanations do not rely on an institutional effect. Rajan and Subramanian (2005) find that aid appears to slow the growth of labor-intensive industries in developing countries, consistent with a “Dutch disease” effect caused by an appreciating exchange rate. The World Bank (2000) finds that Africa’s exchange rates seem to be overvalued—an effect that may be due to a combination of aid flows and natural resource earnings. Many aid specialists have also complained about the volatility of aid flows.

### Using disciplines to preserve institutions

The results of the econometric studies should be treated with caution, especially since such cross-country statistical studies are fraught with difficulties. Nevertheless, at the very least these studies do not allow us to dismiss the concern about a “curse of aid.” It is clearly a risk, and the first response should be to acknowledge that risk rather than treating institutions as if immune to the effects of aid flows. In the past few years, as development professionals have debated the proposition that “aid works in a good policy environment,” donors have responded by redirecting aid to good performers. Too few have acknowledged the possibility that the aid flows may damage the policy environment. More knowledge is needed here, with case studies strengthening the preliminary cross-country research.

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**Figure 1** Big inflows of aid are often followed by reversals in democracy

<table>
<thead>
<tr>
<th>Aid inflows the year before the 10 biggest deteriorations in democracy</th>
<th>Aid inflows the year before the 10 biggest improvements in democracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Official development assistance as a percentage of GDP</td>
<td>Official development assistance as a percentage of GDP</td>
</tr>
<tr>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Gambia, The, 1994</td>
<td>Lesotho, 1993</td>
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<tr>
<td>Lesotho, 1970</td>
<td>Haiti, 1990</td>
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<td>Niger, 1996</td>
<td>Bolivia, 1982</td>
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<td>Sudan, 1989</td>
<td>Pakistan, 1988</td>
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<td>Korea, Rep. of, 1961</td>
<td>Panama, 1989</td>
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<td>Pakistan, 1977</td>
<td>Thailand, 1992</td>
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<td>Fiji, 1987</td>
<td>Indonesia, 1999</td>
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<td>Myanmar, 1962</td>
<td>Ecuador, 1979</td>
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<tr>
<td>Nigeria, 1966</td>
<td>Uruguay, 1985</td>
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<tr>
<td>Nigeria, 1984</td>
<td>Argentina, 1983</td>
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</tbody>
</table>

But beyond recognizing the problem and calling for more research, what practical steps suggest themselves? After all, just because aid may have caused problems in the past, especially during the cold war, does not mean that aid cannot be effectively delivered. (It is notable that large aid flows went in parallel with an improvement in the governance of many African countries during the 1990s, raising hope that methods of delivering aid have improved.) Aid does not have to cause the same type of damage as oil—but without appropriate disciplines, it might be just as bad. So what disciplines are available? There is some evidence that loans naturally discipline both borrowers and lenders more than grants do (see Note 287 in this series)—but grants can be disciplined and loans lax. The key is to keep in mind the incentives facing both donors and recipients and design appropriate disciplines into aid packages:

- If the problem is that aid swells government budgets and thus discourages reform or the growth of accountable institutions, one solution is to direct aid away from governments. Direct budget support would presumably be particularly risky, but since most government funding is fungible, aid may be best delivered elsewhere. Using the private sector is clearly a possibility.

- If the problem is that aid generates rents and fuels patronage, the solution requires much closer control over the aid flows. Corruption needs to be vigorously fought. Donors and aid agencies can take a strong lead and can always look for ways to improve their efforts. One way is to eliminate discretion over rents by paying only after the desired results—vaccinations, electricity connections, operational rural phone booths—have been achieved. (For more on such output-based aid, see Brook and Smith 2001.)

The private sector can help here: one “output based” model of disciplined aid uses the private sector to deliver results, providing grants only after those results are confirmed. This requires a combination of grants paid on completion, to cover the subsidy, and loans (from the private sector or from nonsovereign lenders such as the International Finance Corporation) to provide the capital necessary for the project. Some aid agencies have shown growing interest in such a combination—an interest that the research on aid and institutions should encourage.

### Note

1. The finding that oil damages democratic institutions replicates the results of earlier studies. While these studies often used oil exports relative to GDP as a measure of oil rents, Djankov, Montalvo, and Reynal-Querol (2005) use the dollar value of oil production (annual oil production multiplied by average oil prices for the year in question). This is a more direct measure of oil rents through it leaves aside production costs, known to be modest for most developing countries.

### References


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