The Impact of USAID-Funded Private Sector Development Programs on Mozambique's Private Sector

May 2008

This publication was produced by Nathan Associates Inc. for review by the United States Agency for International Development.

SUMMARY

The purpose of this paper is to estimate the quantifiable[1] benefits of two USAID programs on private sector development in Mozambique: Technical Assistance to the Confederation of Mozambican Business Associations (CTA) and the Ministry of Industry and Commerce (MIC), which operated from 2003 to 2005; and the Mozambique Trade and Investment Project (TIP), which has operated since 2005.

Using a discount rate of 13.2 percent, reflecting an estimate of the real opportunity cost of capital to the private sector in Mozambique in 2003, the present value of quantifiable benefits totals $52.3 million (discounted to 2003). At this discount rate, the present value of program cost has been $8.8 million. This gives a net present value of $43.5 million, and a benefit/cost ratio of 5.9.

Using a discount rate of 4.0 percent, in line with the rate recommended by the U.S. Office of Management and Budget in 2003, the present value (discounted to 2003) of quantifiable benefits totals $81.5 million. At this discount rate the present value of program cost has been $10.5 million. This gives a net present value of $71.0 million, and a benefit/cost ratio of 7.8.

METHODOLOGY

The analysis focuses on program activities that have produced benefits satisfying three fundamental criteria:

- <u>The program activities have already occurred</u>. We only estimate benefits for program activities that have already been implemented. No benefits are forecast for possible future activities. (TIP will end in 2010.)
- <u>There are quantifiable benefits</u>. We only estimate benefits for which pertinent data are available. Many program benefits cannot be quantified because of the absence of data or the inherent difficulty of measuring the effect of efforts to support reforms of the business environment.
- <u>The benefits are attributable</u>. We estimate benefits that are largely or partly attributable to USAID program support to CTA or to MIC. Attribution estimates are based on information provided by TIP's Chief of Party (COP) and USAID's Cognizant Technical Officer (CTO).

We define the net benefits of USAID support as the expected net present value (NPV) of additional income to Mozambique's private sector. These calculations require judgments about what would have happened without the existence of USAID program interventions. As far as possible, these judgments err on the conservative side. For example, we assume a short duration for USAID-related benefits, on the grounds that the government would likely have adopted similar measures anyway because of the influence of other stakeholders or international partners, but with a delay of several years. Hence, the estimated benefits result from cost-reducing reforms occurring earlier than would otherwise have been the case. This approach may be viewed as conservative, as some reforms might not have

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[1] As discussed below under *Non-Quantifiable Impacts on the Private Sector* many other program impacts are not quantifiable.

occurred at all without the stimulus of policy analyses and effective lobbying by the business community, driven by USAID program support.

In the same vein, we base our attribution assumptions on judgments about timing. For example, an assumption of 75 percent attribution implies a judgment that USAID-supported activities were the primary trigger, though not the only one, for getting the government to implement a given reform *at the time* it occurred. In addition, the analysis is limited to direct effects of USAID program activities.

These restrictions are intended to ensure that the estimates represent a lower bound to the actual program benefits.

To estimate the NPV of private sector benefits, we subtract USAID's program costs from the "gross benefit" of the identified program activities. We discount the net benefits to the base year of 2003 using two different discount rates: 4.0 percent and 13.2 percent. The former was the Office of Management and Budget's recommended discount rate for eight-year projects in 2003,[2] whereas the latter represents an estimate of the real cost of capital to private enterprises in Mozambique in 2003.[3] The higher discount rate places a greater weight on early benefits and costs, and therefore reduces the net present value of the program interventions.

Through discussions with the TIP Chief of Party, Ashok Menon, and the USAID CTO for TIP, Tim Born, we identified five reforms that satisfy the three criteria cited above:

1. Reduced time to register a business.
2. Reduced scanner fees.
3. Faster value-added tax (VAT) refunds owing to improved tax administration.
4. Suspended implementation of Aviso 2, which would have established more costly rules for international trade transactions.
5. Elimination of visa requirement and associated fees.

The USAID programs were also instrumental in influencing other trade and policy reforms, which could not be included in the analysis because of the difficulty of quantifying results (see Non-Quantifiable Impacts, below).[4]

We wish to offer several caveats with regard to our analysis:

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[2] http://www.whitehouse.gov/omb/circulars/a094/dischist.pdf, accessed April 3, 2008. OMB's recommended discount rates are based on rates for notes and bonds issued by the United States Treasury.

[3] The is the average bank lending rate for loans of more than two years maturity, adjusted for inflation. Interest rates are from the Central Bank of Mozambique; inflation data are from the International Monetary Fund. Note that the World Bank Group typically uses a discount rate of ten percent. See, for example, Independent Evaluation Group (MIGA), 2006 Annual Report, May 24, 2006, at http://www.miga.org/documents/ieg_2006_annual_report.pdf, accessed April 4, 2008.

[4] See www.tipmoz.com for further information on program activities.

1. The authors are employed by the same firm, Nathan Associates Inc., that managed the projects whose benefits are estimated. We have made every effort to conduct our analysis objectively, but recognize that a potential conflict of interest exists. Ideally, an independent consultant would undertake his or her own analysis to verify the findings.

2. The attribution assumptions provided by the COP and the CTO would ideally be verified through consultation with other stakeholders (e.g., representatives of private sector associations and government officials). While limits on resources for the present analysis did not permit consultation with other stakeholders, we recommend that authors of future studies collect attribution estimates from those sources. In any case, we have scaled down several of the attribution assumptions suggested by the COP and CTO in order to err on the side of understating program benefits.

3. To estimate the direct effects of USAID's programmatic interventions, we focus on gains to the private sector. This accords with USAID's objective of removing constraints on investment and trade and enhancing Mozambique's competitiveness by reducing the cost of doing business. For three of the activities, however, the cost reduction for the private sector entails a loss of revenue for the government or (in the case of the scanning fee) its agent. In an economic sense, one might argue that a gain to the private sector matched by a loss to the government is a benefit transfer and not a net gain to the economy. But if the purpose of the activity is to reduce the cost to the private sector, then it is appropriate to count this as a gain. One might also contend that resources yield a higher economic return in the hands of the private sector than in the hands of the government, but the data and resources available for this study did not allow for a more thorough empirical investigation to settle this debate. Rather than speculate, we focus on the benefits accruing to the private sector, while calling attention here to the issue. At the end of this paper, we also include a note about the potential scope of broader benefits to the economy from improvements in the business environment.

RESULTS

This section briefly explains each of the five reforms covered by the analysis, and provides a short explanation of the assumptions and approximations underlying the computations. Additional technical details are given in footnotes.[5]

1. Reduced Time to Register a Business

Between 2003 and 2007, Mozambique reduced the number of days needed to register a business from 153 to 29. USAID was the lead donor dealing with these issues, and by far the most active one. Specifically, USAID helped Mozambique improve business registration via three channels: (1) technical assistance and financial support to the Confederation of Mozambican Business Associations (CTA), the most influential advocate for business environment reforms;[6] (2) analytical papers on

[5] The calculations in full are available in a separate Microsoft Excel file, which is available upon request via the TIP website: www.tipmoz.com

[6] Support for CTA is a central, ongoing program activity for TIP, as it was under the predecessor project.

problems with the business registration process, and recommendations for reform; and (3) financial, logistical, and technical support for the annual Private Sector Conference hosted by CTA, which has been the primary catalyst for reforms of the business environment.

The direct benefit of faster registration is that entrepreneurs begin earning income from their businesses more quickly. We calculate this gain by multiplying a conservative estimate of the average daily income of a formally registered entrepreneur[7] by the number of days saved due to the expedited registration process, also taking into account the observed increase in the volume of registrations following the introduction of the streamlined procedures.

We also assume, conservatively, that the Government of Mozambique would have taken steps to reduce the days to register a business to 29 by 2010 in the absence of the USAID-supported lobbying and analytical assistance. We also attribute only 50 percent of this short-term benefit to USAID, considering that Norwegian aid financed the computer hardware and software needed for reforming the business registration process, and that other agencies such as the World Bank, DFID, the EU, and the IMF were also promoting reforms.

At a discount rate of 13.2 percent, the net present value of direct benefits from this reform total $1.1 million. At a discount rate of 4 percent, the NPV of direct benefits total $1.6 million.

2. Reduced Scanner Fees

In April 2006, the Council of Ministers authorized a private-sector operator to inspect containers passing through the Port of Maputo using modern scanning technology, and to recover equipment costs by charging fees to shippers.[8] When the government released the schedule of fees for the scanning inspections, a wave of protests ensued. A TIP analysis of the impact of the scanning fees[9] and ensuing lobbying by CTA was instrumental in convincing the government to agree to a small reduction in some of the fees. We thus attribute 75 percent of the benefits of this decision to USAID. We also assume that the operator of the scanners would have reduced fees to current levels by 2012, in any case, as a result of other lobbying or scale economies from increased traffic volume.

Reduced scanning fees benefit Mozambique’s private sector because they save money and allow businesses to dedicate more resources to income-generating activities. More broadly, lower fees also make Maputo Port more competitive vis-à-vis other ports in the region, which helps to attract more container traffic, enhances the port’s contribution to the economy, and fosters development of the logistics sector. These broad benefits are likely to be substantial, but we do not have the requisite data or resources to calculate them. Thus, we limit our calculations to the cost reduction for the private sector as a result of lower scanning fees.

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[7] As a proxy for entrepreneurs’ daily income, we use the estimated average income among the top 10 percent of income earners, based on the income distribution data from the World Bank’s *World Development Indicators*. In effect, we assume that registered business owners, on average, are in this upper income bracket.

[8] Decree No. 10/2006.

[9] “Briefing Note: The Economic Costs of Port Scanning Fees in Mozambique.” USAID/Mozambique Trade and Investment Project, January 2007. http://www.tipmoz.com/upload/tipcat_files/cat3_link_1172427787.doc.

To calculate the benefit, we multiply the difference between the original fees and the reduced ones by actual and projected figures for container traffic through Maputo Port.[10]

At a 13.2 percent discount rate, the estimated net present value of benefits is $5.0 million. Using a 4.0 percent discount rate, it is $8.5 million.

3. Faster VAT Refunds

Over the past decade, the Government of Mozambique has implemented a comprehensive tax reform program covering income taxes, indirect taxes, and customs duties. By 2005, such reforms led the IMF to regard Mozambique's tax system as "broadly in line with international best practices," particularly in consumption and income taxation.[11] Nonetheless, businesses still faced long and costly delays in VAT refunds. While these delays are still a serious problem, improvements led to a 40 percent reduction in VAT refund times, and a corresponding reduction in the stock of VAT refunds owed to the private sector, to an estimated $4 million.[12]

This improvement in the time required to process VAT refunds can be attributed largely to USAID-supported activities, including two reports offering recommendations to streamline the administration of VAT refunds drawing on international best practices for developing countries like Mozambique.[13] These reports were then used very effectively by CTA in lobbying the government for improvements in the refund process, in the face of initial denials by VAT authorities of claims from the private sector that the refund process was a serious problem.

The direct benefit to the private sector is that the reduction in VAT refund delays either reduces financing costs or frees up working capital for productive uses. The benefit can be approximated by the real interest rate on bank loans, which was 13.2 percent. We further assume that in the absence of USAID-supported activities the government would have come around to implementing these reforms in 2010. In light of the central role of the analytical work and lobbying supported by USAID for securing the improvements in an expeditious manner, we attribute 75 percent of their benefits to USAID.

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[10] Data on container traffic through 2007 is from the Port of Maputo website, www.mips.co.mz/general_information.htm, accessed May 13, 2008. Our projection for 2008 to 2011 is based on the average annual growth of container traffic between 2003 and 2007, or 18.2 percent. The Port website did not provide a breakdown of containers by type (i.e., import, export, or transit and full vs. empty). For this purpose we use a forecast of 2007 traffic obtained from the Maputo Port Development Company (MPDC). Our calculations also assume that 25 percent of the traffic involves 40 foot containers.

[11] Teresa Daban, "Tax and Customs Reforms in Mozambique: An Overview," in *Republic of Mozambique: Selected Issues and Statistical Appendix*, IMF Country Report No. 05/311, August, 2005. The report is available at: http://www.imf.org/external/pubs/ft/scr/2005/cr05311.pdf .

[12] This information was provided by Paulo Fumane, Executive Director, CTA, based on work done by CTA's Tax Policy Working Group.

[13] Nathan Associates, *Tax Reform and the Business Environment in Mozambique: A Review of Private-Sector Concerns*, December 2004; and Nathan Associates, *The Economic Costs of VAT Refund Delays in Mozambique*, January 2007. The studies are available at www.tipmoz.com.

At a discount rate of 13.2 percent, the net present value of benefits amount to $428,268. At a discount rate of 4.0 percent, the net present value of benefits equals $651,300.[14]

4. Suspending Aviso 2

In May 2006, the Central Bank of Mozambique issued Notice 2/GGBM/2006 (Aviso 2) to revise a previous (Notice 6/GGBM/2005) in two important respects relating to payments for import and export transactions. First, Aviso 2 required the use of a letter of collection or letter of credit as the only acceptable payment method for transactions involving goods. Second, it required banks to be more active in examining transactions, and requires them to halt execution if they believe the transactions are illicit. These regulations, however well intended, would have had serious side effects by slowing down the payment process, restricting advanced payment options, and adding to the cost of trade transactions by requiring letters of credit.

CTA used TIP analysis[15] to lobby vigorously against Aviso 2, with the result that implementation was suspended indefinitely. For the analysis, we attribute 75 percent of the benefits of this decision to USAID, and assume that the Aviso, had it been implemented, would have been repealed by 2011 even in the absence of USAID-supported interventions, because of other lobbying pressures for liberalization of the trade regime.

The quantifiable direct benefit of suspending Aviso 2 is the saving on additional transaction costs that would have been incurred as a result of the requirement to use letters of credit. The cost saving is assumed to be 1 percent of the value of shipments for imports and 0.25 percent of the value of shipments for exports.[16]

At a discount rate of 13.2 percent, the net present value of the measured benefit amounts to $38.2 million. At a discount rate of 4.0 percent, the NPV of the benefit equals $60.9 million.[17]

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[14] Based on CTA's estimate of a 40 percent increase in VAT refund times, we assume that the private sector obtained an additional $2,666,667 in refunds annually. At the 13.2 percent real interest rate, annual savings on financing charges equal $2,666,667 times 0.132, or $352,000. We attribute 75 percent of the annual savings, or $264,000, to USAID. The total benefit is this value over three years (2007 to 2009), discounted at the 13.2 percent and 4.0 percent rates.

[15] See http://www.tipmoz.com/page.php?cat1=117&cat2=262&cat3=545. Accessed March 25, 2008.

[16] These figures are based on LOC costs in Angola provided by the Supervision Department of the National Bank of Angola for a study by Bolnick, B. et al. (2008) on *Developing the Supply of Financial Services and Improving the Efficiency of the Banking Sector in Angola*, and interviews for that study which established that LOC costs in Angola are in line with regional norms.

[17] We arrive at these figures by multiplying 80 percent of the projected value of imports and exports (excluding "mega-projects") for 2007-2010 by the estimated cost per letter of credit. The 80 percent factor assumes that up to 20 percent of trade transactions would use letters of credit even without the Aviso. See Nathan Associates, *Financial Sector Constraints to Private Sector Development in Mozambique*, May 2007, page 90. The trade projections are from the IMF Country Report No. 08/15, January 2008.

5. Elimination of SADC Visa Fees

Prior to April 2005, tourists from Southern African Development Community (SADC) countries were required to obtain entry visas at a cost of $25. With USAID support, CTA succeeded in lobbied the government to waive this requirement. TIP's CTO reported that in the absence of the USAID-assisted activities this reform would certainly have taken place anyway, but probably not for another three years or so.[18] We thus assume that the government would not have implemented the reform until 2008, and attribute 75 percent of the benefits to USAID-supported interventions.

The elimination of the visa requirement is likely to have stimulated tourist arrivals from SADC countries, because it made entry into Mozambique cheaper and easier. We calculate the benefits as the spending in Mozambique generated by additional SADC tourist arrivals stimulated by the reforms.[19] We assume that the reform increased SADC tourist arrivals in the same proportion as it reduced the out-of-pocket cost of an average visit to Mozambique, or 5.3 percent.[20] This is a very conservative estimate in that it assumes a unitary demand elasticity for tourist decisions to visit Mozambique, instead of other destinations, and excludes any effect from simplifying the visa process. Indeed, our impact estimate represents only a fraction of the total increase in tourism from South Africa since the reform was enacted. Information from CTA suggests that these arrivals increased by 33 percent between the time the visa requirement was waived (April 2005) and the end of 2007.

We multiply the estimated increased arrivals due to the reform (about 12,000 per year) by the average spending per tourist visit ($450) to arrive at the total benefits to the private sector in Mozambique. At the 13.2 percent discount rate, the net present value of this benefit totals $7.6 million; at the 4.0 percent rate, the NPV totals $9.9 million.

NON-QUANTIFIABLE IMPACTS

The two USAID projects under review have supported many other interventions for which it is not possible to obtain even a rough estimate of benefits to the private sector. The list includes the following activities, among others:

1. Annual Private Sector Conference (CASP). USAID has been instrumental in supporting the conference, which has become the main forum for dialogue between the private sector and government on the full range of issues pertaining to improvements in the business-enabling environment.

2. Trade Capacity Building. Through TIP and its predecessor project, USAID has assisted the government with implementation of the SADC and WTO trade agreements, and helped

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[18] Ashok Menon, e-mail message to Alexander Greenbaum, February 28, 2008.

[19] We use tourist arrivals from South Africa as a proxy for intra-SADC tourist arrivals because South Africa is the predominant source of intra-SADC tourists to Mozambique.

[20] We arrive at the 5.3 percent figure by dividing the cost of the visa ($25) by the estimated spending per tourist visit to Mozambique *after* the visa reform ($450), plus the US$25 fee: 25/475=0.053 (source for spending estimates: USAID Northern Mozambique Tourism Project). South African tourist arrivals in 2004 totaled 228,104 (source: Government of Mozambique, *Estatísticas do Turismo: Movimento de Hóspedes*, 2005, http://www.ine.gov.mz/sectorias_dir/turismo, accessed May 12, 2008).

Mozambique negotiate the Trade and Investment Framework Agreement (TIFA) with the United States, and the Economic Partnership Agreement (EPA) with the European Union.

3. Leadership and Development Conference. USAID funded and helped organize a three-day seminar in 2007 that was convened by President of Mozambique and attended by the entire cabinet and all permanent secretaries. The focus of discussion was the need for economic reform and improvements in governance.

4. Integrated Framework. The IF is a multi-agency, multidonor program that helps low-income countries integrate into the global economy, with the aim of enhancing their economic growth and improving poverty reduction strategies. Through Technical Assistance to the Confederation of Mozambican Business Associations (CTA) and the Ministry of Industry and Commerce (MIC) project, USAID helped Mozambique join the IF.

5. Streamlined Licensing. Through TIP, USAID helped the MIC analyze how to reduce and simplify licensing procedures. In March 2008, new licensing regulations were presented to the Council of Ministers and remain under review.

6. Labor Law Reform. With strong support from USAID, CTA pursued a long-term effort to lobby for labor law reforms that were initially beyond the government’s consideration. The analysis and lobbying paid off. On August 1, 2007, the new Labor Law was enacted. The new law turned out to be less far-reaching than expected, but should nonetheless have a positive impact on private sector growth.

7. Telecommunications Reform. The USAID program funded a senior advisor to work with former Minister Tomas Salamão on telecommunications reform. The Minister subsequently pushed through unregulated internet and increased competition in the telecom market by introducing a second cellular phone provider. As a result, the ISP market is competitive, as are rates for regional and international calling.

8. Urban Transport. The government was seriously considering restricting the number of privately operated minibuses in favor of government-run and managed buses. This would almost certainly have led to inefficiency in public transportation. Partly owing to CTA lobbying, supported by USAID, the government decided not to implement the plan.

A NOTE ON BROADER ECONOMIC BENEFITS

Several published studies have estimated the quantitative impact of institutional reform on economic growth. One of the better-known, by Djankov, McLeish, and Ramalho (2006), found that the effect of moving from the fourth to the first quartile in the overall Doing Business ranking yields an estimated gain of 2.3 percentage points per annum in real per capita GDP growth.[21] We reconstructed the results of this study with more recent data and tested variations in the set of control variables, with similar results.

[21] Djankov, Simeon, McLeish, C., Ramalho. R. 2006. *Regulation and Growth*. The World Bank.

A recent paper on *Doing Business and Mozambique: Quick Fixes for 2009* shows that, with political will, Mozambique can improve its Doing Business ranking from 134 to 117 (out of 178 countries) within a relatively short period of time.[22] If this were to be achieved, Mozambique would improve from the 61st percentile to the 55th percentile, other things being equal. Applying the impact estimate from Djankov, McLeish, and Ramalho, this relatively small improvement in rank would lead to an increase of 0.18 percentage points in the annual rate of growth of real per capita GDP, which amounts to a gain of $14 million per year in total GDP.[23] If Mozambique were to emulate a top reformer like Georgia and jump all the way into the top 20 performers, globally, the estimated benefit in terms of higher GDP would be an order of magnitude greater, at $115 million per year. These estimates cannot be applied mechanically to predict the actual impact, but they do serve to show that the full benefit of programs to improve the business environment can be huge.

CONCLUSION

This paper summarizes the results of an empirical analysis of the benefits of recent USAID programs in Mozambique to remove constraints on investment and trade, and enhance Mozambique's competitiveness by reducing the cost of doing business. The analysis leads to two clear conclusions. First, it is inherently difficult to estimate the benefits generated by donor-supported programs aimed at improving the business environment, as distinct from programs that operate at the microeconomic or industry level, or programs with tightly focused impact sets.[24] For many program activities relating to the business environment, it is not possible to identify or measure results, and for others the estimates are rough at best.

And yet, second, even when the analysis is limited to a subset of activities for which one can estimate some of the direct benefits, it is apparent that economic growth programs to facilitate improvements in the business environment can have a powerful economic impact and yield very high returns on the investment of donor resources. Where microeconomic interventions may yield a reasonably high rate of return, successful efforts to reform the business environment have the potential to yield a return that is leveraged many times over, by enabling businesses throughout the economy to be more competitive and grow more quickly.

In particular, this study focuses on just five reform measures in a larger portfolio of activities supported by USAID's program in Mozambique to reform the business environment. The analysis also examines only a limited range of direct effects, and adopts conservative assumptions throughout in order to obtain a *lower bound* estimate of the program benefits. On this basis, we estimate that the

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[22] Greenbaum, Alexander. 2008. *Doing Business and Mozambique, Quick Fixes for 2009*. USAID. These estimates make the following two assumptions: no new countries are added for Doing Business, and no other countries' scores change.

[23] This calculation is based on GDP per capita of $369 in 2007, scaled up to a total population of 20.5 million (source: IMF World Economic Outlook Database, April 2008).

[24] For interventions at the microeconomic or industry level, it is much easier to measure results in before-and-after terms. But a proper impact analysis requires a with-and-without analysis, which necessitates clear assumptions about the counterfactual (without intervention) scenario, or comparisons against a control group, or statistical analysis to distinguish intervention effects from the effects of other contemporaneous changes in business conditions.

net present value (NPV) of *measurable* program benefits to the private sector exceeds the NPV of program costs by a factor of six to eight, depending on the discount rate used. The largest benefit derives from USAID-supported efforts that led the Bank of Mozambique to suspend indefinitely new foreign exchange regulations that would have increased the cost and complexity of most trade transactions.