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The Chad-Cameroon Petroleum Development and Pipeline Project (A)

On June 6, 2000, the World Bank's and the International Finance Corporation's (IFC) Boards of Directors were scheduled to vote on whether to approve funding for the $4 billion Chad-Cameroon Petroleum Development and Pipeline Project. The project presented a unique opportunity to stimulate economic development in Chad, one of the poorest countries on earth, yet it entailed substantial environmental and social risks. Compounding these risks was an unstable political structure: Chad had been in various states of civil war since gaining its independence in 1960, and was currently run by a president who had a history of oppressing people and violating human rights.

Although heated debate surrounded this project, the most contentious issue was how Chad would use its share of project cash flows. According to the projections, Chad would receive up to $125 million per year from the project, an amount that would increase government revenues by more than 50%. Critics argued that the revenues could be used to fund further oppression. To address this concern, the World Bank Group had proposed an innovative revenue management plan that would isolate Chad's share of project revenues and target them for poverty reduction programs. Whether this plan would work and what would happen if it did not were two questions that the directors had to resolve before they could approve the deal. Yet the alternative, rejecting the proposal, seemed to run against the Bank's mission of alleviating poverty around the world especially given Chad's impoverished condition and limited opportunities for development.

The Project

A consortium of oil companies including Conoco, Chevron, Exxon, and Royal Dutch/Shell discovered oil in Chad in the early 1970s, but suspended development of the fields in 1979 due to increasing civil unrest. Frustrated by the situation, Conoco withdrew and Chevron sold its stake to Elf Aquitaine. Almost 15 years later, a reorganized consortium began conducting economic and environmental feasibility studies for an oil field development project in Chad connected to the coast via a pipeline through Cameroon (see **Exhibit 1**). After the studies yielded positive results, the consortium signed memoranda of understanding (MOU) with the two countries' governments in February 1996.

In November 1999, Shell and Elf unexpectedly dropped out of the consortium citing concerns over project economics (oil was at $10.00 per barrel); analysts also cited friction with ExxonMobil.[1] Six

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Research Associate Carrie Ferman prepared this case under the supervision of Professor Benjamin C. Esty. This case was developed from published sources. HBS cases are developed solely as the basis for class discussion. Cases are not intended to serve as endorsements, sources of primary data, or illustrations of effective or ineffective management.

months later, Petroleum Nasional Berhad (Petronas) and Chevron joined the consortium with 35% and 25% stakes, respectively. ExxonMobil remained the leading shareholder with 40%.

With total revenues of $185 billion, a "AAA" debt rating, and operations in more than 100 countries, ExxonMobil was one of the "super majors" in the oil industry. (**Exhibits 2a** and **2b** show summarized financial statements.) Like other large oil companies, ExxonMobil operated four major divisions: 1) Upstream Operations explored for and produced both crude oil and natural gases; 2) Downstream Operations refined, transported, and sold these products; 3) Chemicals manufactured and marketed petrochemicals; and 4) Coal, Minerals & Power did mining and power generation. Despite the range of activities, ExxonMobil was known for its strength in Upstream Operations, which accounted for three-fourths of its earnings. With 58 major exploration projects under way in 1999, the company had one of the strongest upstream portfolios in the industry.

In all of its businesses, ExxonMobil made environmental responsibility a priority:

> A core value of ExxonMobil is to conduct its operations safely and in an environmentally sound manner. ExxonMobil's policy is to conduct its business in a manner that is compatible with the balanced environmental and economic needs of the communities in which we operate. We are committed to continuous efforts to improve environmental performance throughout our operations.[2]

The company, however, had a tainted environmental record largely due to the Exxon Valdez oil spill in 1989. The single-hulled tanker hit a reef spilling 11 million gallons of oil along the pristine Alaskan coastline. Following the spill, ExxonMobil paid $1 billion in damages, began using double-hulled tankers for most of its fleet, and significantly enhanced its environment control systems to the point where many viewed it as an industry leader in setting and enforcing environmental standards. Nevertheless, critics pointed to a recent speech by Chairman Lee Raymond to the World Petroleum Congress as a reason for concern. While arguing for a sensible trade-off between environmental protection and economic development, he warned developing countries to avoid excessive environmental controls that could discourage foreign investment and hinder development.[3]

Petronas, the second largest shareholder, was owned by the Malaysian government and was responsible for developing the country's oil and gas resources. Since its incorporation in 1974, Petronas had become a fully-integrated oil and gas company engaged in upstream and downstream operations. At the time, the company operated 40 fields in 24 countries throughout Asia and Africa.

The third sponsor, U.S.-based Chevron, engaged in a broad range of energy-related activities. The company relied on its upstream business for current revenues and income as well as long-term growth. Chevron was especially active in Africa with projects in Nigeria, Angola, and the Republic of the Congo. The company also owned a 50% stake in Caltex, a downstream operator active in over 60 African, Asian, and Middle Eastern countries.

Project Description

The sponsors planned to develop the $3.7 billion project in two parts: a $1.5 billion Field System to extract oil from the Doba Basin in Chad, and a $2.2 billion Export System to transport oil to the coastal city of Kribi (see **Exhibit 1**). The Field System would consist of 300 wells in three fields, a treatment facility to upgrade the oil, and an operations center to support production. Geologic studies confirmed by independent consultants estimated that the fields contained total proven plus probable reserves of 917 million barrels, and could produce up to 250,000 barrels per day using known technologies.* The Export System would consist of a 670-mile (1,070 km) pipeline buried one meter (3.3 feet) underground. It would contain a monitoring system to detect leaks and be connected to a floating storage and offloading vessel, a stationary, single-hulled tanker capable of holding two million barrels of oil. The sponsors agreed to buy all of the output at market prices in proportion to their ownership shares. Production would end by 2032, at which time the project would end.

According to the plan, an unincorporated joint venture known as the Upstream Consortium would own and finance the Field System. (**Exhibit 3a** contains a diagram of the corporate structure.) Tchad Oil Transportation Company (TOTCO), a special-purpose entity incorporated as a joint venture between the Upstream Consortium and the Chad Government, would own the Chad portion of the pipeline. Cameroon Oil Transportation Company (COTCO), an incorporated joint venture between the Upstream Consortium and the Chad and Cameroon Governments, would own the Cameroon section of the pipeline. EssoChad, a wholly-owned subsidiary of ExxonMobil, would be responsible for project coordination and upstream operations.

Assuming construction began in 2000, and the contractors met the schedule approved by independent consultants, the project would be completed in 2004. During construction, the project would employ as many as 7,000 people; it would employ 500 to 800 people once operations began. Most of the skilled workers would be foreigners, but ExxonMobil hoped that 80% of the employees during operation would be local citizens with extensive training and other skills enhancement.[4]

Financial Projections[5]

The sponsors chose to use corporate finance for the Field System and project finance for the Export System. This structure facilitated equity participation by the host governments and issuance of limited-recourse debt by the pipeline companies (the sponsors would guarantee debt repayment through, but not after, completion). The Treasurer of Exxon Exploration Company explained the firm's policy:

> (We) most often borrow centrally. This has minimized borrowing costs by capitalizing on deep, efficient markets, and drawing on the cash flow support of our global operations….despite our predilection for funding most projects from central sources, we believe project finance can make a constructive contribution to managing risk of projects in a number of areas…However, project finance is not a panacea. We need to assess whether the added costs entailed are worth the various risk mitigation steps achieved.[6]

The proposed structure included $2.3 billion of equity, of which $2.2 billion would come from the private sponsors (see **Exhibit 3b**). The International Bank for Reconstruction and Development (IBRD) and the European Investment Bank (EIB) had agreed to lend the host countries funds to finance their equity stakes. IBRD, a member of the World Bank Group, would lend $77 million while the EIB, the financing institution of the European Union, would lend $42 million.

The $1.4 billion of project debt would come from three sources: the International Finance Corporation (IFC), two export credit agencies (ECAs), and the capital markets. IFC, also a member of the World Bank Group, would make a $100 million "A loan" for its own account and up to a $300 million "B loan" for syndication to other institutions. The two ECAs, Coface from France and the US Export-Import Bank (US Exim), would arrange $600 million of bank financing. ECAs agreed to

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* Based on geological and engineering data, *proved* reserves are expected to be recovered with reasonable certainty; *probable* reserves are more likely than not to be recovered (at least 50% probability); *possible* reserves are less likely to be recovered (at least 10% probability). These definitions are from the Society of Petroleum Engineers and World Petroleum Congress.

arrange financing in exchange for commitments to buy French and U.S. equipment for the project. Finally, COTCO and TOTCO would issue $400 million in bonds. When all the financing was in place, TOTCO and COTCO would have leverage ratios of 62% and 64%, respectively (see **Exhibit 3a**).

The base case financial projections assumed the fields would produce 883 million barrels of salable crude oil out of the 917 million barrels of reserves. With an average price of more than $15 per barrel, total revenues would be $13.7 billion (see **Exhibit 4a**). Distributions to Chad, Cameroon, and the private sponsors would come in the form of royalties, taxes, and dividends (see **Exhibit 4b**). Because the majority of Chad's distributions would come in the form of royalties, its returns were closely tied to project revenues. In addition, it was scheduled to receive a $25 million payment from Chevron and Petronas at financial close, a payment for tax benefits received when they joined the consortium.[7] As a pipeline owner, Cameroon's returns would be a function of pipeline volume. **Exhibit 5** provides a matrix of returns given various oil price and volume scenarios.

Sensitivity analysis revealed that project returns were driven by oil price and volume assumptions. The Bank's technical staff and independent consultants confirmed that actual reserves could vary from 595 million barrels of proven reserves to 1,038 million barrels of proven, probable, and possible reserves. Price assumptions were based on Brent Crude prices, which had ranged from $9 to $42 per barrel over the last 18 years, with an average price of $20 per barrel (see **Exhibits 6a** and **6b**). Given the acidic, corrosive nature of Doba Basin oil, analysts expected it would sell at a discount of 10% to 20% below Brent Crude.[8] Even with the discount, the price was well above the project's finding and development costs of $5.20 per barrel.

Chad (Tchad)

Shortly after gaining independence from France in 1960, Chad erupted in a civil war, with rebel groups in the north fighting against the government in the south. Conflict raged through most of the 1960s and 1970s, and escalated through the 1980s. According to a government study, over 20,000 people were killed and thousands more were tortured during this period.[9]

General Idriss Déby, a French trained army officer and opposition leader, came to power in 1990 after staging a coup against the government. One political analyst described him this way:

> Chadian President Idriss Déby is a warlord…few credible analysts would argue that Déby is anything other than an African strongman, whose weapons purchases dwarf levels of social spending in one of the world's poorest countries, where incidents of political violence continue.[10]

As recently as 1998, Déby's troops had massacred 100 unarmed civilians and imprisoned Ngarléjy Yorongar, a member of Parliament and leading opposition figure, after he criticized the pipeline project.[11] That year, Amnesty International and the U.S. State Department criticized Déby's regime:

> State security forces continue to commit extrajudicial killings, and they torture, beat, abuse and rape persons. Prison conditions remain harsh and life threatening. Security forces continue to use arbitrary arrest and detention. Although the Government detains and imprisons…it rarely prosecutes.[12]

Many years of political instability severely hampered Chad's economic development. Since Déby seized power, output levels had declined, the government had consistently run budget deficits, and the external debt had more than doubled (see **Exhibit 7**). Whereas public aid and foreign investment came largely from international development institutions such as the World Bank and the International Monetary Fund (IMF), the war had significantly reduced overall investment.

As of 1999, Chad was one of the poorest and least developed nations in the world, and showed few signs of reversing its slow decline (see **Exhibit 8**). Approximately 80% of the 7 million citizens lived on less than $1.00 a day.[13] Except for oil, the landlocked country had few natural resources and lacked even rudimentary infrastructure needed for development: there were only 267 kilometers (166 miles) of paved roads in a country almost three times larger than France, no railways, poor telecommunications (two phones per 1,000 people), and irregular electricity supply.[14] In terms of living conditions, poor nutrition and unsafe water—less than 25% of the population had access to clean water—contributed to a life expectancy of 49 years and an infant mortality rate of 115 deaths per 1,000 births, compared to 78 years and 3 to 6 deaths per 1,000 births in developed countries.[15] In fact, more than 20% of children born in Chad died by age five. Based on these conditions and other similar statistics, the United Nations ranked Chad 167 out of 174 counties in terms of development.

Cameroon

Cameroon gained its independence from France in 1960. The country developed its oil resources and agricultural sector, but a severe drop in commodity prices in the mid-1980's threw the country into a decade-long recession. Gross domestic product (GDP) fell by more than 60% from 1986 to 1994.[16] The government, with support from IMF and the World Bank, implemented several reform programs in an effort to improve accelerate growth and alleviate poverty.[17] The economy responded favorably and grew at an average rate of 5% per year during mid to late 1990s.[18]

Despite the improvement and favorable relative position vis-à-vis other African countries, Cameroon was still a very poor nation, ranking 134 out of 174 countries on the UN Development Index and 99 out of 99 countries in terms of corruption according to Transparency International, a non-governmental organization (NGO). (See **Exhibit 8**.) In addition, activists criticized President Biya's administration for its human rights record. Amnesty International reported:

> Large numbers of people were extrajudicially executed in the north of the country. Torture and ill treatment by the security forces remained routine, and prison conditions amounted to cruel, inhuman and degrading treatment, resulting in high mortality rate. Critics of the government…were harassed, arrested and imprisoned. Thirty-six were convicted after an unfair trial before a military tribunal.[19]

World Bank Involvement

By any measure, Chad was one of the riskiest places on earth to invest. The sponsors had stated, and commercial bankers had concurred, that they would not invest without some kind of protection against political risk.[20] The sponsors considered including one or more multilateral development agencies as partners in the deal. The Treasurer of Exxon Exploration Company explained:

> Political risk associated with large-scale projects in the developing world is a reality that must be thoughtfully assessed and carefully addressed in project planning…While the involvement of multilateral institutions and other lenders adds complexity, their presence can enhance country commitment and mitigate political risk.[21]

The World Bank was a logical choice to approach because it had extensive lending and policy experience with developing countries, and had been working in Chad and Cameroon for many years.

Founded in 1944, the World Bank Group's mission was to stimulate economic development and alleviate poverty in its 183 member countries. Under the leadership of President James D.

Wolfensohn, the Bank was the largest source of development assistance in the world, providing more than $15 billion in loans to developing countries in 1999 alone. With operations in more than 100 countries, the Bank invested in development projects and acted as the lender of last resort for countries with no other borrowing options. It carried out its operations through five distinct entities, each of which focused on a different aspect of development:

- **International Bank for Reconstruction and Development** (IBRD) provided market-based loans and development assistance to help governments in middle-income countries;
- **International Development Association** (IDA) provided subsidized loans, technical assistance, and policy advice to the poorest countries;
- **Multilateral Investment Guarantee Agency** (MIGA) provided investment guarantees;
- **International Center for Settlement of Investment Disputes** (ICSID) helped resolve investment disputes between foreign investors and host countries;
- **International Finance Corporation** (IFC) advised investors and was the largest source of debt and equity financing for private-sector projects in developing countries. The IFC had a reputation for acting as an "honest broker" between the public and private sectors and for structuring fair deals.

Over the previous 25 years, the Bank had been involved with numerous projects around the world, including at least 10 major pipelines. Besides earning an average pre-tax financial return of 22%, more than 70% of the Bank's investments achieved their development objectives according to the Bank's Operation Evaluations Department.[22] However, projects in Africa and in the oil and gas sector experienced lower returns and greater problems than other projects in the Bank's portfolio.[23]

When the sponsors first approached the Bank about participating in the deal, senior management was immediately intrigued by the idea of a major development project in Chad. First, the project was commercially viable, and it would be the Bank's responsibility to ensure that the host countries received returns that were commensurate with the risks they would bear. Second, the project could help jump start Chad's listless economy. President James Wolfensohn wrote:

> We think that the project provides the best, and perhaps only opportunity for Chad to reduce the severe poverty of most of its population….Chad's development prospects can only be improved significantly through the use of this traditional energy source….We know this undertaking will involve significant risks. Translating Chad's oil revenues into services which will help the poor directly will be a difficult challenge—as it has been in many countries. But we believe it is a challenge which a development institution like the World Bank Group must take up.[24]

And third, the Bank could play an important role in protecting the environment as well as indigenous people. On its route to the coastline, the pipeline would cross 17 rivers and five habitat zones. These zones were home to rare plant life and endangered species. The forest regions were also home to more than 11,000 Bakola people, known as pygmies. As hunters and gatherers, and the region's oldest known inhabitants, the pygmies depended on the vegetation, land, and wildlife for survival.

While Bank participation had clear benefits, there were risks if it chose not to participate. For example, the sponsors might abandon the project and look to invest in safer countries. A World Bank economist recognized this possibility:

> Chad is not the only country with untapped petroleum reserves. Exploration is underway right across the continent to find new oil sources - which could prove cheaper and more accessible. If Chad does not seize this opportunity, it may well pass the country by.[25]

Another, and potentially worse, outcome might be if the Chadians developed the oil fields with other neighboring countries. The Sudanese government had recently financed a pipeline without the Bank, and was using revenues to fund a civil war.[26] In addition, Libya's President Muammar Qaddafi had been urging President Déby to drop his deal with the westerners and ship oil through Libya.[27] Although the U.S. State Department classified both Sudan and Libya as terrorist nations, they were, nevertheless, potentially feasible options for exporting oil.[28] Because much of the rebel opposition and fighting was based in northern Chad, these routes would entail considerable risk.

After weighing the opportunity against the alternatives, the Bank agreed to work with the sponsors in 1995. They began with an extensive consultation process that included meetings with both supporters and opponents. During this process, the Bank, sponsors, and host governments enlisted advice from 45 scientists and environmental engineers, hosted 145 meetings with 250 international NGOs, and held nearly 900 village meetings. An Esso-Chad spokesperson commented:

> The public consultation process for the Chad Export Project has been one of the most extensive consultation efforts ever undertaken in Africa for an industrial development project. Few similar projects in Europe or North America have held so many village-level public consultation meetings over such a wide area.[29]

The Bank insisted, and the governments and sponsors agreed, that the process should be conducted in an open and transparent way. Towards this end, they posted data collected from environmental surveys on the web, placed project-related information in 17 reading rooms in and around affected areas, and distributed nearly 700 copies of the draft Environmental Assessment (EA). After five years of review and public debate, the sponsors published the final, 3,000-page EA for comment. The 19-volume study contained contingency plans for almost every aspect of the project. There were plans for, among other things, waste management, oil spills, regional development, indigenous peoples, offsite environmental enhancement, community health, compensation and resettlement, induced access management, decommissioning, cultural properties, environmental monitoring and management.

The analysis and contingency planning addressed three key topics—environmental impact, indigenous people, and long-term sustainability—and led to numerous changes to the sponsors' original plans. For example, after careful analysis using satellite imagery and aerial mapping, the sponsors changed the pipeline route in Cameroon to protect the natural habitat and human settlements in the Mbere Rift and Deng Deng forests. The sponsors also increased the benefits for indigenous people under the Compensation and Resettlement Plan. Following these and many other changes, a World Bank report concluded:

> …although there is uncertainty in estimating incremental environment and social costs, most of these potential costs will be mitigated and/or compensated for by the Private Sponsors, and any remaining impacts are expected to be negligible in comparison to the large benefits that Chad and Cameroon stand to gain from the project.[30]

To address sustainability, the Bank established capacity-building programs in both Chad and Cameroon. Through these programs, the Bank hoped to develop the fiscal, legal, regulatory, and managerial infrastructure needed to develop the country's petroleum sector and minimize the project's adverse impact.[31] Concern regarding this last point generated the greatest opposition and led the Bank team to propose a Revenue Management Plan (RMP), something that had never been tried before.

Revenue Management Plan

Based on previous experience, the Bank had learned that a large influx of oil revenues could lead to economic distortion, corruption, and waste. With almost $14 billion in revenues and $8 billion in total distributions, the Bank feared Chad would be susceptible to these same problems. To prevent history from repeating itself, the Bank designed, with input from the Chadian government, a Revenue Management Plan. World Bank President Wolfensohn commented:

> Natural resource "booms" are difficult to manage. This is why our knowledge of other countries' experience has been crucial to designing the project. In Chad, in particular, we want to make certain that the country's new wealth will be invested for the well-being of all Chadians. With our help, the Chad Government has developed a revenue management program that targets oil revenues to key development sectors that are at the heart of its poverty alleviation strategy.[32]

According to projections, Chad would receive $1.8 billion of cash flow from the project in the form of income taxes, royalties, and dividends. Over the first 10 years of production (2004 to 2013), income taxes would represent 16% of he total while royalties and dividends would represent the remainder. Under the RPM, the government would have discretion over how to spend the income tax revenues as long as they were used for general development purposes. In contrast, the royalties and dividends would be deposited into a Special Petroleum Revenue Account and distributed in the following way: 10% would be deposited in foreign financial institutions and used to finance poverty reduction programs for future generations. Of the remaining 90%, 85% would be deposited in Chadian commercial banks and used to finance development programs in five high-priority sectors: education, health and social services, rural development, infrastructure, and environment and water resources.[33] The other 15% would go to the government budget and programs in the Doba region. The $25 million payment from Chevron and Petronas was not covered under the RMP.

Oversight and control of the RMP would occur at several levels. The World Bank and Chadian government would approve a detailed annual expenditure program that had to be reviewed by a newly-formed oversight committee. The committee's nine members—seven from government and two from civil society (one from an NGO and one from a trade union)—would be appointed for terms of three to five years. Each year the committee would publish a review of operations that was subject to an external audit. The World Bank would monitor the full program and retained the right to review all expenditures. To ensure acceptance of the plan, the Bank made implementation of the RMP a contractual obligation under the proposed IBRD and EIB loans. As an added incentive, the Bank explicitly linked the government's performance under the RMP to future World Bank lending.[34]

In 1998, the Chadian government took the first step towards implementation by passing a law that supported key elements of the plan including provisions to establish the oversight committee and various auditing procedures.[35] To further demonstrate its commitment to economic reform and development, the government privatized 45 out of 50 state-owned enterprises, cut the size of the army in half, and reallocated public expenditures to increase development efforts.[36]

Opposition

Right from the start, critics attacked the project on all fronts. An official from a Chadian environmental agency complained:

> There is not one example in Africa where oil has led to development. Look at Nigeria, Angola, the two Congos, and Gabon. They all have an overabundance of oil, and what do they have to show for it? We can even say that the exploitation of oil has retarded their development. What are the chances that things will be any different in Chad or Cameroon[37]

while a report from the Environmental Defense Fund criticized the World Bank for participating:

> The World Bank's involvement…sets a disturbing precedent of public support for oil development which experience and analysis show has detrimental social and environmental impacts with few development benefits….The project as currently designed has little chance of delivering the claimed benefits to sustainable development while carrying major risks of irreparable environmental and social disruption. [38]

In particular, environmental groups such as Friends of the Earth, the Sierra Club, and the Rainforest Action Network pointed to deforestation and oil spills as serious risks. The potential for the greatest damage was in the Atlantic Littoral Forest zone in Cameroon where it would be necessary to clear land to make room for roads, storage depots, and worker housing, not to mention the pipeline itself. The decision to bury the pipeline only increased the chances of groundwater contamination and made it more difficult to repair damage. An environmentalist noted:

> Even with the latest state-of-the-art technology, oil leaks in pipelines can go undetected until a huge amount of damage has been done. The most sophisticated technology has a detection capacity of a leakage of 0.002% of the oil passing through. [T]his means that under the best of circumstances 2,000 gallons could leak a day without being detected. [39]

And when the oil reached the coast, it would threaten two national reserves containing endangered marine life and the Lob Waterfalls, one of the few waterfalls in the world that flowed directly into the ocean. An oil spill in this area could cause irreversible environmental damage.

Social activists, too, joined the chorus of criticism. They claimed the Indigenous Peoples Plan was incomplete because it did not create a specific agency to oversee social issues as required under Bank policy, nor did it establish on-going programs to address future social issues.[40] They also condemned the implementation strategy described in the Compensation and Resettlement Plan. According to one activist:

> …there are numerous examples in Africa and throughout the world, where the Bank has not been able to implement this provision and where poor and vulnerable groups, which are the ones who usually have to be forcibly resettled, suffer greatly as a result of resettlement and are unable to re-establish their livelihoods.[41]

The most vehement opposition, however, centered on the Revenue Management Plan. While one study described it as "massively flawed,"[42] another from Harvard Law School said, "The law is vague in essential parts and lacks the detail necessary to ensure effective oversight…As it is, the law can be seen at best as only a first, and clearly insufficient, step."[43]

Critics were particularly concerned about the allocation of funds. Whereas the RMP spelled out broad categories for expenditure, it did not give specific details regarding permissible expenditures by type and region. Funds directed to one region could be used entirely for infrastructure rather than addressing serious social or health problems.[44] An even greater concern was the fact that the government could change the revenue allocation every five years.

Luc Lampiere, a visiting fellow at Harvard Law School's Human Rights Program, and co-authors noted several problems with the local support needed to make the plan work:

> While the law itself represents a remarkable breakthrough in linking private investment, development, and human rights, it has little chance of succeeding without the will of the authorities or the confidence of the population….According to one high ranking diplomat in Chad, the authorities understood that the law was necessary for World Bank support, but have little intention of allowing it to affect local practice.[45]

The Lampiere report continued:

> Oil will not lead to development in Chad without real participation, real transparency, and real oversight, none of which currently exists. The proposed revenue management plan and the law that was essentially imposed on the Chadian authorities is, at best, a first step in that direction." [46]

Criticism also focused on the oversight committee's composition and powers. Only two of the nine members were from civil society and there were no stipulations to guarantee that they remained faithful to their organizations.[47] Moreover, the RMP did not specify how decisions would be made or how voting power would be determined.[48] Finally, the committee did not possess the right to obtain information (e.g., subpoena power), authorize distributions, or publish opinions on the project.[49]

On a more fundamental level, critics attacked the RMP as an infringement of sovereign rights. Peter Rosenblum, Associate Director for Harvard Law School's Human Rights Program, commented:

> At the core is a challenge to the sovereignty of undemocratic rulers…Previously, no one would have interfered in the relations between an oil company and an African state. He who ruled the state controlled its resources…There is still hope of a delicate balance, where the World Bank strengthens loan conditions that reinforce the democratic process in Chad and enable the Chadian people to better determine how their resources should be spent. That would still threaten the sovereignty of leaders, but would also empower the people.[50]

In the opposition's eyes, the project was not going to benefit the people of Chad and Cameroon. Instead, the most likely beneficiaries would be the project sponsors. Korinna Horta, an economist and environmentalist from Environmental Defense (a U.S.-based non-profit organization), expressed her concern:

> The private sector—the oil companies and the commercial banks—are taking cover behind publicly funded or guaranteed institutions, be they the World Bank group or the export-credit agencies of individual countries….What we have is a financial structure where private sector risk is comfortably cushioned by public funds intended to help the poor in a politically unstable area of Sub-Saharan Africa. What emerges is a case of corporate welfare.[51]

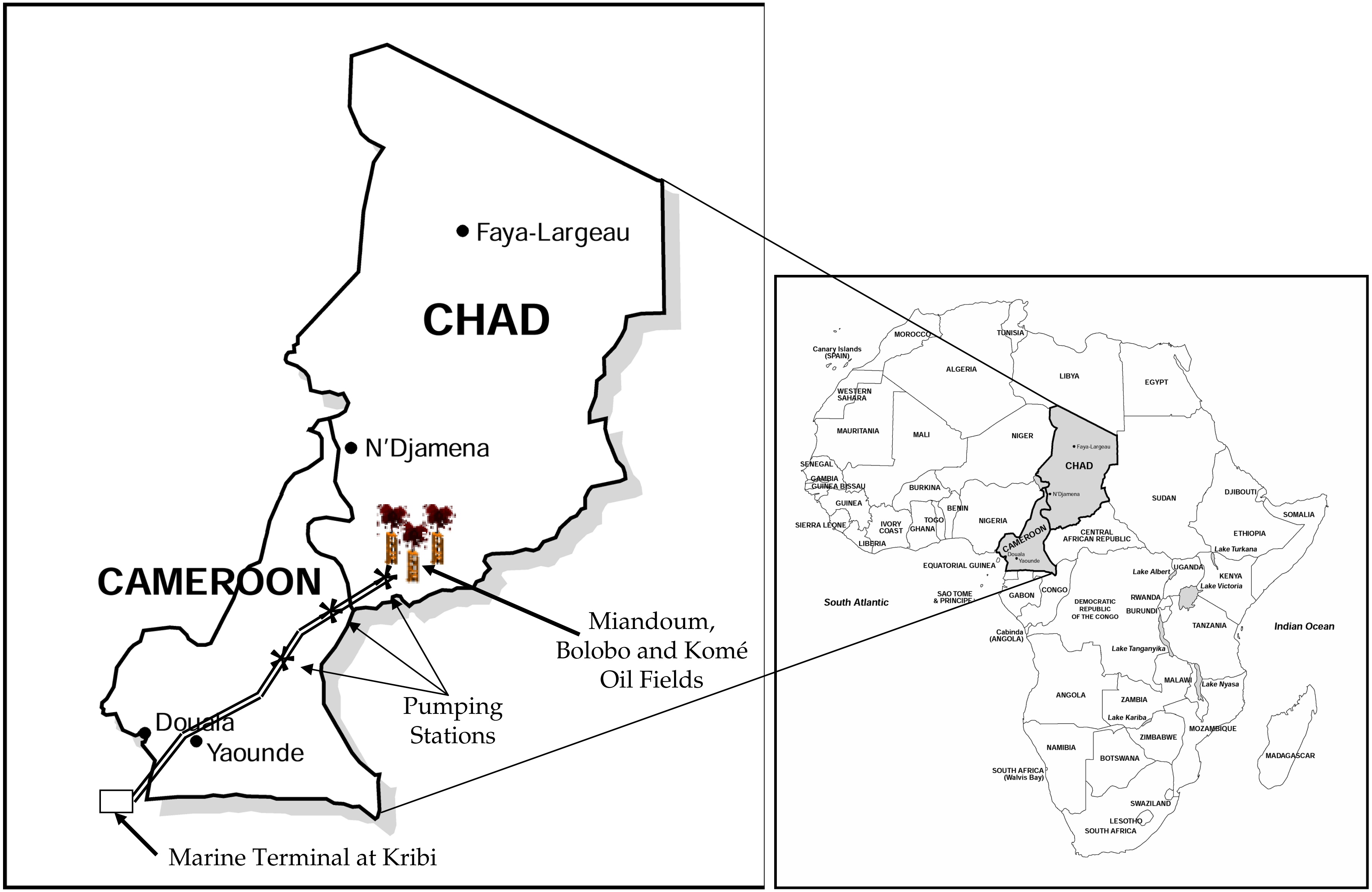
Conclusion

On June 6, the Bank and IFC directors would have to decide whether to approve the funding request. After studying the project for five years, it seemed like they had addressed and corrected the most serious concerns. Though committed, World Bank officials still expressed some concerns:

> One can say it is a bit of an experiment, but it is not a choice between not doing it or doing it…If we don't do it today, somebody will develop (the project) without the safeguards (we are putting into the deal). [52]

As an institution dedicated to poverty alleviation, how could the World Bank turn its back on the only opportunity to effect change in one of the poorest, most underdeveloped nations in the world? Mr. Madavo, a Bank Vice President, stated, "It's very, very important that the World Bank, as an economic institution, not become so risk adverse that it would only do the sure thing."[53] He went on to say, "If it succeeds, wouldn't that be wonderful for a story to be written 20 years from now…that the World Bank stood up, did its homework, supported something that made a tremendous difference to Africa?"[54]

Exhibit 1 Chad-Cameroon Petroleum Development and Pipeline Project



Source: Casewriter.

Exhibit 2a Summarized Income Statements for Project Sponsors ($US in millions)

	ExxonMobil [a]	Chevron [a]	Petronas [b]
Revenues	$185,527	$36,586	$15,955
Costs and other deductions	165,678	29,600	9,207
Depreciation, deletion, and amortization	8,304	2,866	937
Interest and debt expenses	695	472	657
Total costs	174,377	32,938	10,801
Income before income taxes	11,150	3,648	5,154
Incomes taxes	3,240	1,578	1,837
Net income	**7,910**	**2,070**	**3,317**

Exhibit 2b Summarized Balance Sheets for Project Sponsors ($US in millions)

	ExxonMobil [a]	Chevron [a]	Petronas [b]
Assets			
Current assets	$31,141	$8,297	$13,379
Fixed assets less depreciation and depletion	94,043	25,317	15,988
Other assets	19,337	7,054	2,621
Total assets	**144,521**	**40,668**	**31,994**
Liabilities			
Current liabilities	28,163	5,455	8,377
Total debt	18,972	8,608	10,455
Other liabilities	33,920	8,856	2,567
Total liabilities	81,055	22,919	21,399
Shareholders' equity	63,466	17,749	10,595
Total liabilities and shareholders' equity	**144,521**	**40,668**	**31,994**
Number of employees	80,000	31,000	18,500
Numbers of common shares outstanding (mil.)	3,477	713	n/a
Stock price as of December 31, 1999	$80.56	$86.63	n/a
S&P Debt Rating	AAA	AA	BBB

Source: Company Annual Reports.

[a] As of December 31, 1999.

[b] As of March 31, 2000, exchange rate US$1.00 = Malaysian Ringgit (RM) 3.80.

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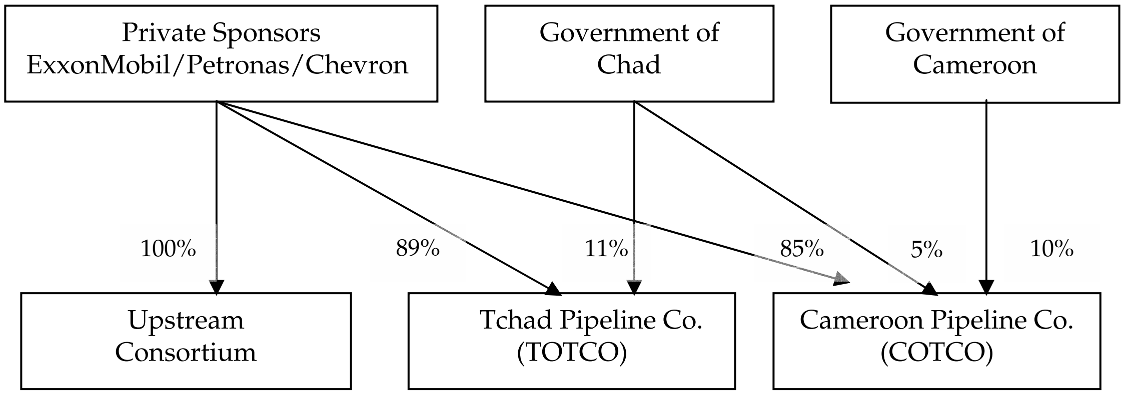
Exhibit 3a Corporate Structure



	Upstream Consortium	Tchad Pipeline Co. (TOTCO)	Cameroon Pipeline Co. (COTCO)
Debt	$0	$199	$1,201
Equity	1,521	123	680
Total Capital	1,521	322	1,881
Debt/Total Capital	0 %	62 %	64 %

Source: The World Bank and IFC Project Appraisal Document, April 13, 2000.

Exhibit 3b Sources and Uses of Cash ($US in millions)

Uses of Cash		
Field System		
Chad	$1,521	40.8%
Export System		
Chad	229	
Cameroon	1,338	
Subtotal	1,567	42.1
Interest and finance costs	458	12.3
Debt service reserve fund	177	4.8
Project Total	**3,723**	**100.0**

Sources of Cash		
Debt:		
Capital markets bond	$400	10.7%
IFC A - Loan	100	2.7
IFC B - Loan	300	8.1
Export credit agencies loans	600	16.1
Total	1,400	37.6
Equity: [a]		
ExxonMobil	883	
Petronas	772	
Chevron	551	
Subtotal	2,206	59.2
Chad Government		
IBRD	33	
EIB	15	
Subtotal	47	1.3
Cameroon Government		
IBRD	44	
EIB	27	
Subtotal	70	1.9
Total	2,323	62.4
Project Total	**3,723**	**100.0**

Source: The World Bank and IFC Project Appraisal Document, April 13, 2000, Annex 3.

[a] Portions of equity financing to be provided as subordinated loans and other forms of quasi equity.

Exhibit 4a Project Financing and Cash Flows [a] (nominal, $US in millions)

	Financing					Project Cash Flow								
Year	Private Sponsors Equity	Chad Equity	Cameroon Equity	Total Debt	Total Debt & Equity [b]	Capital Invest.[b]	Volume (mm bbl)	Price Per Barrel	Total Rev.	Operating Costs	Other Uses of Cash [c]	Total Operating Cash Flow	Total Debt Service	Debt Service Coverage Ratio
2000	$24	$9	$13	$315	$361	$304	0	$0	$0	$0	$0	$0	$0	-
2001	298	6	10	312	626	736	0	0	0	0	0	0	0	-
2002	611	9	15	467	1,102	1,101	0	0	0	0	0	0	0	-
2003	559	8	14	283	864	864	0	0	0	0	0	0	0	-
2004	409	11	18	23	461	519	42	14.29	600	100	67	433	205	2.1x
2005	305	4	0	0	309	137	81	14.64	1,186	184	108	894	348	2.6
2006	0	0	0	0	0	16	81	14.78	1,197	174	16	1,007	337	3.0
2007	0	0	0	0	0	13	81	14.94	1,210	175	33	1,002	249	4.0
2008	0	0	0	0	0	13	81	15.05	1,219	182	13	1,024	191	5.4
2009	0	0	0	0	0	1	79	15.20	1,201	181	1	1,019	148	6.9
2010	0	0	0	0	0	1	65	15.28	993	166	1	826	106	7.8
2011	0	0	0	0	0	1	51	15.57	794	151	1	642	83	7.7
2012	0	0	0	0	0	1	39	15.59	608	137	1	470	66	7.1
2013	0	0	0	0	0	1	32	15.88	508	131	1	376	57	6.6
2014	0	0	0	0	0	1	28	16.07	450	125	1	324	46	7.0
2015	0	0	0	0	0	1	25	16.20	405	122	2	281	37	7.6
2016	0	0	0	0	0	1	23	15.87	365	120	1	244	29	8.4
2017	0	0	0	0	0	1	20	16.55	331	119	0	212	8	26.5
2018	0	0	0	0	0	1	19	16.11	306	150	2	154	0	-
2019	0	0	0	0	0	1	17	16.53	281	115	2	164	0	-
2020	0	0	0	0	0	1	15	16.93	254	113	2	139	0	-
2021	0	0	0	0	0	1	14	16.79	235	111	2	122	0	-
2022	0	0	0	0	0	1	13	17.08	222	109	2	111	0	-
2023	0	0	0	0	0	1	12	17.33	208	109	1	98	0	-
2024	0	0	0	0	0	1	11	17.45	192	106	2	84	0	-
2025	0	0	0	0	0	1	10	18.10	181	106	1	74	0	-
2026	0	0	0	0	0	1	9	17.33	156	101	1	54	0	-
2027	0	0	0	0	0	1	7	18.00	126	95	2	29	0	-
Total	2,206	47	70	1,400	3,723	3,722	855		13,228	3,182	263	9,783	1,910	
Stated Total (2000 – 2032)						**3,737**	**883**		**13,721**	**3,183**	**n/a**	**9,857**	**1,909**	

Source: The World Bank and IFC Project Appraisal Document, April 13, 2000, Annex 5; and casewriter estimates.

[a] These figures ignore some early oil cash flows from 2000 to 2004 and some final cash flows from 2028 to 2032. In addition, the World Bank released only summary data, which means some elements of cash flow are missing. As a result, certain annual cash flows may exhibit discrepancies, and the calculated total cash flows across all years may not match the stated totals in the exhibit or the case. The "Other Uses of Cash" column is an attempt to eliminate some of these discrepancies–it is based on casewriter estimates.

[b] Excludes $15 million of project preparation costs.

Exhibit 4b Participant Revenue Projections [a] (nominal, $US in millions)

		Chad Returns					Cameroon Returns				Private Sponsors Returns		
Year	Cash Flow Available to Distribute	Royalty	Upstream Tax	Pipeline Tax	Share of ROE [b]	Total	Transit Tax	Pipeline Tax	Share of ROE [b]	Total	Upstream Cash Flow	Share of ROE [b]	Total
2000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2001	0	0	0	0	0	0	0	0	0	0	0	0	0
2002	0	0	0	0	0	0	0	0	0	0	0	0	0
2003	0	0	0	0	0	0	0	0	0	0	0	0	0
2004	405	22	0	1	8	31	17	0	12	29	19	166	185
2005	547	55	0	14	11	80	33	1	18	52	141	243	384
2006	670	70	0	8	10	88	33	0	16	49	369	218	587
2007	774	81	0	5	10	96	33	0	15	48	448	214	662
2008	833	89	0	2	10	100	33	0	15	48	498	209	707
2009	871	96	0	22	8	125	32	1	14	47	543	179	722
2010	720	78	0	26	6	110	27	11	12	50	425	149	574
2011	559	59	0	22	6	87	21	10	11	42	304	135	439
2012	404	41	0	19	5	65	16	8	10	34	189	121	310
2013	319	32	0	17	5	54	13	7	9	29	132	110	242
2014	277	39	70	9	1	119	12	3	3	18	113	32	145
2015	244	39	74	4	0	117	10	2	1	13	112	6	118
2016	215	36	66	4	0	106	9	1	1	11	101	6	107
2017	204	35	62	2	0	99	8	1	1	10	95	8	103
2018	154	28	43	2	0	72	8	1	0	9	66	7	73
2019	164	29	47	2	0	78	7	1	0	8	72	7	79
2020	139	26	39	1	0	66	6	1	0	7	60	6	66
2021	122	24	33	1	0	59	6	0	0	6	52	6	58
2022	111	22	30	1	0	53	5	0	0	5	46	6	52
2023	98	20	25	1	0	47	5	0	0	5	40	5	45
2024	84	18	22	1	0	41	4	0	0	4	33	5	38
2025	74	17	20	1	0	39	4	0	0	4	25	5	30
2026	54	14	16	1	0	31	4	0	0	4	15	4	19
2027	29	11	5	1	0	17	3	0	0	3	5	3	8
Total	8,071	981	552	167	80	1,780	349	48	138	535	3,903	1,850	5,753

Source: The World Bank and IFC Project Appraisal Document, April 13, 2000, Annex 5; and casewriter estimates.

[a] These figures ignore some early oil cash flows from 2000 to 2004 and some final cash flows from 2028 to 2032. In addition, the World Bank released only summary data, which means some elements of cash flow are missing. As a result, certain annual cash flows may exhibit discrepancies, and the calculated total cash flows across all years may not match the stated totals in the exhibit or the case. For example, the "Cash Flow Available to Distribute" column does not equal the sum of the total distributions to each of the three sponsors in every year.

[b] The share of dividend distributions received as an equity holder in COTCO and/or TOTCO.

Exhibit 5 Projected Returns [a]

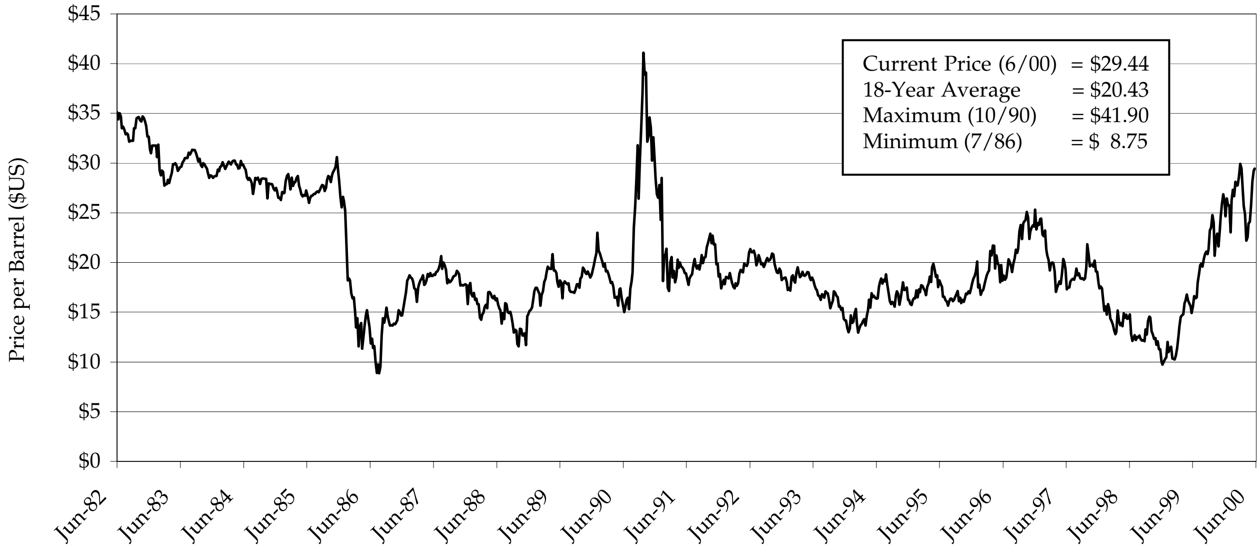
	Net Present Value (NPV) [b] (in $US millions)			Internal Rate of Return (IRR)		
	Chad	Cameroon	Private Sponsors	Chad	Cameroon	Private Sponsors
Reserves: 595 mm bbl						
Price = $12.00/bbl	$108	$92	$(917)	42%	34%	<0%
Price = $15.25/bbl	205	104	(344)	60	35	<0
Price = $18.50/bbl	330	101	235	75	35	13
Reserves: 917 mm bbl						
Price = $12.00/bbl	271	148	(98)	56	39	9
Price = $15.25/bbl	463	144	706	70	39	18
Price = $18.50/bbl	822	141	1,361	84	39	25
Reserves: 1,038 mm bbl						
Price = $12.00/bbl	337	162	198	60	41	12
Price = $15.25/bbl	603	158	1,045	75	40	21
Price = $18.50/bbl	1,170	156	1,614	90	40	27

Source: The World Bank and IFC Project Appraisal Document, April 13, 2000, Annex 4.

[a] Project benefits are generated through the sale of the project's crude oil in international markets. Calculated returns may vary from stated returns because of early (2000-2004) and late (2028-2032) cash flow.

[b] Discounted at 10% to year-end 1999.

Exhibit 6a Brent Crude Prices from June 1982 – June 2000 ($US per barrel)



Source: Adapted from Datastream data.

Exhibit 6b Capital Markets Data as of June 2000

Maturity	U.S. Treasury Yields	Brent Crude Futures Prices ($ per bbl)	Light Sweet Crude Futures Prices ($ per bbl)	Projected Prices for World Oil ($ per bbl) [a]
1 month	-	$29.19	$29.01	-
3 months	5.70%	26.34	27.89	-
6 months	6.24	25.26	26.47	-
1 year	6.30	22.91	24.21	$23.81
2 years	6.58	20.09	21.13	21.80
3 years	-	18.56	19.46	20.98
4 years	-	-	18.43	20.73
5 years	6.43	-	18.17	20.57
7 years	-	-	-	20.58
10 years	6.19	-	-	20.88
20 years	-	-	-	21.76
30 years	5.94	-	-	-

Sources: Bloomberg and casewriter analysis.

[a] Based on projections from the Energy Information Administration's *Annual Energy Outlook, 2001* (in constant 1999 $US). The World oil price is an annual average acquisition cost of imported crude oils to U.S. refiners.

Exhibit 7 Chad Country Data: 1990 – 1999

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Government Finances										
Total revenue ($US, millions) [a]	$293	202	269	279	158	197	216	221	196	175
Total expenditures ($US, millions)	$379	352	509	360	306	289	407	333	306	266
Net revenues ($US, millions)	($87)	(150)	(241)	(81)	(148)	(91)	(191)	(112)	(110)	(91)
Budget balance (% of revenue) [b]	-29.6%	-74.1	-89.6	-29.0	-93.8	-46.2	-88.5	-51.0	-56.5	-52.3
External debt (current $US, millions)	$524	629	723	768	828	902	997	1,026	1,092	1,142
External debt/Gross Domestic Product	30.1%	33.5	38.4	52.5	70.2	62.7	62.1	68.0	64.9	74.6
Output										
Gross domestic product (current $US, millions)	$1,739	1,877	1,882	1,463	1,179	1,438	1,605	1,508	1,682	1,531
Gross national product/capita (constant 1995 $US)	$226	242	255	206	215	210	212	215	224	216
Interest and Monetary Rates										
Inflation (Consumer Price Index)	-0.17%	4.19	-3.14	-7.07	40.43	9.06	12.39	5.62	12.14	-6.80
Lending rate	18.50%	18.15	17.77	17.46	17.50	16.00	22.00	22.00	22.00	22.00
Deposit interest rate	7.50%	7.50	7.50	7.75	8.08	5.50	5.46	5.00	5.00	5.00
Exchange rate (CFAfr per $US)	272.26	282.11	264.69	283.16	555.20	499.15	511.55	583.67	589.95	615.70
Other										
Aid per capita (current $US)	$54.61	44.82	39.47	35.95	32.96	35.24	42.92	32.12	22.98	25.08
Current account balance (% of GDP)	-2.62%	-3.49	-4.55	-7.97	-3.20	-2.53	-4.69	-5.56	-5.99	-10.49
Foreign direct investment (% of GDP)	0.00%	0.21	0.11	1.04	2.30	0.90	1.12	0.99	0.95	0.98
Illiteracy rate (% of population 15 and over)	72.31%	71.04	69.72	68.33	66.92	65.39	63.89	62.29	60.62	59.00

Sources: The World Bank's World Development Indicators 2001 and IMF International Financial Statistics.

[a] Chad currency is the CFA Franc (CFAfr), which has fixed parity with the French Franc: CFAfr 100 = FFr 1.00.

[b] Does not include financial grants or other forms of assistance.

Exhibit 8 African Development, Macroeconomic, and Political Risk Data (1999 unless otherwise noted)

Country	Population (000)	Life Expect. (years)	Access to Improved Water Sources (% of pop.)	United Nations Develop. Rank [a] 1998	Gross National Product ($ mil.)	GNP per Capita ($)	GNP per Capita Growth 1989-99 (%)	Total Debt (% of GDP)	Govn't Surplus or Deficit (% of GDP)	Euromoney Country Credit Rating [b] Sept. 1999	ICRG Composite Risk Rating [c] May 2000	Corruption Perception Rank [d]	Country Credit Rank [e] March 2000
Chad	**7,500**	**49**	**24%**	**167**	**$1,600**	**$200**	**-0.7%**	**74.6%**	**-10.6%**	**27.2**	**NA**	**NA**	**132**
Cameroon	**14,700**	**56**	**44**	**134**	**8,500**	**580**	**-2.5**	**83.6**	**-3.2**	**28.1**	**59.9**	**99**	**115**
Algeria	30,000	71	70	107	46,600	1,550	-0.9	58.6	-0.5	32.3	55.5	NA	91
Angola	12,400	46	32	160	27,000	220	-9.9	194.7	-13.1	24.4	45.5	NA	130
Benin	6,100	53	50	157	2,300	380	1.7	58.8	-2.3	29.7	NA	NA	118
Botswana	1,600	46	70	122	5,100	3,280	1.6	10.8	-2.6	51.1	83.0	24	39
Burkina Faso	11,000	44	-	172	2,600	230	0.9	54.9	-10.9	31.4	62.3	NA	107
Burundi	6,700	42	-	170	800	130	-4.5	157.6	-7.6	NA	NA	NA	136
Central African Rep.	3,500	44	-	166	1,000	290	-0.8	83.4	-8.7	25.6	NA	NA	NA
Congo Republic	2,900	48	-	139	1,900	670	-6.6	245.3	-8.1	25.0	48.8	NA	142
Dem. Rep. of Congo	49,800	49	-	152	-	-	-7.6	-	-7.4	20.0	44.8	NA	139
Cote d'Ivoire	14,700	46	72	154	10,600	720	1.5	132.2	-0.8	31.2	55.8	75	97
Gabon	1,200	53	67	123	3,800	3,090	-0.8	88.4	1.2	33.4	67.5	NA	102
Ghana	18,900	60	56	139	7,500	390	1.9	81.0	-6.0	38.8	57.5	63	82
Libya	5,400	70	90	72	-	-	-	-	-	16.1	68.5	NA	80
Malawi	10,800	42	45	163	2,000	180	1.2	131.4	-11.1	30.3	61.3	45	104
Mali	10,900	50	37	165	2,600	240	0.2	118.6	-8.1	31.9	65.8	NA	119
Niger	10,500	46	53	173	2,000	190	-1.3	80.1	-6.6	28.0	62.3	NA	125
Nigeria	123,900	53	39	151	38,400	310	0.4	92.8	-7.4	31.2	55.5	98	112
Sudan	29,000	55	50	143	9,400	330	-	218.3	-0.8	19.0	NA	NA	140
Togo	4,600	49	-	145	1,500	320	-0.8	89.3	-5.8	29.7	59.5	NA	117
Sub-Saharan Africa	2,417,000	49	-	-	-	500	-	-	-	-	-	-	-
World	6,000,000	66.5	78	-	-	5,130	-	-	-	-	-	-	-

Sources: World Bank, United Nations, African Development Indicators, Transparency International, and Institutional Investor Online Edition.

[a] The United Nations Human Development Index (HDI) provides a rating of health, education, and income across 174 countries. The rank ranges from 1 (high) to 174 (low).

[b] Euromoney's country rating assess the risk of investing in an economy based on nine analytical, credit, and market indicators. The scores ranges from 0 (most risky) to 100 (least risky).

[c] The International Country Risk Guide (ICRG) provides a rating composed of 22 variables in three subcategories of risk: political (100 points), financial (50 points), and economic (50 points). The composite risk rating equals the sum of the individual ratings divided by two: 0.0 to 49.5 is very high risk; 80.0 to 100.0 is very low risk.

[d] Transparency International's Corruption Perception Index (CPI) score relates to perceptions of the degree of corruption as seen by business people, risk analysts and the general public. Transparency International ranks 99 countries from highly clean (1) to highly corrupt (99).

[e] Institutional Investor ranks 145 countries based on information provided by economists at global banks and securities firms. Higher numbers represent a greater chance of country default.

Endnotes

[1] P. Rosenblum, "Pipeline Politics in Chad," *Current History*, May 2000, p. 199.
[2] See the ExxonMobil Corporation Summary Annual Report 1999.
[3] I. Johnson, "Exxon Urges Developing Nations to Shun Environmental Curbs Hindering Growth," *Wall Street Journal*, October 14, 1997, p. A17.
[4] N. Onishi, "The Perils Of Plenty: A Special Report," *The New York Times*, May 16, 2001, p. 1.
[5] "Project Appraisal Document on Proposed International Bank For Reconstruction and Development Loans in Amount of US$ 39.5 Million To The Republic Of Chad And US$ 53.4 Million To The Republic of Cameroon And On Proposed International Finance Corporation Loans In Amount Of US$ 100 Millions In A-Loans And Up To US$ 300 Million In B-Loans To The Tchad Oil Transportation Company, S.A. And Cameroon Oil Transportation Company, S.A. For A Petroleum Development And Pipeline Project" (hereafter referred to as: The World Bank/IFC Project Appraisal Document, April 13, 2000), The World Bank and International Finance Corporation, Report No: 19343 AFR, April 13, 2000, see Annexes 3 and 4.
[6] A.L. MacDonald, Treasurer, Exxon Exploration Company, "Challenges in the Financing of International Oil Operations," Chapter 7 in Managing International Political Risk, ed. T.H. Morgan, Blackwell Publishers Inc., (Malden, MA) 1998, pp. 121-123.
[7] "Work Starts on the #3.5B Chad Pipeline; Pres Causes Concern," Dow Jones International News, Dow Jones Newswires, 12/19/00. Officially, the payment was compensation for tax benefits received when they bought into the deal when Shell and Elf left the consortium.
[8] The World Bank and IFC Project Appraisal Document, April 13, 2000, p. 27.
[9] P. Rosenblum, "Pipeline Politics in Chad," *Current History*, May 2000, p. 195.
[10] "The Chad/Cameroon pipeline: A question of governance," *African Energy*, Issue 19/31, October 1999.
[11] "Problem Project #2: Chad Cameroon Pipeline Project," Bank Information Center, October 2000, Bank Information Center website: www.bicusa.org/africa/ppa_chad1.htm.
[12] "1999 Country Reports on Human Rights Practices: Chad," Bureau of Democracy, Human Rights, and Labor, U.S. Department of State, February 25, 2000, State Department website: www.state.gov/www/global/human_rights/1999_hrp_report/chad.html.
[13] N. Onishi, "Pygmies Wonder if Oil Pipeline Will Ease Their Poverty," *The New York Times*, July 10, 2000, p. A3.
[14] Economist Intelligence Unit, Chad Country Profile 2000, pp. 72-74.
[15] "Environmental Assessment Executive Summary & Update," Chapter 2, Table: Socioeconomic Conditions in Chad, EssoChad website: http://www.essochad.com/eaff/essochad/documentation/english/summary/index.html.
[16] "Background Notes: Cameroon," U.S. Department of State, Bureau of African Affairs, December 1999, www.state.gov/www/background_notes/camerron_9912_bgn.html.
[17] The World Bank and IFC Project Appraisal Document, April 13, 2000, p. 8.
[18] IBRD/IDA Project Information Document, Project ID TDPA 534, April 4, 1995, p. 3.
[19] "Annual Report 2000: Cameroon," Amnesty International website: www.web.amnesty.org/web/ar2000web.nsf/countries/c51a5e1ec565cc52802568f20055290f?OpenDocument.
[20] "Pipeline closes oversubscribed," *Project Finance International*, Issue 220, June 27, 2001, pp. 45.
[21] A.L. MacDonald, pp. 121-123.
[22] The World Bank 2000 Annual Report, III. Evaluation of Operations, The World Bank Group website: www.worldbank.org/html/extpb/annrep/operate.htm.

[23] Letter from K. Horta et al., Environmental Defense Fund, to James D. Wolfensohn, President, The World Bank, 1818 H Street, N.W., Washington, DC 20433, July 9, 1998. Environmental Defense Fund website: www.environmentaldefensefund.org/prog…International/Africa/a_ChadCameroon.html.

[24] Letter from James D. Wolfensohn to Honorable James P. McGovern, The United States House of Representatives, Washington, DC 20515, June 28, 1999.

[25] "World Bank Group Approves Support For The Chad-Cameroon Petroleum Development And Pipeline Project," World Bank, News Release No. 2000/AFR, p. 2.

[26] "Sudan: Oil and Gas Industry," Mbendi Information For Africa, Mbendi website: www.mbendi.co.za/indy/oilg/af/su/p0005.htm.

[27] P. Rosenblum, "Pipeline Politics in Chad," *Current History*, May 2000, p. 199.

[28] Foreign Terrorist Organization Designation 1999 Annual Report, U.S. Department of State, Office of the Coordinator for Counterterrorism, www.state.gov/www/global/terrorism/1999report/sponsor.html.

[29] EssoChad website: www.essochad.com/eaff/essochad/index.html.

[30] The World Bank and IFC Project Appraisal Document, April 13, 2000, Annex 4, p. 76.

[31] "Project Appraisal Documentation on A Proposed Credit in the Amount of SRD 17.4 Million To The Republic Of Chad For A Petroleum Sector Management Capacity-Building Project," The World Bank, Report No: 19342 CD, March 30, 2000, p. 5.

[32] Letter from James D. Wolfensohn to Honorable James P. McGovern, June 28, 1999.

[33] The World Bank and IFC Project Appraisal Document, April 13, 2000, Appendix 11, p. 96.

[34] The World Bank and IFC Project Appraisal Document, April 13, 2000, Appendix 11, p. 98.

[35] The World Bank and IFC Project Appraisal Document, April 13, 2000, Appendix 11, p. 98.

[36] EssoChad website: www.essochad.com/eaff/essochad/index.html.

[37] N. Onishi, "Pygmies Wonder if Oil Pipeline Will Ease Their Poverty," p. A3.

[38] "The Chad Cameroon Oil and Pipeline Project: Putting People and the Environment at Risk," Environmental Defense Fund, U.S.A., (New York, NY) September 1999, p. 3.

[39] K. Walsh, "World Bank Funding of Chad/Cameroon Oil Project," Environmental Defense Fund, March 17, 1997, www.hartford-hwp.com/archives/32/031.html.

[40] "Putting People and the Environment at Risk," pp. 11-12.

[41] K. Walsh, "World Bank Funding of Chad/Cameroon Oil Project."

[42] "Putting People and the Environment at Risk," p. 18.

[43] L. Lampriere et al., "Managing Oil Revenues in Chad: Legal Deficiencies and Institutional Weaknesses," Human Rights Clinical Program Harvard Law School, October 13, 1999, pp. 6-7.

[44] L. Lampriere et al., p. 3.

[45] L. Lampriere et al., pp. 2, 5.

[46] P. Rosenblum, quoted in "Putting People and the Environment at Risk," p. 5.

[47] L. Lampriere et al., pp. 3, 4.

[48] "Putting People and the Environment at Risk," p. 19.

[49] L. Lampriere et al., p. 4.

[50] P. Rosenblum, "Pipeline Politics in Chad," *Current History*, May 2000, pp. 195, 199.

[51] K. Horta, "Corporate Welfare Disguised as Aid to the Poor?" Environmental Defense Fund, March 1997, http://www.environmentaldefense.org/pubs/Reports/c_chadcam.html.

[52] World Bank representative quoted in, "Pipeline closes oversubscribed," *Project Finance International*, Issue 220, June 27, 2001, pp. 46.

[53] N. Onishi, "Pygmies the focus of pipeline politics," *The New York Times*, July 29, 2000, www.smh.com.au/news/0007/29/text/world15.html.

[54] N. Onishi, "Pygmies Wonder if Oil Pipeline Will Ease Their Poverty," p. A3.