

# Oil, Dutch Disease, and Development: The Case of Chad

A summary of work conducted in Chad  
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It would seem that the discovery of a natural resource that is highly valuable on the international market would cause great joy for its owner. Despite the prospects for investment opportunities that petroleum extraction may yield, evidence has been rather mixed regarding the actual impact the industry has had on the nation-owner. In particular most cases of oil development in poorer nations have produced outcomes of increased disparity of wealth often resulting in political instability (Nigeria, Angola, and Bolivia provide clear examples). Although social scientists have correctly identified political factors as an important mechanism for converting oil wealth into unfavorable outcomes, the economics literature has identified further the usually unintentional negative economic consequences of an oil boom on the rest of the economy. The term used for the phenomenon is *Dutch Disease*.

The name Dutch Disease is derived from evidence gathered from the experience of the Netherlands in its discovery and development of North Sea oil resources. The outcome of the oil boom was to induce a decline in non-boom export industries with the result in many cases of total disappearance.

The reason for such an outcome is two-fold. The first component of the Dutch Disease is a *Resource Movement Effect* that in the oil industry occurs primarily during the construction phase of a project. The oil sector induces increased demand for the factors on which it depends. These factors become too expensive for use in non-boom industries. The construction phase of an oil project is highly labor-intensive. We often witness a migration of labor for pre-existing industries towards the oil industry. Any other projects relating to the oil industry also become more costly, often to a prohibitive level. We can imagine a crisis situation when, in a poorer nation, the product of rising cost is food.

The second, too often overlooked, component of Dutch Disease is also the more important of the two with regards its long-term implications. When foreign revenues start flowing into the country, the investments that are most often undertaken depend on non-tradable products. The most obvious of these is construction. One measurement of a country's real exchange rate is the ratio of demand for non-tradable versus tradable goods. Increased demand for non-tradable goods is equivalent to an appreciation of a nation's exchange rate. An appreciation of the exchange rate, along with the increase in factor prices mentioned above, renders non-boom export products less competitive on the world market. Thus, as in the case of the Netherlands, we often see a restructuring of the economy away from pre-boom exports. This phenomenon has been called the *Spending Effect*. In poorer nations the pre-boom industries are very often primary agricultural products whose owners are already living on the margins of survival.

The project undertaken with the generous funding from the Scott-Kloeck Jenson Pre-Dissertation Grant aims to examine evidence of Dutch Disease in Chad where petroleum has recently been discovered and developed for export under the auspices of the World Bank and a consortium of foreign oil companies. The importance of such an analysis is to better understand the *apolitical* economic events surrounding petroleum development and its impact on those who are subject to the so-called Dutch Disease. We will then be better able to create safeguards to protect those who may be in danger of any negative consequences of economic changes induced by an oil boom.

It has been known for quite a while that Chad sits on significant oil reserves. This is no surprise given that almost all of its neighbors are oil producers (Nigeria, Cameroon, Libya, and Sudan). Due to political instability in the post-colonial period, the oil resources have remained untouched. In the early 1990s the World Bank proposed a project to develop Chad's southern oil resources that are centered at the city of Doba close to the border of Cameroon. The proposal became quite controversial as those opposed to World Bank interventions pointed to the stream of failed projects in other oil-rich developing nations. By the end of the 1990s, however, the Bank along with the Chadian government assured the international community that the environment would be protected and revenues would be spent wisely. Various international monitoring agencies were established to ensure both. Construction of the wells as well as a massive pipeline bringing the oil through Cameroon to the Atlantic Ocean began in 2000 and was completed at the end of 2003 when the first barrels of oil were produced.

The 4-week sojourn in July and August 2004 was in the true sense a pre-dissertation trip whose goal was to obtain anecdotal evidence of Dutch Disease as well as to ensure that a longer-term research agenda would be feasible to undertake there in the near future. Travel focused on the two cities of N'djamena and Moundou, the former being Chad's Sahelian capital while the latter the nation's economic center not too far from the oil resources in question.

N'djamena is a small capital of less than 300,000 people located in the Sahelian region of the country. Although the trip took place during the region's cooler rainy season, the weather was quite dry during most of the day and very hot (about 100 degrees Fahrenheit). Quite different than other African capitals that I have visited, N'djamena is far from being a positive showcase of the country. Little development has taken place. The only cosmopolitan side to the city is its lone high-rise building, an architecturally pleasing structure that houses the country's branch of the Bank of Central African States. This was a capital that at one time in the past was experiencing development but for many reasons, most prominent among them recurring civil war, such prospects were interrupted or destroyed altogether. A few traffic lights that no longer work, a couple of large movie theaters shut down, buildings riddled with bullet holes – all signs of a lack of long-term economic and political stability.

Among the interesting discoveries I made in the capital was the unfortunate one that any type of non-Central African amenity was extremely expensive. The many NGO employees I met over the trip told me that N'djamena was Africa's most expensive capital. The cheapest hotel I found in the capital that had electricity cost 50 dollars per night, far different than the usual situation in other African countries. For example 50 dollars in Morocco or Dakar (Senegal) would earn a traveler a 3- or 4-star hotel. As a student I found this situation quite difficult. I wasn't earning enough money to live the life of a western researcher; however embracing an indigenous lifestyle, as a Peace Corps volunteer might do, would prevent me from undertaking effective research.

As an economist my analysis of the situation just described is that Chad is such a poor country that there are few people other than those associated with foreign aid organizations that could afford anything but the most basic local amenities. There was simply no market for hotels; and the market that did exist was monopolized by a few notable local families who, as monopolists, were able to charge anything they wanted to provide these goods necessary to conduct effective work. There was absolutely

no sign of tourism in the country that might have provided an impetus for an expanded and competitive market. N'djamena was a purely U.N.-dependant economy.

The principal reason for being in the capital was to meet with official sources that are involved in Chad's economy. I was able to meet with appropriate officials at the U.S. Embassy. Although friendly in general it was not surprising to hear a positive take on the oil industry – note that it is two American oil companies that make up more than half of the oil consortium. There was absolutely no sign of any economic analysis being done on the prospects of oil for the country. The term “Dutch Disease” was recognized as being simply the “Resource Movement Effect” mentioned above. There seemed to be no awareness of a “Spending Effect”.

I talked with many other people in the capital about oil. A leader of an environmental organization was concerned obviously with the negative environmental impacts. However there is little evidence so far of such an impact. One positive outcome of the controversies leading up to project development is that very stringent guidelines were established before work could begin. Among them is that the pipeline through Cameroon is entirely underground in contrast to almost all other project situations in poorer countries. Most of the people with whom I met in the capital were concerned with how the revenues would be used. The obvious political aspect of oil in Chad is that earnings will be used to solidify the hold of a government whose mandate is not so clear. One unfortunate piece of evidence to support the mal-intentions of the Chadian government is that the initial bonus payment made by the Consortium was indirectly used to buy weapons, this despite the prohibition of doing so made clear by international organizations.

In many ways the trip to Moundou was more interesting and more productive. It is there where the direct effects of project construction could be clearly seen. Moundou is located in a much more fertile quasi-tropical area of Chad. The weather was cooler and the rain fell more often. Green was abundant rather than the browns that dominated the capital.

Several effects of the oil industry could be felt in Moundou. Oil had become part of pop culture for one. I saw a few cafés named after Exxon or others whose names alluded to the dream of oil. I met a man who now drives a motorcycle-taxi who said that he only recently moved to the area because of a job he obtained with the oil industry. As a doorman/guard he was earning with the oil project almost five times what he had been previously earning in the same line of work in the capital! These prospects of hugely increased earnings clearly induced a massive migration to the South from all parts of Chad (a census taken in the area confirms this). I spoke with one official in N'djamena who told me that the capital lost many essential workers, school teachers the most prominent among them, who simply abandoned what they were doing for better opportunities with the oil industry.

The just-mentioned motorcycle-taxi business was created only during the last few years after the oil project had begun. I identify this as a clearly positive aspect of the oil project's impact. The oil industry clearly provided an impetus for the creation of another industry that will remain despite the presence of oil-related work. I also heard the statement, however, that since the end of the construction phase the motorcycle-taxi business (such a taxi being called a “clando” from “clandestine”) has become over-crowded with those whose jobs with the oil industry had ended and who were seeking out new lines of work.

Another important piece of evidence I found concerned prices. I met with the Assistant Director of the National Office of Rural Development who provided me with statistics on agricultural production and prices. He told me that many people abandoned cultivation to find work with the oil industry. At the same time the oil industry provided increased demand for farm goods. In simple economic terms decreased supply with increased demand leads to higher prices. Prices doubled for some goods including

chicken, becoming unaffordable to any family not involved with the oil industry. The situation was described to me as one of near-famine.

In terms of prospects for a successful research project, I was able to find very qualified and enthusiastic people who will be willing to give me the support necessary to continue my research. In order to trace the micro impact of the macroeconomic restructuring, I will need to conduct survey work at the household level. I will look for changes in economic behavior during both the period of project construction, after the first year of revenue earnings, and the transitional phase between the two. The Spending Effect of the Dutch Disease is expected to be felt in the entire country as it is a macroeconomic phenomenon, but even the Resource Movement Effect has been translated into national outcomes including the above-mentioned migration of schoolteachers from the capital to the South. Thus fieldwork will be conducted in villages and towns throughout the country, although for practical purposes in the region between N'djamena and Moundou.

Finally, as a side note, many people asked me about the crisis in Darfur, just over Chad's eastern border, and how it has impacted the country. The answer, not surprisingly, is that there are few signs of any impact of the Darfur crisis on Chadian households. The only sign of a crisis that I could find was the noticeable influx of journalists and aid workers that entered the capital during the time I was there (this ironically represents an economic boom to N'djamena's hotel and restaurant owners). There was absolutely no sign of the Darfur crisis in Southern Chad. The cities are not sufficiently integrated for regional occurrences to spread to other parts of the country. This lack of national integration will certainly be a factor in a proper treatment of the economic outcome of the Chadian oil project.