

Sudan

(SudanRN1.2)

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This is one of a set of “random narratives” to complement our statistical findings in regard to civil war onsets. This is a draft of May 5, 2006; comments welcome.

In his report to the President, John C. Danforth, special envoy for peace, wrote that “after 18 years, with over two million dead and over 4.5 million refugees and internally displaced, the war [in Sudan, between the North and South] continued (Danforth 2002, 5). While missing some of the nuance of Sudan’s modern history, this summary aptly points to the fact that civil war has been endemic in Sudan’s contemporary history.

Sudan in our model, spanning from 1956, its year of independence, through 1999 has 1.2 expected number of civil wars. But its history is worse than our model predicts. Our data record two civil war onsets in this period, .8 higher than predicted. The first is in 1963, a rebellion fought by the Anya Nya, representing Sudan’s southern region, and lasting a decade. The second onset was in 1983, again instigated by forces (among others, the Sudanese People’s Liberation Army or SPLA) representing the southern region. However, our dataset does not include the Ansar rebellion against the government of the Free Officers in 1970. If that were counted (and it is ambiguous as to whether enough Sudanese soldiers were killed for this incident to qualify as a civil war), there would have been a third onset to explain. Going beyond our period of statistical analysis, in 2003 there was a third (or possibly fourth, if Ansar is counted) onset, this in the western region of Darfur. However the Ansar rebellion is counted, it would be fair to say that our model somewhat underpredicts civil war onsets in Sudan.

Furthermore, our model misidentifies the periods of highest susceptibility. In 1963, our model gives Sudan only a 1.5 percent chance of a civil war onset; in 1983, our model gives Sudan a 1.8 percent chance of a civil war onset. Meanwhile, in 1956-57, due to Sudan being a new state, its probability for an onset was 8.1 percent. Other periods of anocracy and/or instability accompanied by plummeting GDP raised the probability for an onset in 1974 (to 3 percent) and in 1986 (to 5.2 percent) – yet there were no onsets in these more vulnerable years. In both underpredicting the expected number and misidentifying the actual years of civil war onsets, our model was not very successful in tracking Sudan’s gruesome civil war history.

Our narrative helps address these apparent anomalies. First, we will show that our model that highlights the commitment problems associated with being a new state were

in fact crucial to the first civil war onset. It turns out that due to a failed mutiny in the year previous to independence, the resources in the south to mount an insurgency were depleted, and the early independence onset was delayed. However, the same set of factors that impel early independence civil wars in general were consequential for the first onset in Sudan. From this perspective, our theory got it almost right.

Second, in regard to the second onset, our narrative highlights a factor that we have previously ignored in our theoretical model, yet is not inconsistent with it. In 1983, President Nimeiri, to remain secure in power, wanted to take away the one issue his strongest opposition pressed for – viz., the creation of an Arab/Islamic Sudan. Because the state was then “strong”, and other opposition (the communists) depleted, the President felt he had the power to renege on the concessions that helped end the first civil war with the south. This turned out to be an historic error in calculation, as his initiatives especially on shari’a law reignited the southern rebellion. Here we have state strength as a causal factor in impelling a regime to squeeze its minorities – and the insurgency coming as a result of miscalculation of that strength.

Third, our narrative helps account for the larger than expected number of civil war onsets. Most important, colonial history sharpened the boundaries between North and South, which had a dual implication. First the exclusion of southerners in several of the key political processes reduced the opportunities for a bargained solution to differences between potential combatants. Second, the separate development of north and south created a united south, helping the various southern groups overcome rather impressive collective action problems in setting off two successful insurgencies. Also important is bad terrain. Our coding of bad terrain focuses only on mountains. In Sudan, the high grass and forests across a desert allowed rebels to hide from the state army and prosper. Our theory of bad terrain is confirmed in this case, but our indicator for it proves to be too narrow.

I. Background¹

Colonial and Condominium Roots

With Napoleon’s forces driven out of Egypt and its control over the Nile in 1801, Sudan was in continuous turmoil under various combinations of Ottoman, Egyptian, and British rule. Under the so-called Turkiyah of 1821, the Egyptian pasha Muhammad Ali pacified the region and turned it into a lucrative slave-farming zone. But with the opening of the Suez Canal in 1869, the British took an increasing interest in Egypt and in the source of the Nile. In 1874 Charles George Gordon, a British officer, became governor of Equatoria province in today’s southern Sudan. Gordon summarily and ruthlessly eliminated slave traders. After he became Sudan’s governor general in 1877, he choked off the then provincial governor Rahman Mansur az Zubeir’s slave trading, and ordered him back to Cairo without his personal army. After Gordon’s resignation in 1880, slave

¹ . Much of the structure of the historical narrative is based on Metz (1991). Since we relied on the electronic version, no page numbers are given in citations. Readers will be able to track sources through key word searches. Unattributed quotation marks in this section refer to the Metz volume.

trading reemerged, but not to previous levels, much to the chagrin of the leading merchants. The new Sudanese army had a small budget, and could hardly contend with the soldiers from disbanded units who themselves became outlaws.

“In this troubled atmosphere, Muhammad Ahmad ibn as Sayyid Abd Allah, a *faqir* or holy man who combined personal magnetism with religious zealotry, emerged, determined to expel the Turks and restore Islam to its primitive purity.” He later declared himself as Al Mahdi al Muntazar ("the awaited guide in the right path," usually seen as the Mahdi), sent from God, not only to redeem his people through a return to the culture of early Islam, but also to prepare for the Prophet's second coming. He recruited followers through a tax rebellion and support of the slave traders. The British responded by reappointing Gordon who led a military campaign that ended in 1885 when the Mahdists killed him and set up an Islamic regime. The Mahdiyyah and its caliphate – despite the Mahdi dying of typhus within months -- is today recognized as the first incarnation of a Sudanese nation.

In 1892 Herbert (later Lord) Kitchener became sirdar, or commander, of the Egyptian army and by 1898 reconquered Sudan in an epic military campaign. In January 1899, the British and Egyptian governments created a Condominium, or joint authority, to rule the country, meeting occasional resistance. The joint authority faced bouts of intertribal warfare, banditry, and low level revolts. Mahdist uprisings occurred in February 1900, in 1902-3, in 1904, and in 1908. In 1916 Abd Allah as Suhayni, who claimed to be the Prophet Isa, launched an unsuccessful jihad (Metz 1991).

Politically, however, there was more uncertainty. The question of whether Sudan was independent of Egypt was not resolved. In 1922 Britain renounced its Egyptian protectorate, but could not get agreement with the new Egyptian government on the Sudan question. Many nationalists in Sudan supported union with Egypt. The British refused and tensions mounted. In November 1924, Sir Lee Stack, governor general of Sudan and sirdar, was assassinated in Cairo. In response, Britain withdrew all Egyptian troops, civil servants, and public employees from Sudan. In 1925 the British rulers in Khartoum formed the Sudan Defense Force (SDF) under Sudanese officers (and some 4,500 soldiers) to replace Egyptian units.

In the 1920s and 30s, the British colonial government ruled indirectly – i.e. through indigenous leaders. Traditional leaders in the North were shaykhs; in the South they were tribal chiefs. To allow the south to develop along indigenous lines, the British closed the region to northerners. Christian missions that operated schools and medical clinics were encouraged but Islamic missions were restricted. The colonial administration also discouraged any public manifestations of Islamic culture, including Arab dress and the Arabic language. "Closed door" ordinances restricted northern Sudanese from traveling, trading, or working in the south, even as government administrators.

Meanwhile, the British revitalized African customs and tribal life that the slave trade had disrupted. For example, the government subvented the anthropological work of E. E. Evans-Pritchard to study the Azande and then the Nuer. There was a desire for

information that would help control, to be sure. But there was also an attempt to provide a foundation for an African culture in Sudan distinct from the Arab North.² Indeed, a 1930 directive stated that blacks in the southern provinces were to be considered a people distinct from northern Muslims and foresaw the South's integration with British East Africa. As a result, the South remained isolated from the North (Metz 1991; Shepherd 1966, 198).

In line with indirect rule, the Sudan's political service had two separate branches. Colonial officials in the South were usually military officers with previous Africa experience, and had little contact with Islamic societies. Officials in the North were largely diplomatic personnel with Arabist leanings. Northern provincial governors convened in Khartoum; their three southern colleagues coordinated with fellow governors of British East Africa. Sudanese nationalism as it appeared after World War I emerged in the North. These nationalists opposed indirect rule and were outraged by Britain's policies in the South. They advocated a united national government in Khartoum.

Social Cleavages

The North/South cleavage is the core cleavage in modern Sudanese history. In the North, there is a modal vision of a unified Arab/Muslim culture. Meanwhile, the South is populated mostly by non-Muslim Nilotes, speaking languages of one section of the Nilotic sub-branch of the Eastern Sudanic branch of Nilo-Saharan. They are marked by physical similarity and many common cultural features. Nilotes share a cattle culture, one that nurtures qualities of "courage, love of fighting, and contempt of hunger and hardship" that distinguishes them from peasants (Evans-Pritchard 1940, p. 26).³

This North/South cleavage was sustained administratively. "While [southern] links with the Arab world were primarily through Arab slavers, a corrupt bureaucracy, and the army," Sarkesian points out, "associations with Europe [for southerners] evolved through Christian missionaries and British administrators." Even the mahdis, who united with the south against Egyptian rule, upset southern tribal life and "left nothing behind but anarchy and fear."⁴ Because of the distinct administrative structures, south Sudanese under British rule had no channels to Khartoum, severely delimiting their ability to strike bargains in later periods. And cultural stereotypes hardened. British administrators reported that Arab traders in the south referred generally to southerners as "slaves". Reflecting this division, "Under the condominium, British administrators argued that the south should be incorporated into Kenya or Uganda, as the people were considered to have affinity with 'Black Africa.'" Because of the distinct administrative structures, south Sudanese under British rule had few if any channels to Khartoum (Sarkesian 1973, 2-5).

² . See the revealing "Introductory" (esp. pp. 7-15) to E.E. Evans-Pritchard The Nuer (New York: Oxford University Press, 1940).

³ . Evans-Pritchard's chapter on "Interest in Cattle" (1940, 16-50) is a classic statement on the cattle culture among the Nilotes.

⁴ . Here Sarkesian is quoting Robert O. Collin 1962 The Southern Sudan 1883-1898, New Haven, Yale, pp. 11-12.

The slave trade plays directly into this North/South cleavage. “During the nineteenth century, the slave trade brought southerners into closer contact with Sudanese Arabs and resulted in a deep hatred for the northerners. Slavery had been an institution of Sudanese life throughout history, but southern Sudan, where slavery flourished, was originally considered an area beyond Cairo's control. Because Sudan had access to Middle East slave markets, the slave trade in the south intensified in the nineteenth century and continued after the British had suppressed slavery in much of sub-Saharan Africa. Annual raids resulted in the capture of countless thousands of southern Sudanese, and the destruction of the region's stability and economy” (Metz 1991). This sad history is reproduced in everyday epithets. While the northerners still call southerners “slaves”, the southerners have called the northerners “sons of Zubeir Pasha”, that is the descendents of slave traders and ruthless overlords from Egypt (Shepherd 1966, 197).

The principal cultural content of the North/South cleavage is religious, a contrast between Islam and emerging Christianity. But there is a related linguistic element to the North/South cleavage. By one account, “Choice of language played a political role in the ethnic and religious cleavage between the northern and southern Sudanese...English has been associated with being non-Muslim, as Arabic was associated with Islam. Thus language was a political instrument and a symbol of identity... In early 1991, with about 90 percent of the southern third of the country controlled by the...SPLA, the use of Arabic as a medium of instruction in southern schools remained a political issue, with many southerners regarding Arabic as an element in northern cultural domination. Juba (or pidgin) Arabic, developed and learned informally, had been used in southern towns, particularly in Al Istiwai, for some time and had spread slowly but steadily throughout the south, but not always at the expense of English. The Juba Arabic used in the marketplace and even by political figures addressing ethnically mixed urban audiences could not be understood by northern Sudanese” (Metz 1991) Historical patterns of interaction and rule, religion, race (Arab vs. African), and language have worked to deepen the North/South cleavage in Sudan.

Complexities of cleavages

The stark North/South cleavage, however, does not do justice to the social complexities of Sudan. Deng (1995, 858-9) rejects the notion that north and south represent different cultures. He writes “If Northerners value the unity of their nation above their self-delusion that they are Arabs [and not Africans]” then peace will not be attained. He further argues that northerners fear that accommodation with the south would expose them as Africans, especially due to the physiognomic similarity with southerners. Not difference but fear of similarity, Deng argues, is the key to the conflict. But even if you accept a blurring of the North/South divide along Deng's lines, there are still numerous internal divisions within each of the two major regions, further blurring the principal divide.

In the South, the Nilotic peoples are themselves divided. The Dinka, Nuer, and Shilluk are the three largest Nilotic groups. They entered southern Sudan before the tenth century, and constituted about sixty percent of the South's population in 1990 (making up

about ten percent of Sudan's population). The Dinka live in a wide swath over the northern portion of the southern region. The Nuer, the next largest group, was only about one-fourth to one-third the size of the Dinka. The Shilluk, the third largest group, had only about one-fourth as many people as the Nuer. Tribal migrations going back to the fifteenth century led to distinct cultural settlements with a wide range of political institutions, going from acephalous anarchy among the Nuer to centralized monarchy among the Shilluk.

Any suggestion of a culturally united Nilotic south needs to take into account the separate institutions and histories of the Nilotic groups. It also needs to contend with the reality of an ugly Dinka/Nuer war in 1991. With the collapse of the Mengistu regime in Ethiopia in May 1991, the SPLA lost a key supply line and military bases in Southwest Ethiopia (and this brought 350,000 southern Sudanese refugees back to Sudan, exacerbating the security situation). In response to this new difficulty, John Garang, the leader of the SPLA and a Dinka, summoned a meeting of the SPLA high command, in which those summoned feared that they would be arrested. But Riek Machar, a Nuer, took this moment to break away from the SPLA to form the SPLA-Nasir faction, in part due to an agreement with Khartoum.⁵ Head-on intra-Nilote warfare followed in which many civilians were killed. The Nasir faction controlled much of the Upper Nile while Garang's Torit faction controlled most of Equatoria and Bahr-el-Ghazal. Indeed, the South-on-South death toll, in Jok and Hutchinson's reckoning (1999, 126-27), "exceeds those lost to atrocities committed by the Sudanese army."

It was northern oppression rather than cultural unity that brought the Dinka and the Nuer to cultivate a common identity as "southerners" (Reed 1972, 20). This is a quite different claim than one that portrays a culturally unified South as a coherent side in a social cleavage.

Intra-Nilotic conflict is not the only complexity in the South. The South also has several groups of non-Nilotes. The Azande people, who entered southern Sudan in the sixteenth century, established the region's largest state. In the 1950s, the Zande were seeking independence for their own state, which they called the Sué River Republic (Reed 1972, 20). The Avungara are another non-Nilotic population in the South. In the eighteenth century, the Avungara conquered the Azande, who were de facto vassals to Avungara power until the British recognized their autonomy (Metz 1991).

Not only are there deep tribal divisions in the South. There are also religious ones. The notion of a Christian (or at least non-Moslem) South is also oversimplified. Read (1972, 27) who marched with Anya Nya forces for ten months in 1969-70 reports that he "met Anya-Nya leaders who are Moslems. For example, Major Makoi in Rumbek District of Central Bahr el Ghazal...is a Moslem...The Southerners do not see it as a religious war."

Further confusing the territorial divide between "North" and "South" are the Ngok Dinka, living on the borderlands in Kordofan between North and South. Many

⁵ . Machar signed a separate "Peace Charter" with Khartoum in April 1996.

Ngok became Muslim and were bilingual in Dinka and Arabic. But Deng writes (1995, 244) “the Ngok have remained distinctly Dinka and in some respects more so than their brethren farther South.” In earlier times, these Dinka joined with northern Muslims in Kordofan to protect themselves jointly against slave raiding. In the nationalist era, young Ngok wanted to join the south; but were quick, after the Addis Ababa Agreement that signaled the end of the first civil war, to be co-opted into the northern camp.

The North too is culturally divided. “The two largest of the supratribal categories are the Juhayna and the Jaali (or Jaalayin). The Juhayna category consisted of tribes considered nomadic, although many had become fully settled. The Jaali encompassed the riverine, sedentary peoples from Dunqulah to just north of Khartoum and members of this group who had moved elsewhere. Some of its groups had become sedentary only in the twentieth century. Sudanese saw the Jaali as primarily indigenous peoples who were gradually arabized. Sudanese thought the Juhayna were less mixed, although some Juhayna groups had become more diverse by absorbing indigenous peoples.”

There are further complexities among northerners. The Baqqara tribe, for example, moved south and west in earlier centuries, and mixed with the indigenous populations there. Today, they are scarcely to be distinguished from them, and are popularly thought to be the descendents of southern slaves. Yet they are considered in ethnic reckonings to be unquestionable northerners. And so, in 1951, proposals to give special status and protection to the south were defeated, and received the greatest calumny from these Baqqara. Deng quotes Mansour Khalid (1995, 130-31) “Abd al-Tam... can be deemed, like so many other Sudanese of markedly Negroid origin, to have been compelled to take positions like that in order to out-Herod Herod.” This is true, Deng asserts, for the Baqqara, who have no traditions of links to Arabs -- these are the greatest Arab chauvinists, and most strongly anti-Dinka.

In Darfur, still in the North, the Fur (who were ruled until 1916 by an independent sultanate and oriented politically and culturally to peoples in Chad) are a sedentary, cultivating group long settled on the western frontier. They are non-Arabized Muslims, and referred to invidiously by other northerners as “Zurga” or blacks. Living on a plateau north of the Fur (and many in Chad) are the seminomadic people calling themselves Beri whom the Arabs call Zaghawa. They are Muslims who have retained many pre-Islamic rites. Herders, the Zaghawa also gained a substantial part of their livelihood by gathering wild grains. The Masalit, a Nilo-Saharan-speaking agriculturalist tribe, also Muslim, over the past century encroached through small scale war on traditional Fur land (Metz 1991, HRW April 2004, 6). HRW (May 2004, 5) refers to the Zaghawa, Fur and Masalit as “African”, and these became the principal victims of the military campaign against a rebel insurgency beginning in 2003. “Arabs” are the principal recruits into the Janjaweed militia.

The Nubians, living in the Nile River valley in far northern Sudan and southern Egypt, are the second largest Muslim group in Sudan. Nile Nubians speak Arabic (usually as a second language), but don’t consider themselves Arab. In the early 1970s, an organization uniting the Fur and the Nuba, amongst others, into a United Sudan

African Liberation Front, spoke for the interests of “Africans” (as opposed to Arabs) who were residents of the North (Reed 1972, 9). The organized presence of non-Arabs in the North further undermines the notion that there is a sharp difference between the Arab/Muslim North and the African/Christian South.

All of this ethnographic description is complicated still by migration. One estimate has it that in 1973 alone more than ten percent of the Sudanese population moved away from their ethnic homelands for economic reasons. Most of the migrants were of employment age and moved to cities, particularly in the Khartoum metropolitan area, which attracted a third of all internal migrants. Migrant flows escalated in the latter 1980s because of drought and famine, civil war (in the South), and bandits (crossing over from Chad) (Metz 1991).

In agreement with conventional theories of civil war onset, there *has* been a polarized North/South cleavage constituting a clash of civilizations. Polarization was sufficiently deep as to be a cause for war. Indeed this clash between the South and North led to two wars. But it should be emphasized, as this discussion shows, that the ethnic/cultural/religious scene in Sudan was sufficiently complex as to allow for a less polarized political outcome than what eventually emerged. The polarization cannot in itself explain the violent conflict; the polarization itself needs to be explained.

II. No War at Independence

Our theory holds that states are quite vulnerable to a civil war onset in their first two years of independence. Indeed our model predicts an 8 percent chance for a civil war onset in each of 1956-7. Yet even with incredible polarization between North and South, there was no “commitment war” in Sudan’s first two years. This section seeks to explain why.

Juba Conference of 1947 and Cairo Conference of 1953

The North/South polarization was growing starker in the final years of British rule. At the Juba Conference of 1947, southern chiefs expressed fears of a northern invasion, and of their inability to act productively in a legislative assembly in which they had no experience. The south was forced to accept a unified Legislative Assembly and in 1948, 13 southerners were combined with 82 northerners. The southerners were therefore in a strategic bind. When the Condominium was liquidated in 1953, and self-rule proclaimed (with independence to occur in 1956), Southerners were dismayed that without political parties to compete for representatives, they had no special protections, and none of the parties that sent representatives to Egypt to negotiate the withdrawal of the condominium had any southern representation (Sarkesian 1973, pp. 5-6).

The constitutional structure was set in the 1953 Cairo Conference, where Southerners had no direct representation apart from Northern-led political parties they had joined. Thus the transitional constitution that was adopted was a unitary one, with no concessions for southern autonomy (even rejecting the British suggestion of the

Governor-General having continuing administrative power in the south) (Shepherd 1966, 202).

Deng suggests that the southerners were duped in this Cairo conference. A constitutional commission was formed there that had only one South Sudanese representative. He proposed a federal arrangement between the South and the North but to deaf ears. Subsequent to the conference, Buth Diu formed the Southern Sudan Party, the first southern party ever; in 1955, it is renamed Liberal Party, and held its first Conference in Juba, with Stansilaus Paysama as President and Buth Diu as Secretary-General. They demanded a federation for South Sudan. But, Deng argues, since they were not as well-acquainted with legal and constitutional procedures as were northerners, they accepted Northern assurances in a too trustworthy way (Deng 1995).

Mutiny of 1955

As independence was approaching, the shadow Sudanese government announced that the southern Sudanese workers at the Nzara cotton scheme would be replaced by northerners. No justification was offered. Southerners workers demonstrated. In response, the Sudanese army rushed in and fired on the demonstrators, killing 20. In this same period, the government announced that the Sudanization of the civil service would open up 800 new posts (formerly held by British civil servants), in which 796 were to go to northerners. Shortly thereafter, a similar message was sent to the Equatoria Corps of the army, whose soldiers found that they were to be transferred to the North (Reed 1972, 14). This sparked a mutiny on August 18, 1955, in which southern soldiers shot their officers and their families. Fatalities included 336 northerners, 75 southerners (55 of whom drowned in the Kinyeti River during a panic exodus from Torit).

The British Royal Air Force airlifted 8,000 Northern Sudanese troops to the South. The British Governor, Knox Helm, promised amnesty to Southerners who laid down their arms. Few surrendered. Those who did were turned over to the shadow government, and after the transition to independence, most of them were killed (Reed 1972, 15). Most mutineers, however, hid, and waited for an opportunity to fight again. A British report on the disturbance concluded that the southerners had a “genuine grievance” as independence to them looked more like a change in masters rather than self-rule (Sarkesian 1973, 10). On the other side, the Mutiny of 1955 was felt by northerners to be a last-ditch effort inspired by the British to sabotage independence (Shepherd 1966, 203).

Transition at 1956 to coup of 1958

On December 19, 1955, the Sudanese parliament, under Ismail al-Azhari's leadership, unanimously adopted a declaration of independence; on January 1, 1956, Sudan became an independent republic. Although it achieved independence without conflict, Sudan inherited many problems from the condominium. Southern leaders concentrated their efforts in Khartoum, where they hoped to win constitutional concessions. Although determined to resist what they perceived to be Arab imperialism,

they were opposed to violence. Most southern representatives supported provincial autonomy and warned that failure to win legal concessions would drive the south to rebellion (Metz 1991).

In the first parliamentary elections, a Southern Party was created (and later re-named as the Liberal Party). It won 12 seats, and southerners altogether had 22 seats, about one-fourth of the parliamentary seats. But southerners balked at their party's alliance with the Umma (against the National Union Party, which got a majority in the elections), pointing out that Umma politicians were the sons of slave traders. Also, as civil service positions were announced, senior positions in the south went almost exclusively to northerners. Under these conditions several southerners in the NUP resigned to join the Liberal Party that was calling for a federation (Sarkesian 1973, 8-9).

With independence in 1956, southern MPs took part in the motion for independence and pressed for federal status. But the military coup in 1958 led by General Abboud "cut off Southern access to parliamentary institution and Northern politicians. With the State of Emergency Regulation and Defense of Sudan Act of 1958, allowing for unlimited detention without trial, some 200,000 southerners left the country as refugees; meanwhile the military government planned to move 1.5 million northerners to the south. In 1962, Christian missionaries were expelled (Sarkesian 1973, 11-12). Tensions were high; the North could not make credible commitments to Southerners; yet there was no civil war in the wake of independence.

Delayed not due to colonial support, but due to lack of means

There was no commitment war at independence in Sudan despite our model's prediction of high vulnerability to an onset. But this seems to be the result not of theoretical failure of the model, but in the arbitrary application of coding rules. If the date of independence were set at 1953 (the date self-rule began), the Mutiny would have come close to qualifying as a start date for the Sudanese civil war. But even accepting the 1956 date for independence, the theory is not undermined by this case. The Mutiny was one year too early to count as the onset for a civil war in Sudan, but it had the effect of sending into exile the personnel capable of mounting a post-independence insurgency. Therefore, the long period before an onset occurred was not because southerners could wait until the state weakened; rather it was because in exile already, they lacked the resources to fight an insurgency until they were able to equip themselves to re-enter the fray.

III. Onset in 1963

The first civil war did not break out in the vulnerable moment of early independence, but rather seven years after independence in a period of political stability and authoritarian rule, in which the probability for a civil war onset was 1.5 percent. The question in this section is why? The answer is that the onset in 1963 is well explained by the commitment logic used to explain wars in the wake of independence.

A Period of Stability and Authoritarian Rule

A military coup undermined the opening of parliament on November 17, 1958. Ibrahim Abbud and Ahmad Abd al Wahab, relying on help not only from Abd Allah Khalil, the Prime Minister and himself a retired army general, but also leading Umma members, took control over government. A Supreme Council of the Armed Forces was now to rule Sudan, divided between the Ansar and the Khatmiyyah factions. Abbud belonged to the Khatmiyyah, whereas Abd al Wahab was a member of the Ansar. Until Abd al Wahab's removal in March 1959, the Ansar were the stronger of the two groups in the government (Metz 1991). Because of the coup, Sudan's Polity score plummeted from +8 in 1957 to -7 in 1958. In consequence, our coding scored Sudan as unstable from 1959-61. After these three years of instability, the probability of a civil war onset dropped by more than 1 percent in 1962 and remained low in 1963 (at 1.5 percent), when our dataset records Sudan's first civil war onset.

The Strategy and Tactics of the Anya Nya

Refugees from the 1955 mutiny were the foundation for the guerrilla movement organized in the Congo (Shepherd 1966, 207). There was little they could do for several years, lacking resources. But after 1960, they were able to get weapons from ambushes of Sudanese army convoys delivering weapons to support the Simba rebellion in the Congo. In February 1962, refugees organized the Sudan Africa Closed Districts National Union, changing its name to the Sudan African National Union (SANU) in April 1963. It called for independence for southern Sudan. Its military wing, the Anya Nya, was led by former mutineers, but it was supplemented by a new generation of well-educated guerrillas, such as Joseph Lagu, a former Sudanese army captain, who helped them diplomatically, especially in getting aid from Israel (Metz 1991). Meanwhile, numerous less-educated southerners, many of whom had been junior civil servants or former members of the Equatoria Corps, joined the fray. Anya Nya later purchased arms from Congolese rebels and international arms dealers with money from southern supporters and a large diaspora. As the Anya Nya professionalized (and increasing its numbers from 5,000 to 10,000 soldiers), it was able to rid many southern districts of state officials (Metz 1991).

Significant killings in 1963 in skirmishes between Anya Nya guerrillas and government forces make it the onset year for the first Sudanese civil war. By the late 1960s, some 500,000 people were killed due to the war. Hundreds of thousands more became internally displaced or refugees.

Why the Civil War?

Clash of Civilizations

The Library of Congress study sees the cultural cleavage to be the key. "The differences between north and south have usually engendered hostility, a clash of cultures that in the last 150 years has led to seemingly endless violence. The strong regional and cultural differences have inhibited nation building and have caused the civil war in the

south that has raged since independence...” (Metz 1991). A variant of this is in Deng (1995) who sees not a clash of cultures, but rather a clash of “visions” of group identity, with northerners having a false consciousness of being Arabs, and using that vision to impose an Arab identity on the whole country. In either case, the war is between two irreconcilable cultural groups, one seeking to identify the Sudanic state with the Arab nation, the other to assert either a more pluralistic view of Sudan or a separate state for those of the Nilotic culture. These theories of course cannot explain the timing of the war; worse, they neglect the significant diversity within each of these regions, as discussed in an earlier section.

Objective grievances

An alternative explanation is to point to southern grievances. Prime Minister Abbud's southern policy, it has been argued, proved to be his undoing. The government openly tried to Arabize the South, and to suppress cultural freedom. In February 1964, Abbud expelled foreign missionaries from the south. He then shut down parliament to cut off a last outlet for southern complaints. These policies impelled southern leaders to support the incipient rebel group Anya Nya that had begun sporadic attacks on the Sudanese forces since 1955 (Metz 1991).

The grievance hand can be overplayed, however. It is often said that the south never had a fair chance at political power. Yet in 1957, in the parliament southerners had 46 seats out of 173 (26%), and the census had them at 30% of the population (Shepherd 1966, 201). The larger issue is that groups all over the world have faced exclusions of the sort faced by Sudan's southerners; it is hard to say that these grievances were of a special character to explain why they impelled a successful insurgency.

Exiles from mutiny

The South's first rebellion began in 1955 as a mutiny of southern troops who inferred from the shadow government's early policies that the departure of the British would be followed by northern efforts to Arabize and Islamicize their region. Many of the better educated southerners who served in government posts or were teachers quickly went into exile (Metz 1991). From this perspective, the 1963 onset was really a 1955 onset (against not the British but against the shadow government) that because of British interference was put into remission until sufficient resources became available to the insurgents to rekindle the insurgency.

Accessibility; no mountains but no roads; bad river traffic

Sudan is not mountainous, and in part this explains the underprediction of civil war, given the rough terrain presented by the desert and high grasses. The Anya Nya began operating in the forests and high grass country of the South in 1963 (Shepherd 1966, 202), areas not accessible to Sudan's conventional army. As for roads, by 1990, according to Metz (1991), “Sudan's road system totaled between 20,000 and 25,000 kilometers, comprising an extremely sparse network for the size of the country.

Asphalted all-weather roads, excluding paved streets in cities and towns, amounted to roughly 3,000 to 3,500 kilometers, of which the Khartoum-Port Sudan road accounted for almost 1,200 kilometers. There were between 3,000 and 4,000 kilometers of gravel roads located mostly in the southern region where lateritic road-building materials were abundant. In general, these roads were usable all year round, although travel might be interrupted at times during the rainy season.”

In regard to river traffic, Metz (1991) reports, “in 1983 only two sections of the Nile had regular commercial transport services. The more important was the 1,436-kilometer stretch of the White Nile from Kusti to Juba (known as the Southern Reach), which provided the only generally usable transport connection between the central and southern parts of the country.” But this was easily cut by insurgents. As Metz (1991) writes, “Virtually all traffic, and certainly scheduled traffic, ended in 1984, when the SPLA consistently sank the exposed steamers from sanctuaries along the river banks. River traffic south of Kusti had not resumed in mid-1991 except for a few heavily armed and escorted convoys.”

Sons of the Soil

The government of Sudan often issued statements envisioning a federation with Libya, Syria and Egypt, in which the southern regions of Sudan would become the bread basket. In the early 1960s, to fulfill this dream, the Sudanese government planned to settle some 1 to 1.5 million Egyptians and Northerners to colonize the Upper Nile Province (Reed 1972, 29). Upon hearing of this plan, several southern Sudanese parliamentarians fled the country to organize ambushes against settler convoys. Although resettlement schemes can be considered a grievance, its causal role in insurgency is to provide easy targets for inexperienced guerillas, and targets that would need to be protected by the state army. Settlers and army convoys into “foreign” territory make for the possibility of getting a proto-insurgency off the ground.

Summary of Explanation for the First Civil War

In sum, local conditions delayed the war for seven years that our model predicts would come in the wake of independence. The Mutiny of 1955, if it had occurred after the British left (and without the British airlift), would have been sufficiently deadly to count as a civil war at the time of independence. But because it occurred “early” (i.e. before the British left), it delayed the actual onset. The exiles from the mutiny and other disaffected southerners were not waiting for the Sudanese government to weaken; rather they were waiting for the resources *to mount the rebellion whose source was the government's inability to commit to a bargain with the South*. With the ammunition coming from the failed Simba rebels in Congo, and with the easy targets by 1963 of settlers and convoys coming to the South, the Anya Nya was able to establish an insurgency capable of setting off a civil war, one which lasted from 1963-1972.

Addis Ababa Accords and the End of the First Civil War

In February 1972, the Southern Sudan Liberation Movement (formed as the political arm of the Anya Nya in 1971) and the Sudanese government convened at Addis Ababa. As Metz (1991) reports, “Initially, the two sides were far apart, the southerners demanding a federal state with a separate southern government and an army that would come under the federal president's command only in response to an external threat to Sudan. Eventually, however, the two sides, with the help of Ethiopia's Emperor Haile Selassie, reached an agreement. The accords guaranteed autonomy for a southern region--composed of the three provinces of Ekuatoria (present-day Al Istiwai), Bahr al Ghazal, and Upper Nile (present-day Aali an Nil)--under a regional president appointed by the national president on the recommendation of an elected Southern Regional Assembly. Southerners, including qualified Anya Nya veterans, would be incorporated into a 12,000-man southern command of the Sudanese army under equal numbers of northern and southern officers. The accords also recognized Arabic as Sudan's official language, and English as the south's principal language, which would be used in administration and would be taught in the schools.” Thus ended the first civil war.

IV. Anocracy and Instability in the 60s and 70s but no New Onset

The Communists in 1965

Sudanese Communists twice sought to challenge through revolutionary action the Sudanese government. They first became a revolutionary threat at the point of political instability in 1965 when our model reckons that the risk of a civil war onset tripled. Discontent around issues of the civil war and the economy was rising among students, teachers, civil servants and trade unionists. The “October Revolution” was in fact a general strike led by a National Front for Professionals that spread throughout the country. They allied with out-of-favor politicians to form the leftist United National Front (UNF), which made further contacts with dissident army officers. After several days of rioting that resulted in many deaths, Abbud dissolved the government and the Supreme Council of the Armed Forces. UNF leaders and army commanders then selected a nonpolitical senior civil servant, Sirr al Khatim al Khalifa, as prime minister to head a transitional government. The new civilian regime, which operated under the 1956 Transitional Constitution, established a coalition government that was quickly subjected to elections.

In the tumultuous (many competing parties, violence in the south, boycotts by southern organizations) 1965 election, the Umma won 75 out of 158 seats while its National Unionist Party (NUP) ally took 52. These two parties formed a coalition cabinet in June headed by Umma leader Muhammad Ahmad Mahjub. Azhari, the NUP leader, became the Supreme Commission's permanent president and chief of state. In October 1965, the Umma-NUP coalition collapsed over a disagreement on who had the right to conduct Sudan's foreign relations. After several months of jockeying, the prime ministership went to Sadiq al Mahdi, the nephew of the Mahdi, from the Umma Party. He was anti-secular for the North, but accepted Southern autonomy. The Umma traditionalist wing therefore opposed him. Political chaos and a breakdown in the unity of the

Arab/Islamic core followed. Northern communists saw government squabbling as an opening for their revolutionary vision. They and their allies demanded the creation of a socialist state. When Sadiq refused to honor a Supreme Court ruling that overturned legislation banning the SCP and ousting communists elected to parliamentary seats, leftists were further enraged. However, their coup attempt in December 1966 (in alliance with a small army group), failed, and most were arrested (Metz 1991).

The Free Officers in 1969

With three years of instability over (due to the democratization of 1965), and the probability of civil war below the world average in 1969 (at 1.6 percent), on May 25, a Free Officers' Movement staged a coup. It was made up of several young officers and led by Colonel Jaafar an Nimeiri. Awadallah, a former chief justice, was a co-conspirator. Together they constituted a Revolutionary Command Council (RCC), Nine members of the Awadallah regime were communists, including John Garang, one of the two southerners in the cabinet as Minister of Supply and later as Minister for Southern Affairs (Metz 1991). As our model would have predicted, this coup was without major violence.

Ansar Rebellion

However, the probability for civil war tripled in 1970-71 due to the return to autocracy under the Free Officers. The regime (with the probability of an onset now at 4.6 percent) was vulnerable to an onset. Conservatives, led by the Ansar, posed the greatest threat to the RCC. Imam Al Hadi al Mahdi returned to his Aba Island base (in the Nile, near Khartoum) in the belief that the government had decided to strike at the Ansar movement. The imam demanded a return to democracy, the expulsion of communists from government, and an end to RCC rule. Nimeiri tried to negotiate, but hostile Ansar crowds blocked his visit to Aba. Fighting subsequently erupted between the army and 30,000 Ansar soliders. When the Ansar refused to surrender, army units with air support assaulted Aba Island, killing some 3,000 people including the imam, who was killed amid an escape to Ethiopia. The government feared that Sadiq al Mahdi would succeed the imam, with even greater popularity. He was thus exiled to Egypt, where Nasser promised to keep him under guard.

While our model would ask us to focus on the perceived weakness of the unstable (and in 1970 anocratic as well) government to account for this civil war (if indeed enough state soldiers were killed), it seems the case that Nimeiri's confidence in state strength – enough so to challenge directly a popular religious leader – provoked the violence.

The Second Communist Rebellion

The Communists moved a second time in 1971, when Sudan was both unstable and anocratic. President Nimeiri had moved against the SCP shortly after crushing the Ansar rebellion. Nimeiri placed under house arrest the SCP secretary general who had returned to Sudan illegally after several months abroad. Then he put trade unions, a traditional communist stronghold, under direct government control. All other communist

affiliated organizations were similarly banned. The government arrested the SCP's central committee and other leading communists. To replace communist organization, Nimeiri announced the formation of the Sudan Socialist Union (SSU) as a supra political party.

The SCP, however, survived clandestinely. On July 19, 1971, it staged a coup. One of the plotters, Major Hisham al Atta, surprised Nimeiri at an RCC meeting in the presidential palace and captured them along with several pro-Nimeiri officers. Atta formed a communist-led revolutionary council. Three days after the coup, however, army units loyal to Nimeiri stormed the palace, rescued Nimeiri, and arrested the coup leaders. Nimeiri, upon reassuming office, arrested, imprisoned and executed remaining communists and officers implicated in the rebellion (Metz 1991). Our model points here to state weakness; but Nimeiri was strong enough in 1970 to decimate Ansar and in the following year withstand a communist putsch. The Polity ranking for Sudan in the wake of the restoration of Nimeiri's power was -7, five points less than it had been in 1970, setting for three more years of instability.

Moving Toward Anocracy

In May 1973, however, the Constituent Assembly promulgated a draft constitution. "This document" according to Metz (1991), "provided for a continuation of presidential government, recognized the SSU as the only authorized political organization, and supported regional autonomy for the south. The constitution also stipulated that voters were to choose members for the 250-seat People's Assembly from an SSU-approved slate. Although it cited Islam as Sudan's official religion, the constitution admitted Christianity as the faith of a large number of Sudanese citizens. In May 1974, voters selected 125 members for the assembly; SSU-affiliated occupational and professional groups named 100; and the president appointed the remaining 25." Although Polity continued to rank Sudan as a -7 on its democracy score, this is the kind of change that our theoretical model says should signal to potential insurgents that the state is weak.

The "national reconciliation" of 1978

In what became known as the "national reconciliation," Nimeiri and Sadiq al Mahdi (who had been exiled to Egypt, and kept under surveillance by Nasser) reconciled. Nimeiri readmitted the opposition to national life (including the return of religious exiles) and to allow for a People's Assembly election where members of the Muslim Brotherhood could compete as Independents. Sadiq agreed to the dissolution of the National Front, the religiously inspired opposition movement that operated from abroad. Independents won 140 of 304 seats, gaining kudos for Nimeiri among in international opinion. His reforms, however, were not reflected in the Polity score, and therefore Sudan's vulnerability for a civil war onset remained low in the late 1970s. But if a revised version of Polity re-coded Sudan in this period as anocratic (and it would therefore have qualified for being unstable), it would have overpredicted the probability of a new civil war onset.

The 1965-78 Period: Vulnerability with no New Onset

There was no civil war in Sudan from 1965 through 1978. In this period, the sum of the probabilities for a civil war onset is .39. In no sense does this disconfirm our model, especially inasmuch as in this period there were two rebellions by communists that were snuffed out, a significant coup d'état, and a massacre of a religiously based opposition group. Probably the best explanation for the failure of civil war given model predictions is that Sudan's GDP/cap is quite low, but its army was in general stronger than what might have been predicted by just looking at GDP. Experts have considered that the Sudanese military constituted an island of stability in a country suffering from social and economic crises. With a reputation for political neutrality, the armed forces were widely respected as compared to the political elites. Their control (especially under Nimeiri) over society led to suppression of dissent (the communists) and massacre of real opposition (Ansar). Our assumption of low GDP/capita as a proxy for military weakness is therefore not upheld in this case – where perhaps a strong military was able to deter insurgency even though our proxy for military strength would predict high susceptibility.

V. Second Civil War Onset in 1983

However, there was a second major onset under Nimeiri's rule in 1983, in a year that our model sees as particularly safe (with a probability for an onset at 1.8) for the regime. In this section, we seek to explain the onset of the second southern rebellion.

A Period of Stability and Authoritarian Rule

After elections in 1978 for the People's Assembly, Nimeiri's rule became more autocratic and paranoid. (This is according to standard sources on Sudan, but the Polity score remains at -7). The State Security Organization imprisoned thousands of Sudanese, mostly without trial. Government ministers and senior military officers were dismissed if they were seen to have independent bases of power.

Nimeiri began to make alliances with religious leaders. He appointed a leader of the Muslim Brotherhood as his attorney general in November 1981, a move that eroded Southern confidence in the central government. He then suspended the Southern Regional Assembly, exacerbating southern distrust. Two years later, 1,000 southern troops mutinied, and staged attacks on government property and forces. Nimeiri responded by redividing the Southern Region administratively. Nimeiri proclaimed the shari'a as the basis of the Sudanese legal system (in his famous "September Laws"). The Sudanese People's Liberation Movement (SPLM) challenged these anti-Southern moves. Its military wing, the Sudanese People's Liberation Army (SPLA), led by John Garang, emerged in mid-1983, and translated political opposition into civil war (Metz 1991).

Causes of the Second Civil War

New Grievances

Nimeiri would make periodic concessions to the South. It was useful for him to do so. His government had two thirds of its troops in the south, and was costly, and he therefore promised regional autonomy to the three southern provinces. But the September Laws (on shari'a) was a blow to the South. Furthermore, southern leaders observed him lobbying for union with Egypt and Libya, giving southerners the sense that they would be submerged in a greater Arab-dominated political unit (Sarkesian 1973, 12-16)

In 1983, when Nimeiri adopted policies of re-dividing the south and imposing Islamic law, he squandered remaining loyalty of his southern soldiers. Now uncertain of their willingness to obey, Nimeiri ordered northern troops into the south and attempted to transfer southern former guerrillas to the north, inciting local mutinies in February 1983.

Army concedes to *murahalin* militias

Counter insurgency for the second war was laid largely on the shoulders of semi-public militias that were formed in early 1983. This organizational move indicates a weakness in military command and control. Militias were provided materiel, but were operationally independent. Metz (1991) estimates 20,000 men were recruited into these militias. Some of the most devastating raids and acts of banditry against the civilian population were perpetrated by the militias known as *murahalin*, formed among Arab communities that traditionally competed for pasture land with the (largely southern) Dinka. These *murahalin* between 1985 and 1988 displaced many Dinka civilians from their regional homeland. *Murahalin* were provided arms, ammunition and training by the Sudan People's Armed Forces (SPAF). Joint counterinsurgency operations with government forces were organized later on. According to Amnesty International, the raids carried out by the *murahalin* killed tens of thousands, largely civilians. In October 1989, the Bashir government promulgated the Popular Defence Act, whose original purpose was to incorporate the militias as auxiliaries of the SPAF. But the *murahalin* continued to exist and operate on its own terms.

Nimeiri saw an opportunity to defeat inside enemies

According to Deng (1995, 866-7), intra-Northern conflict led to Nimeiri abrogating the 1972 Addis Ababa Agreement. He imposed shari'a on the country by presidential decree. He also divided the south administratively into three regions to lower the ability for collective action. Nimeiri had decimated the Communists after its abortive coup in 1971. Thereafter, his sole opposition was the Muslim radicals (who could now recruit former communists, or young students who would have moved into communist circles). Nimeiri abrogated the Addis Ababa agreements in part because he was now stronger and felt he could destroy any southern resistance. But more important, as the Muslim Brotherhood gained political strength, funded through arrangements with the Faisal Islamic Bank (given by the Saudis to the Muslim Brotherhood), Nimeiri was threatened on his religious flank. He responded by showing his (new assumed) "true" Islamic colors. He began to dress in Arab garb, and pressed for the re-introduction of the shari'a. Nimeiri ordered the execution of a leading moderate Muslim when the leader of the Muslim Republican Brothers again to show his radical colors. Here is a case where

perceived state strength, underestimating the capabilities of the potential insurgents, accounts for the second southern Sudanese civil war onset.

Post-Nimeiri instability and authoritarianism

In early 1985, a general strike in Khartoum disrupted the regime, and nearly paralyzed the country. Demonstrators opposed rising food, gasoline, and transport costs. Nimeiri, then on a visit to the United States, was caught off guard, and could not cauterize the strike.

On April 6, 1985, a group of military officers, disturbed by the increasingly chaotic conditions, overthrew Nimeiri, who took refuge in Egypt. Lieutenant General Abd ar Rahman Siwar adh Dhahab, who was the coup leader, and his fifteen-man Transitional Military Council (TMC) tried to even the keel. But the economy was devastated, and the IMF refused to provide financial assistance. Famine followed, in which an estimated 400,000 to 500,000 lives were lost. Under these conditions, with instability and anocracy in 1986, the probability for a civil war onset in our model nearly tripled, to 5.2 percent.

Dhahab, facing dire conditions, declared a unilateral cease-fire in the south. He offered direct talks with the SPLM and an amnesty to rebels. The TMC called for a national conference to review the southern problem. But it was not until March 1986, with the Koka Dam Declaration, that Dhahab showed willingness to negotiate on the question of the shari'a. The declaration also called for the opening of a constitutional conference. Most major political parties and organizations were on board, though the NIF continued to demand universal shari'a, and the SPLA retained its military capabilities.

After relatively free elections in 1986 (bringing Sudan to +7 in its Policy score), Sadiq al Mahdi of the Umma formed a coalition government with the DUP, the NIF, and four southern parties. But political coalitions were difficult to maintain, and governments were unstable. The DUP and the senior army officers were willing to give up shari'a for peace. But the NIF would not accept this. Sadiq could not forge a compromise, and his governments were unstable, making for weak responses to famine and debt (Metz 1991). Sudan's +7 score on its Polity rating lasted only to 1988. But it had in the years 1986-92 seven years of instability without facing a new rebellion.

Coups against al Bashir

On June 30, 1989, Colonel (later Lieutenant General) Umar Hassan Ahmad al Bashir overthrew Sadiq and established the Revolutionary Command Council for National Salvation (RCC-NS). Bashir was committed to a universal application of shari'a law and a military victory over the SPLA (Metz 1991).

The RCC-NS policies aroused antagonism in the north as well as the south, and consequently political threats to leadership continued to dominate Sudan. During 1990, for example, the Bashir government announced that at least two alleged coup attempts

within the military had been foiled. In addition, antigovernment demonstrations were violently suppressed (Metz 1991). However, in agreement with our model's predictions (in which after the period of instability in 1992, the probability of a new onset was negligible, about half the world average), there was no civil war onset.

VI. Onset in 2003 (Darfur)

Going beyond our 1999 cut-off, we report on a rebellion in Darfur that began in 2003. We report on this war without any model prediction.

Historical Origins

Darfur is the Fur homeland, and has been Muslim since its first sultan, Sulayman Solong, decreed in the 16th century that Islam was to be the sultanate's official religion. "However," as Metz (1991) points out, "large-scale religious conversions did not occur until the reign of Ahmad Bakr (1682-1722), who imported teachers, built mosques, and compelled his subjects to become Muslims. In the eighteenth century, several sultans consolidated the dynasty's hold on Darfur. The sultans operated the slave trade as a monopoly. They levied taxes on traders and export duties on slaves sent to Egypt, and took a share of the slaves brought into Darfur. Some household slaves advanced to prominent positions in the courts of sultans, and the power exercised by these slaves provoked a violent reaction among the traditional class of Fur officeholders in the late eighteenth century. The rivalry between the slave and traditional elites caused recurrent unrest throughout the next century."

After the Mahdist war, the British annexed Darfur to Sudan and terminated the Fur sultanate. Many Fur educated themselves in Arabic in the expectation of getting advancement in the Sudanese political environment. They were seen as outsiders by the Arabs, however, and advancement was slow. Moreover, Arabs and Fur competed for scarce land. When in the late 1970s oil was discovered, the Fur had greater incentives to demand autonomy, which was de facto achieved in the 1980s.

Drought in 1984-85 exacerbated relations between Fur and Arab, and between Fur and Zaghawa pastoralists. But in the late-1980s the availability of automatic weapons made recurrent clashes over pasture lands and theft of livestock bloodier. In 1988-1989, the intermittent clashes in Darfur evolved into war between the Fur and the Arabs. It became a civil war and not just a communal conflict when the government in Khartoum began to arm the Arabs (HRW, April 2004, 7-9). By 1990-91 much of Darfur was in a state of war, with many villages being attacked (Metz 1991).

It is not until 2003 when a civil war onset occurs, by our criteria. At this time, the conflict in Darfur pitted the government of Sudan and allied militias, called the *janjaweed*, against an insurgency composed of two groups. The first was the Darfur Liberation Front which later called itself the Sudan Liberation Army/Movement (SLA/M). Second is the Justice and Equality Movement (JEM). Initially, rebels were

made up of the Zaghawa, the Fur and the Masaalit. But later, the Jebel and Dorok peoples joined the rebellion.

In April 2003, the SLA launched a surprise attack on El Fashir, the capital of North Darfur, and damaged several government Antonov aircraft and helicopters and looted fuel and arms depots. The Sudanese government responded with a heavy bombing campaign and the introduction of heavy equipment, including tanks to stave off rebel attacks (HRW April 2004, 7-9).

Oil

Chevron Overseas Petroleum Corporation's discovered oil in the 1970s on the borderlands between the provinces of Kurdufan and Bahr al Ghazal, just to the south of Darfur. Chevron postponed the proposed starting date for drilling in southern Kurdufan in 1988 due to civil war conditions. But other foreign companies were anxious to drill, inasmuch as Sudan had confirmed oil reserves that totaled 2 billion barrels, with an estimated 500 million barrels recoverable (Metz 1991).

The oil factor goes well beyond what is occurring in Darfur. As reported by Amnesty International, "The former Minister of Finance, Abdel Wahab Osman, announced in 1999 that Sudan's own oil exports would contribute 21 per cent of state revenues the following year. Prior to 1999 Sudan had imported up to US\$360,000,000 worth of oil annually. Osman estimated that oil revenue will generate an income of US\$1.2 billion annually for the Sudanese government.

"On 30 August 1999, President al-Bashir declared the 1,600 kilometre-long oil pipeline open. It [was] estimated that the pipeline [would] carry approximately 250,000 barrels of oil a day from the Western Upper Nile region in the south to refineries and the major Sudanese port of Port Sudan in the north. Since the first shipment from Port Sudan took place in September 1999, the pipeline has been attacked by armed opposition forces at least three times.

"There is a clear connection between the new-found oil wealth and the government's ability to purchase arms. On the day of the export shipment of the first 600,000 barrels of oil, an import shipment of 20 Polish T-55 tanks arrived in Port Sudan. This shipment by the Polish government was in violation of a long-standing UN embargo on arms transfers to the Sudanese government. Further arms transfers to Sudan from China and Bulgaria have also been reported."⁶

While this oil factor helps explain the onset in Darfur in 2003 [JIM: WILL "OIL" TAKE ON A VALUE OF "1" BY 2003?], it can also explain the resurgence of great levels of hostilities in the south, having to do with the protection of the pipeline from an area that is mixed Nuer and Dinka. (This is how Riek Machar was bought off by the government, if he could fight the Dinka and protect the pipeline). (See HRW 2003, 36)

⁶ . Sudan: The Human Price Of Oil The Human Amnesty International - Report - AFR 54/01/00 May 2000.

Chad

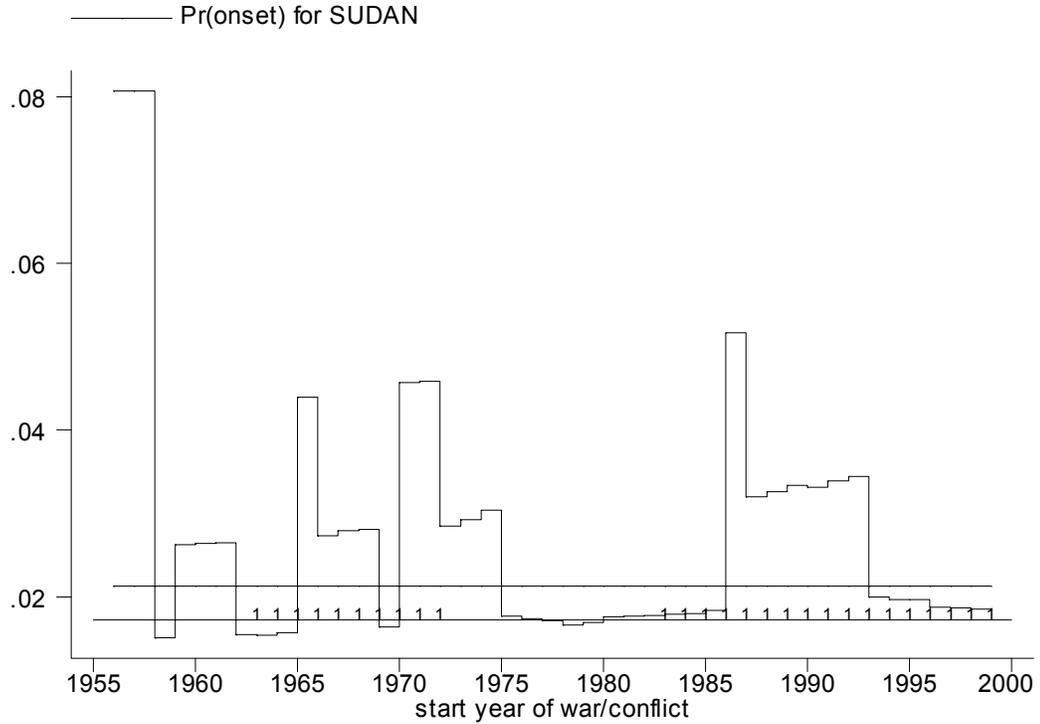
The civil strife in Chad during the 1980s inevitably spilled over into western Darfur, exacerbating historical tensions between the non-Arab Fur and Zaghawa ethnic groups. As Metz (1991) reports, “At the time of the Bashir coup in June 1989, western Darfur was being used as a battleground by troops loyal to the Chadian government of Hissein Habré and rebels organized by Idris Deby and supported by Libya. Deby was from the Zaghawa ethnic group that lived on both sides of the Chad-Sudan border, and the Zaghawa of Darfur provided him support and sanctuary. Hundreds of Zaghawa from Chad had also fled into Sudan to seek refuge from the fighting. In May 1990, Chadian soldiers invaded [Sudan’s] provincial capital of Al Fashir, where they rescued wounded comrades being held at a local hospital. During the summer, Chadian forces burned eighteen Sudanese villages and abducted 100 civilians. Deby’s Patriotic Movement for Salvation (Mouvement Patriotique du Salut) provided arms to Sudanese Zaghawa and Arab militias, ostensibly so that they could protect themselves from Chadian forces. The militias, however, used the weapons against their own rivals, principally the ethnic Fur, and several hundred civilians were killed in civil strife during 1990. [Sudan’s] government was relieved when Deby finally defeated Habré in December 1990. The new government in N’Djamena signaled its willingness for good relations with Sudan by closing down the SPLM office. Early in 1991, Bashir visited Chad for official talks with Deby on bilateral ties.” But there is every reason to see the Chad civil war, and the use of Darfur as a sanctuary for rebels, played a key role in arming African Muslims in Darfur in fighting against Arab herders and challenging the state.

VII. Conclusions

From a perusal of the graph in Table 1 it would appear that our model was not particularly successful in assessing correctly Sudan’s vulnerability to civil war onsets and the likely timing of these onsets. Yet the narrative suggests strongly that the theory behind the model held up reasonably well to the case of Sudan. As discussed in the introduction, the first civil war onset in 1963 reflected the commitment logic that our theory says impels groups to make insurrectionary demands that new state authorities cannot credibly meet. The South wanted assurances that it would not be overrun by the North. The North indeed wanted to overrun the South, but even if it wanted to do otherwise, army units in the south were wise to mutiny early rather than later. In fact they mutinied too early (i.e. when Britain still controlled the armed forces), and this set back their rebellion for several years. Arms coming from Congo, and easy targets due to the presence of Northern convoys and early settlers moving South, gave the Anya Nya the resources to set off what the commitment war.

For the second southern civil war, our model points to low State vulnerability. Here we argue that Nimeiri in 1983, after resoundingly pounding the communists and the Ansar rebels, felt this was his golden moment of strength both to marginalize his last enemies in the North, the Muslim Brotherhood) by reneging on his peace pact with the South. But he vastly overestimated his strength, and re-ignited a war with the South that has yet to be resolved.

In the period from 1965 through 1978, and again in the 1990s, our model gives Sudan a much higher probability for a new onset than in the years onsets actually occurred. We conjecture that Sudan has a much stronger army than would be predicted by its GDP, enabling it to attack the communist rebels twice, and to massacre its conservative opponents on Aba Island. Under al-Bashir in the 1990s, the army has remained rather cohesive (and has made successful contracts with semi-private militias) to stave off other rebellions. However, when arms from Chad became available in the west, along with opportunities to control oil, the West was in a position to set off a new insurrection.



cname	year	pr	gdp~1	pop	mtn~t	Oil	ins~b	anocl
SUDAN	1956	.0807013	858	10404	6.5	0	0	0
SUDAN	1957	.0807013	858	10605	6.5	0	0	0
SUDAN	1958	.0151074	854	10814	6.5	0	0	0
SUDAN	1959	.0262901	852	11030	6.5	0	1	0
SUDAN	1960	.0264389	851	11256	6.5	0	1	0
SUDAN	1961	.0264855	863	11491	6.5	0	1	0
SUDAN	1962	.0154756	847	11736	6.5	0	0	0
SUDAN	1963	.0153716	887	11992	6.5	0	0	0
SUDAN	1964	.0156666	845	12257	6.5	0	0	0
SUDAN	1965	.0439753	818	12533	6.5	0	1	1
SUDAN	1966	.0273316	855	12820	6.5	0	1	0
SUDAN	1967	.0279091	807	13118	6.5	0	1	0
SUDAN	1968	.0281344	801	13428	6.5	0	1	0
SUDAN	1969	.016396	798	13752	6.5	0	0	0
SUDAN	1970	.0457078	791	14302	6.5	0	1	1
SUDAN	1971	.045822	817	14732	6.5	0	1	1
SUDAN	1972	.0285127	859	15167	6.5	0	1	0
SUDAN	1973	.029255	801	15612	6.5	0	1	0
SUDAN	1974	.0303676	705	16072	6.5	0	1	0
SUDAN	1975	.0176867	712	16550	6.5	0	0	0
SUDAN	1976	.0173784	794	17054	6.5	0	0	0
SUDAN	1977	.017132	866	17567	6.5	0	0	0
SUDAN	1978	.0166052	992	18089	6.5	0	0	0
SUDAN	1979	.0168956	962	18618	6.5	0	0	0
SUDAN	1980	.0176339	850	19152	6.5	0	0	0
SUDAN	1981	.0176818	866	19692	6.5	0	0	0
SUDAN	1982	.0177939	870	20236	6.5	0	0	0
SUDAN	1983	.0179263	870	20774	6.5	0	0	0
SUDAN	1984	.017965	886	21352	6.5	0	0	0
SUDAN	1985	.0183952	834	21931	6.5	0	0	0
SUDAN	1986	.0516915	791	22526	6.5	0	1	1
SUDAN	1987	.0320278	852	23140	6.5	0	1	0
SUDAN	1988	.0326081	817	23774	6.5	0	1	0
SUDAN	1989	.0333939	763	24433	6.5	0	1	0
SUDAN	1990	.0331782	808	25118	6.5	0	1	0
SUDAN	1991	.0339516	757	25836	6.5	0	1	0
SUDAN	1992	.0344295	736	26660	6.5	0	1	0
SUDAN	1993	.0200131	757	25592.17	6.5	0	0	0

Fearon and Laitin, Sudan narrative, p. 25

SUDAN	1994	.0196939	773	26104.36	6.5	0	0	0
SUDAN	1995	.0197019	789	26617	6.5	0	0	0
SUDAN	1996	.0187332	968	27160.68	6.5	0	0	0
SUDAN	1997	.0187254	987	27736.87	6.5	0	0	0
SUDAN	1998	.0185763	1031	28347.16	6.5	0	0	0
SUDAN	1999	.0185243	1059	.	6.5	0	0	0

Variable	Obs	Mean	Std. Dev.	Min	Max
pr	44	.0273635	.0150153	.0151074	.0807013
gdpenl	44	844.4773	77.33903	705	1059
pop	43	18306.54	5784.286	10404	28347.16
mtnest	44	6.5	0	6.5	6.5
Oil	44	0	0	0	0

instab	44	.4318182	.501056	0	1
anocl	44	.0909091	.2908034	0	1

Variable	Obs	Mean	Std. Dev.	Min	Max
pr	1550	.0186248	.0198183	.0006296	.2195026
gdpenl	1561	1095.448	954.9041	196	7777
pop	1550	10008.91	14530.35	270	121257.3
mtnest	1593	12.75548	22.33017	0	82.20001
Oil	1593	.0803515	.271922	0	1

instab	1587	.1770636	.3818429	0	1
anocl	1582	.2237674	.4168998	0	1

Variable	Obs	Mean	Std. Dev.	Min	Max
pr	6327	.0166278	.0233814	4.30e-10	.5095447
gdpenl	6373	3651.117	4536.645	48	66735
pop	6433	31786.92	102560.8	222	1238599
mtnest	6610	18.08833	20.96648	0	94.3
Oil	6610	.1295008	.3357787	0	1

instab	6596	.1464524	.353586	0	1
anocl	6541	.2256536	.418044	0	1

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