

**On the Challenges of Economic Development in Post-
Conflict Sudan**

Ali Abdel Gadir Ali,

ملخص

تستعرض هذه الورقة مختلف الاتفاقيات التي تم توقيعها بين حكومة السودان والحركة الشعبية لتحرير السودان خلال الفترة 20 يوليو 2002 و 26 مايو 2004 من وجهة نظر محتواها الاقتصادي والتنموي . هذا وقد تم اقتراح أن تُفهم هذه الاتفاقيات على أساس النظرية الاقتصادية للحروب الأهلية والتي تقول بأن العوامل الاقتصادية تشكل أهم أسباب اندلاع الحروب الأهلية إلا أن تسوية هذه النزاعات لا بد لها من التعامل مع عوامل الغبن التي تهيمن على الخطاب السياسي للحركات المسلحة . هذا واقترحت الورقة أن أهم تحديات التنمية الاقتصادية التي تواجه القطر فيما بعد توقيع الاتفاقية الشاملة للسلام ستمثل في زيادة معدل الاستثمار وإدارة الزيادة المتوقعة في الإنفاق الحكومي ، والاتفاق حول دور البنك المركزي في نظام مصرفي ثنائي ، وتأسيس شبكة حماية اجتماعية .

Abstract

The paper reviews the economic and development content of the various protocols signed by the Government of Sudan and the Sudan Peoples Liberation Movement over the period 20 July 2002 to 26 May 2004. It is proposed that these agreements should be understood in the context of the modern economic theory of civil wars. Under this theory economic factors are held to be the most important explanatory variables for the occurrence of civil wars; however, resolution of such conflicts have to address the grievances expressed in the political discourse of armed movements. The paper argues that the most important economic and development challenges in post-conflict Sudan include increasing the investment rate; management of the expected surge in government expenditure; the role of the central bank in the context of a dual monetary system; and , establishing social safety nets.

On the Challenges of Economic Development in Post-Conflict Sudan

Ali Abdel Gadir Ali¹,
Arab Planning Institute,
Kuwait.
(November, 2004)

I. Introduction:

By the time this presentation is made a peace agreement, settling the second civil war in Sudan, the longest civil war in Africa, may have been signed². The second civil war in Sudan started in 1983, following a peace spell that lasted almost eleven years 1972-1983, following the first civil war of 1962-1972. One of the reasons cited for the irruption of the second civil war is the failure of the development efforts that took place during the peace spell³. This paper deals with the post-conflict challenges of economic development in Sudan⁴.

As is well known the economic causes, and consequences, of civil wars have recently been subjected to rigorous theoretical and empirical analysis. Collier (1999, 2000-a and 2000-b) and Collier and Hoeffler (1998, 2000, 2001) are among the pioneers of the modern economic theory of civil wars. In the analysis individuals are assumed to behave rationally and choose whether to support a rebel movement or to fight the government on the motivation of greed and grievance. Pure greed rebellions will take place only when they are financially viable. Similarly, even rebellions motivated by grievance need to meet financial constraints. For a civil war to occur rebel groups need to build fairly large organizations that require substantial resources for wage payments and for the purchase of arms. It is argued that since all societies have groups who have grievances and who are willing to resort to violence “what differentiates peaceful from conflict-ridden societies is not the incidence of grievance but the

¹ This paper is written for presentation at the ERF’s 11th Annual Conference (Beirut, 13-17 December 2004). I am grateful to Dr. Samir Radwan for suggestions on an earlier draft.

² As is well known, Sudan’s post-independence history featured two civil wars: a first civil war that has started in 1955, but is usually classified in the literature as having started in the 1960s, and was settled in 1972 with peace duration of about ten years. The second war started in 1983 and is currently at the stage of being settled. The total area of Sudan is about 2.51 million squared kilometers, of which the South accounts for 33.3%. At independence the total population of the country was about 10.3 million persons with the population of the South accounting for 27.1%. Currently the official estimate of total population is 33.6 million; the share of the South is 17%.

³ See, for example, Khalid (2003), and Yongo-Bure (1993).

⁴ The development experience of Sudan, looked at from the perspective of economic growth over the period 1960-1999, has been one of low and volatile per capita GDP growth. The average per capita growth rate for the period is calculated as 0.4 percent per annum with a standard deviation of about 14 percentage points. In 1962, the start of the first civil war, real per capita GDP was US\$ 886 (in 1985 PPP), the same level for 1983, the start of the second civil war albeit after a lot of fluctuations. The only period that saw sustained positive per capita growth was 1994 up to the present! For details see Ali and Elbadawi (2003).

capacity to of rebel groups to finance escalated violence”. Thus in formulating the model the rebel group is assumed to meet a survival constraint determined by the size of the rebel forces relative to government forces such that below a certain threshold rebellion is not viable from a military point of view. The survival constraint automatically imposes a financial constraint such that the rebel group must be able to finance at least the size of a military force to surmount the threshold. Low survival, and financial, constraints are to be found in societies where the government is unable to support a large army and where the rebel organization has opportunities to finance itself.

On the basis of the above construct, Collier and Hoeffler (2000, 2001) analyzed the pattern of conflict in a sample of 161 countries over the period 1965-1999. A civil war is defined as an internal conflict with at least one thousand related deaths per year. During the period under consideration 73 civil wars are reported to have taken place, of which 47 wars were considered in the analysis due to data availability. Three models are tested: a greed model; a grievance model and a combined greed-grievance model. A major empirical result is that starting with the distinct greed and grievance models, it is found that most of the proxies for objective grievance (e.g. inequality of income and wealth, lack of democratic rights, ethnic divisions) are insignificant and that the best performing grievance model has very low explanatory power. Thus, it is concluded that the cross-country evidence supports the view that it is the economic factors that are important in explaining civil wars⁵.

Collier (2000-b) summarized the most important risk factors in civil wars as including: (a) dependence on the export of primary commodities (e.g. diamonds). The highest risk occurs at a share of exports 26% of GDP, thereafter the risk declines; (b) high geographical dispersion of the population; (c) past civil wars; (d) a relatively large diaspora (in the USA); (e) low educational achievement (especially secondary school enrolment); and, (f) a dominant ethnic group which constitutes between 45% and 90% of the population. On the basis of the detailed discussion, and explanation, of the influence of these risk factors policies for conflict prevention and post-conflict peace building are explored. The two sets of policies are interrelated. According to Collier (2000-b: 15-16) policies for conflict prevention include the diversification of the economy away from dependence upon primary exports; transparent use of export earnings from primary commodities for effective delivery of basic services; enacting policies that promote economic growth; and, guaranteeing minority rights.

All of the above policies are considered appropriate for post-conflict peace-building. As has happened in the case of Sudan empirical results show that in the “first decade of post-conflict peace, societies face roughly double the risk of conflict that the pre-conflict risk factors would predict. Post-conflict societies are thus at substantial additional risk because of what has happened to them during conflict” (Collier (2000-b: 16)). Due to the nature of the higher risk of conflict in post-conflict societies the

⁵ Extensions of this type of analysis include Reynal-Querol (2001), on religious wars, where it is argued that more “than ethnicity, religion discriminates and differentiates humans in a sharp and exclusive way, even more than belonging to a country would do” ; and, Sambanis (2000), on ethnic wars, where it is noted that “opposing communities in ethnic conflicts hold irreconcilable visions of the identity, borders, and citizenship of the state. They do not seek to control a state whose identity all sides accept, but rather to redefine or divide the state itself”. Under these frameworks it is shown that the most important causal factors are political, religious and ethnic in nature.

major policy orientation is either to allow the political conflict to continue without the military option or to resolve the political conflict itself. Resolving the political contest requires addressing the grievances expressed by the rebel movement. In the context of this overall framework, mitigating the risk of dependence on primary commodity exports requires a peaceful, and legal, sharing of the revenues from such exports with the rebel organization. To address the risk of ethnic dominance both constitutional, and international, guarantees for ethnic minorities will be required. In addition to these policy orientations, and due to low trust situation created by the war, institutional changes that aim at restoring trust in the social system will also be needed. At the limit, institutional changes may require scraping old state institutions that acquired a bad reputation.

Despite the fact that the most important risk factors in civil wars are economic in nature⁶, it seems fair to conclude that the nature of the policies that can be pursued in post-conflict societies are institutional, and political, in nature. Moreover, while it can be conceded that greed may be the deriving force behind rebel movements in the sense of the importance of financial viability of rebel movements, it needs to be conceded that at the initial stage of settling civil wars it is the grievances, real or perceived, that need to be tackled. It is on the basis of this understanding of the results of the economic theory of civil wars that the foundations of post-conflict economic development in the Sudan are seen to reside in the peace protocols, and agreements, that have been signed so far. Section (II) of this paper reviews the economic content of the most important agreements. Section (III) speculates on the policy challenges of the agreements for post-conflict economic development in Sudan while section (IV) concludes.

II. Foundations of Post-Conflict Economic Development:

The foundations of post-conflict economic development in Sudan, it is suggested, can be found in the various protocols and agreements signed by the Government of Sudan (GOS) and the Sudan People's Liberation Movement (SPLM). The Nairobi Declaration on the Final Phase of Peace in the Sudan, signed on the 5th of June 2004, recorded that the Government of Sudan (GOS) and the Sudan People's Liberation Movement/Army (SPLM/A) have met in continuous negotiations between May 2002 and May 2004. The Declaration enumerates the agreements reached by the two parties: The Machakos Protocol (signed 20th July 2002); Agreement on the Security Arrangements During the Interim Period (25th September 2003); Framework Agreement on Wealth Sharing During the Pre-Interim and Interim Period (7th January 2004); Protocol on Power Sharing (26th May 2004); Protocol on the Resolution of Conflict in Southern Kordofan/Nuba Mountains and Blue Nile States (26th May 2004); and, Protocol on the Resolution of Conflict in Abyei Area (26th May 2004). In the declaration the parties jointly agreed "that the Protocols and agreements already signed, together with the Annexes that remain to be negotiated on the Permanent Ceasefire Arrangements and the Agreement on the Modalities of Implementation of

⁶ A stock-taking of the risk factors in Sudan's civil war in the spirit of Collier-Hoeffler is to be found in Ali, Al-Batahani, and Elbadawi (2004). The risk factors discussed include the ethnic, religious, and the linguistic composition of the population; the political and economic conditions; dependence on primary exports; neighboring wars and political regimes; and, external interventions. Further analysis is to be found in Ali and Gore (2004).

the Agreement that shall also include regional and international guarantees, shall constitute the Comprehensive Peace Agreement, which, when signed, shall initiate the Pre-Interim Period”⁷.

The Machakos Protocol, as posted in the internet (e.g. United States Institute of Peace), features three parts A-C on “agreed principles”, “the transition process”, and “structures of government”, in addition to “an agreed text on state and religion” and “an agreed text of the right to self-determination for the people of South Sudan”. Part C on “structures of government” has two sections missing (numbered 4 and 5).

In Part B of the Machakos Protocol the parties agreed on a six months pre-interim period and a six years interim period. The objective of the pre-interim period is to establish the institutions and mechanisms, including the establishment of a constitutional framework, for the implementation of the anticipated peace agreement. At the end of the interim period the two parties shall organize an internationally monitored referendum for the people of South Sudan on the issue of unity versus secession.

An agreed principle of the Machakos Protocol confirms that the people of Sudan share a common heritage and aspirations and accordingly agree to work together to establish a democratic system of governance taking account of the cultural, ethnic, racial, religious, and linguistic diversity and gender equality of the people of Sudan” (article 1.6), and “to find a comprehensive solution that addresses the economic and social deterioration of the Sudan and replace war not just with peace, but with social, political and economic justice which respects the fundamental human and political rights of all Sudanese people” (article 1.7). These two principles summarize the complex nature of the causes behind the civil conflict that characterized post independence Sudan, and the nature of the grievance discourse that guided the SPLM/SPLA in its struggle since 1983⁸. The Machakos Protocol paved the way for the other agreements to be negotiated and signed. From an economic development point of view the most important among these are the Framework Agreement on Wealth Sharing (FAWS) and the Protocol on Power Sharing (PPS).

FAWS has 15 articles dealing respectively with “guiding principles in respect of an equitable sharing of common wealth”; “ownership of land and natural resources”; “oil resources”; “existing oil contracts”; “guiding principles for sharing oil revenue”; “sharing non-oil revenue”; “equalization and allocation of revenue collected nationally”; “fiscal and financial allocation and monitoring commission”; “interstate commerce”; “government liabilities”; “division of government assets”; “accounting standards and procedures and fiscal accountability”; “financing the transition”; “monetary policy, banking, currency and borrowing”; and, “reconstruction and development funds”.

⁷ The full texts of the various agreements are to be found in www.gurtong.org.

⁸ See Deng (1993) for the centrality and the complexity of the identity issue. An excellent recent review of the history of Sudan’s civil war is to be found in Johnson (2003) where the complexity of the issues involved is clearly portrayed (see also Beshir (1968)). Garang (1997) and Khalid (2003) are excellent examples of the articulation of the nature of the grievance discourse of the SPLM/SPLA and an explanation of the complexity of the issues. Akol (2001) and Nyaba (2000) contain dissenting views on SPLM/SPLA, but also expose the complexity of the issues.

PPS is drafted in five parts. Part I of PPS deals with general principles including “principles of administration and inter-governmental linkages”, “human rights and fundamental freedoms”, national “reconciliation”, and “population census, elections and representation”. Part II deals with the institutions at the national level: “the national legislature”, “the national executive”, “the national capital”, “the government of national unity”, “the civil service”, “national security”, “language”, “foreign policy”, “other independent or national institutions to be established”, “the national judiciary”, and the “constitutional review process”. Part III deals with the government of Southern Sudan: “legislature of Southern Sudan”, “the Southern Sudan Executive”, and “the judiciary of Southern Sudan”. Part IV deals with institutions at the level of the states: “the state legislature”, “the state executive”, and, “state judicial institutions”. Part V is reserved for the schedules of powers: schedule A deals with national powers enumerating the exclusive competencies, legislative and executive powers, of the national government; schedule B deals with the powers of the government of Southern Sudan while schedule C deals with the powers of the states. Schedule D deals with concurrent powers where “the national, the government of Southern Sudan and state governments, shall have legislative and executive competencies on any of the matters” listed in the schedule.

The first article of the Framework Agreement on Wealth Sharing (FAWS) enumerates the “guiding principles in respect of an equitable sharing of common wealth”. Among the guiding principles are the following:

- (a) “the wealth of the Sudan shall be shared equitably so as to permit each level of government discharge its legal and constitutional responsibilities and duties” (article 1.2);
- (b) “the sharing and allocation of wealth emanating from the resources of the Sudan shall ensure that the quality of life, dignity, and living conditions of all citizens are promoted without discrimination on grounds of gender, race, religion, political affiliation, ethnicity, or region. The sharing and allocation of wealth shall be based on the premise that all parts of Sudan are entitled to development” (article 1.4);
- (c) “Southern Sudan, and those areas in need of construction/reconstruction, shall be brought up to the same average social/economic standard and public services as the Northern states. To achieve these objectives will take time and effort to build up local institutional, human, and economic capacity” (article 1.7);
- (d) “the parties recognize that the National Government, during the Interim Period, will need to mobilize additional national resources” (article 1.12);
- (e) “there is a limit on how much additional national resources can be mobilized and part of the national needs in a post-conflict Sudan will need to be met by external assistance” (article 1.13);

- (f) “in agreeing to these wealth sharing arrangements the Parties signal to the international community that it will have to play a strong and constructive role in providing post-conflict construction/reconstruction assistance to Sudan, especially to Southern Sudan and other war affected and least developed areas” (article 1.15).

Note that principle (a) emphasizes the importance of respecting the administrative constraints of the various levels of government to enable them to “discharge legal and constitutional responsibilities and duties”. Such requirements are usually reflected in government budgets. Principle (b) can be understood as emphasizing the importance of promoting non-discriminatory development, where development is broadly defined in terms of the “quality of life” and “living conditions” of all citizens. Principle (c) could be interpreted as embodying an objective function to guide the design of a wealth allocation formula in the form of minimizing the gap in average “social/economic standard and public services” between the South and the North. In an earlier paper we have shown that principles (a)-(c) can be interpreted in the light of the Millennium Development Goals as requiring the reduction of poverty in the country subject to an overall resource constraint. We have also shown that the specific formula for sharing oil revenue agreed to in article 5 of FAWS can be justified on the basis of such interpretation (see Ali (2003)).

In this respect it is perhaps important to note that Article 5.3 defines the “net revenue from oil” in a very precise way, with appropriate caveats for possible future events on the price front. In addition an “oil revenue stabilization account” is to be set up such that net oil revenue derived from exports at prices above an agreed benchmark prices (established annually in the context of the national budget) are to be deposited. After payments into the stabilization account, if any, 2% of the net oil revenue “shall be transferred to oil producing states/regions in proportion to output produced in such states/regions”. “After payment to the Oil Revenue Stabilization Account and to the oil producing states/regions, fifty percent (50%) of net oil revenue derived from oil producing wells in Southern Sudan shall be allocated to the Government of Southern Sudan as of the beginning of the Pre-Interim Period and the remaining fifty percent to the National Government and States in Northern Sudan”.

In addition to the above, and relevant to development policy making in the post-conflict period, it is important to note that article 15 of FAWS created the Southern Sudan Reconstruction and Development Fund (SSRDF) and the National Reconstruction and Development Fund (NRDF). SSRDF is to “solicit, raise and collect funds from domestic and international donors and disburse such funds for the reconstruction and rehabilitation of infrastructure of the South, for resettlement and reintegration of internally and externally displaced persons, and to address past imbalances in regional development and infrastructure” (article 15.1). NRDF is charged with the “mission of developing the war affected areas and least developed areas outside Southern Sudan” (article 15.2). The creation of SSRDF and NRDF should be seen as an explicit recognition of the unequal nature of development that has taken place (if any) in the country and equally explicit call for the pursuit of regionally balanced development strategy in post-conflict Sudan.

In another paper, Ali (2004), we suggested that principles (d)-(f) above, in addition to principles (a)-(c), can be understood as dealing with financing the post-conflict development process inclusive of construction/reconstruction of war affected areas. The principles envisage both increased domestic resource mobilization effort by the national government, subject to a limit, and a “strong and constructive” role for the international community in providing assistance. Indeed in the last paragraph of the Nairobi Declaration the parties to the conflict jointly appealed to the “Regional and International Community to continue their unwavering support to the Sudan Peace Process at this final phase, and further appeal to avail resources for necessary and urgent programmes and activities of the transition to peace, and programmes of The Joint Assessment Mission (JAM) and the Joint National Transition Team (JNTT)”.

In addition to the above, it is perhaps important to note that the Protocol on Power Sharing (PPS) provides for the establishment of a Government of Southern Sudan (GOSS) “as per the borders of 1/1/56”. Schedule B of the agreement enumerates “the exclusive legislative and executive powers” of GOSS to include the following economic powers:

- (i) “borrowing money on the sole credit of the Government of Southern Sudan within the national macro-economic policy”;
- (ii) “development of financial resources for the Government of Southern Sudan”;
- (iii) “taxation and revenue raising in Southern Sudan as a whole”; and,
- (iv) “reconstruction and development of Southern Sudan as a whole, subject to the provisions of the Wealth Sharing Agreement”.

We suggest that these economic powers need to be kept constantly at the background in any analysis seeking to explore the issues of economic development in the post-conflict period. The most important implication of these powers is that subject to the provisions of the FAWS and the constraints set by an agreed upon overall macroeconomic policy, GOSS is entitled to pursue an independent “development strategy”, given the initial conditions of Southern Sudan.

From the perspective of designing development policy, the signed protocols and agreements made a number of commitments relating to an overall policy orientation, issues of fiscal policy and detailed requirements on monetary policy. In addition they also created new institutions. Thus, for example, articles (3.1.3) and (3.1.4) of FAWS require that due attention be given to establishing an “enabling environment for the flow of foreign direct investment by reducing risks associated with uncertainties regarding the outcome of the referendum on self-determination at the end of the Interim Period”; and to preserving a “stable macroeconomic environment that emphasizes stability of the petroleum sector”.

Articles 6, 7 and 8 of FAWS address the revenue side of the fiscal structure. Articles (6.1), (6.2), and (6.3) detail the revenue sources of the National Government, the Government of Southern Sudan, and states and regions respectively. Article (7.3) requires the National Government to “allocate fifty percent (50%) of the national non-

oil revenue collected in Southern Sudan to the GOSS to partially meet the development cost and other activities during the Interim Period”; while article (7.5) provides that the “states/regions and the Government of Southern Sudan shall retain and dispose of such other income raised and collected under their own taxing powers”⁹.

Article (14) of FAWS is on “monetary policy, banking, currency and borrowing”. A dual banking system, one Islamic the other conventional, is envisaged to operate during the Interim Period. The Central Bank of Sudan (CBOS), appropriately restructured, shall be responsible for the conduct of monetary policy. “The primary responsibility and mandate of the CBOS shall be ensuring price stability, maintaining stable exchange rate, sound banking system and issuance of currency. The monetary policy shall be carried out accordingly relying primarily on market-based instruments instead of administrative allocation of credit” (article (14.5)). Articles (14.6) and (14.7) provide for the autonomy of CBOS by stating that the “CBOS shall be fully independent in its pursuit of monetary policy”; and that the “Governor of CBOS and his/her two deputies shall be appointed by the Presidency. The Governor of CBOS shall appoint in consultation with his/her two deputies other senior officers within the Central Bank”.

On borrowing, articles (14.13- 14.15) provide for the Government of Southern Sudan and states and regions to borrow money from various domestic and foreign sources based on their respective credit worthiness. “Neither the National Government nor the CBOS shall be required or expected to guarantee borrowing by sub-national governments”. However, foreign “borrowing by all sub-national governments shall be done in a manner that does not undermine national macroeconomic policies and shall be consistent with the objective of maintaining external financial viability. All sub-national governments’ borrowing transactions shall conform to the CBOS specifications” (article 14.6).

The signed agreements and protocols created, and envisaged the creation of, new government organs and institutions that have clear implications for development economic policy. Thus, for example, one of the agreed upon principle that “there shall be a decentralized system of government with significant devolution of powers, having regard to the National, Southern Sudan, State, and Local levels of government” (article 1.5.1.1 of the Protocol on Power Sharing). For each of the three major levels of government, up to the State level, there shall be a legislature, an executive, and a judiciary in addition to a set of “institutions and commissions” created by the PPS and FAWS, and those to be created by the Interim National Constitution.

Examples of new institutions created under the PPS include: Council of States; the Presidency; the Special Commission on Rights of Non-Muslims; the Specialized Courts for Non-Muslims; the National Constitutional Review Commission; the National Judicial Service Commission; the Fiscal and Financial Allocation and

⁹ In addition to a peace dividend increased oil production presents an opportunity for increased public revenue. Recent evidence shows total revenue over the period up to 1999 hovered around an average of 8% of GDP. It increased substantially to 11.2% of GDP by 2000 (see, World Bank (2003: 70, table A6.3) and to 11.3% in 2001 and to 13.5% in 2002 (see, Bahl et al (2003: 26, table 3.5)).

Monitoring Commission (also under FAWS); the Government of Southern Sudan; and, Southern Sudan Constitutional Drafting Committee. In addition, FAWS also envisages the setting up of a number of new institutions that include, as examples, the National Land Commission; Southern Sudan Land Commission; National Petroleum Commission; Southern Sudan Reconstruction and Development Fund; and the Joint National Transition Team.

III. Development Challenges:

To explore the development challenges in post-conflict Sudan it is perhaps instructive to look at the opportunities offered by the anticipated peace agreement for the development of the economy looked at in terms of real per capita GDP growth. This, of course, is a narrow concept of development that confines the term to conventional economic growth¹⁰. The reason why it is invoked is that it is closely related to the economic literature of civil wars. A celebrated result of the economic models of civil war is that countries affected by civil wars tend to grow by about 2.2 percentage points more slowly during the war than during peace (Collier (1999)). This result implies that civil wars impose a substantial development cost on the country involved.

To explore these opportunities the growth of real GDP per capita over the period 1960-1999 will be looked at in terms of half-decades roughly corresponding to the state of the civil war¹¹. Table (1) reports the average growth rates, standard deviations, and coefficients of variation for each half decade.

Table (1): Economic Growth Record of Sudan in Half Decades: 1960-1999

Period	GDP per Capita Growth Rate (%)	Standard Deviation (percentage points)	Coefficient of Variation	Incidence and Intensity of War
1960-64	-1.24	4.24	3.42	Low Intensity War
1965-69	-0.62	3.56	5.74	Low Intensity War
1970-74	-1.84	7.27	3.95	Low Intensity War
1975-79	4.09	11.04	2.70	Peace
1980-84	-0.34	3.20	9.41	Peace
1985-89	-0.45	6.72	14.93	High Intensity War
1990-94	0.33	2.94	8.91	High Intensity War
1995-99	2.86	1.19	0.41	High Intensity War

Source: based on Ali and Elbadawi (2003).

The half decades picture of growth shows four sub-periods of alternating positive and negative growth. In the table the first three half-decades are classified as corresponding to the duration of the first civil war, despite the fact that the Addis Ababa agreement was signed in 1972. This is largely to take account of the lag effect of securing the peace arrangements. During these first three half decades (1960-1974)

¹⁰ A broad definition of development is that of Sen (1999: 4): “Development can be seen as a process of expanding the real freedoms that people enjoy. Focusing on human freedoms contrasts with narrow views of development, such as identifying development with the growth of gross national product, or with the rise in personal incomes, or with industrialization, or with technological advance, or with modernization”.

¹¹ Real GDP per capita is in 1985 purchasing power parity dollars. See Ali and Elbadawi (2003) for the construction of the time series on GDP per capita. This database is constructed on the famous Summers and Heston (1991) Penn World Tables (PWT) for international comparisons.

the economy registered negative growth rates with an overall average negative growth rate of about 1.23 percent per annum. Of the 14 years for which the growth rate is calculated, negative growth is recorded for 9 years. Moreover, growth was volatile as reflected in a coefficient of variation in excess of 3 (with the highest being 5.7) for each half-decade.

The following two half decades are classified as the duration of the first peace. During the half-decade, (1975-79), relatively high positive growth rates are registered for three, of the five, years with an overall average growth rate of about 4.1 percent per annum. Despite this improvement in development performance, growth remained volatile, albeit at a reduced level of volatility, as reflected in a coefficient of variation of 2.7. During the second half decade of the peace duration the average per capita growth rate turned negative, with high volatility. The overall average growth rate for the peace duration was 1.88 percent per annum.

Using the overall average growth rates for the two sub-periods of conflict (1960-1974) and peace (1975-1984) it is an easy matter to see that the cost of war in terms of foregone development amounted to a loss of 3.11 percent per capita annual growth. This implies that in the absence of the first civil war per capita GDP would have doubled in about 22.5 years meaning that by the mid-1982 real per capita GDP would have amounted to about US\$1722.

The following half decade (1985-1989), which witnessed the resurgence of the civil war, registered negative, albeit at lower absolute values than the first three half decades, and highly volatile growth. The coefficient of variation for the 1985-89 half-decade of 14.9 is the highest for all half decades, and growth was negative for three years, at fairly high rates in absolute value, and positive in two years at relatively high rates also.

The 1990s half-decades registered positive growth rates. During the 1990-94 half-decade the registered average growth rate was low at 0.33 percent per annum with fairly high volatility as reflected in a coefficient of variation of 8.9. During this period negative growth was registered in two years. In contrast, the 1995-99 half-decade registered sustained positive growth at progressively higher rates. This is the only half decade during which sustained positive growth was achieved in the above recorded growth history of the country. Moreover, unlike all other half decades growth during the second half of the 1990s was stable as reflected in a coefficient of variation of 0.41.

The overall average growth rate during the second civil war (1985-1999) was 0.91 percent per annum. Thus compared to the peace period of (1974-1984) the economy incurred a loss in its per capita GDP growth rate of 0.97 percentage points per annum. In the absence of the second civil war GDP per capita would have doubled in another 37 years to reach by 2020 about US\$3444 putting Sudan among the lower middle group of countries¹².

¹² Similar foregone development costs from the perspective of the South are alluded to by Yongo-Bure (1993: 51) where it is noted that if “1950s trends continued since then, per capita income in the Southern Sudan should have been about \$150 in 1983, when the national figure was \$300. That this figure was not reached was the result of the 1955-72 civil war, and the lack of development since the Addis Ababa agreement of 1972 which ended that first civil war”.

The above results regarding the cost of the civil war in terms of foregone development are confirmed by an estimation of a standard growth regression equation. Annual per capita growth rate over the period 1961-999 is regressed on the investment rate (i.e. investment GDP ratio) lagged one year, the growth rate of the agricultural sector, the differential growth rate between the industrial sector and the agricultural sector as a proxy for structural transformation (labeled TRANS); and a dummy variable for war taking a value of one for war years and zero otherwise¹³. Our interest is on the coefficient of the war dummy to capture the effect of war. The results are reported in table (2)

Table (2): Foregone Development: The Effect of the Civil War on Per Capita GDP Growth in Sudan
(Dependent variable is real GDP per capita growth rate)

Explanatory Variables/ Details	1	2	3
Lagged Investment Rate	0.4962 (2.33)**	0.6306 (2.37)**	0.3978 (2.05)**
Real Rate of Growth of Agriculture	0.2863 (4.93)*		0.4690 (5.87)*
TRANS		-0.0879 (1.54)	0.1884 (3.03)*
War Dummy	-2.7132 (1.91)***	-3.1019 (1.73)***	-2.1795 (1.68)***
Constant	-6.4130 (1.80)***	-7.3945 (1.65)	-5.9661 (1.86) ***
Adjusted R-Squared	0.4729	0.1638	0.5725
Durbin-Watson	2.0240	1.7138	2.1389
Prob(F-statistic)	0.00001	0.0260	0.000001

Note: * is significant at the 1% level; ** is significant at the 5%; *** is significant at the 10% level.

Without getting involved in technical details it seems reasonable to suggest that the econometric results reported above are fairly decent to allow inference from the estimated coefficient of the war dummy. In column (2) the transformation variable, in the form of the differential growth rate of the industrial and the agricultural sector compared to that of the agricultural sector, on its own is not a strong explanatory variable in view of the low coefficient of determination. Thus, estimates in columns (1) and (3) of the table recommend themselves as the preferred regressions.

Focusing on the coefficient of the war dummy it is clear that war reduced the real GDP per capita growth in the Sudan over the period under consideration. The magnitude of the reduction varies from 2.71 percentage points per annum on account of column (1) estimates to 2.18 percentage points per annum on account of column (3) estimates. These orders of magnitude, we hasten to note, are not much different from those established by Collier from cross-country regression. The implication of these estimates is that on signing the peace agreement expectations about the future prospects of the economy will be bolstered.

¹³ For various other reasons we have explored the effect of weather, proxied by annual rainfall and its variability (standard deviation within the year and coefficient of variation), on per capita GDP growth. In the runs the variable, as level or as variability, did not come out as significant; when it came out as significant in some of the formulations it had the wrong sign. Thus, the role of weather in the growth process in Sudan remains a mystery! Our own interpretation is that the effect is captured through the growth rate of the agricultural sector as in the results reported in the text.

Be the above as it may, the major overall implication of the peace agreements for economic development in the post-conflict period is that for a country emerging from a long civil war, and aiming at reducing poverty by half within a reasonable time horizon, development policy needs to be anchored on a long-term comprehensive development strategy. This indeed is the conclusion drawn by Grang (2004) in a recent speech where he elucidated the implications of the peace agreement to a national development strategy. In addition to good governance aspects the development strategy is envisaged to “combat poverty and the sense of marginalization and exclusion in all regions of Sudan”; to “meet the Millennium Development Goals”; to “enhance economic growth through rural development and transformation of traditional agriculture that is integrated with agro-industries”; and, “to deliver social services through devolution and decentralization of power and empowerment of people”¹⁴.

The major challenge for the design of relevant development policy in the context of such a strategy is obviously that of increasing the current, rather modest, investment rate officially reported as 18% of GDP as an average for the second half of the 1990s¹⁵. Thus, for example, it can be shown that a development strategy that aims at reducing poverty by half by the year 2020, five years after the agreed date for the Millennium Development Goal, would require the GDP of the Sudan to grow at an annual real rate of about 6 percent: GDP for South Sudan is required to grow by about 21 percent per annum in real terms while that of the North is required to grow by about 5.5 percent per annum. The implied required investment rates to achieve these growth rates are 26% of GDP for Sudan; 156 % of the GDP of the South; and 20 % of the GDP of the North¹⁶. With an estimated domestic saving rate of 18% of GDP the remaining gap is about 8% of GDP. Such a resource gap justifies the repeated appeal expressed by the two parties in the peace agreements to the international community to continue its support for the peace process in the country.

The design of relevant development policies will also need to recognize the constraints, or opportunities, already agreed to in the context of the various agreements and protocols signed in the context of the peace process. As noted in section (II) above, in some of these agreements guiding principles for the formulation of economic policies have been explicitly stated.

¹⁴ Speech delivered on the occasion of signing the Nairobi Declaration on launching the final phase of the peace process. The full text of the speech is to be found in www.gurtong.org.

¹⁵ It should be recalled that the period since 1995 up to the present the Sudan was able to achieve, and sustain, a real per capita growth rate in excess of 3 percent per annum. Thus the second half of the 1990s seems to be an appropriate time period to judge the current investment rate.

¹⁶ For technical details behind these results see Ali (2004). Generally, however, note that reducing the head-count ratio by half over 15 years requires an annual rate of decline for the head-count ratio of about 4.52 percent. If we denote the growth elasticity of poverty by, γ , and the rates of change of the head-count ratio, H , and per capita GDP, μ , by $G(H)$ and $G(\mu)$ respectively, then the required rate of per capita GDP growth is given by $G(\mu) = [G(H)/\gamma]$. For the case in the text the required per capita GDP growth is given by $G(\mu) = [-0.0452/\gamma]$. Note that the growth elasticity of poverty is negative and can be estimated or calculated. The details of the calculations of the elasticity for Sudan are given in Ali (2004).

While the details of the required government expenditure to achieve the MDG on poverty will need to be worked out subsequently, the signed protocols and agreements indicate that the early years of peace will witness a surge in government expenditure on account of the agreed upon principle that “there shall be a decentralized system of government with significant devolution of powers, having regard to the National, Southern Sudan, State, and Local levels of government” (article 1.5.1.1 of the Protocol on Power Sharing). For each of the three major levels of government, up to the State level, there shall be a legislature, an executive, and a judiciary in addition to a set of “institutions and commissions” created by the PPS and FAWS, and those to be created by the Interim National Constitution. Examples of new institutions created under the PPS and FAWS have already been noted in section (II). For these new institutions, as well as for older ones, it will be important to pay attention to the question of incentives to public servants. According to the World Bank (2003-a: 76) one “thing is clear: The government currently cannot find the resources in the budget to pay its civil servants a living wage, let alone a motivating one”. In 2002 the ruling pay scale ranged from the equivalent of US\$25 per month for workers (grade 14) to US\$61 for senior civil servants (grade 1) to US\$74 for those on the highest super-scale grade!!! With new levels of pay in the private sector, especially the oil sector, a major revision of government pay scale is already overdue and is certainly an important challenge for the Interim Period economic policy.

From the above, rather cursory, review of economic and institutional content of the agreements and protocols it seems fair to conclude that development policy making during the Interim Period will be conditioned, if not constrained, by two major policy desiderata: (a) a stable macroeconomic policy framework; and, (b) an independent Central Bank to carry out a desired monetary policy. In the context of an economy emerging out of conflict the expectations on the salutary effects of these two aspects of policy is not a certainty. This needs to be borne in mind.

The two major policy desiderata are based on the results of a vast empirical economic growth literature that purported to show that “good policy” is “good for growth”. According to the World Bank (1998: 13) a “country with poor policies would be one with high inflation, large fiscal imbalances, and a closed trade regime”. A more comprehensive definition of good policy would be one that takes into account the various elements of what has come to be known as the Washington consensus. According to Fischer (2003: 6) “the policy consensus consists of four elements: policies to ensure macroeconomic stability; market-oriented microeconomic policies; integration into the global economy, particularly on the trade side; and a positive role for the government in establishing, monitoring, and developing the institutional framework of the economy, providing public goods including especially social expenditures, and conducting stabilization policies”¹⁷.

¹⁷ The details of the components of the Washington consensus include: fiscal discipline; public expenditure priorities in education and health; tax reform; positive rates of interest; a competitive exchange rate; import liberalization; openness to foreign direct investment; privatization; deregulation; and, protection of property rights.

The proposition that “good policy is good for growth” is currently coming under increased scrutiny especially in the context of explaining long-term economic growth of nations (see, for example, Acemoglu et al (2003), Easterly and Levine (2003), and Rodrik, Subramanian, and Trebbi (2002)). For developing countries it has been established that the proposition is derived by extreme values for the policy indicators (i.e. extremely bad policies) implying that countries starting from moderate values for the policy indicators are not likely to see any improvement in their growth performance as a result of further improvements in their policy stance (Easterly (2003))¹⁸. Such findings clearly confirm that a major challenge for economic development in the post-conflict period will be the design of appropriate economic policy. Initial values of the macroeconomic policy indicators need to be carefully evaluated from the point of view of the overall development objectives of a country emerging out of conflict.

The autonomy of the central bank is an institutional innovation thought to impart credibility on macroeconomic policy especially as regards the exchange rate and the interest rate. The dominant historical tradition recommending such an institutional arrangement seems to be that of the USA’s experience with the Federal Reserve System. While it is generally recognized that the quality of institutions is an important determinant of long-run growth of nations, as clearly demonstrated in Hall and Jones (1999) and the above noted works of Acemoglu et al (2003), Easterly and Levine (2003), and Rodrik, Subramanian, and Trebbi (2002), it is also generally appreciated that importing successful institutions from outside a given country does not automatically guarantee the replication of “good performance”.

In addition to the above cautionary remarks on the policy desiderata included in the signed protocols and agreements, and their possible implications for the expected increased government expenditure during the Interim period, it should also be noted that a poverty reduction development strategy must face the issue of establishing safety nets to protect the poor through the transition to post-conflict development. Once again this may require increased government expenditure over and above that implied by the agreements. In this respect, it is perhaps important to note that contrary to previous concerns about the central importance of fiscal prudence in designing macroeconomic policy packages an emerging consensus sees setting-up effective safety nets for the poor as a long-term investment (see, for example, Ferreira, Prenzushi, and Ravallion, (2001)).

The new consensus is based on lessons drawn from past country experience. Two major, and related, lessons have been emphasized. The first lesson is that safety net mechanisms, when they exist, are too often inadequate. This is especially true in rural Africa where informal, family-based or kin-based, safety nets have been weakened by natural as well as man-made disasters (e.g. droughts and civil conflicts respectively). When formal safety nets exist their coverage is often limited, the resources available to provide assistance are very limited, the leakage of benefits is high, and the poor are

¹⁸ The ranges for moderate values of the policy variables used by Easterly are as follows: inflation rate and black market premium in the closed interval [-0.05, 0.35]; budget deficit [-0.12, 0.02]; overvaluation index [-0.4, 0.65] with an index above zero indicating overvaluation; and, trade less than 1.2 of GDP.

too often residual claimants due to unawareness or lack of empowerment. The second lesson is that safety nets are best set-up during good times rather than at times of crises¹⁹.

In advocating safety nets as crucial to any rural development strategy that aims at reducing poverty it is recognized that the comparative advantage of these mechanisms is that they provide a more cost effective insurance for the poor against income losses. Traditional insurance mechanisms, by comparison, entail high costs to long-term progress of the poor especially in the struggle to escape poverty. In the context of a relevant development strategy public safety nets can easily be incorporated as an integral development component.

While countries are expected to decide the design of public safety nets according to their circumstances, experience has shown that two central elements of such mechanisms are public work programs and public transfer programs. Public work programs are expected to provide employment for those who are able to work, while the transfer programs are expected to provide support to those who can not, or should not, work.

The above set-up for social safety nets needs to be built as a permanent feature of the comprehensive development program of the country in such a way as to cater for the poor during normal times as well as times of crises. The implication for macroeconomic policy design is obvious in terms of budget requirements for additional resources.

IV. Concluding Remarks:

In a recent set of articles Khalid (2004) highly praised the economic content of the peace agreements on account of their addressing the root causes of the grievances of the South and other marginalized areas of the country. In the process of reviewing the economic implications of these agreements Khalid correctly asserted that all development efforts since independence were unable to address these grievances either because of their pursuit of the development policies of the colonial state, or because they were caught in a tangle of ideological traps.

Such conclusions support our proposition that the most important challenge for economic development in post-conflict Sudan is that development needs to be thought of in terms of a long-term comprehensive development framework (CDF). By now it must be realized that calling for a long-term comprehensive strategy for development no longer attracts a frown in the development community. After all the imperative of looking at development in such a way is a 1999 initiative of the President of the World Bank, Mr. James Wolfensohn, aiming at enhancing the effectiveness of the partners of development of the developing countries in bringing about desired development outcomes. According to the CDF Secretariat (2000) the CDF is “an approach by which countries can achieve more effective poverty reduction. It emphasizes the interdependence of all elements of development- social, structural, human, governance, environmental, economic and financial”. The framework is

¹⁹ Ferreira et al (2000: 10).

articulated around four major principles: long-term, holistic development framework; country ownership of development programs and policies; country-led partnership among various stakeholders; and, results orientation.

It is not surprising, therefore, that the World Bank has recently announced that it is no longer pursuing policy-based lending, as was the case under the Washington Consensus, but moving to development policy lending. In addition, it is well known that since 1999 heavily indebted poor countries seeking financial support from the international financial institutions are required to draft “poverty reduction strategy papers”, PRSPs. A PRSP, for all intents and purposes, is a long-term development framework. Such long-term comprehensive development framework needs to be signed on by all political parties so as to guarantee stability at the policy making level.

The most striking feature of the peace agreements signed so far between the Government of Sudan and the Sudan People’s Liberation Movement/Army is the array of institutional, and other, guarantees incorporated to safeguard the interests of the marginalized areas of the country. While the causes of the Sudan’s civil war may have been economic in nature, in line with Collier-Hoeffler theoretical construct, the signed agreements and protocols clearly deal with the real, or perceived, grievances of a number of regions which have been left behind in the process of the passage of time since independence, not to say left behind during the process of development. At this stage of the history of the country such grievances have been expressed from regional perspectives (e.g. the current Darfur liberation movements). Thus, the long-term comprehensive development framework needs to be built on a regional dimension. As noted earlier the regional dimension for the South can easily be implemented in view of the fact that the peace agreements have already provided for the creation of the Government of Southern Sudan. Appropriate institutional arrangements need to be further devised for the remaining regions of the country.

The safeguards introduced in the agreements and protocols signed thus far have obvious implications for economic policy design in the post-conflict period. In this paper we argued that the most immediate challenge that shall face policy makers would be that related to increased government expenditure. Both domestic, and foreign, resources would need to be mobilized, and efficiently deployed, if peace is to be guaranteed²⁰. In seeking foreign resources, however, the country must come up with its own definition of what is a “good policy environment”, given its initial conditions and its overarching development objective. This, after all, should be looked at as what ownership of a development strategy means.

²⁰ For an interesting analysis of how peace could be guaranteed in Sudan see CSIS (2004).

Selected Bibliography

Acemoglu, D., Johnson, S., J. Robinson, and Y. Thaicharoen, (2003), "Institutional Causes, Macroeconomic Symptoms: Volatility, Crises and Growth"; *Journal of Monetary Economics*, vol. 50, no. 1.

Akol, L., (2001), *SLM/SPLA: Inside an African Revolution*; Kharoum University Press, Khartoum.

Ali, A.A.G., (2004), "On Financing Post Conflict Development in Sudan"; paper presented to the JAM workshop, Nairobi.

Ali, A.A.G., (2003-a), "Conflict Resolution and Wealth Sharing in Sudan: Towards an Allocation Formula"; Working Paper no. 0305, Arab Planning Institute, Kuwait.

Ali, A.A. G., Al-Batahani, A., and I. A. Elbadawi, (2002), "On the Causes and Consequences of the Civil War in Sudan"; unpublished manuscript.

Ali, A.A. G., and P.W. Gore, (2004), "Opportunities and Challenges in the Post-Peace Era in Sudan"; UNDP, Sudan.

Beshir, M.O., (1968), *The Southern Sudan: Background to Conflict*; Khartoum University Press, Khartoum.

CDF Secretariat, (2001), *Comprehensive Development Framework: Implementation Experience in Low-and Middle-Income Countries: Progress Report*; www.worldbank.org/cdf.

CDF Secretariat, (2000), *Overview and Background of the Comprehensive Development Framework*; www.worldbank.org/cdf.

Center for Strategic and International Studies, (CSIS), (2004), *To Guarantee the Peace: An Action Strategy for a Post-Conflict Sudan*; Washington D.C.

Collier, P., (2000-a), "Rebellion as a Quasi-Criminal Activity"; *Journal of Conflict Resolution*.

Collier, P., (2000-b), "Economic Causes of Civil Conflict and their implications for Policy"; World Bank, Washington.

Collier, P., (1999), "On the Economic Consequences of Civil War"; *Oxford Economic Papers*, vol. 51.

Collier, P., and A. Hoeffler, (2000), "Greed and Grievance in Civil War"; Policy Research Working Paper no. 2355, World Bank.

Collier, P., and A. Hoeffler, (1998), "On the Economic Causes of Civil War"; *Oxford Economic Papers*, vol. 51.

Daly, M.W., (1993), "Broken Bridges and Empty Basket: The Political and Economic Background of the Sudanese Civil War"; in Daly and Sikainga.

Daly, M.W. and A.A. Sikainga, (eds.), (1993), *Civil War in Sudan*; British Academic Press, London.

Easterly, W., and R. Levine, (2003), "Tropics, Germs and Crops: How Endowments Influence Economic Development"; *Journal of Monetary Economics*, vol. 50, no. 1.

Elbadawi, I., and N. Sambanis, (2000), "External Interventions and the Duration of Civil Wars"; World Bank, Washington, D.C.

Ferreira, F., Prenzushi, G., and M. Ravallion, (2001), "Protecting the Poor from Macroeconomic Shocks: An Agenda for Action in a Crisis and Beyond"; unpublished paper, World Bank, Washington.

Garang, J., (2004), "Speech on the Occasion of Signing the Nairobi Declaration"; www.gurtong.org

Garang, J., (1997), *The Vision of the New Sudan: Questions of Unity and Identity*"; edited by E. Kameir; Consortium for Policy Analysis and Development Strategies, Cairo.

Hall, R., and C. Jones, (1999), "Why Do Some Countries Produce So Much Output Per Worker Than Others?"; *Quarterly Journal of Economics*, vol. 114, no. 1.

Khalid, M., (2004), "The Peace Agreements: Origins and Destinations"; (in Arabic), *Al-Sahafa Newspaper*, Khartoum.

Khalid, M., (2003), *War and Peace in Sudan: A Tale of Two Countries*; Kegan Paul, London.

North, D., (1990), *Institutions, Institutional Change, and Economic Performance*; Cambridge University Press, Cambridge.

Nyaba, P., (2000), *The Politics of Liberation in South Sudan*; (2nd edition), Fountain Publishers Ltd., Kampala.

Reynal-Querol, M., (2002), "Ethnicity, Political Systems and Civil Wars"; *Journal of Conflict Resolution*, vol. 46, no. 1.

Rodrik, D., Subramanian, A., and F. Trebbi, (2002), "Institutions Rule: The Primacy of Institutions over Geography and Integration in Economic Development"; Harvard University.

Sambanis, N., (2000), "Ethnic War: A Theoretical and Empirical Inquiry into its Causes"; World Bank, Washington D.C.

Sidahmed, A.S., (1997), *Politics and Islam in Contemporary Sudan*; Curzon Press, London; reprinted by RoutledgeCruzon (2004).

United Nations (UN), (2002), Implementation of the United Nations Millennium Declaration: Report of the Secretary-General; report no. A/57/270; www.un.org.

World Bank, (2003-a), Sudan: Stabilization and Reconstruction: Country Economic Memorandum, Volume 1: Main Text; Report no. 24620-SU, World Bank, Washington.

World Bank, (2003-b), Sudan: Stabilization and Reconstruction: Country Economic Memorandum, Volume 2: Statistical Appendices; Report no. 24620-SU, World Bank, Washington.

Yongo-Bure, B., (1993), "The Underdevelopment of the Southern Sudan Since Independence"; in M. Daly and A.A. Sikainga (eds.).