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## Assessing Competitiveness After Conflict: The Case of the Central African Republic

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Lewis, and Jean-Claude Nachega*



## **IMF Working Paper**

African Department

### **Assessing Competitiveness After Conflict: The Case of the Central African Republic**

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#### **Abstract**

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This paper assesses competitiveness in the case of the Central African Republic, a post-conflict country. The paper presents several conventional techniques for assessing competitiveness, namely the real exchange rate and recent trade performance. Several other measures are considered, in particular transport costs and governance measures, which may be more effective in capturing the obstacles to competitiveness posed by the poor security environment and weak institutions common to many post-conflict situations. The real exchange measure and trade measures suggest some mild erosion of competitiveness in recent years, while the other measures indicate that the competitiveness challenges faced by the Central African Republic are much deeper.

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## I. INTRODUCTION

The Central African Republic (C.A.R.) is emerging from a long period of political and military instability that has significantly eroded the country's economic infrastructure and steadily diminished living standards. The contraction in economic activity since the mid-1990s has resulted in the disappearance of some two-thirds of formal sector enterprises, and led to a collapse of agriculture exports and stagnation in almost all other sectors of the economy. As a result, the domestic production of traded goods outside of the natural resources sectors (principally, diamonds and timber) has largely disappeared.

Restoring economic activity remains a daunting task, with only halting progress made since the end of formal hostilities in March 2003. Rekindling economic growth will hinge on a range of actions, many of which entail greater stability in the political and security spheres. Improving the C.A.R.'s external competitiveness—the country's ability to produce goods and services cost-effectively with respect to other countries—will be essential to economic recovery.

As a post-conflict case, assessing the C.A.R.'s competitiveness relative to potential comparator countries presents a number of challenges. First, data availability and quality is extremely poor. Notably, substantial weaknesses in price and balance of payments data introduce significant uncertainties into the determination of real exchange rates and the reliability of trade data. Many microeconomic measures that allow an assessment of production costs are unavailable.

Second, while the conflict may be formally over, security conditions remain very unstable due to the proliferation of arms, undermanned or disorganized security forces, and little government presence outside major cities and towns. The additional uncertainty and costs associated with a still-unstable security environment weigh heavily on economic decisions by the private sector. While some of these costs may be partly captured in other measures of competitiveness—for example, higher prices resulting from security disruptions will be reflected in CPI-based measures of the real exchange rate—other costs are not, and the higher risk of operating in the country may be much more relevant for the private sector than other measures of competitiveness.

Third, as in many low-income countries, institutional and governance issues are paramount in evaluating competitiveness. Weak institutions and widespread corruption can impose significant direct and indirect costs on business. The C.A.R.'s institutional fabric has frayed considerably since the early 1990s, which has led to deepening problems of corruption, great uncertainty in the policy and regulatory environment, and very weak public services.

This paper assesses competitiveness in the C.A.R. from a range of perspectives with the aim of providing a comprehensive view of competitiveness in a post-conflict setting. As a starting point, several standard price and current account measures will be used. These measures will be supplemented by other indicators aimed at capturing the impact of the fragile security and institutional setting in the country, thereby providing a more comprehensive view on the competitiveness challenges faced by the C.A.R. These additional measures will include a

discussion of transport costs—which partly proxies for the security problems faced by the C.A.R.—and institutional quality.

To this end, Section II examines movements in trade measures to assess whether there have been noticeable trends in the C.A.R.’s export and import performance. Section III discusses trends in the real exchange rate, including an assessment of the equilibrium real exchange rate. Section IV examines transport cost, which, in addition to being in part a proxy for the residual security problems in the C.A.R., is a critical issue for a land-locked country. Section IV also considers several other cost measures, including labor costs. Section V discusses various governance and institutional measures, how they affect competitiveness and the environment for the private sector. Section VI summarizes the conclusions and provides a summary measure of the C.A.R.’s competitiveness with respect to other countries.

## II. EXTERNAL TRADE PERFORMANCE

A starting point for an examination of competitiveness in the C.A.R. is trade performance, notably whether developments in exports and imports in recent years suggest actual or emerging competitiveness problems. In particular, an increasingly negative export performance could indicate that key sectors of the C.A.R. economy are no longer competitive.

The C.A.R. has experienced a dramatic decline in the volume of external trade since the early 1980s (Figure 1). Exports and imports of goods have fallen from 18 percent and 41 percent of GDP in 1980 to less than 10 and 20 percent in 2004.<sup>2</sup> Moreover, there has been a sizable reduction in the diversification of its export base. In particular, principal export products are diamond, timber, coffee, and cotton. In 2004, diamond and timber together accounted for more than 85 percent of total export earnings compared with 53 percent in 1987. While coffee and cotton were major export commodities in the 1980s, together providing about one-quarter of export receipts in 1987, they now represent less than 5 percent.

The increasing isolation of the C.A.R. economy took place despite trade liberalization starting in the early 1990s and the 1994 devaluation of the CFA franc.<sup>3</sup> Reflecting the positive impact of the devaluation of the CFA franc and the reduction in external trade protection, C.A.R.’s exports and imports increased, respectively, to 20 percent and 16 percent of GDP in 1994. However, since 1995 exports and imports as a share of GDP have continuously decreased, reaching respectively 9.6 and 10.5 percent in 2004 (Figure 1). Thus, the ratio of exports plus imports (of goods) to GDP fell from 36 percent in 1994 to 20 percent in 2004, a striking loss in openness to international trade.

<sup>2</sup> 2004 is the latest year for which finalized balance of payments data are available.

<sup>3</sup> The C.A.R. undertook extensive trade reforms within the framework of the Central African Economic and Monetary Community (CEMAC). These include: (i) reduction in the level of external protection, following the adoption of the common external tariff and the elimination of most quantitative restrictions, and (ii) the elimination of tariff and nontariff barriers on trade with other CEMAC member countries through the participation in the common market. In January 1994, the CFAF was devalued by 50 percent in foreign currency terms vis-à-vis the French franc, with a view to restoring external competitiveness.

In this setting, the trade balance first improved during much of the 1990s, but has deteriorated more recently (Figure 2). This trend appears not to be driven by movements in the real effective exchange rate, which has remained largely flat since 1995. The C.A.R.'s terms of trade have deteriorated mildly since the mid-1990s.

On balance, the trade developments in recent years appear to be a consequence of economic dislocation caused by political instability, weak macroeconomic policies, and adverse external shocks, including spillover effects of regional conflicts. The sharp drop in imports reflects these factors, mirrored by a fall in consumption and investment in the C.A.R. over this period. In fact, the import compression during this period may indicate that the trade balance would have been much worse in the absence of the political and military instability. Exports were also affected by the instability, and the evidence suggests as well that competitiveness problems may be endemic to key sectors, notably cash crops.

Figure 1. C.A.R.: Trade Performance, 1980-2005

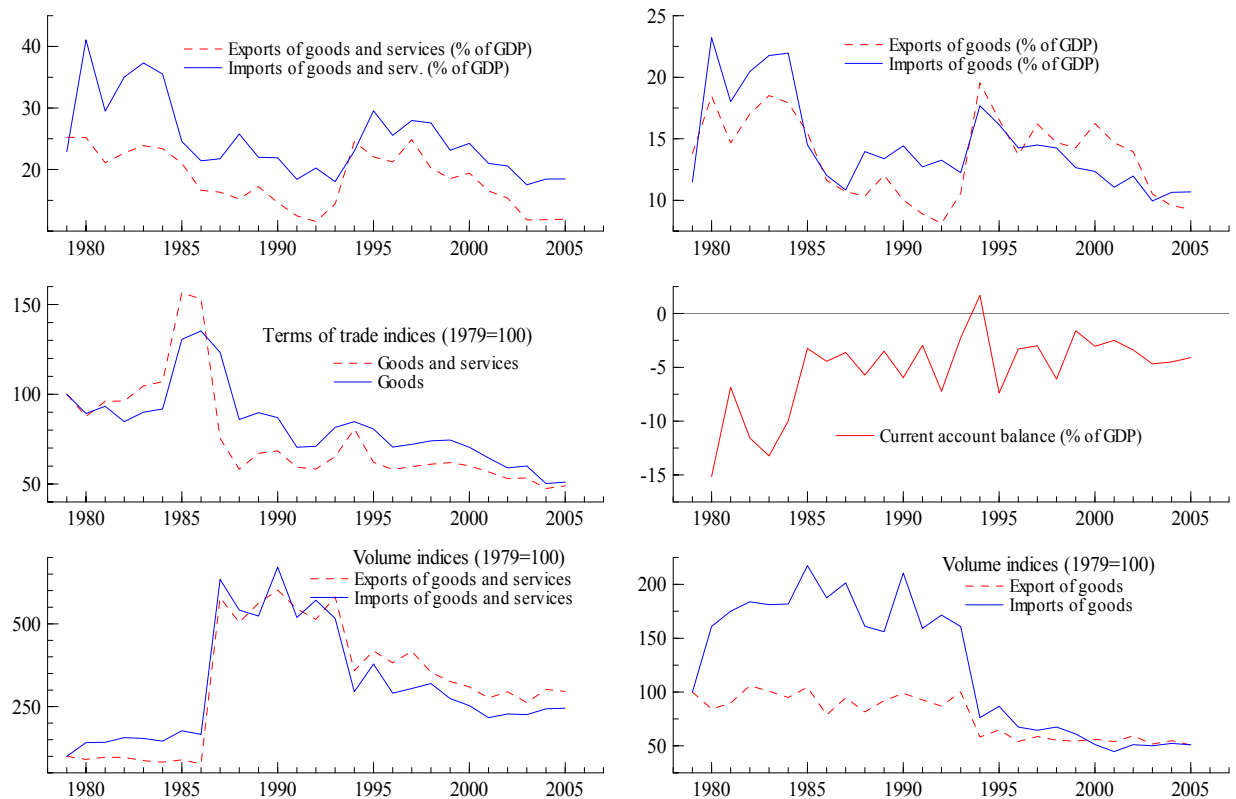
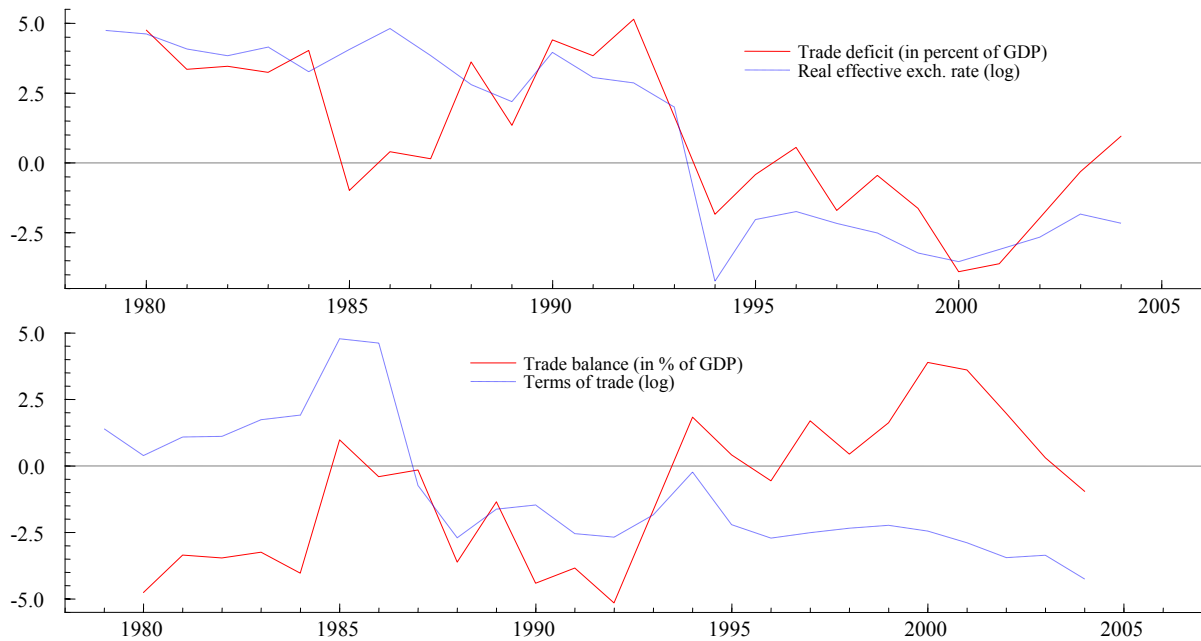


Figure 2. Trade Deficit, Real Exchange Rates, and Terms of Trade



### III. EXCHANGE RATE MEASURES

Another common approach to the analysis of competitiveness involves a comparison of movements in exchange rates and prices, based on the concept of purchasing power parity (PPP). This approach predicts that real exchange rates should tend to return to a constant long-run equilibrium in response to short-run shocks and, therefore, that nominal exchange rate movements should tend to offset relative price movements.

#### A. Purchasing Power Parity

Three versions of PPP have traditionally been used in the literature: the law of one price, which relates exchange rates to prices of individual homogeneous goods in different countries; absolute PPP, which relates exchange rates to overall price levels; and relative PPP, which relates exchange rate changes to inflation rates.

The law of one price states that when there are no transaction costs or trade barriers (such as tariffs or quotas), the prices of identical goods sold in different countries should be the same when expressed in a common currency. Empirically, the law of one price appears to hold well for homogeneous primary commodities traded on major exchanges, when adjustments are made for contract differences and delivery lags. The prices of differentiated products, such as manufactured goods and services, tend to deviate to a greater degree from the law of one price.

The strong or absolute PPP extends the law of one price to an integrated, competitive market: the same basket of goods and services should cost the same amount in all countries when expressed in a common currency. Clearly, if the law of one price holds for every good, then



absolute PPP should also hold. Absolute PPP, however, requires the parity relationship to hold only on average for all goods, not strictly for each good.

Absolute PPP provides a specific equilibrium concept for the nominal exchange rate: namely, the PPP exchange rate. This is defined as the rate that equalizes the prices of a common basket of goods in two different countries. Deviations between the market exchange rate and the PPP exchange rate are viewed as short-lived, since they should be eliminated by arbitragers purchasing goods in one market and selling in the other.

The weak or relative version of PPP holds that starting from a base of an equilibrium exchange rate, and for given obstacles to trade, an increase in the home price level relative to that abroad implies an equiproportionate depreciation of the home currency. In other words, the rate of depreciation of the home currency will be equal to the relative inflation differential between the two countries.

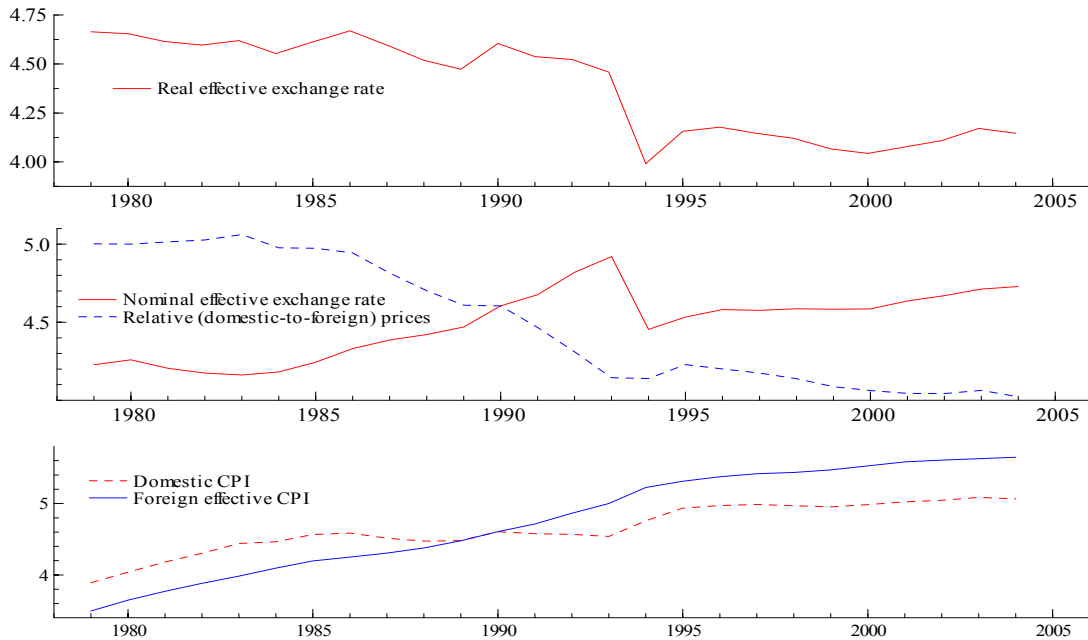
Empirical evidence suggests that PPP-based indicators may be useful to explain long-run movements in exchange rates among industrial countries, but less so to explain movements of these exchange rates in the short run, or of exchange rates between industrial and developing countries, either in the long or the short run. Examining changes in competitiveness alone is also not very helpful in explaining developments in external trade. It is necessary to incorporate the analysis of competitiveness in a broader framework—taking into account structural and cyclical economic developments, government policies, and financial market conditions—that may explain long-lasting changes in equilibrium real exchange rates. Development economists have tended to emphasize real factors such as the external terms of trade, commercial policy, and growth as determinants of the real exchange rate.

### **B. Computation of the Equilibrium Real Exchange Rate for the C.A.R.**

The strengthening of the CFA franc vis-à-vis the dollar in 2003-04 has resulted in some appreciation of the real effective exchange rate (REER), raising concern with respect to the external competitiveness of the C.A.R.'s economy (Figure 3). Edwards' (1989) dynamic model of a three-good (exportables, importables, and nontradables) small open economy with a fixed exchange rate provides a coherent framework to identify the fundamental variables that are associated with the equilibrium real exchange rate (ERER). We investigate the existence of a long-run cointegrating relationship between the REER and the fundamental variables. The choice of fundamentals is determined both by particular features of the C.A.R. economy and data constraint.

The fundamental determinants of the ERER considered are: productivity growth, openness to trade and financial flows (as proxied respectively by imports plus exports and the net foreign asset position, in percent of GDP), government spending, and the terms of trade. The dataset consists of annual observations for the period 1980-2005.

Figure 3. Effective Exchange Rates and Prices



The empirical model is estimated using the multivariate cointegration procedures developed by Johansen (1988, 1995), since the series are nonstationary. Cointegration analysis confirms the existence of a stable, long-run relationship among the REER, the terms of trade, openness to trade, government consumption, net foreign assets, and technological progress:

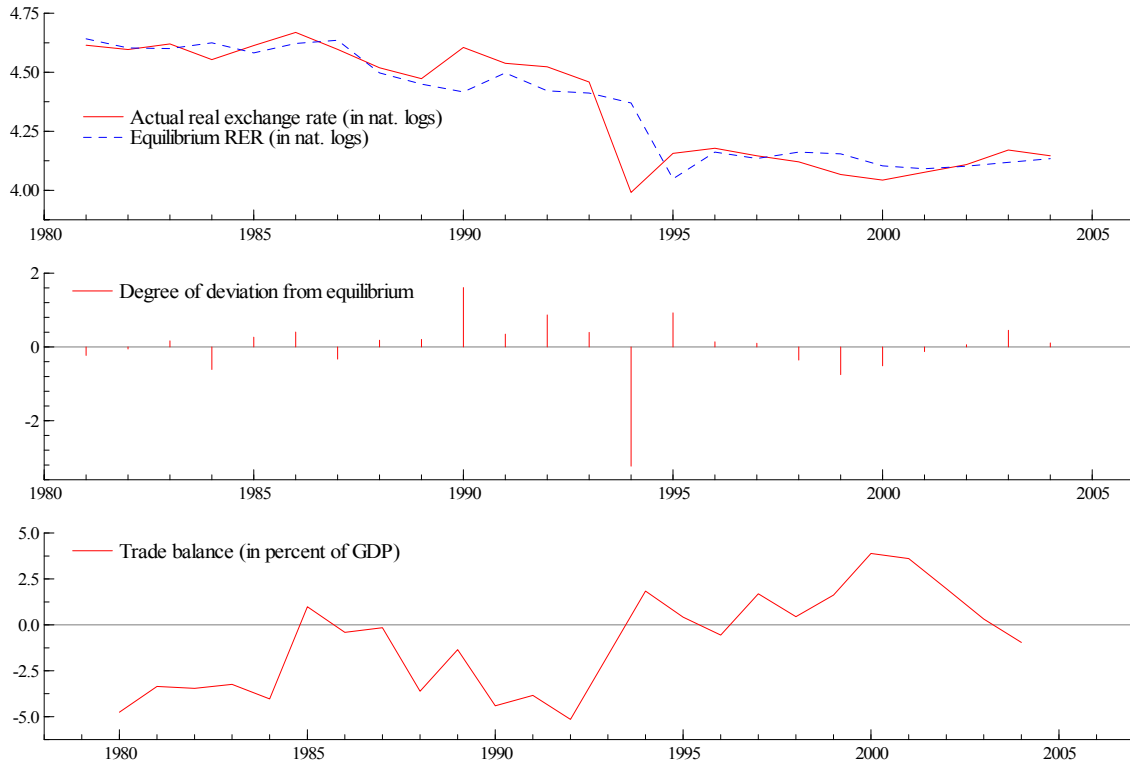
$$\ln(REER) = 0.9 \ln(TOT) - 0.1 \ln(OPEN) + 0.6 \ln(GOV CY) - 0.06 TPROG + 0.01 NFAY. \quad (1)$$

Equation (1) suggests that the long-run REER appreciates when the terms of trade improves and government spending and capital inflows increase, and depreciates when openness to trade and productivity increase. Since higher government spending tends to appreciate the ERER, it follows that increases in government spending fall mostly on nontraded goods. With the exception of *TPROG*, all the variables have the expected sign. *OPEN* and *NFAY* were found, however, not to be statistically significant.<sup>4</sup>

When estimated “permanent” values of the fundamentals are substituted into the right-hand side of equation (1), the fitted values provide estimated time series for the ERER (Figure 4). The derived measure of disequilibrium reveals three periods: deteriorating competitiveness during 1988-93; improving competitiveness during 1994 and 1997-2001; and deteriorating competitiveness during 2003-04. A comparison of the REER with estimated ERER suggests that the REER was overvalued at the time of the devaluation in 1994 and became undervalued since, but has become overvalued relative to the theoretical ERER over the past two years.

<sup>4</sup> Equation (1) was also estimated using an autoregressive distributive lag (ARDL) model to check robustness of estimated coefficients. With the exception of technological progress and net foreign assets, all the corresponding elasticities had the same sign and magnitude. Note, however, that—unlike the Johansen procedure—the ARDL model assumes weak exogeneity of the fundamentals. In particular, the weak exogeneity assumption for technological progress was rejected using the Johansen cointegration analysis.

Figure 4. Actual and Equilibrium Real Exchange Rates



Episodes of overvaluation tend to correspond to high deficits of the trade balance: a one percentage point increase in the deviation of the REER (from its equilibrium level) has been inducing, on average, about 0.5 percentage point of GDP fall in the trade surplus. Using a one-order autoregressive distributed lag model, we find that a 1 percentage point deviation of REER reduces per capita real GDP growth by about 0.3 percent.

With a view to curbing the deviation from the long-run EER and enabling the C.A.R. to achieve its diversification and growth potential, structural reforms of products and factor markets that can increase the flexibility and productivity of the economy are key. Fiscal policy may help through the improved provision of public goods and restraint on key factor prices, such as wages, and through labor market reforms that increase the flexibility of wage setting.

#### IV. TRANSPORT AND PRODUCTION COST MEASURES

The measures of competitiveness discussed above provide insight into the C.A.R.'s position with respect to other countries. These measures are helpfully supplemented by other indicators that may capture more directly factors that undermine competitiveness deriving from the country's post-conflict status. In particular, transport costs are a useful proxy for production costs, which otherwise are very difficult to measure in a post-conflict setting. In addition, transport costs reflect the remaining security problems, which add significantly to an already high transport bill for exporters owing to the C.A.R. being a landlocked country with very poor infrastructure and limited transportation options. We use data from the United Nations Conference on Trade and Development (UNCTAD) to show the relatively high transport costs that exporters in the C.A.R. face compared with other countries in the world

and regionally. As an example, we also illustrate the impact of transport cost on the competitiveness of the cotton sector using prevailing cost structures in the C.A.R., Benin, and Burkina Faso. Cotton has been produced for many years in the C.A.R., and thus represents a product for which the C.A.R. has a comparative advantage in terms of know-how and resource endowments. High costs for cotton production and export would therefore raise important competitiveness concerns for the country.

The importance of transportation for international trade and development is well documented in the economics literature. Anderson and van Wincoop (2004) underscore the role of transport costs as a barrier to trade notwithstanding the improvement in technology that reduced the unit cost of transport. Sachs and others (2004) highlight the role of transport costs in impeding the development of Africa and the report of the Commission for Africa (Our Common Interest) issued in March 2005 discusses the weak state of the transport infrastructure as a systemic problem facing the continent.<sup>5 6</sup>

Transport costs take on significantly more importance for landlocked countries. Limão and Venables (2001) find that land transport is seven times more costly than sea transport for each unit of distance. They show that infrastructure, in addition to geography, is quantitatively important in determining transport costs. In addition to their own infrastructure, landlocked countries' transport costs depend also on the infrastructure of their transit country partners. While poor infrastructure accounts for 40 percent of predicted transport costs in their model for coastal countries, its contribution rises to 60 percent for landlocked countries.<sup>7</sup> This makes it all the more difficult to transport agricultural products or other goods to shipping ports for export.

### **A. Geography, Infrastructure, and Transit Issues**

The C.A.R. is a large landlocked country of more than 600,000 km<sup>2</sup> with a relatively small and widely dispersed population (population density is 5 inhabitants per km<sup>2</sup>). It is surrounded by five countries, two of which can serve as a transit point for ocean shipping. The nearest ports from the capital city Bangui are Douala in Cameroon (around 1,600 km) and Pointe-Noire in the Republic of Congo (around 1,800 km). Both the low population density and the long distance from ports suggest that the cost of transporting goods from points of production to sea ports (as well as the cost of delivering imported goods to the population) is likely to be very high. In addition, weather conditions have a direct effect on transport options. During the rainy season, many roads become impassable, while during the

<sup>5</sup> As an illustration of the severity of internal transportation in Africa, shipping a car from Japan to Abidjan costs \$1,500, while moving it from Abidjan to Addis Ababa costs \$5,000.

<sup>6</sup> The Commission for Africa was established by the British Prime Minister Tony Blair to define the challenges facing Africa and provide recommendations on how to support the changes needed to reduce poverty.

<sup>7</sup> This point is further elaborated by Sachs and others (2004), who describe the peculiarity of Africa in terms of the tendency of Africans to live away from the coast, given, among other factors, the richer soil in the interior. In addition to the lack of investment in effective transport networks, Africa's rivers are generally not easily navigable, let alone for oceangoing vessels.

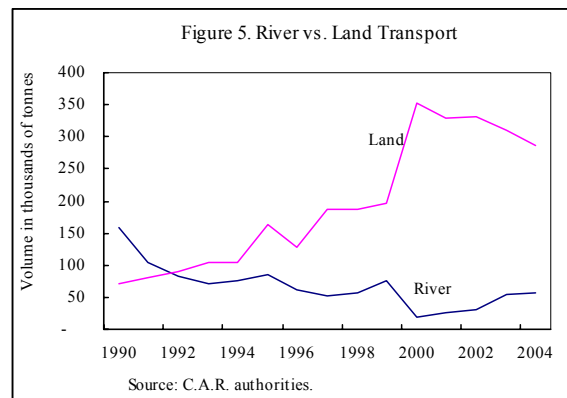
dry season the decline in the water level prevents traffic to Pointe-Noire (Republic of Congo) along the Oubangui River, limiting traffic to no more than six months a year.

In addition, transport infrastructure is extremely limited in the C.A.R. The country has no railways to connect it with its neighboring countries. Air transportation is very limited because of the inadequacy of facilities at Bangui-M'poko Airport, the only major airport in the country.<sup>8</sup> The only viable and continuous means of transporting goods across the border to reach shipping ports is by land. Over 90 percent of C.A.R. freight, in fact, goes via the Cameroonian border. However, only 700 km are paved out of a national road network of around 10,000 kilometers (according to the authorities' estimates). The rural road network is estimated at around 15,600 km, although much of this network is currently unusable.

Aside from negligence, government security and transit agent checkpoints have proliferated along the Bangui-Douala route and created complications for transporters. Current estimates suggest drivers must go through 25-30 checkpoints between Bangui and the Cameroonian border. In addition to the resulting increase in time incurred by transporters, these checkpoints became a means of corruption given the relative ease with which payments can be extracted from drivers to facilitate their passing. According to the authorities' estimate, illegal charges along the road amount to between CFAF 350,000 and CFAF 450,000 per truck (about \$0.50 per kilometer). Moreover, security remains a major concern, with banditry widespread along roads, exposing drivers and passengers to either robbery or extortion.

Conflict in the region has also created an environment favorable for pirating along the river way. A considerable shift from river to land transport took place during the 1990s, which undermined the competitiveness of the C.A.R.'s exports because of the latter's relatively higher cost (Figure 5).

Transit from the C.A.R. to Cameroon imposes a considerable burden on exporters in their efforts to reach external markets.<sup>9</sup> Despite an accord designed to simplify transit formalities, crossing into Cameroon remains a major handicap because of high administrative costs and long delays at the border. Aside from the problems mentioned above, there is still no unique customs document for transit, and the hours of operation at border posts are not harmonized.



<sup>8</sup> Internal flights are very limited and confined to small planes.

<sup>9</sup> As an illustration, according to Hausmann (2001), simply crossing the U.S.-Canadian border amounted to adding the equivalent of at least 4,000 kilometers worth of transportation costs.

## B. International Comparison of Transport Costs

Regionally, the C.A.R. compares poorly on the cost of transportation and even worse in an international context. While the ratio of freight and insurance costs to total exports has always been higher in the C.A.R. than the average for sub-Saharan Africa, according to Amadji and Yeats (1995) the situation deteriorated significantly between 1970 and 1990. The deterioration in security and economic conditions has accelerated over the past 15 years, suggesting that the C.A.R. has likely lost even more ground to other African countries. In addition to banditry along the major roadways, the C.A.R. has one of the lowest proportions of paved roads among landlocked countries and has to contend with the poor quality of roads in its transit neighbor (Table 1).

The cost of sending a standard container from Baltimore in the United States to Côte d'Ivoire is about \$3,000, but goes up to \$13,000 if it is to reach the C.A.R.<sup>10</sup> This is due in large part to the very high land transport cost. In fact, C.A.R. exporters and importers face among the highest per unit land transport costs in the world. The Douala-Bangui corridor, which is the most traveled road to reach a maritime port for the C.A.R., is among the costliest in the world (Table 2).

Table 1. Quality of Roads in Selected Landlocked Countries

	Proportion of Paved Roads (index)	Transit Country Paved Road Quality (index)
C.A.R. 1/	0.01	0.27
Bolivia	0.07	0.16
Rwanda	0.11	0.23
Ethiopia	0.33	0.74
Uganda	0.34	0.47
Mali	0.36	0.47
Zimbabwe	0.36	0.82
Burundi	0.37	0.49
Malawi	0.40	0.34
Zambia	0.40	0.91
Burkina Faso	0.41	0.12
Mongolia	0.45	0.07
Niger	0.52	0.37
Swaziland	0.65	0.19
Botswana	1.00	...

Source: Faye and others, 2004.

1/ Figure not fully consistent with data from C.A.R. authorities.

<sup>10</sup> See Hausmann, 2001.

Table 2. Estimated Unit Road Transport Cost for Container for Selected African Routes

	Distance (km)	Total Cost (US\$)	Cost per km (US\$)
Douala – Bangui	1,600	7,900	4.94
Douala – D'Jamena	1,900	8,000	4.21
Dar-es-Salaam – Kigali	1,650	4,980	3.03
Mombasa – Kampala	1,440	3,250	2.26
Dar-es-Salaam – Lusaka	2,000	4,230	2.11
Cotonou – Niamey	1,056	220	2.08
Abidjan – Bamako	1,230	2,192	1.78
Walvis Bay – Harare	2,409	3,585	1.49
Average in developed countries			
United States			1.10
European Union			1.65

Source: UNCTAD, 2003.

### **C. The Effect of Transport Costs on Competitiveness: The Cotton Sector**

The cotton sector in the C.A.R. has experienced a precipitous deterioration in the past 10 years. After reaching a level of over 40,000 tons in 1998, production started to decline and reached 1,500 tons in 2003. High transportation costs along with a number of other factors, including low world prices of cotton, contributed to this decline. In general, transportation figures prominently at two stages in the production and export process of cotton fiber. First, cotton seeds have to be collected and transported to ginning facilities. For the C.A.R., problems associated with poor rural road infrastructure render this phase of transportation very costly.<sup>11</sup> Second, cotton fiber has to be transported to export ports. Exporters have to contend with poor infrastructure and a lack of security in the C.A.R. as well as in its main transit neighbor.

A comparison of the C.A.R. with Burkina Faso and Benin reveals the extent to which transport costs present a burden on activity in the sector (Table 3). The difference is large for both domestic transport of cotton seed and transport of cotton fiber to export ports. The cost of transport as a percent of the total is larger than for the other two countries, although the difference is muted by the fact that the level of production in the C.A.R. is very low, which renders the average total cost much higher than in other countries. Many ginning and other costs of production are generally fixed. They would therefore decrease as production increases. By contrast, transport costs are mostly variable and very high. Reducing them

<sup>11</sup> In addition, this problem makes it difficult, cost-wise, for ginning companies to bring raw cotton from one zone to a ginning facility in another (the two main production zones are located in the southeast and northwest of the country).

requires government action to strengthen security, improve road and river transport infrastructure, and remove procedural bottlenecks on international transit routes.

Table 3. Transport Cost of Cotton

	Central African Republic			Burkina Faso			Benin		
	2002/03	2003/04	2004/05 est.	2002/03	2003/04	2004/05	2002/03	2003/04	2004/05
Average transport cost of seed cotton to ginnery									
In CFAF/kg 1/, 2/	32	30	35	19	19	17	25	55	17
In percent of total purchase price	18	20	21	11	10	8	11	22	8
Average transport cost of cotton fiber from ginnery to FOB									
In CFAF/kg	117	106	106	71	74	74	15	20	17
In percent of FOB cost	11	14	12	10	11	11	2	2	...
Average total FOB transport cost (CFAF/kg) 3/	193	178	188	108	111	106	73	151	58
Memorandum items									
Production level of cotton seed (tons) 4/	2,220	1,500	6,800	407,710	483,091	630,964	84,460	76,002	100,886

Source: Country authorities; and IMF staff estimates.

1/ Includes transport cost and some other transaction costs.

2/ Figure for Benin in 2003/04 is not representative because it deviates substantially from the average of the past five years.

3/ Assuming a productivity ratio of 0.52 for Burkina Faso and 0.42 for the C.A.R. and Benin.

4/ For Benin, production level corresponds to SONAPRA.

#### D. Other Cost-Based Measures of Competitiveness

Other measures of external competitiveness include those that also capture a significant share of production costs, such as unit labor costs and energy costs. Data on unit labor costs are not available for the C.A.R. As a proxy we use average civil service wages, which are reported to be the benchmark for private formal sector wages in the country. In the C.A.R., in 2003 it was around \$2,500 per year, which is high by sub-Saharan African standards (Table 4). In addition, as a ratio to per capita GDP, the average civil service wage is also large, suggesting a low employment capacity in the private sector and hence lower competitiveness.

Table 4. Public Sector Wage Bill for Selected Sub-Saharan African Countries in 2003

	C.A.R.	Mali	DRC	Uganda
Total wage bill (in millions US\$)	60	144	136	326
Number of government employees (in thousands)	24	94	620	212
Average wage bill (in US\$)	2,451	1,530	220	1,533
Ratio of average civil service to per capita GDP	8	4	2	6

Source: Country authorities and IMF staff estimates.

Regarding energy costs, it should be noted that domestic prices of petroleum products are administered and have been changed only once (in January 2006) over the past six years. In



addition, the actual high cost of electricity is manifested mostly in frequent power outages and other supply disruptions rather than in electricity tariff rates. These factors, which represent real costs to producers, are difficult to capture in price measures.

## **V. GOVERNANCE AND QUALITY OF INSTITUTIONS**

The poor governance and weak institutions characteristic of post-conflict situations can severely undermine external competitiveness. In particular, the level of corruption, efficiency of the public sector, extent of regulatory burdens, limits placed on political authorities, and the extent of legal protection of private property strongly impact the business climate and the costs of conducting business. Various surveys outlined below point to major obstacles to the development of the private sector in the C.A.R., and provide another means of comparing the C.A.R.'s competitiveness across countries.

### **A. Current State of Institutions in the C.A.R.**

#### **Quality of governance**

The concept of governance can be defined either narrowly or broadly, with each definition having its advantages and disadvantages. A broader but practical definition is given by Kaufmann, Kraay, and Zoido-Lobaton (1999, page 1), who define governance as

...the traditions and institutions by which authority in a country is exercised. This includes: (i) the process by which governments are selected, monitored and replaced, (ii) the capacity of government to effectively formulate and implement sound policies, and (iii) the respect of citizens and the state for the institutions that govern economic and social interactions among them.

#### *Process by which governments are selected, monitored and replaced*

The C.A.R. has been the site of numerous politico-military crises in the past decade, punctuated by several coups or attempted coups (see Ghura and Mercereau, 2004). From independence in 1960 to the present, the country has had only two democratic elections that led to a change in government. According to the World Bank's governance indicators, in 2004, less than 15 percent of the countries included in the sample (209 countries) had lower scores in the voice and accountability indicator,<sup>12</sup> and only 8 percent ranked worse in terms of political instability. Additionally, the lack of constraints on the authority of the executive branch is higher than in most other countries in the sample. According to the University of Maryland's Polity IV dataset, the president faced restrictions on his actions only from 1993

<sup>12</sup> This includes variables measuring the different aspects of the political process, civil liberties, and political rights. See Kaufmann, Kraay and Zoido-Lobaton (1999) for a description of the World Bank governance indicators.

to 2002, during the period of democracy or transition to democracy, although the regime could still be classified as a strong presidential system (see Marshall and Jaggers, 2002).<sup>13</sup>

### *Government effectiveness*

The second element of the definition of governance—the effectiveness of the government—includes perceived quality of public service provision, the quality of bureaucracy, the competence of civil servants, how independent civil servants are from political pressures, and the government’s credibility with regard to its policy commitments. Only 2 percent of the countries surveyed by the World Bank have less effective governments than the C.A.R. The Heritage Foundation compiles an annual Index of Economic Freedom, which is defined as “the absence of government coercion or constraint on the production, distribution, or consumption of goods and services beyond the extent necessary for citizens to protect and maintain liberty itself” and includes variables measuring the government’s trade policy, the fiscal burden imposed on people by the government, monetary policy, property rights, regulatory burden, and so on. According to the index, the C.A.R. is classified as a mostly “unfree” economy,<sup>14</sup> marked particularly by heavy government regulation and intervention.

### *Respect for institutions*

The concepts of the rule of law and freedom from corruption are the last points raised in the above-referenced definition. Several studies have found that there is a high degree of correlation between the abundance of natural resources and the level of rent-seeking activities (see Mauro, 1995). In the Central African Republic, resources such as diamonds and timber have undoubtedly contributed to the significant amount of rent-seeking activities. In 2004, the C.A.R. ranked in the third percentile of the World Bank’s indicator of corruption, which measures the extent to which the government can effectively control corruption.<sup>15</sup> The World Bank, in its 2004 Country Policy and Institution Assessment (CPIA), gives the C.A.R. an unsatisfactory score in terms of transparency, accountability, and corruption in the public sector.<sup>16</sup>

### **Property rights**

The political instability of the past decade coupled with the various political regimes that the C.A.R. has experienced since its independence have impaired the ability of private citizens or

<sup>13</sup> The dataset does not cover the period beyond 2002.

<sup>14</sup> The index groups countries into four broad categories of economic freedom: free, mostly free, mostly unfree, and repressed.

<sup>15</sup> Only 3 percent of all countries in the sample have governments that are less effective at controlling corruption.

<sup>16</sup> See the International Development Association (IDA) page on the World Bank’s website at <http://www.worldbank.org> for a discussion of the CPIA. The CPIA indices are constructed on the basis of the assessment of World Bank country analysts using information available to them and their direct knowledge of the country.

firms to accumulate and maintain private property. Frequent military coup attempts and mutinies in the armed forces have sparked a culture of looting and destruction of property by civilian mobs and the military. The Heritage Foundation ranks the C.A.R. at 4 on a scale of 1 to 5, with 1 being a very high level of protection of private property and 5 being a very low level. This ranking corresponds to a setting in which property ownership is weakly protected, and the court system is inefficient, corrupt, and influenced by other branches of government.<sup>17</sup>

The enforcement of contracts and of laws, which is a key element in the protection of private property, depends mainly on informal channels in the C.A.R. Laws and regulations are unpredictable and change frequently through executive decrees rather than through a transparent legislative process. Corruption pervades the system, and judicial decisions are often not published. The process of enforcing contracts is time-consuming and very costly (see below). The government has recently undertaken certain reforms in this area to strengthen and reform the judicial sector. With technical assistance from international donors, the government has undertaken the training of judges specialized in financial matters. It has also adopted a new criminal code and an anticorruption law to penalize, among other things, corruption, extortion, and influence peddling.

## **B. Impact of Institutions on the Business Environment**

The C.A.R. authorities have recently adopted certain measures to improve the business climate, such as the implementation of the provisions of the regional Organization for the Harmonization of Business Law in Africa (OHADA) treaty, which aims at combating corruption, reinforcing the rule of law, and harmonizing business law. However, the C.A.R. still lags in many of these areas in comparison with the average for sub-Saharan Africa and, overall, regulates business more than most countries. In its latest Doing Business report,<sup>18</sup> the World Bank ranks countries on ten factors according to the length and nature of procedures in (i) starting a business, (ii) dealing with licenses, (iii) employing workers, (iv) registering property variables, (v) getting credit, (vi) protecting investors, (vii) paying taxes, (viii) trading across borders, (ix) enforcing contracts, and (x) closing a business. The C.A.R. generally ranks below the Sub-Saharan African average except with respect to starting a business,<sup>19</sup> registering property, and protecting investors. Compared with the CEMAC average, however, the C.A.R. fares better for most indicators.

The C.A.R. lags behind Sub-Saharan African averages notably in terms of labor regulations, protecting investors, and enforcing contracts, although it has made progress in improving investor protection over the last few years. It is much harder to hire and fire a worker in the C.A.R. than in the average sub-Saharan African country. Indeed, using the World Bank's

<sup>17</sup> See the Heritage Foundation website at <http://www.heritage.org> for a detailed discussion of the Index of Economic Freedom.

<sup>18</sup> See World Bank (2006). The report and the data are available online at <http://www.doingbusiness.org/Default.aspx>.

<sup>19</sup> Although the C.A.R. requires slightly fewer procedures to open a business and significantly less time than in the average sub-Saharan African country, it costs almost twice as much.

rigidity of employment index, which measures how difficult it is to hire a new worker, how rigid the regulations are on working hours, and how hard it is to dismiss a redundant worker, the C.A.R. scores 73, while the Sub-Saharan African average is 47 on a scale of 0 to 100, in which higher values represent more rigid regulations. Also, according to the Doing Business report, it takes longer to enforce a simple commercial contract in the C.A.R. compared to the average for sub-Saharan Africa. The cost of enforcement relative to the disputed amount has decreased in recent years although it remains higher than the Sub-Saharan African average.

## VI. CONCLUSIONS

This paper has examined a range of competitiveness indicators for the C.A.R. The RER and trade measures provide some suggestion of mild overvaluation in recent years and an export performance that has been hampered by competitive issues. The decline of exports and export diversification appears to be in large part a result of the political and security disruptions that have affected the C.A.R. economy as a whole. These disruptions may have had a disproportionately greater impact on imports, suggesting that the trade measures would have shown a bigger deficit in the absence of these disruptions.

At the same time, a theme of this paper has been that, while conventional price or current account measures of competitiveness may be informative, the poor security conditions and weak institutions characteristic of many post-conflict countries argue for other measures that may more directly capture the competitiveness challenges faced by these countries. One difficulty of these other measures of competitiveness is to ensure that they are able to compare developments over time and/or across countries. The measures examined in this paper, notably on transport costs and governance, largely overcome this challenge of comparability over time and across countries, and outline a worrisome picture of the C.A.R.'s competitiveness.

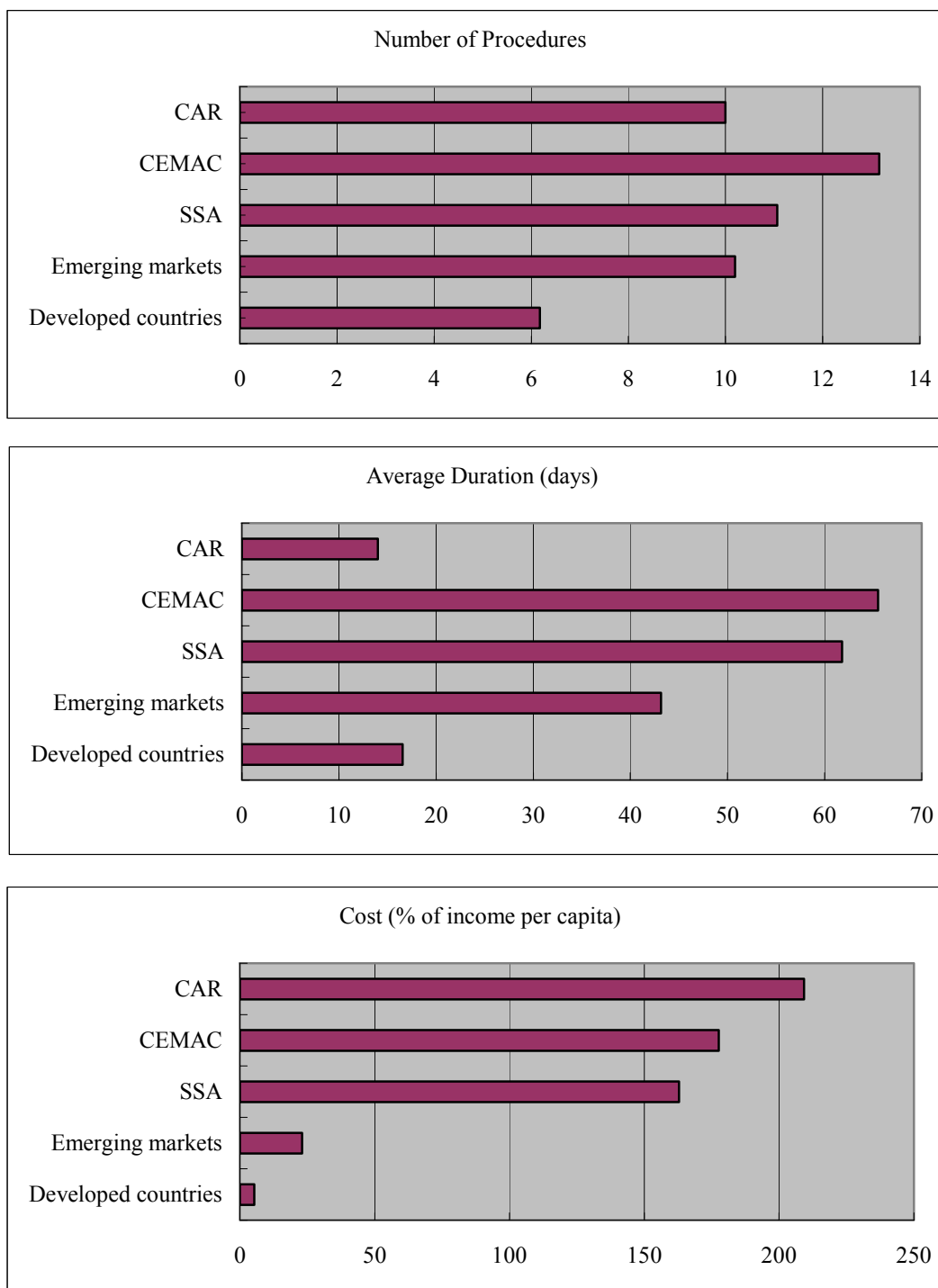
No single measure either in the C.A.R. or elsewhere can fully capture the competitive position of a country. For this reason, to illustrate the C.A.R.'s position relative to several other landlocked African countries, a "competitiveness triangle" is shown in Figure 9 below using data presented in this paper for transport costs, governance, and labor costs.<sup>20</sup> In this presentation, the wider the triangle of measures of competitiveness, the deeper the competitiveness problems for the given country.

As shown in Figure 9, the C.A.R. fares significantly worse on most of these measures, and overall is well behind the Sub-Saharan African average. This suggests that the C.A.R. is substantially less competitive than would be indicated by the standard measures of competitiveness, and underlines the toll that the insecurity and disruptions of recent years have taken on the country. Restoring competitiveness, and the boost in both traditional and nontraditional exports that could be an outcome, will clearly involve improved security and continued efforts to strengthen institutions. Sound macroeconomic policies buttressed by key

<sup>20</sup> Transport costs are shown as an index on the basis of unit costs in Table 2 above, with unit costs in the United States being zero on the index; the governance indicator is the cost of starting a business (as a share of per capita income) from Figure 6, normalized on a scale of 0 to 100; labor costs are the average civil service wage from Table 4, multiplied by 10.

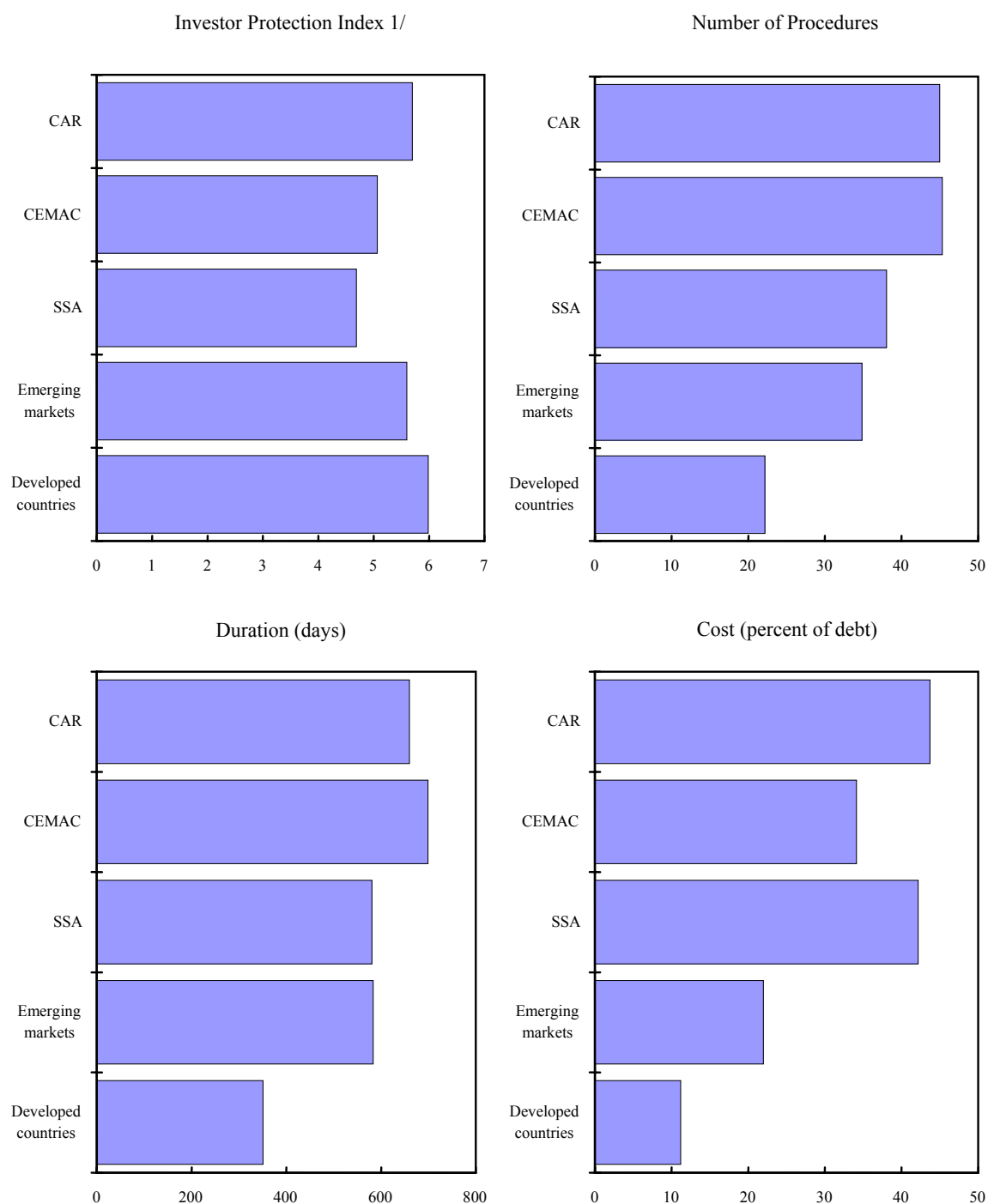
structural reforms will also be crucial, notably in fostering greater labor market flexibility, improvements relative to contract enforcement, and a lighter regulatory burden. Finally, greater and more effective public investment in infrastructure will be essential to any effort to strengthen competitiveness in the C.A.R.

Figure 6. Starting a Business



Source: World Bank's Doing Business Database 2006.

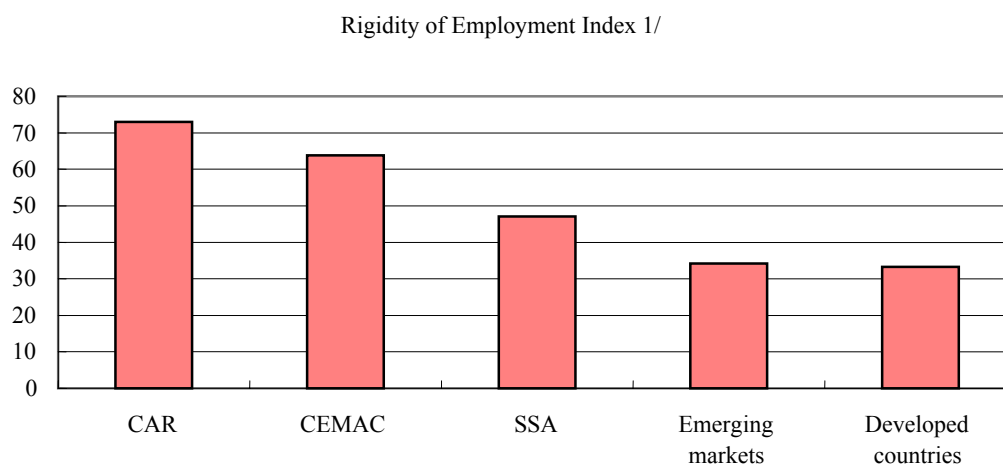
Figure 7. Protecting Investors and Enforcing Contracts



Source: World Bank's Doing Business Database 2006.

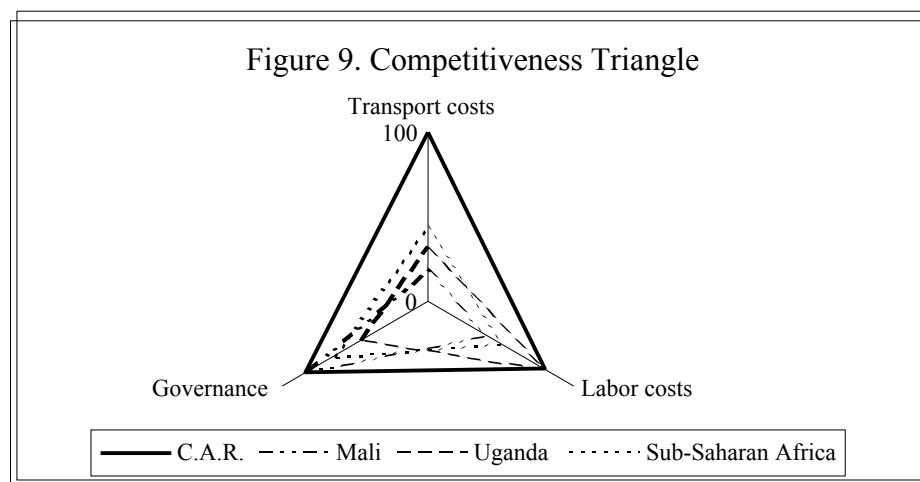
1/ The investor protection index varies between 0 and 10, with higher values indicating a stronger protection. It incorporates the level of transparency of transactions, liability for self-dealing and shareholders' ability to sue officers and directors for misconduct.

Figure 8. Employing Workers



Source: World Bank's Doing Business Database 2006.

1/ The index ranges from 0 to 100 with higher values representing more rigid labor regulations.



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