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Towards the attainment of self-sustaining growth: Ghana and the Ivory Coast

by

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Towards the attainment of self-sustaining growth: Ghana and the Ivory Coast

by
Sven Heldt

April 1977

1. Ghana and the Ivory Coast are two neighbouring states of the West Coast of Africa so similar in size, geography, resource endowment, stage of economic development in terms of per capita income and capacity to develop at the date of independence (Ghana 1957 and Ivory Coast 1960), that a comparison of the results of the economic policies adopted and the political orientation followed by each of them has ever been a big challenge.

While Ghana had at the time of independence almost twice the population of Ivory Coast, the agricultural sector had similar importance accounting for more than 40 percent of GDP, the industrial sector for less than 10 percent. The principal agricultural export crops were the same: cocoa, coffee and wood and the importance of external trade was also similar, amounting to about 30 percent of GDP in each country in 1960 (table 1). But while in Ghana cocoa was by far the most important export product it was coffee in the case of Ivory Coast.

2. Looking at the development policies followed by the two countries we find big differences, which with a high degree of probability had an important influence upon the economic results we now can observe in both countries. The roots of these divergent policies can be found in the personalities of the leaders of the countries.

While Houphouet-Boigny in Ivory Coast was a strong supporter of a close cooperation between the African countries and their metropolies based on equality and fraternity, Nkrumah put freedom and independence as well as cooperation and unity among the different African countries in the first place. Houphouet was sceptical about the benefits of independence argueing that the establishment of own diplomatic services and an army would mean a waste of scarce resources and talent and thus predicted, on the occasion of Nkrumah's visit to Abidjan on April 5, 1957, that in ten years the Ivory Coast in close cooperation with the metropoly would have passed its neighbour in the economic and social fields[1].

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[1] André Blanchet, "Le defi de M. Houphouet-Boigny au Dr. Nkrumah", in Le Monde, 17.April 1957, p. 7, cited in Jan Woronoff, "West African Wager: Houphouet versus Nkrumah", Metuchen, N. J., 1972, p. 13.

Table 1 - Basic economic indicators for Ghana and Ivory Coast

	1960	1965	1970	1972	1973
Ghana					
Population (1000)	6703	7610	8640	9086	9313
GDP/Capita[a]	227	232	230	234	
GDP[b] (million cedis)	1258.1	1466.4	1641.4	1760.6	
Agriculture/GDP (%)	40.8	40.8	46.9	47.6	
Manufacturing/GDP (%)	9.8	9.8	11.0	10.3	
Imports (million cedis)	308.0	391.8	538.6	465.2	
Exports (million cedis)	245.0	251.1	523.2	648.4	
Implicit GDP deflator[c]	69.1	100.0	137.6	160.5	
Foreign exchange rate[d]	1.399	1.163	0.980	0.761	0.870
Ivory Coast					
Population (1000)	3619	4298	5065	5400	5578
GDP/Capita[a]	200	244	298	314	326
GDP[b] (billion CFA Francs)	163.1	236.8	340.2	382.6	409.5
Agriculture/GDP (%)	43.4	35.9	27.2	27.0	27.5
Manufacturing(GDP (%)	6.9	10.1	13.4	16.2	15.7
Imports (billion CFA Francs)	37.0	81.9	173.8	201.1	195.5
Exports (billion CFA Francs)	47.9	86.7	177.9	199.8	215.4
Implicit GDP deflator[c]	86.3	100.0	121.7	125.5	139.7
Foreign exchange rate[e]	246.9	246.9	277.7	252.2	222.7

[a] US-$ at average 1967-69 market prices and exchange rates. - [b] At 1965 prices. - [c] 1965=100. - [d] US-$ per Cedi, annual average. - [e] CFA Francs per US-$, annual average.

Source: World Bank, World Tables 1976.

The Ivory Coast was then granted independence in 1960 without much indigenous effort and after independence it remained committed to the free enterprise philosophy giving priority to the operation of private business, restricting the state intervention to a participation in the financing of investment and in the management of important companies, especially agricultural estates. Heavy reliance upon French technical assistance and aid was another important element for the economic and administrative performance, with the consequence, that there are now more Frenchmen in the Ivory Coast than at the time of independence.

Ghana, on the other side, followed a policy of state intervention aiming at a predominant role of the government in agriculture as well as in industry. This policy was intensified after 1961, while in the years before aid and technical assistance from private and government sources from the West were highly welcomed. Nonetheless, it never came to a full nationalization, both domestic and foreign private investment were still desired, and compensation for nationalization of enterprises was always granted by the Government.

3. But apart from these striking differences in the overall policies followed by the two countries, Ghana embarked on a forced industrialization program to attain selfsufficiency in important industrial goods and also favouring large scale agricultural projects, thus aiming at a bigger independence from third countries, while Ivory Coast gave agriculture the first priority, aiming at an increase in the production of traditional agricultural products first and at a diversification of production and increased processing of products for export in a second stage. Therefore, the differences between both countries were along two lines, in the overall development philosophy and in the economic sectors favoured.

The results of the two experiments were indeed very divergent in terms of real overall growth of the economy as well as in per capita terms.

4. The extraordinary good performance of the Ivory Coast has been critized by some as having been a process of "growth without development"[1], because it was based on agricultural export crops developed by foreign capital and

[1] S. Amin, "Capilatism and Development in the Ivory Coast", in J.C. Markovitz, ed., African Politics and Society, The Free Press, N.Y. 1970.

having little diffusion effects upon the rest of the economy, while the case of Ghana might have been a process of "development without growth"[1]. Others attribute the divergent development paths to structural economic differences over which the governments had little or no control[2], or to a poor implementation and unsoundness of some policies of the development strategy that would not have been fatal in the case of Ghana if the export proceeds would have kept growing during that period[3]. And finally there are authors, to whom I feel most inclined, that attribute the differences in economic performance mainly to the economic policies followed in each country, calling them "structural transformation versus gradualism"[4] or the result of the "realistic application of irrealistic theories" in the case of Ivory Coast[5].

These "irrealistic theories" see foreign trade as an effective engine of growth, provided that the access to the markets of the industrial countries for manufactures of developing countries is given and that the pattern of advance in the industrial countries is such as to cause a rapidly rising demand for imported food stuffs and raw materials. With respect to manufactures both Ghana and Ivory Coast are now in privileged position, since they can profit from a free and unrestricted acess to the markets of the EEC.

Towards self-sustained growth

5. The following analysis shows by means of several indicators, which have been the results of the Ivory Coast and Ghana with respect to the external sector and whether conditions have been fulfilled for a process of self-

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1 J.M. Due, "Development without growth. The case of Ghana in the 1960's?", in: The Economic Bulletin of Ghana, Vol. 3, No. 1, 1973.

2 E. Eshag and P. J. Richards, "A comparison of economic developments in Ghana and the Ivory Coast since 1960", in: Bulletin of the Oxford University Institute of Economics and Statistics, Vol. 29, No. 4, Nov. 1967.

3 R. H. Green, "Reflection on economic strategy, structure, implementation and necessity: Ghana and the Ivory Coast, 1957-67", in: Ph. Foster and A.R. Zolberg, eds. Ghana and the Ivory Coast. Perspectives on Modernization, Univ. of Chicago Press, 1971.

4 E.J. Berg, "Structural transformation versus gradualism: recent economic development in Ghana and the Ivory Coast", in: Ph. Foster and A.R. Zolberg, op.cit.

5 M. Penouil, "Le miracle ivoirien ou l'application réaliste de théories irréalistes", in:Année Africaine, Paris 1971.

Table 2 - Ivory Coast: Indicators of self-sustaining growth

		1960/65	1965/70
Capital inflow:	Fo/Vo	2.6[a]	2.0
Investment performance:	$K\bar{r}$	10.3[b]	17.8[c]
	Io/Vo	16.8	19.1
	i	17.1	7.5
Saving performance:	a o	15.9	16.4
	a '	6.4	21.2
Trade performance:	Eo/mo	1.16	1.08
	ϵ	12.6	15.5
	u'/u_o	1.04	1.37
Growth GDP		11.0	11.8
Growth GDP/capita		7.2	8.2
Growth GDP (1965=100)		7.7	7.5
Growth GDP/capita (1965=100)		4.1	4.0
$\frac{(Eo/mo)(1+\epsilon)^{p}-1}{(1+\bar{r})^{p}-1}$		2.64	2.52
Conditions for self-sustaining growth:			
$I/V \geq K\bar{r}$		$16.8 \geq 10.3$	$19.1 \geq 17.8$
$a' \geq K\bar{r}\,cr$		$6.4 \leq 10.3$	$21.2 \geq 17.8$
$a \geq K\bar{r}$		$15.9 \geq 10.3$	$16.4 \leq 17.8$
$\frac{u'}{u_o} \leq \frac{(Eo/mo)(1+\epsilon)^{p}-1}{(1+\bar{r})^{p}-1}$		$1.04 \leq 2.04$	$1.37 \leq 2.52$
ICOR		2.71	3.13[d]

[a] 1963-65. - [b] $K\bar{r}$: Investment rate necessary to achieve 7.2 % annual growth. - [c] $K\bar{r}$: Investment rate necessary to achieve 8.1 % annual growth. (Loi Plan 1967-70). - [d] ICOR 1970-73: 4.60.

Note: For symbols see text.

Source: Calculated from World Bank, World Tables 1976, IMF: Balance of Payments Yearbook and UN: National Account Statistics.

Table 3 - Ghana: Indicators of self-sustaining growth

		1960/66	1966/71
Capital inflow :	F_o/V_o	4.7	3.7[a]
Investment performance :	$K\bar{r}$	21.7[b]	6.0[c]
	I_o/V_o	18.2	12.6
	i	- 1.4	12.6
Saving performance :	a_o	10.4	9.2
	a'	- 5.2	14.7
Trade performance:	E_o/m_o	0.76	0.95
	ϵ	- 1.6	14.8
	u'/u_o	- 0.059	1.105
Growth GDP		9.7	10.5
Growth GDP/capita		7.0	7.7
Growth GDP (1965=100)		1.8	4.8
Growth GDP/capita (1965=100)		- 0.9	2.0
$\frac{(E_o/m_o)(1+\epsilon)^p - 1}{(1+\bar{r})^p - 1}$		- 2.18	2.91
Conditions for self-sustaining growth:			
$I/V \geqslant K\bar{r}$		$18.2 \leqq 21.7$	$12.6 \geqslant 6.0$
$a' \geqslant K\bar{r}$ or			$14.7 \geqslant 6.0$
$a \geqslant K\bar{r}$		$10.4 \leqq 21.7$	$9.2 \geqslant 6.0$
$\frac{u'}{u_o} \leqq \frac{(E_o/m_o)(1+\epsilon)^p - 1}{(1+\bar{r})^p - 1}$		$-0.059 \geqslant 2.18$	$1.105 \leqq 2.91$
ICOR		12.3	3.8

[a] 67-71. - [b] Investment rate necessary to achieve 5.5 % annual growth. (Seven Year Development Plan 1963/64-1969/70). - [c] Public Investment rate necessary to achieve 4.0-5.5 % annual growth (Plan 1968-70).
Note: For symbols see text.

Source: Calculated from World Bank, World Tables 1976; IMF: Balance of Payment Yearbook and U.N.: National Account Statistics.

sustained growth. For this purpose a test developed by Chenery and Strout[1] will be used. This test, which has already been applied for Ivory Coast in the period between 1960 and 1965[2] uses three criteria to judge economic performance: an investment, a savings and a trade criterion.

The investment criterion states, that the rate of growth of investments must be greater than the target rate of growth, so that the ratio of investment to GDP (I/V) be able to sustain the target rate of growth ($k\bar{r}$). The savings criterion states that "the marginal savings rate (a') must be greater than the target investment rate unless the average rate of savings (a) is already above this level"[3]. And finally the trade criterion states that either the growth rate of exports (ε) be higher than the target rate of growth of GDP or the marginal import rate (u') be reduced below the average import rate (u) of the base year.

6. While for the Ivory Coast the three criteria are met for the decisive period 1960-65 in Ghana none is fulfilled during the Nkrumah period, 1960-66 (tables 2 and 3). The causes for these opposed results can be found in the economic measures adopted in each country.

The Ivory Coast, following a policy of gradual transformation involving a limited role for the government in direct productive activities remained export oriented, concentrating on the agricultural sector under continued supply of foreign capital and skills. By this way a class of agricultural entrepreneurs could develop, which in turn favoured a rapid monetization of the economy. A substantial shift of people out of less productive regions and employments into more productive ones was a concomitant effect, where a kind of triangular circuit could be observed: people emigrating from those zones with stagnant agriculture to the zones with growing agriculture (to either villages or countryside) and the rural population of the zones with growing agriculture emigrating to the cities in these regions or to Abidjan[4]. Estab-

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1 H.B. Chenery and A.M.Strout, "Foreign Assistance and Economic Development" in: American Economic Review, Vol. 56, No. 4, Part 1, Sept. 1966.

2 V.L. Galbraith, "Trade as an engine of growth: the Ivory Coast", in: South of the Sahara: Development in African Economies, S.P. Schatz, ed., McMillan 1972.

3 H.B. Chenery and A.M. Strout, op. cit. p. 705.

4 L.L. Camier, "Aspects économiques de la constitution de réseau urbain de la Côte d'Ivoire", in: Mondes en Developpement, No. 9, 1975, Paris, p. 101.

lishing a correlation along the time it can further be observed, that the urbanization in the Ivory Coast progressed at the same rhythm as exportable agricultural products were developed, and Abidjan, as the major export part, experienced a dramatic growth passing from 180 000 inhabitants in 1960 to more than 550 000 in 1970.

Had the Ivory Coast followed a more autarquic policy towards the direct satisfaction of the internal necessities, this dramatic concentration around Abidjan would most probably not have occured. Foreigners continued to dominate the economy, but since this situation has assured an efficient operation and true transformation of the economy it has been a bearable price paid for the rapid growth experienced: 7.7 percent real growth rate per year between 1960 and 1965 (4.1 percent growth rate per capita) and 7.5 percent real growth rate per year between 1965 and 1970 (4.0 growth rate per capita). The agricultural development played, as mentioned before, a very important role and was directed in the first phase towards an increase of the traditional exports, coffee and cocoa, including timber in an increasing proportion. Thereafter a diversification policy was followed to include especially cotton, oil palm and coconuts as well as food crops for the national consumption, like rice.

8. Additionally, the Ivory Coast experienced favourable export conditions in the first phase as the major part of the coffee exports were directed to France, which paid higher prices than the international levels[1], sometimes over 50 percent. Later, when Ivory Coast was seeking for new markets for further expanding its coffee exports (as the French demand was growing only very slowly and the pressure from the EEC for dismantling the preferential price system was rising) it met with a rapidly expanding demand of the US for soluble coffee which can be made with robusta type beans grown in the Ivory Coast. And since Ivory Coast was a small producer of coffee by that time and not subject to the quotes of the Coffee Agreement it could rapidly raise sales to the US. By this way and, due to a broader export base that made the Ivory Coast less sensible to international price fluctuations (table 4), it had continued balance of payments surpluses which secured the financing of developments.

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[1] This French policy toward its former colonial territories had its price in the form of higher prices for the manufactured products exported to the African countries.

Table 4 - Percentage composition of exports: Ghana and Ivory Coast

	1962	1966	1970	1974
Ghana				
071 coffee	0.4	1.3	0.7	0.3
072 cocoa	70.6	68.8	76.5	73.5
242 wood rough	5.8	6.5	4.7	8.7
243 wood shaped	6.4	6.0	3.9	4.6
275 ind. diamonds	7.4	6.4	3.3	2.0
283 non ferr.base metals	6.2	8.5	2.1	1.9
631 veneers, plywood	0.8	0.2	0.3	1.1
684 aluminium	-	-	7.4	4.5
other SITC 0-4	2.3	1.9	0.9	2.8
SITC 5-8	-	0.4	0.1	0.5
Total	100	100	100	100
Total (mill. US-$)	280.6	237.0	424.9	637.2
Ivory Coast				
051 fruit fresh	6.6	4.1	3.2	
053 fruit preserved	1.4	2.2	2.4	
071 coffee	43.2	40.4	34.8	
072 cocoa	23.6	19.7	24.7	
221 oil seeds	0.6	0.6	0.8	
231 rubber crude	-	0.8	0.9	
242 wood rough	18.5	19.6	18.2	
243 wood shaped	1.7	4.5	3.4	
263 cotton	-	0.4	1.2	
292 crude veg.material	0.1	1.5	0.9	
631 veneers, plywood	0.1	0.4	1.0	
652 cotton fabrics	-	0.1	1.0	
692 metal tanks, boxes	-	0.9	0.9	
other: SITC 0-4	2.1	2.3	3.4	
SITC 5-8	1.7	2.5	3.3	
Total	100	100	100	
Total (mill. US-$)	181.3	308.2	466.6	

Source: UN Commodity Trade Statistics.

9. This experience was in sharp contrast with that of Ghana, which depended heavily on cocoa exports whose world prices declined drastically during the Nkrumah period. And since the export base was not as diversified as that of Ivory Coast (table 4) Ghana quickly run into serious foreign exchange problems, as imports were at the same time rising rapidly. Since Ghana was the most important cocoa exporter of the world, the increase in the export volume in order to match the sharply reduced prices helped to depress even more the price level, so that by 1965 the prices were at 41 percent of their 1958 level. Further the agricultural policy of the government was based on the creation of state farms and the formation of cooperatives, where a big waste of resources took place lacking the impetus for a consequent diversification in the production both for exports and for the domestic market[1].

At the same time heavy investments in the industrial sector and in infrastructure (the Akosombo dam, the port of Tema and the aluminium company VALCO are the most prominent) were done as part of the forced industrialization policy aimed at reducing the level of dependence from the exterior.But this investment program was accompanied by a falling savings rate, administrative corruption, mismanagement, rising inflationary pressures and foreign indebtedness, with the result, that the economy experienced a very slow real growth rate per year in the period 1960-66 (1.8 percent) and even a decline in per capita terms (- 0.9 percent). These catastrophic results were directly responsible for the overthrow of Nkrumah in 1966 who believed, that industry is the only true force capable of modernizing a country, via import substitution and, that large scale mechanized farming under the lead of the State was the best way for modernizing agriculture.

10. Apart from the highly politiziced atmosphere, too little attention was given to the facts, that an import substitution process in a market like Ghana soon runs into difficulties and that an ambitious public sector development program without disposing of sufficiently trained people cannot be managed effectively. This situation was clearly reflected in the overall

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[1] J.M. Due, "Agricultural development in the Ivory Coast and Ghana", in: The Journal of Modern Africans Studies, Vol. 7, No. 4, 1969.

Table 5 - Overall productivity of capital (three year moving averages)

	Ghana			Ivory Coast		
	Increments in GDP[a]	GDCF[a,b]	ratio (1) : (2)	Increments in GDP[c]	GDCF[c,b]	ratio (1) : (2)
	(1)	(2)	(3)	(1)	(2)	(3)
1961	48.9[d]	266.9	0.183	9.2[d]	25.4	0.362
1962	52.0	252.9	0.206	14.9	28.3	0.527
1963	47.6	259.6	0.183	21.7	33.4	0.650
1964	36.6	269.6	0.136	18.4	41.1	0.448
1965	- 3.8	241.5	-0.016	14.0	46.6	0.300
1966	0.2	197.2	0.001	4.7	46.1	0.102
1967	- 4.8	163.6	-0.029	20.2	48.0	0.420
1968	44.8	163.9	0.273	20.4	51.6	0.395
1969	65.0	191.7	0.339	27.2	61.7	0.440
1970	105.9	221.3	0.479	21.1	70.7	0.298
1971	74.3	196.7	0.378	23.9	76.6	0.312
1972				23.1	81.3	0.284

[a] Million cedis. - [b] Gross Domestic Capital Formation. - [c] Billion CFA-Francs. - [d] Two years average.

Source: Calculated from World Bank, World Tables 1976.

productivity of capital (table 5), where a sharp decline between the years 1963 and 1967 was observed, in contrast to the case of the Ivory Coast, where the productivity of capital was on the average at a much higher level, although with a tendency to decline, as a higher volume of investment has become necessary to diversify the agricultural production and to promote industrialization on the basis of comparative advantages.

11. This observation is in line with the presumption, that fast growing countries (Ivory Coast in this case) are more efficient in their use of factors of production, which is reflected in low capital output or incremental

capital output ratios (ICOR)[1]. But the good performance of the Ivory Coast has also to be explained by favourable structural factors such as the strong expansion of external demand for its exports mentioned before, which till the mid sixties required relatively modest additional investments in order to sustain a high growth rate of the economy.

In the next years this situation has been changing radically in the Ivory Coast making necessary a yearly planned investment rate of 27.6 percent for the period 1975-80 as compared to a realized investment rate of only 16.8 percent in the period 1960-65 to sustain a similar growth rate of between 7 and 8 percent per year. On the other side, if no sufficient attention is paid to ease the main structural constraints that limit the growth of demand for either export products or products for internal consumption, increased investment efforts to step up the growth rate of the economy will receive only a very small reward. And this was the case of Ghana in the Nkrumah period, where no efforts were made to diversify the agricultural productive structure, either for exports or for the internal consumption, and where the mismanagement of the economy produced a general dislocation of production and inflationary pressures resulted in a decline of the buying capacity of the population[2]. And as an effort to close the external deficit a regime of import controls rather than of export promotion was chosen, so that the pressure of domestic demand acted as a further internal price increase mechanism, resulting in reduced domestic saving rates[3].

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1 This measure is the reverse of the productivity of capital shown in table 5. Taking a cross-country comparison it is, nevertheless, almost impossible to draw conclusions for the relationship between growth and capital-output ratios, since "relatively large intercountry differences in growth rates are accompanied by relatively small differences in investment ratios. Therefore the use of ICORs as an indicator of efficiency in the use of capital is a very deficient and insatisfactory measure. See UNCTAD, "The measurement of development effort", UN, N.Y., 1970, p. 27.

2 It has to be mentioned here, that while Ghana is free to pursue own monetary policies the Ivory Coast, being a member of the Franc-Zone, is not in a position to influence the internal money supply, thus having experienced very low inflationary pressures.

3 J. Clark Leith, "Foreign Trade Regimes and Economic Development: Ghana", Columbia University Press, 1974, specially chapter IV.

12. Nevertheless,can there be said that in Ghana,despite all the difficulties, a process of development without growth could be observed in the Nkrumah period? If development is defined as a process of persistent improvement of the well - being of the population measured by social indicators for education, the provision of health services, nutrition levels, housing and others, an improvement can surely be seen in Ghana, thanks to a massive inflow of foreign financement, mainly official aid. But lack of growth in per capita terms during this period brought the whole system to a collapse, since structural changes in the social sectors indicated can only be supported if the economy can generate important own financial resources. And this is only possible, if the economy shows positive growth rates in the medium and long run. This was certainly not the case in Ghana as opposed to the Ivory Coast, where the social reforms kept pace with the own financing capacity (table 6).

13. Thus, while Ghana did not fulfill the conditions for a self-sustaining growth process during the period 1960-66, as we have seen from the application of the Chenery and Strout model, the Ivory Coast performed excellently. This country continued to show positive signs during 1965-70. So it is to be asked, how was the performance of Ghana in the same period, i.e. after the fall of Nkrumah?

14. During the period of consolidation after the chaotic situation left by the Nkrumah-administration, from 1966 to 1968, the new government chose to devalue the currency (July 1967) and to launch the economy on an experiment aiming at a careful liberalization of imports. And in the year 1968 it anounced a two year development plan (1968-70), where the first priority was given to the agricultural sector as being the most important sector to develop before any considerable progress can be made.
This plan should build the base for a selfsustained growth through a better utilization of investment resources and imports, the maintainance of an internal financial equilibrium so to prevent price increases on the one side and an external financial equilibrium on the other side, by keeping the balance of payments deficit at the level of a reasonable estimation of the expected foreign capital inflow. The private consumption should not be allowed to grow by more than 1 percent per year and the public investment program of 222 million cedis should secure an annual growth rate between 4 and 5.5 percent,

Table 6 - Social indicators for Ghana and the Ivory Coast

	1960		1970	
	Ghana	Ivory Coast	Ghana	Ivory Coast
- Infant mortality rate[a]	156	-	-	140
- Life expectancy at birth[b]	-	35	46	42
- Urban population[c]	23.0	22.0	32.0	28.0
- Percent of Labour force in:				
- agriculture	58.0	86.0	54.0	78.0
- industry	15.0	2.0	-	5.0
- Percent unemployed	6.0[d]	-	6.0[d]	9.0[e]
- Percent of national income received by:				
- lowest 20 %	-	7.0	-	4.0
- highest 5 %	-	29.0	-	30.0
- Population per physician	21360	22000	12950	12140
- Population per hospital bed	-	570	760	680
- Per capita calorie supply[f]	95.0	94.0	96.0	108.0
- Adjusted school enrollment ratio				
- primary	59.0	46.0	89.0	77.0
- secondary	2.0	2.0	5.0	11.0
- Years of schooling provided[g]	15.0	13.0	15.0	13.0
- Vocational enrollment as % of sec. school enrollment	13.0	13.0	23.0	7.0
- Adult literacy rate	-	9.0	-	20.0
- Radio receivers per 1000 popul.	17.0	17.0	78.0	17.0
- Passenger cars per 1000 popul.	3.0	3.0	4.0	11.0
- Electric power consumption[g]	55.0	21.0	324.0	120.0
- Newsprint consumption[h]	0.6	0.1	0.4	0.2

[a] Per thousand live birth. - [b] Years. - [c] % of total. - [d] Registered unemployed. - [e] National and World Bank estimates. - [f] % of requirements. - [g] KWh per capita. - [h] Per capita kg per year.

Source: World Bank, World Tables 1976.

taking into account, that the international prices for cocoa showed a rising trend.
On account of the modest investment program, the plan has been characterized as a development program without investment after a period of investments without development. It was in fact the outcome of a simple reaccomodation of the old seven year plan of the Nkrumah period while the government is attempting to introduce in the future the annual development budget as the major instrument of its policy.

15. According to the Chenery and Strout model (table 3), Ghana indeed performed much better in the post Nkrumah period, meeting the conditions for self-sustained growth. Here the improved cocoa prices played a major role (the prices increased by almost 2.5 times between 1966 and 1970), but the benefit for the economy was limited, since the greater part of the foreign exchange receipts were absorbed by the debt service. On the other hand, the higher cocoa prices contributed to a rapidly growing aggregate demand, that without adequate surcharges, led to a rising demand for imports.By mid-1970 this brought the import-liberalization program to fail and induced a devaluation in 1971, which produced such an adverse shock to the economy, that the government was replaced by the military. The first measures of the new government were to revalue the currency and to introduce once again a strict import licensing system[1].

Some indicators of economic succes and effort

16. In the following pages it is intended to show by means of some indicators to what extent Ghana and the Ivory Coast have succeeded in securing a sustained rate of economic development based on their own efforts, that is to say, which has been the efficiency of both countries in mobilysing internal resources for development. Therefore, we need on the one side measures of success and on the other side measures related to effort.

17. As indicators of success we find in table 7 some measures that show how different the experiences of Ghana and the Ivory Coast have been.

In terms of growth, the Ivory Coast has been very successful, while Ghana can show only modest rates, that in per capita terms have not been able to keep

[1] J. Clark Leith, op. cit., p. 161-162 and chapter VI.

Table 7 - Indicators of success (yearly average growth rates, in percentages)

	1960-65		1965-70	
	Ghana	Ivory Coast	Ghana	Ivory Coast
Growth of GDP[a]	3.1	7.7	2.3	7.5
Growth of GDP/capita[a]	0.5	4.1	- 0.3	4.0
Growth of private consumption/capita[a]	1.7	3.3	- 1.1	2.7
Growth of exports[b]	0.5	12.6	15.8	15.5
Ratio of saving to GDP	10.4	15.9	9.1	16.4

[a] 1965=100. - [b] Current prices.

Source: Calculated from World Bank, World Tables 1976.

the real level of income, while the Ivory Coast can show in per capita terms also impressive figures. The private consumption per capita of Ghana kept rising in the 1960-65 period at higher rates than per capita income, thus being greatly responsible for the poor savings performance. The decline in per capita income in the period 1965-70 is directly responsible for the decline in private consumption per capita but had also an adverse effect on the savings capacity, which fell even below the level of 1960-65. In the case of the Ivory Coast the growth of private consumption per capita kept below the growth rate of per capita income, thus contributing to a good savings performance that even improved in the period 1965-70 as the growth rate of private consumption decelerated. And finally, we have a difference in the rate of growth of exports between Ghana and the Ivory Coast in the period 1965-70 in contrast to almost identical rates in the period 1965-70. This result was greatly influenced by the movement in the international prices for the most important export products, especially cocoa, as well as by the structure of the export supply in each country.

18. Since the export sector can be termed as having been the engine of growth in the Ivory Coast and an important constraint factor in Ghana, it is worth analysing it in more detail.

For this purpose a constant market share analysis was made to see how the actual export growth of the two countries performed in relation to a hypothetical growth which turns out of the concomitant interaction of three effects: the overall increase in total world trade, the commodity composition of world trade and the regional distribution of world trade. Therefore, if the exports grew at a different rate than total world exports, this can be due to the concentration on commodities for which the world demand was growing slower/faster than the world average (for all commodities) or due to a proportionately higher/smaller concentration on markets that are relatively stagnant in relation to the world average. The resulting difference is attributed to a higher/smaller competitiveness of the countries concerned as compared with the other exporting countries. A lack of competitiveness is then considered as the reflection of internal supply problems of the countries analysed.

The formula that allows us to make a decomposition of the past export growth of a country into the components just mentioned is the following[1]:

$$\sum_i \left(X_{i.}^{(2)} - X_{i.}^{(1)}\right) = r\sum_i X_{i.}^{(1)} + \sum_i (r_i - r)\, X_{i.}^{(1)} + \sum_i \sum_j (r_{ij} - r_i)\, X_{ij}^{(1)} + \sum_i \sum_j \left(X_{ij}^{(2)} - X_{ij}^{(1)} - r_{ij}\, X_{ij}^{(1)}\right)$$

where

X_{ij} = Export earnings of commodity i to the market j

$X_{i.}$ = X_{ij} = Total value of exports of commodity i to the world, in value terms

r = percentage increase in the world trade in aggregate from time (1) to time (2), refered to world's earnings from exports

r_i = percentage increase in the world trade for commodity i from time (1) to time (2)

r_{ij} = percentage increase in the world export of commodity i to the market j from time (1) to time (2)

[1] The model was first used by H. Tyszynski, "World trade in manufactured commodities, 1899-1950", in: The Manchester School of Economic and Social Studies, Vol. XIX, Manchester, 1951, pp. 272 squ.

Table 8 - Ghana: Constant market share analysis of the sources of change in exports (in 1000 US-$)

	0-9	0+1	2+4	3	5	7	6+8
1 Export 1962	281186	204185	74275	-	-	-	2556
2 Exports 1966	237627	167432	66964	133.3	579	-	1014
3 Export increase	43559	- 36753.0	- 7311.0	1333.0	579	-	- 1542.0
4 Hypothetical exp.increase		68402.0	19757.2	-	-	-	1283.1
5 Net difference:		-105155.0	-27068.2	1333.0	579.0	-	- 2825.1
a commodity comp. effect		- 21031.1	-12775.3	-	-	-	163.6
b market dist.eff.		15582.8	- 2765.1	-	-	-	- 220.2
c competitiveness eff.		- 99706.7	-11527.8	1333.0	579.0	-	- 2768.5
1 Exports 1966	237627	167432	66964	1333	579	-	1014
2 Exports 1970	425850	330731	60772	654	394	236	32542
3 Export increase	188233	163299.0	- 6192.0	- 679.0	-185.0	236.0	31528.0
4 Hypothetical exp.increase		44202.0	17745.5	691.8	344.5	-	591.2
5 Net difference:		119097.0	-23937.5	-1370.8	-529.5	236.0	30936.8
a commodity comp. effect		- 32816.7	-17812.4	- 16.0	37.1	-	52.7
b market dist.eff.		14836.1	6419.6	118.5	- 78.7	-	- 107.8
c competitiveness eff.		137077.6	-12544.7	-1473.3	-487.9	236.0	30991.8
1 Exports 1962	281186	204185	74275	-	-	-	2556
2 Exports 1970	425850	330731	60772	654	394	236	32542
3 Export increase	144664.0	126546.0	-13503.0	654.0	394.0	236.0	29986.0
4 Hyp.exp.increase		140683.5	44713.6	-	-	-	3522.2
5 Net difference:		14137.5	-58216.6	654.0	394.0	236.0	26463.8
a commod.comp.eff.		-104746.9	-44565.0	-	-	-	449.9
b market dist.eff.		46431.0	10436.8	-	-	-	- 821.8
c competitiveness eff.		44178.4	-24088.4	654.0	394.0	236.0	26835.7
1 Exports 1970	425850.0	330731.0	60772.0	654.0	394.0	236.0	32542.0
2 Exports 1974	638748.0	474043.0	111849.0	12352.0	841.0	575.0	38390.0
3 Export increase	212898.0	143312.0	51077.0	11698.0	447.0	339.0	5848.0
4 Hyp.exp.increase		585063.1	107505.7	1156.9	697.0	417.5	57566.8
5 Net difference:		-441751.1	-56428.7	10541.1	-250.0	- 78.5	-51718.8
a comm.comp.effect		-166027.0	-42844.3	2064.7	54.8	-111.4	-13602.6
b market dist.eff.		25658.1	11502.1	- 910.1	- 27.2	- 43.0	-983.7
c competitiveness eff.		-301382.2	-25086.5	9386.5	-277.6	75.9	-37132.5

Source: Computed on basis of data available from UN Commodity Trade Statistics and Monthly Bulletin of Statistics.

Table 9 - Ivory Coast: Constant market share analysis of the sources of change in export (in 1000 US-$)

	0-9	0+1	2+4	3	5	7	6+8
1 Exports 1962	182461.0	136709.0	41730.0	-	128.0	489.0	3278.0
2 Exports 1966	310537.0	206677.0	90461.0	-	1404.0	2336.0	9618.0
3 Export increase	128076.0	69968.0	48731.0	-	1276.0	1847.0	6340.0
4 Hypothetical exp. increase		45795.0	11100.0	-	78.2	271.4	1645.0
5 Net difference:		24173.0	37631.0	-	1197.8	1575.6	4694.4
a Commodity comp. effect		-14081.0	- 7177.6	-	22.8	57.2	209.8
b market dist. eff.		12113.0	5604.8	-	11.9	28.8	178.3
c competitiveness effect		26141.0	39203.8	-	1163.1	1489.6	4306.3
1 Exports 1966	310537.0	206677.0	90461.0	-	1404.0	2336.0	9618.0
2 Exports 1970	468800.0	310003.0	125828.0	2904.0	3025.0	5022.0	22015.0
3 Export increase	158263	103326.0	35367.0	2904.0	1621.0	2686.0	12397.0
4 Hyp.ex. increase		54562.7	23972.2	-	835.4	1710.0	5607.3
5 Net difference:		48763.3	11394.8	2904.0	785.6	976.0	6789.7
a commodity comp. effect		-40508.7	- 24062.6	-	89.9	469.5	500.1
b market dist. effect		46572.2	7175.6	-	-191.7	- 621.5	- 432.1
c competitiveness effect		42699.8	28281.8	2904.0	887.4	1128.0	6721.7
1 Exports 1962	182461.0	136709.0	41730.0	-	128.0	489.0	3278.0
2 Exports 1970	468800.0	310003.0	125828.0	2904.0	3025.0	5022.0	22015.0
3 Export increase	286339.0	173294.0	84098.0	2904.0	2897.0	4533.0	18737.0
4 Hypothetical exp. increase		94192.5	25121.5	-	200.8	827.9	4517.1
5 Net difference:		79101.5	58976.5	2904.0	2696.2	3705.1	14219.9
a commodity comp. effect		-70131.7	-25038.0	-	47.0	240.1	576.9
b market dist. effect		63425.6	12146.6	-	36.4	- 79.3	325.5
c competitiveness effect		85807.6	71867.9	2904.0	2612.8	3544.3	13317.5

Source: Computed on basis of data available from UN, Commodity Trade Statistics and Monthly Bulletin of Statistics.

19. The export growth of Ghana and the Ivory Coast was analysed for the following periods: 1962-66, 1966-70, 1962-70 and 1970-74 in the case of Ghana. The results can be seen in tables 8 and 9 respectively. It is interesting to note, that while Ivory Coast shows a high competitiveness effect in all export commodities for the periods chosen, Ghana can only show substantial positive competitiveness effects in the period 1966-70, where in the category 0+1 the enormous increase in cocoa prices and in the category 6+8 the aluminium exports of the VALCO company that started production in that period are mainly responsble.

For both countries, due to the main export orientation toward the European markets, which belonged to the most dynamic of the world, especially the EEC, it was possible to counterbalance in part the negative effect of the commodity composition of exports, which still concentrates on primary products. And due to a higher export diversification in Ivory Coast, compared to Ghana, the negative commodity composition effect remained also smaller. Both countries, compared to the exports of the group of all LDC's in the period 1962-70, performed highly above average in primary goods as well as in manufactured exports (table 10). For Ghana, this is a surprising result.

The analysis in the period 1970-74 does not allow to draw valid conclusions for Ghana, since the world exports were highly influenced by the oil price increase, which more than doubled the participation of the SITC 3 category in total world trade, from 9.1 percent in 1970 to 19.5 percent in 1974.

20. Comparing the performance of the export sectors in both countries we can see, that the Ivory Coast was far more successful in diversifying the export structure than Ghana. The Gini/Hirshman concentration index[1] based on the three digit SITC trade classification shows the following figures for the Ivory Coast: 53.1 (1962), 49.5 (1966) and 46.7 (1970) as compared to 71.8 (1962), 70.2 (1966), 77.2 (1970) and 74.2 (1974) for Ghana. Further, while

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[1] Gini/Hirshman, $\sqrt{\sum_i \left(\frac{x_i}{x.}\right)^2} \times 100$, where x_i = exports of commodity i according to the three digit SITC trade classification and x. = total exports.

Table 10 - Constant market share analysis of the sources of change in LDC[a] export of primary products and manufactures 1962-70, in mill. US-$

	Primary exports			Manufactured exports		
	LDCs	Ghana	Ivory Coast	LDCs	Ghana	Ivory Coast
Export increase	16802.0	113.7	260.3	8389.0	30.6	26.2
Hypothetical export increase	17625.2	185.4	119.3	6831.3	3.5	5.5
Net difference	- 823.2	- 71.7	141.0	1557.7	27.1	20.7
Commodity comp. effect	1108.1	-149.3	- 95.2	- 455.9	0.4	0.9
Market dist. effect	570.1	56.9	75.6	- 210.2	- 0.8	0.3
Competitiveness effect	- 2501.4	20.7	160.6	2223.8	27.5	19.5

[a] Countries covered by class II of the UNCTAD classification of countries.

Source: For LDCs, R. Banerji, The performance of less developed countries: a constant market share analysis, in: Weltwirtschaftliches Archiv, Band 110, Heft 3, 1974, p. 460 and for Ghana and Ivory Coast, tables 8 and 9 respectively.

the participation of manufactures (SITC 5-8 and 053) in total exports rises from 3.5 percent in 1962 to 8.8 percent in 1970 for the Ivory Coast, the comparable figures for Ghana are 1.0 percent and 8.0 percent respectively. The enormous increase in Ghana is, as mentioned before, almost completely accounted for by aluminium exports and there are only seven other export products that show export values of more than 100 000 US-$ in 1970. In the Ivory Coast, on the contrary, the manufactured exports are quite evenly distributed among 37 products with export values of more than 100 000 US-$ in 1970, with the exception of plywood and veneers, cotton fabrics and metal tanks and boxes which show much higher export values[1].

In per capita terms the exports of manufactures of the Ivory Coast grew from 1.67 US-$ in 1962 to 4.52 US-$ in 1966 and to 8.12 US-$ in 1970, while in Ghana the corresponding figures are 0.41, 0.29, 3.93 and 4.32 US-$ in 1974. These results are below a kind of normal pattern calculated by UNCTAD on the basis of a cross section analysis including 54 developing countries where the explanatory variables considered were the following: national availability of arable land per capita, percentage of total population engaged in manufacturing, annual average per capita foreign aid over the five year period considered (1961-65) expressed in dollars and two dummy variables representing membership in the Commonwealth and the EEC preference system respectively[2]. Nevertheless, the average yearly rates of growth of manufactured exports are impressive in both countries (more than 20 percent growth per year).

21. After having presented some indicators of success we turn to the measurement of the efforts these countries made in order to reach their development goals. Some partial indicators have been developed for this purpose. Although they are unsatisfactory for giving a comprehensive picture of the development effort of individual countries they give at least a first approach to the subject.

22. The first indicator tries to measure the share of GDP growth attributable to the national effort. For this purpose the proportion of gross domestic capital formation that is financed by national sources is taken and multiplied

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1 It is remarkable, that more than 41 percent of the manufactured exports in 1970 went to the countries of the West-African Monetary Union. The relatively undervalued currency of Ivory Coast compared to the other members of the Union is most likely to have played an important role in this respect. See R.Langhammer, "Die Westafrikanische Wirtschaftsgemeinschaft", in: Afrika-Forum, Vol. 9, No 7/8, July/August 1973.

2 UNCTAD, "The measurement of development effort", op. cit., p. 47. Due to the inclusion of other semi-processed primary products like food, drink and timber products in the category of manufactures (normally SITC 5-8), Ghana and the Ivory Coast happen to rank above the estimated export of manufactures per capita in the year 1966 in the UNCTAD calculation.

with the overall growth rate of the economy. This so called Kroeller/Hayes indicator is in spite of its limitations - it assumes a strong and stable relationship between investments and growth, equal productivity between foreign and domestic capital and no influence of foreign capital inflows on the internal savings rate - a good starting point for the examination of development performance under the viewpoint of own efforts. The results for Ghana and the Ivory Coast (table 11) show that the proportion of the growth rate sustained by national effort is substantially higher for the Ivory Coast. It is also interesting to note, that while the ratio of gross savings to gross domestic capital formation declines over time for the Ivory Coast, in Ghana a substantial recuperation can be observed. This indicates, that the rising investment rate of the Ivory Coast has been increasingly financed by foreign sources, while Ghana, having heavily relied on external financement during the 1960-65 period and thus accumulated an enormous external debt, was forced to reduce drastically the investment rate in the years thereafter and relied more on internal savings for this purpose.

23. An additional effort indicator is the relationship between domestic resources mobilized and GDP. This indicator developed by W.A. Lewis[1], states that to attain self-sustained growth the ratio of domestic resources mobilized to GDP has to reach the 30 percent level. It is a kind of measure of the national effort made in increasing investment in men and resources faster than current consumption. Lewis further suggested, that aid given to an individual country, whose purpose should be to give a "big push" in the attainment of self-sustained growth, could be then made subject to a multiple of the following expression:

$$L = \frac{R_1}{GDP_1} - \frac{R_4}{GDP_4}$$

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[1] W. A. Lewis, "Richard T. Ely Lecture. A review of economic development", in: American Economic Review, Vol. 55, No. 2, May 1965.

Table 11 - Kroeller/Hayes indicator for Ghana and Ivory Coast

	Rate of growth of GDP[a]		Ratio of gross savings to GDCF		Kroeller/Hayes indicator	
	Ghana	Ivory Coast	Ghana	Ivory Coast	Ghana	Ivory Coast
1960			65.6	144.6		
1961	3.5	9.9	41.2	91.6	1.4	9.1
1962	4.1	1.2	69.2	92.0	2.8	1.1
1963	4.3	14.4	57.8	99.3	2.5	14.3
1964	2.2	17.6	74.7	108.7	1.6	19.1
1965	1.4	- 3.1	38.9	79.5	0.5	- 2.5
1966	- 4.3	5.5	53.9	77.2	- 2.3	4.2
1967	3.1	3.5	57.4	69.7	1.8	2.4
1968	0.4	15.0	88.0	99.6	0.3	14.9
1969	5.9	4.6	83.6	99.4	4.9	4.6
1970	6.8	9.4	80.2	80.3	5.5	7.5
1971	7.8	6.0	59.1	65.5	4.6	3.9
1972	- 0.5	6.1	-	65.1	-	4.0
1973	-	7.0	-	84.5	-	5.9
60-65	3.1	8.0	56.4	94.2	1.7	7.5
65-70	2.4	7.6	72.6	85.2	1.7	6.5

[a] In 1965 prices.

Sources: Own calculation based on World Bank, World Tables 1976.

where R = domestic resources mobilized, equal to gross investments (less foreign aid) plus current government expenditures (minus defence and welfare transfers) and subscripts refer to years.

Table 12 - Ratios of domestic resources mobilized to GDP: Ghana and Ivory Coast

	1960/61	1967/68	1971/72
Ghana	31.2	24.2	22.0
Ivory Coast	-	31.6	36.2

Source: Own calculations based on World Bank, World Tables 1976.

According to table 12 in both countries the ratio exceeded the 30 percent target, Ghana experiencing a decline in the post Nkrumah period. According to the Lewis criterion it would be suggested paradoxically to withhold aid from the Ivory Coast on account that a further mobilization of domestic resources seems unnecessary. Ghana, on the other side, should be granted aid in order to regain the 30 percent level, but its indebtness capacity may put limits to additional foreign lending. Both conclusions are highly questionable. Therefore, the use of this criterion as a measure for the efficient employment of available resources seems to lack significance and further refinements should become necessary.

24. Finally there is another indicator of development effort, which points at a comparison of actual savings with a measure of maximum potential savings. In measuring potential savings again a criterion suggested by Lewis[1] was used,

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[1] W.A. Lewis, op. cit.

whereby per capita consumption should not be permitted to increase by more than 60 percent of the increase in per capita income.

The calculations (table 13) indicate, that for both countries, Ghana and the Ivory Coast, consumption per capita increased above this rate, taking the year 1960 as a base.

Table 13 - Actual and maximum potential savings: Ghana and Ivory Coast

	Maximum potential savings ratio (with 1960 base): S^x/GDP						Actual savings ratio: S/GDP					
	1960	1965	1966	1970	1971	1973	1960	1965	1966	1970	1971	1973
Ghana	-	26.0	27.4	-	35.4	-	16.0	7.0	6.9	-	8.3	-
Ivory Coast	-	29.6	30.7	37.6	-	39.0	21.0	15.1	15.1	17.7	-	18.4

Note: S^x/GDP = maximum potential savings ratio defined in terms of the 60 percent consumption norm and S/GDP = actual savings ratio.

Source: Own calculations based on World Bank, World Tables 1976.

This performance can be regarded as good or bad depending on what is emphasized, the growth of consumption for either welfare or economic reasons or the increase of savings, which for the purpose of attaining self-sustained growth seems to be more important. By the last of these standards Ivory Coast performed far better than Ghana. On the other hand, if consumption is considered to provide incentives that serve to stimulate growth, this has certainly not been the case in Ghana, as well as additional savings may have hardly been able to bring important additional growth impulses in the case of Ivory Coast. For these reasons the potential savings indicator is often considered as an indicator of development success rather than of effort.

Present problems and future prospects for Ghana and Ivory Coast

25. If development can be considered as a process of constant transformation of economic and social structures, the only way to sustain it is through continued growth, development being a long term and growth a medium term phenomenon. Continued growth implies, on the other side, that important structural changes do take place. Therefore, the criterion for assessing a development process should be the permanence of growth over the long term[1].

26. Taking this criterion as base for considering the development prospects of the two countries analysed, the Ivory Coast performs very well, having secured a continued and strong growth process along the time, accompanied by important structural changes. Since this growth process has been mainly achieved through the expansion of agricultural export production, further growth of this sector can be achieved by diversifying the production structure and by incorporating new land to the production process, in order to secure an external equilibrium and sufficient financing.
In fact, new land in the western regions have been increasingly incorporated into production, a new harbour has been built in that region (San Pedro) to serve as a counterbalance to Abidjan, and new products have been sucessfully promoted. By this way Ivory Coast has become the most important coffee producer in Africa, ranking third in the world after Brazil and Colombia, the second largest producer of cocoa after having overtaken Nigeria and at its present rate of expansion, with chances to overtake Ghana in the medium term and, according to the massive plantation program of oil palm it is expected to become by 1980 the world's largest producer of palm oil[2]. Also the production of pineapples, bananas, coconuts, rubber, avocados and other fresh fruits have played a very important role.

[1] M. Penouil, op. cit., p. 326.
[2] This massive plantation program has been often criticized as being too capital intensive, thus not contributing to create sufficient employment opportunity as could be the case by an alternative use of the capital invested.

With respect to self-sufficiency in crops for internal consumption big successes have been achieved in rice, where now exportable surpluses are available, and sugar, where important production increases are on the way. Finally, as the development effort based on the agricultural sector does not give an adequate growth participation to those regions which are less favoured by their agricultural potentialities, cotton production has been successfully promoted in the northern region, so that now Ivory Coast is the second largest cotton exporter among the Sahelian states after Chad. And this expansion of agricultural production is likely to continue as important infrastructural investments are taking place, which also aim at a diminution of the development differences between south and north and south-west.

27. In order to reduce dependence on agricultural export products industrialization based on comparative advantages has been increasingly promoted. Especially the industries which use the advantages of low labour costs and the availability of national raw materials, like textiles and clothing, have expanded dramatically in the last years, contributing in an increasing way to diversify the export structure.
But in spite of this promising development the problem of a relatively high unemployment rate resulting from a strong rural-urban migration has not been solved adequately[1]. And since in the last years large scale manufacturing which uses more capital-intensive technique has been increasingly promoted, the labour absorption capability may not have improved, despite the relatively labour intensiveness of the branches promoted[2]. Therefore, a more fruitful approch to solve the unemployment problem would be to develop suitable intermediate techniques and promote effectively small- and medium-size firms rather than large scale industrial establishments.

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1 The massive inflow of migrant workers from neighbouring countries in response to better economic opportunities, especially from Upper Volta, has contributed importantly to high unemployment rates. They compete for working places with the Ivorians, thus keeping the salaries down. The migrant workers constituted in the year 1970 more than 56 percent of all wage and salaries earners; in Abidjan this figure was "only" 35 percent. See H. Joshi, H. Lusbell and J. Mouly, "Abidjan. Urban development and employment in the Ivory Coast", ILO, Geneva, 1976.

2 A recent study on multinational firms in Brazil has showed, that in the choice of production techniques scale differentials are more important than cost of labour and the behavioral elasticity of substitution between labour and capital in most manufacturing happens to be small. S. A. Morley and G.W.Smith, "The choice of technology: multinational firms in Brazil", in Economic Development and Cultural Change, Vol. 25, No. 2, January 1977.

Further, the ambitious targets of the development plan 1975-80 call for higher and higher investments to sustain the growth rate of past years. This will imply, that increased foreign borrowing will become necessary as internal sources of financement have not been growing correspondingly. Since the Ivory Coast has reached an income level per head that is much higher than in most African countries it is not likely that cheap credits and grants will be available in the quantities received until now and external borrowing will become more expensive. But as the debt servicing lies still below the 10 percent mark of yearly exports and the economy can be considered as having a sustained growth base, the necessary funds to finance the projected development program will probably be raised without any difficulty.

28. The prospects for the economy of Ghana are not so promising. Ghana has not yet been able to achieve a sustained high growth rate to permit substantial increases in per capita income nor has the savings rate been sufficiently high to enable a process of self-sustained growth since consumption rose rapidly, thus contributing to persistent price increases. And this situation has not changed after five years since General Acheampong assumed power in order to put order into the economy.

29. The present difficulties are officially explained by the consequences of the rise in oil prices, lack of foreign investments and two seasons of bad harvest. But one of the key economic difficulties lies in the overvalued exchange rate that obliges to keep restraining imports, thus feeding internal inflation[1]. For the same reason the promotion of non traditional exports, especially manufactures, has been practically impossible. But it seems to be politically unfeasable for the present government to change this situation, for one of the main arguments for assuming power in 1972 was the devaluation of the currency by nearly 50 percent undertaken by the Busia-administration.

1. A sudden devaluation by a large amount will also have negative effects on the internal prices. Therefore a system of planned devaluations by small amounts, known as "trotting peg", is most likely to bring the best results. See J.B. Donges, "Brazil's trotting peg. A new approach to greater exchange rate flexibility in less developed countries", Washington, D.C., 1971.

Therefore, the industrialization process of Ghana based on import substitution has slipped from the easy stage into the difficult stage and was unable to step to the export diversification stage. The exchange rate structure is thus systematically biased against industrial exports, making them unprofitable. This is what has been called the "inefficiency illusion"[1].

Further, the so called operations "feed yourself", to achieve selfsufficiency in agriculture and "feed your industry", aimed at producing the necessary raw materials for industrial processing have been loosing impetus and have also suffered from bad weather. Additionally the most important agricultural products, cocoa and timber, are increasingly facing competition from the Ivory Coast. And lastly, the mismanagement of the import licensing system, together with the overvalued exchange rate have been feeding corruption and smuggling. The relatively cheap imports of raw materials for industry and final goods expressed in national currency as well as internally produced agricultural goods are attracted towards neighbouring countries, where higher prices in convertible currencies can be achieved[2].

30. It can then finally be said, that while Ivory Coast by choosing a model of an open economy based on comparative advantages has been able to attain high growth rates and self-sustaining growth[3] at the price of a relatively high foreign dependency, Ghana by choosing a model of forced industrialization with the target of lessening foreign dependency, has payed the price of not being able to show comparably good economic results, whereby mismanagement, lack of sound economic projects and political instability may have played an important role.

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[1] D. Schydlowsky, "Latin American Trade Policies in the 1970's: a prospective appraisal", in: Quarterly Journal of Economics, Vol. 86, No. 2, May 1972 and ——, "Price and Scale Obstacles to Export Expansion in LDC's" Proceedings of the Rehovot Conference on Economic Growth in Developing Countries, September 1973.

[2] A. Kumar, "Smuggling in Ghana: its magnitude and economic effects", in: The Nigerian Journal of Economic and Social Studies, Vol. 15, No. 2, July 1973.

[3] Ivory Coast is not the only example of success by choosing the above mentioned development strategy and numerous other prominent cases can be enumerated, like Taiwan, South Corea, Singapore, Spain, Colombia, etc.

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