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Benin: Selected Issues and Statistical Appendix

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INTERNATIONAL MONETARY FUND

BENIN

Selected Issues and Statistical Appendix

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Approved by African Department

June 6, 2008

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I. BENIN'S EXTERNAL SUSTAINABILITY AND COMPETITIVENESS[1]

A. Introduction

1.   This chapter examines the external sustainability and competitiveness of Benin's economy. The chapter uses four approaches to evaluate external sustainability. These include assessments of: (i) Benin's balance of payment flows, (ii) the fundamental equilibrium exchange rate (FEER), (iii) the level of the real effective exchange rate (REER) using the macroeconomic balance approach, and (iv) external sustainability as indicated by Benin's net foreign asset (NFA) position. Competitiveness is assessed using the purchasing power parity (PPP) approach and competitiveness surveys.

2.   There are several reasons for caution when evaluating Benin's external sustainability. First, Benin is a member of the West African Economic and Monetary Union (WAEMU). As such, it has access to the pooled reserves of the Central Bank of West African States (known by the French acronym BCEAO). This means that Benin may be able to sustain larger current account deficits than would be the case if it were not a member of the union. At the same time, the exchange rate is not determined by developments in Benin alone but in the WAEMU as a whole. For these reasons, the IMF does not assess external stability at the level of individual WAEMU members but at the level of the union as a whole. Nonetheless, it may still be useful to examine Benin's individual performance in relation to its peers. This highlights trends in Benin's external sustainability and its contribution to the stability of the WAEMU as a whole.

3.   A second reason for caution is that different methodologies produce different assessments of competitiveness. This is not just the case for Benin but for other countries as well. For example, Roudet, Saxegaard, and Tsangarides (2007) note that "there is significant uncertainty about the path of the equilibrium real exchange rate in WAEMU countries and thus the degree of exchange rate misalignment."[2] Using four different econometric techniques to estimate the impact of fundamentals on the exchange rate, they find that coefficients and significance levels vary substantially depending on the technique employed. Similarly, the 2008 assessment of WAEMU's external stability arrived at different conclusions regarding the WAEMU's competitiveness depending on whether the equilibrium real exchange rate or external sustainability approach is used.

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[1] Prepared by Lawrence Dwight.

[2] Roudet, Saxegaard, and Tsangarides. *Estimation of Equilibrium Exchange Rates in the WAEMU: A Robustness Approach*. IMF Working Paper No. 07/194, p. 38-39.

4.   In Benin's case, assessment of balance of payments flows, the equilibrium real exchange rate, and the macroeconomic balance approach suggest the current account and real effective exchange rate are broadly in line with fundamentals. However, the external sustainability approach suggests the current account deficit is not sustainable. In assessing external sustainability it is best not to rely on any one approach, but to form a general view taking into consideration the conclusions of a range of measures.

5.   With regard to competitiveness, the PPP approach indicates that Benin has lost some competitiveness vis-à-vis other members of the WAEMU since the 1994 devaluation. Competitiveness surveys suggest that ranked globally, Benin's competitiveness is low.

Overview of Results

External Sustainability

According to the approach used, assessment of Benin's external sustainability leads to the following conclusions:

- **Balance of Payments Flows**: suggest Benin's external position is sustainable. Large trade and current account deficits are comfortably financed by inflows through the capital and financial accounts, in particular project grants and loans, private capital, and inflows to commercial banks. Benin has also been a net contributor to the BCEAO's international reserves since 1991.

- **Fundamental Equilibrium Exchange Rate** (FEER): assessments indicate Benin's REER is within 3-7 percent of its equilibrium value, well within the confidence interval for this approach. Thus, the FEER approach concludes that Benin's real effective exchange rate is broadly in line with fundamentals.

- **The Macroeconomic Balance Approach**: suggests that the underlying current account deficit and real effective exchange are in line with the norm for a low income African country with substantial aid inflows.

- **The External Sustainability Approach**: suggests modest overvaluation. Based on sustainable levels of foreign direct investment as well as portfolio and debt flows, it is estimated that Benin could sustain a net foreign liability position in the range of 40-60 percent of GDP, corresponding to current account deficits of 3-5 percent of GDP. To reduce the underlying current account deficit of 6 percent of GDP to this range would require a real devaluation of 5-12 percent.

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Table 1. Benin: External Sustainability and the Real Exchange Rate

Technique	Assessment	Over (+) or Under(-) Valuation (percent)
Balance of Payment Flows	Flows in line with fundamentals	0
Fundamental Equilibrium Exchange Rate	REER broadly in line with fundamentals	+3-7
Macroeconomic Balance Approach	Current account deficit in line with fundamentals	0
External Sustainability Approach	Current account deficit may be unsustainable at current levels	+5-12

Competitiveness

- **Purchasing Power Parity**: shows that Benin's real effective exchange rate has risen 41 percent since 1994, more than any other WAEMU member. During the same period, relative productivity gains have been modest—per capita output rose 20 percent—not exceptional relative to the WAEMU countries and other trading partners. Thus, Benin appears to have lost competitiveness vis-à-vis several other WAEMU members.

- **Surveys of Competitiveness**: such as the World Bank's *Doing Business Indicators* and the World Economic Forum's *Global Competitiveness Index* rank Benin in the bottom 20 percent in the world. However, Benin is ranked the most competitive country in the WAEMU. Areas ranked as in need of urgent reform are contract enforcement, paying taxes, inadequacies in education, and infrastructure.

Table 2. Benin: Competitiveness

Technique	Assessment
Conditional Purchasing Power Parity	Loss of competitiveness relative to other WAEMU countries of 14 percent
Survey Indicators	In the bottom 20 percent globally, but best in WAEMU

<u>**Assessing External Sustainability**</u>

B. Evolution of Benin's Balance of Payments

6.   The balance of payments approach examines the sustainability of Benin's current account deficit based on the nature and sustainability of capital inflows and the overall level of Benin's international reserves. Examination of the balance of payments shows that Benin has been a net contributor of reserves to the BCEAO since 1991. Some key features of the balance of payments are:

- While the **current account** has registered a deficit averaging 5¾ percent of GDP from 1991 to 2007, this has been more than offset by a surplus on the capital and financial account.

    -- The deficit on trade in goods and non-factor services averaged more than 11 percent of GDP.

    -- Deficits on the trade account have been partly offset by a steady flow of private and public transfers averaging 6½ percent of GDP. Transfers are evenly split between private and public transfers.

- On the **capital and financial account**, grants and loans (averaging 4¾ percent of GDP) and private capital inflows (averaging 2 percent of GDP), have been more than enough to finance the current account deficit.

- On average, Benin's **international reserves** have grown by 2½ percent of GDP per annum since 1991.

- In conclusion, Benin's balance of payments appears sustainable on a flow basis. The deficit on the trade balance has been financed by transfers, grants and loans, and more recently by private capital flows.

    -- Nonetheless, while the *flows* in the balance of payments appear sustainable, the current account deficit could lead to an unsustainable *stock* of net foreign liabilities. Indeed, because of large debt stocks, Benin received HIPC debt relief in 2003 and MDRI relief in 2006. An assessment of the evolution of Benin's stock of net foreign liabilities is taken up in section E of this chapter.

Figure 1. Benin: Developments in the Balance of Payments, 1991-2007
(Percent of GDP)
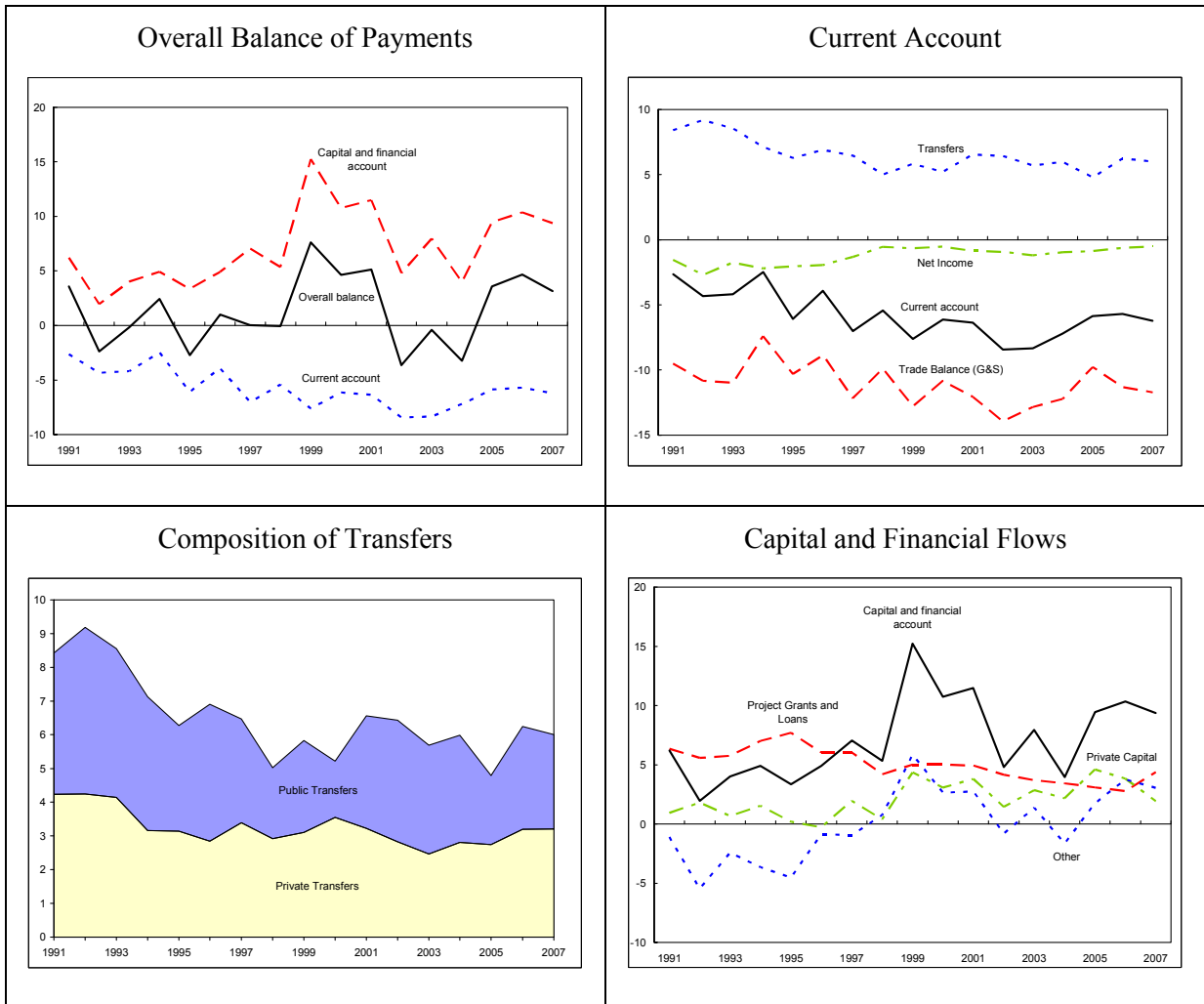
C. Reduced Form Estimation of the Equilibrium Real Exchange Rate

7.   The equilibrium real exchange rate approach compares a country's observed exchange rate to an equilibrium exchange rate estimated from economic fundamentals. The first step in the ERER approach is to calculate the observed real effective exchange rate (REER) from the nominal effective exchange rate and price indices for a country and its trading partners. The real effective exchange rate is defined as:

(1) $REER \equiv \dfrac{EP}{P*}$

Where: REER = the observed real effective exchange rate,
       E = the nominal effective exchange rate,
       P = the domestic price index, and
       P* = the weighted partner country price index.

Note that the real effective exchange rate can be decomposed into the equilibrium real equilibrium effective exchange rate and deviations from equilibrium:

(2) $REER \equiv EREER + \varepsilon$

       EREER = the unobserved equilibrium real exchange rate, and
       ε = deviation from equilibrium.

The ERER approach posits that the equilibrium real exchange rate is a function of economic fundamentals:

(3) $EREER = f(fundamentals)$

By estimating the EREER, one can estimate the deviation of the observed exchange rate from its equilibrium value.

The Fundamental Equilibrium Exchange Rate (FEER)

8.   The FEER approach assumes the EREER is a function of economic fundamentals. Typical fundamentals include public consumption, the terms of trade, investment, productivity, and openness to trade.

9.   In this chapter, the following empirical model is estimated:

$$\ln(REER) = \beta_0 + \beta_1 \ln(NIR) + \beta_2 \ln(CGR) + \beta_3 \ln(OPEN) + \beta_4 \ln(PROD) + \beta_5 \ln(TOT)$$
$$+ \beta_6 \ln(DS) + D_{1994} + \varepsilon_t$$

where ln denotes the natural logarithm, ε_t, is the error term and

REER = real effective exchange rate
NIR = gross investment as a share of GDP
CGR = government consumption as a share of GDP
OPEN = openness = exports and imports of goods and services as a share of GDP
PROD = productivity = real GDP per capita
D_{1994} = dummy for the 1994 devaluation,
TOT = terms of trade
DS = debt service (PMG approach only)

Fundamentals that Drive the Exchange Rate

In Fundamental Equilibrium Exchange Rate (FEER) models a number of factors are hypothesized to influence the equilibrium real exchange rate:

- *Investment*: To the extent that investment is spent on non-traded goods, increases in investment should result in increased demand for non-traded goods. This would be expected to raise the price of non-traded goods and cause an appreciation of the exchange rate. However, if investment is intensive in traded goods, increases could result in deprecation. The measure used in this chapter is gross investment to GDP.

- *Productivity*: As explained earlier, according to the Balassa-Samuelson theory more rapid productivity growth in the trade goods sector or a more capital intensive traded goods sector is expected to cause the real exchange rate to appreciate. To proxy productivity, this chapter uses real GDP per capita.

- *Public consumption*: Increases in public consumption are expected to increase the demand for goods. Whether this increased demand falls on traded on non-traded goods depends on the composition of government expenditure. If government expenditure is more heavily weighted toward non-traded goods, this could raise the price of non-traded and hence result in appreciation of the real exchange rate. The measure used in this chapter in public consumption to GDP.

- *Openness*: Openness is a proxy for trade controls. A reduction in controls would be expected to increase trade. Whether increased trade results in an appreciation or depreciation of the real exchange rate, depends on individual country circumstances. The measure used in this chapter is exports plus imports of goods and services to GDP.

- *Terms of trade*: An increase in the terms of trade raises a country's income. Part of the increase will be spent on traded goods and part on non-traded goods. For a small country, the additional demand for traded goods can be satisfied by increased imports. If demand and supply for non-traded goods are in equilibrium prior to the improvement in the terms of trade then there will be excess demand for non-traded goods. To the extent this raises non-traded goods prices, an improvement in the terms of trade would be expected to appreciate the real exchange rate.

- *Debt service*: The PMG approach includes debt service. An increase in debt service payments causes the external balance to deteriorate. A depreciation of the real exchange rate would be required to restore equilibrium. Thus, higher debt service should be associated with a deprecation of the exchange rate.

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Figure 2. Benin: The Real Exchange Rate and Fundamentals
(Actual and Smoothed)
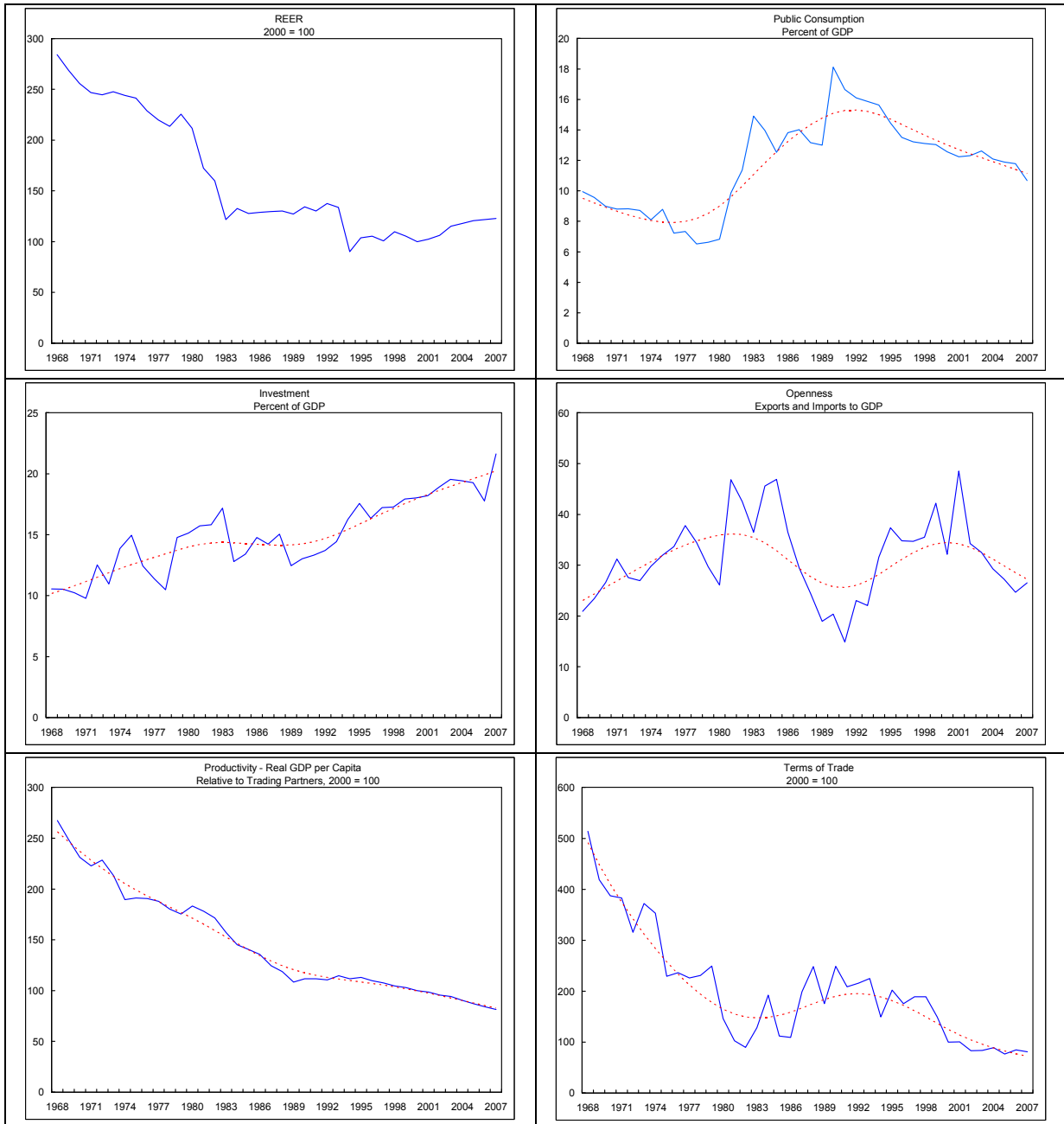
10.   Four different techniques were used to estimate the FEER: Johansen's vector error correction (VECM) technique, Pesaran and Shin's autoregressive distributed lag (ARDL) technique, Pedroni's fully modified ordinary least squares (FMOLS) technique, and the pooled mean group (PMG) technique proposed by Pesaran, Shin, and Smith (1999) and

implemented for Sub-Saharan African countries by Chudik and Mongardini (2007). Johansen's approach is appropriate in the presence of cointegration. Unfortunately, cointegration tests have low power in small samples. As an alternative to Johansen's technique, an autoregressive distributive lag model was also estimated. The ARDL technique is expected to have better small sample properties and is robust to different orders of integration. In contrast to these two time series approaches, the FMOLS and PMG are panel techniques. The panel methodology offers the prospect of greater precision since data is aggregated from more than one country. However, it assumes that the explanatory variables have the same elasticity with respect to the EREER for all members of the panel in the long run, although short run dynamics may vary.

Data and Implementation

11.   Data on government consumption, gross investment, export and imports, productivity, and terms of trade were obtained for 1968 to 2007 (see Figure 2). Prior to 1984, data from different sources often had different values. For example, measures of GDP, productivity, and exports and imports, depended on whether the data came from the International Financial Statistics (IFS) or World Economic Outlook (WEO) databases. Judgment was used to determine which measures appeared to be most reliable. In some cases, values from the two sources were averaged. As a robustness check, regressions were carried out for the full forty year period, 1968-2007, and for the latest twenty four year period, 1984-2007. In the later period, the data from different sources generally agreed. The coefficients from different period were often inconsistent. Nonetheless, estimates from both time periods showed similar degrees of over or undervaluation.

12.   The FMOLS estimated is based on coefficients obtained from the IMF staff's 2008 assessment of external stability of the WAEMU. The PMG estimate was derived using coefficients obtained by Chudik and Mongardini (2007). Due to data limitations these coefficients were derived from data for the period 1985-2007.

Empirical Results

13.   The results of an augmented Dickey-Fuller test were consistent with all variables being integrated of order one, I (1), during the period 1968 to 2007.[3] A Johansen cointegration test was consistent with one cointegrating equation among the real exchange rate and the fundamental variables at the 5 percent level. Finally, a vector auto regression was run in levels to determine the appropriate lag length. One lag was chosen consistent with the results of the Schwarz and Hannan-Quinn information criteria. Because the vector error correction model is differenced, this corresponded to no lags in the VECM.

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[3] A unit root test indicated that the openness variable was close to stationary, with the p-value of the test rejecting the null of a unit root at the 6.2% level.

Table 3. Benin: Results of ERER Regressions

Estimates of Long-Run Coefficients	VECM 1968-2007	ARDL 1968-2007	FMOLS	PMG 1/
Ln (government consumption)	-0.37*** [-5.9]	-0.60*** [-4.5]	0.30*** [5.2]	0.54*** [7.7]
Ln (gross investment)	0.02 [0.2]	-0.10 [-0.4]	-0.04*** [-3.0]	
Ln (openness)	-0.62*** [-11.2]	-0.32*** [-2.6]	-0.25*** [-3.9]	-0.46*** [-7.4]
Ln (productivity)	1.08*** [13.3]	0.30 [1.1]	0.29*** [7.1]	0.99*** [10.4]
Ln (terms of trade)	-0.25*** [-5.7]	0.11 [0.9]	0.15*** [3.1]	0.26*** [5.5]
Ln (debt service)				-0.33*** [-4.6]
Error Correction Coeffient D[ln(REER)]	0.01 [0.1]	-0.38*** [-3.5]		
Adjusted-R2	0.39	0.97		
Estimated Over (+) / Under (-) Valuation	3%	3%	7%	4%

1/ Coefficients taken from Chudik and Mongardini (2007), Table 4.

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Figure 3. Benin: Comparison of FEER Estimates of the Real Exchange Rate, 1968-2007
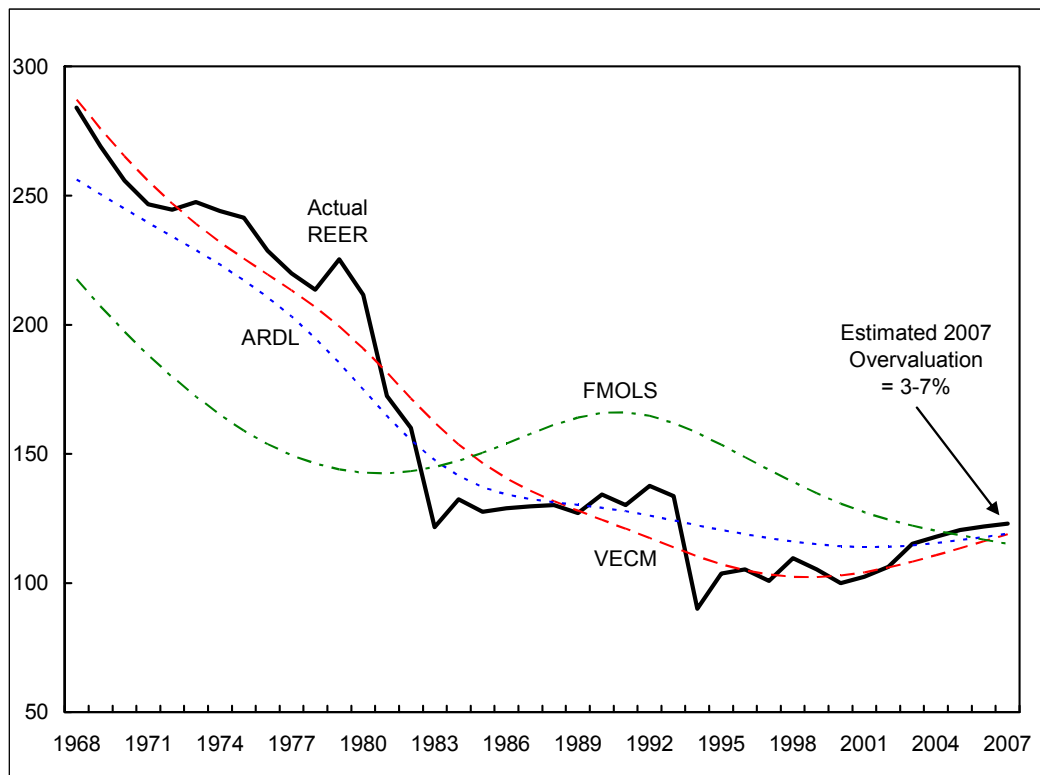
14.   The results using the Johansen VECM, ARDL, FMOLS, and PMG techniques suggest that Benin's real effective exchange rate is in line with fundamentals (see Table and Figures 3, 4, and 5). The point estimates indicate 3-7 percent overvaluation of Benin's real exchange rate but are well within the 95 percent confidence bands.

15.   The agreement on the level of the exchange rate masks differences in the estimates of the coefficients on the explanatory variables:

- **Government consumption** is statistically significant at the one percent level for all four techniques. The single country regressions indicate that increased consumption by Benin's government results in a depreciation of the exchange rate. This is consistent with the view that increased government consumption is more heavily weighted on traded goods. The panel regressions indicate that for the WEAMU as a whole government consumption results in an appreciation, thus indicating more spending on non-traded goods.

- **Gross investment** is not significant in the single country regressions. Using the FMOLS technique, gross investment is statistically significant at the one percent level. This is consistent with the view that for WAEMU as a whole investment is more heavily weighted towards traded goods.

- **Openness** is statistically significant in all four regressions at the one percent level. The negative sign indicates that increased openness is associated with a decline in the equilibrium real exchange rate. This is consistent with the use of openness as an indication of trade restrictiveness, i.e. an increase in openness (a reduction in trade restrictiveness) results in a deterioration of the trade balance and a depreciation of the exchange rate.

- **Productivity** is statistically significant at the one percent level in the VECM, FMOLS, and PMG regressions. The positive sign is consistent with the Balassa-Samuelson effect; an increase in productivity results in an appreciation of the exchange rate.

- **Terms of trade** are statistically significant at the one percent level in the VECM, FMOLS, and PMG regressions. However, the techniques disagree on the direction of the effect. The coefficient in the panel regressions is positive in agreement with the prior that an increase in the terms of trade should result in an appreciation of the real exchange rate.

- **Debt service** in the PMG regression is statistically significant and has the expected negative sign, i.e. an increase in debt service payments is associated with a depreciation of the real exchange rate.

Figure 4. Benin: Actual and Estimated REERs by Technique, 1968-2007
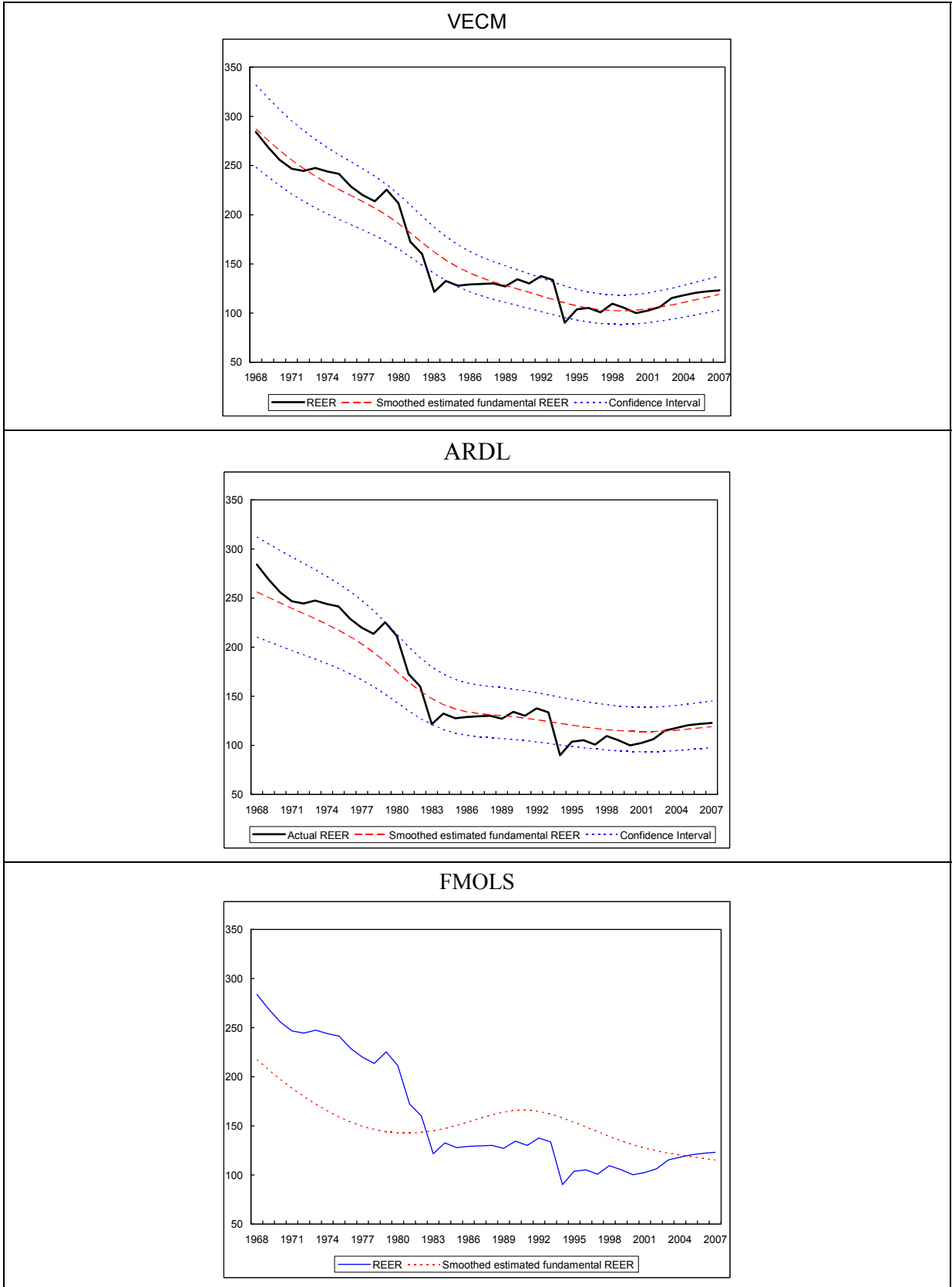
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Figure 5. Benin: Real and Equilibrium Real Effective Exchange Rate
PMG Approach, 1985-2007

Source: Chudik and Mongardini (2007).
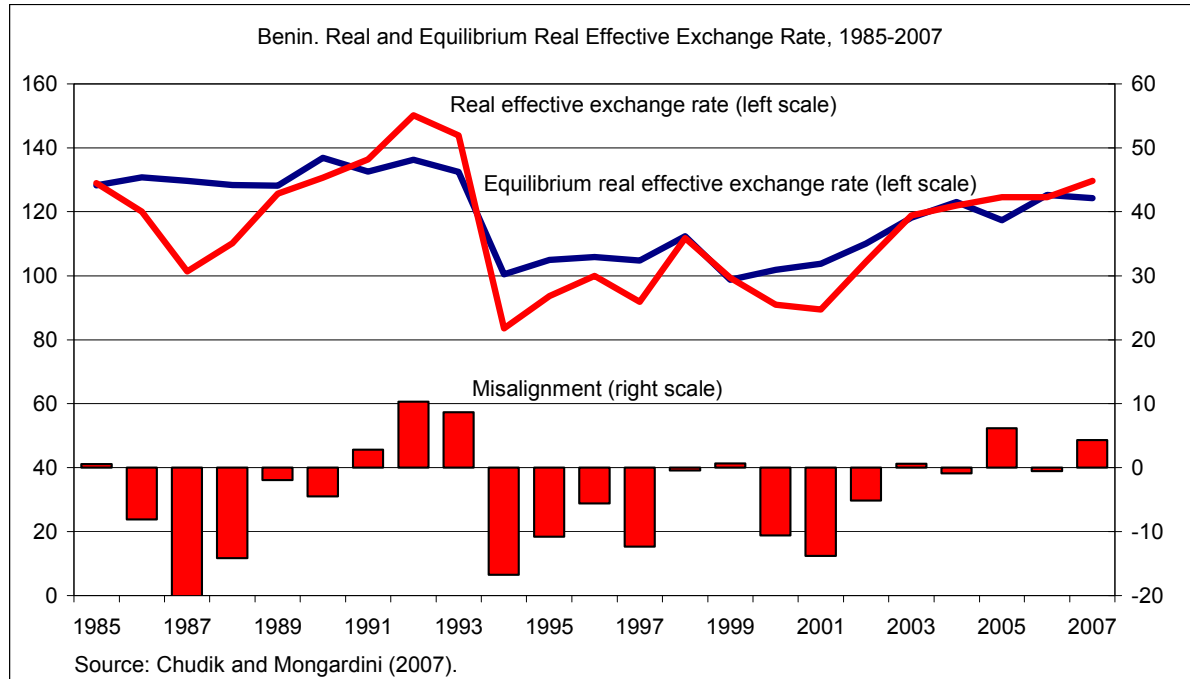
16.   The error correction term for the log REER in the ARDL equation is negative and statistically significant at the 5 percent level. Thus, the ARDL approach indicates the REER tends to revert to its fundamental value in the long-run. However, the error correction term for the log REER in the VECM equation is zero and not statistically significant. Nonetheless, the error correction terms for government consumption, openness, and terms of trade are all negative and statistically significant at the 5 percent level. Thus, the VECM approach seems to indicate that it these variables rather than the REER that restore long-run equilibrium. The different coefficient and error correction estimates resulting from the different approaches underlines that caution must be applied in evaluating the results of these regressions.

17.   The results obtained here for Benin are broadly consistent with the 2008 assessment for the WAEMU. IMF staff found that the WAEMU's real effective exchange rate was 1 to 10 percent overvalued according to the ERER approach. However, the overvaluation of the WAEMU's real exchange rate was only statistically significant using the VECM approach.

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Table 4. Estimates of Overvaluation under the FEER Approach for Benin and the WAEMU,
2007

Technique	Benin	WAEMU
VECM	3	10**
ARDL	3	6**
FMOLS	7	1
PMG	4	3

** Indicates statistically different from zero at the 5 percent level.

Thus, the ERER estimates indicate no overvaluation of Benin's real exchange rate and are
broadly consistent with the results of the WAEMU assessment.

D. Macroeconomic Balance Approach

18.   The macroeconomic balance approach attempts to evaluate the appropriateness of a
country's underlying current account balance against a savings-investment norm. The
underlying current account is defined as "the current account stripped of temporary factors,
such as cyclical fluctuations, temporary shocks, and adjustment lags."[4] The process of
stripping out temporary factors includes eliminating the impact of output gaps and the lagged
effects of previous exchange rate and policy changes. The savings-investment norm is
derived from panel regressions of countries' savings-investment balances on economic
fundamentals. This is translated into a current account norm through the identity that links
savings and investment to the current account:

(4)   Current Account = Savings – Investment

As a final step, trade elasticities are used to estimate the degree of real exchange rate
depreciation or appreciation that would be required to bring the underlying current account
balance in line with the current account norm.

19.   In practice, there are a number of ways to estimate the underlying current account. In
this chapter, two broad approaches are used. The first approach adjusts the observed current
account balance for temporary factors. This is done by: (i) taking the five year forecast for
the current account contained in the World Economic Outlook (WEO) and (ii) adjusting the
observed 2007 current account balance for shocks to the cotton and power sectors. The WEO
forecasts are based on the assumption that the lagged effects of temporary factors have

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[4] IMF, *Review of the 1977 Decision – Proposal for a New Decision Companion Paper*, May 22, 2007, p. 3.

disappeared and that the exchange rate is unchanged over the forecast period. This is the method followed by the IMF's Research Department in its application of the macroeconomic balance approach. Adjusting the observed 2007 current account for temporary shocks accounts for the fall in cotton output due to poor weather and the increase in generator imports due to a power shortage.

20.   The second broad approach to estimating the underlying current account balance attempts to strip out temporary factors by applying filters to the data. In this chapter, this is done using: (i) a five year moving average and (ii) the Hodrick-Prescott filter.[5] The results are given in Table 5 and shown in Figure 6. The four procedures result in estimates of the underlying current account deficit ranging from 5 to 7 percent of GDP.

Table 5. Benin: Estimates of the Underlying Current Account for 2007

Method	Estimates of the Underlying Current Account for 2007
Five-Year WEO Projection	-5.3
Observed Current Account adjusted for Cotton and Generator Shocks	-5.6
5-year Moving Average	-6.9
Hodrick-Prescott Filter	-7.0
Average	**-6.2**

Figure 6. Benin: Underlying Current Account, Filter Method
(Percent of GDP)

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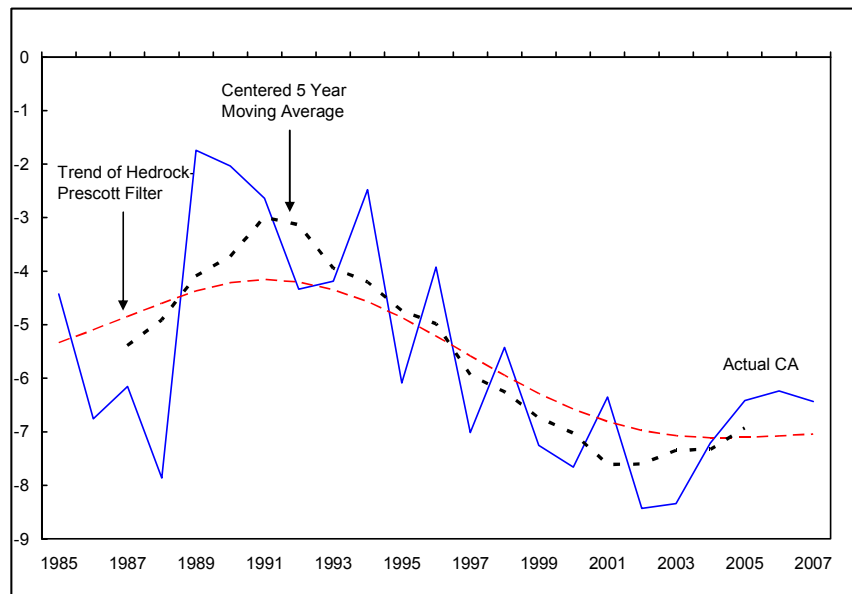
[5] The Hodrick-Prescott filter was implemented with λ=1600, the standard for advanced economies and consistent with a four year business cycle. This choice of lambda could be over or underestimating the business cycle in Benin.

21.   The second step in the macroeconomic balance approach is to estimate an equilibrium savings-investment (= current account) norm. This is done by undertaking a panel estimate of a large number of developing countries. In this chapter, estimates from Appendix IV of IMF Occasional Paper 209 are used. Based on the work of Chinn and Presad (2000), it uses two specifications to estimate savings-investment norms for African countries. Explanatory variables include the government budget balance, the relative youth dependency ratio, relative income, net foreign assets, and foreign aid. For Benin, the two specifications yield quite different estimates of the savings-investment norm. According to the first equation, Benin's savings-investment norm should be a deficit of 1.6 percent of GDP. According to the second, Benin's savings-investment norm should be a deficit of 6.1 percent of GDP.

22.   In both estimates, the government budget balance contributes more than 2 percent of GDP to the savings-investment deficit. However, in the second Benin's low income and foreign aid add another one and 2 percent of GDP, respectively, to the estimated deficit. As foreign aid should be a significant contributor to Benin's current account deficit and it is omitted from the first specification, the second estimate probably provides a more appropriate savings-investment norm.

Table 6. Benin: Estimates of the Savings-Investment Norm

	Benin's Data	Coefficients 1/	
		(4)	(5)
Government budget balance (% of GDP)	-3.6	0.6 ***	0.64 ***
Youth dependency ratio (relative to mean)	1.9	...	-0.16 **
Relative income (ratio to United States)	2.7	0.33 *	-0.45 **
Relative income squared	0.1	-0.49 *	...
Net foreign assets (% of GDP)	-8.0	0.04 ***	0.03 *
Foreign aid (% of GDP)	4.0	...	-0.51 ***
Benin's Estimated Savings-Investment Norm (% of GDP)		**-1.6**	**-6.1**

1/ From IMF Occassional Paper 209, p. 33

23.   The final step in the macroeconomic balance approach is to estimate trade elasticities and use them to determine the size of the real effective exchange rate change required to eliminate the gap between the underlying current account balance and the savings-investment norm. The elasticities of Benin's exports and imports with respect to the exchange rate were estimated for 1968-2007. The elasticities along with the GDP shares of exports and imports were then used to estimate the effect of a devaluation on the trade and current account balances.[6] The calculations are shown in Table 7 and suggest that a 3.6 percent devaluation of the real exchange rate is needed to improve the current account balance by one percent of GDP. This is in line with the estimate used for the IMF's 2008 WAEMU assessment.

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[6] The elasticity of the real effective exchange rate with respect to the current account is estimated as (export elasticity) x (export to GDP ratio) – (import elasticity) x (import to GDP ratio).

Table 7. Benin: Impact of a Devaluation on the Current Account

Export Elasticity (Elas X)	-0.99
Import Elasticity (Elas M)	0.78
Share of exports of goods and services in GDP, X/GDP	0.11
Share of imports of goods and services in GDP, M/GDP	0.22
Elasticity of the current account (with respect to the REER) = Elas X * (X/GDP) - Elas M * (M/GDP)	-0.28
Required percentage change in the REER to improve the current account by one percent of GDP	-3.6

24.   The underlying current account deficit was estimated at 6.2 percent of GDP while the two estimates in Table 8 imply that Benin's real exchange rate is overvalued by 16 and ½ percent, respectively. However, as noted earlier the second specification seems more appropriate for Benin as it includes the impact of foreign aid on the current account. Using this estimate, the macroeconomic balance approach suggests that Benin's current account balance and real effective exchange rate are in line with fundamentals.

Table 8: Benin: Results of the Macroeconomic Balance Approach

	(4)*	(5)*
Average underlying current account balance	-6.2	-6.2
Savings-investment norm	-1.6	-6.1
Required improvement in the current account balance	4.6	0.1
Implied over (+) or under (-) valuation	**16.3**	**0.4**

* Refers to regression equations in Table 4 and IMF Occasional Paper No. 209, p. 33.

E. External Sustainability Approach

25.   The external sustainability approach emphasizes the relationship between a country's current account balance and its long-run net foreign asset (NFA) position.[7] It should be noted that it is the NFA position of the union that determines the external sustainability of each

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[7] For consistency in terminology, this section refers to Benin's current account balance and net foreign asset position. Thus, a negative sign on the current account balance corresponds to a deficit and a negative sign on net foreign assets indicates Benin's gross foreign liabilities exceed gross foreign assets.

member. However, as argued in the introduction applying this approach highlights trends in Benin's external position and its contribution to the sustainability of the WAEMU as a whole.

26.   The external sustainability approach consists of three steps. The first step calculates the level of the current account that would stabilize the NFA position at a given benchmark level. The second step compares the observed current account flows and/or NFA position with the benchmark level. The final step calculates the adjustment in the real effective exchange rate necessary to bring the current account balance to the level that stabilizes the NFA position at the target level.

27.   The main problem in implementing the external sustainability approach is the choice of NFA target. Before selecting a target it is useful to assess: 1) the long run NFA position that would result from maintaining the present underlying current account balance; and 2) the current account balance required to stabilize the NFA position at its current level. The target NFA position is then calculated taking account of country circumstances as well as the composition of the current and financial account flows.

28.   Calculations according to the external sustainability approach suggest that Benin's current account deficit is larger than the level that would stabilize Benin's net foreign asset (NFA) position at an appropriate level. In particular, a depreciation of the real effective exchange rate of 5-12 percent would be required to reduce the current account deficit from an unsustainable level of 6 percent of GDP to a sustainable level of 3-5 percent of GDP.

29.   According to the external sustainability approach, the level of the current account consistent with an unchanged net foreign asset to GDP ratio is:

$$(5) \quad ca^s = \frac{g + \pi}{(1+g)(1+\pi)} b^s$$

Where: ca^s = stabilizing level of the current account balance to GDP
              g = the estimated growth rate of real GDP
              π = estimated GDP inflation
              b^s = stable net foreign asset to GDP ratio

For Benin the following assumptions are made:

              $g = 5.8\ \%$ (projected growth rate of real GDP)
              $\pi = 2.8\%$ (projected growth in the GDP deflator)
              $b^s = -12.4\ \%$ (net foreign asset to GDP ratio at end-2006)

Implications of Current Levels of the Current Account and Net Foreign Assets

30.   Equation (5) can be used in two ways to assess Benin's present situation. First, one can assume that the underlying 2007 current account deficit is continued into the future and identify the implications for the long-run net foreign asset position. Alternatively, one can calculate the level of the current account balance that would maintain the net foreign asset position at its 2006 level.

31.   **Continuing the 2007 Current Account**. In section D, the underlying current account balance including grants was estimated at -6.2 percent of GDP for 2007. Benin's real growth rate and GDP inflation are estimated at 5.8 and 2.8 percent, respectively, based on the projections for these variables over the medium-term (2008-2013). According to equation (5), a 6.2 percent current account deficit would result in long-run NFA position equal to -78 percent of GDP. As discussed later in the section on appropriate targets, a net foreign asset position of -78 percent of GDP appears to be too high to be sustainable.

32.   **Maintaining the 2006 Net Foreign Asset Position**. Instead of using the underlying current account to estimate Benin's long-run NFA position, it is possible to use equation (5) to estimate the current account deficit required to keep Benin's NFA position at its current level. According to the BCEAO, Benin's end-2006 NFA position was -12.4 percent of GDP. A current account deficit of one percent of GDP would be required to maintain net foreign assets at this level. Based on the analysis of savings-investment norms in section D and the current account balances of Benin's peers, a current account deficit of one percent of GDP appears too low for a developing country in Benin's situation. Also, as argued below, a net foreign asset position of -12.4 percent of GDP appears to be too conservative and could cause Benin to forego investment needed for development.

Table 9. Benin: Implications of Maintaining 2007 Levels
of the Current Account and Net Foreign Assets

Underlying Current Account Balance of: -6.2 percent of GDP	=>	Steady State NFA Position of: -78 percent of GDP
A Steady State NFA Position of: -12.4 percent of GDP	=>	Current Account Balance of: -1.0 percent of GDP

Appropriate Targets for Benin's Net Foreign Asset Position

33.   While the current NFA position provides a reference point, it may not provide the best target for policy. In fact, the key question in the external sustainability approach is what is an appropriate target for a country's net foreign asset position. The target should take into account country circumstances as well as the composition of the current and financial account flows.

34.   In this chapter, a lower limit for Benin's target NFA position is constructed by choosing appropriate values for long-run capital flows: foreign direct investment, portfolio flows, debt financing, and international reserves. It is assumed that the income and transfer components of the current account remain unchanged. A key consideration is the amount of foreign direct investment (FDI) that Benin receives. Financing from FDI is more stable than from portfolio investment or debt financing. This is because FDI transfers risk to investors and returns from FDI are often reinvested and thus do not require servicing as portfolio dividends and interest payments do. Thus, two targets for Benin's long-run NFA position are constructed based on whether FDI financing is low or high. The calculations are shown in Table 10 along with Benin and WAEMU's NFA position for 2006 from the BCEAO.

35.   The targets assume that gross foreign assets remain at their end-2006 levels. To the extent that assets are higher than this level, additional liabilities could be incurred. However, this would not change the targets which are set in net terms. For liabilities, the low FDI target assumes Benin is unable to increase foreign direct investment above 2006 levels. It would be desirable for Benin to boost the level of FDI which it receives so as to promote its development objectives. However, it is not clear how much FDI Benin would be able to attract. The high FDI target assumes Benin is able to attract 30 percent of GDP in foreign direct investment over the long-term, 10 percent higher than the WAEMU average. As for other components of gross foreign liabilities, it is assumed that portfolio liabilities rise from one percent of GDP in 2006 to 5 percent of GDP over the long-run. The modest targeted increase reflects the fact that low income countries often have low levels of portfolio investment and the concern that if portfolio inflows become too large they could change rapidly and cause instability. For debt, the target on liabilities comes from the IMF and World Bank's debt sustainability framework. As a medium performer, the framework suggests that Benin's NPV of debt should not exceed a threshold of 40 percent of GDP. Finally, for net international reserves the target assumes that Benin maintains minimum net reserves equivalent to three months of imports. This reflects a common benchmark used to assess reserve adequacy. Benin may also be able to maintain this minimum rather than higher level since it has access to the pooled reserves of the BCEAO. Translated into GDP terms for 2007, reserves equal to three months of imports is estimated to be 4 percent of GDP.

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Table 10. Benin: Target for Net Foreign Assets
(Percent of GDP)

	WAEMU 2006	Benin 2006	Target for Benin Low FDI	High FDI
NFA	-36	-12	-37	-59
Net FDI	-18	-7	-7	-30
Net Portfolio	0	1	-3	-3
Net Debt + Other	-31	-25	-31	-31
Net Reserves	13	18	4	4
Assets	34	30	16	16
FDI	2	0	0	0
Portfolio	1	2	2	2
Debt + Other	18	9	9	9
Net Reserves	13	18	4	4
Liabilities	70	42	53	75
FDI	20	8	8	30
Portfolio	1	1	5	5
Debt + Other	49	34	40	40

Table 11. Benin: Assessment of the REER as Calculated by the External Sustainability Approach

	High FDI Scenario	Low FDI Scenario
NFA Target (Percent of GDP)	-59	-37
Associated Current Account Target (Percent of GDP)	-4.7	-2.9
Change from Underlying Current Account Balance of -6.2 Percent of GDP	+1.5	+3.3
Estimated Overvaluation, using Elasticity of REER with respect to the current account of 3.6 (Percent)	+5	+12

36.   The resulting lower limits on Benin's NFA position are calculated to be -37 percent of GDP for the low FDI scenario and -59 percent of GDP for the high FDI scenario. Using equation (5) these translate to upper limits on the current account deficit of 2.9 and 4.7 percent of GDP, respectively. Using the elasticity of the current account with respect to the REER of 3.6 calculated in section D, real devaluations of 12 percent and 5 percent would be required to bring the underlying current account deficit of 6.2 percent of GDP in line with these limits. Thus, the external sustainability approach suggests Benin's real effective exchange rate is overvalued by 5-12 percent.

Table 12. Estimates of Overvaluation under the External Sustainability Approach
for Benin and the WAEMU, 2007
(Percent)

Benin	WAEMU[1]
5-12	9-12

[1] From the IMF's 2008 assessment of the external sustainability of the WAEMU.

Figure 7. Benin: Baseline and Target Steady State NFL Positions
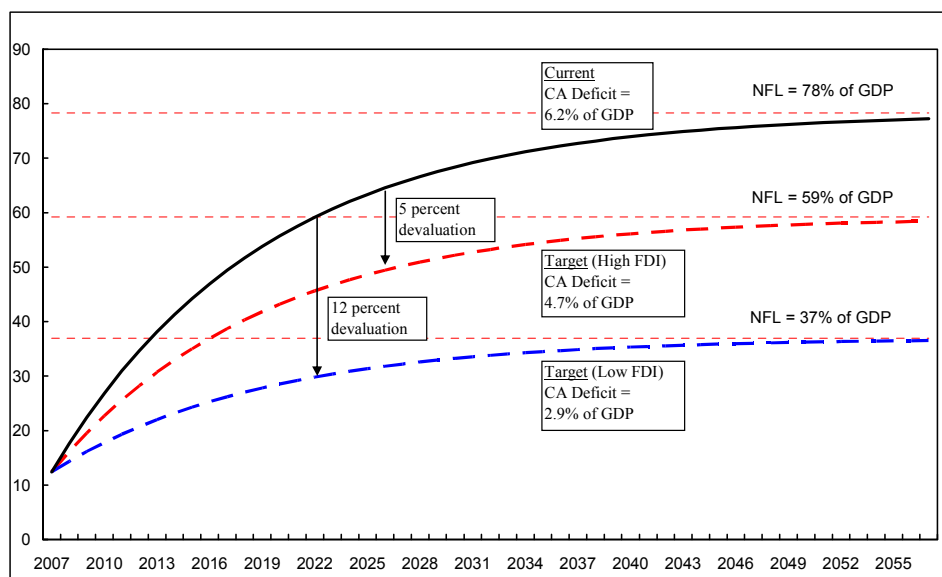
Assessing Competitiveness

F.   The Real Exchange Rate and Conditional Purchasing Power Parity (PPP)

Developments in Benin's Real Exchange Rate

37.   Figure 8 shows developments in Benin's real effective exchange rate since 1968. From 1968 to 1986, Benin's REER was on a steady downward path with the overall level of

the exchange rate falling by half during this period. Between 1986 and 1994, the real exchange rate remained relatively flat. Nonetheless, there was a consensus that the WAEMU countries had lost competitiveness during this period and that by 1994 the CFA Franc was overvalued. In 1994, the CFA Franc was devalued by 50 percent against the French Franc to which it was pegged. Since then the nominal exchange rate against the Franc and later the Euro has remained unchanged. However, the real exchange rate has appreciated, with Benin's REER increasing by 41 percent since 1994.

The Purchasing Power Parity Approach

38.   The <u>unconditional</u> PPP approach assumes that the same goods produced in different countries should, in equilibrium, have the same price when measured in a common currency. In other words:

39.   (6) $P* = E \cdot P$

Figure 8. Benin: Evolution of the Real Effective Exchange Rate
(Year 2000 = 100)
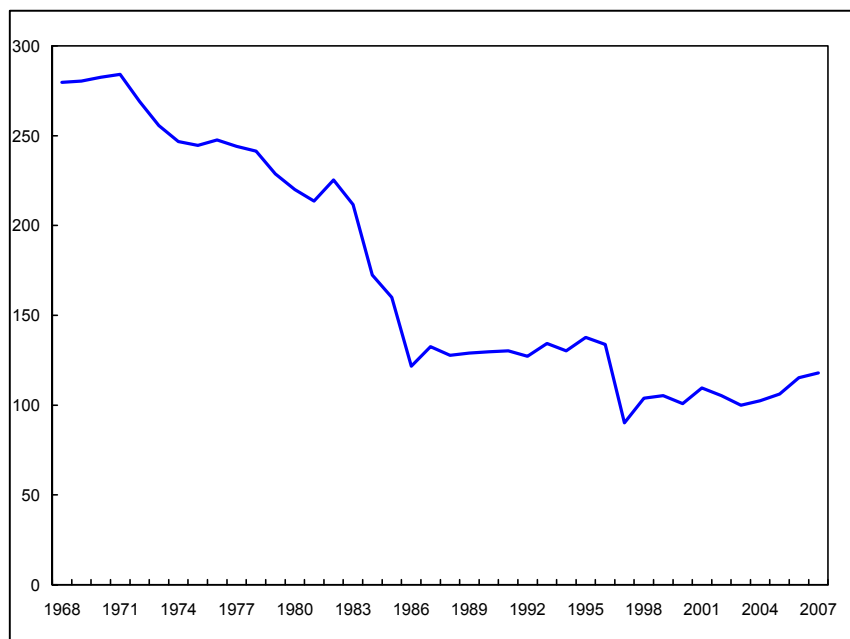
If this were not true, traders could buy goods in the country with low prices and sell in the country with high prices. The resulting increase in demand in the country with low prices should raise prices until prices are the same across countries. In a stochastic environment, the REER can deviate from the equilibrium REER in the short run. However, the REER should return to equilibrium over the long-term. Tests of this theory with developed countries suggest that deviations from equilibrium can occur for relatively long periods, with a half-life to convergence on the order of 3-5 years.

40.   In the empirical literature, the general conclusion is that (4) does not hold. As one possible explanation, the Balassa-Samuelson theorem posits that a country's real exchange

rate may appreciate if compared with its trading partners: 1) productivity increases faster in the traded goods sector than in the non-traded goods sector, or 2) productivity is uniform across sectors but the traded goods sector is relatively capital intensive. Thus, most researchers consider a <u>conditional</u> PPP model where domestic and foreign prices are equal up to a parameter:

(7) $P* = k \cdot E \cdot P$

Where the parameter k is interpreted as a productivity differential between the domestic economy and the rest of the world that can change over time. The conditional PPP approach implies that Benin's REER should grow with Benin's relative productivity.

41.   Figure 9 shows the evolution of Benin's REER in comparison with the REERs of other WAEMU members. Benin's real effective exchange rate has appreciated 41 since the devaluation in 1994, more than any other WAEMU country. In Benin's case, data is not available to separately measure productivity in the traded and non-traded goods sectors. However, an indication of trends can be obtained by examining changes in real GDP per capital—a rough proxy for productivity per worker—in the WAEMU countries.

Figure 9. WAEMU: Real Effective Exchange Rates, 1991-2007
(Average 2000 = 100)
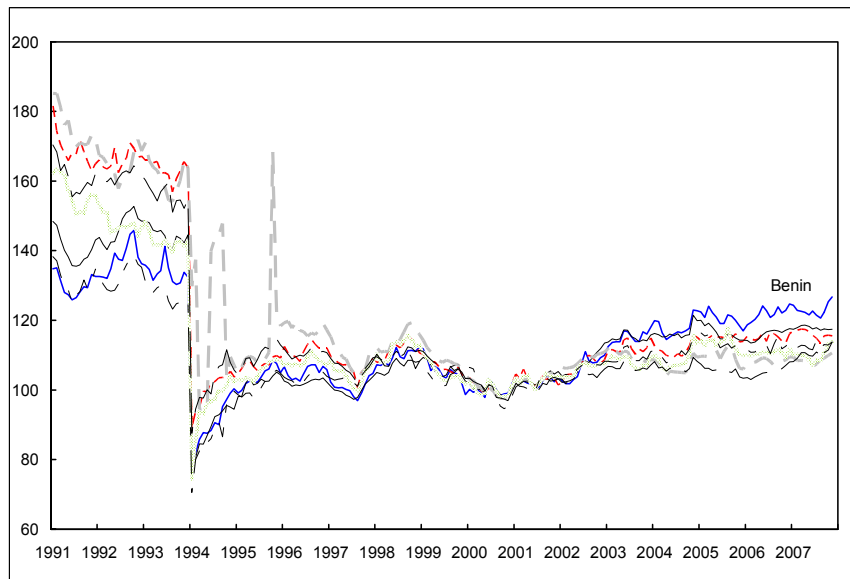
42.   Figure 10 shows that since 1994, appreciation of Benin's real exchange rate appreciation has been greater and growth in real GDP per capita lower than in Burkina Faso, Mali, and Senegal. This implies Benin has lost relative competitiveness vis-à-vis these countries even taking account of the Balassa-Samuelson effect. While Benin's real effective exchange rate has risen compared with Cote d'Ivoire, Niger, and Togo, its change in real GDP per capita has also been larger.

Figure 10. WAEMU: A Purchasing Power Parity Assessment of Competitiveness, 1994-2007

Real Effective Appreciation in WAEMU Countries

Mali 4.9; Senega 11.2; Burkina Faso 17.8; Nige 21.6; Togo 30.1; Cote D'Ivoire 31.7; Benin 41.1

Cumulative Growth of Real GDP per Capita

Togo -10.4; Cote D'Ivoire -6.1; Niger 6.6; Benin 20.3; Senegal 25.8; Mali 37.4; Burkina Faso 57.8

Change in Productivity Adjusted REER Index

Burkina Faso -25.4; Mali -23.6; Senegal -11.6; Niger 14.1; Benin 17.3; Côte d'Ivoire 40.2; Togo 45.3

43.   As a rough measure of Benin's productivity adjusted real exchange rate, an index was created by dividing the change in the real exchange rate by the change in real GDP per capita. The change in this index for 1994 to 2007 is shown in the bottom of Figure 10. Benin's productivity adjusted REER has appreciated by 17 percent, as real appreciation of 41 was offset by growth in real GDP per capita of 20 percent. However, Benin's productivity adjusted REER has appreciated by more than Burkina Faso, Mali, Senegal, and Niger's. While Benin's index has appreciated by less than Cote d'Ivoire and Togo, this was due to falls in those countries' real GDP per capita due to civil conflict. Thus, by this measure it appears Benin has lost competitiveness vis-à-vis Burkina Faso, Mali, Senegal, and Niger.

G.   Survey Based Indicators

44.   As a complement to examination of the real exchange, this section looks at survey based indicators, in particular the World Bank's *Doing Business Indicators* and the World Economic Forum's G*lobal Competitiveness Index*.

The Doing Business Indicators

45.   According to the World Bank's *Doing Business Indicators*, Benin is in the bottom 20 percent of economies in the world. Benin ranked 151 out of 178 countries in the 2008 survey and 147 out of 175 in the 2007 survey. Benin ranked best in registering property (105) and closing a business (106) and worst in enforcing contracts (166) and paying taxes (161). While Benin ranked poorly in the world, it was considered the most competitive country in the WAEMU.

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Figure 11. WAEMU:
World Bank's Doing Business Indicators 2008
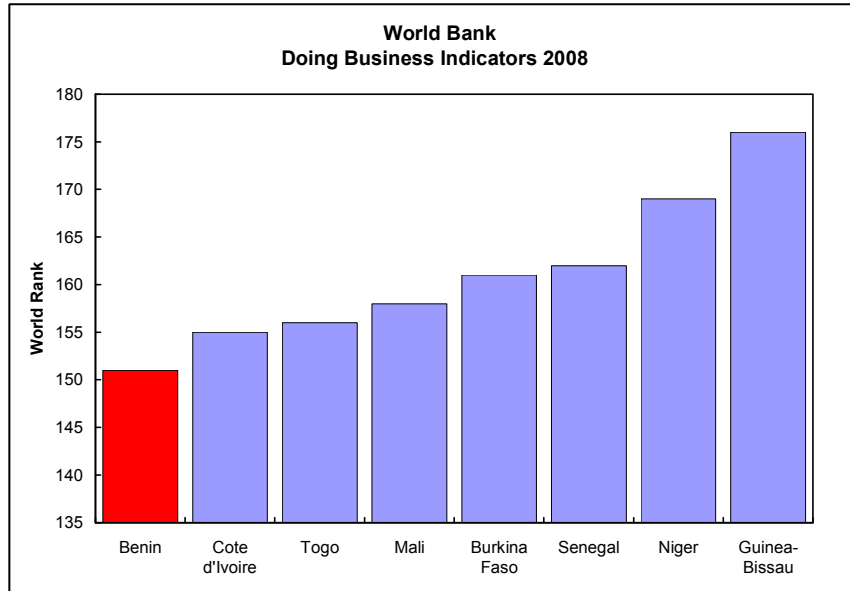
The World Economic Forum's Global Competitiveness Index

46.   The World Economic Forum's *Global Competitiveness Index* ranked Benin 108 out of 131 countries for 2007-08. This was a slight decline from 107 in the 2006-7 survey. Benin ranked relatively well in macroeconomic stability (80) and innovation (86) but lagged in market size (121) and higher education and training (114). Respondents rated access to finance, corruption, and tax regulations as the most problematic factors for doing business in Benin. On the other hand, government instability, foreign currency regulations, and labor market regulations were described as relatively benign.

Figure 12. Selected WAEMU Countries:
World Economic Forum's Global Competitiveness Rankings

World Economic Forum
Global Competitiveness Index
(Out of 131 Countries)
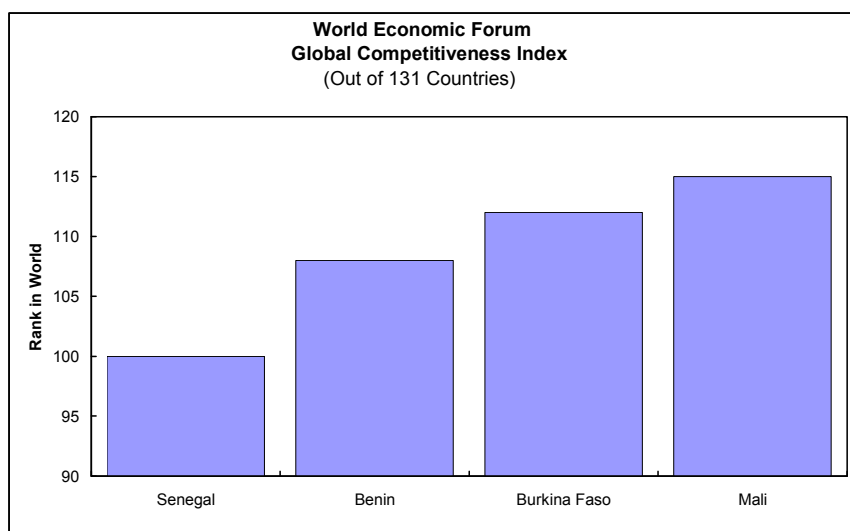
Table 13. Benin: Survey Based Measures of Competitiveness

	2007	2008			2006-07	2007-08
Overall Ranking	*147*	*151*		*Overall ranking*	*105*	*108*
Starting a Business	129	137		Insitutions	90	90
Dealing with Licenses	120	123		Infrastructure	114	112
Employing Workers	118	115		Macroeconomic stability	92	80
Registering Property	114	105		Health and primary education	101	111
Getting Credit	111	115		Higher education and training	101	114
Protecting Investors	147	147		Goods market efficiency	95	99
Paying Taxes	163	161		Labor market efficiency	...	110
Trading Across Borders	120	124		Financial market sophistication	...	97
Enforcing Contracts	166	166		Technological readiness	112	112
Closing a Business	100	106		Market size	...	121
				Business sophistication	85	97
				Innovation	90	86
Number of Countries	175	178		Number of Countries	125	131

Sources: World Bank, *Doing Business 2008* and World Economic Forum, *Global Competitiveness Index 2008* .

H. Conclusion

47.   This chapter has reviewed several different approaches to Benin's external sustainability and competitiveness. With regard to external sustainability, most methods including the balance of payments flows, equilibrium real exchange rate, and macroeconomic balance approaches indicate that Benin's real effective exchange rate is broadly in line with economic fundamentals. However, the external sustainability approach suggests that Benin's current account deficit may not be sustainable over the long-term and that the REER may be moderately overvalued.

48.   With regard to competitiveness, the purchasing power parity approach indicates Benin's real exchange rate has appreciated since 1994 and Benin has lost competitiveness vis-à-vis some of the other WAEMU members. However, it is difficult to determine whether this movement is causing overvaluation or represents a movement towards equilibrium after

the devaluation of 1994. Finally, survey based measures indicate that Benin ranks better than other WAEMU countries on competitiveness.

49.   Since the WAEMU and Benin as a member maintain a fixed exchange rate, the nominal exchange rate cannot be used to address external competitiveness. As a result, the main policy message is to strengthen structural and institutional factors to improve competitiveness. While the surveys suggest that enforcing contracts, reducing the burden of taxes, and improving education would help to boost competitiveness, the foregoing analysis underscores more generally the need for Benin to accelerate its long-awaited structural agenda.

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Table 1. Benin: Gross Domestic Product by Sector of Origin
at Current Prices, 2001–06

	2001	2002	2003	2004	2005	2006
		(Billions of CFA francs)				
Primary sector	633.0	660.6	663.5	686.0	716.9	770.8
Agriculture and forestry	451.2	463.2	459.6	473.1	485.9	530.8
Livestock and fishing	105.8	113.9	121.4	127.8	136.1	143.7
	76.0	83.5	82.5	85.1	94.9	96.4
Secondary sector	244.6	267.1	283.6	285.3	313.4	328.4
Manufacturing and handicrafts	4.0	4.3	4.7	5.0	6.1	6.6
Construction and public works	156.3	167.0	171.2	167.6	183.1	188.0
Mining and petroleum	15.7	20.9	25.5	25.9	28.2	29.9
Water, gas, and electricity	68.6	74.9	82.2	86.8	96.0	103.8
Tertiary sector	816.9	880.9	953.9	984.0	1,090.1	1,172.7
Trade	631.7	682.1	741.8	760.9	844.7	907.3
Transport and other services	305.2	328.4	350.1	354.3	399.1	425.5
Public administration	130.9	140.3	161.0	163.9	179.4	199.6
Other services	32.3	35.1	38.6	39.6	44.4	47.6
	163.3	178.3	192.1	203.1	221.7	234.5
	185.2	198.8	212.1	223.1	245.4	265.4
GDP at factor cost	1,664.6	1,776.2	1,866.0	1,919.2	2,080.3	2,228.9
Indirect taxes (net)	167.6	180.5	201.9	219.0	239.4	252.0
GDP at market prices	1,832.2	1,956.7	2,067.9	2,138.2	2,319.7	2,481.0
		(Percent of GDP)				
Primary sector	34.5	33.8	32.1	32.1	30.9	31.1
Agriculture and forestry	24.6	23.7	22.2	22.1	20.9	21.4
Livestock and fishing	5.8	5.8	5.9	6.0	5.9	5.8
	4.1	4.3	4.0	4.0	4.1	3.9
Secondary sector	13.4	13.7	13.7	13.3	13.5	13.2
Manufacturing and handicrafts	0.2	0.2	0.2	0.2	0.3	0.3
Construction and public works	8.5	8.5	8.3	7.8	7.9	7.6
Mining and petroleum	0.9	1.1	1.2	1.2	1.2	1.2
Water, gas, and electricity	3.7	3.8	4.0	4.1	4.1	4.2
Tertiary sector	44.6	45.0	46.1	46.0	47.0	47.3
Trade	34.5	34.9	35.9	35.6	36.4	36.6
Transport and other services	16.7	16.8	16.9	16.6	17.2	17.2
Public administration	7.1	7.2	7.8	7.7	7.7	8.0
Other services	1.8	1.8	1.9	1.9	1.9	1.9
	8.9	9.1	9.3	9.5	9.6	9.5
	10.1	10.2	10.3	10.4	10.6	10.7
GDP at factor cost	90.9	90.8	90.2	89.8	89.7	89.8
Indirect taxes (net)	9.1	9.2	9.8	10.2	10.3	10.2
GDP at market prices	100.0	100.0	100.0	100.0	100.0	100.0

Sources: Institut National de la Statistique et de l'Analyse Economique (INSAE); and staff estimates.

Table 2. Benin: Gross Domestic Product by Sector of Origin
at Constant 1985 Prices, 2001–06

	2001	2002	2003	2004	2005	2006
(Billions of CFA francs)						
Primary sector	334.9	343.0	350.7	370.7	369.4	390.0
Agriculture and forestry	245.1	249.0	254.6	271.1	264.6	283.7
Livestock and fishing	50.4	52.1	53.9	55.7	57.6	59.7
	39.4	41.9	42.2	43.9	47.1	46.6
Secondary sector	124.6	134.7	137.8	137.4	144.5	143.6
Manufacturing and handicrafts	0.9	1.0	1.0	1.1	1.2	1.2
Construction and public works	84.4	90.6	90.7	89.1	93.5	90.2
Mining and petroleum	11.3	13.4	14.3	14.5	15.4	15.8
Water, gas, and electricity	28.0	29.7	31.8	32.7	34.3	36.4
Tertiary sector	346.4	364.0	382.8	387.7	408.3	423.7
Trade	259.2	273.2	287.7	289.1	305.6	316.2
Transport and other services	116.9	122.7	128.5	127.5	136.4	140.5
Public administration	45.6	48.5	51.1	50.8	53.7	55.8
Other services	13.8	14.8	15.9	16.0	17.1	18.0
	82.9	87.2	92.2	94.8	98.4	101.8
	87.2	90.8	95.1	98.6	102.6	107.6
GDP at factor cost	793.0	828.0	856.8	881.2	906.5	940.9
Indirect taxes (net)	62.5	65.7	71.6	76.4	79.3	81.9
GDP at market prices	855.5	893.7	928.4	957.6	985.8	1,022.9
(Annual changes in percent)						
Primary sector	6.4	2.4	2.2	5.7	-0.4	5.6
Agriculture and forestry	7.5	1.6	2.2	6.5	-2.4	7.2
Livestock and fishing	3.6	3.4	3.5	3.3	3.5	3.5
	3.2	6.3	0.7	4.0	7.3	-1.0
Secondary sector	8.9	8.1	2.3	-0.3	5.1	-0.6
Manufacturing and handicrafts	5.4	11.1	0.0	10.0	5.0	6.0
Construction and public works	8.7	7.3	0.1	-1.8	5.0	-3.6
Mining and petroleum	16.2	18.6	6.7	1.4	6.3	2.4
Water, gas, and electricity	7.1	6.1	7.1	2.8	5.0	6.0
Tertiary sector	5.3	5.1	5.2	1.3	5.3	3.8
Trade	6.0	5.4	5.3	0.5	5.7	3.4
Transport and other services	5.6	5.0	4.7	-0.8	7.0	3.0
Public administration	6.5	6.4	5.4	-0.6	5.7	4.0
Other services	7.6	7.2	7.4	0.6	6.9	5.0
	6.0	5.2	5.7	2.8	3.8	3.5
	3.1	4.1	4.7	3.7	4.1	4.8
GDP at factor cost	6.3	4.4	3.5	2.9	2.9	3.8
Indirect taxes (net)	4.9	5.1	9.0	6.7	3.8	3.3
GDP at market prices	6.2	4.5	3.9	3.1	2.9	3.8

Sources: Institut National de la Statistique et de l'Analyse Economique (INSAE); and staff estimates.

Table 3. Benin: Supply and Use of Resources at Current Prices, 2001–06
(Billions of CFA francs)

	2001	2002	2003	2004	2005	2006
Supply of resources	2,313.3	2,494.5	2,616.4	2,706.3	2,836.8	3,042.8
Gross domestic product	1,832.2	1,956.7	2,067.9	2,138.2	2,319.7	2,481.0
Imports of goods and nonfactor services	481.1	537.8	548.5	568.1	517.0	561.9
Goods	340.1	387.0	400.9	416.4	371.8	397.1
Services	141.0	150.8	147.6	151.7	145.2	164.8
Use of resources	2,313.3	2,494.5	2,616.4	2,706.3	2,836.8	3,042.8
Gross domestic expenditure	2,053.2	2,229.5	2,333.6	2,399.8	2,537.5	2,761.8
Consumption	1,681.2	1,892.8	1,928.5	1,994.6	2,082.0	2,312.0
Public	202.4	243.7	274.9	290.8	339.0	359.2
Private	1,478.9	1,649.1	1,653.6	1,703.8	1,743.0	1,952.8
Gross investment	371.9	336.7	405.1	405.3	455.4	449.8
Fixed and portfolio investment	345.2	345.8	389.3	390.2	425.3	419.7
Central government	135.3	119.6	141.1	131.0	144.2	113.4
Private sector	209.9	226.2	248.2	259.1	281.1	306.3
Change in stocks	26.7	-9.2	15.7	15.1	30.1	30.1
Exports of goods and nonfactor services	260.1	265.0	282.8	306.5	299.3	281.1
Goods	153.2	147.3	168.1	181.0	171.2	139.8
Services	106.9	117.7	114.7	125.4	128.1	141.3
Gross Domestic savings	151.0	63.9	139.4	143.7	237.7	169.0
Resource gap	221.0	272.8	265.7	261.6	217.7	280.8
Private transfers	59.1	55.3	50.8	60.0	63.6	79.2
Public transfers (current)	61.1	70.6	66.9	68.0	47.4	75.7
Income paid abroad (net)	-15.6	-18.1	-24.7	-20.5	-20.3	-15.4
Gross national savings	255.5	171.7	232.5	251.1	328.5	308.5
Current account deficit	-116.4	-165.0	-172.6	-154.2	-136.2	-141.3

Sources: Beninese authorities; and staff estimates.

Table 4. Benin: Supply and Use of Resources at Current Prices, 2001–06
(Percent of GDP)

	2001	2002	2003	2004	2005	2006
Supply of resources	126.3	127.5	126.5	126.6	122.3	122.6
Gross domestic product	100.0	100.0	100.0	100.0	100.0	100.0
Imports of goods and nonfactor services	26.3	27.5	26.5	26.6	22.3	22.6
Goods	18.6	19.8	19.4	19.5	16.0	16.0
Services	7.7	7.7	7.1	7.1	6.3	6.6
Use of resources	126.3	127.5	126.5	126.6	122.3	122.6
Gross domestic expenditure	112.1	113.9	112.8	112.2	109.4	111.3
Consumption	91.8	96.7	93.3	93.3	89.8	93.2
Public	11.0	12.5	13.3	13.6	14.6	14.5
Private	80.7	84.3	80.0	79.7	75.1	78.7
Gross investment	20.3	17.2	19.6	19.0	19.6	18.1
Fixed and portfolio investment	18.8	17.7	18.8	18.2	18.3	16.9
Central government	7.4	6.1	6.8	6.1	6.2	4.6
Private sector	11.5	11.6	12.0	12.1	12.1	12.3
Change in stocks	1.5	-0.5	0.8	0.7	1.3	1.2
Exports of goods and nonfactor services	14.2	13.5	13.7	14.3	12.9	11.3
Goods	8.4	7.5	8.1	8.5	7.6	5.8
Services	5.8	6.0	5.5	5.9	5.7	5.8
Gross Domestic savings	8.2	3.3	6.7	6.7	10.2	6.8
Resource gap	12.1	13.9	12.8	12.2	9.4	11.3
Private transfers	3.2	2.8	2.5	2.8	2.7	3.2
Public transfers (current)	3.3	3.6	3.2	3.2	2.0	3.1
Income paid abroad (net)	-0.9	-0.9	-1.2	-1.0	-0.9	-0.6
Gross national savings	13.9	8.8	11.2	11.7	14.2	12.4
Current account deficit	-6.4	-8.4	-8.3	-7.2	-5.9	-5.7

Sources: Beninese authorities; and staff estimates.

Table 5. Benin: Production and Producer Prices of Cotton Products, 2001/02–2005/06

	2001/02	2002/03	2003/04	2004/05	2005/06
Production		(Thousands of tons)			
Seed cotton	400.7	337.5	333.1	427.7	190.8
Cotton Seed	167.9	148.0	146.0	187.5	83.7
		(CFA francs per kilogram)			
Producer prices					
Seed cotton	200	180	190	190	185
Cotton Seed	64	71	13	19	31

Sources: Ministry of Rural Development, Department of Planning and Research; and Société Nationale pour la Promotion Agricole (SONAPRA).

Table 6. Benin: Production and Cultivated Area of Principal Food Crops,
2001/02-2005/2006

	2001/02	2002/03	2003/04	2004/05	2005/06
		(In thousands of metric tons)			
Production					
Maize	686	797	788	841	865
Sorghum	165	183	163	164	133
Millet	35	41	35	37	35
Rice (paddy)	55	63	55	65	63
Total cereals	941	1,084	1,041	1,107	1,096
Cassava	2,703	3,155	3,055	2,955	2,809
Yams	1,701	2,151	2,011	2,257	1,577
Beans	78	95	82	94	88
		(In thousands of hectares)			
Cultivated area					
Maize	623	685	663	714	593
Sorghum	183	193	174	181	167
Millet	46	51	45	45	39
Rice (paddy)	27	29	23	25	29
Total cereals	879	958	905	965	829
Cassava	240	262	238	226	173
Yams	156	174	167	173	196
Beans	116	135	119	123	96

Source: Ministry of Rural Development, Department of Planning and Research.

Table 7. Benin: Retail Price of Major Petroleum Products, 2001–06
(CFA francs per liter)

	2001	2002	2003	2004	2005	2006
Premium gasoline	350	323	348	348	383	410
Regular gasoline	325	298	328	330	375	430
Kerosene	210	188	195	217	321	380
Diesel	285	263	293	300	381	426

Source: Société Nationale de Commercialisation des Produits Pétroliers (SONACOP); and Ministry of Commerce (MCAT).

Table 8. Benin: Transportation Activity, 2001–06

	2001	2002	2003	2004	2005	2006
	(Thousands of metric tons, unless otherwise indicated)					
Port traffic						
Loading	380.5	462.2	469.4	488.2	596.1	514.3
Of which						
Palm products	0.0	0.0	24.0	0.0	0.0	0.0
Cotton products	220.6	212.0	241.0	178.7	267.9	158.4
Transit	6.5	5.6	8.6	...	...	2.1
Unloading	2,929.3	3,007.7	3,808.9	3,520.6	4,556.8	4,854.8
Of which						
Hydrocarbons	323.9	514.7	838.1	835.0	796.1	872.0
Transit	984.9	514.7	838.1	...	...	2462.1
Total	3,309.9	3,469.9	4,278.3	3,968.8	5,152.9	5,369.1
Transit	1,005.9	1,055.5	1,229.7	1,241.7	2,041.1	2,474.8
Niger	513.6	549.7	799.9	671.4	1,041.3	1,280.2
Nigeria	402.0	350.6	311.4	416.6	629.3	798.1
Burkina Faso	14.4	65.1	37.2	25.6	105.8	224.2
Togo	5.0	6.3	2.8	3.0	6.4	2.4
Mali	28.7	47.0	14.0	0.4	258.4	169.8
Rail traffic						
Passengers (in millions per kilometer)	66.7	68.2	65.6	45.4	17.0	0.0
Freight (in millions of tons per kilometer)	93.8	88.8	85.7	33.8	23.0	28.9
Upfreight (in thousands of metric tons)	105.1	105.1	102.6	43.6	37.4	35.8
General merchandise	93.7	91.5	91.3	37.6	32.1	33.9
To Benin	11.4	8.9	11.3	6.0	7.1	...
To Niger	82.3	82.6	80.0	31.6	25.0	...
Hydrocarbons	11.4	8.9	11.3	6.0	5.3	1.9
To Benin	11.4	8.9	11.3	6.0	5.3	1.9
To Niger	0.0	0.0	0.0	0.0	0.0	0.0
Downfreight (in thousands of metric tons)	61.7	9.9	61.8	34.3	40.9	21.5
From Benin	58.3	89.2	60.1	32.6	38.9	...
From Niger	3.4	3.7	1.7	1.7	2.0	...

Sources: Ministry of Transportation, Directorate of the Port of Cotonou; Bénin-Niger Railway (OCBN); and staff estimates.

Table 9. Benin: Consumer Price Index in Urban Areas, 2001–06 1/
(Index, December 1996=100, unless otherwise indicated)

	2001	2002	2003	2004	2005	2006
January	116.8	119.8	123.3	124.8	127.9	134.0
February	115.6	119.9	123.8	124.3	128.2	135.7
March	117.5	120.3	124.1	123.3	131.0	136.4
April	118.9	122.1	124.6	124.1	130.8	137.6
May	120.9	121.8	124.8	124.9	131.2	139.0
June	120.3	123.8	124.2	125.4	132.2	137.8
July	120.7	126.2	124.4	125.7	133.5	135.5
August	119.5	122.8	123.0	124.3	133.2	134.2
September	119.0	121.0	122.5	124.6	133.5	137.9
October	119.4	121.4	123.8	124.7	133.8	136.6
November	120.3	123.1	124.6	127.0	133.6	137.4
December	122.0	123.5	124.5	127.7	132.5	139.4
Average	119.2	122.1	124.0	125.1	131.8	136.8
Changes in percent	4.0	2.4	1.5	0.9	5.4	3.8

Source: Institut National de la Statistique et de l'Analyse Economique (INSAE).

1/ Index is based on data covering five major cities.
2/ Harmonized consumer price index of the West African Economic and Monetary Union, based on a 1996 basket covering Cotonou.

Table 10. Benin: Industrial Minimum Legal Wage, 2001–06
(CFA francs per hour)

December, 2001	144.2
December, 2002	144.2
April, 2003	158.7
December, 2003	158.7
December, 2004	158.7
December, 2005	158.7
December, 2006	158.7
December, 2007	158.7

Sources: Central Bank of West African States (BCEAO); and Ministry of Labor
and Social Affairs.

Table 11. Benin: Production and Cost of Electricity, 2001–06

	2001	2002	2003	2004	2005	2006
	(In thousands of kilowatt-hours)					
Electricité						
Production disponible	487,682.0	535,769.0	579,785.0	593,563.0	623,563.0	656,733.0
Dont:						
importée du Ghana	431,794.0	482,643.0	512,810.0	523,193.0	541,494.0	532,944.0
Consommation	401,718.0	436,709.0	474,230.0	487,153.0	506,616.0	533,605.0
	(In millions of CFA francs)					
Coût de production	22,944.0	26,945.0	30,428.0	33,241.0	35,819.0	42,607.0
Dont:						
frais de personnel	941.0	1,076.0	360.0	496.0	611.0	798.0
Coût direct de distribution	2,296.0	2,246.0	2,216.0	918.0	1,264.0	2,315.0
Charges indirectes d'exploitation	2,336.0	3,781.0	3,238.0	6,806.0	8,212.0	9,185.0
Frais de siège	4,895.0	5,671.0	4,857.0	...	...	...
Prix de revient total	32,471.0	38,643.0	40,739.0	40,965.0	45,296.0	54,108.0
Prix de revient unitaire (en francs CFA)	81.0	88.0	86.0	84.1	89.4	101.4
Prix unitaire de vente d'eau (en francs CFA)	72.0	89.0	88.0	88.0	87.9	81.8

Table 12. Benin: Consolidated Government Operations 2001–06

	2001	2002	2003	2004	2005	2006
Recettes totales	281.0	318.2	350.7	351.4	383.4	416.9
Fiscales	247.1	282.5	313.6	311.4	334.0	378.8
Recettes douanieres 1/	133.2	145.9	163.6	155.9	174.8	207.4
Impôts directs et indirects	113.9	136.6	150.0	155.5	159.2	171.4
Nonfiscales	33.9	35.7	37.1	40.0	49.4	38.1
Dépenses totales	353.2	382.1	426.3	429.5	489.3	483.8
Masse salariale	80.7	90.1	108.0	118.3	130.3	135.0
Pensions et bourses	20.5	21.5	25.7	26.7	26.5	29.3
Transferts courants	41.5	73.7	61.8	65.5	81.8	102.2
Autres dépenses	59.6	58.4	79.5	80.3	100.4	92.7
Investissements	135.3	119.6	141.1	131.0	144.2	113.4
Contributions budgétaires	55.4	54.5	71.8	61.2	76.3	48.6
Financements extérieurs	79.8	65.1	69.3	69.8	67.9	64.8
Prêts nets (-=remboursements)	0.4	3.2	-2.0	0.7	-0.8	1.2
Solde primaire (définition large) 2/	23.2	19.9	4.0	-0.6	-31.9	-31.9
Intérêts	15.2	15.5	12.3	7.0	6.9	10.1
Intérieurs	1.8	1.2	1.0	1.2	1.3	0.2
Extérieurs	13.5	14.3	11.3	5.8	5.6	9.9
Déficit global (base ordonnancement)	-72.3	-63.9	-75.7	-78.1	-105.8	-105.8
Variation d'arriérés	-6.7	-6.7	-2.1	-8.5	-19.0	-15.0
Dette extérieure 3/	0.0	0.0	0.0	0.0	0.0	0.0
Arriérés intérieurs	-6.7	-6.7	-2.1	-8.5	-19.0	-15.0
Paiements pendant la periode complementaire	8.3	-13.8	1.3	-10.7	40.2	25.8
Déficit global (base caisse)	-70.7	-84.4	-76.4	-97.3	-84.7	-84.7
Financement	70.7	84.4	76.5	97.2	84.7	56.1
Intérieur	-49.0	11.4	-3.2	2.4	-6.4	-48.4
Financement bancaire	-47.8	13.7	-1.2	8.9	18.2	-50.1
Tirage net sur le Fonds monetaire	-3.0	-6.8	-3.5	-2.8	-3.4	-31.3
Décaissements	7.5	3.6	5.4	1.1	0.7	0.0
Remboursement	-10.6	-10.4	-8.9	-3.9	-4.1	-31.3
Autres	-44.7	20.4	2.3	11.7	21.5	-18.9
Financement non bancaire et ventes d'actifs	-1.3	-2.3	-2.0	-6.5	-24.6	1.7
Extérieur	119.7	73.1	79.6	94.8	91.1	104.5
Financements projets	79.8	70.4	69.3	69.8	67.9	64.8
Dons projets	24.5	15.3	31.9	40.9	39.7	37.6
Prets projets	55.3	55.1	37.4	28.9	28.1	27.2
Amortissement	-17.5	-18.8	-17.9	-9.3	-9.7	-548.5
Aides Programme	41.7	3.7	11.2	34.3	33.0	18.1
Dons	21.5	3.7	4.9	14.8	8.2	18.1
Prêts	20.3	0.0	6.3	19.5	24.8	0.0
Allègement obtenu du service de la dette	15.7	17.8	17.0	0.0	0.0	0.0
Besoin de financement (-exces)	0.0	0.0	0.0	0.0	0.0	0.0
Allègement possible de la dette	0.0	0.0	0.0	0.0	0.0	0.0
Besions de financement residuel	0.0	0.0	0.0	0.0	0.0	0.0
	15.3	16.3	17.0	16.4	16.5	16.8
Dépenses totales	19.3	19.5	20.6	20.1	21.1	19.5
Masse salariale	4.4	4.6	5.2	5.5	5.6	5.4
Investissements	7.4	6.1	6.8	6.1	6.2	4.6
Déficit global (base caisse)	-3.9	-3.3	-3.7	-3.7	-4.6	-2.7
	1.3	1.0	0.2	0.0	-1.4	0.4
Solde primaire (définition large) 4/	-3.1	-2.5	-3.1	-3.3	-4.3	-2.3
PIB 5/	1,832.2	1,956.7	2,067.9	2,138.2	2,319.7	2,481.0

Sources: Données fournies par les autorités, et estimations et projections des services du Fonds.

3/ Arriérés sur le service de la dette sujet à l'allegement de la dette envers les créanciers non membres du Club de Paris.

Table 13. Benin: Central Government Revenue, 2001–06

	2001	2002	2003	2004	2005	2006
	(In millions of CFA francs)					
Total revenue	280,977	318,177	342,881	351,416	383,446	416,946
Direct taxes	63,131	61,643	76,394	82,289	83,779	91,906
Taxes on income and profits	40,167	46,815	47,809	47,350	53,232	59,108
Individual	4,255	5,802	6,820	8,555	7,826	2,564
Corporate	33,004	37,554	36,426	34,031	39,880	50,872
Other taxes	2,909	3,458	4,563	4,764	5,526	5,672
Taxes on payroll and workforce	22,964	14,828	28,585	34,938	30,548	32,797
Domestic taxes on goods and services	54,330	67,350	75,711	79,576	78,126	79,489
Value-added tax	31,600	41,454	40,775	49,738	53,660	55,278
Domestic production, sales, and excises	4,416	4,277	5,868	5,430	4,393	4,992
Taxes on specific services	4,307	4,528	7,124	5,781	5,672	6,326
Motor vehicle taxes (vignette)	0	0	0	0	0	0
Other	14,007	17,091	21,944	18,627	14,401	12,893
Taxes on international trade and transactions	133,248	145,881	159,215	155,903	174,815	207,413
Customs duties	34,387	40,124	44,673	27,867	45,925	53,241
Value-added tax	79,264	86,606	85,091	98,366	93,826	105,773
Export duties, including re-exportation tax	2,439	1,771	1,173	976	919	1,137
Other	17,158	17,381	28,279	28,694	34,146	47,262
Nontax revenue	30,268	43,303	31,561	39,983	49,420	38,138
From nonfinancial public enterprises	5,149	5,047	5,388	1,346	699	505
Contribution to government employees' pension fund	9,269	10,791	11,155	13,883	14,360	12,712
Repayment on on-lending						
Other nontax revenue	15,850	27,465	15,018	24,754	34,361	24,922
	(In percent of GDP)					
Total revenue	15.3	16.3	16.6	16.4	16.5	16.8
Taxes on income and profits	3.4	3.2	3.7	3.8	3.6	3.7
Domestic taxes on goods and services	3.0	3.4	3.7	3.7	3.4	3.2
Taxes on international trade and transactions	7.3	7.5	7.7	7.3	7.5	8.4
Nontax revenue	1.7	2.2	1.5	1.9	2.1	1.5
	(In percent of total tax revenue)					
Taxes on income and profits	25.2	22.4	24.5	26.4	25.1	24.3
Domestic taxes on goods and services	21.7	24.5	24.3	25.6	23.4	21.0
Taxes on international trade and transactions	53.1	53.1	51.1	50.1	52.3	54.8

Sources: Beninese authorities; and staff estimates

Table 14. Benin: Central Government Expenditure, 2001–06

	2001	2002	2003	2004	2005	2006
	(Billions of CFA francs)					
Total expenditure	356.9	384.5	428.3	437.4	490.1	531.8
Primary expenditure	268.2	303.8	346.7	352.0	415.3	424.2
Salaries, pensions, and scholarships	101.2	111.6	133.7	145.0	156.8	167.4
Wage bill	80.7	90.1	108.0	118.3	130.3	136.4
Pensions and scholarships	20.5	21.5	25.7	26.7	26.5	29.6
Other expenditure and current transfers	111.5	132.2	141.3	145.8	182.2	174.4
Budgetary contribution to investment	55.4	60.1	71.8	61.2	76.3	82.4
Interest	15.2	15.5	12.2	15.5	6.9	8.2
Internal debt	1.8	1.2	0.9	0.8	1.3	0.2
External debt	13.5	14.3	11.3	14.7	5.6	8.0
Investment expenditure financed from abroad	79.8	65.1	69.3	69.8	67.9	99.3
Net lending (- =reimbursement)	-2.0	3.2	-2.0	0.7	0.0	0.0
	(Percent of GDP)					
Total expenditure	20.5	19.6	20.7	20.5	21.1	22.1
Primary expenditure	15.4	15.5	16.8	16.5	17.9	17.6
Salaries, pensions, and scholarships	5.8	5.7	6.5	6.8	6.8	6.9
Wage bill	4.6	4.6	5.2	5.5	5.6	5.7
Pensions and scholarships	1.2	1.1	1.2	1.2	1.1	1.2
Other expenditure and current transfers	6.4	6.8	6.8	6.8	7.9	7.2
Budgetary contribution to investment	3.2	3.1	3.5	2.9	3.3	3.4
Interest	0.9	0.8	0.6	0.7	0.3	0.3
Internal debt	0.1	0.1	0.0	0.0	0.1	0.0
External debt	0.8	0.7	0.5	0.7	0.2	0.3
Investment expenditure financed from abroad	4.6	3.3	3.4	3.3	2.9	4.1
Net lending (- =reimbursement)	-0.1	0.2	-0.1	0.0	0.0	0.0
	(Percent of total expenditure)					
Total expenditure	100.0	100.0	100.0	100.0	100.0	100.0
Primary expenditure	75.2	79.0	81.0	80.5	84.7	79.8
Salaries, pensions, and scholarships	28.4	29.0	31.2	33.2	32.0	31.5
Wage bill	22.6	23.4	25.2	27.0	26.6	25.7
Pensions and scholarships	5.7	5.6	6.0	6.1	5.4	5.6
Other expenditure and current transfers	31.2	34.4	33.0	33.3	37.2	32.8
Budgetary contribution to investment	15.5	15.6	16.8	14.0	15.6	15.5
Interest	4.3	4.0	2.8	3.5	1.4	1.5
Internal debt	0.5	0.3	0.2	0.2	0.3	0.0
External debt	3.8	3.7	2.6	3.4	1.1	1.5
Investment expenditure financed from abroad	22.4	16.9	16.2	16.0	13.8	18.7
Net lending (- =reimbursement)	-0.6	0.8	-0.5	0.2	0.0	0.0

Source: Ministry of Finance.

Table 15. Benin: Operations of the Social Security Fund, 2001–06
(Millions of CFA francs)

	2001	2002	2003	2004	2005	2006
Contributions	13,828.0	20,386.0	22,476.0	23,909.0	23,335.0	28,332.0
Family allowances	6,534.0	8,711.0	9,589.0	10,188.0	9,957.0	12,130.0
Workers' compensation	1,711.0	1,978.0	2,192.0	2,335.0	2,291.0	2,664.0
Retirement	7,312.0	9,697.0	10,695.0	11,386.0	11,088.0	13,538.0
Other revenue	2,235.0	3,576.0	4,446.0	5,851.0	5,825.0	7,737.0
Total receipts	17,792.0	23,962.0	26,922.0	29,760.0	29,160.0	36,069.0
Benefits	5,900.0	6,626.0	7,748.0	8,452.0	9,670.0	9,983.0
Family allowances	874.0	861.0	1,036.0	1,524.0	2,096.0	1,819.0
Workers' compensation	177.0	157.0	198.0	344.0	236.0	255.0
Retirement	4,849.0	5,608.0	6,514.0	6,584.0	7,368.0	7,909.0
Other expenses	2,226.0	3,694.0	4,654.0	6,459.0	6,792.0	6,884.0
Total expenditure	8,126.0	10,320.0	12,402.0	14,912.0	16,491.0	16,867.0
Surplus/deficit (-)	9,666.0	13,642.0	14,520.0	14,850.0	12,669.0	19,202.0

Source: Social Security Fund (OBSS).

Table 16. Benin: Central Government Investment Expenditure, 2001–06
(In billions of CFA francs)

	2001	2002	2003	2004	2005	2006
Expenditure	135.3	120.7	144.8	120.8	84.8	124.8
Rural development	9.2	13.3	19.1	18.2	18.8	10.6
Industry	6.0	4.9	2.2	3.7	3.5	3.4
Infrastructure	53.2	50.1	51.8	48.9	20.2	36.3
Tourism and commerce	2.6	3.3	6.9	2.4	0.7	4.5
Health	17.0	12.4	15.4	14.3	13.5	12.1
Education	15.8	12.2	11.8	10.1	7.1	13.6
Other	31.5	24.4	37.6	23.1	20.9	44.2
Financing	121.0	126.0	144.8	120.8	84.8	124.8
Domestic financing	41.7	54.5	71.4	51.0	49.6	44.4
National budget	55.4	54.5	71.4	50.6	46.7	41.9
CAA/FNI 1/	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.4	2.9	2.6
External financing	79.3	71.5	73.4	69.8	35.2	80.3
Grants	24.5	16.4	35.6	40.9	7.0	37.3
Loans	55.3	55.1	37.8	28.9	28.3	43.0

Sources: Ministry of Planning and Statistics, Directorate for Planning and Technical Assistance; and staff estimates.

1/ CAA = Autonomous Amortization Fund; FNI = National Investment Fund.

Table 17. Benin: Monetary Survey, 1999-2006

	2001	2002	2003	2004	2005	2006
	(Billions of CFA francs; end of period)					
Net foreign assets	476.8	426.7	398.1	336.7	386.7	529.0
Central Bank of West African States (BCEAO)	371.2	318.1	326.9	257.6	328.0	443.8
Banks	105.6	108.6	71.2	79.1	58.7	85.2
Net domestic assets	115.7	143.1	209.5	230.3	304.1	276.1
Domestic credit	133.4	178.1	251.0	280.0	356.0	337.8
Net claims on government	-60.1	-46.5	-47.7	-38.9	-20.8	-70.9
Credit to the nongovernment sector	193.5	224.6	298.7	312.1	376.8	408.7
Other items (net)	-17.7	-35.1	-41.3	-49.7	-51.9	-61.8
Broad money (M2)	592.5	569.8	607.6	567.0	690.8	805.1
Currency	223.8	170.9	190.3	129.9	195.2	254.2
Bank deposits	360.1	391.9	409.9	429.0	487.0	541.7
Deposits with national post and savings agency	8.6	7.0	7.4	8.1	8.6	9.2
	(Percent of beginning-of-period broad money, unless otherwise specified)					
Memorandum items:						
Net foreign assets	23.6	-8.5	-5.0	-10.1	8.8	8.8
Net domestic assets	-10.9	4.6	11.6	3.4	13.0	13.0
Domestic credit	-9.2	7.5	12.8	4.8	13.4	13.4
Net claims on government	-9.1	2.3	-0.2	1.5	3.2	3.2
Credit to the nongovernment sector	-0.1	5.2	13.0	2.2	11.4	11.4
Broad money	12.7	-3.8	6.6	-6.7	21.8	21.8
Velocity of broad money (GDP relative to average M2)	3.3	3.4	3.5	3.6	3.7	3.7
Credit to the economy (annual change in percent)	32.3	29.1	29.4	26.5	29.8	29.8
Nominal GDP (in billions of CFA francs)	1,832.2	1,956.7	2,067.9	2,138.2	2,319.7	2,319.7

Sources: Central Bank of West African States (BCEAO); and staff estimates.

Table 18. Benin: Summary Account of the Central Bank of West African States (BCEAO), 2001–06

(Billions of CFA francs; end of period)

	2001	2002	2003	2004	2005	2006
Gross foreign assets	431.5	369.6	370.8	305.9	365.6	453.1
Gross claims on central government	51.1	45.6	41.9	36.2	32.1	1.3
Advances to the treasury	0.0	0.0	0.0	0.0	0.0	0.0
Treasury bonds	1.1	0.7	0.4	0.3	0.1	0.0
Trust Funds on-lent and Structural Adjustment Facility (SAF)/Enhanced Structural Adjustment Facility (ESAF) loans	50.0	44.9	41.5	36.0	32.0	1.3
Other assets	7.6	5.5	1.9	0.0	0.0	0.0
Total assets	490.2	420.7	414.6	342.1	397.6	454.4
Banknotes and coins outside banks	223.8	170.9	190.3	129.9	195.2	254.2
Government deposits and cash	111.3	88.6	87.5	63.6	56.5	99.2
Deposits	109.2	86.9	85.3	60.8	53.8	96.5
Central government	105.7	86.1	85.3	60.8	53.6	96.2
Other public agencies	3.5	0.8	0.0	0.0	0.2	0.3
Cash held by the treasury	2.1	1.7	2.2	2.9	2.7	2.7
Commercial banks' deposits and cash	77.1	86.3	81.7	91.0	99.0	79.3
Deposits	63.6	70.3 ...		75.2	83.4	62.2
Cash	13.5	16.0 ...		15.8	15.6	17.1
Public enterprises deposits	2.4	0.6	0.8	0.5	0.7	0.6
Short-term foreign liabilities	3.1	1.8	3.8	12.8	8.2	8.1
SDR allocations	8.8	8.7	7.7	7.5	7.5	7.1
Long-term foreign liabilities 1/	57.2	49.7	40.1	35.5	29.4	1.3
Other liabilities	6.5	14.0	2.7	1.3	1.2	4.8
Total liabilities	490.2	420.6	414.6	342.1	397.6	454.4

Source: Central Bank of West African States (BCEAO).

1/ Mainly Trust Fund and outstanding SAF/ESAF loans.

Table 19. Benin: Summary Account of Commercial Banks, 2001–06
(Billions of CFA francs; end of period)

	2001	2002	2003	2004	2005	2006
Réserves	77.1	86.3	78.0	112.3	88.4	75.2
Encaisses	13.5	16.0	18.6	15.8	15.6	17.1
Dépôts à la BCEAO						
	63.6	70.3	59.4	96.5	72.8	58.1
Avoirs extérieurs bruts	178.5	170.0	147.4	160.2	157.8	191.8
Créances brutes sur l'Etat	23.0	20.6	23.8	13.1	27.9	33.5
Administration Centrale	22.3	18.2	19.0	13.1	27.9	33.5
Autres organismes publics	0.7	2.4	4.8	0.0	0.0	0.0
Crédit a l'Economie	192.8	222.2	293.9	312.1	375.1	417.3
Crédit total	184.5	208.2	280.2	289.8	336.3	374.1
Crédits de campagne	2.4	19.8	20.4	6.3	15.4	10.0
Autres	182.1	188.4	259.8	283.5	320.8	364.1
Credits non performants	8.3	14.0	13.7	22.3	38.9	43.3
Secteur privé						
Autres éléments de l'actif	17.5	37.0	31.4	6.9	18.7	11.4
Total Actif	488.9	536.1	574.5	604.6	667.9	729.2
Total des Dépôts	304.1	325.0	355.9	364.1	411.1	461.9
Dépôts du secteur privé						
Engagements extérieurs à court terme	72.9	61.4	76.2	81.1	99.1	106.6
Auprès des banques etrangères	18.4	19.2	23.6	29.2	35.6	46.1
Comptes courants	17.9	8.9	5.9	3.0	3.8	1.5
Autres	36.6	33.3	46.7	48.9	59.7	59.0
Dépôts du gouvernement	84.4	95.0	81.7	97.0	108.1	95.0
Administration centrale	34.3	29.5	28.5	32.6	33.0	16.0
Autres organismes publics	50.1	65.5	53.2	64.4	75.1	78.9
Concours de la Banque Centrale	0.0	0.0	0.0	0.0	0.0	0.0
Engagements extérieurs à moyen-long terme	0.9	1.4	2.5	2.0	3.5	4.1
Autres éléments de passif	26.6	53.5	58.0	67.2	47.9	53.1
Total Passif	488.9	536.3	574.3	611.4	669.6	720.6

Source: Banque des Etats de l'Afrique de l'Ouest (BCEAO).

Table 20. Benin: Net Claims on the Central Government, 2001–06 1/
(Billions of CFA francs; end of period)

	2001	2002	2003	2004	2005	2006
Banque Centrale (BCEAO)	-27.6	-42.2	-45.6	-27.4	-24.2	-97.5
Créances sur l'Administration Centrale	43.6	45.6	41.9	36.2	32.1	1.3
Trésor	43.6	45.6	41.9	36.2	32.1	1.3
C.A.A. , F.N.I. et Fonds Routier	0.0	0.0	0.0	0.0	0.0	0.0
Dépôts de l'administration centrale (hors projets)	71.2	87.8	87.5	63.6	56.3	98.9
Trésor	40.7	53.9	63.8	34.7	19.7	51.3
FIR	0.2	0.2	0.2	0.2	0.2	0.2
C.A.A. et F.N.I.	16.9	12.6	7.1	7.8	9.6	11.8
Fonds Routier	0.0	0.0	0.0	0.1	3.0	2.2
Encaisses de l'administration centrale	3.4	1.7	2.2	2.9	2.7	2.7
Dépôts liés aux projets (BCEAO)	10.0	19.4	14.2	18.1	21.1	30.8
Banques commerciales	0.0	-11.3	-9.5	-19.5	-5.1	17.5
Créances brutes sur l'administration centrale	23.4	18.2	19.0	13.1	27.9	33.5
Dont:						
Bons du Trésor	20.4	13.8	10.5	7.1	22.1	27.9
Dépôts de l'Administration Centrale	35.5	29.5	28.5	32.6	33.0	16.0
Dont:						
Trésor	30.1	17.1	18.7	22.3	18.4	3.3
C.A.A. et F.N.I.	3.3	4.2	3.8	4.7	4.3	2.6
Dépôts CCP	6.3	7.0	7.4	8.1	8.6	9.2
Crédit net à l'administration centrale	0.0	-46.5	-47.7	-38.9	-20.8	-70.9

Source: Banque des Etats de l'Afrique de l'Ouest (BCEAO).

Table 21. Benin: Central Bank Lending Rates, January 2001-December 2006
(Percent per annum; end of period, unless otherwise indicated)

	Rediscount Rate (TES)	Repurchase Rate	Average Monthly Money Market Rate (TMM)	Reserve Requirment Rate
2001 January	6.50	6.00	4.95	9.00
February	6.50	6.00	4.95	9.00
March	6.50	6.00	4.95	9.00
April	6.50	6.00	4.95	9.00
May	6.50	6.00	4.95	9.00
June	6.50	6.00	4.95	9.00
July	6.50	6.00	4.95	9.00
August	6.50	6.00	4.95	9.00
September	6.50	6.00	4.95	9.00
October	6.50	6.00	4.95	9.00
November	6.50	6.00	4.95	9.00
December	6.50	6.00	4.95	9.00
2002 January	6.50	6.00	4.95	9.00
February	6.50	6.00	4.95	9.00
March	6.50	6.00	4.95	9.00
April	6.50	6.00	4.95	9.00
May	6.50	6.00	4.95	9.00
June	6.50	6.00	4.95	9.00
July	6.50	6.00	4.95	9.00
August	6.50	6.00	4.95	9.00
September	6.50	6.00	4.95	9.00
October	6.50	6.00	4.95	9.00
November	6.50	6.00	4.95	9.00
December	6.50	6.00	4.95	9.00
2003 January	6.50	6.00	4.95	9.00
February	6.50	6.00	4.95	9.00
March	6.50	6.00	4.95	9.00
April	6.50	6.00	4.95	9.00
May	6.50	6.00	4.95	9.00
June	6.50	6.00	4.95	9.00
July	5.50	5.00	4.95	9.00
August	5.50	5.00	4.95	9.00
September	5.50	5.00	4.95	9.00
October	5.50	5.00	4.95	9.00
November	5.00	4.50	4.95	9.00
December	5.00	4.50	4.95	9.00
2004 January	4.50	4.00	4.95	9.00
February	4.50	4.00	4.95	9.00
March	4.50	4.00	4.95	9.00
April	4.50	4.00	4.95	13.00
May	4.50	4.00	4.95	13.00
June	4.50	4.00	4.95	13.00
July	4.50	4.00	4.95	13.00
August	4.50	4.00	4.95	13.00
September	4.50	4.00	4.95	13.00
October	4.50	4.00	4.95	13.00
November	4.50	4.00	4.95	13.00
December	4.50	4.00	4.95	13.00
2005 January	4.50	4.00	4.95	13.00
February	4.50	4.00	4.95	13.00
March	4.50	4.00	4.95	13.00
April	4.50	4.00	4.95	13.00
May	4.50	4.00	4.95	13.00
June	4.50	4.00	4.95	13.00
July	4.50	4.00	4.95	15.00
August	4.50	4.00	4.95	15.00
September	4.50	4.00	4.95	15.00
October	4.50	4.00	4.95	15.00
November	4.50	4.00	4.95	15.00
December	4.50	4.00	4.95	15.00
2006 January	4.50	4.00	4.95	13.00
February	4.50	4.00	4.95	13.00
March	4.50	4.00	4.95	13.00
April	4.50	4.00	4.95	13.00
May	4.50	4.00	4.95	13.00
June	4.50	4.00	4.95	13.00
July	4.50	4.00	4.95	15.00
August	4.50	4.00	4.95	15.00
September	4.50	4.00	4.95	15.00
October	4.50	4.00	4.95	15.00
November	4.50	4.00	4.95	15.00
December	4.50	4.00	4.95	15.00

Source: Central Bank of West African States (BCEAO).

1/ Reform of lending rate structure, involving the abolition of the preferential discount rate and
the creation of a special rate for advances to the treasury.

Table 22. Benin: Balance of Payments, 2001–06

	2001	2002	2003	2004	2005	2006
	(Billions of CFA francs)					
Trade balance	-186.9	-239.7	-232.8	-235.4	-200.6	-257.3
Exports, f.o.b.	153.2	147.3	168.1	181.0	171.2	139.8
Cotton	115.9	99.3	116.1	114.6	92.7	56.1
Oil	0.0	0.0	0.0	0.0	0.0	0.0
Other	37.3	48.0	52.0	66.4	78.5	83.7
Imports, f.o.b.	-340.1	-387.0	-400.9	-416.4	-371.8	-397.1
Of which: petroleum products	-40.1	-53.0	-61.9	-80.6	-55.2	-69.1
Services and income (net)	-49.7	-51.2	-57.5	-46.8	-46.6	-38.9
Services	-34.1	-33.1	-32.9	-26.3	-26.3	-23.5
Credit	106.9	117.7	114.7	125.4	128.1	141.3
Debit	-141.0	-150.8	-147.6	-151.7	-154.4	-164.8
Income	-15.6	-18.1	-24.7	-20.5	-20.3	-15.4
Of which: interest due on government debt	-13.5	-14.3	-11.3	-5.8	-5.6	-9.9
Current transfers (net)	120.2	125.9	117.7	128.0	111.0	154.9
Unrequited private transfers	59.1	55.3	50.8	60.0	63.6	79.2
Public current transfers	61.1	70.6	66.9	68.0	47.4	75.7
Current account	-116.4	-165.0	-172.6	-154.2	-136.2	-141.3
Capital account	31.8	22.7	103.2	40.9	39.7	607.8
Public project grants	31.8	22.7	35.6	40.9	39.7	37.6
Debt cancellation	0.0	0.0	67.6	0.0	0.0	0.0
Financial account (net)	178.7	71.4	61.2	43.9	179.5	-350.7
Medium- and long-term public capital	61.4	39.9	27.3	42.8	47.0	-517.4
Disbursements	78.9	58.6	47.4	52.1	56.8	31.1
Project loans	58.7	58.6	41.0	32.6	32.0	31.1
Program loans	20.3	0.0	6.3	19.5	24.8	0.0
Amortization due	-17.5	-18.8	-20.1	-9.3	-9.7	-548.5
Principal not yet due 1/						
Medium- and long-term private capital	26.0	8.8	18.8	26.4	51.9	68.4
Deposit money banks	-14.4	-3.0	37.4	7.9	-20.4	26.5
Short-term capital	43.7	19.6	40.3	20.0	55.0	26.6
Errors and omissions	61.9	6.2	5.1	-53.2	46.0	45.2
Overall balance	94.0	-70.9	-8.2	-69.4	70.4	115.8
Financing	-94.1	70.9	8.2	69.3	-70.4	-115.8
Change in net foreign assets (- increase)	-109.7	53.1	-8.8	69.3	-70.4	-115.8
Of which: net use of Fund resources	-3.0	-6.8	-3.4	-2.6	-2.6	-30.6
Loans	7.5	3.6	5.5	1.1	0.7	0.7
Repayments	-10.6	-10.4	-8.9	-3.7	-3.3	-31.3
Change in external arrears (+ increase)	0.0	0.0	0.0	0.0	0.0	0.0
Interest	0.0	0.0	0.0	0.0	0.0	0.0
Principal	0.0	0.0	0.0	0.0	0.0	0.0
Debt relief obtained	15.7	17.8	17.0	0.0	0.0	0.0
Financing gap	0.0	0.0	0.0	0.0	0.0	0.0
	(Percent of GDP)					
Current account	-6.4	-8.4	-8.3	-7.2	-5.9	-5.7
Overall balance	5.1	-3.6	-0.4	-3.2	3.0	4.7
Memorandum items:	(Billions of CFA francs)					
reexports	147.9	164.9	146.2	120.5	133.4	247.3
imports for reexports	-97.8	-86.0	-74.8	-59.8	-70.9	-132.3

Sources: Central Bank of West African States (BCEAO); and staff estimates.

1/ The entry in 2003 is for the stock of debt operation at the completion point.

Table 23. Benin: Balance of Payments, 2001–06
(Millions of US dollars)

	2001	2002	2003	2004	2005	2006
Trade balance	-255.1	-345.1	-401.4	-446.1	-381.0	-492.5
Exports, f.o.b.	209.2	212.1	289.8	343.1	325.1	267.6
Cotton	158.3	142.9	200.2	217.3	176.0	107.3
Oil	0.0	0.0	0.0	0.0	0.0	0.0
Other	50.9	69.1	89.6	125.9	149.2	160.2
Imports, f.o.b.	-464.3	-557.2	-691.1	-789.2	-706.1	-760.1
Of which : petroleum products	-54.7	-76.3	-106.7	-152.8	-104.9	-132.2
	0.0	0.0	0.0	0.0	0.0	0.0
Services and income (net)	-67.9	-73.7	-99.2	-88.6	-88.5	-74.5
Services	-46.6	-47.7	-56.7	-49.8	-49.9	-45.1
Credit	145.9	169.4	197.8	237.8	243.3	270.4
Debit	-192.5	-217.1	-254.5	-287.5	-293.2	-315.5
Income	-21.3	-26.1	-42.5	-38.9	-38.6	-29.4
Of which: interest due on government debt	-18.4	-20.6	-19.4	-11.0	-10.6	-18.9
Current transfers (net)	164.1	181.3	203.0	242.5	210.9	296.5
Unrequited private transfers	80.7	79.6	87.6	113.7	120.8	151.6
Public current transfers	83.4	101.6	115.4	128.8	90.1	144.9
Current account	-158.9	-237.5	-297.6	-292.2	-258.6	-270.4
Capital account	43.4	32.7	177.9	77.5	75.5	1163.4
Public project grants	43.4	32.7	61.4	77.5	75.5	71.9
Debt cancellation	0.0	0.0	116.5	0.0	0.0	0.0
Financial account (net)	244.0	102.8	105.6	83.2	341.0	-671.4
Medium- and long-term public capital	83.9	57.4	47.0	81.2	89.3	-990.4
Disbursements	107.7	84.4	81.7	98.8	107.8	59.6
Project loans	80.1	84.4	70.7	61.9	60.7	59.6
Program loans	27.6	0.0	10.9	37.0	47.1	0.0
Amortization due	-23.9	-27.0	-34.7	-17.6	-18.5	-1050.0
Principal not yet due 1/						
Medium- and long-term private capital	35.5	12.7	32.4	50.0	98.6	130.9
Deposit money banks	-19.6	-4.3	64.5	15.0	-38.7	50.7
Short-term capital	59.7	28.2	69.5	37.9	104.5	50.9
Errors and omissions	84.6	8.9	8.7	-100.9	87.4	86.4
Overall balance	128.4	-102.0	-14.1	-131.5	133.8	221.6
Financing	-128.5	102.0	14.1	131.4	-133.7	-221.7
Change in net foreign assets (- increase)	-149.8	76.5	-15.2	131.4	-133.7	-221.7
Of which : net use of Fund resources	-4.2	-9.7	-5.9	-4.9	-4.9	-58.6
Loans	10.3	5.2	9.5	2.0	1.3	1.3
Repayments	-14.5	-15.0	-15.3	-6.9	-6.2	-59.9
Change in external arrears (+ increase)	0.0	0.0	0.0	0.0	0.0	0.0
Interest	0.0	0.0	0.0	0.0	0.0	0.0
Principal	0.0	0.0	0.0	0.0	0.0	0.0
Debt relief obtained	21.4	25.6	29.3	0.0	0.0	0.0
Financing gap	0.1	0.0	0.0	0.1	-0.1	0.0

Sources: Central Bank of West African States (BCEAO); and staff estimates.

1/ The entry in 2003 is for the stock of debt operation at the completion point.

Table 24. Benin: External Trade Indices, 2001–06

	2001	2002	2003	2004	2005	2006
			(1992=100)			
Merchandise exports, f.o.b.						
Value index	438.4	421.5	481.0	518.0	489.9	320.7
Volume index	269.5	298.0	323.7	279.9	346.2	311.6
Unit value index	268.2	233.6	238.8	291.9	224.5	211.9
Merchandise imports, f.o.b.						
Value index	335.1	381.3	395.0	410.2	366.3	391.2
Volume index	138.7	146.3	153.3	157.8	163.0	170.1
Unit value index	241.5	260.5	257.7	259.9	224.7	229.9
Terms of trade index	111.0	89.6	92.7	112.3	99.9	92.2
			(Annual percentage change)			
Merchandise exports, f.o.b.						
(excluding reexports)						
Value index	15.3	-3.9	14.1	7.7	-5.4	-34.5
Volume index	-4.5	10.6	8.6	-13.6	23.7	-10.0
Unit value index	18.7	-12.9	2.3	22.2	-23.1	-5.6
Merchandise imports, f.o.b.						
(excluding imports for reexports)						
Value index	8.0	13.8	3.6	3.9	-10.7	6.8
Volume index	6.2	5.5	4.7	3.0	3.3	4.4
Unit value index	1.7	7.9	-1.1	0.9	-13.6	2.3
Terms of trade index	16.7	-19.3	3.4	21.2	-11.0	-7.8

Sources: Beninese authorities; and staff estimates.

Table 25. Benin: Services, Income, and Private Transfers, 2001–06
(Billions of CFA francs)

	2001	2002	2003	2004	2005	2006
Services (net)	-34.1	-33.1	-32.9	-26.3	-17.1	-23.5
Credit	106.9	117.7	114.7	125.4	128.1	141.3
Freight and insurance	24.4	20.5	18.1	15.7	17.4	48.3
Government operations	10.1	8.1	5.6	6.2	7.7	10.8
Tourism	46.0	60.4	61.8	62.6	63.1	48.4
Other services	21.6	24.3	24.4	27.4	25.9	19.1
Other transport	4.8	4.4	4.8	13.5	14.0	14.8
Debit	-141.0	-150.8	-147.6	-151.7	-145.2	-164.8
Freight and insurance	-65.8	-77.0	-78.3	-71.8	-72.2	-89.1
Government operations	-4.6	-4.0	-5.9	-7.2	-6.3	-5.2
Tourism	-12.7	-13.7	-12.3	-15.4	-13.8	-5.5
Other services	-31.4	-34.2	-30.2	-37.5	-33.9	-40.1
Other transport	-26.5	-21.9	-20.9	-19.8	-19.0	-24.9
Income	-15.6	-18.1	-24.7	-20.5	-20.3	-15.4
Credit	5.5	17.5	11.9	20.7	10.5	26.3
Debit	-21.1	-35.6	-36.6	-41.2	-30.8	-41.6
Of which						
Interest on government debt	-13.5	-14.3	-11.3	-7.9	-5.6	-9.9
Private transfers	59.1	55.3	50.8	60.0	63.6	79.2
Credit	65.0	65.1	56.3	62.6	80.6	107.4
Debit	-5.9	-9.8	-5.5	-2.6	-17.0	-28.2

Sources: Central Bank of West African States (BCEAO); and staff estimates.

Table 26. Benin: Direction of Recorded Exports, 2001–06 1/

	2001	2002	2003	2004	2005	2006
	(Millions of U.S. dollars)					
World	591.0	241.5	271.4	290.1	300.4	389.8
Industrial countries	40.2	38.8	39.9	33.7	25.5	81.3
Of which						
United States	0.6	0.4	0.7	0.1	0.3	0.5
Belgium-Luxembourg	5.3	3.0	3.5	1.6	0.6	0.0
France	5.2	6.8	4.4	8.5	3.6	9.0
Italy	9.3	9.9	6.6	4.3	3.7	3.6
Portugal	1.9	2.8	2.0	3.2	3.8	6.7
Spain	5.3	4.5	4.3	4.3	2.1	4.7
Switzerland	1.5	2.4	3.3	4.9	2.0	0.1
United Kingdom	2.3	1.4	1.9	0.7	2.3	0.5
Developing countries	550.2	201.1	231.4	256.4	274.6	308.1
Africa	433.3	77.2	57.5	81.1	81.0	107.7
Of which						
Burkina Faso	1.1	1.1	2.2	2.2	4.4	5.4
Côte d'Ivoire	1.0	1.2	1.4	4.5	1.1	8.0
Morocco	4.8	8.9	3.2	2.1	3.2	3.9
Niger	5.0	5.1	7.7	15.2	17.9	22.1
Nigeria	13.4	35.8	12.8	16.7	13.7	16.9
South Africa	1.9	2.6	4.3	2.6	3.7	3.8
Togo	2.8	4.1	12.4	10.0	14.5	18.0
Asia	96.7	115.7	161.7	170.5	183.9	181.0
Of which						
Bangladesh	2.6	2.9	10.8	1.2	7.6	8.3
China,P.R.: Mainland	0.8	16.3	62.3	104.9	93.9	81.3
India	61.3	42.2	27.4	20.0	22.1	27.3
Indonesia	11.3	23.9	25.3	10.5	24.5	30.2
Korea	0.0	0.0	1.1	0.0	0.0	0.2
Malaysia	1.8	0.7	1.3	8.0	0.0	0.1
Thailand	8.6	12.5	15.7	10.6	14.3	10.9
Europe	6.3	5.5	0.8	2.2	1.3	3.9
Of which						
Turkey	3.6	3.7	0.1	1.4	0.0	2.9
Middle East	2.0	0.8	7.0	1.3	7.2	8.8
Of which						
Saudi Arabia	1.6	0.7	1.1	0.3	4.2	5.2
Western hemisphere	11.9	2.0	4.5	1.3	1.2	6.7
Of which						
Argentina	0.0	0.1	0.0	0.0	0.0	0.0
Brazil	9.0	0.9	0.9	0.0	0.6	5.6
Not specified countries	0.0	1.4	0.0	0.0	0.3	0.4
Memorandum items:						
European Union	37.8	35.8	35.1	29.2	24.2	81.4
Oil exporting countries	27.5	60.6	45.0	28.0	45.3	55.9
Non-oil developing countries	522.7	140.5	186.4	228.4	229.3	252.2
Percent distribution	(Percent)					
Industrial countries	6.8	16.1	14.7	11.6	8.5	20.9
Developing countries	93.1	83.3	85.3	88.4	91.4	79.0
Africa	73.3	31.9	21.2	27.9	27.0	27.6
Asia	16.4	47.9	59.6	58.8	61.2	46.4
Europe	1.1	2.3	0.3	0.8	0.4	1.0
Middle East	0.3	0.3	2.6	0.5	2.4	2.3
Western hemisphere	2.0	0.8	1.6	0.4	0.4	1.7
	(Annual percent change)					
World	202.2	-59.1	12.4	6.9	3.6	29.8
Industrial countries	2.1	-3.6	2.9	-15.7	-24.3	219.0
Developing countries	252.4	-63.4	15.1	10.8	7.1	12.2
Africa	1428.0	-82.2	-25.5	41.0	0.0	32.9
Asia	2.8	19.7	39.7	5.5	7.8	-1.6
Europe	-38.2	-13.5	-85.3	172.9	-40.5	198.4
Middle East	-19.1	-62.1	819.7	-81.1	445.6	22.8
Western hemisphere	-43.2	-83.0	120.1	-71.7	-7.6	476.1

Source: IMF, Direction of Trade Statistics.
1/ Trade partners data

Table 27. Benin: Direction of Recorded Imports, 200106 1/

	2001	2002	2003	2004	2005	2006
	(Millions of U.S. dollars)					
World	622.2	720.9	886.0	897.2	892.9	3427.4
Industrial countries	332.7	364.8	456.6	414.7	448.3	843.6
Of which						
United States	29.7	20.9	24.9	9.7	18.2	127.2
Japan	20.4	20.3	30.1	20.3	13.8	18.0
Austria	2.9	0.5	0.1	0.2	0.1	2.8
Belgium-Luxembourg	...	...	...	...	...	93.6
Denmark	5.2	5.1	5.5	4.2	7.9	2.1
France	144.4	172.9	214.7	165.2	194.5	257.3
Italy	23.3	23.3	19.2	10.8	14.4	38.8
Spain	13.2	13.2	18.4	15.5	23.5	31.8
Switzerland	2.6	1.1	2.3	23.4	20.5	14.1
United Kingdom	21.4	35.7	41.3	51.4	46.7	76.5
Developing countries	283.3	349.5	428.8	479.2	444.2	2583.3
Africa	167.2	192.4	247.9	248.0	266.4	367.7
Of which						
Burkina Faso	0.1	0.0	0.4	0.3	0.1	0.1
Cameroon	0.8	0.8	4.6	10.0	9.6	11.9
Côte d'Ivoire	33.9	40.5	47.5	62.3	62.4	121.4
Morocco	0.7	1.0	2.0	2.6	2.8	3.5
Nigeria	29.9	27.5	37.7	26.7	35.9	45.1
South Africa	11.8	18.0	42.4	6.3	19.7	25.6
Togo	40.5	35.7	35.5	50.7	39.8	49.2
Asia	95.5	105.8	140.4	188.2	138.6	2119.7
Of which						
Bangladesh	0.1	0.0	0.0	0.3	0.3	0.4
China,P.R.: Mainland	46.5	46.3	62.7	78.9	59.5	1597.6
India	8.3	14.0	14.7	14.1	9.2	11.4
Indonesia	5.6	5.2	5.3	6.9	8.5	10.7
Korea	6.2	6.8	3.9	5.9	4.5	20.8
Malaysia	0.9	2.9	12.4	5.4	8.8	108.3
Pakistan	1.9	0.8	0.1	0.9	0.2	0.3
Thailand	18.9	20.3	31.1	59.7	37.4	205.0
Europe	8.1	13.0	10.5	3.9	3.8	14.8
Of which						
Turkey	3.6	5.1	4.5	1.9	1.9	6.6
Middle East	10.7	27.7	19.8	24.4	25.7	31.4
Of which						
Saudi Arabia	5.5	4.6	1.8	1.5	9.9	12.4
Western Hemisphere	1.8	10.5	10.3	14.7	9.7	49.6
Of which						
Argentina	0.1	1.8	0.2	0.5	0.0	5.4
Brazil	0.9	7.0	8.6	9.8	9.0	42.9
Not specified countries	1.3	0.7	0.5	3.3	0.5	0.6
Memorandum Items:						
European Union	278.1	319.8	395.5	345.3	384.8	672.1
Oil exporting countries	41.4	45.2	47.3	45.8	60.7	76.3
Non-oil developing countries	241.9	304.2	381.5	433.3	383.5	2507.0
	(Percent of total imports)					
Industrial countries	53.5	50.6	51.5	46.2	50.2	24.6
Developing countries	45.5	48.5	48.4	53.4	49.7	75.4
Africa	26.9	26.7	28.0	27.6	29.8	10.7
Asia	15.4	14.7	15.8	21.0	15.5	61.8
Europe	1.3	1.8	1.2	0.4	0.4	0.4
Middle East	1.7	3.8	2.2	2.7	2.9	0.9
Western Hemisphere	0.3	1.5	1.2	1.6	1.1	1.4
	(Annual percent change)					
World	10.6	15.8	22.9	1.3	-0.5	283.8
Industrial countries	3.0	9.6	25.2	-9.2	8.1	88.2
Developing countries	20.1	23.3	22.7	11.7	-7.3	481.6
Africa	31.8	15.1	28.8	0.0	7.4	38.0
Asia	22.9	10.7	32.8	34.0	-26.3	1429.4
Europe	-2.9	61.5	-19.6	-62.8	-2.1	288.4
Middle East	-47.2	158.0	-28.6	23.3	5.3	22.3
Western Hemisphere	-34.8	498.8	-2.7	43.4	-34.2	411.9

Source: IMF, Direction of Trade Statistics.

1/ Trade partners data reported CIF. These imports include Benin's reexports.

Table 28. Benin: Stock of Public and Guaranteed External Debt, 2001–06[1]
(Billions of CFA francs, unless otherwise indicated)

	2001	2002	2003	2004	2005	2006
Multilateral institutions	829.0	782.7	705.9	677.1	813.9	201.6
IMF	57.1	53.9	38.6	37.0	31.3	1.4
IDA	449.4	424.3	382.2	366.6	410.6	58.7
African Development Bank/Fund	205.2	193.7	152.0	150.0	237.7	33.9
Other	117.3	110.7	133.1	123.5	134.4	107.5
Bilateral creditors	159.9	151.0	29.8	63.1	42.1	65.4
Paris Club 2/	136.0	128.4	7.7	24.8	4.1	0.0
France 3/	44.0	41.5	0.0	0.0	0.0	0.0
Germany	1.7	1.6	0.0	0.0	0.0	0.0
Italy	22.3	21.1	0.0	0.0	0.0	0.0
Norway	21.0	19.8	0.0	0.0	0.0	0.0
Russia	13.8	13.0	7.7	24.8	4.1	0.0
United Kingdom	2.9	2.7	0.0	0.0	0.0	0.0
Other	30.3	28.6	0.0	0.0	0.0	0.0
Other creditors	23.9	22.6	22.1	38.3	38.0	65.4
Total debt outstanding (after HIPC Initiative relief)	988.9	933.6	754.6	722.6	856.0	267.0
Memorandum item:						
Debt outstanding (in percent of GDP)	56.9	47.7	36.5	33.8	36.9	10.8

Sources: Autonomous Amortization Fund (CAA); and staff estimates.

1/ MDRI in 2006.
2/ In 1997, Russia became a member of the Paris Club.
3/ Including hospital and postal debt

Table 29. Benin: Debt-Service Obligations on Public and Publicly Guaranteed Debt, 2001–06
(Billions of CFA francs)

	2001	2002	2003	2004	2005	2006
Intérêts	13.5	14.3	10.6	9.2	7.9	5.4
Multilatéraux (non compris FMI)	7.3	7.8	6.2	5.3	7.5	4.6
FMI	0.3	0.2	0.2	0.1	0.1	0.0
Club de Paris (Moyen et long terme) 1/	5.3	4.8	3.9	3.5	0.1	0.1
Autres créanciers bilatéraux	0.6	0.6	0.4	0.3	0.3	0.6
Dette à court terme	0.0	0.0	0.0	0	0.0	0.0
Dette postale et hospitalière	0.0	0.0	0.0	0	0.0	0.0
Autres	0.0	0.0	0.0	0	0.0	0.0
Principal (amortissement)	28.0	29.0	26.3	23.3	18.9	9.6
Multilatéraux (non compris FMI)	15.7	16.5	13.9	13.2	14.5	7.9
FMI	10.5	10.2	8.4	5.7	4.1	0.0
Club de Paris (Moyen et long terme)	0.9	1.4	2.0	2.2	0.0	0.1
Autres créanciers bilatéraux	0.9	0.9	2.0	2.2	0.3	1.6
Dette à court terme	0.0	0.0	0.0	0	0.0	0.0
Dette postale et hospitalière	0.0	0.0	0.0	0	0.0	0.0
Autres	0.0	0.0	0.0	0	0.0	0.0
Service dû de la dette (total)	41.5	43.3	38.1	32.5	26.9	15.0
Intérêts	13.5	14.3	11.3	9.2	7.9	5.4
Principal	28.0	29.0	26.8	23.3	18.9	9.6
Variations des arriérés (+ augmentation)	0.0	0.0	0.0	0	0.0	0.0
Réechelonnement obtenu 1/	15.7	23.7	19.1	17.0	11.2	0.0
Dont:						
Club de Paris	4.3	3.6	4.5	4.0	1.6	0.0

Sources: Caisse Autonome d'Amortissement, et estimations des services du Fonds.

Table 30. Benin: Exchange Rate Developments, 2001–06

	2001	2002	2003	2004	2005	2006
Exchange rates						
Period averages						
CFA francs per U.S. dollar	732.40	694.56	580.07	527.59	526.55	522.40
CFA francs per SDR	932.44	899.68	812.62	781.45	778.11	768.67
End-of-period						
CFA francs per U.S. dollar	744.31	644.20	533.69	489.24	553.26	496.47
CFA francs per SDR	939.91	863.24	783.15	753.61	791.84	748.61
Exchange rate indices (1990=100)						
CFA franc per U.S. dollar	269.00	255.10	213.05	193.78	193.40	193.40
CFA franc per SDR	252.23	243.37	219.81	211.38	210.48	210.48
Nominal effective exchange rate 1/	50.10	51.34	55.87	58.30	58.01	58.01
Real effective exchange rate 1/ 2/	79.28	82.19	89.08	91.25	93.23	93.23

Source: IMF, Information Notice System.

1/ Trade weighted.
2/ Deflated by the relative consumer prices.