

**IMMEDIATE
ATTENTION**

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March 13, 2012

To: Members of the Executive Board

From: The Acting Secretary

Subject: **Benin—Third Review Under the Extended Credit Facility
Arrangement—Impacts of Twin External Shocks in 2012**

The attached supplement entitled impacts of twin external shocks in 2012 provides background to the paper on the third review under the Extended Credit Facility arrangement for Benin (EBS/12/29, 3/13/12), which is being considered on a lapse of time basis. Unless an objection from the authorities of Benin is received prior to the conclusion of the Board's consideration, the document will be published. Any requests for modifications for publication are expected to be received two days before the Board concludes its consideration.

Questions may be referred to Mr. de Zamaroczy (ext. 36934), Ms. Macario (ext. 39978), and Mr. Pani (ext. 38536) in AFR.

Unless the Documents Section (ext. 36760) is otherwise notified, the document will be transmitted, in accordance with the procedures approved by the Executive Board and with the appropriate deletions, to the WTO Secretariat on Wednesday, March 21, 2012; and to the African Development Bank, the European Commission, the Islamic Development Bank, and the West African Economic and Monetary Union, following its consideration by the Executive Board.

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BENIN

THIRD REVIEW UNDER THE EXTENDED CREDIT FACILITY ARRANGEMENT—IMPACTS OF TWIN EXTERNAL SHOCKS IN 2012

March 12, 2012

Prepared By

The African Department

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BENIN: IMPACTS OF TWIN EXTERNAL SHOCKS IN 2012

The euro area countries are facing a sovereign debt crisis that is a burden on their economic performance. In January 2012, the government of Nigeria lowered gasoline subsidies. This note examines the implications of these twin external shocks on growth, inflation, and fiscal revenue in Benin in 2012.¹

CONTEXT

A. Recession in Europe

1. The global economic environment is gloomy. Global economic growth in 2012 was projected to be 4 percent, and growth in the euro area, the United States, and emerging and developing economies was projected to be 0.2 percent, 2 percent, and 6 percent, respectively. However, the difficulties of solving the sovereign debt crisis in the European countries and market concerns about the fiscal outlook in the United States have slowed the global economy's exit from the "great recession." Consequently, global economic growth was revised downward for 2012. The new projections predict a recession in the euro area, while economic growth would slow in the United States and the emerging and developing countries.

B. The Gasoline Market in Benin

2. The retail gasoline market in Benin is dominated by the informal sector. The proximity of Nigeria, where until the end of 2011 the Government heavily subsidized the price of gasoline at the pump, encouraged the development of the informal gasoline market. The gasoline, commonly called "kpayo," is smuggled in at low prices from Nigeria and is sold informally at a price well below the price filling gas stations charge.

3. It is difficult to measure the volume of informal sales of gasoline. According to estimates, it accounted for roughly 70 percent of total sales a few years ago. This figure has risen significantly in recent times, mainly owing to the increase in the official price of gasoline in Benin, whereas the price in Nigeria has remained practically unchanged. This price differential encouraged consumers to purchase more gasoline in the informal market, which is reflected in the latest estimates according to which official sales accounted for only 10 to 15 percent of total sales at end-2011. This trend has caused several oil companies to leave Benin, and many filling stations have closed as a result. According to current estimates, fewer than 100 stations are operating, compared to more than 400 a few years ago.

¹ This note was prepared by Messrs. Pani, Farah, Lonkeng, and de Zamaróczy.

4. This situation has a number of implications for the economy of Benin:

- **It deters investment and entrepreneurial activities** in the formal sector in favor of “rent seeking” in the informal sector. For a citizen of Benin who has amassed a certain amount of savings and who is willing to take risks, it is more profitable to engage in smuggling gasoline than to set up a business. This negatively affects growth, because informal gasoline imports do not produce any increase in productivity or additional demand for goods and services (at most, they encourage the growth of private transportation in urban settings).
- **It is a violation of the laws** on importing and distributing petroleum products. This infringement produces distortions and other negative effects in other business sectors.
- **It leads to a significant loss in government revenue.** Because no taxes or duties are collected on informal sales, the total cost of this tax avoidance can be estimated at between 1 and 2½ percent of GDP according to the assumptions that are used—see a detailed discussion below.
- **It fosters the excessive use of means of transportation and does not encourage fuel savings.** Beninese consumers are used to artificially low prices for fuel in the informal market and they do not know the real cost of the fuel they consume in terms of resources and money. Therefore, they are prone to use more transportation services than they would use under a “truth-in-pricing” system, because they, for example, purchase products shipped over long distances instead of local products. In addition, there is no incentive to use more efficient vehicles with smaller engines. The most visible aspect of these distortions may be the presence of many “zémidjans” (motorcycle-taxis) in urban areas.
- **It takes a heavy toll in terms of pollution and health.** Smuggled fuel is often impure and consuming this fuel causes substantial air pollution. Shipping and handling smuggled fuel leads to high health costs (e.g., cancer) and results in serious and even deadly accidents.

5. **This situation generates a transfer from the government of Nigeria to the consumers of Benin.** The government of Nigeria subsidizes the price of gasoline, and this subsidy is then transferred to Beninese consumers in proportion to their consumption of gasoline. However, this transfer is not warranted economically or socially. There are no benefits to the government of Nigeria for this transfer, while the financial benefits for Beninese consumers are obvious. Moreover, the principal beneficiaries are not the poor, who do not own vehicles and use private transportation only occasionally; rather, they are urban middle-class consumers.

CHANNELS FOR TRANSMITTING THE SHOCKS TO THE ECONOMY OF BENIN

A. Recession in Europe

6. The main channels for transmitting the slowdown in economic activity from the euro area to the economy of Benin are as follows:

- **Exports** to the euro area account for about 7 percent of total exports from Benin, which themselves account for roughly 12 percent of the Gross Domestic Product (GDP). The decline in economic activity in Europe and the slowdown in economic growth in emerging economies may therefore slightly lower exports from Benin.
- **Remittances from migrants**—a third of which come from the euro area—account for 1½ percent of GDP. Therefore, given the low exposure, the impact through this channel would be slight.
- **Foreign direct investment (FDI)** in Benin is estimated at 1½ percent of GDP, and less than half come from the euro area. Given this low exposure, the impact through this channel also would be slight.
- **Foreign aid:** the slowdown in economic growth in the world and the crisis in the euro area may generate a decline in commitments for foreign public assistance. Aid flows amounted to about 3.2 percent of GDP in 2010, and about 60 percent came from the euro area. Because public aid is decided mostly at the political level, it is not unreasonable to predict a certain stagnation or even a decline in this assistance given the fiscal difficulties the donor countries are experiencing.

B. Reduction of Subsidies in the Price of Gasoline

7. **The informal gasoline market, fueled by Nigeria, is an essential share of total domestic consumption.** As a result, an increase in gasoline prices in Nigeria spills over into the informal Beninese market through the following channels:

- **a drop in consumption** caused by the decline in real household income, which makes growth slow; and
- **an increase in prices** owing to the primary and secondary price effects.

PROSPECTS FOR GROWTH IN BENIN IN 2012

8. **A mild slowdown in the growth of real GDP in 2012.** The slowdown in global economic growth and the partial elimination of fuel subsidies in Nigeria may lower the rate of real GDP growth

in Benin from the initial forecast of 4.3 percent to 3.5 percent. This downward revision of the forecast reflects:

- **A drop in exports, remittances, and FDI:** the combined effects of the slowdown in these macroeconomic aggregates could lower growth by 0.2 percentage points from the initial forecasts. However, this new forecast assumes that foreign aid to Benin will remain unchanged in 2012 because aid programs are decided in advance.
- **The higher price of gasoline** in the informal *kpayo* market, which represents between 85 and 90 percent of gasoline sales in Benin, would lower real GDP growth by 0.6 percentage point. This high price will induce a supply shock, which will result in a rise in production and transportation costs, inducing in turn a slowdown in economic growth. The sectors most affected by the increase in the price of gasoline are trade, transportation, tourism, restaurants, and the hospitality industry. In general, growth will also be bridled because of the downturn in real household income.²

9. **Risk:** the scenario above (a 0.8 percentage point combined reduction of growth) may be optimistic. A lack of firmness in solving the European sovereign debt crisis and heightened concerns over the medium-term fiscal outlook in the United States could further weaken prospects for global growth, which could have an additional adverse impact on Benin.

INFLATION OUTLOOK IN BENIN IN 2012

A. The Reform in Nigeria and its Consequences for Benin

10. **On January 2, 2012, the Nigerian government decided to end its policy of subsidizing the price of gasoline and to move to a truth-in-pricing system.** Consequently, the price of gasoline at the pump increased from 65 to 140 naira per liter (Table 1). This rise immediately caused an increase in the price of gasoline in the informal market in Benin, where prices temporarily exceeded the official price in the filling stations. This caused consumers to return to the formal market, resulting in long lines at the filling stations.

² Simulations conducted by IMF staff show that an increase in the price of fuel from US\$107 to US\$150 a barrel in 2011 (i.e., a 40 percent increase) would reduce growth by about 0.7 percentage point for oil-importing, low-income, sub-Saharan countries. For the same shock, end-period inflation would rise by 1.8 percentage point ("Regional Economic Perspectives for sub-Saharan Africa," IMF, April 2011, Box 1.3). However, these simulations are based on the fact that, usually, an increase in international prices is only partially passed through to local prices. This is not the case in Benin where the increase in the price of gasoline in Nigeria was passed through immediately and fully to the informal market.

Table 1: Nigeria. Gasoline Prices, 2011-12.

	2011	2012	2012
		Early Jan.	Mid-Jan.
Price per liter			
Naira	65	140	97
CFA francs	190	425	295
<i>Memorandum item:</i>			
CFA francs/naira	2.9	3.0	3.0

Source: IMF staff estimates.

11. In mid-January 2012, the government of Nigeria reached a compromise with the unions. The price of gasoline stabilized at 97 naira per liter, which is a 49 percent increase over the initial price.

12. The reform in Nigeria will produce various macroeconomic effects in Benin:

- **The first effect has been an immediate increase in the price of gasoline in the parallel market.** The prices of goods and services in which fuel accounts for a significant portion of production costs (transportation services and taxis) increased immediately as well. These increases were at first reflected by a rise in the general level of prices (immediate effect), followed by inflationary pressures as the initial increase spilled over into other prices.
- **The loss of transfers from Nigeria should affect the trade balance** through gasoline imports, combining two effects: a first effect linked to the increase in the price of gasoline, which would cause an increase in the value of imports, and a second effect which would translate into a reduction in the volume of imports.
- In the short term, the effects will be similar to the effects produced by a sudden deterioration in the terms of trade (which in fact has occurred): the loss in buying power will weaken domestic demand and thus growth.
- **In the medium term, changes in relative prices may lead to a reallocation of demand and supply between sectors.** Informal sales of gasoline could decline and private capital and energy could be directed toward new productive sectors, supporting growth and employment. These increases should lead to changes in relative prices and real exchange rates (which could result in a better productivity if non-tradable goods and services become cheaper than tradable goods and services). In terms of growth, the medium-term effects should be positive owing to more efficient resource allocation (capital, labor, entrepreneurial capacity) brought about by greater truth in prices.

13. Inflation will strongly increase in 2012. The decrease in the gasoline subsidy in Nigeria resulted in an immediate increase in the price of *kpayo*. This increase in the price of gasoline will have a direct impact on households and businesses that use *kpayo*, and an indirect impact because of higher transportation costs and the prices of other products for which transportation is a major share of the costs. The increase in the price of petroleum products should increase the general level of prices immediately by about 4 percent—the “first-round” effect, followed by additional inflation of roughly 1 percent—the “second-round” effect. These increases will be on top of the underlying 2 percent inflation, so that total annual inflation in 2012 in Benin should be around 7 percent (Table 2).

Table 2: Benin. Inflation Forecast, 2012.
(Percent)

	Price Increase	Weight in the Basket	Inflation
Gasoline	50.0	2.7	1.4
Transportation	20.0	14.0	2.8
Second-round effects			1.0
<i>Additional inflation</i>			5.2
Initial projection			2.0
Revised inflation			7.2

Source: Beninese authorities; and IMF staff estimates.

14. Risk: a heavy depreciation in the value of the euro could increase the cost of fuel imports, thus generating additional inflationary pressures.

FISCAL EFFECTS IN 2012

A. Price of Gasoline at the Pump in Nigeria

15. The change in the price of gasoline in Nigeria in the short term remains uncertain.

Initially, the Nigerian authorities fully eliminated the subsidies, effective January 2, 2012; this increased the price of gasoline at the pump from 65 to 140 naira per liter. Because of widespread opposition to the increase, in mid-January the Nigerian authorities reduced the price at the pump to 97 naira per liter; however, they also confirmed that their medium-term objective still was to completely eliminate subsidies. For the rest of 2012, a steady price of 97 naira per liter seems to be the most likely assumption.

16. Thus, we consider three possible scenarios for the price at the pump in Nigeria: (i) a baseline scenario, which calls for the continuation of the current price of 97 naira per liter; and two “alternate” scenarios: (ii) a medium scenario, which calls for a subsequent reduction of subsidies

and would result in a price at the pump of 120 naira per liter; and (iii) a truth-in-pricing scenario, which calls for the complete elimination of subsidies of the price of gasoline, which would result in a price at the pump of 140 naira per liter—which was the actual price between January 2 and mid-January 2012.

B. Fiscal Effects in the Baseline Scenario

17. In the baseline scenario, the fiscal effects of the rise in prices in Nigeria would be rather modest owing to the rigidity of the supply in the formal market. In this scenario, the purchase price of gasoline in Nigeria would increase from CFAF 190 to 295 per liter, which would enable the informal operators to continue offering a large discount compared to the official price (albeit smaller than the previous one) while maintaining a substantial profit margin (after paying for transportation and distribution). For example, the informal operators could continue to obtain a profit margin greater than 40 percent of the purchase price (albeit lower than the margin of about 60 percent that they obtained previously) by selling gasoline at a price of CFA francs 415 per liter, at a discount of about 27 percent compared to the official price. Under these conditions, it is unlikely that sales volumes in the formal market will increase significantly over 2011 volumes. Consequently, the volume of formal sales of gasoline – and thus their taxable value and tax revenue – would not change significantly compared to 2011.

C. Fiscal Effects in the Alternate Scenarios

Assumptions and estimates

18. To estimate the fiscal effects that would occur under the two alternate scenarios, we proceed in four stages: (i) we estimate how the total volume of sales of gasoline in Benin would respond to price changes; (ii) we estimate how the size of the formal market would then respond to the discount offered in the informal market; (iii) based on these estimates, we estimate the value of gasoline sales in the formal market in Benin; (iv) finally, we apply the ratios of taxes and revenue duties to the official sales to determine the amount of tax revenue that could be collected under each of the two scenarios.

Estimate of total sales of gasoline in Benin

19. To estimate the effect of the reform in Nigeria on total sales of gasoline in Benin, the following must first be established: (i) how the price of the gasoline offered in the informal market in Benin would change in the two scenarios; and (ii) how the demand for gasoline in Benin would change with the price offered in the informal market (assuming that the official price does not change).

20. Consumers respond to higher gasoline prices by lowering their consumption of gasoline. However, the size of this decrease will probably be rather modest, at least in the short term. Although consumers may reduce their use of transportation services, their needs cannot be compressed in the short term. The price elasticity of the demand for gasoline (in other words, the

ratio between the percentage increase in the price at the pump and the percentage decrease in the volume of sales) is thus low. We consider two possible values for this arc elasticity: -0.2 and -0.4.³ The higher the absolute value of the elasticity, the more consumers will respond to a price increase by lowering the volume of their purchases.

21. The discount offered in the informal market depends on the purchase price of gasoline in Nigeria. An increase in the purchase price forces the informal market operators to compress either the discount, or the profit margin, or both. In our estimates, in the medium scenario, the discount could go down to about 17 percent and leave a profit margin of 30 percent (Table 3); in the truth-in-pricing scenario, the discount would have to drop to 10 percent to leave a barely sufficient profit margin (20 percent) to maintain informal operators in business.

Table 3: Benin. Price at the Pump in the Informal Market, 2011-12.

	2011	2012		
		Baseline Scenario	Medium Scenario	Truth-in-pricing Scenario
Price at the pump in Nigeria (naira per liter)	65	97	120	140
<i>Percentage of increase compared to 2011</i>	<i>0.0</i>	<i>49.2</i>	<i>84.6</i>	<i>115.4</i>
<i>Price in CFA francs</i>	<i>190.0</i>	<i>294.6</i>	<i>364.4</i>	<i>425.2</i>
Informal selling price in Benin (CFA francs per liter)	300.0	415.0	475.0	510.0
<i>Percentage of increase compared to 2011</i>	<i>0.0</i>	<i>38.3</i>	<i>58.3</i>	<i>70.0</i>
<i>Discount on the official price</i>	<i>47.4</i>	<i>27.2</i>	<i>16.7</i>	<i>10.5</i>
<i>As a percentage of the official price</i>	<i>52.6</i>	<i>72.8</i>	<i>83.3</i>	<i>89.5</i>
Profit margin from informal trade (CFA francs per liter)	110.0	120.4	110.6	84.8
<i>As a percentage of the purchase price</i>	<i>57.9</i>	<i>40.9</i>	<i>30.3</i>	<i>19.9</i>

Sources: Beninese authorities; and IMF staff estimates.

22. Depending on the elasticities selected, the impacts on the volumes of gasoline sold will be different. If the above-mentioned arc elasticity values are applied to gasoline sales in the informal market (assuming the sale price in the formal market does not change), the volume of total gasoline sales would fall by roughly 7-12 percent if the elasticity is -0.2, and by 13-24 percent if the elasticity is -0.4 (Table 4).

³ Arc elasticity applies to cases such as this one, in which the price increase is large. If the percentage increase is modest, marginal elasticity is generally used. Arc elasticity is usually higher than marginal elasticity. In Mauritius, the marginal elasticity in the demand for gasoline in the short and long term has been estimated at -0.21 and -0.44, respectively (Sultan, R., 2010: "Short-Run and Long-Run Elasticity of Gasoline Demand in Mauritius: An ARDL Bonds Test Approach," *Journal of Energy Trends in Economics and Management*, 1 (2), pp. 90-95).

Table 4: Benin. Volume of Gasoline Sales, 2011-12.

	2011	2012		
		Baseline Scenario	Medium Scenario	Truth-in-pricing Scenario
Informal selling price (CFA francs per liter)	300.0	415.0	475.0	510.0
<i>Discount on the official price</i>	<i>47.4</i>	<i>27.2</i>	<i>16.7</i>	<i>10.5</i>
Estimated volume of total sales (index: 2011 = 100)				
Elasticity = -0.2	100	93.5	90.1	88.1
Elasticity = -0.4	100	87.0	80.2	76.2
Estimated volume of total sales (millions of liters)				
Elasticity = -0.2	132.0	123.4	118.9	116.3
Elasticity = -0.4	132.0	114.8	105.8	100.6

Sources: Beninese authorities; and IMF staff estimates.

Size of the formal market

23. It can be assumed that the size of the informal market is a growing function of the discount offered in this market, and the reverse is true for the official market. If the price of fuel in the informal market is equal to the price in the formal market, it is reasonable to assume that the informal market will disappear in the long run.⁴ As of end-2011, gasoline in the informal market was selling for CFAF 300 per liter, about 50 percent less than the official price at the pump, which remains at CFAF 570 francs per liter. We assume that a discount (i) of 30 percent is sufficient to maintain the share of the informal market (at the current level of 85 percent of the total sales volume); (ii) of 5 percent or less, leads to the elimination of the informal market in the short-to-medium term because there would be no significant incentive for consumers to purchase fuel in this market; (iii) between 5 and 30 percent, would make the share of the informal market follow a linear function of the discount (equal to zero with a 5 percent discount and to 85 percent when the discount is equal to 30 percent). The formal market evolves in the opposite direction; thus, the relative size of the formal market compared to total gasoline sales would increase from about 15 percent in 2011 to roughly 60 percent in the medium scenario and to more than 80 percent in the truth-in-pricing scenario (Table 5).

⁴ If the reform in Nigeria continues until the subsidies for the price of gasoline are entirely eliminated, the formal supply of gasoline in Benin will eventually eliminate a sizeable portion of informal sales. Investments are already being considered for reopening closed filling stations. This change will take time, but it will eventually alter the fuel market in Benin. However, in the absence of effective control measures, the parallel market will not be completely eliminated because it offers a "convenience" service (proximity, sales can be made at nearly any time of day or night, flexible amounts, etc.).

Value of sales in the formal market

24. Sales in the formal market would increase significantly only under the most favorable assumptions. The value of sales in the formal market was estimated by multiplying the estimated volume of total sales (based on the purchase price in Nigeria and the elasticity of the demand for gasoline in Benin) by the relative size of the formal market and the official selling price. According to these estimates, the total value of formal sales would climb from about CFAF 13 billion in 2011 to

Table 5: Benin. Volume and Value of Gasoline Sales in the Formal Market, 2011-12.

	2011	2012		
		Baseline Scenario	Medium Scenario	Truth-in-pricing Scenario
Informal selling price (CFA francs per liter)	300.0	415.0	475.0	510.0
Official selling price (CFA francs per liter)	570.0	570.0	570.0	570.0
<i>Discount of the informal price on the official price (percent)</i>	<i>47.4</i>	<i>27.2</i>	<i>16.7</i>	<i>10.5</i>
Share of the formal market (percent of total sales volume)	15.0	24.5	60.3	81.2
Estimated value of total sales (millions of liters)				
Elasticity = -0.2	132.0	123.4	118.9	116.3
Elasticity = -0.4	132.0	114.8	105.8	100.6
Estimated sales volume in the formal market (millions of liters)				
Elasticity = -0.2	19.8	30.3	71.7	94.4
Elasticity = -0.4	19.8	28.2	63.8	81.7
Estimated sales value in the formal market (billions of CFA francs)				
Elasticity = -0.2	12.8	17.3	40.9	53.8
Elasticity = -0.4	12.8	16.1	36.4	46.6

Sources: Beninese authorities; and IMF staff estimates.

between CFAF 35 and 55 billion in 2012, depending on the reform scenario and the elasticity of demand at the prices under consideration (Table 5). For example, in the truth-in-pricing scenario and with an elasticity of -0.2, total sales volume⁵ would fall from 130 to 116 million liters; the relative size of the formal market would grow by 15 percent to 81 percent; thus, the volume of sales in the formal market would increase from 20 to 95 million liters (in other words, 81 percent of total sales of 116 million liters), and the value of sales in the formal market would rise from CFAF 13 to 54 billion (95 million liters at CFAF 570 per liter).

⁵ The volume of total gasoline sales in Benin in 2011 was estimated by dividing the amount of gasoline sales in the formal market (about 20 million liters) by the relative size of the formal market (approximately 15 percent of total sales).

Tax revenue

25. The Government in Benin collects about CFAF 160 per liter on official gasoline sales.

This revenue comes from various taxes—customs import duties, specific taxes, the VAT, and so forth; Table 6). Total revenue from official sales of gasoline is estimated at about CFAF 3.3 billion in 2011 (0.1 percent of GDP), without including other revenue collected from oil company business activities, such as taxes on turnover, wages, and so forth.⁶

Table 6: Benin. Tax Revenue from Gasoline Sales, 2011.
(Billions of CFA francs)

Total revenue	3.3
Value-added tax (VAT)	2.3
Specific tax (TSPP)	0.4
Hydrocarbons tax (customs)	0.5
Other taxes and duties	0.1
<i>Memorandum item:</i>	
Estimated value of taxable gasoline sales	12.8

Source: Beninese authorities; and IMF staff estimates.

26. Assuming there is no change in tax policy, the increase in fiscal revenue would be proportional to the rise in the value of sales in the formal market. It would thus be between CFAF 6 billion (the equivalent of 0.1 percent of GDP in 2012) in the least favorable case (the medium scenario, with elasticity of -0.4) and CFAF 10 billion (0.3 percent of GDP) in the most favorable case (truth-in-pricing scenario, with elasticity of -0.2; Table 7).

⁶ Total revenue collected on hydrocarbons in 2011 is estimated at roughly CFAF 20 billion; of that amount, 3.3 billion is from customs import duties; 2.8 billion is from the specific tax; and about 14 billion comes from the VAT. Since the value of formal gasoline sales in 2011 was CFA francs 12.8 billion, or about 1/6th of the value of total formal sales of fuel (which amounted to 81 billion), it can be estimated that the amount of revenue collected on gasoline was approximately CFAF 3.3 billion, or the equivalent of 1/6th of the total amount of CFAF 20 billion.

Table 7: Benin. Tax Revenue from Gasoline Sales, 2011-12.

	Formal Market Sales		Tax Revenue	
	Billions of CFA Francs	As a Percentage of GDP	Billions of CFA Francs	As a Percentage of GDP
Situation in 2011 (estimate)	12.8	0.4	3.3	0.1
Situation expected in 2012				
Elasticity = -0.2				
Baseline scenario	17.3	0.5	4.4	0.1
Medium scenario	40.9	1.1	10.5	0.3
Truth-in-pricing scenario	53.8	1.4	13.8	0.4
Baseline scenario	16.1	0.4	4.1	0.1
Medium scenario	36.4	1.0	9.3	0.2
Truth in pricing scenario	46.6	1.2	11.9	0.3
<i>Memorandum items:</i>				
GDP (2011)	3,442.2	100.0	3,442.2	100.0
GDP (2012)	3,760.6	100.0	3,760.6	100.0

Source: Beninese authorities; and IMF staff estimates.

CONCLUSION

27. The combined effect of the twin external shocks in Benin would be a loss of 0.8 percentage point in growth in 2012. The direct effects of the recession in Europe on growth in Benin in 2012 would be marginal, because of the magnitude of trade links between Benin and emerging Asia. The effects of reducing subsidies for the price of gasoline in Nigeria would be slightly more important.

28. By contrast, the effects of reducing subsidies in Nigeria are significant in terms of inflation in Benin in 2012, because the level of inflation is expected to double compared to its level of the previous year. The effects on the level of fiscal revenue will continue to be modest in 2012 because the increase in prices in Nigeria will not significantly reduce the share of the informal gasoline market in 2012.

29. With this backdrop, the following may also be noted for Benin:**In 2012:**

- The effects of partially eliminating subsidies in Nigeria will cause a reduction of domestic demand brought about by lower household real income.
- The general level of prices increased suddenly in January with the transmission of the price increase to Benin, followed by inflationary pressures with the spilling over of the price increase to other sectors of the economy. If this rise does not lead to a general increase in wages, inflation will gradually return to its lower underlying trend, but the real exchange rate, and thus external competitiveness, will undergo a lasting—probably favorable—change.

In the medium term:

- If the Nigerian authorities completely eliminate gasoline price subsidies, the informal gasoline market in Benin may contract considerably. Such a change would generate major social costs, but it will also offer opportunities for increasing productivity, fighting corruption, promoting private investment, and creating productive activities that generate growth and employment in the formal sector.
- Under this same assumption, the value of formal sales of gasoline will increase significantly, producing an expansion of the taxable base and higher tax revenue that could range from 0.1 to 0.3 percent of GDP.
- To reenergize the formal hydrocarbons sales sector, it is important that the Beninese authorities strengthen the fight against fraud among the official distributors to bolster their credibility and in the informal market to check fraudulent imports.