

Macroeconomic Policy Coordination

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There is a strong theoretical and practical argument for fiscal-monetary policy coordination in the West African Economic and Monetary Union (WAEMU). WAEMU countries conduct independent fiscal policies but implement a single regional monetary policy. National ministries of finance are in charge of the formulation and implementation of fiscal policies; the WAEMU Commission coordinates fiscal policies among member states, whereas the Central Bank of West African States (BCEAO), the regional central bank, conducts the single monetary policy. As in any monetary union, this institutional setup raises an important practical question of coordination between heterogeneous fiscal policies and a homogeneous monetary policy. Fiscal-monetary policy coordination is a stated goal of the WAEMU but in practice it has been limited, leading to undesirable side effects. A coherent framework is needed for the WAEMU Commission and the BCEAO, which could help align and mutually reinforce their so-far largely autonomous efforts in the implementation of their fiscal and monetary policies. There is ample theoretical evidence that mutual adaptation of fiscal and monetary policy on a continuous timeline would lead to superior outcomes in terms of reaching policy objectives. In normal times, ministries of finance should continue to target long-term debt sustainability while the BCEAO should focus on inflation. This can be achieved through mutual adaptation of levels of fiscal deficit and policy rates. During stress times, the fiscal policies of finance ministries should still target debt sustainability, while the BCEAO's monetary policies should target inflation. However, in the short term, the BCEAO should be willing to tolerate temporarily high inflation as a strategy for increasing the likelihood of meeting the inflation target in the long term. Ministries of finances (MoFs) can focus on stabilizing output and employment at the expense of a temporary deviation from a sustainable debt path.

INSTITUTIONAL SETUP

Fiscal policy refers to the government's use of taxation and spending to regulate the aggregate level of economic activity. The use of fiscal policy consists of changes in the level or composition of taxation or government spending, and hence in the government's financial position relative to the rest of the economy (Hilbers 2005). Key policy variables include government deficits and debt, as well as tax and expenditure types and levels, fiscal deficits, and public debt.

Monetary policy refers to the central bank's control of the availability of credit in the economy to achieve the broad objectives of economic policy. Control can be exerted by operating on such aggregates as the level and structure of interest rates, the money supply, and other conditions affecting credit. The most important objective of most central banks is price stability, but there can be others such as promoting economic development and growth, stabilizing the exchange rate, safeguarding the balance of external payments, and maintaining financial stability. Key variables in this policy area include interest rates, money and credit supply, and the exchange rate.

While fiscal and monetary policies are implemented by different institutions, national ministries of finance and central banks, these policies are closely interlinked. A change in fiscal policy impacts the effectiveness of monetary policy and thereby affects the overall macroeconomic policy stance. The opposite is also true, as any changes in monetary policy have an impact on fiscal

policies and therefore on the overall effectiveness of macroeconomic policies. That is why it is crucial to pursue a consistent fiscal-monetary policy mix to avoid tensions and achieve optimal impact. Credibility of the overall policy mix depends on credibility of each of the policies. This policy mix is a key component of the IMF's macroeconomic policy advice.

The goal of this section is to suggest a framework of fiscal-monetary policy coordination in the context of the WAEMU. WAEMU countries conduct independent fiscal policies but have a single monetary policy. The WAEMU Commission is charged with the coordination of tax policies and monitoring fiscal convergence criteria, whereas the BCEAO, the regional central bank, conducts the single monetary policy. As in any monetary union, this raises an important practical question of coordination between heterogeneous fiscal policies and a homogeneous monetary policy.

Since WAEMU countries have a common monetary policy and different fiscal policies, coordination is developing at two levels: ensuring convergence of countries in fiscal policies and coordination between fiscal policies and the common monetary policy. After the adjustment of the parity of the CFA franc in 1994, WAEMU countries adopted the Covenant on Convergence, Growth and Solidarity between Member States, which formally expanded monetary integration to the economic sphere and introduced formal provisions for coordination of economic policies.

Provisions for coordination between fiscal and monetary policies are included in the founding documents of the WAEMU and in the recently revised BCEAO statute (Box 3.1). The WAEMU Treaty recognizes economic policies of member countries as an area of common interest, which should be coordinated (Article 63). Special attention should be paid to the consistency of fiscal policies with the objectives of the monetary policy, in particular price stability (Article 64). Specifically, the treaty calls for harmonization of the domestic legislation of member countries,

BOX 3.1. Statutory Provisions for Policy Coordination

WAEMU Treaty

Article 4. Without prejudice to the objectives defined in the Treaty, the Union pursues the following objectives: . . . harmonize, to the extent necessary for the proper functioning of the common market, the laws of the member states and in particular the system of taxation.

Article 63. Member States shall consider their economic policies as a matter of common concern and shall coordinate them within the Council. . . .

Article 64. On a proposal from the Commission, the Council decides on major guidelines on the economic policies of the Member States and the Union by way of providing recommendations. . . . These guidelines also take into account the requirement for compatibility of budgetary policies with the objectives of monetary policy, in particular that of price stability.

WAEMU Commission

The Commissioner of the Department of Economic Policy and Internal Taxation supervises, directs and coordinates joint EU policies in the following areas: harmonization of legal and accounting framework of public finances; the harmonization of domestic tax systems, direct and indirect taxes economic analyzes and forecasting. . . .

BCEAO Statute

Article 18. The claims of the Central Bank collateralized with securities issued or guaranteed by the treasuries, local authorities or all other public bodies in the Member States can not exceed a percentage of national tax revenues in the penultimate fiscal year, as set by the Monetary Policy Committee.

Article 61. The Governor of the Central Bank can make statements at the Council of Ministers on general economic policies of Member States, particularly on their fiscal issues and debt.

including their tax regimes (Article 4). The WAEMU Commission supervises, directs, and coordinates common policies on the harmonization of legal and accounting frameworks of public finances, as well as of domestic direct and indirect taxes. According to the BCEAO statute, the BCEAO governor has the right to raise at the Council of Ministers the economic policies of member countries, including their budget and debt policies (Article 61). The BCEAO statute also puts a ceiling on the amount of budget financing that can be backed by rediscounting government paper at the central bank (Article 18). While legal provisions for coordination are present, in practice such coordination has been limited.

The institutional setup of the WAEMU is generally adequate for effective fiscal-monetary policy coordination. As orientation for the medium term, governments approve *multiyear programs of economic development*, in line with their medium-term development plans and poverty reduction strategy papers (PRSPs). For comparability purposes, these programs are presented in a consistent manner across all WAEMU countries and include projections of key macroeconomic variables, including levels of fiscal deficits and a discussion of options for financing and debt policies for the medium term. National authorities submit these multiyear programs to the WAEMU Commission for assessment of consistency with the convergence criteria agreed to at the regional levels. The WAEMU Commission in its regular *Multilateral Surveillance Report* analyzes the multiyear programs for their structures, realism of underlying assumptions, and consistency with reaching the convergence criteria. If countries diverge from the convergence criteria, the WAEMU commission provides recommendations on the needed adjustments. To increase peer pressure on countries to comply, the report is submitted for consideration to the Council of WAEMU Ministers and is published on the WAEMU Commission Web site. The Council of Ministers, on which each country is represented by two ministers including the minister of finance, directs the overall macroeconomic policies of the union. The BCEAO is represented at its meetings by the governor, in an advisory capacity.

Regional arrangements have also been established for short-term coordination of fiscal and monetary policy. The Monetary Policy Committee, charged with the formulation and daily implementation of monetary policies, includes representatives of each WAEMU government. In addition, in each WAEMU country there is a National Credit Council (Conseil National du Cr dit), an advisory body to the minister of finance, which consists of the representatives of the government (including the ministry of finance), the private sector, and the national branch of the BCEAO. It is chaired by the minister of finance. The council reviews national financial conditions and can provide advice to the minister of finance on all issues related to money and credit. Finally, the BCEAO has established a surveillance committee to monitor the issuance of government paper.

FISCAL-MONETARY POLICY MIX

Fiscal and monetary policies have different but complementary policy objectives (Figure 3.1). At the institutional level, fiscal and monetary policies are designed and implemented by different bodies. In the context of the WAEMU, eight national ministries of finance are charged with the design and implementation of fiscal policies in their respective countries, whereas the BCEAO is responsible for the design and implementation of a single monetary policy in the interest of all eight countries of the region. The BCEAO is an intergovernmental institution, formally independent of national governments and their ministries of finance.

The objectives of fiscal and monetary policies are different but complementary (Blinter 1982; Canzoneri, Cumby, and Diba 2010).

- The main objective of fiscal policy, and actually often its formal long-term anchor, is a sustainable level of public debt, as well as macroeconomic stability and economic growth.

Figure 3.1. Complementary Policy Objectives

	Fiscal policy	Monetary policy
Institutions	National MoF/WAEMU Commission	BCEAO
Objectives	Real growth, sustainable public debt, employment	Price stability, financial sector stability
Instruments	Taxes: types, levels, exemptions; Expenditure: composition, structure	Interest rates, open market operations, reserve requirements
Timeframe	Long-term	Short-term
Constraints	Monetary dominance, implementation lags, low market access, tax policy rigidities, legal constraints	Fiscal dominance, mutually excluding goals (price and exchange rate stability), insufficient credibility, lack of transparency

Common policy objectives
Macroeconomic stability Aggregate demand

Source: Authors' presentation.

Note: BCEAO = Central Bank of West African States; MoF = ministry of finance; WAEMU = West African Economic and Monetary Union.

Generally, the objectives of fiscal policy are not enshrined in law. In the WAEMU context, constitutions of individual countries only mention that budget law will set the level of revenues and expenditures every year. The budget framework law usually establishes the structure, amendment, and voting requirements for the budget law, but does not specify any objective for either fiscal policy. National development strategies in individual countries in most cases backed by an IMF-supported program contain similar wording but include the important dimension of inclusiveness as part of the objectives for fiscal policy. WAEMU regional convergence criteria are the only documents that set specific fiscal policy objectives.

- The main objective of monetary policy is normally low and stable inflation, often supplemented by the additional objectives of maintaining an overall economic stability and achieving higher growth. The BCEAO defines price stability as an annual average inflation rate of 2 percent plus or minus 1 percentage point and set over a 24-month horizon. It mentions a number of secondary objectives such as support of sound and sustainable growth, and support of integration in the WAEMU.

Fiscal and monetary authorities use different types of instruments.

- Fiscal policy instruments operate by setting tax rates and expenditure priorities. Tax and spending instruments are generally used to counter cyclical fluctuation and are often targeted to support growth and employment, rather than to reduce inflation. Fiscal deficits are generally expansionary and lead to increased aggregate demand, interest rates, and inflation. Fiscal surpluses are contractionary and lead to lower aggregate demand, interest rates, and inflation.
- The instruments of monetary policy include policy interest rate, money supply, and reserve requirements. Central banks lower interest rates in recession and raise them to counter inflationary pressures. Lower interest rates increase aggregate demand, are expansionary, and

generally lead to real depreciation and higher inflation. Higher interest rates are contractionary, lower the aggregate demand, may cause real appreciation, and reduce inflation.

Monetary and fiscal policies operate on a different time scale.

- Fiscal policies are set in annual budgets, which at times are integral parts of medium-term fiscal frameworks. Tax types, rates, and bases, and other characteristics of the tax regime are set in the tax and customs codes and other laws. As these laws require parliamentary approval, tax regimes cannot be adjusted quickly. Financing also often depends on foreign donors, which commit their resources in advance and cannot revise their contributions in the course of the fiscal year. Therefore, long periods are generally required to alter the fiscal stance, and fiscal policy itself is better suited to addressing long-term fundamental challenges such as growth or unemployment.
- Monetary policy can be adjusted to change economic conditions relatively fast, at least within a given year. Central banks' monetary policy committees or similar bodies usually meet at least quarterly and the central bank can act independently of the legislature. Therefore, the monetary policy stance can be adjusted relatively quickly as a short-term reaction to spikes in inflation, exchange rate volatility, or credit conditions in the economy.

Both fiscal and monetary policies face important constraints, in particular under a fixed exchange rate arrangement with limited capital mobility.

- In this institutional setup, fiscal policy efficiency is constrained, as a fiscal expansion in the form of higher fiscal deficits can initially lead to an increase of aggregate demand and, therefore, to higher output and employment. But it also leads to an increase in money demand in the form of higher credit to the government from the banking system, which with unchanged money supply, should lead to an increase in interest rates. Higher interest rates would hold back economic activities and offset the initial positive impact of fiscal expansion, at least in part. In addition, fiscal policy is hindered by long implementation lags, often low efficiency of public investment, and little flexibility with spending composition.
- Monetary policy efficiency under a fixed exchange rate and limited capital mobility is also highly constrained, as changes in the policy interest rate can operate only in a short run. In this institutional setup, any monetary loosening would initially increase the GDP as credit became more affordable, but with time would lead to higher inflation and real exchange rate appreciation, even if the nominal rate were pegged. This would reduce export demand and therefore offset part of the GDP gains. Moreover, monetary policy is often handicapped by fiscal dominance, the need to play under political pressure the role of the lender of last resort for problem banks. In addition, monetary policy may be charged with mutually excluding goals, such as simultaneous price and exchange rate stability, and suffer from insufficient credibility and lack of transparency.

At the same time, fiscal and monetary policies are highly complementary. Both policies ultimately pursue a common goal of macroeconomic stability and can influence in a significant way aggregate demand. In an appropriate policy mix, each policy would play a supportive role to the other, with the view of achieving this common goal. On the other hand, the absence of coordination leads to suboptimal outcomes. It can result in either fiscal dominance, if fiscal policies play the central role, or monetary dominance, if this role belongs to monetary policies. Would it be better for the economy if fiscal or monetary authorities took decisions on their policies independently? Or would it be better if they cooperated and consulted each other before making policy decisions?

Owing to the specificity of the instructional setup of the WAEMU, fiscal and monetary policies are interlinked in a special way. In this setup, monetary policy can have a short-term impact on output because of temporary price and wage rigidities and can lead to several fiscal effects (Dahan 1998). The opposite is also true: fiscal policies have important monetary effects (Figure 3.2).

Central bank independence by itself cannot safeguard monetary policy objectives from the impact of fiscal policy. Even when the central bank has independence, and hence is not constrained by the financing needs of the government, the need to offset the impact of expansionary fiscal policy on aggregate demand and inflation could prompt it to tighten monetary policy by

Figure 3.2. Mutual Effect of Macroeconomic Policies

Fiscal effects of monetary policy	Monetary effects of fiscal policy
<ul style="list-style-type: none"> • <i>Tax revenue effect.</i> Higher interest rates may dampen economic activities, reduce demand for credit, and lead to slower GDP growth. As a result, the taxable base would be reduced, which would negatively affect tax revenue collection and could increase the fiscal deficit. The size of the revenue effect would depend on the elasticity of tax collection with respect to GDP and short-term rigidities of prices and wages in the economy. If automatic stabilizers were built into the design of the tax system, the negative revenue effect could be even larger than the drop in nominal growth. 	<ul style="list-style-type: none"> • <i>Deficit monetization effect.</i> In an extreme case, the budget deficit is financed by central bank credit, which leads to a direct increase in reserve money and a negative impact on inflation, policy credibility, and over all macrostability. Even if such direct financing is not allowed, the central bank can be forced by the need to support weak banks and inject liquidity in to the banking system, often with the view to give the means to commercial bank to lend to the government. This quasi-monetization operation still expands broad money and may have negative implications for inflation, the primary objective of monetary policy.
<ul style="list-style-type: none"> • <i>Interest payment effect.</i> Higher policy interest rates may lead to an increase in the interest payments on domestic government debt. If the transmission mechanism of the monetary policy functions well, an increase in policy rates would affect the whole term structure of interest rates, including the rates government has to pay on its Treasury bills and bonds. As interest payments are included above the line in budgets as government expenditure, additional debt service costs would increase the fiscal deficit. 	<ul style="list-style-type: none"> • <i>Crowding-out effect.</i> If a government finances its deficit by issuing government paper in the market, large borrowings by the government can displace the private sector from the financial market. With limited credit resources available, such crowding out would mean that the remaining financial resources could become scarce and too expensive for the private sector, which would harm economic development. Credit availability for the private sector in the economy is an important objective of monetary policy, which may be thus undermined.
<ul style="list-style-type: none"> • <i>Deficit financing effect.</i> A cut in policy interest rates would make bank credit less expensive for both the government and the private sector. If the resulting decline in market borrowing rates is asymmetric, banks may revise their lending strategies and direct their credit to the more profitable private sector customers, where they can charge higher rates. If the budget relies in large part on domestic bank financing, this may pose problems for the financing of the deficit. 	<ul style="list-style-type: none"> • <i>External sustainability effect.</i> Governments may finance their deficits externally, which is also an area of concern for the central bank. Excessive external financing may heighten balance-of-payments risks; lead to unsustainable current account deficits and exploding levels of external debt; and undermine exchange rate stability and other external risks, all of which are in the purview of the central bank.
<ul style="list-style-type: none"> • <i>Asset price effect.</i> Higher interest rates due to tight monetary policies reduce prices of almost all assets, including government paper. The market value of government debt (both domestic and foreign) would unambiguously drop in the short run, which could help press down inflation, nominal growth, and tax revenue. 	<ul style="list-style-type: none"> • <i>Price effect.</i> Unsustainably high fiscal deficits could force governments to resort to increases in indirect taxes, which would have an immediate impact on inflation. Moreover, such an increase in taxes could drive the wage-price increase spiral and set firm expectations of higher inflation in the future, which are hard to reverse. This would invalidate the efforts of the central bank to control inflation, as financial behavior of economic agents often depends directly on their perception of fiscal sustainability.

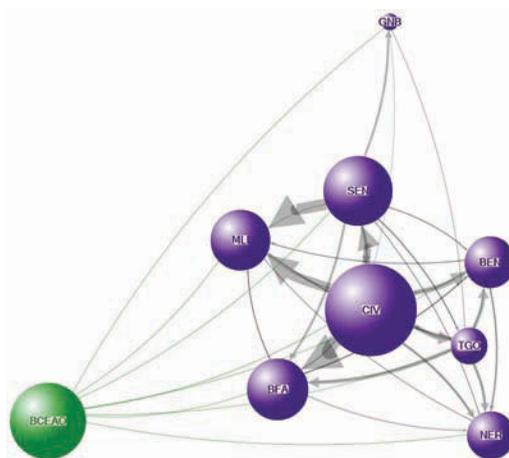
raising interest rates or reducing credit. The resulting high interest rates could depress economic activity and attract short-term and easily reversible capital flows, thereby adding to inflation and appreciation pressures on the currency, and eventually damaging macroeconomic and financial stability.

FRAMEWORK FOR THE WAEMU

In the WAEMU, fiscal and monetary policies are designed and implemented by institutionally independent bodies. Eight ministries of finance are responsible for fiscal policies in each of the WAEMU countries, whereas the BCEAO conducts a single monetary policy in the interest of the region as a whole. The visualization of the WAEMU's financial flows allows identifying the role of individual finance ministries and the BCEAO in the regional system (Figure 3.3). With the nodes proportional to fiscal revenue of individual countries, Côte d'Ivoire is squarely placed in the middle with the largest and presumably most influential finance ministry in the region, followed by Senegal and Burkina Faso. The same countries are linked by the most substantial financial flows. The BCEAO node is proportional to its balance sheet, which is comparable in magnitude to budget revenue of individual countries. The BCEAO is linked to individual countries, as the regional banking system supported by BCEAO liquidity injections provides financing to fiscal deficits. These links are not particularly large relative to other financial flows in the region, which places the BCEAO at a substantial distance from individual countries.

Budget financing and public debts are the two main areas of interaction between fiscal and monetary policies in the WAEMU. Fiscal deficits are set by individual WAEMU governments, often in cooperation with the IMF. The flow of government borrowing translates into changes in the stock of public debt and has immediate implications for public debt levels and sustainability. However, the conditions of government borrowing (for example, interest rate and collateral requirements) and the overall availability of credit resources to the government depend directly

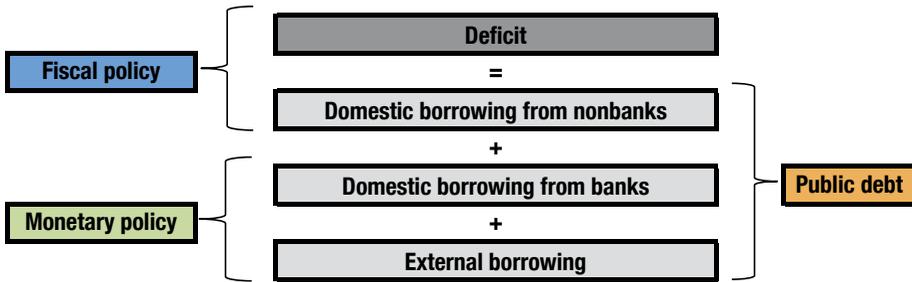
Figure 3.3. WAEMU: Network Interdependence for Policy Coordination



Source: IMF staff.

Note: Three-letter International Organization for Standardization abbreviations used for country names. BCEAO = Central Bank of West African States. Based on the Fruchterman-Reingold (1991) force-directed layout algorithm to determine the attractive forces among countries. The larger the flow, the stronger is the attractive force between the countries it links, assuming the strength of the repulsive force of 10 with 100 iterations per layout.

Figure 3.4. Key Areas of Policy Coordination in the WAEMU



Source: IMF staff.

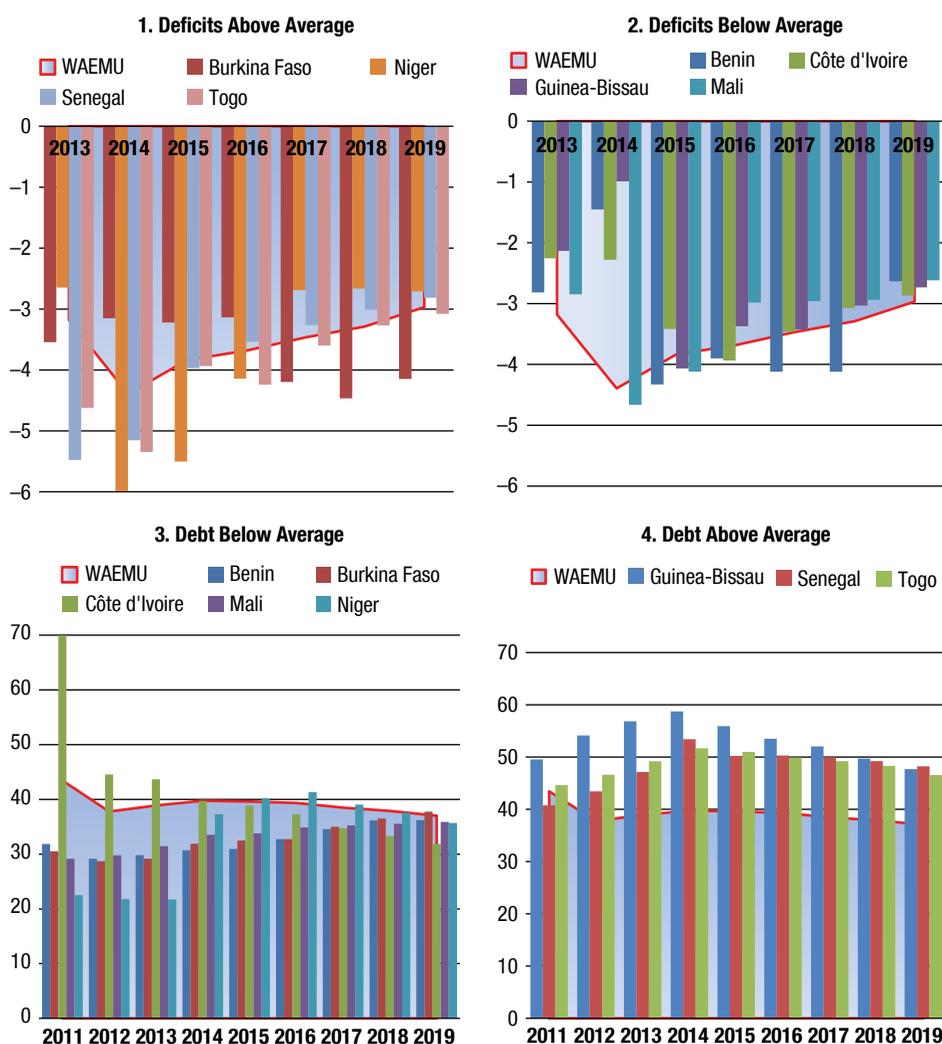
on the BCEAO’s monetary policy (Figure 3.4). To help avoid crowding out of the private sector by excessive government borrowing, and to constrain marginal expenditure decisions, most IMF programs with individual WAEMU countries include explicit ceilings on net domestic credit to governments in addition to the fiscal deficit.

The overall conditions of the fiscal deficit and public debt in the WAEMU are broadly conducive for policy coordination. Fiscal deficits and debt accumulation in the WAEMU are projected to stay on broadly sustainable paths subject to the implementation of good policies as planned by the authorities (Figure 3.5). After a slight increase in the overall fiscal deficit driven by government financing of a large hydrocarbon project in Niger, fiscal consolidation is set to continue in all WAEMU countries, with the exception of Burkina Faso, which intends to scale up investment spending. In the medium term, the rhythm of fiscal consolidation should be slightly slower than projected earlier with the need to finance new development programs and infrastructural projects in most countries. However, fiscal balances are projected to stay within the 3–4 percent of GDP range in the medium term in all WAEMU countries. Total public debt also is projected to remain sustainable, irrespective of a substantial scaling up planned in individual countries. The nominal level of total external and domestic public debt is projected to stay below 40 percent of GDP on average for the WAEMU. Only in Guinea-Bissau, Togo, and Senegal is the level of debt hovering at about 50 percent of GDP, which is the level some of the governments in the region target themselves. In all cases, the overall public debt is well below the WAEMU convergence criteria of 70 percent of GDP, which is considered a ceiling, rather than the targeted level.

Four kinds of interactions between fiscal-monetary policies are possible in the context of the WAEMU. These are illustrated by the option matrix in Figure 3.6. The matrix lays out possible fiscal-monetary policy interaction options for the eight finance ministries and the BCEAO. The two fundamental options are to coordinate policies (Yes) or not to coordinate them (No).

Case I. MoFs and the BCEAO set policy objectives independently

Each WAEMU country prepares its budget without consultation with other members or with the BCEAO. This is possible, as each country has its own economic structure and therefore main revenue streams, mainly related to key commodities (for example, cocoa in Côte d’Ivoire, uranium in Niger, and gold in Mali). Also, WAEMU countries face asymmetric exogenous shocks (droughts or Ebola may affect different countries), and have different policy priorities (geopolitical risks, domestic security situation) with fiscal policy the only instrument to address them. The BCEAO sets interest rates and defines the monetary stance that reflects the priorities of the

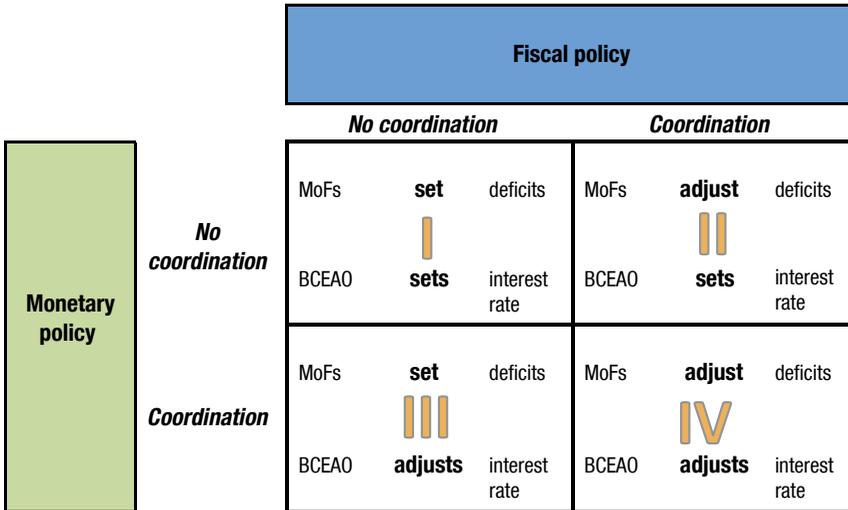
Figure 3.5. Fiscal Balances and Public Debt in the WAEMU

region as a whole, but without consulting with the ministries of finance (MoFs) of individual countries.

Case II. The BCEAO sets monetary stance independently from MoFs' financing needs

This is the case of monetary dominance. The BCEAO sets the policy rate at a level consistent with the money supply needed to achieve the inflation target for the region as a whole. As countries' transmission mechanisms differ, inflation in individual countries may deviate from the targeted level. The BCEAO determines its money supply, mainly the domestic component of reserve money. The resulting policy rate may be too high for national MoFs, which will incur additional debt-servicing costs on interest payments and therefore will have to adjust by expanding their deficits beyond the levels needed for debt sustainability. Alternatively, credit availability may not be sufficient to accommodate both the needs of governments and the private sector.

Figure 3.6. WAEMU: Options for Fiscal-Monetary Policy Coordination



Source: IMF staff presentation.
 Note: BCEAO = Central Bank of West African States; MoF = ministry of finance.

Case III. MoFs set fiscal deficits independently from the BCEAO’s monetary stance, which has to adjust its policy

This is the case of a complete fiscal dominance. Each country sets its own deficit based on national priorities; national MoFs do not coordinate the levels of deficits. Once national budgets are approved, the BCEAO is informed of the decisions taken at national levels and has to accept the aggregated fiscal deficit at the regional level. Because the governments’ financing requirements are given, the BCEAO is forced to adjust its monetary policy by providing direct financing for fiscal deficits, for example in the form of now discontinued statutory advances, or finance them indirectly. In the latter case, through refinancing operation the BCEAO has to provide liquidity to commercial banks in the amounts needed to finance the aggregated fiscal deficit, while leaving sufficient credit resources for the private sector. In this case, the BCEAO cannot control domestic credit and the goal of price stability may be jeopardized. Alternatively, if the overall fiscal deficit at the WAEMU level is too large, the private sector may be crowded out.

Case IV. MoFs coordinate among themselves and with the BCEAO

National MoFs set their deficit targets consistent with short-term national priorities and long-term debt sustainability criteria. They inform each other of the selected paths for the fiscal deficits at an early stage of the annual budget preparation process. The mechanism of regional consultations and exchange of information is used for this purpose. The MoFs consult with the BCEAO on potential monetary effects of their fiscal policies. In turn, the BCEAO preselects the level of the policy rate needed to preserve the inflation target for the region and consults with the MoFs regarding potential fiscal effects of its suggested monetary policy stance. Through this iterative process and mutual adjustments, the appropriate fiscal-monetary policy mix is set for the medium term.

STATUS OF COORDINATION

What is the current status of fiscal-monetary policy coordination in the WAEMU according to these metrics? There is no single answer. There is a certain degree of regional policy coordination in the region. The Council of Ministers, represented in most cases by ministers of finance, is a decision-making body of the WAEMU, and the BCEAO is a specialized autonomous body of the WAEMU. Also, national MoFs share their borrowing plans with the BCEAO on a regular basis and coordinate their debt issuances through the recently established WAEMU Securities Agency. This rules out Case 1 (no coordination). Under a fixed-exchange-rate arrangement, Case 2 (monetary dominance) also should be ruled out. Fiscal policy is clearly the main tool for achieving any national and regional goals, and monetary policy in such an institutional setup can play at best a support role. Case 4 requires a functioning instructional consultative infrastructure and procedures. While the WAEMU commission is charged with fiscal harmonization of tax policies and monitoring convergence criteria, it has no direct authority for fiscal policy coordination. The WAEMU Commission's ability to influence national governments' decisions on the level of fiscal deficit and the sources of their financing is very limited. Also, fiscal coordination is perceived in a very restricted sense, mainly as harmonization of tax levels and providing encouragement to countries to implement WAEMU directives. Ideally, developed financial markets, in particular a secondary market for government securities, are needed, so that price signals could be transmitted between fiscal and monetary policies, with both MoFs and the BCEAO adjusting their stances in an iterative manner. There is clearly not the case in the WAEMU where key financial markets are at an early stage of development.

Therefore, it is possible to argue that national MoFs set fiscal policies with little coordination among each other and with the BCEAO (Case 3). Several facts in recent history could lead one to this conclusion:

1. The overall level of fiscal deficit for the region is largely viewed not as a regional policy variable but rather as a simple aggregation of fiscal deficits adopted by individual countries.
2. Based on financing needs expressed by individual countries, regional monetary policy has to be accommodative in providing the required financing for fiscal deficits from the regional market and ensuring its affordability to governments in terms of its costs.
3. The BCEAO and the WAEMU Commission have limited influence on governments in which there is a need to modify fiscal policy stance based on broader regional considerations.
4. The capacity of the regional financial market to absorb government debt is not sufficiently taken into account in setting the levels of fiscal deficits.
5. Monetary policy considerations (for example, the need to eliminate persistent structural liquidity surpluses in the region), are not taken into account in setting fiscal policies of individual countries.

Current coordination efforts are limited. One consequence of this lack of coordination is the necessity to have binding rules on monetary financing of governments. Direct financing by BCEAO is formally forbidden, while there are some exceptions, refinancing banks on sovereign collateral is limited to 35 percent of fiscal revenue. These rules are a key item of the monetary union. The BCEAO monitors the overall fiscal and debt stance of the region and makes its views known to the national governments through the appropriate WAEMU mechanisms, aggregates fiscal and debt data, and provides indicative ceilings on the resources available to each country in the regional market. The WAEMU commission monitors tax harmonization and implementation of the respective WAEMU directives and convergence criteria. The WAEMU Securities Agency coordinates issuances of government paper on the regional market by individual treasuries, mainly to avoid bunching.

Therefore, there is a strong theoretical and practical argument for fiscal-monetary policy coordination in the WAEMU. There is ample theoretical evidence that Case 4, with mutual adaptation of fiscal and monetary policy on a continuous timeline, would lead to superior outcomes in terms of reaching policy objectives (Gali and Monacelli 2008); (Fragetta and Kirsanova 2010); (Hallett, Libich, and Stehlik 2011); (Daly and Smida 2013). In normal times, MoFs should continue to target-long term debt sustainability while the BCEAO should focus on inflation. This can be achieved through mutual adaptation of the levels of fiscal deficit and the policy rates so as to meet both targets. Ideally, the signals for policy adjustments should be provided by market prices rather than by explicit operational coordination arrangements. But for that, financial market development should be better developed to transmit better policy signals from fiscal and monetary authorities to economic agents, which is not the case in the WAEMU. During times of stress, the fiscal policies of finance ministries should still target debt sustainability, while the BCEAO's monetary policies should target inflation. However, in the short term, the BCEAO should be willing to tolerate temporarily high inflation as a strategy for increasing the likelihood of meeting the inflation target in the long term. Ministries of finances can focus on stabilizing output and employment at the expense of a temporary deviation from a sustainable debt path.

REFERENCES

- Blinter, A. 1982. "Issues in the Coordination of Monetary and Fiscal Policy." NBER Working Paper No. 982.
- Canzoneri, M., R. Cumby, and B. Diba. 2010. "The Interaction Between Monetary and Fiscal Policy." In *Handbook of Monetary Economics, Volume 3*, edited by B. M. Friedman and M. Woodford, 935–99. San Diego: Elsevier.
- Dahan, M. 1988. "The Fiscal Effects of Monetary Policy." May 1998. IMF Working Paper 98/66. International Monetary Fund, Washington.
- Daly, H., and M. Smida. 2013. "Coordination of Monetary and Fiscal Policies: Theoretical Overview." Munich Personal RePEc Archive (MPRA) Paper No. 48066.
- Fragetta, M., and T. Kirsanova. 2010. "Strategic Monetary and Fiscal Policy Interactions: An Empirical Investigation." *European Economic Review* 54 (7): 855–79.
- Fruchterman, T., and J. Reingold, E. M. 1991. "Graph Drawing by Force-Directed Placement." *Software: Practice and Experience* 21(11): 1129–64.
- Gali, J., and T. Monacelli. 2008. "Optimal Monetary Policy and Fiscal Policy in a Currency Union." *Journal of International Economics* 76: 116–32.
- Hallett, A., J. Libich, and P. Stehlik. 2011. "Welfare Improving Coordination of Fiscal and Monetary Policy." *AUCO Czech Economic Review* 5: 7–26.
- Hilbers, P. 2005. "Interaction of Monetary and Fiscal Policies: Why Central Bankers Worry About Government Budgets." IMF Seminar on Current Development in Monetary and Financial Law. International Monetary Fund, Washington.