FISCAL DOMINANCE AND CENTRAL BANK INDEPENDENCE

PRESENTED BY AKPAN H. EKPO, JOHNSON P. ASIAMA & CHRISTIAN R.K AHORTOR

AT THE *2015 AACB SYMPOSIUM OF THE GOVERNOR*

13TH AUGUST 2015

MALABO, EQUATORIAL GUINEA,

RESENTATION OUTLINE

- Introduction
- Background on fiscal dominance and central bank independence
- Simple Model of Fiscal Dominance
- Case study of fiscal dominance and monetary policy in Ghana
    - ✓ Recent Macroeconomic Developments
    - ✓ Trends in Fiscal Performance in Ghana
    - ✓ Evidence of Fiscal Dominance
    - ✓ Testing for Fiscal Dominance
    - ✓ Effect of Fiscal Policy on Monetary Policy
    - ✓ Summary, Conclusions and General Recommendations

HE PRINCIPLE THAT A CENTRAL BANK, CHARGED WITH ONTROLLING INFLATION, SHOULD BE INDEPENDENT FROM HE GOVERNMENT IS UNASSAILABLE. IT MAY ALSO BE TRUE HAT IT'S EASIER FOR THE CENTRAL BANK TO GUARD ITS NDEPENDENCE FROM POLITICAL PRESSURE WHEN IT MAINLY HOLDS GOVERNMENT SECURITIES

Y JANET YELLEN

NTRODUCTION

- Several low income economies have transited to modern monetary policy frameworks.
- South Africa, Ghana, Mauritius and Uganda have adopted inflation targeting monetary policy framework
- Other countries in SSA are implementing hybrid monetary policy frameworks
- The transition has been necessitated by
  - ✓ progress in financial deepening and diversification
  - ✓ Increasing integration into global financial markets
  - ✓ improvement in the quality and depth of statistical data

NTRODUCTION (CONT.)

- "Modern" monetary policy frameworks require the following specific conditions to function optimally:
  - ✓ a truly independent central bank;
  - ✓ absence of fiscal dominance;
  - ✓ absence of administered prices such as petroleum and utilities price adjustments; and
  - ✓ an efficient communication framework to help in anchoring inflation expectations.
- This presentation focuses on the first-two

ACKGROUND

- Fiscal dominance refers to a regime where monetary policy ensures the solvency of the government.
- Roles reversal: monetary policy stabilizes real government debt, while inflation is determined by the needs of fiscal policy.
- Monetary policy no longer follows the objective of price stability but rather the concerns of fiscal policy by accommodating high levels of public debt.
- High and volatile inflation occurs and monetary policy is no longer able to control it.

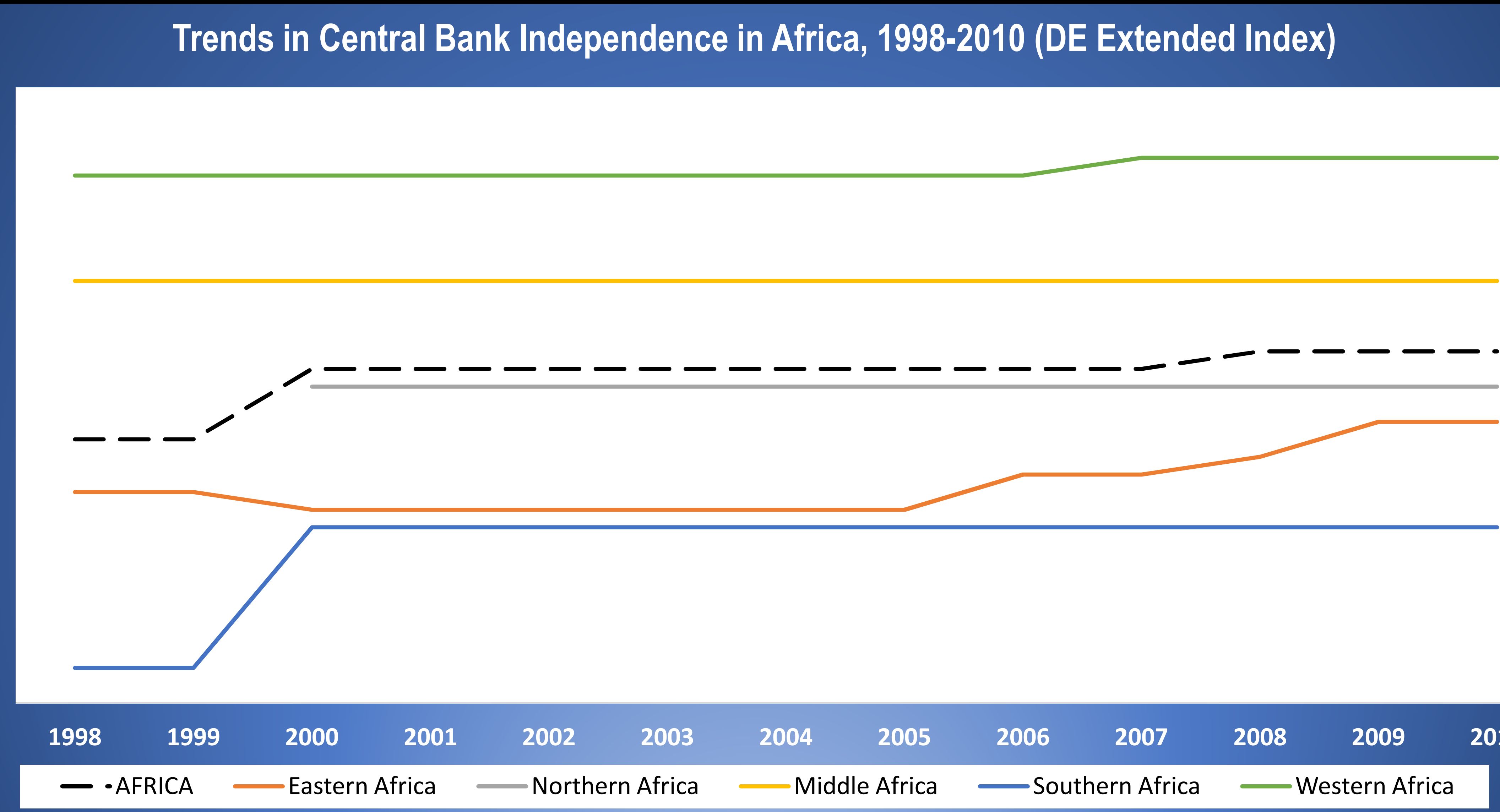
ACKGROUND (CONT.)

- Central bank independence refers to the central bank's freedom from government/political influence in the achievement of its monetary policy goals.
- Government should be involved in setting the goals of monetary policy but the central bank must be given the scope / space to pursue those goals.
- When the fiscal is solvent, monetary policy is truly independent in achieving its stated objectives.
- Central bank independence is looked at mostly from legal perspctives.

ACKGROUND (CONT.)

- Cukierman, Webb, and Neyapti (1992) composite index of centra bank independence derives from sixteen legal indices.
- These are put under 4 categories relating to:
    - appointment procedures for the head of the central bank
    - resolution of conflict between the bank and government
    - the use of an explicit policy target
    - rules limiting lending to government
- Dincera and Eichengreen (2014) extended CWN indices by addin a new category relating to tenure, appointment and dismissal of board members.

ACKGROUND (CONT.)



NTRAL BANK INDEPENDENCE IN GHANA

e look at central bank independence in Ghana along the lines of Dinc
d Eichengreen (2014):

- ief Executive Officer (CEO)- Term of Office, Who appoints CE
missal, May CEO hold other offices in government?, Is there
ppointment for CEO?
- licy Formulation - Who formulates monetary policy?, Who has final wo
resolution of conflict?, Role in the government's budgetary process, W
mulates exchange rate policy?
- jectives
- nitations on lending to the government
- ard Members - Term of Office, Who appoints board members?, Dismis

SIMPLE MODEL OF FISCAL DOMINANCE

$${}_t - D_{t-1} = G_t + TR_t + R_{t-1}D_{t-1} - Z_t - T_t \qquad (3.1$$

$${}_t + \sum_{j=1}^{\infty} \gamma_{tj}\, g_{t+j} = \sum_{j=1}^{\infty} \gamma_{tj} (\tau_{t+j} + z_{t+j}) \qquad (3.2$$

$${}_t - F_{t-1} = r_{t-1}F_{t-1} + (MB_t - MB_{t-1}) - Z_t \qquad (3.3)$$

$${}_t - f_t) + \sum_{j=1}^{\infty} \gamma_{tj}\, g_{t+j} = \sum_{j=1}^{\infty} \gamma_{tj} (\tau_{t+j} + \Delta mb_{t+j}) \qquad (3.4)$$

SIMPLE MODEL OF FISCAL DOMINANCE : THE ISSUES

iscal policy is dominant when the fiscal authorities utonomously fix the path of spending, taxation and debt.

This leaves monetary authorities to decide only about the hythm of money creation revenues to satisfy such an ntertemporal budget constraint.

his illustrates a theoretical relationship between deficits and he present value of the revenue from seigniorage.

'If the sequence of future budget surpluses is exogenously iven, the price level is the only variable that can make the tock of nominal bonds inherited from the past consistent with he present value of these primary surpluses. Hence, it is the overnment's inter-temporal budget constraint that determines he price level" (Zoli, 2005, p.3).

SCAL DOMINANCE AND MONETARY POLICY IN GHANA

- Recent Macroeconomic Developments
  - ❖Average real GDP growth between 2007-2012 was 8.3%
  - ❖Inflation remained in single digits between 2010 and 2012
  - ❖Adoption of the HIPC status between 2002-2006 brough substantial debt relief to the country (26% in 2008).
  - ❖Rebasing of the country's GDP in 2010 with 2006 as the base yea moved the country to a lower middle-income bracket (US$1,292. in 2010 to US$1,570 in 2012)
  - ❖However, things began to deteriorate in 2012. The period 2012 2014 was characterized by declining economic growth, increasin inflation rates, rising debt levels and financial vulnerabilities

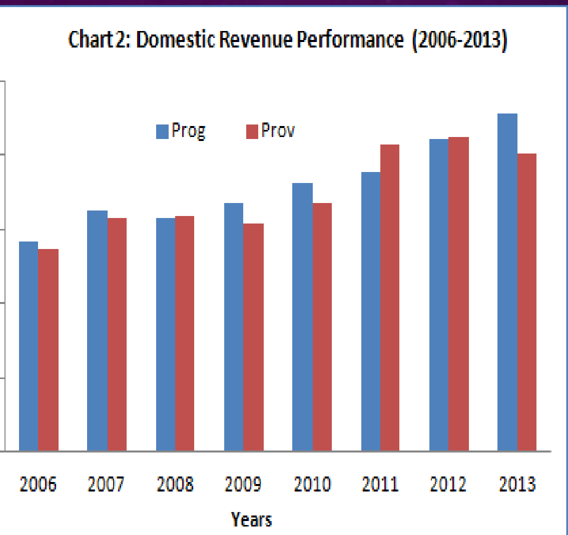
IMF EXTENDED CREDIT FACILITY TO GHANA (2015-2017)

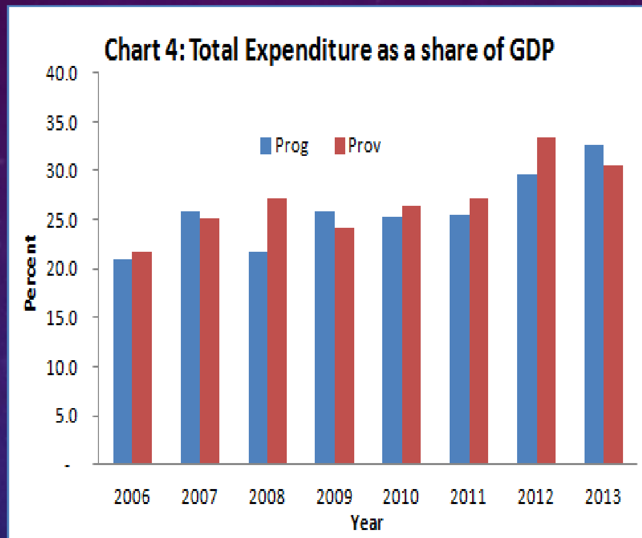
- A three-year Extended Credit Facility (ECF) was approved by the IMF Executive Board in April 2015 with a resource envelope of US$940 million.
- The program rests on three pillars, namely,
  - ✓ restraining and prioritizing public expenditure with transparent budget process;
  - ✓ increasing tax collection; and
  - ✓ strengthening the effectiveness of the central bank monetary policy.

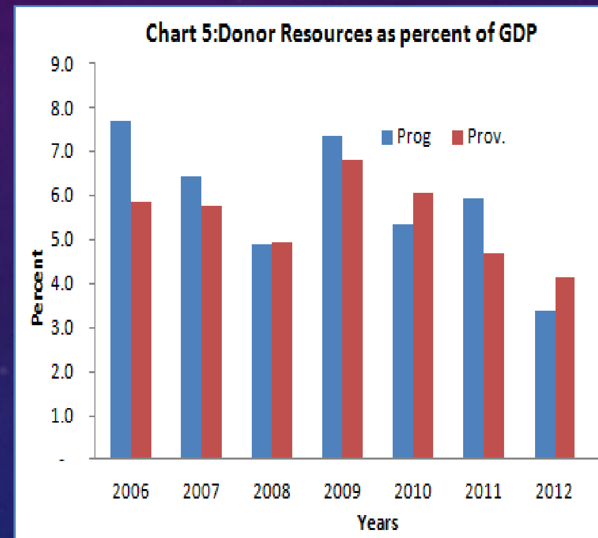
RENDS IN FISCAL PERFORMANCE IN GHANA

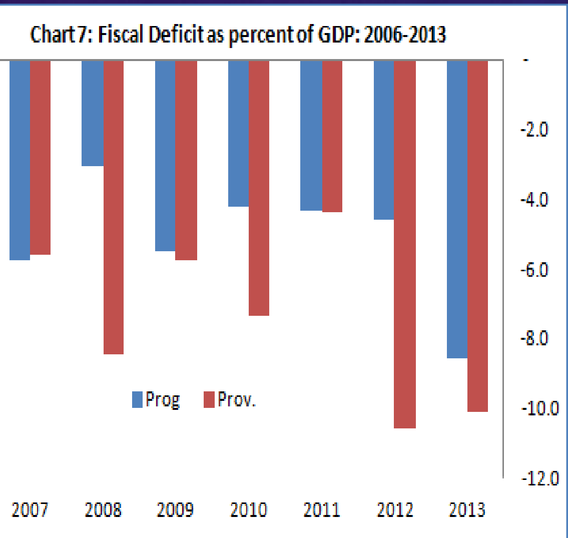
- Some fiscal consolidation brought overall fiscal deficit (cash down from 9.81% of GDP in 2000 to 2.96% of GDP in 2005.
- The stock of public debt reduced from 187.3% of GDP in 2000 to 26.2% of GDP in 2006.
- Interest payments as a share of total revenue also reduced from 42.3 percent in 2000 to 15.3 percent in 2005.
- However, government spending began to increase rapidly relative tax revenue from 2006 through 2008 (energy, golden jubilee celebration, election).

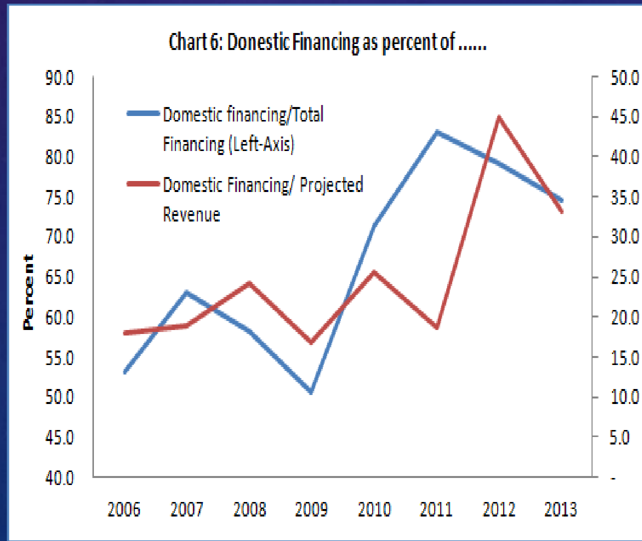
RENDS IN FISCAL PERFORMANCE IN GHANA (CONT.)

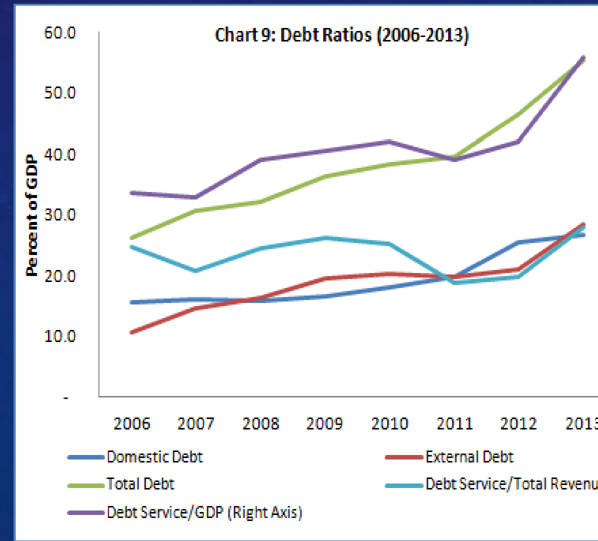




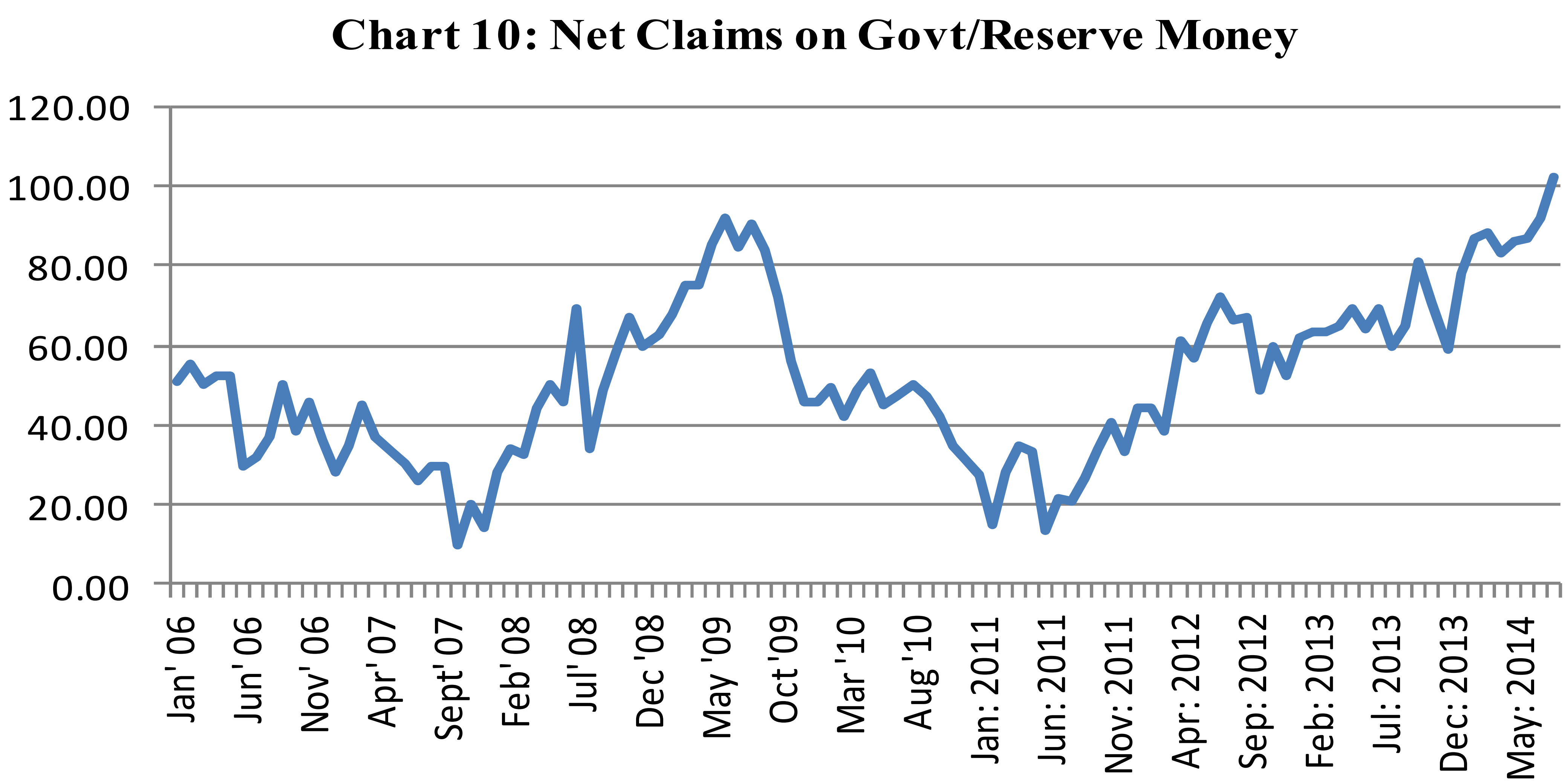




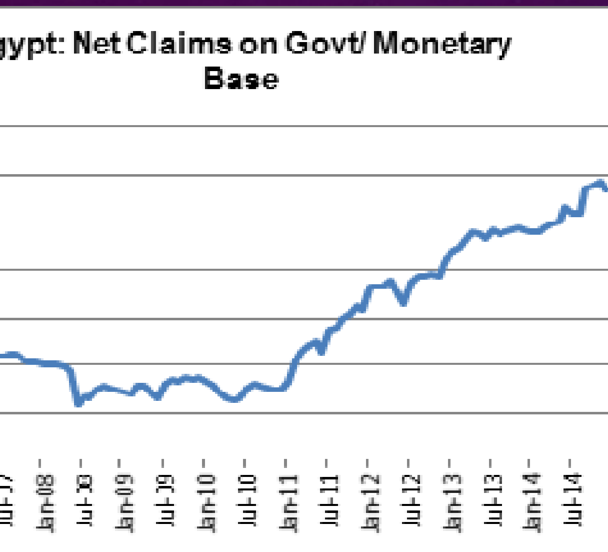


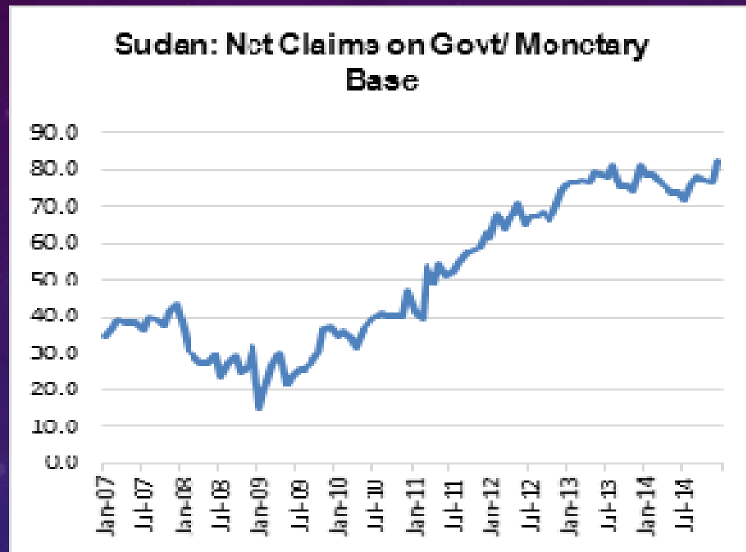


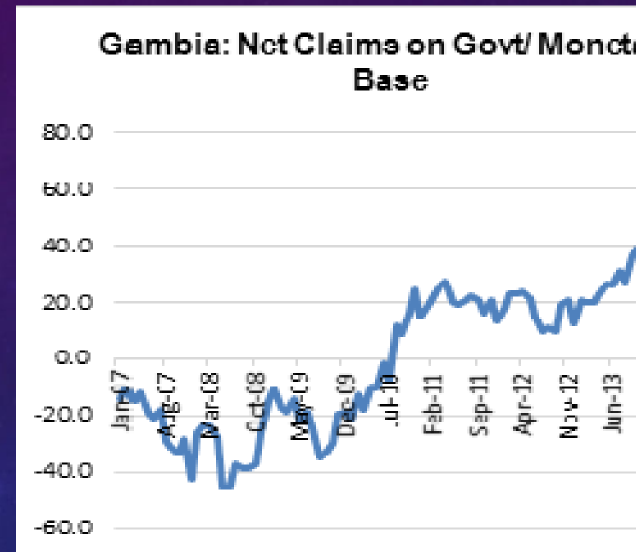
VIDENCE OF FISCAL DOMINANCE IN GHANA

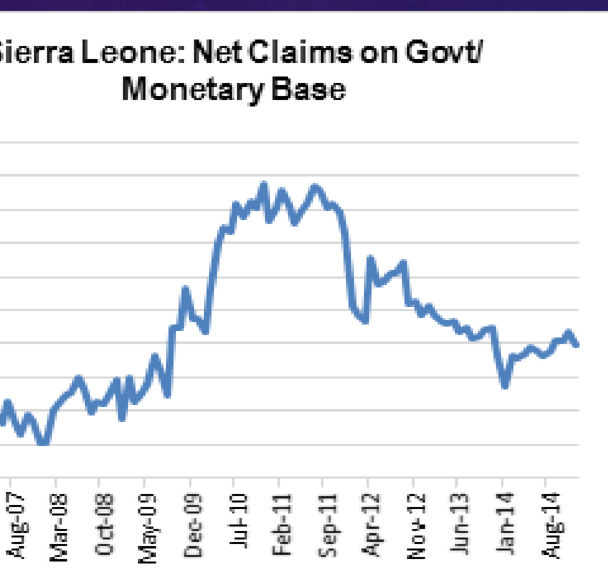


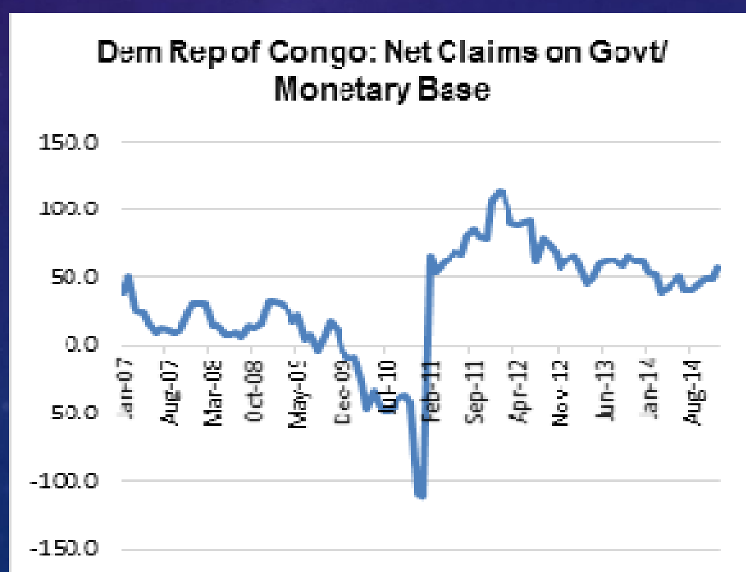
DENCE OF FISCAL DOMINANCE IN SELECTED AFRICAN COUNTRI

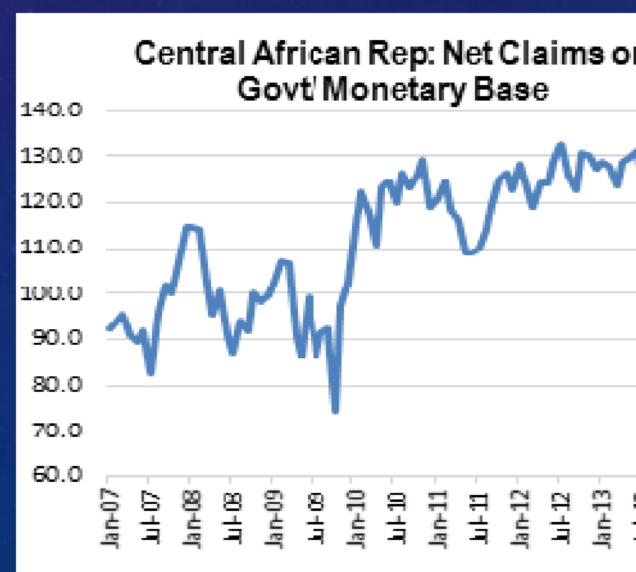












SESSING THE EFFECT OF FISCAL POLICY ON MONETARY POLICY: THE MODEL

xamining whether deficits are exogenously set, independent of ublic sector liabilities – prerequisite for fiscal dominance – within entral bank reaction function.

$$= f(r_{t-1}, INF_{t-1}, Y_p, \Delta PB) \qquad (4.4$$

$$= b_0 + b_1 r_{t-1} + b_2 INF_{t-1} + b_3 Ygap_{t-1} + b_4 PB_{t-1} + V_t \qquad (4.5$$

$$= b_0 + b_1 r_{t-1} + b_2 (INF^e - INF^x) + b_3 Ygap_{t-1} + b_4 PB_{t-1} + V_t \qquad (4.6$$

$$MPR_t = \alpha(S_t) + \beta(S_t) primbg_{t-1} + \theta(S_t) ygap_{t-1} + \theta(S_t) \Delta inf_{t-1} + \vartheta(S_t) C_t + \sigma(S_t)\mu_t, \dots \dots \dots \dots \dots \dots \dots \dots \dots (4.7)$$

MPIRICAL RESULTS – GRANGER CAUSALITY

Table 3: Pairwise Granger-Causality Test Result

Null Hypothesis:	lag 1	Lag 2
PUBDG does not Granger Cause PRIMBG	[0.00]*	[0.06]***
PRIMBG does not Granger Cause PUBDG	[0.35]	[0.55]

Note: *, ** & *** denote 1%, 5% & 10% significant levels respectively

mplication: The response of fiscal authority to rising ublic liability is inadequate to obviate debt build-up, nd suggests that monetary policy is largely subjugated y the fiscal policy.

PIRICAL RESULTS – IMPULSE RESPONSE FUNCTIONS

Figure 11: Response of Primary Balance to Innovations in Public Debt

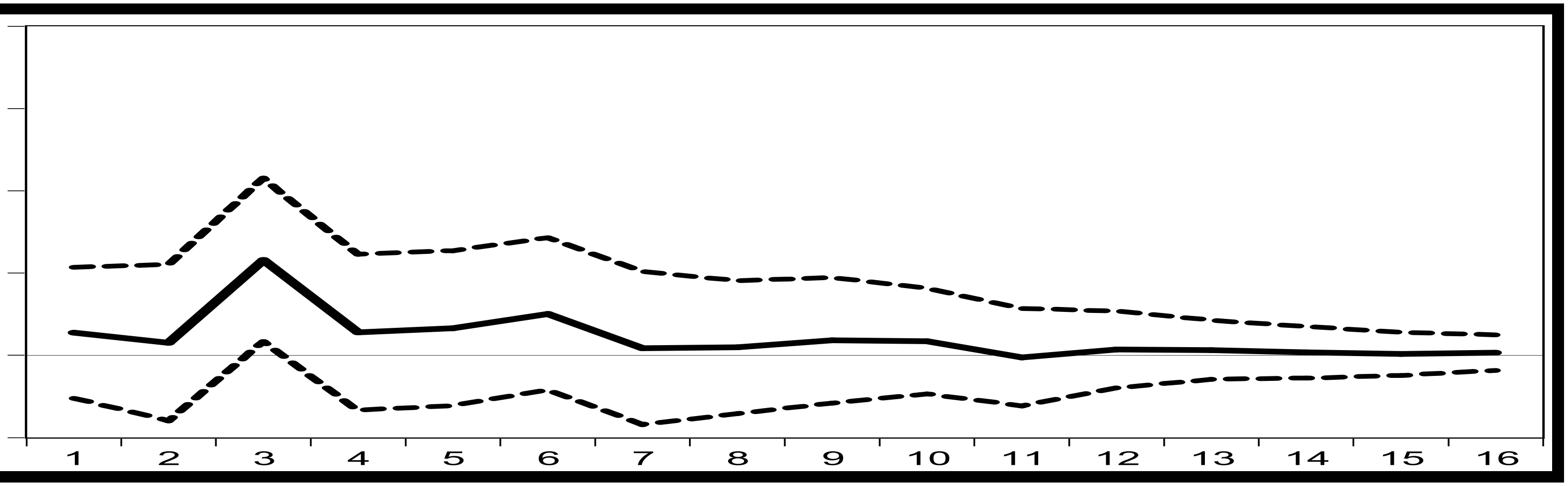
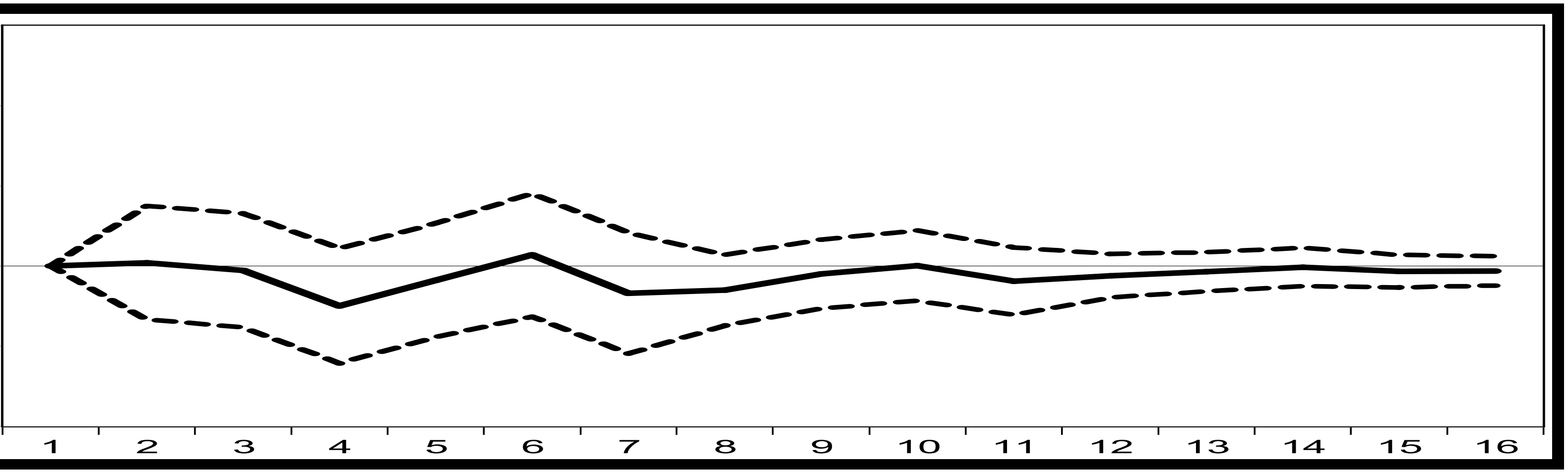


Figure 12: Response of Public Debt to Innovations in Primary Balance



MPIRICAL RESULTS – VARIANCE DECOMPOSITIONS

Table 4: Variance Decomposition Results

	Variance Decomposition of PRIMBG:		Variance Decomposition of ΔPUBDG:	
Period	ΔPUBDG	PRIMBG	ΔPUBDG	PRIMBG
1	0.9	99.1	100.0	0.0
2	1.1	98.9	100.0	0.0
3	13.8	86.2	99.9	0.1
4	13.2	86.8	95.5	4.5
5	13.7	86.3	95.8	4.2
6	15.4	84.6	95.6	4.4
7	15.1	84.9	94.1	5.9
8	15.0	85.0	93.0	7.0
9	15.2	84.8	93.0	7.0
10	15.4	84.6	93.0	7.0

IRICAL RESULTS - EFFECT OF FISCAL POLICY ON MONETARY POL

- The results from the Markov Regime Switching Model confirm significant and positive response of MPR to:
  - ✓ rising primary deficit,
  - ✓ rising inflation,
  - ✓ high nominal exchange rate depreciation,
  - ✓ rapid public debt accumulation
  - ✓ pass-through of debt to inflation (interaction); and
  - ✓ political election cycle effect
- Monetary authorities in Ghana have higher tendency to reac almost instantaneously and aggressively to fiscal polic developments.

UMMARY OF FINDINGS

➢There is evidence of fiscal dominance in Ghana during the study period, and this suggests:

- ✓a problem of coordination between monetary authorities and government;
- ✓a need for the central bank to adhere to legal limits on central bank financing of government deficits;
- ✓a need to intensify efforts at expanding the domestic resource base to deal with deficits; and
- ✓a need to deepen the market for private bonds as an alternative source of financing.

NCLUSION AND RECOMMENDATIONS

urtailing fiscal dominance is key to achieving and maintaining long-term pric ability.

his will require:

- Fiscal consolidation to keep inflation expectations anchored, despite th short-run dampening effect on growth.
- a credible and sustained fiscal adjustment, which would involve amon others,
    - ✓ comprehensive tax reform (expanding the tax base, designing a inflation-proof tax system, and improving tax administration an collection),
    - ✓rationalization of public spending, etc. are crucial in establishin fiscal policy credibility
- Enhanced central bank independence, with a clear mandate to mainta price stability as the overriding objective of monetary policy.