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**Determinants of Current Account Balance in
South Asian Economies – An Empirical Analysis**

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Motivation

- Possibility of external vulnerability in SAEs owing to escalating trade tension between US and China
- Protracted US federal government shutdown – downside risk to global investment and growth in SAEs
- Brexit effect and geopolitical tensions in Middle East and East Asia has implication for SAEs
- EMDEs have been encountering difficult external conditions followed by rising US interest rates, dollar appreciation, capital outflow and volatile oil prices.

Introduction

- South Asian Economies (SAEs) - persistent imbalances in their current accounts
- Expenditure switching *vis-à-vis* expenditure control policies
- Growth dynamics of advanced economies and associated spillover
- Role of REER *vis-à-vis* expenditure controls in SAEs in adjusting CAB
- Budget balance, private credit and crude oil prices are incorporated in empirical model
- Fiscal adjustments and private credit growth offers better insights on CAB adjustment in SAEs

**Table 1: Current account balance of South Asian Economies (SAEs)
(per cent of GDP)**

Country	<i>Average (2001-2010)</i>	<i>2013</i>	<i>2014</i>	<i>2015</i>	<i>2016</i>	<i>2017</i>	<i>2018P</i>
Afghanistan	--	0.3	5.8	2.9	7.3	5.0	5.3
Bangladesh	0.5	1.2	1.3	1.9	0.6	-2.0	-3.2
Bhutan	-13.1	-25.4	-26.4	-28.3	-29.4	-22.8	-22.8
India	-0.8	-1.7	-1.3	-1.1	-0.6	-1.9	-3.0
Maldives	-12.6	-4.3	-3.2	-7.4	-24.5	-19.5	-18.2
Nepal	2.5	3.3	4.5	5.0	6.3	-0.4	-8.2
Pakistan	-1.5	-1.1	-1.3	-1.0	-1.7	-4.1	-5.9
Sri Lanka	-2.7	-3.4	-2.5	-2.3	-2.1	-2.6	-2.9
SAEs	-0.6	-1.5	-1.1	-0.9	-0.6	-2.1	-3.3

Source: World Economic Outlook, IMF. P: Projection.

SAEs – Economic Scenario

- Growth prospects revived – favorable financial condition and improved external demand
- Export performance remains lacklustre, while imports grown rapidly
- Trade deficits in South Asia (*especially*, India, Pakistan, Sri Lanka and Bangladesh) have widened in 2017-18
- Indian and Pakistani Rupee depreciated recently
- Fiscal deficits in South Asia remain large by international standards
- Government debt is also high in SAEs

Issues in the Context

- Central Banks and Governments use monetary and fiscal policy tools to focus on internal balance
- Central banks also use foreign exchange interventions - nominal exchange rates
- To achieve both internal and external balances - 'expenditure control' and 'expenditure switching' policies
- Meade (1978) had emphasised that –
 - demand management (fiscal and monetary policies) to pursue price stability
 - foreign exchange policies to maintain balance-of-payments equilibrium

Contd..

- With the progressive openness to capital flows, sterilised intervention may achieve the nominal exchange rate objective
- However, capital flows pose challenges for the independent conduct of monetary policy
- Post Global Financial Crisis (GFC), internal balance is considered important from the view of monetary or fiscal policies
- While internal balance could aid to external balance too - adjustments of real exchange rate
- If a nation's exchange rate floats, it will depreciate as needed to eliminate a current account deficit without any action by policy-makers

Accounting for an open economy

$$Y = C + I + G + (X - M) \quad \dots (1)$$

$$Y + R - T - C = I + (G - T) + (X + R - M) \dots (2)$$

$$\textit{Current Account} = (X - M) + R = (S - I) + (T - G) \quad \dots (3)$$

- current account balance equals the excess of private sector investment over saving plus the government's budget deficit

Trends in Variables

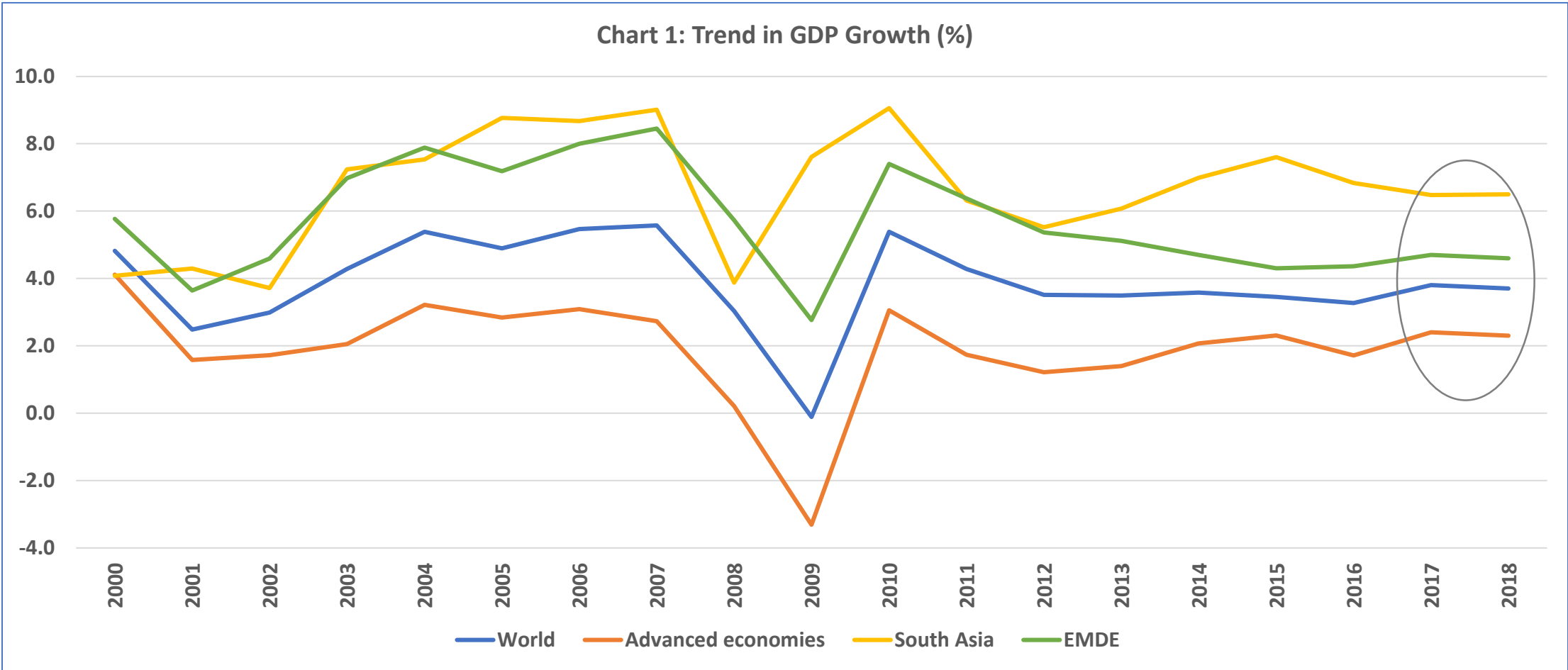


Chart 2: Growth Difference (%)

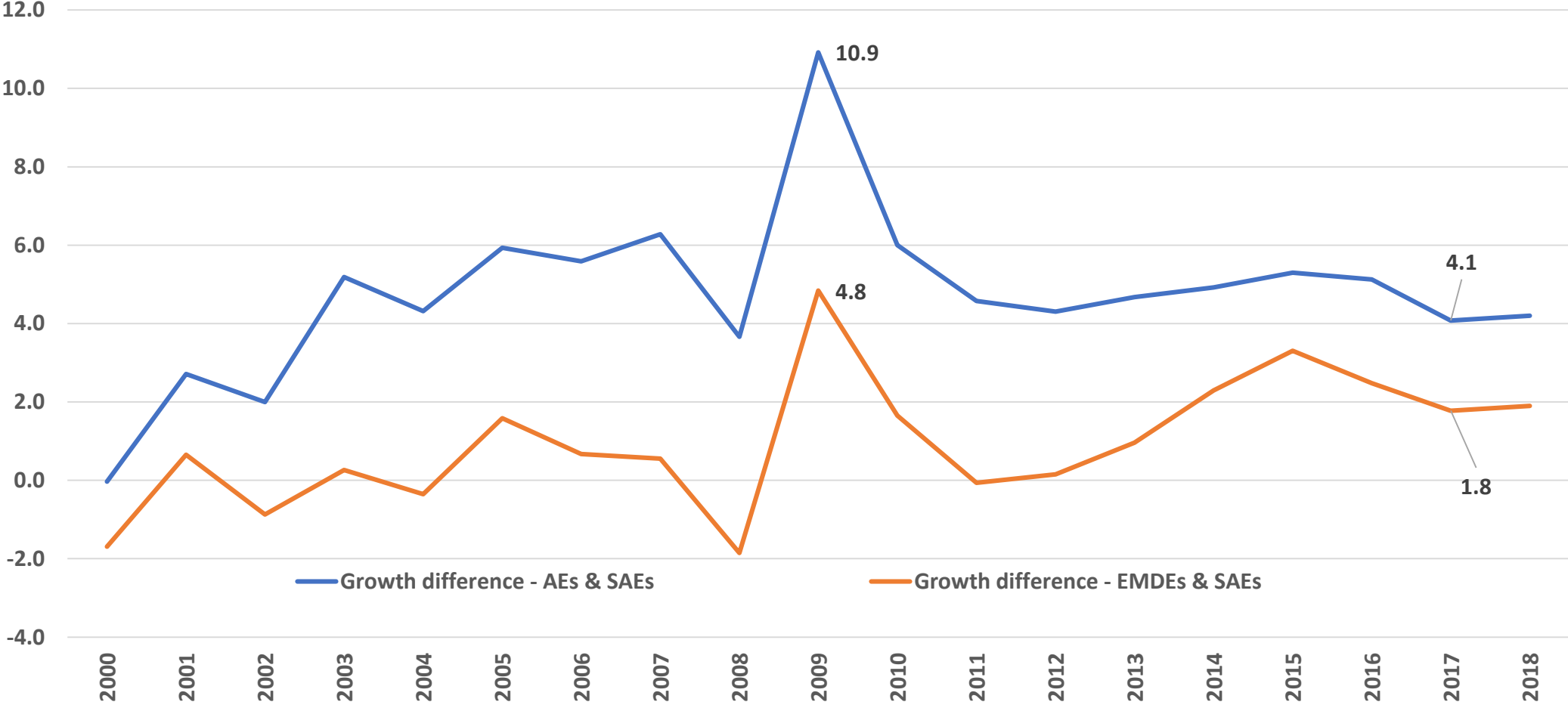


Chart 3: CPI Inflation Rate

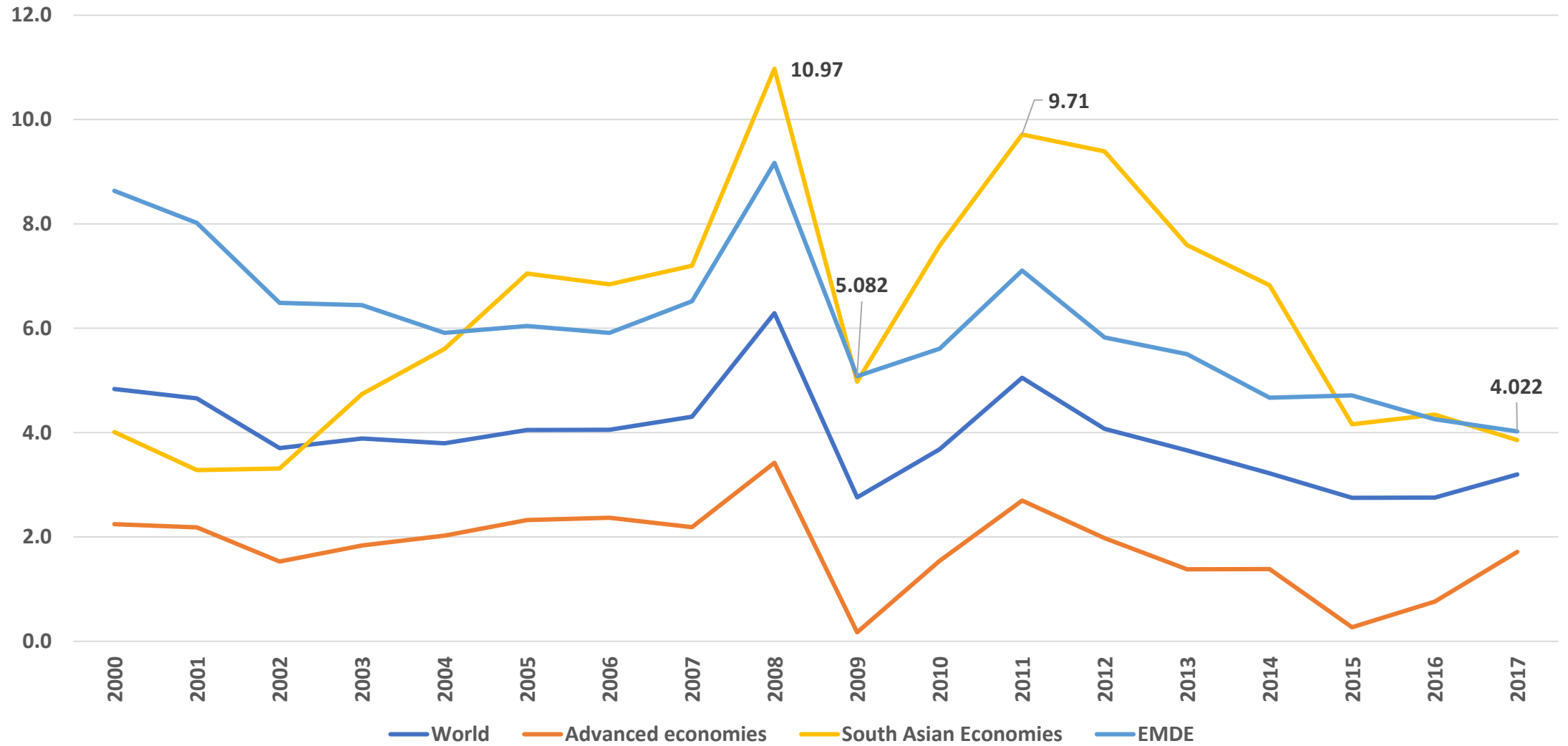


Chart 4: Inflation difference (%)

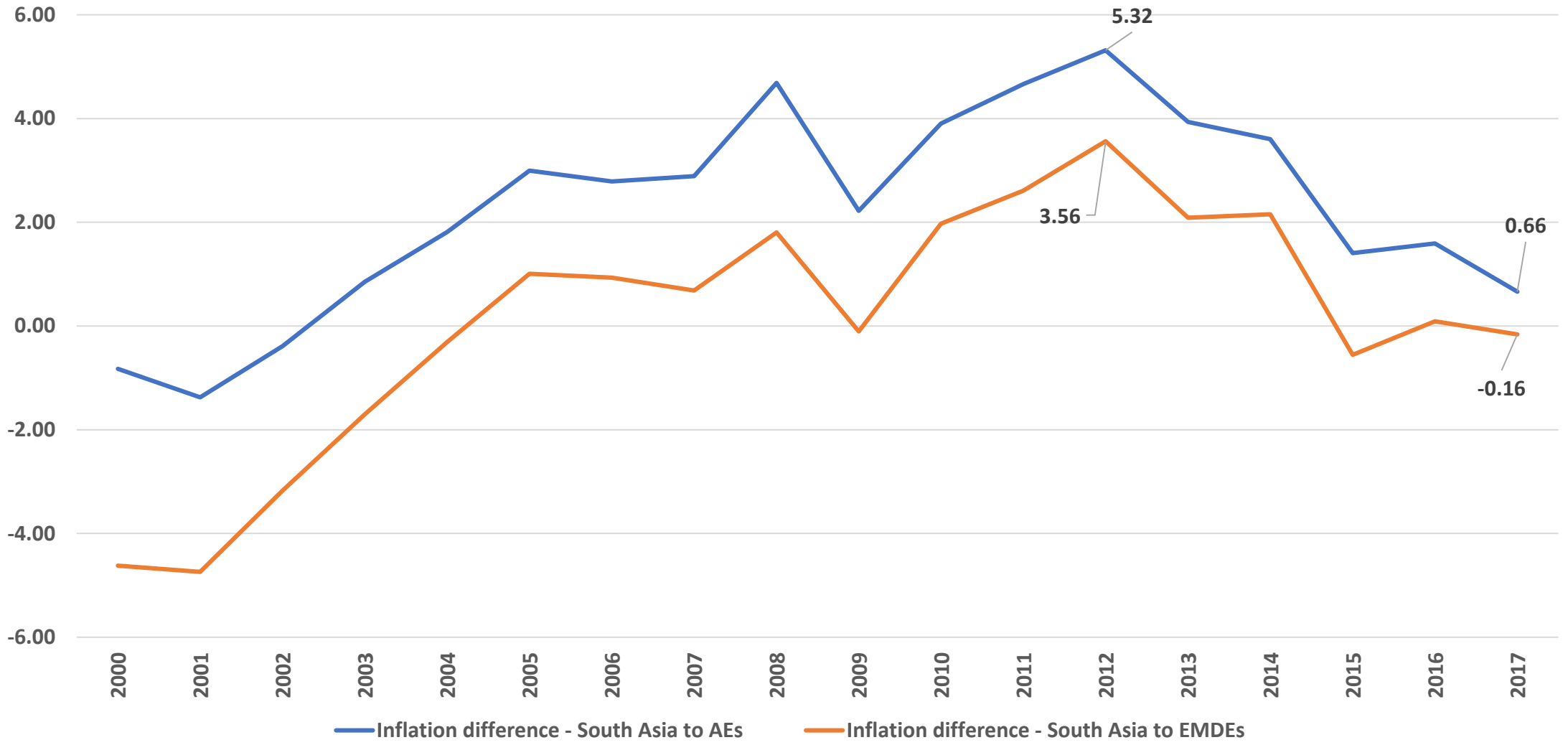


Chart 5: South Asia: Domestic credit to private sector (% of GDP)

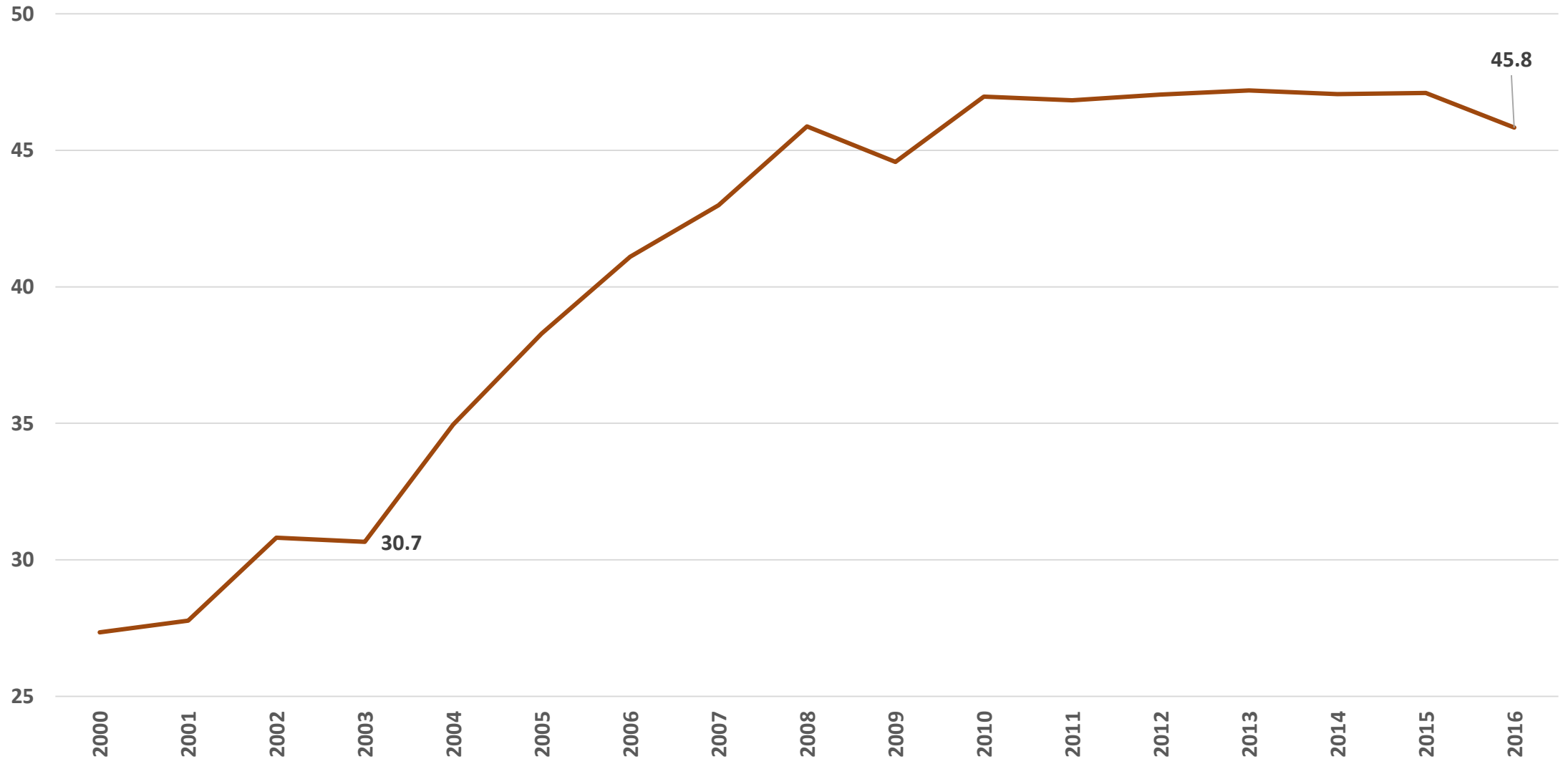


Chart analysis

- Overall, it underscores the role of internal absorption more clearly behind any changes in CABs of SAEs.
- It is possible that as the AEs output gap falls, growth slowed in SAEs, yet their CABs improved.

Chart 7: Current Account Balance (% of GDP)

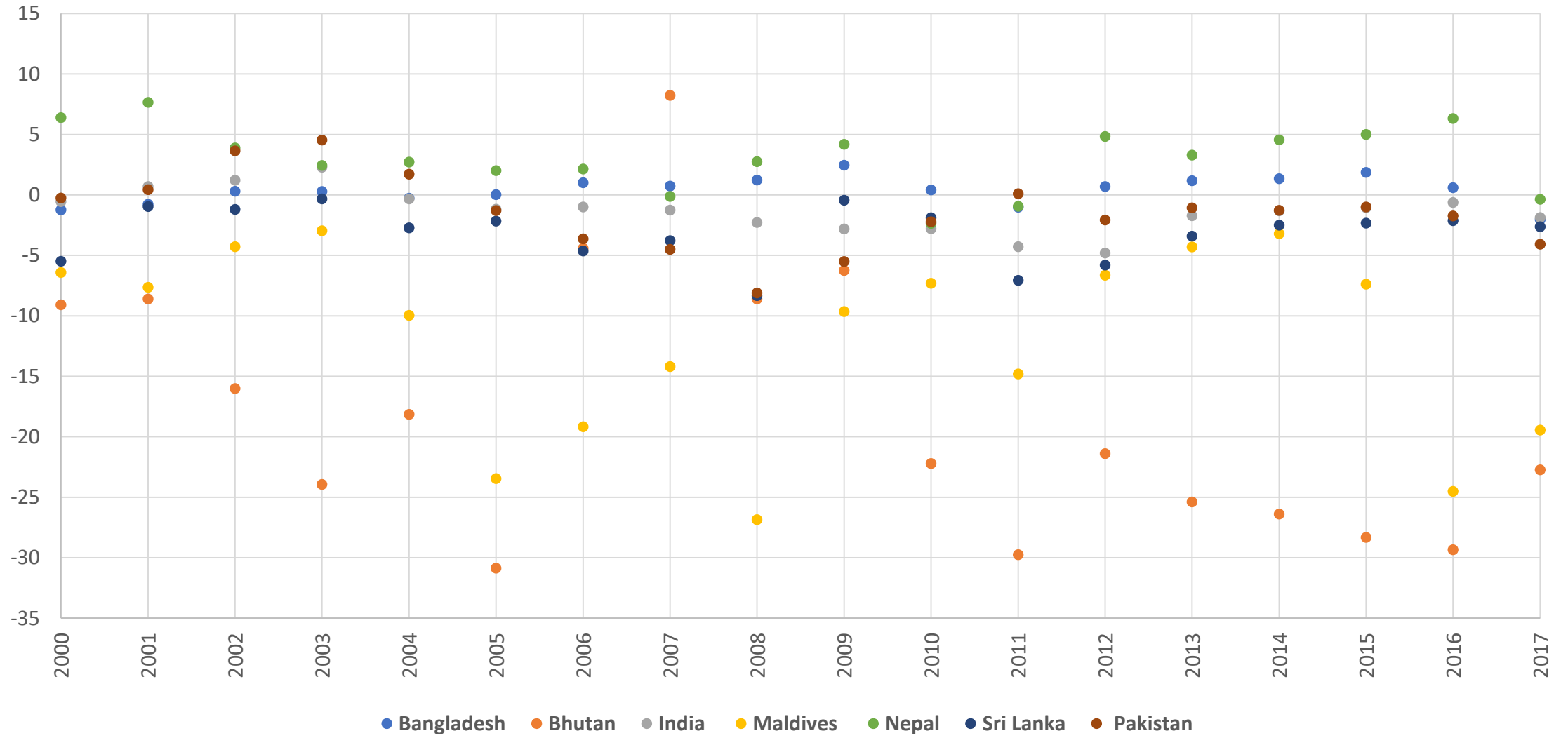
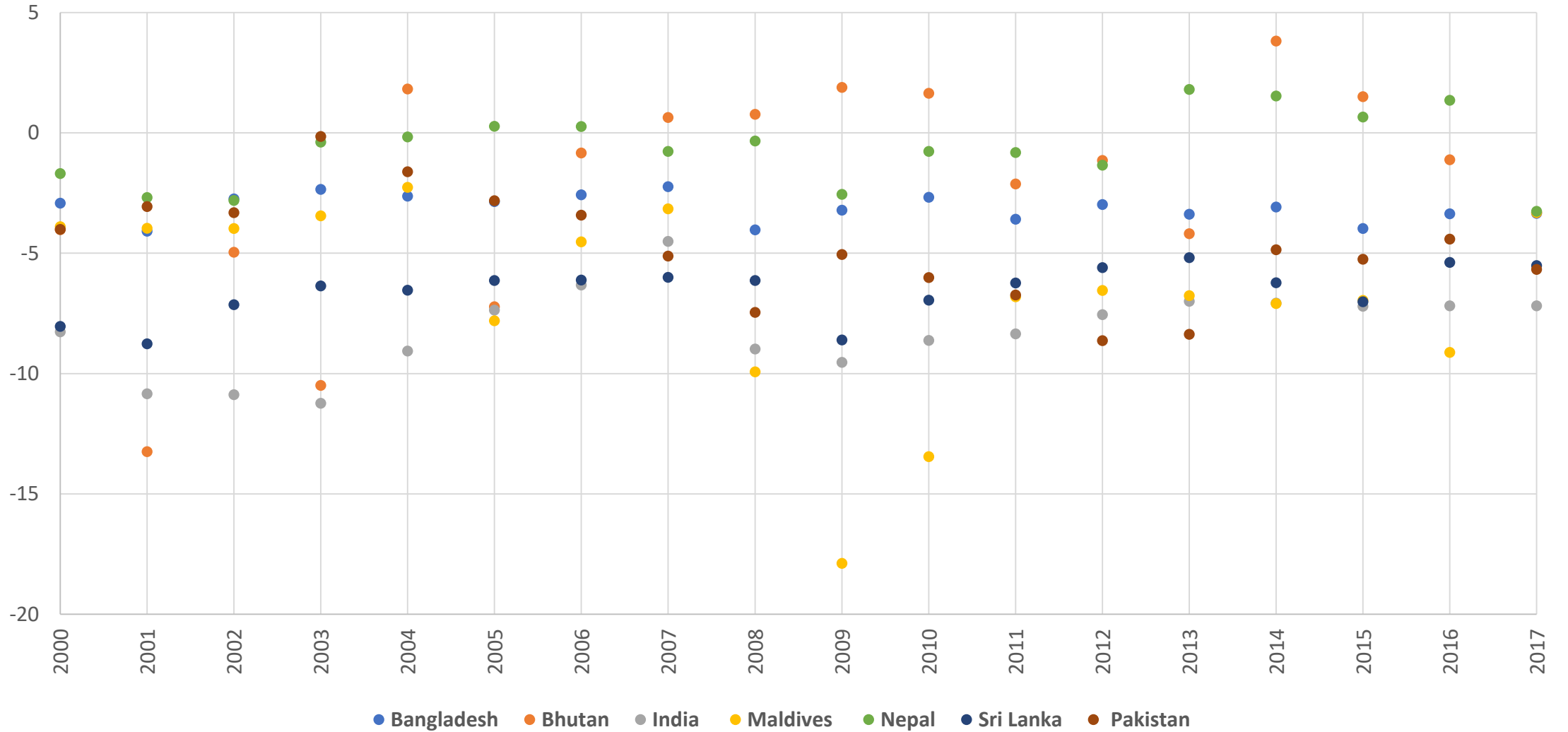


Chart 8: Fiscal Balance (% of GDP)



Our Approach

- Tested the conventional hypothesis: Whether REER can be held as the major determinant for deterioration of CAB in SAEs.
- High global growth elasticity of exports does not take into account the fact that emerging market economies themselves are the global drivers of growth in recent period.
- Sharper slowdown of growth rates emanating from the growth spillover of Advance Economies (AEs).
- External imbalances is the confluence of factors like sharp shift in exchange rate, stock of imbalances, uneven recovery and commodity price dynamics.

Empirical Analysis

- Pooling country-specific and world-level annual data in a panel regression for 7 SAEs for 18 years (2000-2017).
- A Fixed-effects (FE) static model is specified with country specific effects as we are interested in average impact of variables in CAB.

$$Y_{it} = \alpha_i + \beta_1 X_{it} + \mu Z_t + \varepsilon_{it} \quad \dots\dots (1)$$

- Alternatively, random effect model specification, but *Hausman Test* rejects the possibility of randomness in terms of country or time specific parameters.
- Lagged real effective exchange rate (REER)
- Output gap in advanced economies (AE_OUTGAP)
- Lagged domestic credit to private sector (PVT_CR)
- General government fiscal balance (FIS_BAL)
- Average crude oil price (OIL_PRICE)

Empirical Analysis

- All the regression coefficients are statistically significant.
- R^2 is high and probability of F-statistics is less than 0.05 means that model is fitting well.
- Real effective exchange rate, private credit, fiscal balance, and crude oil price have bearing on the CABs of SAEs.

Table 2: OLS Cross-section Regression Results - Fixed Effect Model
(Dependent variable: Current Account Balance, 2000–2017)

	<u>Without Crisis</u>	<u>With Crisis</u>
Constant	3.9157*** (3.48)	4.1537*** (3.37)
REER (-1)	-0.0351*** (-3.15)	-0.0352*** (-3.14)
Crisis periods	--	0.4884 (0.65)
PVT_CR (-1)	-0.0471** (-2.34)	-0.0465** (-2.32)
Fis_Bal	0.1339* (1.67)	0.1588* (1.94)
Crude Oil_Price	-0.0355*** (-4.64)	-0.0388*** (-4.46)
AE_Outgap	-0.2091* (-1.71)	-0.2440* (-1.93)
R²	0.6084	0.6094
Prob.(F-statistic)	0.0000	0.0000
***: significant at 1% level; **: significant at 5% level; *: significant at 10% level.		

Interpretation

- 10 per cent real effective appreciation of currency may lead CAB to worsen by about 0.3 per cent of GDP;
- 1 per cent rise in output gap of AEs may lead CAB to worsen by about 0.2 per cent of GDP;
- 10 per cent rise in private credit to GDP in SAEs may lead CAB to worsen by about 0.5 per cent of GDP;
- 1 per cent improvement in fiscal balance to GDP may lead CAB to improve by about 0.13 per cent of GDP;
- 10 dollars increase in the price of crude oil price may lead CAB to worsen by about 0.3-0.4 per cent of GDP;

Conclusions

- For SAEs, the direction of general government fiscal balance is consistent with their direction of CABs.
- While real exchange rate is important in management of CAB, growth spillover from AEs, other determinants of internal balance like fiscal balance and private credit growth in relation to GDP is also helpful for SAEs to manage their CAB.
- Growth dynamics of advanced economies seems to be playing relatively major role in CAB adjustments of SAEs.

Thank You