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INFLUENCE OF CURRENT ACCOUNT GAP ON ECONOMIC GROWTH: ASIAN ECONOMIES

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ABSTRACT:

This study has examined the impact of current account gap (CAGAP) on economic growth in selected South Asian countries for the period of 1990 to 2018. CAGAP is calculated from macroeconomic fundamentals through macroeconomic balance approach. The study used panel autoregressive distributive lags estimation technique by taking into account cross sectional dependence and estimated pooled mean group, mean group and dynamic fixed effect estimators. The results of dynamic panel showed that CAGAP, foreign direct investment and gross fixed capital formation significantly affected real GDP growth of the selected countries in the region. CAGAP is contractionary in the short run due to dominance of demand channel while it has expansionary effect in the long run due to dominant supply channel. The policy interventions must focus on the structural distortions and slow- changing factors to eradicate CAGAP. The selected countries should initiate reforms in the form of diversification of tax and exports that would reduce the burden and create buffers to absorb

the external shocks.

1. INTRODUCTION:

Current account deficit (CAD) in South Asian countries was considerably higher than the average deficit experienced by the other emerging and developing economies in Asia during the last three decades. Almost all the economies in South Asia are to tackle the pressure of external obligations and internal economic issues in the coming years (South Asian Regional Update IMF, 2018). Pakistan, India and Sri Lanka had been suffering from CAD since last decade while Nepal and Sri Lanka spent half time period from 1990 in CAD. CAGAP adjustment may be very painful for an economy if it reflects (a) domestic distortion (b) competitiveness problems and overheating would require a perid of slowdown of the economy for recovery (Comunale, 2017) (c) financing a sudden stop in inflows would require to deleverage intensively resulting a sharp contraction of domestic economy (Lane and Milesi-Ferretti, 2012).

The possible channels of impact of CAGAP on key macroeconomic variables are (a) the supply channel suggests that CAGAP causes depreciation of domestic currency making the imports of raw material, semi – finished products and capital goods expensive. It would not only increase cost of production but also price level in the home country (Yurdakula & Ucar,2015),
(b) CAGAP through exchange rated epreciation may also shift the aggregated emandupdueto increase in competitiveness. The dominant effect of demand and supply channel would decide the net effect on prices (Dincer & Kandil,2011).

This study has estimated the impact of current account CAGAP) on economic growth for selected South Asian economies, namely, Pakistan, Bangladesh, India, Nepal and Sri Lanka over the period of 1990 to 2018. The conventional view considered macro economicim balances primarily caused by macro economic policies and cyclical fact orsinrich economies. However, after global financial crisis 2007, an alternative approach dominated considering the structural distortions and slow-changing factors responsible for the imbalances in the economies(Serven and Nguyen, 2013). This study is very useful for the South Asian region as according to Lane and Milesi-Ferretti (2014) the countries having negative CAGAP would bear larger macroeconomic pain in the form of dramatic decline in demand growth and all the selected countries of the region are facing CAD. But as far as the economic growth is concerned,South Asian countries are enjoying an average 5.4% annual growth while the world average is only 3.1% over the last five decades. These economies performed impressively during the 21st centurybyenjoying6.82% annual growth , while the world experienced annual growth of 2.78% (Hassan, 2019; Ullah, Khan, Usman, 2020). A few empirical studies have scrutinized the consequences of CAGAP on key macroeconomic variables in case of developed economies (Darvas, 2015; Comunale, 2017). However, this study will be a bench mark regarding impact of CAGAP on growth in South Asia.

2. REVIEW OF LITERATURE:

One of the major performance indicators of external sectoris CAGAP and it has critical impact on economic decisions in developing countries. A strand of literature consists of empirical studies considering CAB as determinant of economic growth for developing as well as developed economies (see Nyoni et al., 2017; Gruss, Nabar, and Poplawski-Ribeiro, 2018). Garsviene and Cibulskiene (2016), Nyoni et al. (2017) investigated the impact of CAD on economic growth concluding that CAD negatively affects the real GDP growth and GDP per capita income. Gruss, et al. (2018) investigated the impact of external demand, external financia land commodity terms of trade one conomic growth.The favorable external conditions have positive effect on economic growth of the developing and emerging

economies and one- third increase in average per capita income growth during 1995 to 2004 and 2005 to 2014 was attributed to external conditions. Another strand of literature is based on the evolution and measurement of CAN, CAGAP and the role of cyclical and structural factors in determining CAN for the developed and developing economies using different approaches of IMF (see Gnimassoun et al. (2013); Comunale, 2015; Moral-Benito & Viani,2017).

An accurate estimation of CAN is helpful to determine the future adjustment required and possible trajectories of economic fundamentals. The calculated CAGAP can be transitory or persistent due to bad fundamentals (Comunale, 2015). Lane et al. (2014) & Fuchs (2015) empirically investigated the dynamics of CAB, its equilibrium and adjustment of CAGAP. In line with this strand of literature, we have estimated the impact of CAGAP on economic growth. The recent empirical studies have also estimated impact of CAGAP on REER realinterestrate, inflation, economic growth, and deterioration of trade (Comunale, 2017; Gnimassoun et al., 2013; Nyonetal.,2017). Fuchs (2015) concluded that the countries below negative 3.8% CAB of GDP showed substantially fasterad justment than the countries above 3.8% benchmark CAD in the 21 OECD countries over the period from 1974 to 2013.Laneetal.(2014) concludedthat in the adjustment of CAGAP, expenditure switching policy played a limited role while thereis drastic change in aggregate demand as well as in output level in global economies from the period 2008 to2012.

3. RESEARCHMETHODOLOGY:

Inspired by Kamin and Klau (1997), determinants of economic growth are incorporated in the following model and currency misalignment is replaced with CAGAP as the currency misalignment is a function of CAGAP (Comunale, 2017).

$$RGDPG_{it} = \beta_0 + \beta_1 CAGAP_{it} + \beta_2 GCF_{it} + \beta_3 FDI_{it} + \beta_4 INF_{it} + \beta_5 PG_{it} + \mu_{it} \qquad (1)$$

RGDPG$_{it}$ shows the growth rate of real GDP, CAGAP$_{it}$ is the current account gap, GCF$_{it}$ is gross capital formation, FDI$_{it}$ is foreign direct investment, INF$_{it}$ is the inflation rate, PG$_{it}$ is population growth, t represents year and i country, while $\mu_{it}$is the white noise error term.

The nature of the relationship of used proxies of explanatory variables with economic grow thare discussed as follows. When CAB diverges from its CAN,its reversion to CAN often requires important costs from economic point of view. When the realignment of exchange rate is essential for the correction of CAGAP, the earlier literature (Mussa, 2005; Edward, 2007; Arghyrou and Chortareas 2008; Mejean, Rabanal & Sandri, 2011) implicitly assumes that exchange rate misalignment is the main cause of CAGAP. FDI reduces the saving-investment imbalance and plays its role in the provision of technology which can increase the production of goods and services. The increment of tax revenue, human capital and economic integration are the other benefits of the FDI. According to neo-classical synthesis, savings plus borrowing must equal to the assets acquisition in an open economy while national savings and domestic investment are always equal in a closed economy. One popular theory " Big Push" in 1970s also suggested that economies need big push in the form of large investments in infrastructure and education coupled with private investment to break viciouscy cleand to move towards more productive stage and a permanent increase in growth rates. The study used gross fixed capital formation as a percent of GDP as control variable. The cost of production rises due to rise in price level in the economy which no tonly affects profit level but also economic growth through supply of goods (Rahman, Ranaand Barua,2019). We used consumer price in dexin flation rateas control variable. The population growth leads to lower per capita capital thus has negative impact on economic growth (Bucci, 2015).

The unit rootest sin times eriespanel may be examined by twotests Levin-Lin-Chu(LLC) and Fisher type (FT) test. LLC and FT assume that N/T approaches to zero, so these are good

for time series panel. The current study used panel ARDL based on the three estimators including the mean group (MG), pooled mean group (PMG), and dynamic fixed effect (DFE). Panel ARDL model can be applied even with the variables with different order of integration i.e. the variables of order I (0) or I (1) and PMG and MG produce consistent estimate even in the presence of endogeneity as it includes the lags of dependent and independent variables (Pesaran, Shin & Smith, 1999). The heterogeneity is specific to the short run coefficients due to dynamics recorded by each economy. The speed of adjustment to restore equilibrium canbe determined by the value of ECM.

4. RESULTS AND DISCUSSIONS:

There are 145 observation for each variables i.e. it is a strong balanced data. The correlation matrix showed the general level of relationship among selected variables and it also ruled out the presence of any significant Multicollinearity bias. Pairwise correlation coefficients only measure the strength of the linear relationship between two variable. RGDPG is significantly correlated with GCF and FDI as the asterisk (*) shows that p-value <0.05. Table1 shows thet alltheindividualvariableshavecrosssectiondependenceasp-veluesare<0.05.Thestudyused Levin Lin Chu, Fisher-type and Pesaran's CADF unit roots test to take into account cross sectiondependence.

Table 1: Cross- Section Dependence Test

Variable	CD-test	p-value	Correlation	Abs (corr)
RGDPG	1.710	0.088	0.100	0.189
CAGAP	3.820	0.000	0.225	0.227
GCF	2.490	0.013	0.146	0.588
FDI	3.850	0.000	0.226	0.294
PG	10.470	0.000	0.615	0.615
INF	3.160	0.002	0.186	0.211
Notes: Pesaran (2004) CD test under the null hypothesis of cross-section independence CD ~ N (0,1)				

Table 2: Results of Unit Root Investigation (Levin Lin Chu and Fisher-type tests)

Variables	Tests	At Level	At First Difference	Decision
RGDPG	L. L. Chu	-4.9724***[5]		I(0)
	Fisher	9.3375***		
CAGAP	L. L. Chu	-1.3235*[4]		I(0)
	Fisher	3.3281***		
GCF	L. L. Chu	0.3943[5]	-3.4128***[5]	I(1)
	Fisher	0.1347	11.4784***	
FDI	L. L. Chu	-2.8253***[2]		I(0)
	Fisher	2.5694***		

PG	L. L. Chu	-2.2120**[7]		I(0)
	Fisher	2.1472**		
INF	L. L. Chu	-3.4774***[2]		I(0)
	Fisher	7.9581 ***		
*, **, *** represents significance of coefficients at 10%, 5% and 1% level of significance. LLC and FT used ADF regression with one lag and to ensure μ_{it} white noise, we let LLC test choose the optimal lag length selected by AIC within a maximum of 10 lags.				

We estimated equation (2) to see the impact of CAGAP on economic growth with PMG, MG and DFE estimates and then applied the Hausman test to see whether there are significant differences among these three estimators. Real GDP growth rate, gross fixed capital, current account gaps, population growth, and foreign direct investment have lag structure (1,1,1,1,1) based on SBC and HQ information criteria.This dynamic analysis comprises of three stimators of panel ARDL: PMG, MG and DFE. LLC and FT are used by considering Cross-section dependence. The results reveal that there is mixed order of integration (either I (0) or I (1)) of individual series and no variable is I(2).

The regression model of economic growth in table-3 shows CAGAP, FDI, and GCF positively and significantly affect the economic growth in the long run in selected countries. CAGAP affects real GDP growth positively as according to Lane et al. (2014) CAGAP affect RGDPG negatively in the short run as positive CAGAP undergo a greater pressure on the relative decline in the domestic demand due to the appreciation of domestic currency that will be mapped into a decline in domestic output. In the long run, for the correction of CAGAP, there is pressure on domestic currency for the realignment through depreciation which will positively affect real GDP growth. On demand side, appreciation induced by the lowering deviation from CAN, shifts aggregate demand down due to decreasing competitiveness and wages and price level. On the supply side, appreciation through import cost channel of imported input and final goods and inflows increases capital accumulation that positively affect real GDP growth in the longrun.

Table 3: Model 1 Panel ARDL Model, (Dependent Variable: RGDPG)

Variables	PMG	MG	DFE
CAGAP	0.1720** (0.0844)	0.0463 (0.0607)	0.1099 (0.0843)
FDI	0.7665*** (0.2480)	0.1429 (0.3228)	0.6065** (0.2865)
PG	0.0564 (0.3865)	- 0.9284* (0.5036)	0.731 (0.3752)
GCF	0.0819** (0.0403)	0.1513* (0.0818)	0.0405 (0.0417)
INF	-0.2387 (0.3750)	0.001 (0.0268)	0.0474 (0.0447)

Short Run Dynamics			
ECT$_{t-1}$	-0.8900***	-1.1082***	-0.8965***
ΔCAGAP	-0.1996*** (0.3484)	-0.0767** (0.0358)	-0.1591** (0.0659)
ΔGCF	0.4281*** (0.1176)	0.3374** (0.1606)	0.3153*** (0.0617)
ΔFDI	0.0144 (0.3720)	0.0794 (0.4410)	0.0319 (0.3052)
ΔINF	-0.03569 (0.0612)	-0.0285 (0.0595)	0.0167 (0.0314)
ΔPG	4.3282 (6.7261)	20.753 (23.001)	-2.2557** (1.0549)
Constant	2.1725*** (0.3227)	3.3372 (2.0330)	3.2756** (1.3475)
Hausman Test Chi^2 (P-value)	PMG Vs MG 7.84(0.1654)	MG Vs DFE 2.21 (0.8196)	DFE Vs PMG 6.37 (0.2719)
Decision: PMG estimates are selected on the bases of Hausman Test			

ECT$_{t-1}$ Coefficient in Selected Countries				
Bangladesh	India	Nepal	Pakistan	Sri Lanka
-0.78***	-0.76***	-1.05***	-1.03***	-0.82***

*, **, *** represents significance of coefficients at 10%, 5% and 1% level of significance. The 1st column has PMG, 2nd MG and 3rd column has DFE estimates

CAGAP affects negatively and significantly to real GDP growth even in the short run. The coefficient of ECT$_{t-1}$ (-0.90) of PMG model is negative and highly significant. All the determinants of growth model have size and sign according to earlier literature (see e.g. Gnimassoun et al., 2013; Lane et al., 2014 & Comunale, 2017).

5. CONCLUSION ANDRECOMMENDATIONS:

The results indicated that CAGAP affected real GDP growth negatively in the short run while it affected real GDP growth positively in the long run. The coefficient of lagged ECM in PMG model showed that the faster adjustment stakes place in the countries below their CAN orhave negative CAGAP.

The countries with persistent CA im balances should focus on structural changes (e.g.fiscal discipline, labor market reforms, strengthening of private savings) to have a comparable level of competitiveness and productivity with their trading partners (Gnimassoun et al., 2013). Restrict ivemonetary and fiscal policies can be used for the adjustment of CAGAPbyreducing aggregate demand. Growth friendly aggregate demand management policies should be used as these strongly affect the expectations of investors about their ability to sell their output in the future.

REFERENCES:

[1]   Ahmad, S. S., Jaffri, A.A., & Rana, F. (2020). Demographic Determinants of Current Account Norms in South Asia. Pakistan Journal of Languages and Translation Studies Issue, 8(1),61-78

[2]   Arghyrou,M.G.,&Chortareas,G.(2008).CurrentAccountImbalancesandRealExchange Rates in the Euro Area. Review of International Economics 16(4),747-764.

[3]   Bucci, A. (2015). Product proliferation, population, and economic growth. Journal of Human Capital, 9,170-197

[4]   Comunale M. (2015). Current Account and REER misalignments in Central Eastern EU Countries: anup date using the Macro economic Balance approach. Economics Department, Bank of Lithuania.

[5]   ComunaleM.(2017). Apanel VAR analysis of macro-financial imbalances in the EU.ECB Working Paper, No. 2026, ISBN978-92-899-2748-2.

[6]   Darvas Z. (2015). The Grand Divergence: Global and European Current Account Surpluses.   IEHAS Discussion Papers, No. MT-DP - 2015/42. Institute of Economics, Centre for Economic and Regional Studies, Hungrian Academy of ScienceBudapest.

[7]   Dincer, N,. & Kandil, M. . (2011). The Effects of Exchange Rate Fluctuations on Exports: A Sectoral Analysis for Turkey. Journal of International Trade and Economic development, 20 (6).

[8]   Edwards, S. (2007). On current account surpluses and the correction of globalism balances,
NBER Working

[9]   Fuchs p. (2015). Current Account Imbalances: Signs of Adjustment?.

[10]   Gnimassoun, D., & Mignon, B. . (2013). Current-account adjustments and exchange-rate misalignments. Working Paper 2013/29, CEPII ResearchCenter.

[11]   Garsviene, L., & Cibulskiene, D. (2017). Evaluation of the Factors Determining Risk of Growing Current Acount Deficit to the Country in the Context of Economic Growth. Inzinerine Ekonomika-Engineering Economics, 28(1),4-14.

[12]   Gruss B., Nabar M., and Poplawski-Ribeiro M. . (2018). Growth Accelerations and Reversals in Emerging Market and Developing Economies: The Role of External Conditions IMF Working Paper Research DepartmentWP/18/52.

[13]   Hasan A.M. (2019). Does globalization accelerate economic growth? South Asian experience using panel data. Journal of Economic Structures,26.

[14]   International Monetary Fund. (2018). South Asia: Strong Outlook But External Pressures Can't Be Ignored. Washington: IMF South Asia Regional Update, October2018.

[15]   Kamin B.S. & Klau M.,. (1997). "Some multi-country evidence on the effects of real exchange rates on output," BIS Working Papers 48, Bank for InternationalSettlements.

[16]   Lane P.R. & Milesi-Ferretti M. . (2012). External Adjustment and the Global Crisis. . Journal of International Economics 88(2) ,252-265.

[17]   Lane R.P.,and Milesi-Ferretti M.G. . (2014). Global Imbalances and External Adjustment after the Crisis 2014. IMF Working Paper Research DepartmentWP/14/151.

[18]   Mejean, I., Rabanal, P., & Sandri, D. (2011). Current Account Rebalancing and Real Exchange Rate Adjustment between the US and Emerging Asia, IMF Working Paper,1-29.

[19]   Moral-Benito E. & Viani. (2017). An Anatomy of The Spanish Current Account Adjustment: The Role of Permanent and Transitory Factors. Banco de Espana,Madrid.

[20]   Mussa, M. . (2005). Sustaining global growth while reducing external imbalances, in: Bergsten C.F. (ed.), The United States and the World Economy: Foreign Economic Policy for the Next Decade, Institute for International Economics, Washington,175-207.

[21]   Nyoni T., Musisinyani B. and Nyoni M. (2017). The Impact of Current Account Deficits on Economic Growth in Zimbabwe. International Journal for Innovative Research in Multidisciplinary Field, 3(8).

[22]   Pesaran, M.H., Shin, Y. and Smith, R.P. (1999). Pooled Mean Group Estimation of Dynamic Heterogeneous Panels. Journal of the American Statistical Association, 94(446), 621-634.

[23]   Rahman M., Rana R., & Barua S. . (2019). The Drivers of Economic Growth in South Asia:Evidence from a Dynamic System GMM approach. Journal of Economic Studies.46.

[24]   Ullah, M., Khan, A.M., Usman, A. (2020). COVID-19 and Global Stock Market. International Journal of Management. 12(2), 374-380.

[25]   Yurdakul,F.,&Ucar,B..(2015).The Relationship Between Current Deficit and Economic Growth: An Empirical Study on Turkey. Science Direct Procedia Economics and Finance 26 ,, 101 –108.