DEMOGRAPHIC DETERMINANTS OF CURRENT ACCOUNT NORMS IN SOUTH ASIA

Sardar Shakeel Ahmad*, Atif Ali Jaffri & Faisal Rana

Abstract

This paper empirically determines the current account gap (CAGAP) for selected five South Asian countries namely Pakistan, India, Nepal, Bangladesh and Sri Lanka for the period 1990 to 2018. CAGAP defined as the difference between current account balance (CA) and its norm is very important indicator to assess the performance of external sector. The current account norm is determined through finding long run relationship between CA and its determinants. Among determinants of current account norm, net foreign assets, fiscal balance, domestic credit to private sector, demographic transition indicators, terms of trade and real GDP growth are included. This paper has followed IMF's Macroeconomic-Balance (MB) approach using panel data to estimate current account norms. The results show that external sector in Pakistan and Nepal are substantially weak as compared to other selected countries as referred by CAGAP. The findings show that the current account norm is relatively more affected by structural determinants like demographic indicators, net foreign assets and foreign direct investment. Based on empirical findings, the policy implication is that South Asian countries need structural reforms including exchange rate flexibility, productivity for the exports promotion and increase in the skills and employment opportunities to take the advantage of demographic transition. Pakistan and Nepal specifically should focus on the improvement of business climate and tax administrations, increase in financing through exports and take measures to convert demographic transition into demographic dividend.

Keywords: Current account balance, current account norms, current account gaps, panel data

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1. Introduction

The current account deficit in South Asian countries was considerably higher than the average deficit experienced by 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 Asia Regional Update IMF, 2018). Since 1990, Pakistan experienced current account surplus in only three years as compared to four years by India, whereas, Sri Lanka did not experience current account surplus. Bangladesh and Nepal have experienced twelve and sixteen years of CA deficits. Bangladesh, India, Nepal, Pakistan and Sri Lanka faced 2.0, 2.5, 9.6, 4.6, and 2.8 percent CA deficit as percentage of GDP respectively in 2019 (WEO, IMF 2019). The dejected picture of external sector in selected economies is obvious from the table 1. This situation creates an obvious question: whether fundamentals explain the CAGAP in these economies? And, how much it diverged from benchmark set by IMF?

Table 1: Ten Years' Average Current Account Balance in Selected South Asian Countries

Years/ Countries	Pakistan	Nepal	India	Bangladesh	Sri Lanka
1981-1990	-2.80	-5.00	-1.72	-2.25	-6.42
1991-2000	-3.62	-5.64	-1.16	-0.38	-4.63
2001-2010	-1.46	1.38	-0.76	0.99	-3.05
2011-2018	-2.50	1.53	-2.24	-0.10	-3.64
2018	-5.8	-8.20	-2.5	-3.60	-2.90

Source data: WDI, World Bank

South Asian economies are experiencing structural transformation in the form of (a) fall in the share of agriculture in GDP and employment over time (b) increase in the urbanization and (c) demographic transition. According to Jha and Afrin (2018), South Asian economies are following the same pattern of sectoral transformation of the incomplete industrialization from agriculture to services. Most of the economies in the region are experiencing twin deficit, high public debt and there is robust growth of credit to private sector which may make their reversal difficult. Macroeconomic factors that matter for a country's saving and investment are demographic transition, fiscal balance, relative income and credit to private sector (WEO, IMF 2019).

One of the important points regarding external imbalance in "Washington consensus" is that the value of the exchange rate should be determined by both internal and external balances. CAGAP is one of the reasons of exchange rate misalignment (Gnimassoun & Mignon 2013; Comunale 2017). Current account imbalance either surplus or deficit is not always problematic as it depends on the question whether it is aligned to the macroeconomic fundamentals of the economy (Lane & Milesi-Ferretti, 2014; Comunale, 2017). It may stem grave consequences if it diverges from the current account norm estimated from the fundamentals. According to Cusolito and Nedeljkovic (2013) continuous current account deficit is the bad presage of disruption of economic trends creating an external crisis, vulnerability to sudden stop, current account reversal, exchange rate collapse and economic slowdown. Current account balance was an important factor in the emergence of bubbles and transmission of global financial crisis (Ca, Zorzi, Chudik & Dieppe, 2009; Obstfeld, 2012) and it may also create serious macroeconomic and financial stress (Obstfeld, 2012). Current account needs to be assessed by using proper equilibrium values or norms and the current account norms also help us anticipate future adjustment needs and possible dynamics of economic fundamentals (Comunale, 2015).

A country may incur CAGAP due to increased domestic consumption and investment demand and it may be financed through external borrowing or reduction in foreign reserves in the short run. If the gap remains in the long run, then question arises whether the CAGAP is consistent to the fundamentals of the economy or not. This paper answers the above question regarding five countries in South Asia: Bangladesh, India, Nepal, Pakistan and Sri Lanka. In the context of South Asian economies, existing research on the subject concentrated on determinants of current account and its sustainability (Shastri, Giri & Mohapatra, 2018). A few empirical studies have scrutinized the role of transitory and permanent factors in current account equilibrium and the consequences of CAGAP on key macroeconomic variables in case of developed economies (Darvas, 2015; Comunale, 2017). The longer time period is also contributing for two reasons. First it allows us to better incorporate the effects of the external crisis in the selected region (Milesi-Ferretti, 2012). Second, it gives better description and a clearer perspective on the medium term dynamics of current account. To the best of our knowledge, no empirical study on estimation of long series of CAGAP for this region is available in the existing literature. This study will be a benchmark and a significant contribution to the literature on current account in the context of South Asian economies. The remaining part of the paper is structured as follows: section 2 reviews relevant empirical literature, section 3 summarizes the empirical approach and data, section 4 explains the results and section 5 concludes and gives a brief description of policy implications.

2. Review of Literature

The ultimate goal for the developing economies is to have balanced growth that is achieving the internal and external balance simultaneously. CA Norms is one of the major performance indicator on external sector so, it has a major role in the economic decision and expectations. The selection of policies for the stabilization of CAGAP plays an important role in determining economic growth and direction of economy (Ayden & Esen, 2016). This section covers three strands of relevant literature on CA dynamics with reference to South Asia.

The first strand of literature consists of a plenty of empirical studies on the current account determinants and sustainability for developing as well as developed economies (Medina, Prat & Thomas, 2010; Comunale, 2015; Arize 2017). Shastri, Giri and Mohapatra (2018) and Sahoo, Suresh & Umakan (2016) used a panel of South Asian economies for the sustainability of CA. The first study concluded that weak sustainability of current account and emphasized the policy intervention while later found the continuous CA deficit raised question of sustainability in the long run. The study further explained that the current account of Maldives and Sri Lanka is sustainable while Bangladesh, Bhutan, Pakistan, India and Nepal have their unsustainable current account in the long run. Das (2016) concluded that the trade openness, NFA, real effective exchange rate (REER) and exchange rate stability positively affect CA in developed economies but opposite impact in developing economies for the period of 1980-2011. Hounsou (2017) determined that the significant determinants of CA of France and non- France zone are the terms of trade, gross domestic savings, NFA, trade balance, exchange rate and consumer price index. Arize (2017) confirmed that trade balance is more reactive to depreciation than appreciation in all countries. Zhou (2018) also empirically explained that population age structural has significant negative impact on CAB while the youth dependency and REER are not significant determinants of CAB for autonomous region of China from the period 1994 to 2015.

The second strand of literature focused on the measurement of CA Norms while the third investigated contribution of cyclical and structural determinants in CA Norms (Cheung, Furceri & Rusticelli, 2010; Moral-Benito & Viani, (2017). The Methodology used in these studies were MB approach of IMF used by Rahman (2008), Lee et al. (2008), Medina et al. (2008) and Comunale (2015) while Moral-Benito & Viani (2017) used External Balance Assessment Methodology of IMF. The medium term values of the macroeconomic fundamentals used for the calculation of CAGAP in the earlier literature are (a) fitted values from CA regression (b) long-term trend values calculated through HP-filter (c) forecasted values of IMF (see Rahman, 2008; Chinn & Parsad, 2003 & Darvas, 2015). The CA norms in the MB approach are estimated through the techniques of pooled OLS regression and panel fixed effect used by Chinn & Parsad (2003), Rahman (2008), Lee et al. (2008), Medina et al. (2008), Darvas (2015) while Moral-Benito & Viani, (2017) used Generalized Least Square(GLS) for time series model. These techniques were selected by taking into account the Cross sectional independence, autocorrelation and heteroscedasticity. The demographic factors are significant in determination of CA Norms in the studies which used MB approach of IMF (see e.g. Rahman (2008), Lee et al. (2008), Medina et al. (2008), Gnimassoun et al. (2013) and Comunale (2015).

The contribution of structural factors is more dominant than cyclical factors (see Tinti, 2016; Rahman 2008; Medina et al., 2008; Gnimassoun et al., 2013 and Comunale 2015). According to Rahman (2008) structural factors like fiscal balance and population age structure are more prominent in the estimation of CA norms for the 10 new European economies for the period of 1992-2006. Medina et al. (2008) used the modified version of MB Approach of IMF (CGER to find the CA norms for 33 emerging market economies and concluded that the fiscal balance has strong impact on the CA norms or equilibrium in case of emerging economies as compare to the advanced economies. Structural factors like fiscal balance, population growth, dependency ration, NFA etc. are dominant in the norms of CA of 28 European economies for the time period of 1974 to 2014 (Tinti, 2016). Gnimassoun et al., (2013) concluded that structural factor like exchange rate misalignment is dominant in CA norms explanation for the 22 industrialized economies for the period of 1980-2011. The REER and CA norms clearly depends on the cyclical factors like of the panel of 11 European economies for the period of 1994 to 2012 (Comunale, 2015). Moral-Benito et al. (2017) concluded that CA norms of Spain depends equally on the cyclical factors as well as structural factors (e.g. population aging, fiscal balance, growth expectations and gain in competitiveness) for the period 2008 to 2015.

3. Research Methodology

This section describes the regression model and selected variables along with their theoretical justification and expected impact of explanatory variables on the current account. Following econometric model is used in the study by augmenting a model originally developed by Moral-Benito et al. (2017)

$$CA_{it} = \alpha_i + \beta_i X_{it} s + \gamma_i X_{it} c + \mu_{it}.....$$
(Model)

 CA_{it} refers to the current account of a specific country i in time period t, $X_{it}s$ shows the vector of structural variable components (population growth, fiscal balance, domestic credit to private sector and net foreign assets) with coefficients β_i , $X_{it}c$ represents the vector of cyclical variables (economic growth and terms of trade etc.) with coefficients γ_i , α_i represents the country specific heterogeneity and μ_{it} is the error term in the model. The emperical model estimated is given below:

$$\begin{split} CA_{it} &= \beta_1 + \beta_2 NFA_{it} + \beta_3 FB_{it} + \beta_4 PG_{it} + \beta_5 TOT_{it} + \beta_6 RGDPG_{it} + \beta_7 DCPS_{it} + \beta_8 FDI_{it} \\ + \beta_9 URB_{it} + \beta_{10} 9/11_i + \beta_{11} RI_{it} + \varepsilon_{it} \end{split}$$

In above model, dependent variable is current account balance(CA) while explanatory variables are net foreign assets (NAF), fiscal balance (FB), population growth (PG), terms of trade (TOT), real GDP growth (RGDPG), domestic credit to private sector (DCPS), foreign direct investment (FDI), urbanization (URB), relative income (RI) and dummy variables for 2001 terrorism attack (9/11). The data period is from 1990-2018 and all the data is in percentage of GDP to facilitate comparison across countries. The link between CAB and explanatory variables is explained below.

Two indicators of demographic transition are used in the study: population growth and urbanization i.e. urban population as a percentages of total population. A country with higher population growth will have higher aggregate demand which would adversely affect CA (Medina et al., 2010). The study included population growth as explanatory variable. Urbanization enhance industrialization which in turn increases economic growth and per capita income and living standards of the

people. All this is achieved through division of labor and economies of scale (Darvas, 2015).

If a country is experiencing current account surplus, it is the indication of the value of a country's net foreign assets grew over the period in question. Similarly, a current account deficit indicates that NFA shrank. So, NFA affects current account balances positively (Chinn and Prasad, 2003).

The fiscal expansion through the reduction in taxes or increase in govt. expenditure affects the aggregate demand which in turn affects the trade balance as well as current account i.e. deviation from Ricardian Equivalence (Chinn and Prasad, 2003). There is a strong relationship between fiscal deficits and current account deficits because government spending tends to crowd out private spending.

Credit to private sector can be divided into credit to household and credit to firms and its impact varies according to its type and use. Credit to household may increase aggregate demand which in turn negatively affect CA. The credit to firms may increase demand of imported inputs which will affect negatively in the short run while a positive impact in the long run due to increase in production. According to Darvas (2015) if there is low level of financial deepening in an economy it could face credit constraints. It will lower private savings and thus deteriorate the CA. Domestic credit to private sector as percentage of GDP is used as a proxy of financial development.

At a similar stage of development, a country with stronger growth lowers CA. If the faster growth depends on the foreign-financed investment, it will harm the current account balance and negative coefficient is expected (Comunale, 2015). Real GDP growth is used in the model to measure economic growth. Higher the economic growth could attract capital inflows and make the CA worse (Darvas, 2015).

FDI increases in a country if the investment climate improves in a country and it may provide a stable source of financing CA deficit. Generally, FDI tend to worse CA through the increased imports in a developing country (Rahman, 2010).

If a country experiences an increase in world market prices of a country's exports relative to its imports, its CAB improves (Chinn and Prasad, 2003). The proxy used is the ratio of the export unit value index to the import unit value index.

The Asian region enjoyed significant capital inflows as well as witnessed unprecedented growth after 9/11 terrorist attacks (Shahzad & Qin, 2019). Lane and Milesi-Ferretti (2012) and comunale (2015) also used various crisis dummy variables in CAB regression to capture crisis experience of countries.

The studies are using both the External Balance Assessment (EBA, IMF) regression and Macroeconomic-Balance approach (MB) for the measurement of CA norms and CAGAP. This study used the MB approach given by IMF because of the following reasons. First, according to Comunale (2015), EBA regression have inclusion of large sets of cyclical, permanent and policy variables and many of them do not have theoretical foundation for their inclusion which may create problem in econometric analysis. Second, the calculation of CA misalignment after the inclusion of subjective values of these policies variables may create serious complications in the analysis. Third, according to Gnimassoun et al. (2013) MB approach can be used for panel as well as a single country which do not have long enough time series of macroeconomic variables for the estimation of the current account regression. Macroeconomic fundamentals that affect underlying savings and investment of an economy are used as explanatory variables in the measurement of current account norm through MB approach, (Rahman, 2008; Gnimassoun et al., 2013 & Comunale, 2015). The first step is the current account regression in MB Approach and then current account norm is estimated in the second step with the help of estimated coefficient and medium-term values of the regressors. In the third step, CAGAP is determined (IMF, 2006 & Prati, 2008). The above explained procedure is reflected in the following equations

4. Results and Discussions

This section comprises of two parts as first integration orders are decided on the basis of panel unit roots analysis and then the estimates are determined in the impact analysis.

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

Variables	Tests	At Level	At First Difference	Decision
CA	L. L. Chu	-1.1106	-5.1190***	I(1)

	Fisher	1.0443	14.3288***	
NFA	L. L. Chu	1.9202	-4.3004***	I(1)
	Fisher	-0.6569	8.4965***	
PG	L. L. Chu	-2.2120**	-1.4645*	I(0)
	Fisher	2.1472**	2.5446***	
DCPS	L. L. Chu	-0.3186	-3.5568***	I(1)
	Fisher	-0.6094	9.9722***	
FB	L. L. Chu	-2.6640***	-3.4624***	I(0)
	Fisher	1.8434**	8.2500***	
TOP	L. L. Chu	-0.3056	-4.2131***	I(1)
	Fisher	-0.2039	8.7991***	
RI	L. L. Chu	1.5480	-1.1170	I(1)
	Fisher	-2.0631	2.3583***	
RGDPG	L. L. Chu	-4.9724***	-9.9273***	I(0)
	Fisher	9.3375***	36.5421***	
FDI	L. L. Chu	-2.8253***	-2.8253***	I (0)
	Fisher	2.5694***	15.7960***	, ,
URB	L. L. Chu	-2.0207**	-1.4564*	I(0)
	Fisher	1.1287	-0.8412	, ,
RGDPPC	L. L. Chu	3.4589	-3.2249***	I(1)
	Fisher	-2.1685	4.4520***	` ,
TOT	L. L. Chu	-6.5671***	-10.7818***	I(0)
	Fisher	15.6286 ***	41.9316***	• •

The t- statistics values at level and at 1st difference is in 3rd and 4th column while *, **, *** represents significance of coefficients at 10%, 5% and 1% level of significance. LLC is the abbreviation of Levin-Lin-Chu.

Panel data methodology is used to find the CAGAP through MB approach. The panel regression takes into account the specific cross unit heterogeneity, more information, degree of freedom and efficiency. To avoid the occurrence of spurious regression and taking into account cross sectional dependence, unit roots test is applied to move towards further data analysis. The above table 4.1 shows the examination of the unit root by two tests Levin-Lin-Chu (LLC) and Fisher type test. Since LLC and Fisher assume that N/T approaches to zero so these are good for time series panel. Fisher unit root test is also useful for small and unbalanced panel. The variables have mixed order of integration so, panel cointegration cannot be applied since same integration order is its prerequisite. Majority of the studies have used panel fixed effect technique to estimate the CAGAP (Rahman, 2008; medina et al, 2010; Darvas, 2015). This study also used the fixed effect model (FEM) to estimate

current account norms. The augmented regression proved that there is correlation between regressors and error term, so theoretically FEM is appropriate. Gujrati (2003) argued that random effect model (REM) is attractive when there is no correlation between regressors and error term. The explanatory power of the regression increases through FEM estimation and the good part of it can be derived from country-specific constant terms. Moreover, when there is time series panel, the estimates of FEM and REM are likely to be little different. So, the choice depends upon the computational convenience and on this score FEM is preferable. The Hausman specification test also supported FEM as compared to REM.

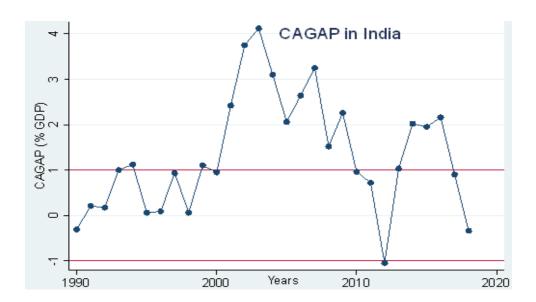
Table 3: Current Account Regressions (Dependent Variable: CAB)

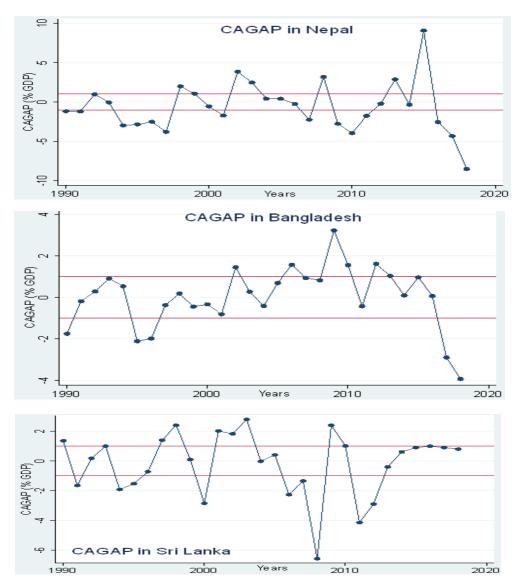
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Explanatory	POLS	FE	FE	FE	FE	FGLS	Standardized
Variables	(B	aseline) (1	995-2018)				Regression
NFA	0.08***	0.06***	0.11***	0.06**	0.06***	0.05***	0.39
FB	0.19**	0.33***	0.59***	0.33***	0.38***	0.30***	0.19
PG	-2.74***	-3.22***	-5.64***	-3.46***	-3.01***	-2.45***	-0.68
RGDPG	-0.24**	-0.30***	-0.46***	-0.28***	-0.29***	-0.19*	-0.15
DCPS	-0.05**	-0.9***	-0.9***	-0.07***	-0.07***	-0.04**	-0.24
TOT	6.46**	4.94	3.90	3.40		0.04*	0.21
URB	0.21***	0.14	1.74			014***	·. 0.49
RI	0.04	0.22*	0.24	0.21*	0.22*		0.04
FDI	-1.25***	-1.20***	-1.29***	-1.15***	-1.22***	* -0.99***	* -0.29
9/11 TA	3.22***	3.08***	2.91***	3.16***	3.23**	* 3.54**	*
TO						-0.05**	*
Constant	-8.47	-2.09	5.97	4.21	10.64**	* 7.22**	*
Observations 145 145 1			120	145	145	145	

^{*, **, ***} represents significance of coefficients at 10%, 5% and 1% level of significance. FE (baseline) is the benchmark regression used for the determination of CA Norms series. The 2^{nd} , 3^{rd} and 4^{th} FE model is to check the robustness with the time period 1995 to 2018 and with the explanatory variables other than the bench -mark regression.

Tests	Test Statistics (d.f.)	Probability	Decision
1.Model Specification Test			
(a) Ramsey RESET test	F(3, 131) = 0.58	0.6296	No Misspecification
(b) Multicollinearity Test	Mean VIF=3.38		No Multicollinearity
2. Model Selection Tests			3.0737
(a) Breusch and Pagan LM tes	1.0000	POLS	
(b) Durbin-Wu-Hausman test	(augmented regression)	0.0001	No POLS/RE
(c) Hausman Specification te	st chi2(10)= 25.18	0.0050	NO RE
(d) Fixed Effect Test Chow T	est (F-test) $F(4, 130) = 5.46$	0.0004	FE(LSDV)
3. Residual Diagnostics			
(a). Cross sectional independe		Cross- sectional	
Groupwise heteroskedasticity	51 0.2318	Independence	
(b). Autocorrelation Test			No First Order
Wooldridge test first order au	tocorrelation $F(1, 4) = 1.035$	0.3665	Autocorrelation
(c). Heteroskedasticity test (M	Iodified Wald test)		No
(B-P / Cook-Weisberg)	chi2(5) = 8.67	0.1228	Heteroscedasticity

The CA regression shows that increase in 1 percent of GDP in NFA, RI and FB have significantly explained variation in CAB and on average it changed 0.06, 0.04 and 0.33 percent of GDP, respectively. On average, one percent increase in the RGDPG, DCPS, FDI and PG negatively affected the mean value of CAB by 0.24, 0.09, 1.20 and 3.22 percent of GDP. CA also found to be significantly affected from world level crisis and it can be explained to the shock to capital flows during these periods. The standardized coefficient or Beta coefficient of demographic factors are the most important explanatory variable for CAB as it shows that one standard deviation change in population growth and urbanization are responsible for 0.68 and 0.49 standard deviation change in CAB while FB is the second most important variable to explain CAB. The Ramsey RESET test also shows that there is no omitted variable biasedness as the probability value (0.63) failed to reject the Null hypothesis. Macro panels have another problem of cross sectional dependence. According to Cameron and Trivedi (2005) a panel data with correlated observation have less information than a panel with independent observations. Therefore, the correlation of regression disturbances over time and between cross section can produce biased and inconsistent results. Three residual diagnostics are used to justify the panel estimation. For macro econometric panel, B-P/LM test can be applied to check the correlation of residual across different entities (Baltagi, 2008). The null hypothesis of this test is that the cross sections are independent. The probability value (0.23) indicates that there is cross section independence across the panel of these countries. Since there is no first order autoregressive effect AR (1) or no serial correlation in the estimation (p-value=0.3665), so static fixed effect estimates will be consistent. The mean value (3.38) of variance inflation factor (VIF) shows no multicollinearity among regressors. At the end, residual diagnostics tests are applied, the p-value (0.12) of modified Wald test revealed homoscedasticity in the errors. This paper also applied some checks to get robustness of the regression. First, column 3 shows FEM with time period 1995-18. Second, column 4 and 5 have FEM with some different explanatory variables. Third, an alternative approach feasible generalized least square (FGLS) is also applied to get best linear unbiased estimates. All the three checks reveal no variation in the estimates as compared to baseline regression. The diagnostics show that the model has no heteroscedasticity, no autocorrelation, no cross-section dependence and no omitted variables. Since there is no econometric problem in the model, therefore, these estimates are unbiased, consistent and efficient. The size, signs and significance of the variables is justified with the help of theoretical relationships as well as earlier literature (Rahman, 2008; Medina et al., 2010; and Comunale, 2015).





igure 1: Current Account Gaps in Selected South Asian Economies

The country with negative current account balance and negative CAGAP will be more vulnerable than the country with negative current account balance and positive CAGAP (Catao and Maria, 2013). According to ESR (2019), if CAGAP is -1% to 1%, the external position is consistent with the fundamentals and desirable policy

settings^{††††}. The current account position of India (0.9 CAGAP) is in line with external balance assessment of IMF (IMF, 2019) and Sri Lanka (-0.5CAGAP) is consistent according to fundamentals of the economy while reflecting macroeconomic challenge for Nepal and Pakistan in 2018. The CAGAP of Bangladesh reflects that external position is weak in 2018. The graphic analysis shows that the results of long time series of CAGAP are aligned to the recent and annual literature of external sector reports of IMF on this region.

5. Conclusion and Policy Implications

Within the context of the fastest growing region in 2016 but having fragile external sector over the years (World Bank, 2017), the aim of this paper was to estimate the CA norms for the selected South Asian countries. The study used a panel of five South Asian countries for the assessment of current account gap through macrobalance approach. Fiscal balance, NFA, relative income, FDI, population growth, domestic credit to private sector, real GDP growth and dummy for terrorism attack explained current account balance significantly. The size, sign and significance of the estimated coefficients are in line with the expectations and earlier literature. According to the classification of benchmark, the estimated CAGAP is weak for Bangladesh, substantially weaker for Nepal and Pakistan, however, it is consistent to macroeconomic fundamentals for India and Sri Lanka (see footnote 2 & figure 4.1). Structural variables are more prominent than cyclical factors in the final fixed effect panel regression. South Asian countries need structural reforms for exchange rate flexibility, productivity for the exports promotion and increase in the skills and employment opportunities to take the advantage of demographic transition. Pakistan and Nepal specifically should focus on the improvement of business climate and weak tax administrations, increasing the finance through exports and investing in the young population to convert demographic transition into demographic dividend. The potential of demographic dividend can be realized through appropriate public policies of making the working age population diversified, dynamic and competitive to fulfill the requirements of job markets; population control and economic

environment that generate employment for new entrants into labour market (Nayab, 2008 & Navaneetham & Dharmalingam, 2012).

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