Faculty of Economics and Business

Investigating the Effects of Trade Protectionism, External Capital and Financial Sector Development on Pakistan's Balance of Payments and Current Account Reversals Impact on Growth

Zeeshan Khan

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Zeeshan Khan

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DECLARATION

I declare that the work in this thesis was carried out in accordance with the regulations of Universiti Malaysia Sarawak. Except where due acknowledgements have been made, the work is that of the author alone. The thesis has not been accepted for any degree and is not concurrently submitted in candidature of any other degree.

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Signature

Name: Zeeshan Khan

Matric No.:   14010154

Faculty of Economics and Business

Universiti Malaysia Sarawak

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ABSTRACT

This study employs two models to investigate Pakistan's balance of payments behaviour in relation to some macroeconomic phenomenon. Motivation behind conducting this study is Pakistan's lukewarm performance on its external account. Model-I with its intended objective-I, investigates the relationship between trade protectionism, financial sector development, external capital shock and balance of payments by using time series data from 1950 to 2016. Unit root and structural break properties of covariates have been tested by Augmented Dickey Fuller (ADF) and Bai–Perron tests. The Autoregressive Distributed Lag (ARDL) approach is applied to examine the cointegration between variables due to mixed orders of integration I(0)/I(1). The Autoregressive Distributed Lag results suggest long-run relationship among trade protectionism, financial sector development, external capital shock and balance of payments. Error correction model (ECM) is applied to analyze the speed of adjustment. The lagged value of the ECM_{t-1} is negative and significant at 5%. The value of ECM_{t-1} is −0.27, suggest convergence towards equilibrium in long-run with correction speed of 27% every year. Trade protectionism, financial sector development and external capital shock have significant impact on balance of payments in long run. However, in short-run only trade protectionism and external capital shock have statistically significant impacts. For Granger causality, all covariates having bi-directional causality except financial sector development. Diagnostics statistics such as, robustness and goodness of fit have confirmed stability of the Model-I. Model-I concludes applicability of Keynesian theory to balance of payments. Lastly, Model-II, to empirically address objective-II of this study, utilises Treatment Effect Regression to ascertain the economic cost associated with current account reversals first finds Sudden Stop (SS) in capital flows and declining Trade Openness (TO) carrying statistically significant probabilities in triggering current account reversals. Further,

negative economic impact of these reversals is 0.74%. Model-II found structurally stable through Sbcusum estimates and concludes partial applicability of Keynesian theory to the balance of payments.

Menyiasat Kesan Perlindungan Perdagangan, Pembangunan Sektor Luar dan Sektor Kewangan Terhadap Imbangan Pembayaran Pakistan dan Pembalikan Akaun Semasa Kesan terhadap Pertumbuhan

ABSTRAK

Kajian ini menggunakan dua model untuk menyiasat perilaku imbangan pembayaran Pakistan sehubungan dengan beberapa fenomena ekonomi makro. Motivasi dalam menjalankan kajian ini adalah prestasi suam-suam kuku Pakistan di akaun luarannya. Model-I dengan objektifnya-I, menyiasat hubungan antara proteksionisme perdagangan, pembangunan sektor kewangan, kejutan modal luaran dan imbangan pembayaran dengan menggunakan data siri masa 1950 hingga 2016. Sifat punca dan struktur struktur kovariat telah diuji oleh Ujian Augmented Dickey Fuller (ADF) dan Bai − Perron. Pendekatan Autoregressive Distributed Lag (ARDL) diterapkan untuk meneliti kointegrasi antara pemboleh ubah kerana pesanan campuran integrasi I (0) ∕ I (1). Hasil Lag Teragih Autoregresif menunjukkan hubungan jangka panjang antara perlindungan perdagangan, pembangunan sektor kewangan, kejutan modal luaran dan imbangan pembayaran. Model pembetulan ralat (ECM) digunakan untuk menganalisis kelajuan penyesuaian. Nilai ECMt lag 1 yang tertinggal adalah negatif dan signifikan pada 5%. Nilai ECMt − 1 adalah −0.27, menunjukkan penumpuan ke arah keseimbangan dalam jangka masa panjang dengan kelajuan pembetulan 27% setiap tahun. Perlindungan perdagangan, pembangunan sektor kewangan dan kejutan modal luaran mempunyai kesan yang besar terhadap imbangan pembayaran dalam jangka panjang. Walau bagaimanapun, dalam jangka pendek hanya proteksionisme perdagangan dan kejutan modal luaran yang mempunyai kesan yang signifikan secara statistik. Untuk sebab-akibat Granger, semua kovariat mempunyai sebab-akibat dua arah kecuali pembangunan sektor kewangan. Statistik diagnostik seperti,

ketahanan dan kesesuaian telah mengesahkan kestabilan Model-I. Model-I menyimpulkan penerapan teori Keynesian untuk imbangan pembayaran. Terakhir, Model-II, untuk menangani objektif-II dari kajian ini secara empirikal, menggunakan Regresi Kesan Rawatan untuk memastikan kos ekonomi yang berkaitan dengan pembalikan akaun semasa pertama kali mendapati Hentian Mendadak (SS) dalam aliran modal dan penurunan Keterbukaan Perdagangan (TO) yang membawa signifikan secara statistik kebarangkalian untuk mencetuskan pembalikan akaun semasa. Selanjutnya, kesan ekonomi negatif pembalikan ini adalah 0.74%. Model-II didapati stabil secara struktural melalui anggaran Sbcusum dan menyimpulkan penerapan separa teori Keynesian terhadap imbangan pembayaran.

Kata kunci: *Imbangan Pembayaran, dasar Makroekonomi dan Kejutan Eksogen, Pembalikan CA dan Pertumbuhan.*

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LIST OF ABBREVIATIONS

ADF	Augmented Dickey Fuller
ARDL	Autoregressive Distributed Lag
ATE	Average Treatment Effect
ATET	Average Treatment effect on Treated
BOP	Balance of Payments
CA	Current Account
CARs	Current Account Reversals
FSDEV	Financial Sector Development
POMEANS	Probability Outcome Means
TO	Trade Openness
TP	Trade Protectionism

CHAPTER 1

INTRODUCTION

1.1   Background of Study

Country's balance of payments account is a statistical document that summarizes nations' transactions with rest of the world. Two basic components of balance of payments account comprise *current account* and *financial account.* Transactions which do not create liabilities and records an economy's trade of goods and services along with net current transfers and workers' remittances etc. generally a part of current account. At the other end, transactions incurring future liabilities on sale and purchase of the assets are recorded on country's capital or financial account. Economies with persistent deficits on their current account offset by surpluses on capital/financial account are considered as net borrowers from rest of the world. Contrary, economies having surpluses at their current accounts followed by deficits on their capital/financial accounts are net lenders to rest of the world.

Analysing balance of payments is as essential as studying economics as a subject in itself for many reasons. First, the same provides an estimate for foreign currency demand and supply along with country's standing in terms of international economic competition. Second, balances on the balance of payments account gives an indication or a measure to both deep seated economic crisis and warning to foreign creditors and also provide an account of economy's integration to global economies.

1.2   Selection of the Country: Pakistan's Balance of Payments Issues

As this study revolves around assessing Pakistan's external account woes, it has been observed that during the past decade country has been unable to take off like some of the

emerging market economies at its external front. Successive governments have been coerced to start IMF programs to averse balance of payments crisis and to restore macroeconomic stability and, therefore, signed up for strict vigilance by the international financial institutions. Such woes have been aggravated further in the recent times as to the effect that the country has lost on average 1.45% yearly in global exports market share since 2005. As a percentage of Pakistan's GDP, exports have significantly declined to 8.9% in FY 2015 as compared to 13.5% peak in FY 2002. Pakistan's export performance has been lagging in recent years, with earnings in FY2015 (USD 23.67 billion) below the level in FY2013 (USD 25.11 billion).Country's exports of goods and services rose from US$8.6 billion to US$19.9 billion (a mere 2.3 times) in 23 years from 1991 to 2014 while those of Bangladesh rose 22 times from just US$1.1 billion to 24.3 billion, of Vietnam 33 times from US$3.3 billion to 90.5 billion, of India by 14.5 times and of China by more than 25 times, over the same period. As a result of such sustained below par exports performance, Pakistan's trade deficit has continued to grow, over the past decade. It is important to note the during the year 2014-2015 exports declined by 4.42 % or USD 1.1 billion as they stood at $23.89 billion against $24.90 billion for the same period of the previous year i.e. 2013-14. The same declining trend was also witnessed during the year 2015-16 where exports declined to USD 20.8 billion, falling at a rate of 12.17% as compared to 2014-15's decline of 4.42% against 2013-14 (State Bank of Pakistan, 2016).

Besides the current account's export performance, the inflows on country's financial account other than debt creating inflows are also not promising. While looking at financial account, country instead of alluring inflows through FDI has secured substantial foreign debt and grants through IMF. The other sources to maintain the required level of foreign exchange reserves are other multilateral donors and floating bonds in the international market. Such

bourgeoning reliance on foreign debts and grants as an alternate to the sustainable inflows on current and financial account has raised the Pakistan's balance of payments susceptibility to external Capital shock of a larger magnitude. As such shock's magnitude dependent on the country's balance of payments reliance on foreign debt and level of global interest rates and exchange rate volatility (International Monetary Fund, 2017).

Further, Pakistan is considered to be the world's seventh most protected economy as measured by the Overall Trade Restrictiveness Index (OTRI)[1] tariffs are almost twice as high as the world average and three times more than those in South East Asia. As trade protectionism and its subsequent impact on Pakistan's balance of payments is of greater importance to be discerned through empirical findings of this study, therefore, relatively a greater detail has been added here in addition to detailed section on country's level of trade protectionism below. According to World Economic Forum, Pakistan ranks 136 out of 142 countries in terms of trade tariffs (WB, 2016). Not only that, Pakistan's tax rates are also amongst the highest and most skewed in the world. Pakistan earns 40% of its tax revenue by taxing international trade, while most of its notable competitors accumulate less than 5% under this head. The same anomaly in import tariff structure carrying an adverse impact on the small and medium enterprises which are unable to access inputs efficiently (Ahmed, 2014). Even current trade and industrial policy espousing more distortive strategy towards trade and export promotion by resorting to economically unjustified protections for specific industrial sectors such as, fertilizer, steel, automobile, chemical, textile and its associated sub-sector which are felt worthy to be protected. One could notice that these aforementioned

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[1]The OTRI quantifies the uniform tariff that if imposed on home imports instead of the existing heterogeneous structure of protection would leave aggregate imports at their current level.

sectors, this way or the other, yet after four or five decades are still not competitive and are seeking various budgetary supports in the form of subsidies and substantial import tariff concessions on their inputs from the government. Whereas, it is an established fact that these excessive domestic protections hampers incentive to export and permits inefficient local firms to remain in business (Hussain & Ahmed, 2012). Pakistan's average industrial tariff comparison with a few other regional economic players reveal contrasting statistics for various line of commodity groups and ranges from a minimum level of protection of 8.6% to a maximum of 35.8%. Nonetheless, the same ranges between a minimum of 1.9% to a maximum of 30.2% for comparing economies. Not only this, all commodity groups in the sample in relative comparison have been divulged as highly protected. Though the country's macroeconomic condition by the year 2015 was somehow improved and 2014-15 budget provided an opportunity to take some viable economic initiatives to avert from such a protectionist regime to a more growth yielding trade policy. But, Pakistan in a stark contrast to what was required has further raised the custom duties on already over-taxed imports thus, again resorted to a more inward-looking approach (Ahmed, 2014). In a nutshell, Pakistan over the years, has experienced phases of import substitution, export orientation and the resurgence of trade protectionism. There is an urgent need for policy makers to adopt a cautious perspective when dealing with the recent revival of protectionism while keeping in mind its associated impact on country's balance of payments position.

Besides trade protectionism one of the major impediments to Pakistan's balance of payments, analysis of Pakistan's financial sector lending shows that, despite a low policy rate of 5.75% credit of take to private sector remained substantially low, especially to SMEs and the same has declined from 40% to only 28% during FY 2010-2016. The same depicts

the structural weaknesses in country's financial sector or credit lending institutions (State Bank of Pakistan, 2017).

Additionally, countries with continuous deficits on its balance of payments does not only encounters difficulties in foreign payments for imports and other debt related payments but, such deficits carry a huge economic costs with itself. It has been argued that the deficit on developing countries balance of the payments generally emanates from deficits on their current account due to their unmanageable import bills and lower export base. The resultant huge deficits on current account increases the country's tendency to experience the current account reversals. These reversals or adjustments on the current account as per the various researches (Section 2.5) found disruptive and detrimental to country's GDP growth. As Pakistan's balance of payments has also consistently remained in deficit due to posting huge deficits on its current account therefore, the economic cost associated with these current account reversals seems significant. Thus, such phenomenon also merits attention to be empirically studied. In other words, if a country experiences a sharp and abrupt adjustment in its external account in which country's current account deficit to GDP substantially reduces (i.e 3%) or turn into smaller surpluses within a year or more, what will be the impact of this very phenomenon on country's economic growth?

1.3 Problem Statement and Study's Construct

Pakistan despite its large pool of natural and economic resources surprisingly has so far remained unable to outperform at its external front in terms of earning much needed foreign exchange. Country's balance of payments account stayed largely under pressure since its inception, except for the Years 1947-1948, 1950-1951 and 1972-1973, wherein it has posted positive trade balance. This very phenomenon develops utmost interest amongst

the researchers to investigate the reasons encompassing country's external account wretched performance.

It has recently been argued that despite the low policy rate regime credit take-off or lending to private sector (especially SMEs) is not so promising which plays a vital role in stabilizing country's exports and balance of payments thereof. Such below par lending to the private sector attributed to structural weakness and lack of development in Pakistan's financial sector. Secondly, Pakistan's relatively higher trade protectionist regime which earns 40% of its tax revenue by taxing international trade, while most of its notable competitors accumulate less than 5% under this head. The said anomaly in import tariff structure constraining country's ability to secure low cost inputs for export oriented industry. Lastly, consistent deficit on country's current account and insufficient FDI and other inflows on Pakistan's financial account has increased country's reliance on the foreign debt mainly donors and floating bonds in the international market. Such reliance on foreign debt creating inflows perceived as constraining the balance of payments flows on financial account amid fluctuating global interest rates, thus, making it susceptible to external capital shock.

It merits mention here that the aforesaid covariates are based on the gap in the existing literature (for detailed GAP analysis see Section 2.3). Meaning that these covariates and their potential associations/impacts, though subject to debate amongst many researchers and academician alike, on Pakistan's balance of payments have not been empirically tested. Various empirical researches (*see literature review section 2.3*) have concluded that Trade Openness, financial liberalization, FDI, exchange rate, GDP, Inflation, fiscal and trade balance, industrial production, gross capital formation, net foreign assets, domestic credit, and private investments founds to be causing substantial fluctuations in countries' balance

of payments. Thus, the covariates being empirically tested according to the underlying objective-I, that duly intends to explore the long and short run relationship between the trade protectionism, financial sector development, external capital shock and balance of payments carrying novelty and will help in adding new dimension to the existing literature. Further, empirical investigations attained under such the same objective will also enable to identify Pakistan's balance of payments linkage with applicable theory as to whether is it a Monetary or real phenomenon.

Additionally, Pakistan's consistent external account deficits also has some growth implications as it is mainly driven by fluctuating current account. It has been observed that the current account deficits of such larger magnitude has increased the likelihood of current account reversals. Pakistan has so far encountered some 15 subsequent periods in which country's current account has experienced reversals. According to myriad empirical findings these current account reversals found disruptive and detrimental to nations' GDP growth. Considering such phenomenon, as per the cited literature, these reversals on current account and its growth consequences thereof are crucial to be studied in context of Pakistan as well. So far, studies conducted and literature reviewed with regard to current account component of balance of payments has not touched upon this area. Thus, this study, while underlying objective-II of this study in place, also intends to fill this gap for Pakistan in the literature through its due empirical findings in order to ascertain whether these reversals on country's current account, like as per the literature for other developed, emerging and developing economies, cause negative growth implications.

Keeping in view the above highlighted issues associated with Pakistan's balance of payments account, this study intends to empirically investigate to see the effects of such

aforementioned macroeconomic policy and exogenous shock variables on Pakistan's balance of payments. The variables to capture the effects of such factors include trade protectionism, level of country's financial sector development and external capital shock vis-à-vis global business environment (Controlled variable). The empirical investigations to study effects of such variables will be carried out through employing Autoregressive Distributed Lag (ARDL) for the period 1960 to 2016.

Notwithstanding the above, further, it is also equally essential to highlight the theoretical approach used to analyse the balance of payments and its subsequent linkage to methodology adopted in this study. Accordingly, theoretical underpinnings cater for two distinct approaches whether the balance of payments is a real or monetary phenomenon? through Keynesian and Monetary theories of balance of payments adjustments. Methodological approach of the aforesaid theories varies *per se* and views the balance of payments differently to a larger extent. Keynesian Theory of adjustments contains two further approaches i.e. Elasticity theory and absorption model. The former approach explains balance of payments as an effect of exchange rate and difference between the aggregate domestic output and expenditure. More simply, the Elasticity approach uphold Marshal Lerner condition to the balance of payments and emphasizes that devaluation of exchange rate and price changes defines the nations' balance of payments through affecting the trade balance. However, the Absorption Approach explains balance of payments as a difference between what the economy has produced and what it has taken for absorption or domestic use. If the economy produces more than what is needed for domestic use, then the surplus output will be exported, thus, turning the balance of trade (balance of payments) into a surplus, and as opposite in the case if a country produces less. At the other end, monetary theory implies that the country's balance of payments is always a monetary phenomenon and