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A Study on the Effect of Share Price Shocks on the Current Account Fluctuations

Mahdi Abbasi*

Department of Accounting, Kermanshah Branch, Islamic Azad University, Kermanshah, Iran; mabbasi.hatim@gmail.com.

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Abstract

When the economy encounters sudden foreign shocks, the current account is regarded as an important political priority. This paper has studied the effect of share price shocks on the current account in the member states of ECO from 2008-2012. It has tried to answer how the share price shocks affect fluctuations of the current account in the member states of ECO by using scientific methods. By using the Value at Risk (VaR) approach, the results obtained for the current account fluctuations variable revealed that share price, the ratio of the current account balance to GDP, and the nominal interest rate have the greatest effects on this variable. Furthermore, the least explanatory power in the current account fluctuations pertains to GDP and consumer price variables.

Keywords: Fluctuations of the current account, Share price, VAR panel, Monetary policy, Exchange rate, Shock.

1 | Introduction

The relation between the current account deficit and the effective variables depends upon studied cases, time period, and more importantly, statistical techniques and econometrics used in the research. In fact, the studies show that the relationship between economic variables and current account deficit may change over time even for a country like Iran. It may be due to different time spans and different techniques used in the empirical studies [1].

If a country experiences a share price shock, more budgets will be allocated to the country and the status of the current account will become bad. Moreover, an increase in the share price may influence real activities through the effects of wealth on consumption and the effects of the balance sheet. Both will increase demands for imports and unfavourable fluctuation of the current account. Albeit, there is no clear structural interpretation of share price shocks. Based on this assumption that share prices are forward-looking and so reflect people's expectations, this research and a large part of the studies interpret price shocks as a change in

Corresponding Author: mabbasi.hatim@gmail.com

expectations. For example, people expect that the country's share of production in the world will increase in the future [2]. Alternatively, price shocks may be regarded as logical bubbles [3].

In recent years, the effective factors on the fluctuations of current accounts have been discussed extensively in the academic literature. One of the reasons is that the dispersion of the current account balance has never been as much as today. It creates such concern that a lack of global balance may create a global financial crisis. Following the current financial crisis, understanding the resources of such imbalances and their probable mechanisms is more important. Particularly, the role of share price is very interesting, and this paper studies this role. The extant literature regarding the relation between share price and current account is small and focused on the countries individually.

On the contrary, this paper extends the analysis to an expansive set of Middle East countries and compares the effect of share price shocks with the effects originating from monetary policies and currency exchange rates. The obtained results reveal the effect of capital market price shocks on the current account. With regard to the existing tests, if these effects are significant, these shocks may be used as a tool for improving the current account balance. So, the main question of this paper is whether share price shocks are effective on the fluctuations of the current account and whether the exchange rate and monetary policies are effective on the current account or not.

2 | Literature Review

Jouini studied the relation between oil price shocks and stock market fluctuations in Saudi Arabia during 2007-2011 [4]. Empirical evidence of this paper shows the return and volatility interaction between oil prices and stock markets.

Hoffmann [5] has studied the effective factors on China's current account. A simple value model with non-tradable goods explains more than 70 per cent of the current account diversity during 1982-2007.

Chang [6] has studied the global dispersion of current accounts. The results of this research show that optimal consumption and investment and response to sustainable productivity shocks may explain one-third of the dispersion of current accounts in data.

Theofilakou [7] has studied current account adjustments in OECD countries. The results of this research show that fiscal policies may modify foreign imbalance challenges.

Mohaqeq Nia [8] has studied the relation between exchange rate fluctuations and banking industry return. The results of estimating both models depict that there is no significant relation between fluctuations of the U.S. dollar exchange rate against the Rial and the share price of these banks.

Yavari [9] has studied resources of current account fluctuations in Iran and Mexico by using the Structural Vector Auto Regression Model (SVAR). The results show that the most important fluctuations pertain to the global real interest rate, real currency rate, net domestic product, the ratio of domestic fiscal balance to net domestic product, and the ratio of the current account to the net domestic product.

Oryani [10] has studied the effect of terms of trade shock on the trade balance in the framework of the Harberger-Laursen-Metzler effect in the Iranian economy. The empirical results confirm the existence of the Harberger-Laursen-Metzler effect in the Iranian economy. That is, positive shocks of terms of trade improve trade balance in the short term, but this effect is removed quickly.

3 | Materials and Methods

This paper is a descriptive-correlative research that is aimed at describing the relation of variables. It is also applied research in terms of objective and casual ex post facto research in terms of data collection.

The statistical universe is comprised of member countries of the Economic Cooperation Organization (ECO) during 2005-2013. Ten member countries have been selected randomly as the research sample. These

countries are Afghanistan, Azerbaijan, Iran, Kazakhstan, Pakistan, Turkmenistan, Kyrgyzstan, Uzbekistan, Turkey, and Tajikistan.

The information about theoretical literature is gathered by referring to the related papers, books, studies, theses, and so on. So library method is used for data collection. Also a part of information related to the research variables is derived from the World Bank data and the website[1]. In the research descriptive statistics, the values of descriptive statistics, including mean, standard deviation, etc. and also the time series diagram of the research variables are studied for 17 selected countries and Iran.

In deductive statistics, the VAR approach is used for answering the research questions. When the number of variables engaged in a co-integration regression is more than two, it is possible to have more than one co-integration vector between variables. Applying the Engel and Granger method, which is based on the assumption that there is only one co-integration vector, is not suitable for situations in which there is more than one co-integration vector [11]. So VAR approach is used in this paper because this method is superior since it can identify multiple long-term relations. Also, to estimate the related model, the first variables, reliability and accumulation, must be tested. Since time series variables used in estimating the model parameters are unreliable, data is first tested to prevent false regression. Such programs as Eviews, Excell, and SPSS estimate the obtained data.

4 | Findings

The main variables of this paper are, namely, the current account balance, gross domestic product (GDP), consumer price, the ratio of the current account to GDP, nominal interest rate, real effective exchange rate, and share price.

4.1 | Diagrams of Changes in the Research Variables

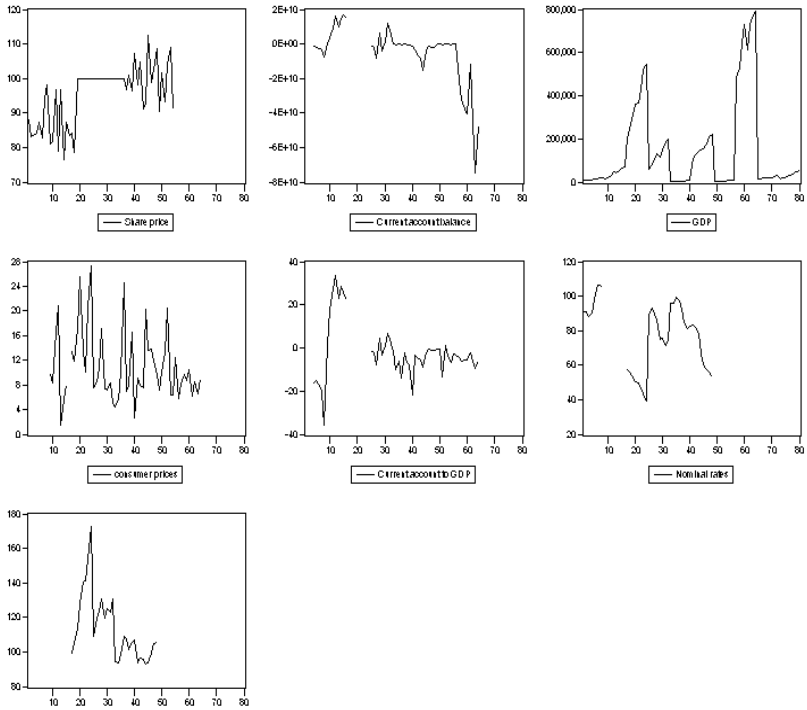

Fig. 1. The trend of changes in the research variables in the ECO member countries.

[1]https://unctad.org/

4.2 | Data Statistical Description

Table 1. descriptive statistics of the research variables.

Variable	Mean	Standard Deviation	Minimum Value	Maximum Value
Current account balance	-1.47E+09	5.49E+09	-1.57E+10	1.23E+10
GDP	97753.25	76938.53	2460.247	221848
Consumer price	10.19336	5.199304	2.68703	24.5242
The ratio of the current account to GDP	-4.06434	6.085404	-22.0936	6.530497
Nominal interest rate	79.96473	13.68718	53.19927	99.06355
Real effective exchange rate	107.5251	12.58101	92.79335	130.9437
Share price	100.4625	4.527771	91.3	112.6

4.3 | Reliability of the Research Variables

In this section, the reliability of the research variables is tested by using the unit root test.

Table 2. The results of the unit root test for share price variable.

Newey-West Bandwidth Selection Using Bartlett Kernel				
Method	Statistic	Prob.**	Cross-sections	Obs
Null: Unit Root (Assumes Common Unit Root Process)				
Levin, Lin & Chu t*	-5.37827	0	6	40
Null: Unit Root (Assumes Individual Unit Root Process)				
Im, Pesaran and Shin W-stat	-2.53635	0.0056	6	40
ADF - Fisher Chi-square	30.9748	0.002	6	40
P.P. - Fisher Chi-square	34.5074	0.0006	6	40

** Probabilities for Fisher tests are computed using an asymptotic Chi-square distribution. All other tests assume asymptotic normality.

It is seen that the prob. value of IPS statistics and other statistics is less than the significance levels 1%, 5%, and 10%. So, one can conclude that the assumption of share price unreliability is rejected, and this variable is reliable (at the significance levels of 1%, 5%, and 10%). The tables below present the results of testing the reliability of the research variables by using the IPS unit root test at the model time series level.

Table 3. the results of the unit root test for the research variables.

Variable	IPS	Prob*	Result	Degree
Share price	-2.53635	0.0056	Reliable at all levels	I(0)
Current account balance	-2.33810	0.0097	Reliable at all levels	I(1)
GDP	-1.86698	0.0310	Reliable at all levels	I(1)
Consumer price	-1.29709	0.0973	Reliable at all levels	I(0)
The ratio of current count to GDP	-2.52048	0.0059	Reliable at all levels	I(1)
Nominal interest rate	-0.85157	0.0972	Reliable at level 10%	I(2)
Real effective exchange rate	-1.27613	0.0910	Reliable at level 10%	I(2)

So, the final result of the reliability tests reveals that all the research variables are reliable.

4.4 | Co-Integration Test

To test the co-integration of two variables Xt and Xy, the Durbin-Watson co-integration regression test is used. In this test, the null hypothesis indicates that disturbing statements of the regression (U_t) are unreliable, that is

$$U_t=U_{t-1}+V_tV_t\sim IN\ (0,\sigma^2).$$

the inverse hypothesis states that disturbing statements have a first-order self-explanatory process and are reliable.

$U_t=\rho U_{t-1}+V_tV_t\sim IN\ (0, \sigma^2)$.

Table 4. Critical values of the CRDW test.

Significance level	Critical quantity
1%	0.511
5%	0.386
10%	0.323

With regard to the obtained results, the D.W. test statistic is larger than the determination coefficient of R2 ($0.265<2.62$), which rejects the probability of false regression existence.

To test the hypothesis $d=0$, the Durbin–Watson statistic calculated in the estimated regression is compared with the critical quantities presented by Sargan and Bhargava. The results show that the statistic $D.W=2.62$ is larger than the presented critical quantities, even at the level of 10%. So, the null hypothesis is rejected. That is, disturbing statements are reliable.

Table 5. Durbin-Watson statistic and R2 obtained from ordinary least squares model.

Statistic	Value
Durbin-Watson stat	2.622956
R-squared	0.265892

4.5 | Determination of Optimal Lag in the VAR Model

After recognition of the model variables reliability, the first problem in the Vector Autoregressiva models is to determine the length of optimal lag. Based on Schwarz (S.C.), Akaike (AIC), Final Prediction Error (FPE), and Hannan-Quinn (H.Q.) criteria, the optimal lag is lag 1 because, in the lag 1, these criteria have their minimum value compared to lag 0; while based on Likelihood Ratio (L.R.) criterion, the optimal lag is zero. Since most criteria show lag 1, it is selected as the optimal lag of the model.

Table 6. Finding the optimal lag of the model.

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-1093.889	NA	8.08e+36	104.8466	105.1947	104.9221
1	-952.4328	1755175.1363*	1.61e+33*	96.4122*	98.82661*	96.64572*

*indicates lag order selected by the criterion

LR: sequential modified LR test statistic (each test at 5% level).
FPE: final prediction error.
AIC: akaike information criterion.
SC: schwarz information criterion.
HQ : hannan-quinn information criterion.

4.6 | Estimation of the VAR Model

The obtained models are namely:

$$\begin{aligned}\mathrm{SHPRICE} = &-0.353237198021 * \mathrm{SHPRICE}(-1) - 2.60155140196e-10 * \mathrm{CAB}(-1)\\ &- 5.17916216817e-05 * \mathrm{GDP}(-1) + 0.327849053431\\ &* \mathrm{CONPR}(-1) + 0.444540749042 * \mathrm{CAGDP}(-1) - 0.29235190267\\ &* \mathrm{NRATE}(-1) + 0.0360709439516 * \mathrm{REALEXCH}(-1)\\ &+ 158.167654993.\end{aligned}$$

$$\begin{aligned}\mathrm{CAB} = {} & 222440291 * \mathrm{SHPRICE}(-1) + 0.381366790407 * \mathrm{CAB}(-1) \\ & - 39294.1010334 * \mathrm{GDP}(-1) - 303618928.753 * \mathrm{CONPR}(-1) \\ & - 563367085.022 * \mathrm{CAGDP}(-1) - 317528585.703 * \mathrm{NRATE}(-1) \\ & + 333526078.196 * \mathrm{REALEXCH}(-1) - 27848153712.8.\end{aligned}$$

$$\begin{aligned}\mathrm{GDP} = {} & 574.790525619 * \mathrm{SHPRICE}(-1) - 7.32478280243\mathrm{e}-07 * \mathrm{CAB}(-1) \\ & + 1.02701236295 * \mathrm{GDP}(-1) - 1560.97934646 * \mathrm{CONPR}(-1) \\ & - 1242.09090699 * \mathrm{CAGDP}(-1) - 582.438424343 * \mathrm{NRATE}(-1) \\ & + 648.830448071 * \mathrm{REALEXCH}(-1) - 58321.6062301.\end{aligned}$$

$$\begin{aligned}\mathrm{CONPR} = {} & 0.00925347895872 * \mathrm{SHPRICE}(-1) - 2.25807857918\mathrm{e}-10 * \mathrm{CAB}(-1) \\ & + 3.15483111465\mathrm{e}-05 * \mathrm{GDP}(-1) - 0.139903793197 \\ & * \mathrm{CONPR}(-1) - 0.231061157433 * \mathrm{CAGDP}(-1) + 0.139174555877 \\ & * \mathrm{NRATE}(-1) - 0.0774471714266 * \mathrm{REALEXCH}(-1) \\ & + 3.9940876057.\end{aligned}$$

$$\begin{aligned}\mathrm{CAGDP} = {} & 0.335593782188 * \mathrm{SHPRICE}(-1) + 1.02433878318\mathrm{e}-10 * \mathrm{CAB}(-1) \\ & + 7.77064959866\mathrm{e}-05 * \mathrm{GDP}(-1) - 0.258792192529 \\ & * \mathrm{CONPR}(-1) - 0.610156811268 * \mathrm{CAGDP}(-1) + 0.0568136156982 \\ & * \mathrm{NRATE}(-1) + 0.223477918268 * \mathrm{REALEXCH}(-1) \\ & - 72.6265276064.\end{aligned}$$

$$\begin{aligned}\mathrm{NRATE} = {} & 0.188202586303 * \mathrm{SHPRICE}(-1) + 4.66667718819\mathrm{e}-10 * \mathrm{CAB}(-1) \\ & - 1.13111398676\mathrm{e}-05 * \mathrm{GDP}(-1) - 0.389379044519 \\ & * \mathrm{CONPR}(-1) - 0.54960888923 * \mathrm{CAGDP}(-1) + 0.844691285261 \\ & * \mathrm{NRATE}(-1) - 0.00123792695015 * \mathrm{REALEXCH}(-1) \\ & - 4.70498768999.\end{aligned}$$

$$\begin{aligned}\mathrm{REALEXCH} = {} & 0.269440676022 * \mathrm{SHPRICE}(-1) + 3.11888432304\mathrm{e}-10 * \mathrm{CAB}(-1) \\ & + 1.12912085137\mathrm{e}-05 * \mathrm{GDP}(-1) - 0.497699691827 \\ & * \mathrm{CONPR}(-1) - 0.864952400744 * \mathrm{CAGDP}(-1) - 0.119603099252 \\ & * \mathrm{NRATE}(-1) + 1.02520643868 * \mathrm{REALEXCH}(-1) - 15.9368835018.\end{aligned}$$

The table below shows values of the determination coefficient (R2), F statistic, etc., for each model of the research.

Table 7. Values of determination coefficient, F statistic, etc., for the estimated VAR models.

	Share Price	Current Account Balance	GDP	Consumer Prices	Current Account to GDP	Nominal Rates	Real Effective Exchange Rate
R-squared	0.420119	0.487644	0.985019	0.220119	0.587383	0.946695	0.869216
Adj. R-squared	0.107876	0.211759	0.976952	-0.19982	0.365204	0.917992	0.798794
Sum sq. resides	269.6401	3.52E+20	1.87E+09	448.5771	345.9033	209.3074	423.9422
S.E. equation	4.554289	5.20E+09	11980.4	5.874175	5.158289	4.012552	5.710599
F-statistic	1.345486	1.767566	122.1078	0.524174	2.64374	32.98273	12.34296

The values of determination coefficients show that,

- *The estimated model explains 42% of changes in share price, 48.8% of changes in the current account balance, 98.5% of changes in GDP, 22% of changes in the consumer price, 58.7% of changes in the current account to GDP ratio, 94.7% of changes in nominal interest rate, and 86.9% of changes in real effective exchange rate.*

4.7 | The Effect of a One Standard Deviation Shock to the Research Variables on the Share Price

Table 8. The effect of a one standard deviation shock to the research variables on the share price.

Period	SHPRICE	CAB	GDP	CONPR	CAGDP	NRATE	REALEXCH
1	4.554289	0	0	0	0	0	0
2	-1.60874	-1.35409	-0.62048	1.925843	2.29307	-1.17308	0.205987

The first column of the above table shows that a sudden change or shock to the share price variable increases the share price by 4.55 units in the first period (year) while it reduces the share price by 1.61 units in the second year.

The second column shows the effect of a shock to the current account balance variable so that if the current account balance is increased by one standard deviation, it does not affect the share price in the first period, but it reduces the share price by 1.35 units in the second period.

The third column shows that a shock to GDP does not affect the share price in the first period. The shock to this variable reduces the share price by 0.62 units in the second period.

The fourth column shows the effect of a one-standard-deviation shock on the consumer price. The shock does not affect the share price in the first period but increases the share price by 1.93 units in the second period.

The fifth column shows the effect of a shock to the current account balance to GDP ratio on the share price. The shock to this variable does not affect the share price in the first period but increases the share price by 2.29 units in the second period.

The sixth column shows the effect of a shock to the nominal rate on the share price. The shock to this variable does not affect the share price in the first period but reduces the share price by 1.173 units in the second period.

The seventh column shows the effect of a one standard deviation shock on the real effective exchange rate. It does not affect the share price in the first period but increases the share price by 0.21 units in the second period.

4.8 | The Effect of Share Price Shock on the Research Variables

Table 9. the effect of share price shock on the research variable.

Period	CAB	GDP	CONPR	CAGDP	NRATE	REALEXCH
1	0	0	0	0	0	0
2	1.019	2617.762	0.042143	1.528391	0.857129	1.227111

The first column shows that a sudden change or shock to the share price variable does not affect the current account balance in the first year, while it increases the current account balance by 1.019 units in the second year.

The second column shows the effect of shock on the GDP by the share price. If the share price is increased by one standard deviation, it does not affect GDP in the first period but increases GDP by 2617.762 units in the second period.

The third column shows that a one standard deviation shock to the share price has no effect on the consumer price in the first period but increases the consumer price by 0.042143 units in the second period.

The fourth column shows the effect of a one-standard-deviation shock on the share price. The shock does not affect the current account balance to GDP ratio in the first period but increases the current account balance to GDP ratio by 1.528 units in the second period.

The fifth column shows the effect of shock on the share price on the nominal rate. This shock does not affect the nominal rate in the first period but increases the nominal rate by 0.857 units in the second period.

The sixth column shows the effect of a shock to the share price on the real effective exchange rate. This shock has no effect on the real effective exchange rate in the first period while increasing it by 1.227 units in the second period.

4.9|The Effect of Shock to the Research Variables on the Current Account Balance

Table 10. The effect of shock to the research variables on the current account balance.

Period	SHPRICE	CAB	GDP	CONPR	CAGDP	NRATE	REALEXCH
1	0	5.209	0	0	0	0	0
2	1.019	1.989	-4.718	-1.789	-2.919	-1.279	1.909

The first column shows that a sudden change or shock to the share price variable does not affect the current account balance in the first period, while it increases the current account balance by 1.019 units in the second period (this was mentioned in the last section, too).

The second column shows the effect of shock on the current account balance by the current account balance. So, if the current account balance is increased by one standard deviation, it increases by 5.209 units in the first period and 1.989 units in the second period.

The third column shows that a one standard deviation shock to the GDP does not affect the current account balance in the first period, while this shock reduces the current account balance by 4.718 units in the second period.

The fourth period shows the effect of shock on the consumer price. It does not affect the current account balance in the first period and reduces the current account balance by 1.789 units in the second period.

The fifth column shows the effect of a shock to the current account balance to GDP ratio on the current account balance. This shock does not affect the current account balance in the first period while reducing it by 2.919 units in the second period.

The sixth column shows the effect of shock on the nominal rate on the current account balance. This shock does not affect the current account balance in the first period while it reduces the current account balance by 1.279 units in the second period.

The seventh column shows the effect of shock on the real effective exchange rate. This shock does not affect the current account balance in the first period and increases the current account balance by 1.909 units in the second period.

4.10|Analysis of Variance

Table 11. Percentage of variance caused by the effect of research variables shock on the share price.

Period	S.E.	SHPRICE	CAB	GDP	CONPR	CAGDP	NRATE	REALEXCH
1	4.554289	100	0	0	0	0	0	0
2	6.224814	77.81781	0.157039	3.04886	9.65038	8.45286	0.869451	0.003598

The results of the above table reveal that the prediction error was 4.554289 in the first period and 6.224814 in the second period.

The second column shows that 100% of changes in the share price have been caused by the same variable in the first period, while in the second period, 77.82% of changes in this variable pertain to the share price, 0.158% to the current account balance, 3.049% to the GDP, 9.65% to the consumer price, 8.45% to the current account balance to GDP ratio, 0.869% to the nominal rate, and 0.003% to the real effective exchange rate.

The table below shows the percentage of variance caused by the effect of a shock to the share price on the other research variables.

Table 12. The percentage of variance caused by the effect of shock to the share price on the other research variables.

Period	CAB	GDP	CONPR	CAGDP	NRATE	REALEXCH
1	16.3406	1.8789	3.909392	0.46323	32.45503	10.37547
2	21.88982	4.62682	3.418498	14.55539	41.1419	22.11748

The above table shows that the percentage of variance caused by share price shock in the first period has been 16.34% on the current account balance, 1.87% on GDP, 3.91% on consumer price, 0.463% on the current account balance to GDP ratio, 32.45% on the nominal rate, and 10.37% on the real effective exchange rate. In the second period, this variance percentage caused by the share price shock on these variables has been increased to 21.89%, 4.63%, 3.42%, 14.55%, 41.14%, and 22.12%, respectively.

The table below shows the percentage of variance caused by the research variables' shock on the current account balance.

Table 13. Percentage of variance caused by the research variables shock on the current account balance.

Period	S.E.	SHPRICE	CAB	GDP	CONPR	CAGDP	NRATE	REALEXCH
1	5.209	16.3406	83.6594	0	0	0	0	0
2	5.919	21.88982	65.30833	0.149172	0.241737	11.55209	0.517512	0.341343

The results of the above table show that the prediction error was 5.209 in the first period and 5.919 in the second period. The next columns show the variance percentage caused by the sudden change of shock.

The second column shows that in the first period, 16.3406% of changes in the exchange rate have been caused by share price, and the same variable has caused 83.6594% of changes, while in the second period, 21.88982% of changes pertaining to the share price, 65.30833% pertains to the current account balance shock, 0.149172% pertains to GDP shock, 0.241737% pertains to the consumer price shock, 11.55209% pertains to the current account balance to GDP ratio, 0.517512% pertains to nominal rate shock, and 0.341343% pertains to the real effective exchange rate.

5 | Conclusion

I. Having approved the reliability of the research variables by using the ordinary least squares test and Durbin-Watson statistic, we concluded that disturbing statements are reliable and so one can infer that there is a long-term balance relation between variables of the related model. Based on Schwarz (S.C.), Akaike (AIC), FPE, and Hannan Quinn (H.Q.), lag 1 was selected as the optimal lag and the VAR model was estimated with this lag. The results showed that:

II. In the model estimated for the share price variable, 42% of changes in the variable are explained by other variables. Also, in the model estimated for the current account balance, 48.8% of changes in the variable are explained by other variables.

III. A one standard deviation shock to the share price variable increases the share price by 4.55 units in the first period and reduces the share price by 1.61 units in the second period.

IV. A one standard deviation shock to the current account balance, GDP, and the nominal rate has a negative effect on the share price variable in the second period and also a shock to the consumer price, the current account balance to GDP ratio, and the real effective exchange rate has a positive effect on the share price variable.

V. The shock to the share price has a positive effect on all the research variables, and it also has the highest effect on GDP and the lowest effect on the consumer price.

VI. A one standard deviation shock to the current account balance variable in the first period increases the current account balance by 5.209 units, while in the second period, it increases the current account balance by 1.989 (the effect of shock is reduced in the second period).

VII. The shock to the share price and real effective exchange rate have a positive effect on the current account balance, while the shock to GDP, consumer price, current account balance to GDP ratio, and nominal interest rate have a negative effect on the current account balance.

The results of variance analysis showed that:

I. The shock to GDP and the shock to the consumer price have the greatest effect on the share price changes, respectively.

II. Also the shock to the share price and shock to the current account balance to GDP ratio have the greatest effect on the current account balance, respectively.

With regard to the research findings, the suggestions below are presented:

I. Since demand and supply are the major factors that affect share price, the government policies, performance, and potential capabilities of the industry and company have a great effect on the investor demand behaviour both in the primary markets and secondary markets. So it is suggested to study these effective factors on the share price from macro and micro perspectives so as to adopt proper policies for improving the share price.

II. The attempt of the related authorities to refrain from formulating and ratifying plans that cause budget deficit and so current account deficit is a matter of great magnitude. It is necessary to adopt proper monetary policies for reducing the current account deficit.

III. Studying the effect of imperative policies for determining the interest rate on the current account balance.

IV. Measuring efficiency and synergy of companies affiliated with the bank with an emphasis on the benefits of diversity.

Author Contributions

Mahdi Abbasi was solely responsible for the conception, design, and execution of this study. He performed the analysis and interpretation of data, and wrote the initial draft and final version of the manuscript.

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Data Availability

The data that support the findings of this study are available from the corresponding author upon reasonable request.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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