

Dynamics of the exchange rate in Tunisia.

Author Details: Rabia najaf

Riphah international university Islamabad Pakistan

Abstract:

This paper analyzed the association between macroeconomic variables and volatility of Tunisia stock exchange .We have taken data from 1993 to 2012 and applied the Pearson s correlation test. Our results are showing that there is always association between macroeconomic variables and stock market of Tunisia. Now a day, it is seen that exchange rate is appearing as the strategic variable .Exchange rate is the way of the express the price of one country s currency in terms of another currency .Thus, with the help of exchange rate can be determined prices of all foreign and local goods.

Keywords: *macroeconomic variables, volatility, Tunisia stock market, Pearson s correlation.*

Introduction:

Most of studies have been done about the impact of the exchange rate on all over world stock exchanges .Most of scholars have proved that exchange rate act as backbone of the economy .It also act as integral part for economic agents .This paper analyzed that impact of fluctuation of exchange rate on economy of Tunisia .Now a days, It is seen that exchange rate is appearing as the strategic variable .Exchange rate is the way of the express the price of one country s currency in terms of another currency .Thus ,with the help of exchange rate can be determined the prices of all foreign and local goods .Exchange rate regime is known as important topic of discourse for all developing nations .According to Obansa (2010) exchange rate impact on economic development of all emerging and developed countries .From last few decades , impact of exchange rate on development of economy is very interesting issue for economists .Many economists argued that exchange rate impacts on fiscal and monetary policies. They also argued that in condition of misalignment in real exchange rate, rate of production will reduce. Mordi (2015) argued that there is always impact of exchange rate movement on fiscal viability, BOP equilibrium .Accounting to nish (2013) exchange rate policy has crucial role for guidness of investor. Our study is trying to explore that change in exchange rate will also impact on producers and foreign investors. For instance, for set out business currency has always crucial role. Most of scholars had been proved that instability in exchange rate will worst impact on business transactions .There are exchange rate deprecation due to high cost of capital goods .All these reasons, there is worst impact on the export products .In 1987, exchange rate was fixed in Tunisia .There are different ways to ensure exchange rate stability, for instance SFEM and DAS .Oman (2016) argued that sometimes speculates are responsible of exchange rate deprecation.

Tunisia - Unemployment Rate (%)



Source : IMF
Date : 2015
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Problem statement:

Impact of exchange rate on the stock market of Tunisia.

Objectives:

- 1) Relationship between exchange rate and interest rate
- 2) Relationship between exchange rate and interest rate.
- 3) Relationship between exchange rate on the GDP of Tunisia.

Literature review:

Due, P., Sen, P. (2006), examined the impact of exchange rate on stock prices of Nigeria .For this purpose, they had taken data from 1994 to 2004 and applied VAR model. Their results are showing that there are significant negative association between stock prices and exchange rate [1].

Edwards, S. (2001), observed the impact of exchange rate on stock prices of Malaysia this purpose, they had taken data from 1984 to 2014 and applied ECM model. Their results are showing that there are negative association between stock prices and exchange rate [2].

Harberger, A. (2004), Viewed the impact of exchange rate on stock prices of India .For this purpose, they had taken data from 1999 to 2009 and applied VECM model. Their results are showing that there are significant negative association between stock prices and exchange rate [3].

Hoffman, M.E.S. (2005), analyzed the impact of exchange rate on stock prices of Pakistan. For this purpose, they had taken data from 1998 to 2008 and applied multiregression model. Their results are showing that there are long run negative association between stock prices and exchange rate [4].

Husain, A.M., Mody, A., Rogoff, K.S., Viewed the impact of exchange rate on stock prices of Russia. For this purpose, they had taken data from 1991 to 2001 and applied GARCH model. Their results are showing that there are short run negative association between stock prices and exchange rate [5].

Meese, R., Rogoff, K. (2004), examined the impact of exchange rate on stock prices of USA. For this purpose, they had taken data from 1993 to 2003 and applied OLS model. Their results are showing that there are long run negative association between stock prices and exchange rate [6].

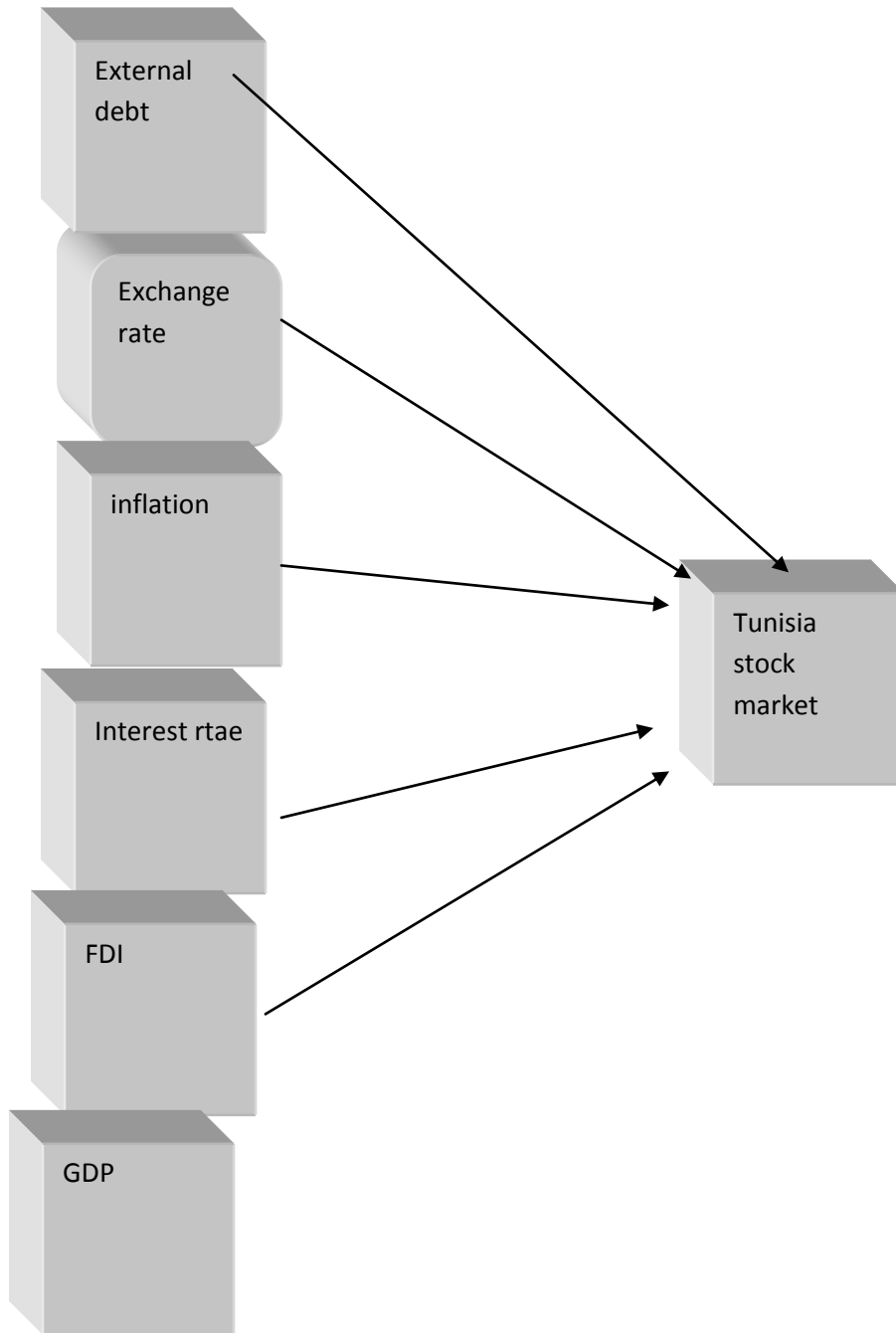
Simon W.L.S. (2005), Analyzed the impact of exchange rate on stock prices of UK. For this purpose, they had taken data from 1998 to 2008 and applied VEM model. Their results are showing that there are negative association between stock prices and exchange rate [7].

Taylor, L. (2001), viewed the impact of exchange rate on stock prices of CHIAN. For this purpose, they had taken data from 1990 to 2000 and applied ECM model. Their results are showing that there are long run negative association between stock prices and exchange rate [8].

Rabia Najaf, Khakan Najaf (2016), Observed the impact of exchange rate on stock prices of France. For this purpose, they had taken data from 1997 to 2007 and applied EARCH model. Their results are showing that there are long run negative association between stock prices and exchange rate [9].

Naeem, M., & Abdul, R. (2002), Viewed the impact of exchange rate on stock prices of Indonesia. For this purpose, they had taken data from 1986 to 2006 and applied Dickey Fuller Unit Root Test, Johansen co-integration test, Regression, Granger-causality test and vector autoregressive (VAR) model. Their results are showing that there are long run negative association between stock prices and exchange rate [10].

Theoretical Framework:



Methodology:

In this paper, we used the secondary data from 1995 to 2015 and applied the all the best statistical tools .In this study stock exchange of Tunisia is dependent variable and exchange rate, CPI, interest rate, GDP are the dependent variables .we have applies the Pearson s correlation model.

Various Macroeconomic Indicators in Tunisia (1995-2015)

	Exchange	Inflation	Interest	External	GDP	FDI
Year	Rate	(CPI)	Rate	Debt	(Current	(Current
	(against		(Lending	(Current	(Current	(Current
	\$)		Rate)	US\$)	US\$)	US\$)
1995	21.4	15.8	16.8	89.87	266.53	78
1996	21.8	15.9	16.8	80.67	246.56	270
1997	31.36	2.5	19.4	99.07	278.05	550
1998	39.38	12.3	19.9	98.62	326.52	970
1999	36.37	19.3	19.6	90.18	358.4	2140
2000	39.43	6	19	90.92	386.35	2420
2001	39.28	7.1	19.9	90.8	418.93	3570
2003	49.3	13.2	19.6	90.78	418.26	2630
2004	49.06	4.2	19.6	90.14	456.49	2160
2005	49.92	2	19.4	109.25	468.19	3580
2006	49.19	3.2	19.2	99.65	478.86	5470
2007	41.64	4.2	19.8	109.83	508.18	5620
2008	42.57	3.2	19.6	110.88	598.47	4320
2009	49.4	3.2	19.8	120.58	728.58	5770
2010	49.08	4.4	19.9	121.23	839.05	7600
2011	49.28	6.1	18.3	159.6	958.35	20330
2012	49.28	6.5	19	209.94	1249.44	25480
2013	49.25	8.1	19.4	229.98	1218.98	43400
2014	41.37	10.1	19.3	247.98	1378.27	35590
2015	49.7	12	19.3	299.29	1729.12	24150
Source: (World Development Indicators)						

Results:

Interest rate vs. exchange rate:

There is negative correlation between interest rate and exchange rate.

Inflation rate vs. exchange rate:

There is exist moderate correlation between inflation rate and exchange rate.

GDP vs. exchange rate:

There is moderate correlation between GDP and exchange rate.

Foreign direct investment VS exchange rate:

There is exist mild positive correlation between foreign direct investment and exchange rate.

Conclusion:

Our result is showing that there is association between macroeconomic variables and stock market of Tunisia .Deprecation of currency is basic reason that investors feel hesitate regarding investment .Exchange rate has the crucial role for the development of economy ,without stable exchange rate progress of country is not possible.

References:

- [1] Due, P., Sen, P. (2006). Capital flow Volatility and Exchange Rates: The Case of India, Central for Development Economics, Department of Economics, Delhi School of Economics. (Working Paper No. 144).
- [2] Edwards, S. (2001). Exchange Rate Regimes, Capital Inflows and Crisis Prevention, NBER and University of California (Working Paper).
- [3] Harberger, A. (2004). Economic Adjustment and the Real Exchange Rate, in S. Edwards and L.Ahamed (eds.). Economic Adjustment Exchange Rates in Developing Countries, University of Chicago Press, 10, 308-321.
- [4] Hoffman, M.E.S. (2005). The Exchange Rate and the Trade Deficit: What's the Relationship? June 2005. Available at: <http://people.duke.edu/~meh13/exchangerate-tradedeficit.pdf>
- [5] Husain, A.M., Mody, A., Rogoff, K.S., (2009). Exchange Rate Regime Durability and Performance in Developing Versus Advanced Economies, Journal of Monetary Economics, 52(1), 35-64.
- [6] Meese, R., Rogoff, K. (2004). The Out-of-Sample Failure of Empirical Exchange Rate Models: Sampling Error or Misspecification?, National Bureau of Economic Research, Inc. (p. 67-112).
- [7] Simon W.L.S. (2005). Is There Life Outside the ERM? An Evaluation of the Effects of Sterling's Devaluation on the UK Economy, International Journal of Finance and Economics, 2,199-216
- [8] Taylor, L. (2001). Argentina: A Poster Child for Failure of Liberalised Policies? Challenge/November-December. 44, 6, 28-44.
- [9] Rabia Najaf, Khakan Najaf (2016). DYNAMICS OF THE EXCHANGE RATE IN MALAYSIA, vol:1, No :2,2016 Page 104, International Journal of Academic Research in Management and Business.
- [10] Naeem, M., & Abdul, R. (2002). Stock Prices and Exchange Rates: Are they related? Evidence from South Asian Countries. Department Economics & Finance, Institute of Business

.Administration, Karachi.

- [11] Bekhet, H. A. & Mugableh, M. I. (2012). Investigating Equilibrium Relationship between Macroeconomic Variables and Malaysian Stock Market Index through Bounds Tests Approach. *International Journal of Economics and Finance*, 4(10), 69-81.
- [12] Eita, J. H. (2012). Modeling Macroeconomic Determinants of Stock Market Prices: Evidence from Namibia. *Journal of Applied Business Research*, 28(5), 871-884.
- [13] Fama, E. F. (1970). Efficient Capital Markets: A Review of Theory and Empirical Work. *The Journal of Finance*, 25(2), 383-417.
- [14] Fama, E. F. (1991). Efficient Capital Markets: II. *The Journal of Finance*, 46(5), 1575-1617.
- [15] Fathi, S., Sameti, M., Nouri, B. A. & Esfahani, S. S. (2012). Examining the Effect of Selective Macroeconomic Variables on the Stock Exchange's Depth and Breadth (Case Study: Tehran Stock Exchange). *International Journal of Economics and Finance*, 4(3), 97-104.
- [16] Hsing, Y., Budden, M. C. & Phillips, A. S. (2012). Macroeconomic Determinants of the Stock Market Index for a Major Latin American Country and Policy Implications. *Business and Economic Research*, 2(1).
- [17] Hussin, M. Y. M., Muhammad, F., Abu, M. F. & Awang, S. A. (2012). Macroeconomic Variables and Malaysian Islamic Stock Market: A Time Series Analysis. *Journal of Business Studies Quarterly*, 3(4), 1-13.
- [18] Kyereboah-Coleman, A. & Agyire-Tettey, K. F. (2008). Impact of Macroeconomic Indicators on Stock Market Performance. *The Journal of Risk Finance*, 9(4), 365-378.
- [19] Lee, C. L., Boon, T. H. & Baharumshah, A. Z. (2001). The Stock Market, Macroeconomic Fundamentals and Economic Growth in Malaysia. *Asia Pacific Journal of Economics and Business*, 5(2), 44-55.
- [20] MacDonald, R. & Ricci, L. (2003). Estimation of the Equilibrium Real Exchange Rate for South Africa, *IMF Working Paper* WP/03/44.
- [21] Majid, M. S. A. & Yusof, R. M. (2009). Long-run Relationship Between Islamic Stock Returns and Macroeconomic Variables. *Humanomics*, 25(2), 127-141.
- [22] Mehr-un-Nisa, L. & Nishat, M. (2011). The Determinants of Stock Prices in Pakistan. *Asian Economic and Financial Review*, 1(4), 276-291.
- [23] Muhammad, J., Ghuslan, M. I. & Jusoff, K. (2009). Long Run Relationship between Malaysian Stock Market and Agriculture Sector. *Interdisciplinary Journal of Contemporary Research in Business*, 1(6), 157-171.
- [24] Rahman, A. A., Sidek, N. Z. M. & Tafri, F. H. (2009). Macroeconomic Determinants of Malaysian Stock Market. *African Journal of Business Management*, 3(3), 095-106.