

Indian It Cos Trying To De Bug 'Foreign Exchange' `Risk

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Abstract: Foreign Exchange Rate Fluctuations has been boon and bane for international business. It has been established and believed that foreign exchange rate fluctuation do affect the valuation of the firm over a period of time. Small businesses dealing in foreign exchange has been wiped out due to transgression in risk management of the foreign exchange.

The Indian IT industry has been the harbinger of the world's outlook towards Indian talent and skill set. It has been an extraordinary journey considering that the India missed the manufacturing boom bus thus we leap frogged an entire set of stairs to an advanced stage of IT revolution. IT multinationals has been India's Foreign Exchange Rain Man and thus the perils of foreign exchange risk also came along with it.

The purpose of this paper is to analyse the foreign exchange exposure of Indian IT multinationals. This study will try to find association between foreign exchange rate and the valuation of the firm. In this paper we examine the relation between Indian IT stock returns and un-anticipated exchange-rate changes for four firms with two each from large cap and Mid Cap traded on Bombay Stock exchange rate over the 2007-2017 period. Second we find the exposure of these firms in foreign exchange. Here we are examining only transaction exposure faced by these firms. Then we are try find the External hedging practices used by firms to counter the exchange Risk. The Co movement between foreign value of rupee and stock returns is found to be positive/negative. Our results indicate that the foreign exchange-rate risk premium is a significant component of Japanese stock returns. The combined evidence from the currency exposure and asset pricing analyses, suggests that currency risk is priced and, therefore, has implications for corporate and portfolio managers.

Keywords: Foreign Exchange Risk Management, IT, BSE.

I. Introduction

The rupee has gate crashed the psychological 70 mark barrier against the US dollar for the first time since the limited and fast controlled Turkey's economic crisis. A weak rupee is generally a bad news however for export oriented stocks such as IT have bull run. The major market for these IT companies being outside India it is interesting to investigate how these IT companies are managing foreign exchange risk.

Its a broad view that foreign exchange rate fluctuations impact value of the firm, standard economic analysis suggests that value/profitability of the Indian IT companies dealing in foreign markets, i.e. which are exposed to foreign exchange, should appreciate with fall in value of rupee with corresponding currency and should depreciate with increase in the value of the firm.

The constant foreign exchange risk hovering over the companies operating in the foreign pastures made the regulatory bodies all over the world and in India too incorporate tighter disclosure norms. It was understood that the investor has the right to information regarding the firms foreign exchange risk exposure as different firms used different styles of reporting in their financial disclosure according to their comfort. This was removed with new disclosure guidelines to create greater comparability amongst similar firms.

Aggrawal(1981) concluded in his finding that when exposed to huge exchange rate risk expose it reflects in their firms stock prices.

Blanchard & Summus (1984) established how different changes impact asset value, thus simultaneous impact of monetary variables on the exchange rate & stock price even for firms not exposed to foreign exchange.

The previous researches held different view regarding impact of foreign exchange on the firms value. Dumas (1978), Alder & Dumas (1980), & Hodder (1982) defined economic exposure to exchange rate movement as the regression coefficient of the real value of the firm on the exchange rate across states of nature.

Dumas (1978) emphasised that multinationals responsiveness to change in exchange rate fluctuations has operational element. Many firms exposed to foreign exchange move their country of production to lesson exchange rate exposure.

II. Objectives

1. To study foreign exchange exposure of Indian IT companies.
2. To study causal relationship between stock return of the Indian IT Firms and their Foreign exchange risk management practices.

An insubstantial U.S. evidence demands a further study in to different economies, therefore researcher is motivated to take up study in the hustling Indian economy. The Indian case is puts up a several strong reasons. First the major studies are based on U.S. economy or in developed economies where exchange is very stable. India is a developing nation though it has a huge significance considering its one of the fastest growing economies in the world. BSE stock exchange now features in top 10 stock exchanges of the world. Secondly the researcher is studying Indian Healthcare sector, in specific the IT companies whose major operations are in foreign countries. These firms are highly exposed to foreign exchange risks. Finally few studies has been done on Indian firms exposure to foreign exchange. Thus India makes a suitable choice for our study. We try to find out whether Indian IT companies exposed to foreign exchange are affected by it and whether it has impact on the current stock returns.

Dumas(1978), Hodder (1982), & Alder & Dumas (1984) found no causal relationship between exchange rate fluctuations & change in value firm.

The study is in line with Amihud's (1994) and Bartov and Bodnar's (1994) findings that changes in the dollar can explain firms' current stock returns.

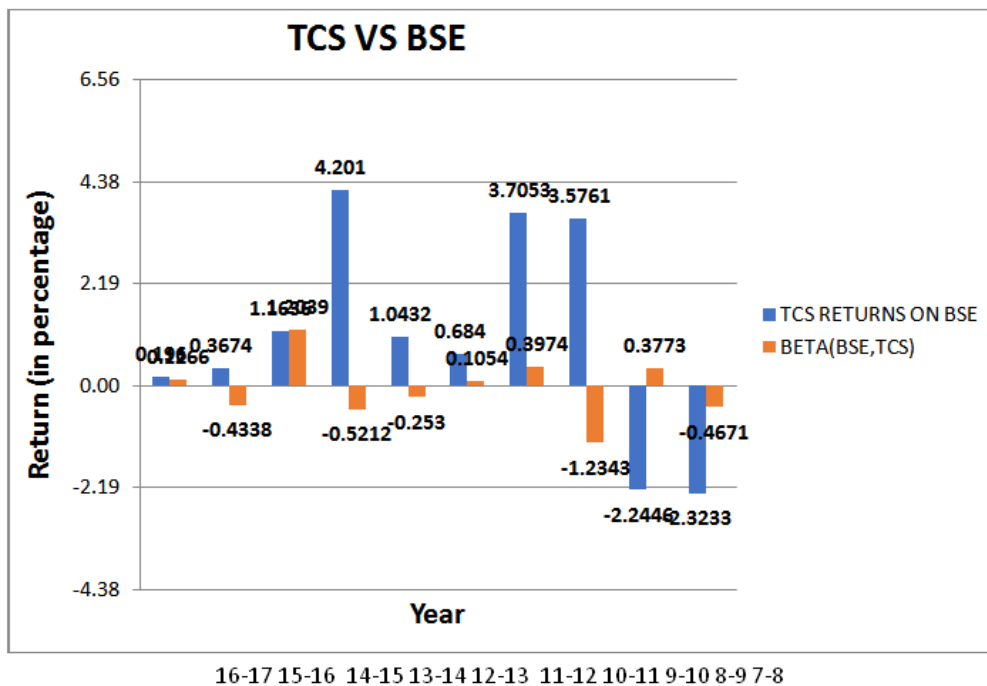
III. Research Methodology

Researcher has used longitudinal study spanning over 10 years from April 2006 to March 2016 of IT stocks on the Bombay Stock Exchange and compare them with extent of foreign exchange exposure over the time span of study. The study also undertakes the extent of exposure hedged and if there is significant impact on the firms performance on the stock exchange. To ensure a firm wide study in IT sector two companies each from Small Cap, Mid Cap & Large Cap segment were picked. This will also help identifying firm wide cross sectional hedging practices. The study includes only external hedging practices followed by the firms as internal hedging practices like netting etc. don't find mention the Annual report. The external hedging practices have become part of mandatory financial disclosure guideline.

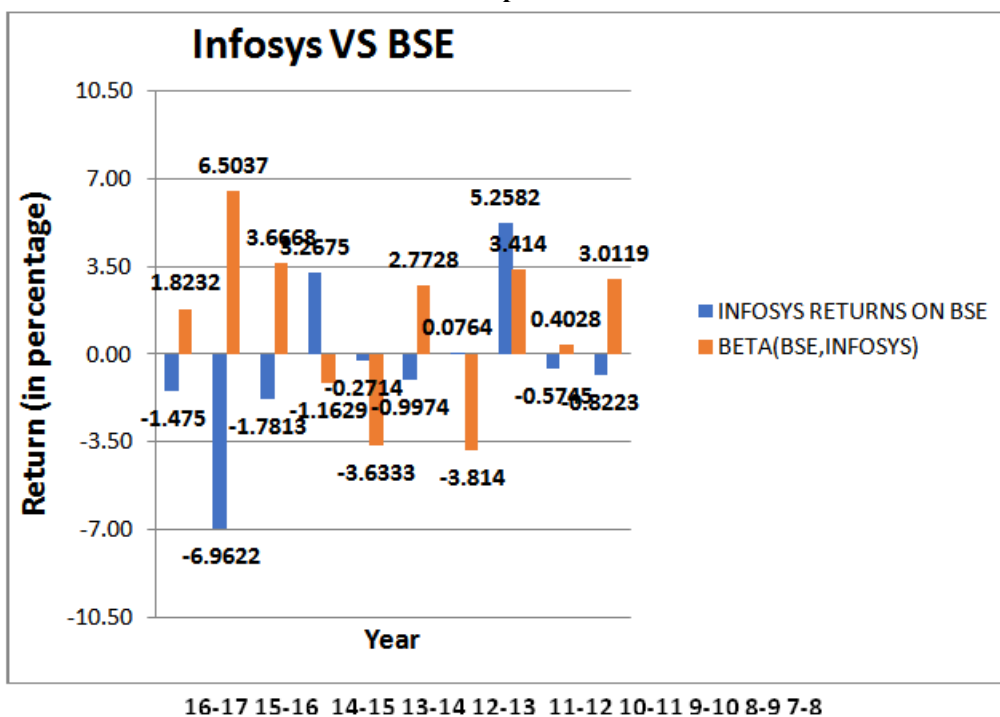
IV. Result & Analysis

Stock Performance over the past 10 years

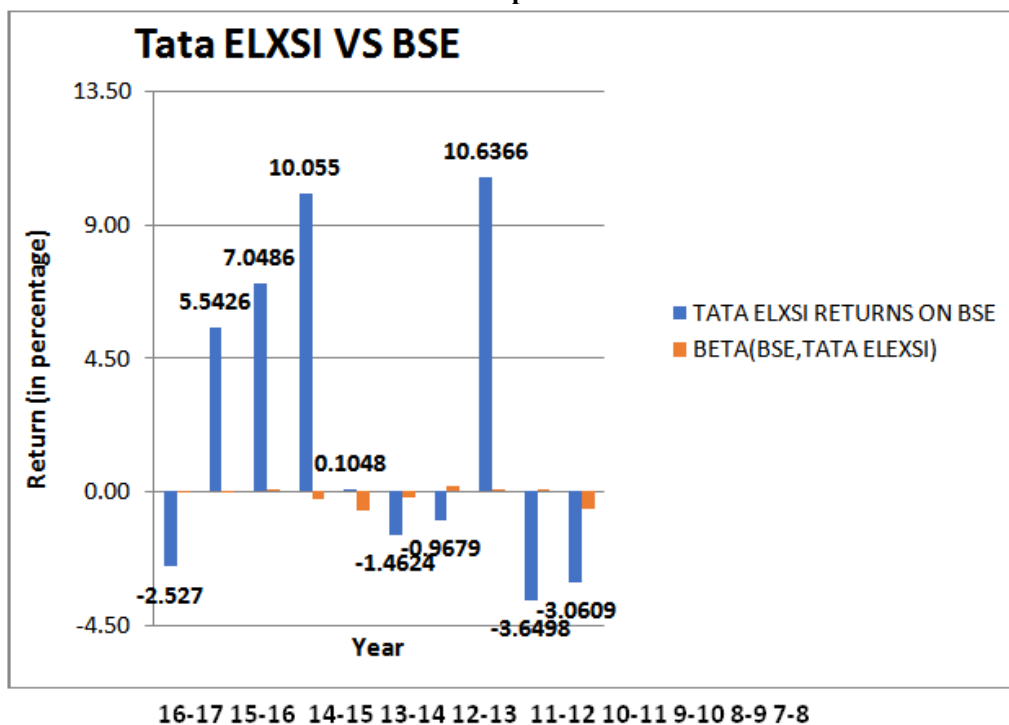
Graph 1.



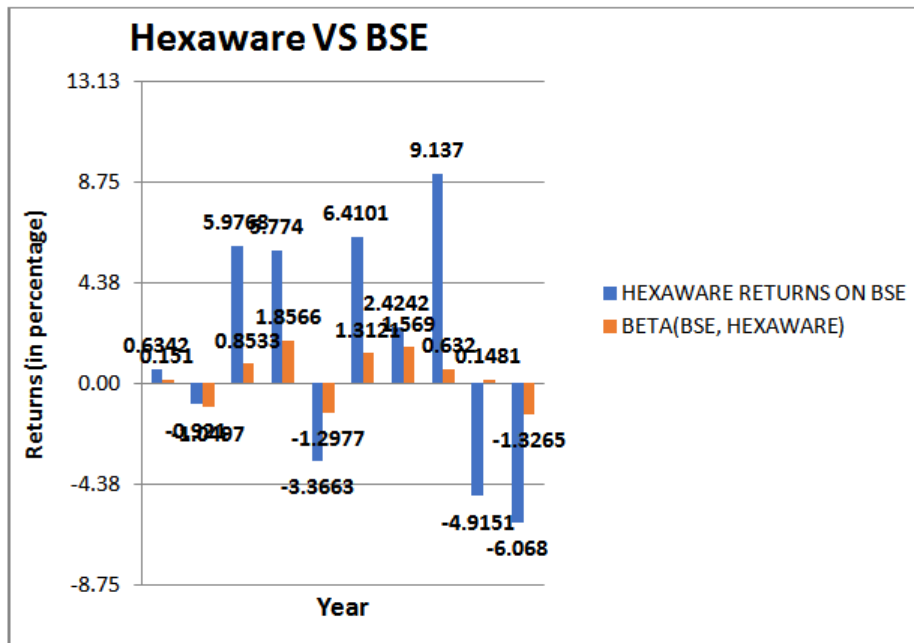
Graph 2.



Graph 3.



Graph 4



16-17 15-16 14-15 13-14 12-13 11-12 10-11 9-10 8-9 7-8

Table. 1

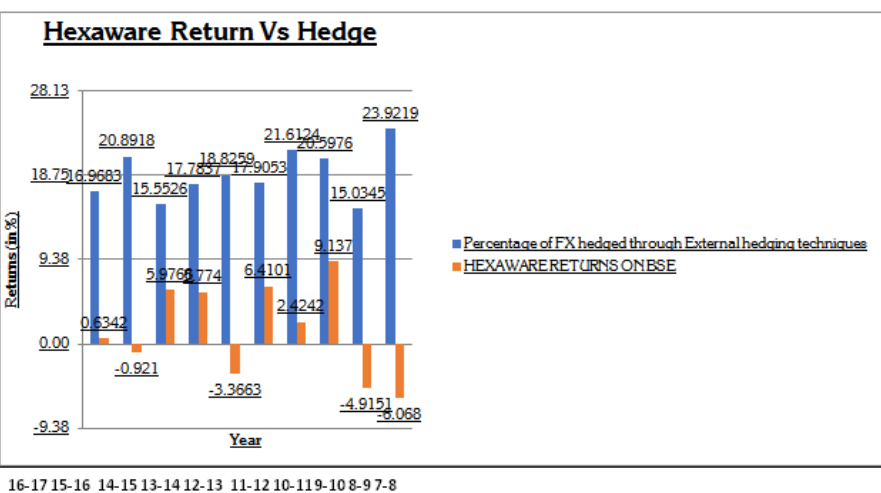
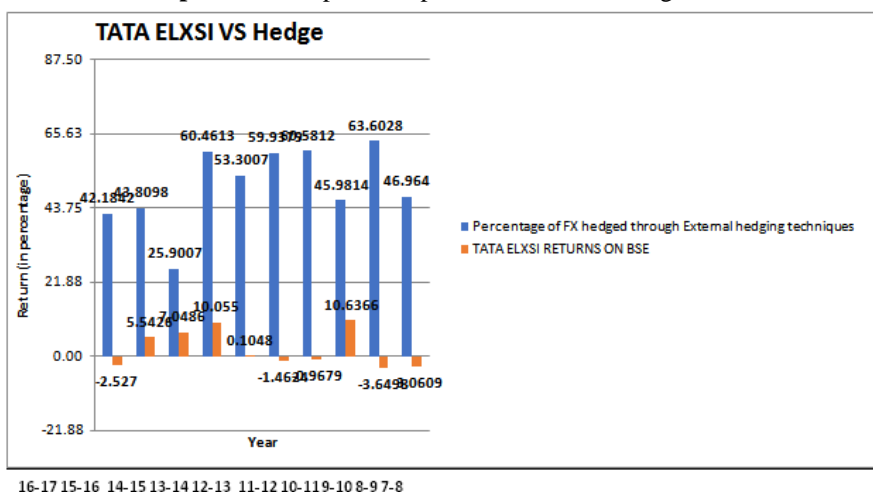
SNO	FINANCIAL YEAR	BETA(BSE,TCS)	BETA(BSE,INFOSYS)	BETA(BSE,TATA ELEXSI)	BETA(BSE, HEXAWARE)
1	2007-08	-0.4671	3.0119	-0.5864	-1.3265
2	2008-09	0.3773	0.4028	0.06672	0.14807
3	2009-10	-1.2343	3.414	0.057124	0.63201
4	2010-11	0.3974	-3.814	0.20219	1.56904
5	2011-12	0.10539	2.7728	-0.21217	1.31213
6	2012-13	-0.253	-3.6333	-0.63362	-1.2977
7	2013-14	-0.52118	-1.1629	-0.24053	1.85663
8	2014-15	1.2039	3.66679	0.09361	0.85332
9	2015-16	-0.4338	6.5037	-0.00149	-1.0497
10	2016-17	0.12655	1.8232	-0.04645	0.15103

The results show that the beta is majorly positively correlated i.e. IT stocks has been moving more or less in tandem with BSE in past 10 years. The IT stocks are sensitive to economy even though over the years their substantial business transactions has been overseas.

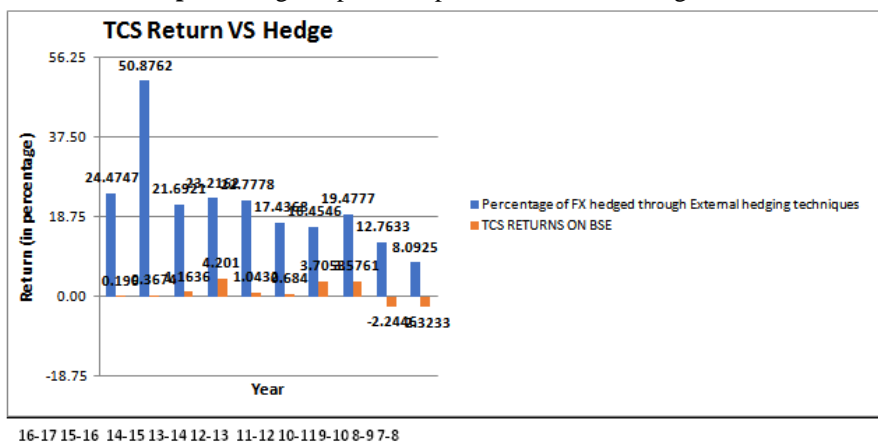
Return Vs Hedged

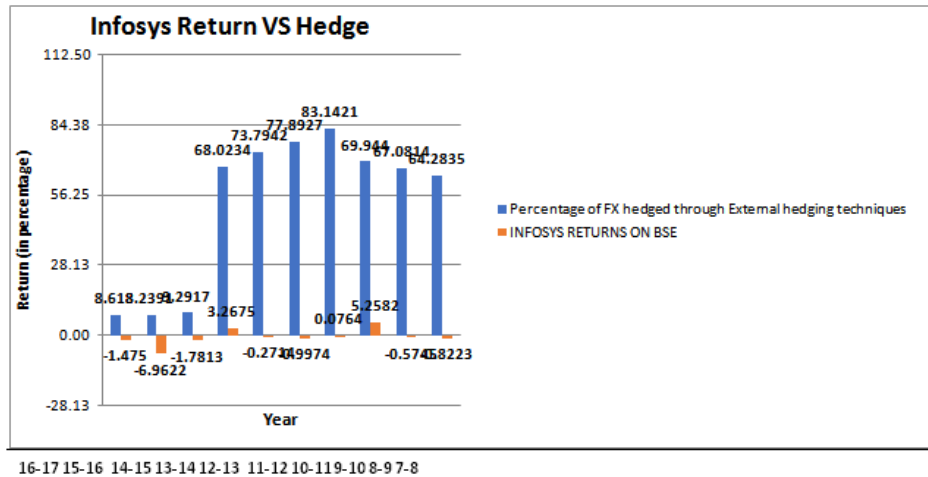
Here researcher is studying if hedging the foreign exchange exposure has any impact on stock return on BSE.

Graph 5. Mid Cap IT companies Returns vs Hedged Data



Graph 6. Large Cap IT companies Returns vs Hedged Data





Dumas (1978), Hodder (1982), and Adler and Dumas (1984) define exchange- rate exposure as the effect of exchange-rate changes on the value of a firm. This definition has no implication for a causal relationship between exchange- rate fluctuations and changes in firm value. In other words, stock prices and exchange rates are endogenously determined. However, we assume par- tial equilibrium in the sense that exchange rates are exogenous to the value of a firm.

Table 2

SN	Q.	FY	TCS				INFOSYS				TATA ELXSI				HEXAWARE							
			Total Foreign Earnings (in Crore)	Hedged Current y Exposure	Percentage of FX hedged through External hedging techniques	TCS RETURN ON BSE	BETA(TCS)	Total Foreign Earnings (in Crore)	Hedged Current y Exposure	Percentage of FX hedged through External hedging techniques	INFOSYS RETURN ON BSE	BETA(INFOSYS)	Total Foreign Earnings (in Crore)	Hedged Current y Exposure	Percentage of FX hedged through External hedging techniques	TATA ELXSI RETURN ON BSE	BETA(TATA ELXSI)	Total Foreign Earnings (in Crore)	Hedged Current y Exposure	Percentage of FX hedged through External hedging techniques	HEXAWARE RETURN ON BSE	BETA(HEXAWARE)
1	2016	1	818851	200411	24.47	0.20	0.13	5E+05	45560	8.62	-1.48	1.82	9120.72	3847.5	42.18	-2.53	-0.05	13184.7	2257.21	16.97	0.83	0.15
2	2015	2	718183	365384	50.88	0.37	-0.43	5E+05	38030	8.24	-4.96	6.50	7015.89	3073.7	43.81	5.54	0.00	12328.1	2575.57	20.89	-0.92	-1.05
3	2014	3	622608	325057	23.60	1.16	1.20	4E+05	40100	8.29	-1.78	3.67	6204.47	1697	25.90	7.05	0.09	10999.9	1710.77	15.85	5.88	0.85
4	2013	4	459420	106660	23.22	4.20	-0.52	4E+05	2E+05	68.02	3.27	-1.16	4847.35	2991.3	60.46	10.16	-0.24	9977.96	1774.45	17.78	5.77	1.86
5	2012	5	373480	88063.7	22.78	1.04	-0.25	3E+05	2E+05	73.79	-0.27	-3.63	4102.07	2186.4	53.30	0.10	-0.63	8871.15	1670.88	18.83	-3.37	-1.30
6	2011	6	266658	46496.7	17.44	0.88	0.11	2E+05	2E+05	77.89	-1.00	2.77	3109.22	1863.6	59.94	-1.46	-0.21	6564.61	1175.41	17.91	6.43	1.31
7	2010	7	212896	35031.2	16.45	3.71	0.40	2E+05	2E+05	83.14	0.08	-3.81	2663.32	1784	60.58	-0.97	0.20	4080.89	882	21.61	2.42	1.57
8	2009	8	208367	40885	19.48	3.58	-1.23	2E+05	1E+05	68.84	5.26	3.41	3387.2	1502.1	45.88	10.64	0.06	4740.85	976.5	20.80	9.34	0.63
9	2008	9	167765	21412.3	12.76	-2.24	0.38	1E+05	97201	67.68	-0.57	0.40	2915.39	1854.3	63.60	-3.65	0.07	4805.75	722.52	15.03	-0.92	0.15
10	2007	10	138025	11169.6	8.09	-2.32	-0.47	1E+05	78143	64.28	-0.82	3.01	2411.53	1132.6	46.86	-3.06	-0.59	4437.74	1061.89	23.82	-6.07	-1.33

source :BSE, Annual Reports

V. Conclusion

Over the years firms have hedged greater portion of their foreign exchange exposure and since study is only looking at external hedging practices, as internal hedging practices are not disclosed in financial statement of the firms. Indian IT firms in study have steadily increased their offshore business leading to greater foreign exchange exposure and the exchange volatility called for management of this exchange exposure. However the study concludes foreign exchange management seems to have no causal relationship with firms stock performance on BSE.

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