Downfall of Credit Suisse Impacting the Bancassurance and Stock Instability

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Abstract

Background: In a merger devised by Swiss institutions, UBS decided to buy its rival bank Credit Suisse for 3 billion Swiss francs ($3.23 billion) and accept up to $5.4 billion in losses. Following the Credit Suisse transaction, major central banks including the Federal Reserve, Bank of Canada, England, Japan, the European Central Bank, and others declared a coordinated act to increase the facility of liquidness through the destabilised S. dollar liquidity switch line engagements. This alternate arrangement was intended to calm frightened customers and increase the confidence of apprehensive lawmakers and investment bankers.

Objectives: This primary objective of this study to analyse the Insurance capital index of the bancassurance provider of the Credit Suisse and rank the elements of index based on their performance, from best to worst. The secondary objective of the study is to comprehend the volatility of the Credit Suisse's significant performance ratios with respect to the stock price.

Methodology: The period of study is from 2009 -2023 and the outcomes got have been analysed through Mean, Standard Deviation, Covariance, Coppock's Instability Index (CII) and Cuddy Della Valle Instability Index (CVDI) and to analyse the Insurance Capital Indices BWM MCDM Technique is used to study the relevance.

Key Findings: The instability indexed through the stock prices with the Price to Sales and Price to Free Cash Flow (FCF) ratio aspects are the significant result of the controversies and scandals that took off since 2020. The Indices of the Insurance Capital also reveals the performance of each Index in different attributes concerning to the field of bancassurance. It holds an impact in the stock prices, market share and overall performance focusing on the future of Credit Suisse.

Implications/Significance: As policy architects through the domain circumnavigate this unrestrained era, the policy outline necessity be directed by the objective of upholding macroeconomic stability.

Keywords: Bancassurance, Cuddy Della Valle Index, Credit Suisse, Coppock's Instability, Downfall, Stock Prices

Introduction

CREDIT SUISSE GROUP and Winterthur deals with investment merchandises, private funding and monetary consultative facilities, as well as insurance and pension resolutions. Credit Suisse First Boston offers securities underwriting, trades and trading, financial counselling, investment examination, venture capital and asset management facilities. Since they concentrate in attaining a profound considerate of their customers' monetary wants, they recognize that no one's requirements are two-dimensional. Credit Suisse, one of Switzerland's foremost financial establishments subsequently its forerunner Schweizerische Kreditanstalt was established in 1856, was amongst a cluster of 30 banks recognized as internationally methodically significant, and a full failure might have distressed the worldwide monetary organization.

Timeline of the Failure

2019 and early 2020: Credit Suisse faces an espionage disgrace concerning an outward-bound wealth management executive; then-CEO Tidjane Thiam quits.

2021: Archegos Capital and Greensill Capital failure, leading to $1 billion in losses for Credit Suisse and one more organization shake-up.

January 2022: Chairman Antonio Horta-Osorio quits from the concernsubsequentto the newscast that he broke COVID-19 isolation guidelines.

July and August 2022: Rumour mingles that Credit Suisse surfaces imminent catastrophe, warning clienteles to pull about $119 billion in moneys in the previous part of the year.

January 2023: Credit Suisse declares it will appropriate up to $54 billion to shore up liquidness, but topmost backer Saudi National Bank utters it will not stretch cash for the reason that of supervisory concerns.

March 2023: U.S. institutions Silicon Valley Bank and Signature Bank nose-dive, setting the world wide monetary system on edge.

March 2023: Switzerland's decision-making division ballots to permit the buyout devoid of stake holder consent.

Effect of the Collapse

The effect of UBS' buyout of Credit Suisse is wide-ranging. For the bank's workplaces around the domain and its 50,000 workforces, the upcoming vestiges unclear, as UBS might engross approximately or everything of them and close or lay off others. UBS is estimated to have approximately $5 trillion in AUM subsequent to the contract. The world wide monetary system reacted with events to effort to alleviate banks. Central banks enthused to synchronize day-to-day contact to an advancing competence for banks looking for to borrow U.S. dollars in the instantaneous result of the buyout. Switzerland's administration is predominantly wedged, as it has decided to offer 100 billion CHF ($108.4 billion) to safeguard the contract is accomplished. For stakeholders, around 16 billion CHF (more than $17 billion) in Credit Suisse's reliant convertible bonds are smeared out as part of the buyout. The failure of Credit Suisse could also affect Switzerland's standing as a steady, sturdy country for funding. The loss of one of the country's ancient monetary organizations, the bank that financed the building of Switzerland's railways, might sabbatical Swiss citizens in and out of the banking business distressed.

On the trajectory of Bancassurance

Swiss insurers have the cash and the long-standing prospect to flutter a big venture in Credit Suisse. In operation deliberations could also play a part subsequently since financial executives have emanated to perceive their professional as an ecological unit. Bancassurance conglomerates amongst banks and insurers are yet again well-thought-of in Switzerland. Paradoxically, it was Credit Suisse that systematically cluttered the bancassurance notion. To start with, the union with Winterthur Versicherungen, now Axa, in 1997 terminated in a revolting failure in the nineties. From the viewpoint of a long-term institutional stakeholder, an access into Credit Suisse could mark intelligence equally as a financial venture and because of likely operating competences. Conversely, most big insurers in Switzerland are openly operated. Since the extent of the contract, they would consequently have had to notify stakeholders of their intents initial in the course, disagreeing in contradiction of this consequence.

In recent years, there has been a general trend towards accumulation in the banking sector, which has been accelerated by the liberalisation of banks' activities. The extension of banks into the insurance industry, and notably bancassurance, has been a distinctive element of economic growth. The conceptualization and economic physiological characteristics of the bancassurance phenomenon are thoroughly examined in this research study. Additionally, it evaluates the impact of banking risks brought on by the rise of the insurance industry. Since Credit Suisse partnered with the prominent French Insurance Company AXA in 2020, bancassurance has been a significant development engine for the company over the past few years. Some of the difficulties the bank had in its other operations have been somewhat mitigated by the bancassurance business's outstanding success. Looking ahead, Credit Suisse is in an advantageous position to maintain its impressive results in bancassurance. The bank's dominant position in important markets, emphasis on digital delivery, and dedication to innovation will all contribute to the sector's continuing growth. Bancassurance is expected to be a significant growth engine going forward, according to Credit Suisse. This study focuses on the stock price volatility with respect to the Price-Sales ratio and Price-FCF ratio brought on by scandals and damaged reputations. It also discusses the Index Profiles summarizing the defining characteristics of the Insurance Capital Indices of bancassurance and its potential future.

Review of Literature

David Ricketts (2023), in Financial News reported that Outflows from Credit Suisse brand-named venture funds have enhanced in the weeks subsequently to its momentous unification with Swiss competitor UBS, as stakeholders remain to transfer billions of dollars. Statistics delivered to Financial News by Morningstar indicates net discharges from about 300 EU and US domiciled Credit Suisse capitals have touched $5.6bn over the three weeks since the tie-up. The up-to-the-minute expenditures will mound burden on the amalgamated firm; stakeholders had by this time drawn around $3bn from Credit Suisse resources. The up-to-the-minute statistics show an extra $2.5bn of net expenditures from Credit Suisse resources between 23 March and 6 April 2023.

Kassandra Jimenez-Sanchez (2023), in Fitch Ratings stated that Forecasters at Fitch Ratings have guaranteed EU and UK insurers that Credit Suisse’s Additional Tier 1 (AT1) proceedings comprehensive write down by Swiss establishments – without daunting full losses on the bank’s equity – does not suggest that the countries’ establishments will treat their Restricted Tier 1 (RT1) mechanisms the similar manner.

Matt Sheehan (2023), in JP Morgan Reinsurance news stated that Forecasters at JP Morgan have guaranteed that European insurers’ acquaintance to bank business credit and AT1 bonds are low-slung, afterwards a salvage arrangement for the stressed Credit Suisse surprised some stakeholders by leave-taking their bonds valueless.

Nathan Reiff (2023), in INVESTOPEDIA stated that in mid-March 2023, Swiss bank UBS Group AG (UBS) bought competing Credit Suisse Group AG for 3 billion CHF (about $3.3 billion USD), a move envisioned to shoreline up the global banking organization and stop the latter financial institution from failing.

Preeti Singh (2023), in Bloomberg World News stated that the Credit Suisse Group AG crunch is expected to mark animpression on the meansof well-to-do Indians opinesglobal wealth leaders.

Reuters (2023), reported that UBS is constructingmodifications to its $6 billion share buyback programme subsequentto its buyout of Credit Suisse.UBS allegedthat it will custommore or less of the shares for the buyoutsomewhat than terminating them as initiallyintended after in receipt ofendorsement from the Swiss Takeover Board. Switzerland's largest bank decided in March 2023 to purchasecompeting Credit Suisse CSGN.S for 3 billion Swiss francs in stock and decided to shoulder up to 5 billion francs in losses, in aunificationcaused by Swiss establishments to evadeadditional market-shaking chaos in worldwide banking.

Reuters (2023), stated in Economic Times that the Swiss government has conferred an advice-giving directive value up to 8.7 million Swiss francs ($9.70 million) to Alvarez & Marsal Switzerland, related to the salvage of Credit Suisse.

Luke Gallin (2022), in Credit Suisse commented that Credit Suisse Asset Management (CSAM) has now filed 18 claims contrary to insurers in relation to the insolvency of its Greensill-linked coffers, amounting to acquaintances of just about $2.2 billion through the binary Supply Chain Finance Funds (SCFFs).

Samuel Gerber (2022), in Finews wrote that the Saudis and Qataris are not the lone ones adding funds into Credit Suisse. It is also revealed that a Swiss group also desires in and in an immense means. But the path is muddy.

Megha Bhattacharya (2020), in IBS Intelligence reported that Credit Suisse proclaimed that it will be initiating unified bancassurance elucidations for its clienteles, in conglomerate with AXA. The company indicated that the elucidations will be executed in its CSX digital banking offering, that will be propelled in October 2020. The businesses are inward bound into a partnership in order to deal clienteles exact bancassurance elucidations straight via the CSX app as well as through all added patron networks.

Research Gap

Since the stumble of the Credit Suisse Bank and the collapse of Silicon Valley Bank, Swiss Bank marketers and service providers are on a tight-end position trying to maintain the confidence of their consumers and earn their trust. It is clear from the review that the stability index of stock prices over a 13-year period in relation with Price- Sales Ratio and Price to FCF Ratio has not been well studied, and the topic of bancassurance as an option of retrieval has received less comprehension. By analysing the volatility of stock priceswith respect to the ratios, following the allegations and scandals over the period from 2009 to 2023, this study fills the identifiable research gap. It also examines the defining characteristics of Insurance Capital Index of bancassurance Indices, considering the significant collapse of the parent banking company in 2023.

Objectives of the Study

Based on the reviews stated, the primary objective of this study is to analyse the Insurance capital index of the bancassurance provider of the Credit Suisse and rank the elements of index based on their performance, from best to worst.

The secondary objective of the study is to comprehend the volatility of the Credit Suisse's significant performance ratios with respect to the stock price for the past 13 years since 2009.

Research Methodology

The methodology employed in this research is based on secondary data, systematically gathered from a variety of financial research texts and reviews, financial expert's opinions, news reviews, and publications and also from websites such as www.creditsuissse.com and www.macrotrends.net. The volatility of the Stock price index with respect to the Price-Sales ratio and Price to FCF ratio over the course of 13 years from 2009 to 2023 is pondered to understand the instability in their performance. The instability denotes to an aberration from a specific movement. For the purpose of this study, three types of analysis methods are used which are as under:

Coppock's instability Index is used to study the volatility and change in the performance over the specific course of years to study the instability in stock price and price to sales ratio. Coppock measures instability through log variance method. The Coppock Instability Index with higher numerical value represents greater variability whereas the lower numerical value represents lesser instability. In a broader spectrum, a Co-Variance value more than 1 is time and again well-thought-out to be accepted as high.

Coppock's Instability Index = CII (%) = Antilog (sq. rt (Log-1)) *100

Cuddy Della Valle Instability Index is utilised to study the instability of Stock Price with respect to Price to FCF Ratio. Despite being a relatively primary barometer of instability, Coefficient of Variation (C.V.) overvalues instability in longitudinal data sets that are characterised by long-term trends. The calculation of CV is as follows:

(C.V) = (Standard Deviation /Mean) * 100

Using the Cuddy-Della Valle Index, the variability in the Stock price with respect to Price to FCF ratio has been studied. The long-term trend's coefficient of variance is altered using the Cuddy-Della Valle Index. The particularpath of the instability is shown by the Cuddy Della Valle Index de-trends. As a result, it is a better yardstick of industry volatility in the banking and insurance sectors. This index's value reflects the intensity of instability that the banking and insurance industries are under, and vice versa. The Cuddy-Della Valle Index revises the CV as:

Cuddy - Della Valle Instability Index (%) = CV√(1-R^2)

Where, R^2 was the coefficient of determination from a time trend regression adjusted for its degrees of freedom and C.V. was the coefficient of variation in percent. The following are the CDVI ranges:

- Low instability = 0 to 15
- Medium instability = 15 to 30
- High instability = 30 and above

Best-Worst Method is used to analyse a Multi-Criteria Decision-Making (**MCDM**) problem. In order to (i) identify the best option from the existing alternatives, (ii) rank each of the options, or (iii) categorise the different options according to the specifications, a number of opportunities are assessed with regard to a range of criteria.

To find the optimal weights, the following optimization model is formulated.

$$\text{Min Max } \{ |W_b/W_j - a_{bj}|, |W_j/W_w - a_{jw}| \}$$

$$\sum_j W_j = 1$$

$W_{j,}$ j ≥ 0, for all

Consistency Ratio

A comparison is fully consistent when for all j, $a_{bj} \times a_{jw} = a_{bw}$ are respectively the preference of the best criterion over the criterion j, the preference of criterion j over the worst criterion, and the preference of the best criterion over the worst criterion. It has an index that if the Ksi is closer to 0, it signifies that the results are consistent and reliable while if it is closer to 1, the results are considered inconsistent and unreliable.

Results and Discussion

Table 1 - Index Profiles summarizing the defining characteristics of the Insurance Capital Indices

Table 1a – Index Profile Weights in terms of Issues, Market Value and Par Amount

Insurance Capital Indices As of January 4, 2022	**Number of Issues**	**Weights**	**Market Value (‘000)**	**Par Amount (‘000)**	**Weights**
ICI Euro	192**	0.166666667	13,60,82,112	125168253	0.114754
ICI Dollar	51*	0.541666667	3,85,86,049	3,50,95,982*	0.229508
ICI Sterling	76	0.291666667	3,57,78,680	30481178**	0.448087
Ksi		**0.041666667**			**0.010929**

***Indicates the Best MCDM Index** ****Indicates the Worst MCDM Index**
Source: Computed and Compiled by the Authors from www.creditsuissse.com

Discussion: Table 1a reveals the performance of the ICI in terms of Issues, Market Value and Par Amount. Based on the number of issues, Dollar has the best MCDM index while Euro stands to be the worst. The Ksi is indicated at 0.041666667 which indicates that the results are consistent. As far as the Par Amount is considered, it is dependent on the market value of the issues, giving the implication that Dollar is the best performing Index and Sterling denoting the Worst MCDM Index. The Ksi indicated also prove that the weights and the results are reliable.

Table 1b – Index Profile Weights in terms of Yield and Coupon Percentage and Remaining Term

Insurance Capital Indices As of January 4, 2022	**Yield (%)**	**Coupon (%)**	**Weights**	**Remaining Term (years)**	**Weights**
ICI Euro	1.15	3.236	0.25	5.59**	0.230769
ICI Dollar	3.27	4.885**	0.125	16.34*	0.307692
ICI Sterling	3.02	5.562*	0.625	14.58	0.461538
Ksi			**0.375**		**0.453327**
***Indicates the Best MCDM Index** ****Indicates the Worst MCDM Index**					
Source: Computed and Compiled by the Authors from www.creditsuissse.com					

Discussion: Table 1b studies about the Yield, Coupon and Remaining terms of the Indices profile. The Coupon % is dependent on the Yield % which implies that Sterling has a good performing index at 0.125 while the Dollar depicts a declining performance rate. Dollar contradictorily has a reliable indication with respect to remaining terms while Euro seems to have the Unfavourable MCDM Index. Both of the outputs are considered reliable based on the Ksi.

Table 1c - Index Profile Weights in terms of Spread over YC, Asset Swap Spread, Mac Duration, Mod Duration

Insurance Capital Indices As of January 4, 2022	**Spread over YC**	**Weights**	**Asset Swap Spread**	**Weights**	**Mac Duration (years)**	**Weights**	**Mod Duration (years)**	**Weights**
ICI Euro	157.37*	0.538462	259.4**	0.114754	5.13*	0.5	5.08*	0.461538
ICI Dollar	191.64	0.153846	283*	0.229508	6.88	0.166667	6.74	0.307692
ICI Sterling	206.49**	0.307692	277.6	0.448087	7.22**	0.333333	7.08**	0.230769
Ksi		**0.076923**		**0.010929**		**0.166667**		**0.923077**

***Indicates the Best MCDM Index**
****Indicates the Worst MCDM Index**

Source: Computed and Compiled by the Authors from www.creditsuissse.com

Discussion: Table 1c studies about the Spread over YC and Asset Swap Spread, Mac& Mod Duration of the Indices. From the table, the Euro Index is best performing in terms of Yield Curve spread, while Sterling has the low profiling performance. In terms of Asset Swap Spread, Euro contradicts in performance and has the Worst MCDM Index, While Dollar being the best performing Index. In terms of Mac and Mod Duration, since they are positively in proportion to each other, have the same Best and Worst MCDM Index – Euro performing the best and Sterling to be the Worst MCDM Index in these terms.

Table 2 – Coppock's Instability Index of Stock Price and Price- Sales Ratio of Credit Suisse

Date	**Stock Price**	**P/S Ratio**	**Log**
2023-04-17	0.92	0.11	0.03777582
2022-12-31	3.04	0.36	-1.0882946
2022-09-30	3.92	0.47	-1.8093388

Table 2 – Coppock's Instability Index of Stock Price and Price- Sales Ratio of Credit Suisse			
Date	**Stock Price**	**P/S Ratio**	**Log**
2022-06-30	5.67	0.64	-3.8880557
2022-03-31	7.78	0.79	-8.7032752
2021-12-31	9.56	0.82	-11.37605
2021-09-30	9.78	0.77	-8.7247395
2021-06-30	10.40	0.81	-11.113299
2021-03-31	10.46	0.78	-9.4483845
2020-12-31	12.63	0.98	-125.53144
2020-09-30	9.78	0.73	-7.2458266
2020-06-30	10.11	0.73	-7.3512744
2020-03-31	7.87	0.56	-3.5581101
2019-12-31	13.08	0.95	-50.125155
2019-09-30	11.87	0.89	-21.230011
2019-06-30	11.64	0.90	-23.295705
2019-03-31	11.11	0.86	-15.964723
2018-12-31	10.35	0.80	-10.473018
2018-09-30	14.24	1.07	39.2566947
2018-06-30	14.19	1.08	34.4659772
2018-03-31	15.77	1.20	15.1277197

Table 2 – Coppock's Instability Index of Stock Price and Price- Sales Ratio of Credit Suisse			
Date	**Stock Price**	**P/S Ratio**	**Log**
2017-12-31	16.76	1.25	12.6331013
2017-09-30	14.84	1.08	35.0479437
2017-06-30	13.71	0.95	-51.042257
2017-03-31	13.93	0.94	-42.570143
2016-12-31	13.44	0.91	-27.549747
2016-09-30	12.34	0.82	-12.662304
2016-06-30	10.05	0.61	-4.6683994
2016-03-31	12.60	0.67	-6.3266885
2015-12-31	19.34	0.93	-40.817793
2015-09-30	21.43	0.95	-59.750341
2015-06-30	24.62	1.05	65.6599373
2015-03-31	23.38	0.98	-156.0128
2014-12-31	21.77	0.89	-26.434669
2014-09-30	24.00	0.96	-77.851508
2014-06-30	24.63	1.01	321.995847
2014-03-31	27.38	1.10	34.7267503
2013-12-31	26.25	0.98	-161.74397
2013-09-30	25.83	1.04	82.9035565

Table 2 – Coppock's Instability Index of Stock Price and Price- Sales Ratio of Credit Suisse

Date	Stock Price	P/S Ratio	Log
2013-06-30	22.38	0.84	-17.826827
2013-03-31	22.07	0.77	-11.838701
2012-12-31	20.69	0.72	-9.2225662
2012-09-30	17.81	0.54	-4.673523
2012-06-30	15.40	0.44	-3.3306118
2012-03-31	23.19	0.61	-6.359993
2011-12-31	19.10	0.46	-3.7985563
2011-09-30	21.35	0.50	-4.4161642
2011-06-30	31.74	0.75	-12.018746
2011-03-31	33.54	0.80	-15.742058
2010-12-31	31.83	0.86	-22.943528
2010-09-30	33.52	1.06	60.2747226
2010-06-30	29.48	1.00	25.8242917
2010-03-31	39.43	1.40	10.9207434
2009-12-31	37.72	1.37	11.5313425
Variance(log)			4008.02728
Variance^0.5			63.3089826
Variance^0.5 – 1			62.3089826

Table 2 – Coppock's Instability Index of Stock Price and Price- Sales Ratio of Credit Suisse			
Date	**Stock Price**	**P/S Ratio**	**Log**
CII			**114.19355**
Source: Computed and Compiled by the Authors from www.macrotrends.net			

Discussion: Table 2 studies the variability in the Stock Prices through the Coppock's Instability Index. This reveals that the CII has an indication of 114.19355 which is a massive increase percentage wise. This means that the instability is higher in response to the sequential controversies faced by Credit Suisse. The Highest Instability is noted at 321.99 in the year 2014 and correspondingly in the year 2020 with an index of -125.5314. The intensity of variation in the Log values is due to the inconsistency in the moving of the Stock Prices with respect to the P/S ratio. This indicates an inconsistency between both the variables. The CII indicates that the Instability Index is Highest in the past 13 years from 2009 to 2023.

Table 3 – Cuddy Della Valle Index of Stock Price and Price-FCF Ratio of Credit Suisse						
Adjusted R^2		**-0.019**	**$\sqrt{1\text{-}AdR^2}$**			**1.009455**
Date	**Stock Price**	**Price – FCF Ratio**	**Mean**	**Standard Deviation**	**CV**	**CDVI**
2023-04-17	0.92	0.20	0.56	0.36	64.28571	**64.8935549**
2022-12-31	3.04	0.67	1.855	1.185	63.8814	**64.4854193**
2022-09-30	3.92	0.75	2.335	1.585	67.88009	**68.5218919**
2022-06-30	5.67	1.03	3.35	2.32	69.25373	**69.9085254**
2022-03-31	7.78	0.40	4.09	3.69	90.22005	**91.0730795**
2021-12-31	9.56	0.61	5.085	4.475	88.00393	**88.8360103**
2021-09-30	9.78	1.05	5.415	4.365	80.60942	**81.3715803**

Table 3 – Cuddy Della Valle Index of Stock Price and Price-FCF Ratio of Credit Suisse						
Adjusted R^2		**-0.019**	**$\sqrt{1\text{-}AdR^2}$**			**1.009455**
Date	**Stock Price**	**Price – FCF Ratio**	**Mean**	**Standard Deviation**	**CV**	**CDVI**
2021-06-30	10.40	1.53	5.965	4.435	74.35038	**75.05336**
2021-03-31	10.46	0.00	5.23	5.23	100	**100.9455**
2020-12-31	12.63	0.00	6.315	6.315	100	**100.9455**
2020-09-30	9.78	0.00	4.89	4.89	100	**100.9455**
2020-06-30	10.11	0.00	5.055	5.055	100	**100.9455**
2020-03-31	7.87	0.00	3.935	3.935	100	**100.9455**
2019-12-31	13.08	0.00	6.54	6.54	100	**100.9455**
2019-09-30	11.87	0.00	5.935	5.935	100	**100.9455**
2019-06-30	11.64	0.00	5.82	5.82	100	**100.9455**
2019-03-31	11.11	15.66	13.385	2.275	16.99664	**17.1573412**
2018-12-31	10.35	2.28	6.315	4.035	63.89549	**64.4996188**
2018-09-30	14.24	5.17	9.705	4.535	46.72849	**47.1703083**
2018-06-30	14.19	9.55	11.87	2.32	19.54507	**19.7298703**
2018-03-31	15.77	182.68	99.225	83.455	84.10683	**84.902058**
2017-12-31	16.76	0.00	8.38	8.38	100	**100.9455**
2017-09-30	14.84	1.12	7.98	6.86	85.96491	**86.7777105**
2017-06-30	13.71	1.98	7.845	5.865	74.76099	**75.4678595**

Table 3 – Cuddy Della Valle Index of Stock Price and Price-FCF Ratio of Credit Suisse						
Adjusted R^2		**-0.019**	**$\sqrt{1\text{-}AdR^2}$**			**1.009455**
Date	**Stock Price**	**Price – FCF Ratio**	**Mean**	**Standard Deviation**	**CV**	**CDVI**
2017-03-31	13.93	1.86	7.895	6.035	76.44079	**77.1635329**
2016-12-31	13.44	1.06	7.25	6.19	85.37931	**86.1865717**
2016-09-30	12.34	2.17	7.255	5.085	70.08959	**70.7522905**
2016-06-30	10.05	0.86	5.455	4.595	84.23465	**85.0310857**
2016-03-31	12.60	0.75	6.675	5.925	88.76404	**89.603309**
2015-12-31	19.34	2.27	10.805	8.535	78.99121	**79.7380696**
2015-09-30	21.43	11.58	16.505	4.925	29.83944	**30.1215745**
2015-06-30	24.62	17.97	21.295	3.325	15.61399	**15.7616242**
2015-03-31	23.38	0.00	11.69	11.69	100	**100.9455**
2014-12-31	21.77	0.00	10.885	10.885	100	**100.9455**
2014-09-30	24.00	0.00	12	12	100	**100.9455**
2014-06-30	24.63	0.00	12.315	12.315	100	**100.9455**
2014-03-31	27.38	2.41	14.895	12.485	83.82007	**84.6125926**
2013-12-31	26.25	1.76	14.005	12.245	87.43306	**88.2597392**
2013-09-30	25.83	0.71	13.27	12.56	94.64959	**95.5444974**
2013-06-30	22.38	2.69	12.535	9.845	78.54009	**79.2826843**
2013-03-31	22.07	1.51	11.79	10.28	87.19254	**88.0169415**

Table 3 – Cuddy Della Valle Index of Stock Price and Price-FCF Ratio of Credit Suisse						
Adjusted R^2		**-0.019**	**$\sqrt{1\text{-}AdR^2}$**			**1.009455**
Date	**Stock Price**	**Price – FCF Ratio**	**Mean**	**Standard Deviation**	**CV**	**CDVI**
2012-12-31	20.69	0.00	10.345	10.345	100	**100.9455**
2012-09-30	17.81	7.06	12.435	5.375	43.22477	**43.633459**
2012-06-30	15.40	0.43	7.915	7.485	94.56728	**95.4614109**
2012-03-31	23.19	3.41	13.3	9.89	74.3609	**75.0639846**
2011-12-31	19.10	0.47	9.785	9.315	95.19673	**96.0968148**
2011-09-30	21.35	1.07	11.21	10.14	90.45495	**91.3102025**
2011-06-30	31.74	0.00	15.87	15.87	100	**100.9455**
2011-03-31	33.54	0.00	16.77	16.77	100	**100.9455**
2010-12-31	31.83	6.02	18.925	12.905	68.19022	**68.8349631**
2010-09-30	33.52	0.00	16.76	16.76	100	**100.9455**
2010-06-30	29.48	1.14	15.31	14.17	92.55389	**93.4289833**
2010-03-31	39.43	3.05	21.24	18.19	85.6403	**86.4500304**
2009-12-31	37.72	0.00	18.86	18.86	100	**100.9455**
Source: Computed and Compiled by the Authors from www.macrotrends.net						

Discussion: Table 3 reveals the results of Cuddy Della Valle Index of Stock Price and Price - FCF Ratio of Credit Suisse from the year 2009. The CDVI shows highest instability index throughout the years. The highest Instability is marked at years which has index over 100%. The following dates have marked the highest index – December 2009, March 2011, June 2011, December 2012, June – December 2014, June 2019 to March 2021. Lowest CVDI is marked on 30-06-2015 at 15.7616242. This reveals the highest volatility throughout the course of 13 years from 2009 to 2023.

Findings from the Study

Table 1 revealing the Insurance Capital Index along with the characteristics contributing to the profile of the Indices suggest that each of them perform in a varied pace with respect to the profile attributes. When the par amount is higher than the market value, the issues are at premium and it is a favourable position. According to the MCDM Valuation, Dollar is performing best in terms of issues and market value as the increase in issues is an unfavourable position for the stakeholders, Table 1b reveals Coupon and Yield % and Remaining years in Terms. As per the desirability, Coupon % being higher than the Yield % is considered favourable and a higher Mod and Mac years indicates high price fluctuations which is not ideal. ICI Sterling is performing best in Yield% and the Spread over YC and Assets denotes contradictory results. ICI Euro performs better in Spread over YC and with Mac and Mod Duration. In overall terms, the Insurance Capital index of Euro has been performing better comparatively with other indices. The Ksi is closer to 0 in all the results indicating superior consistency with the output.

The Coppock's instability index is valued at an instability of 114.19355% which is indicates high instability. The higher percentage in the variability is due to the fluctuation in the stock prices and also with respect to the price to sales ratio. Changes in the management, downfall in the diversification of the services and turbulence in the Swiss banking market are all the factors contributing towards the scandals and controversies that Credit Suisse went through since 2020.

The Cuddy Della Valle Instability index studies instability with respect to previous year to determine the level of downfall or increase in terms of price and price to FCF ratio. A continuous period of instability is identified as the highest possible index was recorded between December 2009 and March 2011, June 2011 and December 2012, and between June 2019 and March 2021. On June 30, 2015, the lowest CVDI measured at 15.7616242. This depicts the 13-year period from 2009 and 2023 with the most volatility.

Concluding Observations and Suggestions

Credit Suisse is currently attempting to restore its public image and is concentrated on earning a profit. It has started a multi-year restructuring strategy to reorganise its company, cut expenses, and concentrate on its core competencies. Although the journey forward will be difficult, Credit Suisse is still a powerful and enduring institution. The second-largest investment bank, Credit Suisse, had managerial issues and scandals. Due to its inability to deliver capital after the regulatory limits, investors withdrew. The primary causes of such stock price volatility and the decline in market share in bancassurance were shifts within the top management and involvement in cases of money laundering. However, following the publicly announced plan to borrow $54 billion from SCB, Credit Suisse made a small recovery. Through other banking activities, they intend to spin off the business opportunities. Bancassurance, the foundation of diversity in the relevant industry, can help with the recovery that the loss sparked.

Social Relevance of the Study

The Credit Suisse is indicative of a factor of two technique which facilitates in concentrating on creating a reliable network between the management and the stakeholders. It broadens the effect of the offering, enhances their function as suppliers of financial services, and benefits the economy and society. Their standing among the other companies in the sector will be reflected by their dedication to stability in both the quantitative and qualitative fronts.

References

1. **David Ricketts (2023),** in Financial News on Credit Suisse fund outflows widen to $5.6bn following UBS tie-up extracted from https://www.fnlondon.com/articles/credit-suisse-outflows-widen-ubs-deal-20230417, Monday April 17, 2023 12:01 am.
2. **Kassandra Jimenez-Sanchez (2023)** in Fitch Ratings on Insurers' assured RT1's won't be treated as Credit Suisse's AT1 notes: Fitch retrieved from https://www.reinsurancene.ws/insurers-assured-rt1s-wont-be-treated-as-credit-suisses-at1-notes-fitch/, 28th March 2023.
3. **Luke Gallin (2022),** in Credit Suisse on Credit Suisse (CSAM) files additional insurance claims as part of Greensill funds liquidation retrieved from https://www.reinsurancene.ws/credit-suisse-csam-files-additional-insurance-claims-as-part-of-greensill-funds-liquidation/, 16th August 2022.
4. **Matt Sheehan (2023),** in JP Morgan Reinsurance news on Insurer AT1 exposure low amid Credit Suisse shock: JP Morgan retrieved from https://www.reinsurancene.ws/insurer-at1-exposure-low-amid-credit-suisse-shock-jp-morgan/, 20th March 2023.
5. **Megha Bhattacharya (2020),** in IBS Intelligence on Credit Suisse & AXA team up to launch digital bancassurance services retrieved from https://ibsintelligence.com/ibsi-news/credit-suisse-axa-team-up-to-launch-digital-bancassurance-services/, October 22, 2020.

6. **NATHAN REIFF (2023),** in INVESTOPEDIA on What Happened at Credit Suisse, and Why Did It Collapse? Extracted from https://www.investopedia.com/what-happened-at-credit-suisse-and-why-did-it-collapse- updated March 28, 2023.
7. **Preeti Singh (2023),** on Credit Suisse Crisis Sends Shivers Amongst Wealthy Indians extracted from https://www.ndtv.com/world-news/credit-suisse-crisis-sends-shivers-amongst-wealthy-indians-3881280, Updated: March 21, 2023 8:14 pm IST.
8. **Reuters (2023),** on UBS makes changes to buyback programme following Credit Suisse takeover extracted from https://www.reuters.com/business/finance/ubs-makes-changes-buyback-programme-following-credit-suisse-takeover-2023-04-18/, Updated April 18, 202312:01 PM GMT+5:30.
9. **Reuters (2023),** on Swiss government awards $9.7 million contract related to Credit Suisse: UBS merger retrieved from https://economictimes.indiatimes.com/news/international/business/swiss-government-awards-9-7-million-contract-related-to-credit-suisse-ubs-merger/articleshow/99563866.cms updated Apr 17, 2023, 08:23 PM IST.
10. **Samuel Gerber (2022),** in Finews on Who is Credit Suisse's Secret Investor? Extracted from https://www.finews.com/news/english-news/54221-credit-suisse-capital-increase-switzerland, updated Tuesday, 8 November 2022 11:20.