# Emmalyn.

ENHANCING DECISION MAKING IN CAPITAL MARKETS.

The World's First AI Risk Analyst.





# Fundamental Analysis has been under invested

### **Active Fundamental Research**

- Has been underinvested in since the GFC with fundamentals not driving asset price returns.
- Is performed by teams of analysts who spend time **researching a limited number of companies** under coverage.
- Suffers from capacity constraints, overloading of information and structural positive bias.

### **Portfolio Manager**

- Has focused on Macro & Market to deliver performance because of diminished research quality and capacity constraints.

# FINANCIAL TIMES

# Active managers fail to beat the market again

Two-thirds of US equity funds underperformed benchmarks over last 12 months, report shows

Active European funds deliver worst returns in more than 20 years UBS analysis for 2022 shows vehicles in aggregate delivered -4.13% of

# UK active managers fail to prove their mettle in a bear market

alpha after fees

Only half of stock pickers outperformed in 2020's volatile markets





# Automating investment decision making in capital markets

Emmalyn runs an active research process focused on the recognition of mispricing in securities with reference to company fundamentals.

Emmalyn identifies **unrecognised risk** opportunities, **replicating the behaviour** of an active asset manager's research process **systematically** and **without bias**.

Emmalyn's metadata is used by **quantitative investors**, to generate meaningful investment edge.



# Emmalyn identifies Unforeseen Risk in advance of analogue research processes, with precision & track record

# Coverage

3000+ Rated Issuers

7500+ Meta Universe

## **Ratings Downgrade**

81.1%

Emmalyn alerts users up to 6 months prior to an Agency Downgrade **Earnings Shock** 

### 77.3%

Emmalyn alerts users up to 6 months prior to an Earnings Shock



# Training Emmalyn – 8 years & USD \$15mn R&D

#### BLUE FIRE AI

Artificial Intelligence, Data Analytics and Statistical Models Listing Risk Outlook

#### Fundamentals Intelligence Stream

- Normalized Multi-Factor Models
- Standardised Multi-Factor Models

#### **Risk Events Intelligence Stream**

- Proprietary Querying domain contextualised for Capital Markets
- Proprietary Mandarin native Full Stack
- Elastic Search based Querying
- Word2Vec for Word Embeddings
- Proprietary Neural Network made up of hidden layer ReLU and Sigmoid
- Cosine Similarity
- DBSCAN
- Word Movers
- Intelligent Voting Scheme
- Random Forest Classification
- Simhash Algorithms
- Topic Vector Distance
- Sentence Movers
- tf-idf
- RNNs
- Attention based LSTM
- CNNs CRF-BERT
- CRF-DERI

#### Institutional Behavioural Intelligence Stream

- Noise vs Error Modelling
- Classification Models
- Investment Behavioural Profiling
- Loss Aversion Models
- Risk Parity
- Capital Allocation Models

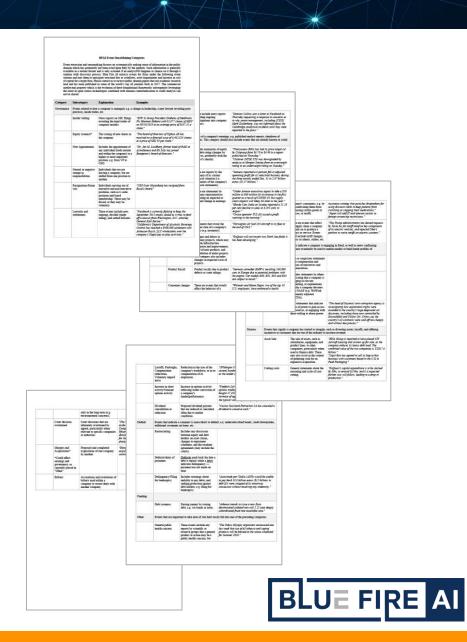
#### Market Intelligence Stream

- Z Score Modelling
- XGBoost Decision Trees
- Marginal Demand Supply Imbalance
- Proprietary Dynamic Beta Modelling
- Multi Factor Modelling
- Proprietary Regime Classification Modelling
- Abnormal Return Modelling
- Spectral Analysis
- OAS Modelling
- Proprietary Latent Dirichlet Allocation modelling for multi-dimensional integer series
- Nelsel-Siegel term structure modelling

#### Final Risk Output Layer: Deep Tech Decision Combinatorics Proprietary Model

#### Credit Stress Measure

- BlueFire AI proprietary modified KMV-Merton Model
- Proprietary Neider Mead algorithm optimised for credit data distributions
- EMR optimized high performance computing architecture for Numerical Solvers



# Emmalyn's forward-looking outputs

### **Credit Stress Measure:**

Intrinsic credit risk in an issuer expressed in percentage terms. Superior to incumbent Probability of Default (PoD) models:

- Calibrated to Asset Prices and highly sensitive for trading/investment PNL
  - [instead of Bankruptcies for PoD models relevant to Bank Loan Capital provisioning]
- Sector optimized [REITs, Banks, Insurance]
  - [instead of incumbent models which are sector generic and fail to anticipate regulatory intervention]
- High Performance Computing Implementation on scaled parallel infrastructure enabling sophisticated convergence algorithms
  - [instead of traditional infrastructures limiting to basic Newton methods eg: Moody's]

### **Risk Outlook:**

Industry's first forward-looking categorization of unforeseen risk in Credit and Equity. AI decision modelling incorporating:

- Fundamental Analysis of financial statements to identify dissonance between operational realities and earnings communicated by management
- Event analysis from publicly available information including professional media, regulatory reporting, investor communications, etc. to identify potential earning shocks
- Behavioral Analysis of buy side positioning and sell side analyst forecasts to identify informed investors anticipate risk increase vs the 'Street'
- Stock & Bond Price Analysis to identify moments when idiosyncratic risk begins to drive price i.e. when the market starts responding to the preciously unforeseen risk



# "Emmalyn's workflow compresses fundamental analysis from hours to minutes..." CIO Tier 1 AM

**Cross Capital Structure Report** 

#### Push to Action Email

#### ▶ Send 🔋 Attach 🗸 📋 Discard \cdots

Altice USA, Inc. Class A	2022-08-09	Cable/Satellite TV	High	High	-8.15
Coinbase Global, Inc. Class A	2022-08-08	Packaged Software	Medium	Neutral	-27.09
Scor SE	2022-08-01	Multi-Line Insurance	Medium	High	-7.12
Neinor Homes SA	2022-06-15	Real Estate Development	Medium	Medium	-10.24

 Ubiadri : Low : Weak top-line growth outlook given ongoing games delays and decline in net bookings, cash flows are under building pressure, leverage (Net debt/Market cap) reached record highs, asset values have more than halved this year, all could translate into a credit downgrade to BB. Watch out for possible corporate restructuring as Tencent now seeks to become its single largest shareholder.

 PostVL.NV: Medium: Downgraded profit outlook due to the inflationary spiral and lower parcel volumes. Leading analysts also expect weak numbers throughout 2022-23; asset values are under building pressure and leverage put the company in a weaker position vs peer, this will lead to a constrained credit environment with a possibility or a capital increase]

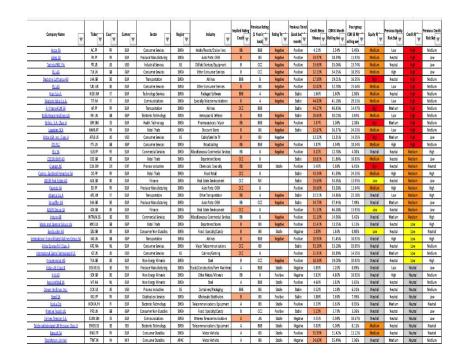
#### New Risk: Now on BFAI Watchlist

Company Name	Region	Sector	Implied Rating Credit	Rating Trend	Credit Stress Measure	Equity Risk	Credit Risk	
Foot Locker, Inc.	US	Retail Trade	В	Negative	14.19%	Medium	High	
Chewy, Inc. Class A	US	Retail Trade	BB	Negative	3.52%	Low	Medium	

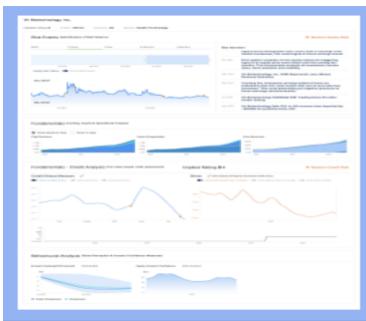
#### Foot Locker, Inc. Equity Risk : Medium Credit Risk : High

#### Equity Kisk : Weatown Creak Kisk : High Lagging revenue growth and high leverage will weigh on future cash flows, which along with the CEO's departure, puts further pressure on asset prices.

Foot Locker faces two main challenges in the near-term: a slowdown in revenues due to lower discretionary spending and weakening market share considering competition with Nike in direct-to-consumer sales channels. In August 2022, the CEO stepped down, which may sound alarming to current shareholders. Sales growth has been downgraded from 7% to 5%, and the near-term profitability is likely to remain weak as Foot Locker stays prone to supply chain headwinds. This is corroborated by an increase in the 12-month trailing yield, signifying higher risk in earnings outload. Cash generation, a spread between net operating cash flows and net income, is trending at all-time lows, suggesting a cash flow drawdown. This starts translating into a liquidity problem, a CashCurrent Assest ratio is also at extreme levels. With its current cash position, it's not surprising that the company starts borrowing itself out. Debt coverage (Debt/EBIT) is trending higher, suggesting a test how all debt servicing problem could *if* become acute if EBIT slows down. Looking at the credit side, asset values almost halved this year. SUD3 value of leverage is substantially elevated which is pushing the



### Comprehensive Risk Report Per Company





# Emmalyn's Metadata powering Systematic Edge

bbs   bbs< <th>A</th> <th>В</th> <th>С</th> <th>D</th> <th>E</th> <th>F</th> <th>G</th> <th>н</th> <th>I</th> <th>J</th> <th>К</th> <th>L</th> <th>М</th> <th>N</th> <th>0</th> <th>Р</th>	A	В	С	D	E	F	G	н	I	J	К	L	М	N	0	Р
17/2/222   000002   Chima Varke Co, Lut Class A   Finance   OV   0.06424   0.05589   0.14213   0.07711   0.073399   0.086424     17/2/222   00050 IS   000500 IS   000500 IS   000500 IS   0.005624   0.00529   A     17/2/222   00050 IS   000500 IS   0000500 IS   000021	bbį	bg_ticker	bfai_ticker	proper_name	sector	iso_country	currency	csm	market_value	leverage	volatility	6month_csm	equity_peer_csm	credit_peer_csm	implied_rating	risk_outlook
17/j.222   000270 KS   68 Corp.   Consumer Durables   FR   HW   0.000589   0.000274   0.020274   0.000274   <	/5/2023 000	00001 CH	000001.CH	Ping An Bank Co. Ltd. Class A	Finance	CN	CNY	0.050926	76118420502	0.589047	0.151301	0.052198	0.014921	0.010638	A	Neutral
T/s/222   Constraint   Electronic Technology   RR   KWW   0.005827   0.22773   0.00227   0.22773   0.00227   0.20229   A     T/s/2023   000050   00072050   KOW   0.00999   423844456   0.21713   0.244646   0.0100567   0.020297   0.020297   0.020297   0.020297   0.020297   0.020297   0.020297   0.0201667   0.0201667   0.0201667   0.0201667   0.0201667   0.0201667   0.0201667   0.02017   0.020297   0.020297   0.020167   0.020167   0.020291   0.010657   0.02017   0.0105812   0.013739   0.0021649   0.0106161   0.02019   0.0105812   0.013739   0.026143   0.020291   0.0106121   0.021271   0.017969   0.016415   0.0101781   0.002179   0.046415   0.0101781   0.002179   0.046415   0.0101781   0.0102172   0.02179   0.026673   0.01774   0.021714   0.010372   0.020171   0.017951   0.01774   0.020171   0.017951   0.01774   0.020177   0.01774   0.020177 </td <td>/5/2023 000</td> <td>00002 CH</td> <td>000002.CH</td> <td>China Vanke Co., Ltd Class A</td> <td>Finance</td> <td>CN</td> <td>CNY</td> <td>0.08442</td> <td>48078730274</td> <td>0.59457</td> <td>0.174213</td> <td>0.07711</td> <td>0.073599</td> <td>0.086415</td> <td>BBB</td> <td>Neutral</td>	/5/2023 000	00002 CH	000002.CH	China Vanke Co., Ltd Class A	Finance	CN	CNY	0.08442	48078730274	0.59457	0.174213	0.07711	0.073599	0.086415	BBB	Neutral
T/s/222 200720 K5   D00723 K8   Hynords Engineering & Construct Industrial Services   PR   KW   0.0099   0.23944650   0.02332 0.00390   0.003923 0   0.03923 0     T/s/2022 201040 K5   001040 K5   Cl corporation   Consumer Non-Durabes   R   KW   0.08203 3   246435445   0.0212 0.033512   0.033512   0.007459 B   0.007459 B     T/s/2022 20124 CH   00142 CH   Bank of Ningbo Ca, Ld Cas A   Fransportation   CN   CN   OV   0.04203 3   2436212060   0.04338 B   0.215701   0.040503   0.012783   0.002219 A     T/s/2022 20123 CH   0.03237 CH   MAURA Technology Group Ca LE (Producer Manufacturing   CN   CN   OV   0.02467 T   34395920000   0.044593   0.040250   0.01381 BB     T/s/2022 201243 CH   0.03237 CH   MAURA Technology Group Ca LE (Producer Manufacturing CN   CN   OV   0.02267 T   3409592000   0.045492   0.02477   0.040051   0.044527   0.044602   0.02749   0.02017 T   0.003518   0.03511 B   0.03747 C   3409592040   0.03512   0.05737 B   0.04224	/5/2023 000	00270 KS	000270.KS	Kia Corp.	Consumer Durables	KR	KRW	0.000598	30618009142	0.141674	0.262964	0.002913	0.003474	0.175382	BBB	Neutral
7/5/202   00988.01   Wullanger Whin Ca, Ltd. Class A Consumer Non-Durables (N   0 Y   0 9199873238   0.002246   0.039312   0.013734   0.003526   0.076459 B     7/5/202   01979 OH   OTB370 OF   Consumer Non-Durables (N   0.04   0.039312   0.039312   0.039312   0.039312   0.039312   0.039312   0.039312   0.039312   0.039312   0.039312   0.039312   0.039312   0.039313   0.020931   0.039312   0.039312   0.039312   0.039312   0.039312   0.039312   0.039312   0.00005   0.03938   BAB     7/5/202   0.02475 OH   Luckhare Precision Industry Co. Li Cectornic Technology   OH   0.044693   3493279   0.31938   0.002174   0.020371   0.00005   0.03932   0.020171   0.00005   0.03932   0.020171   0.00005   0.03932   0.020171   0.00005   0.00383   A   7/5/202   0.020476   Human Steet Consumer Number Nu	/5/2023 000	00660 KS	000660.KS	SK hynix Inc.	Electronic Technology	KR	KRW	0.005082	77589701116	0.193277	0.277758	0.006287	0.020624	0.003299	A	Neutral
17/s/202   00100 KS   Clossport   Consumer Non-Duralies   R   KWW   0.00273   0.003212   0.012753   0.006326   0.076459   0.076459   0.076459   0.076459   0.076459   0.076459   0.076459   0.076459   0.076459   0.076459   0.076459   0.076459   0.076459   0.076459   0.076459   0.07759   0.076459   0.07759   0.076459   0.07759   0.076459   0.07759   0.076459   0.07759   0.076459   0.07759   0.076459   0.07759   0.07759   0.064693   A     71/2/202 00223 (CH 002320.41   Nukh A Technology Group Catt Producer Mandraturing   N   CVY   0.004679   300320501   0.03928   0.064224   0.040605   0.040012   0.004274   0.004077   0.004274   0.004274   0.0040274   0.0040274   0.001725   0.001725   0.001725   0.001725   0.07174   0.004274   0.0040274   0.0040274   0.00172   0.002174   0.001724   0.00172   0.00172   0.00182   0.05213   0.002248   0.003328   0.00172   0.00182	/5/2023 000	00720 KS	000720.KS	Hyundai Engineering & Construct	Industrial Services	KR	KRW	0.00999	4239441650	0.21713	0.284496	0.010369	0.039326	0.009233	BB	Neutral
17/s/202 001979 CH   Olina Mechanic Shekus Industri Finance   CN   CV   0.0283/20   0.0379117   0.178252   0.074096   0.073599   0.086413 BBA     17/s/202 00232 CH   0.0232 CH   0.0232 CH   0.0232 CH   0.0232 CH   0.032370   0.038781   0.002192   0.032370   0.038781   0.00219   0.0032370   0.03887   0.002170   0.004693   0.04843   BBA     17/s/202 00232 CH   0.0237.01   Husha Technology Grupo Ch teChnology CN Ch Chocker Mandiculung   CN   CV   0.004797   0.002877   0.000877   0.000877   0.000877   0.000877   0.000877   0.000877   0.000877   0.000197   0.000877   0.000877   0.000787   A     17/s/202 00254 CH   0.02446   Mayan Fodd Co, Lid. Gass A   Consumer Durables   CN   CV   0.0045754   6.027387   0.027496   0.03932   0.049241   0.005424   A     17/s/202 00580 CS   0.03900 CS   Krowa N rules Co, Ltd.   Tarsportation   CN   CV   0.004574   Mayan Codd Co, Cu   Codd Codd Codd Codd Codd Codd Codd Cod	/5/2023 000	00858 CH	000858.CH	Wuliangye Yibin Co., Ltd. Class A	Consumer Non-Durables	CN	CNY	0	91998732538	0.002246	0.399019	0	0.001764	0	AA	Neutral
71/5/2023 00244 CH   02242 CH   Bank of Ningbe Ca, Ltd. Clask A. Finance   CN   0.00478   30242206   0.045439   0.215701   0.0046933   0.018733     71/5/2023 002371 CH   002371 CH   NAUKA Clask A. Transportation   CN   CNV   0.004783   0.018210   0.018211   0.018211   0.018211   0.018211   0.018211   0.018211   0.018211   0.018211   0.018211   0.018211   0.018211   0.018311   0.004813   0.002017   0.000831   888     71/5/2023 00294 CH   023940 CH   RogetAmprillimited Class A. Consumer Durables   CN   CNV   0.004666   9492129897   0.540166   0.021743   0.005182   0.054287   A     71/5/2023 00391 CK   0039100 S   Korsan At Lines Co., Ltd. Class A. Process Inductries   CN   CNV   0.004564   9199169421   0.014571   A 001511   180   0.015111   180   0.015111   180   0.015111   180   0.015111   180   0.015111   180   0.015111   180   0.015111   180   0.015111   180   0.015111   180 <td>/5/2023 003</td> <td>01040 KS</td> <td>001040.KS</td> <td>CJ Corporation</td> <td>Consumer Non-Durables</td> <td>KR</td> <td>KRW</td> <td>0.010657</td> <td>12466354445</td> <td>0.821</td> <td>0.038512</td> <td>0.013753</td> <td>0.006326</td> <td>0.076459</td> <td>В</td> <td>Neutral</td>	/5/2023 003	01040 KS	001040.KS	CJ Corporation	Consumer Non-Durables	KR	KRW	0.010657	12466354445	0.821	0.038512	0.013753	0.006326	0.076459	В	Neutral
7/s/2023 00232 CH   02352 CH <td>/5/2023 001</td> <td>01979 CH</td> <td>001979.CH</td> <td>China Merchants Shekou Industri</td> <td>Finance</td> <td>CN</td> <td>CNY</td> <td>0.082093</td> <td>33648503740</td> <td>0.579117</td> <td>0.179825</td> <td>0.074096</td> <td>0.073599</td> <td>0.086415</td> <td>BBB</td> <td>Elevated 1</td>	/5/2023 001	01979 CH	001979.CH	China Merchants Shekou Industri	Finance	CN	CNY	0.082093	33648503740	0.579117	0.179825	0.074096	0.073599	0.086415	BBB	Elevated 1
7/5/2023 002371 CH   02371 CH   0404005   0.001358 BBB     7/5/2023 00249 CH   002475 CH	/5/2023 002	02142 CH	002142.CH	Bank of Ningbo Co., Ltd. Class A	Finance	CN	CNY	0.044476	42369212069	0.435439	0.215701	0.040593	0.018783	0.022192	A	Neutral
7/5/2023   002475 CH   002475 CH   002475 CH   002475 CH   002476 CH   00214 CH   0014	/5/2023 002	02352 CH	002352.CH	S.F. Holding Co., Ltd. Class A	Transportation	CN	CNY	0.00748	39014703528	0.159327	0.318878	0.007109	0.046493		Α	Neutral
7/5/2023   OctA933 CH   Rongehenge Petrochemical Co., L1 Sixtibution Services   CN   CNY   OutA9669   24992173997   OutA9650   OutA9501   OutA9502   OutA9503   OutA95033   OutA950	/5/2023 002	02371 CH	002371.CH	NAURA Technology Group Co Ltd	Producer Manufacturing	CN	CNY	0.002091	23102329061	0.016821	0.572331	0.004827	0.040005	0.001358	BBB	Neutral
7/5/2023   002594 CH   002594 CH   002594 CH   002594 CH   002594 CH   002592 CH   0.004287   A     7/5/2023   003490 KS   004201 KS   004201 KS   004201 KS   00420 KS   00421 KS   00420 KS   00421 KS   00420 KS   00421 KS	/5/2023 002	02475 CH	002475.CH	Luxshare Precision Industry Co. L	Electronic Technology	CN	CNY	0.024767	34309592091	0.13928	0.408122	0.022749	0.020177	0.008031	BBB	Elevated 1
7/5/2023 002714 CH Muyaan Foods Co., Ltd. Class A. Process Industries CN CN 0.03032 0.042241 0.007687 A   7/5/2023 003490 KS Korean AIr Lines Co., Ltd. Transportation KR KRW 0.065312 996822440 0.663818 0.137344 0.027196 0.045038 0.016111 BB   7/5/2023 005380 KS 005380 KS 005380 KS 005380 KS 005380 KS 0.005314 0.002147 A   7/5/2023 005380 KS 005380 KS 005380 KS 0.005313 0.0005314 0.0005313 0.0005314 0.0003531 0.0003511 0.0002561 0.000351 0.0003511 0.0002561 0.0003511 0.0022104 (B 0.001351 0.0022104 (B 0.00571 9552551080 0.0039314 <td< td=""><td>/5/2023 002</td><td>02493 CH</td><td>002493.CH</td><td>Rongsheng Petrochemical Co., Lt</td><td>Distribution Services</td><td>CN</td><td>CNY</td><td>0.104669</td><td>34992173997</td><td>0.540166</td><td>0.217413</td><td>0.103362</td><td>0.058739</td><td></td><td>Α</td><td>Elevated 1</td></td<>	/5/2023 002	02493 CH	002493.CH	Rongsheng Petrochemical Co., Lt	Distribution Services	CN	CNY	0.104669	34992173997	0.540166	0.217413	0.103362	0.058739		Α	Elevated 1
7/5/2023 004490 KS 003490 KS 004590 KS 004503 KS 005380 KS 004503 KS 005380 KS 0005513 0.003573 B 0.003513 0.003544 A A   7/5/2023 005400 KS 006400 KS Samsung Electronic Technology KR KRW 0.003513 0.20528 C 0.003756 0.071167 0.001331 A   7/5/2023 005400 KS 006400 KS Samsung Electro-Mechanics Co., Lid Electronic Technology KR KRW 0.00277 0.0717436 0.02587 0.00391 A 0.002513 0.002513 0.002187 0.001311 B 0.00238 A 0.00513 B 0.00561 B 0.00310 A 0.00238 A 0.00313 A 0.003131 A 0.00238 A 0.00313 A 0.00313 A 0.00313 A 0.00313 A 0.002187 0.00131 A 0.002187 0.00131 A 0.002187 0.00313 A 0.002187 0.00314 B 0.002187	/5/2023 002	02594 CH	002594.CH	BYD Company Limited Class A	Consumer Durables	CN	CNY	0.002648	69189169242	0.043685	0.459761	0.009182	0.054287		A	Neutral
7/5/2023   004020 KS   Hyundai Xetel Company   Non-Energy Minerals   KR   KRW   0.0635212   9008522480   0.66318   0.137384   0.071108   0.034727   A     7/5/2023   005380 KS   005380 KS   005380 KS   005380 KS   0.03131   0.003678   0.03131   0.003678   0.03131   0.00368 B     7/5/2023   005390 KS   005380 KS   005380 KS   005380 KS   005380 KS   0.003131   0.00268 B     7/5/2023   006800 KS   MIRAE ASET SECURITIES CO., LF Fanace   KR   KRW   0.00277   307737436   0.26522   0.003131   0.00266     7/5/2023   006870 KS   006870 KS   MIRAE ASET SECURITIES CO., LF Finance   KR   KRW   0.00277   307737436   0.26532   0.214544   0.002187   0.003401   0.02267   0.00361   0.02567   0.003614   0.02667   0.02167   0.03161   0.02624   0.021478   BB   7/5/2023   00540 KS   00870 KS   08780 KS   08800 KS   08800 KS   08800 KS   08800 KS   08800 KS   08800 KS </td <td>/5/2023 002</td> <td>02714 CH</td> <td>002714.CH</td> <td>Muyuan Foods Co., Ltd. Class A</td> <td>Process Industries</td> <td>CN</td> <td>CNY</td> <td>0.030777</td> <td>41356537845</td> <td>0.218672</td> <td>0.338057</td> <td>0.030332</td> <td>0.042241</td> <td>0.007687</td> <td>A</td> <td>Elevated 1</td>	/5/2023 002	02714 CH	002714.CH	Muyuan Foods Co., Ltd. Class A	Process Industries	CN	CNY	0.030777	41356537845	0.218672	0.338057	0.030332	0.042241	0.007687	A	Elevated 1
7/5/2023   004020 KS   Hyundai Motor Company   Non-Energy Minerals   KR   KRW   0.063521   9008522480   0.66318   0.137384   0.071108   0.038475   A     7/5/2023   005380 KS   003801 0.02264   0.022148   002148   002148   002148   003214   0.02664   0021481 BB   00550 KS	/5/2023 003	03490 KS	003490.KS	Korean Air Lines Co., Ltd.	Transportation	KR	KRW	0.020111	12120175411	0.469775	0.17174	0.027936	0.045038	0.016111	BB	Neutral
7/5/2023   005830 KS   005830 KS   005830 KS   005830 KS   005930 KS   000127   000127   0002577   0002177   0021267   0001074   00202767   000121   0.03987   0.000704   0.020264   0.021216   BB     7/5/2023   009540 KS   009540 KS   009540 KS   009540 KS   009540 KS   009540 KS   0005631   0.00074   0.020624   0.02176   0.00174   0.020624   0.021648   0.001276   0.010105 KS   0.00074   0.020624   0.021248   BB   7/5/2023 010130 KS   10130 KS   Korea Zinc Co, Ltd   None-fnergy Minera1s   KR   KRW	/5/2023 004	04020 KS	004020.KS	Hyundai Steel Company	Non-Energy Minerals	KR	KRW	0.065321	9908522480	0.663818	0.137384	0.071108		0.038757	В	Elevated 3
7/5/2023   005930.KS   Samsung Electronics Co., Ltd.   Electronic Technology   KR   KRW   0.00796   0.215264   0   0.003131   0.042885   AA     7/5/2023   006400.KS   Samsung SDI Co., Ltd   Electronic Technology   KR   KRW   0.000797   0.325252   0.000391   0.02567   0.00164   BB     7/5/2023   008770 KS   009710.KS   009710.KS   0.002177   307373456   0.26567   0.00391   0.002677   0.00391   0.002147   BBB     7/5/2023   009540.KS   009540.KS   KOREA.SHIPUILDING Co., Ltd. Consumer Services   KR   KRW   0.00373   3325281098   0.109012   0.301987   0.00074   0.026624   0.021478   BBB     7/5/2023   009540.KS   KOREA.SHIPUILDING CoRPORA Electronic Technology   KR   KRW   0.0075577   935251908   0.026614   0.0166212   0.047514   BB     7/5/2023   010140.KS   Samsung Heavy Industries Co., Lt   Now-Energy Minerals   KR   KRW   0.001525   6216495345   0.296746   0.239204	/5/2023 005	05380 KS	005380.KS	Hyundai Motor Company	Consumer Durables	KR	KRW	0.013034	90089376856	0.655105	0.097935	0.024128	0.003474		A	Neutral
7/5/2023   006400 KS   Samsung SDI Co., Ltd   Electronic Technology   KR   KRW   0.000946   f14/140645166   0.029455   0.322522   0.000756   0.071167   0.001033   A     7/5/2023   006800 KS   MIRAE ASSET SECURTIES CO., L'Inance   KR   KRW   0.000727   307037445   0.023277   0.003991   0.02267   0.00104   BB     7/5/2023   009510 KS   009510 KS   Samsung Electro-Mechanics Co., Electronic Technology   KR   KRW   0.000774   0.020624   0.021478   BB     7/5/2023   009830 KS   009830 KS   009830 KS   009830 KS   009830 KS   009830 KS   000704   0.020624   0.020327   BB     7/5/2023   00130 KS   Korea Zinc Co., Ltd   Non-Energy Minerals   KR   KRW   0.003524   0.296740   0.028231   0.020624   0.020327   BB     7/5/2023   010130 KS   Korea Zinc Co., Ltd   Non-Energy Minerals   KR   KRW   0.003524   0.296744   0.020474   0.020421   0.040481   BB <t< td=""><td>/5/2023 005</td><td>05830 KS</td><td>005830.KS</td><td>DB INSURANCE CO. LTD</td><td>Finance</td><td>KR</td><td>KRW</td><td>0.005513</td><td>3139218479</td><td>0.209531</td><td>0.268263</td><td>0.005513</td><td>0.005513</td><td>0.000368</td><td>В</td><td>Neutral</td></t<>	/5/2023 005	05830 KS	005830.KS	DB INSURANCE CO. LTD	Finance	KR	KRW	0.005513	3139218479	0.209531	0.268263	0.005513	0.005513	0.000368	В	Neutral
7/5/2023   006800 KS   MIRAE ASSET SECURITIES CO., L'Finance   KR   KRW   0.004725   39144642193   0.827   0.023927   0.003991   0.02567   0.00164   BB     7/5/2023   008770 KS   008770 KS   008770 KS   000715 KS   008710 KS   0.002187   0.002187   0.002187   0.002187   0.002187   0.002187   0.0021478   BBB     7/5/2023   009540 KS   KOREA SHIPBULDING & OFFSHK Producer Manufacturing   KR   KRW   0.007379   35253108   0.019014   0.020242   0.024178   BBB     7/5/2023   00130 KS   KOREA SHIPBULDING S OFFSHK Producer Manufacturing   KR   KRW   0.007379   935243230   0.093191   0.304069   0.00006   0.001481   BBB     7/5/2023   010140 KS   Samsung Heavy Industries Co., LI   Producer Manufacturing   KR   KRW   0.001253   262139476   0.05020   0.414968   0.001726   0.166212   0.04343   BB     7/5/2023   011020 KS   01050 KS   01050 KS   0.0050 KS   0.0050 KS   0.00176 K	/5/2023 005	05930 KS	005930.KS	Samsung Electronics Co., Ltd.	Electronic Technology	KR	KRW	0	3.33E+11	0.01796	0.215264	0	0.03131	0.042885	AA	Neutral
7/5/2023   008770 KS   008770 KS   008770 KS   008770 KS   008770 KS   008770 KS   0002187   0.002187   0.002187   0.002187   0.002187   0.002187   0.002187   0.002187   0.002187   0.002187   0.002187   0.002187   0.002187   0.002187   0.002187   0.002187   0.002070   0.002187   0.002187   0.002070   0.002640   S008240   S008240   S008240   S008240   S008240   S008240   S008231   0.002064   0.002217   BB     7/5/2023   000930 KS   009830 KS   009830 KS   Non-Energy Minerals   KR   KR   KR   0.00227   9854175378   0.376731   0.29407   0.083231   0.020644   0.020327   BB     7/5/2023   010104 KS   Samsumg Heavy Industries Co., LIP oducer Manufacturing   KR   KRW   0.001553   2621308476   0.05302   0.414968   0.001726   0.166212   0.0343 B     7/5/2023   010107 KS   011070 KS   011070 KS   011070 KS   011070 KS   011070 KS   011070 KS   0.106212	/5/2023 006	06400 KS	006400.KS	Samsung SDI Co., Ltd	Electronic Technology	KR	KRW	0.000946	41140645166	0.09455	0.325252	0.000756	0.071167	0.001033	A	Neutral
7/5/2023 009150 KS 009150 KS 009150 KS 009150 KS 009150 KS 009150 KS 009540 KS 0002644 0.020624 0.021478 BBB   7/5/2023 009540 KS 009540 KS 009540 KS 0005540 KS 000764 0.020624 0.026149 0.036314 0.166212 0.047514 BB   7/5/2023 010130 KS 0010130 KS 010130 KS 010130 KS 010130 KS 0000624 0.020327 BB   7/5/2023 010140 KS 010130 KS 010140 KS Samsung Heavy Industries Co., LI Producer Manufacturing KR KRW 0.001253 2621499345 0.029444 0.166212 0.047514 BB   7/5/2023 010140 KS 010140 KS 010140 KS 010140 KS annotacturing KR KRW 0.001553 262149345 0.299746 0.339204 0.020414 0.166212 0.047514 BB   7/5/2023 010140 KS 010950 KS 010120 KS 101070 KS 010950 KS 010950 KS 010950 KS 010950 KS 010170 KS LG Innotek Co., Ltd Producer Manufacturing KR KRW 0.021763 6139325459 <t< td=""><td>/5/2023 006</td><td>06800 KS</td><td>006800.KS</td><td>MIRAE ASSET SECURITIES CO., L</td><td>Finance</td><td>KR</td><td>KRW</td><td>0.004725</td><td>39144642193</td><td>0.827</td><td>0.023927</td><td>0.003991</td><td>0.02567</td><td>0.00164</td><td>BB</td><td>Elevated 2</td></t<>	/5/2023 006	06800 KS	006800.KS	MIRAE ASSET SECURITIES CO., L	Finance	KR	KRW	0.004725	39144642193	0.827	0.023927	0.003991	0.02567	0.00164	BB	Elevated 2
7/5/2023 009540 KS 000540 KS 000541 KR KR KRW 0007577 9854175378 0.376731 0.29407 0.083231 0.020624 0.020327 BB   7/5/2023 010130 KS 010140 KS 031040 KS 010140 KS 0340659 0.000641 0.166212 0.047514 BB   7/5/2023 010620 KS 010620 KS 010620 KS 010620 KS 010620 KS 010620 KS 0.0166212 0.047514 BB   7/5/2023 011070 KS 0.017649 0.357735 0.027653 0.022665 0.008924 BB   7/5/2023 0111700 KS 011170 KS Lintotehemical Corp. Process Industri	/5/2023 008	08770 KS	008770.KS	HOTEL SHILLA CO., LTD.	Consumer Services	KR	KRW	0.002977	3070737436	0.266532	0.214544	0.002187	0.03401	0.022104	BB	Neutral
7/5/2023 009540 KS 000540 KS 000541 KS 000550 KS 000449 BS 0001726 0.02465 0.008924 BS 000170 KS 01170 KS			009150.KS		Electronic Technology	KR	KRW	0.000773	9352581098		0.301987	0.000704	0.020624	0.021478	BBB	Neutral
7/5/2023   009830 KS   000800 KS   000830 KS   000330 KS   000302 C   000304 KS   000302 C   000304 KS   000302 C   0.000441   0.016212   0.004451 BBB     7/5/2023   01050 KS   010950 KS   010950 KS   010950 KS   010170 KS   G10070 KS   G101070 KS   G101070 KS   G101070 KS   G101070 KS   G101070 KS   G10070			009540.KS	-		KR				0.290942	0.261499					Neutral
7/5/2023 010140 KS 010200 KS 011700 KS	/5/2023 009	09830 KS	009830.KS	HANWHA SOLUTIONS CORPORA	Electronic Technology	KR	KRW	0.076577	9854175378	0.376731	0.29407	0.083231	0.020624	0.020327	BB	Neutral
7/5/2023 010620 KS 010620 KS 010620 KS 010620 KS 0.010726 0.016212 0.0343 BB   7/5/2023 010950 KS 010950 KS 010950 KS 010950 KS 0.01070 KS 010950 KS 0.01070 KS 0.01070 KS 0.01070 KS 0.01070 KS 0.01070 KS 0.023665 0.001999 BB   7/5/2023 011070 KS 011070 KS LG Innotek Co., Ltd Electronic Technology KR KRW 0.021353 6819325459 0.177849 0.357735 0.022665 0.008924 BB   7/5/2023 011170 KS 011170 KS Lotte Chemical Corp. Process Industries KR KRW 0.04077 10298647785 0.464781 0.0107415 0.042121 0.10928 BB   7/5/2023 01170 KS 01170 KS 011700 KS 011700 KS 011700 KS 011700 KS 0.003165 0.003166 0.03721 0.00322 0.02266 BB   7/5/2023 011790 KS 011790 KS 011790 KS 011790 KS 011790 KS 011790 KS 010506 KS 0.050322 0.080129 B   7/5/2023 011790 KS 011790 KS 011790 KS 011790 KS	/5/2023 010	10130 KS	010130.KS	Korea Zinc Co., Ltd.	Non-Energy Minerals	KR	KRW	0.000382	8189432300	0.093191	0.304069	0.0006		0.001481	BBB	Elevated 2
7/5/2023   010950 KS   010950 KS   010950 KS   010950 KS   0.010499   BB     7/5/2023   011070 KS   011070 KS   011070 KS   011070 KS   011070 KS   0.023665   0.001499   BB     7/5/2023   011170 KS   011170 KS   011170 KS   011170 KS   011170 KS   011170 KS   0.01170 KS   0.023665   0.008924   BB     7/5/2023   011170 KS   011170 KS   Lotte Chemical Corp.   Process Industries   KR   KRW   0.004077   10298647785   0.464781   0.201854   0.03131   0.043212   0.00926   BB     7/5/2023   011270 KS   011780 KS   011780 KS   011790 KS   011790 KS   011790 KS   0.050322   0.080129   B     7/5/2023   011230 KS   011790 KS   011790 KS   011790 KS   011790 KS   011790 KS   0.037217   BB     7/5/2023   012330 KS   012330 KS   012330 KS   0123454   0.037217   BBB     7/5/2023   01560 KS   Korea Electric Power Corporatior   Ullities	/5/2023 010	10140 KS	010140.KS	Samsung Heavy Industries Co., L	Producer Manufacturing	KR	KRW	0.012278	6226495345	0.296746	0.239204	0.020414	0.166212	0.047514	BB	Neutral
7/5/2023   010950 KS   010950 KS   010950 KS   010950 KS   0.010499   BB     7/5/2023   011070 KS   011070 KS   011070 KS   011070 KS   011070 KS   0.023665   0.001499   BB     7/5/2023   011170 KS   011170 KS   011170 KS   011170 KS   011170 KS   011170 KS   0.01170 KS   0.023665   0.008924   BB     7/5/2023   011170 KS   011170 KS   Lotte Chemical Corp.   Process Industries   KR   KRW   0.004077   10298647785   0.464781   0.201854   0.03131   0.043212   0.00926   BB     7/5/2023   011270 KS   011780 KS   011780 KS   011790 KS   011790 KS   011790 KS   0.050322   0.080129   B     7/5/2023   011230 KS   011790 KS   011790 KS   011790 KS   011790 KS   011790 KS   0.037217   BB     7/5/2023   012330 KS   012330 KS   012330 KS   0123454   0.037217   BBB     7/5/2023   01560 KS   Korea Electric Power Corporatior   Ullities	/5/2023 010	10620 KS	010620.KS	Hyundai Mipo Dockvard Co., Ltd	Producer Manufacturing	KR	KRW	0.001553	2621308476	0.05302	0.414968	0.001726	0.166212	0.0343	BB	Neutral
7/5/2023 011070 KS 011170 KS 011770 KS 011170 KS 000322 0.08212 0.08212 0.08212 0.08212 0.08212 0.08					-											Neutral
7/5/2023 011170 KS 011200 KS 011700 KS 0103322 0.008012 0.008012 0.008012 0.008012 0.008012 0.008012 0.008012 0.008012 0.008012 0.008012 0.008012 0.008012 0.008012 0.008012 0.00801													0.023665			Neutral
7/5/2023 011200 KS 011200 KS HMM CO.,LTD Transportation KR KRW 0.087835 1027769797 0.285725 0.377873 0.110415 0.043212 0.10926 BB   7/5/2023 011780 KS 011780 KS Kumho Petrochemical Co., Ltd. Process Industries KR KRW 0.01376 3532131031 0.155567 0.355332 0.022445 0.050322 0.080129 B   7/5/2023 011790 KS 011790 KS SKC Co., Ltd. Process Industries KR KRW 0.0077897 4657410897 0.338526 0.32248 0.080129 D.030322 0.080129 B   7/5/2023 012330 KS 012330 KS 012330 KS 013760 KS 015760 KS Korea Electric Power Corporatio Utilities KR KRW 0.001157 66047395241 0.828 0.04288 0.02017 0.02948 BB   7/5/2023 01860 KS 01860 KS Samug Securities Co., Ltd. Finance KR KRW 0.00787 17112942873 0.821 0.002472 0.002667 0.021137 BB   7/5/2023 018260 KS 020150 KS 02									10298647785	0.464781	0.201854					Neutral
7/5/2023 011780 KS 011790 KS 0105012 0.000120 0.000120 0.000120 0.000120 0.000120 0.000121 0.000121 0.000121 0.000121 0.000121 0.000121 0.000121 0.000121 0.001213 0.001213 0.01213 0.01213 0.01213 0.01213 0.01213 0.01213																Elevated 2
7/5/2023 011790 KS 012330 KS 013760 KS 015760 KS Korea Electric Power Corporatior Utilities KR KRW 0.00186 18473911221 0.124271 0.025571 0.000918 0.037217 BBB   7/5/2023 015360 KS 016360 KS Samsung Securities Co., Ltd. Finance KR KRW 0.00787 7112942873 0.821 0.037208 0.008861 0.02567 0.021137 BB   7/5/2023 020150 KS 0.006711 BB																Neutral
7/5/2023 012330 KS 012330 KS Hyundai Mobis Co., Ltd Producer Manufacturing KR KRW 0.000186 18473911221 0.124271 0.255714 0.000918 0.037217 BBB   7/5/2023 015760 KS 015760 KS Korea Electric Power Corporatio Utilities KR KRW 0.019157 66047395241 0.828 0.04288 0.02017 0.029948 BB   7/5/2023 016360 KS 016360 KS Samsung Securities Co., Ltd. Finance KR KRW 0.00787 17112942873 0.821 0.037208 0.008861 0.02567 0.021137 BB   7/5/2023 018260 KS 018260 KS SAMSUNG SDS CO., LTD. Technology Services KR KRW 0.004088 2127638651 0.05447 0.24433 1.00E-06 0.015199 0.016768 BBB   7/5/2023 02150 KS 02150 KS 02150 KS 02150 KS COWAY Co., LTD. Producer Manufacturing KR KRW 0.002472 3376751674 0.228481 0.002273 0.017866 0.006711 BB   7/5/2023 021240 KS 02140 KS 02140 KS 02353																Elevated 2
7/5/2023 015760 KS 015760 KS Korea Electric Power Corporatio Utilities KR KRW 0.019157 66047395241 0.828 0.04288 0.02017 0.029948 BB   7/5/2023 016360 KS 016360 KS Samsung Securities Co., Ltd. Finance KR KRW 0.00787 17112942873 0.821 0.037208 0.008861 0.02567 0.021137 BB   7/5/2023 018260 KS 018260 KS 018260 KS SAMSUNG SDS CO., LTD. Technology Services KR KRW 0.007878 0.05447 0.24433 1.00E-06 0.015199 0.016768 BBB   7/5/2023 020150 KS 020150 KS 020150 KS 020150 KS 020150 KS 020150 KS 0.002472 3376751674 0.228861 0.022133 0.001312 0.009138 0.033467 BB   7/5/2023 023530 KS 0.009138 0.033467 BB   7/5/2023 02850 KS 02850 KS 02850 KS 02850 KS 02850 KS 028050 KS 028050 KS																Neutral
7/5/2023 016360 KS 016360 KS Samsung Securities Co., Ltd. Finance KR KRW 0.00787 17112942873 0.821 0.037208 0.008861 0.02567 0.021137 BB   7/5/2023 018260 KS 018260 KS SAMSUNG SDS CO., LTD. Technology Services KR KRW 0 7757789405 0.05447 0.24433 1.00E-06 0.015199 0.016768 BBB   7/5/2023 020150 KS 020150 KS 020150 KS 020150 KS 020150 KS 02140 KS 020330 KS 02330 KS 023530 KS <td></td> <td>0.007.227</td> <td></td> <td></td> <td>Neutral</td>													0.007.227			Neutral
7/5/2023   018260 KS   018260 KS   0AMSUNG SDS CO., LTD.   Technology Services   KR   KRW   0   7757789405   0.05447   0.24433   1.00E-06   0.015199   0.016768   BBB     7/5/2023   020150 KS   0.01273   0.017166   0.006711   BB     7/5/2023   021240 KS   021240 KS   021240 KS   021240 KS   020472   3376751674   0.228861   0.03213   0.001312   0.009138   0.033467   BB     7/5/2023   02350 KS   023530 KS   023530 KS   023530 KS   023530 KS   0.05655   0.448195   0.002273   0.01312   0.009138   0.033467   BB     7/5/2023   023530 KS   023530 KS   023530 KS   023530 KS   023530 KS   023530 KS   0.005615   0.02733   0.001312   0.009138   0.033467   BB     7/5/2023   02850 KS   028050 KS   028050 KS   028050 KS   028050 KS   028050 KS   0.000933   0.00													0.02567			Neutral
7/5/2023   020150 KS   020150 KS   020150 KS   020150 KS   020150 KS   020150 KS   0.002273   0.017866   0.006711   BB     7/5/2023   021240 KS   02140 KS   02140 KS   02140 KS   02140 KS   02140 KS   020050 KS   02330 KS   023530 KS   02350 KS																Neutral
7/5/2023   021240 KS   021240 KS   0CWAY Co., Ltd.   Consumer Durables   KR   KRW   0.002472   3376751674   0.228861   0.232133   0.001312   0.009138   0.033467   BB     7/5/2023   023530 KS   02050 KS   0.0056141   0.035258   0.02442   0.165952   B     7/5/2023   028050 KS					÷.											Elevated 2
7/5/2023   023530 KS   023530 KS   Lotte Shopping Co., Ltd   Retail Trade   KR   KRW   0.027866   9294657174   0.828   0.056141   0.035258   0.02442   0.165952   B     7/5/2023   028050 KS   0.000933																Neutral
7/5/2023   028050 KS   028050 KS <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>Elevated 1</td></th<>																Elevated 1
7/5/2023 028260 KS 028260 KS 028260 KS SAMSUNG C&T CORP Industrial Services KR KRW 0.000561 19500572312 0.213387 0.211092 0.0009 0.039326 BBB																Elevated 3
																Neutral
7/5/2023 028300 KS 028300 KS 028300 KS HLB Co., Ltd. Health Technology KR KRW 0.006241 3293908074 0.022312 0.603608 0.00686 0.007251 0.003034 BB			028300.KS	HLB Co., Ltd.	Health Technology	KR	KRW	0.006241	3293908074	0.022312	0.603608	0.00686	0.007251	0.003034		Neutral
7/5/2023 032640 KS 032640 KS 032640 KS 032640 KS LG Uplus Corp Communications KR KRW 0.001679 7014987629 0.491021 0.116362 0.001824 0.001824 0.007208 BB					•.								0.007251			Elevated 2
7/5/2023 033780 KS 033780													0.02896	0.007200		Elevated 2
7/5/2023 034220 KS 034220												-		0.065128		Neutral

BLUE FIRE AI

## Case Study: Emmalyn on Silicon Valley Bank (SVB) Four Early Warnings of Unrecognised Risk During 2022

This was continually flagged on our client's risk reports for 40 weeks, during 2022 as a name that needed to be reviewed.

- Early warning 1: 24<sup>th</sup> January 2022, remained for 18 weeks on client's weekly report.
- Early warning 2: 8<sup>th</sup> September 2022, remained for 5 weeks on client's weekly risk report.
- Early warning 3: 17<sup>th</sup> October 2022, remained for 17 weeks on client's weekly report.
- Early warning 4: 16<sup>th</sup> January 2023.





Blue Fire AI on Silicon Valley Bank (SVB) Supported by Explainable Auto Generated Quick Note

### Emmalyn (AI) 16<sup>th</sup> January 2023, Quick Note on SVB

### **Risk "Elevated 2" Review Name**

Following on from multiple early warnings since January 2022, the Net Interest Income outlook has been under building pressure as the cost of deposits and borrowing expenses continued to accumulate. As a major lender to start-ups, SVB was adversely impacted by the reduction in venture capital investment activity, coupled with higher interest rates and high cash burn among its clients. Thus, the biggest red flag was the sudden drop in funding stability (Deposit-to-Total Funding ratio), as these factors highlighted its inability to retain deposits and led to a significant increase in wholesale funding in the second half of 2022. Over the last year, the risk outlook highlighted that the company's ability to generate core capital has severely deteriorated since the start of 2022. This trend is reflected in the spike of CSM for that year, resulting from some extraordinarily high leverage and the collapse in the value of assets (-\$29.5 Bio in FY22). Currently sitting on BBB- rating, the company may find it extremely difficult to raise funds at favourable conditions and could easily dilute current shareholders by raising more capital. Leading analysts forecast more downside risk, with a potential drop of 10% in EPS by 2024.

### Major Global Investment Bank Analyst Note on SVB

### **Over-Weight - Price Target Dec 2023 \$375**

We recently hosted a deep dive webinar with SVB's CFO Dan Beck where we addressed several risk factors that have been at the forefront of investors attention. Since reporting 3Q22 earnings three weeks ago when the company indicated that 3Q22 likely represented a peak for NIM/NII, prompting us to reduce our 2023 EPS estimate by nearly 50%, the focus of investors rapidly shifted to the company's \$16B of unrealized losses in its HTM securities to meet cash needs, thereby reducing tangible common equity. With this in mind, however, we walked away from our webinar with a view that (1) deposit outflows appear very manageable, (2) even if a worst case scenario plays out, SVB has multiple liquidity sources and (3) the inflection point for the balance sheet will likely be measured in guarters (and not years) On deposit outflows, while deposits to early stage customers (37% of total) would be considered less sticky, helping to temper pace of outflows from this cohort are substantial organic inflows from the sales of later stage startups.



# Our Awards



Recognised for excellence in the deployment and management of financial information and technology within Asia's capital market community. Winners of the Best AI-Based Solution 2021.



Winners of the IA Velocity Program Awards. Selected by 25 London Asset managers for transforming China A-Shares investment.



INVESTMENT MANAGEMENT ASSOCIATION OF SINGAPORE

Winners of the IMAS Digital Program Awards. Players' Player awarded by Asset Manager CEOs who see BlueFire AI solving a real industry problem.



Blue Fire Al awarded the MUFG Innovation Partners Award for Early Warnings of Unforseen Risk in a B2B application.



The United Kingdom Department of International Trade (DIT) awards BlueFIre AI as a Fintech player enabling UK based Investors access to Chinese Markets.



Winners of the Symphony Innovation Awards for Risk Signals: the early identification of unforeseen risk and the unique delivery over bots.



The Government of Singapore identifies BlueFire Al as one of the future deep tech companies in the Asia region. Awards a significant R&D Grant.



BlueFire AI Mandarin AI and Natural Language Processing technology achieves global #1 rankings in multiple task. Published in AAAI and EACL.



BlueFire AI wins FinTech Artificial Intelligence Award. Specific recognition of outstanding Hong Kong based companies leading with new tech in this field.



BlueFire AI wins Best Mature Stage Start Up at the Next Money Global FinTech Finals 2018 - January 2018.



# Thank you



www.BlueFireAl.com



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