Criat

Advancing the Frontier of Credit Analytics.

Who we are

Criat leads in credit analytics with our "Deep in Technologies, Deep in Applications" approach, known as **Deep Credit Analytics**.

Deep in Technologies – Building on over a decade of pioneering research, we have established a comprehensive suite of DeepCredit® Analytical Technologies. It uniquely blends dynamic econometric models with interpretable AI/ML techniques. Central to this suite is our **Forward Intensity Model (FIM),** excelling in advancing dynamic default prediction.

Deep in Application – Partnering with prominent financial institutions, we provide innovative products and solutions to address common industry needs, generating actionable insights with easy interpretation. We explore the integration of new AI/Gen-AI tech to ensure ease of adoption for more users.

Criat is a spin-off from the National University of Singapore (NUS).

Our History

2009 – Originated from NUS Credit Research Initiative (CRI)

2017 – Founded as an NUS spin-off in Singapore

2022 – Launched subsidiary in Shanghai, China

2024 – Established global partnership with FactSet

Trusted By

Banks, insurance companies, asset managers, regulators, etc.

AIG, eastspring investments, alecta, DBS, SGX, The World Bank, International Monetary Fund, 招商银行 China Merchants Bank, 中国民生银行 China Minsheng Bank, ADB Asian Development Bank, MAS Monetary Authority of Singapore, Bank BRI, Bank BTN

Partner With

Data & analytics providers, consulting firms, associations, etc.

FactSet, imas Investment Management Association of Singapore, Deloitte., KPMG

Awarded With

AsiaRisk Awards 2024

HIGHLY COMMENDED

Buy-side risk solution of the year

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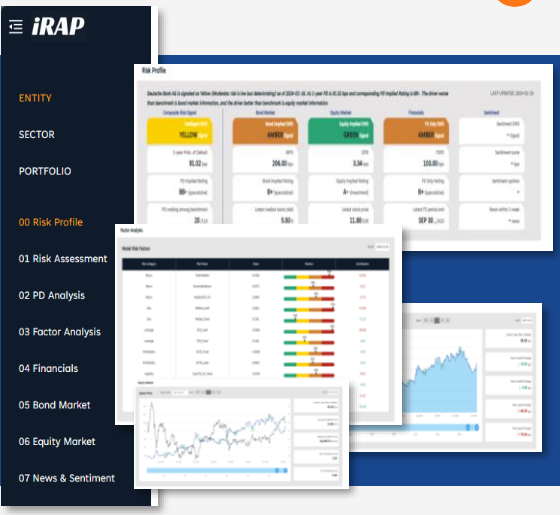
iRAP (intelligent Risk Analysis Platform)

Stay Ahead of Credit Risk

A comprehensive platform empowering risk and portfolio managers to analyze the credit risk of global firms, sectors and portfolios in a fast, simple and intuitive way.



Unlock the power of DeepCredit® Analytical Technologies

- Leading-edge dynamic models powering forward-looking prediction
- High accuracy + Easy interpretation + Transparent performance
- Extensive coverage of global public firms + bond issuers + private firms
- Meticulous data processing and rigorous operations since 2009

All-in-One Effortless Analysis

- Filtered and consolidated information for all your needs
- Widescale risk visualization accessible anywhere

Client-centric Dedicated Service

- Seamless workflow integration with ongoing training & support to ensure your success

Clientele

- Banks
- Insurers
- Asset Managers
- Corporates

Early Warning	Risk Monitoring
Risk Reporting	Risk-Based Pricing
Limit Setting	Stress Testing
Pre-Screening Opportunities	Portfolio Optimization

- Web UI Service
- Data File Service
- API Service
- On-premise

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Products

1. Probability of Default (PD) Suite

1.1 PD Term Structure

Quantifies the creditworthiness of a firm over time horizons from 1 month to 5 years by evaluating the stages of credit cycle, region, industry, and firm-specific factors.

1.2 PD implied Rating

Provides an intuitive overview on the credit quality of a firm by assigning a letter-grade according to a systematic mapping of Criat PD to Big 3's credit ratings.

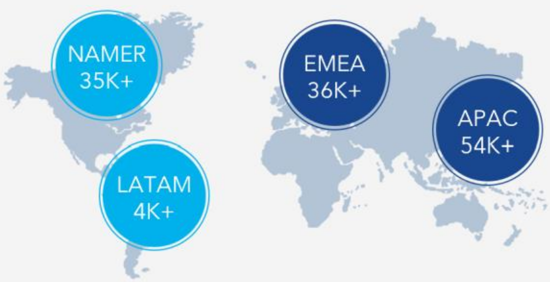
PD	Composite PD		FS-based PD
			Equity-implied PD
	Scenario-Conditioned PD	News Senti.-Adjusted PD	Bond-implied PD
PD-linked	Risk Factors	Risk Attributes	Risk Sensitivities

> Forward Intensity Model
> Macro Data + Financial Statement + Equity Info + Bond Info

> Daily-Updated
> 30yrs+ History
> Point-in-Time
> Spot & Forward

> Exceptional Accuracy
> APAC & China Featured
> Public & Private Comparable

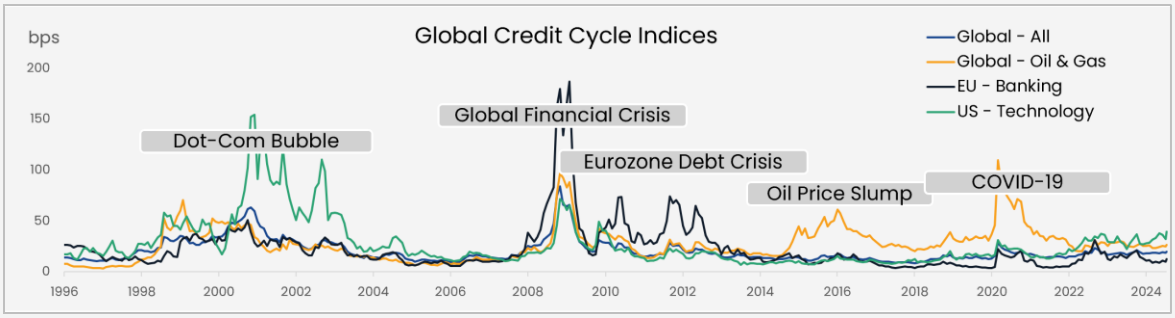
Public Firms + Bond Issuers: 130,000+ firms



Private Firms: Private Firm Calculator | Private Firm PD (partner with data vendor)

1.3 Credit Cycle Indices (CCCI)

Paints the dynamic credit environment over time for selected regions or industries.



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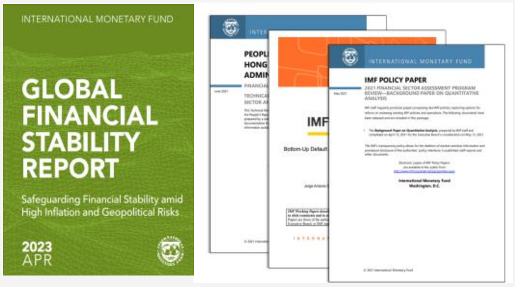
Products

2. Stress Testing & Scenario Analysis

Criat offers bespoke toolkits for automated stress testing & scenario analysis, namely **BuDA** (Bottom-up Default Analysis) and **TdDA** (Top-down Default Analysis), making both bottom-up and top-down approaches available. Advanced econometrics and modern machine learning bring forecast accuracy and interpretation to the next level. Clients can select the best fit-for-purpose modelling approach that stays true to the narrative of their analysis.

- ✓ Entity-level analysis; Easy to aggregate to the portfolio-level
- ✓ Multiperiod analysis; Competent for both single-year and multi-year
- ✓ Novel default correlation model using modern ML techniques
- ✓ Accelerated Monte-Carlo Simulation; Capable for tail risk assessment



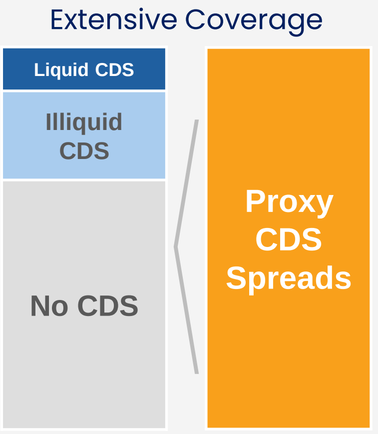
International Monetary Fund
Financial Sector Assessment Program (FSAP) has been using BuDA since 2016.

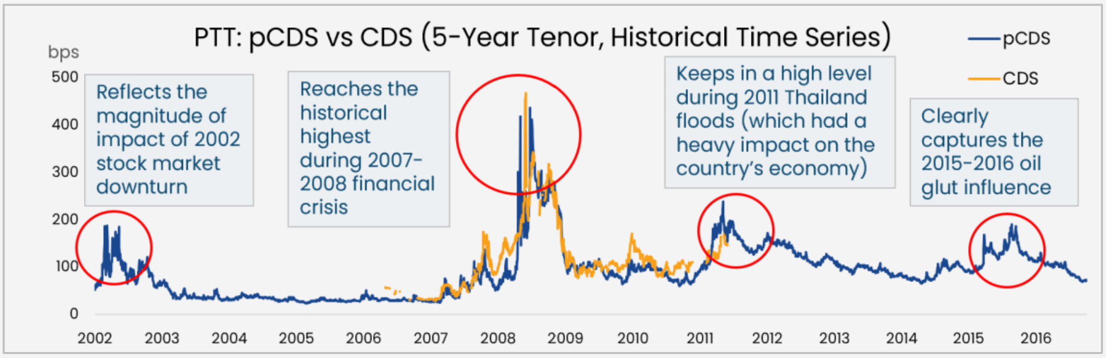
3. Proxy Credit Spread

Criat offers single-name proxy CDS spread curves (**pCDS**) for global public and private firms, providing mark-to-market valuation of their credit risk.

Criat pCDS is produced by Criat PD-AS-CDS models that translate Criat real-world PD term structure to risk-neutral credit spread curve. It covers every single firm that Criat produces PD.

Customized version based on client's PD system is also available.





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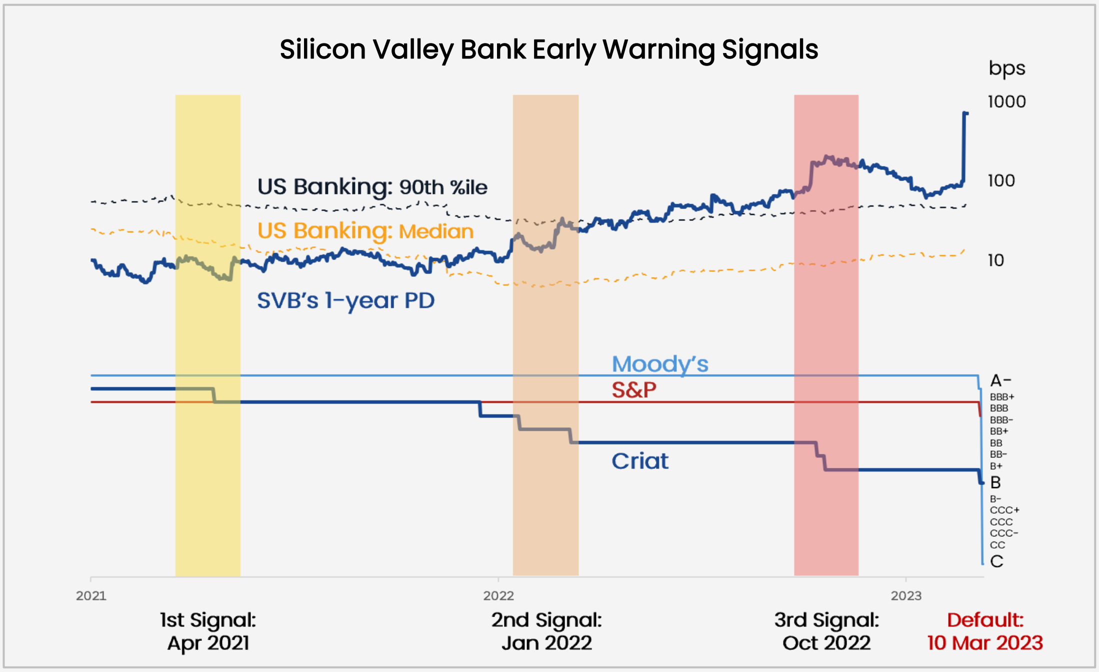
Solutions

1. Credit Early Warning Solution (EWS)

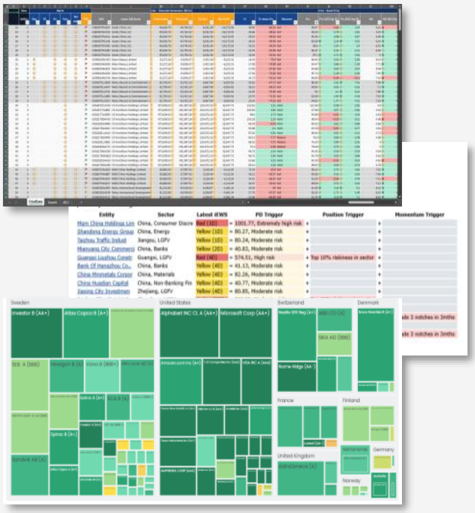
Criat EWS distinguishes itself with its **exceptional effectiveness** in identifying at-risk entities and endangered sectors, combined with complete yet simple interpretation. Remarkably, over the past few years, it has successfully provided early warning for major credit events, such as SVB, Credit Suisse, and Evergrande.

- ✓ Early Warning: Topmost effectiveness
- ✓ Risk Factors : Traditional + Alternative
- ✓ Interpretation: Complete yet simple
- ✓ Coverage: Complete for all exposures
- ✓ Flexibility: Tailored to your portfolio



1.1 For Buyside Investment

Subscribe our **SaaS solution** to enable effortless portfolio risk monitoring with Email Alert, All-in-One Excel File, Visualization Web UI and Gen-AI Credit Report.



1.2 For Corporate & SME Loan

Get an on-premise solution with PD models and EWS models tailored to your loan portfolios and your most available data, as well as full-cycle management of data and models.

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Criat's Laboratory

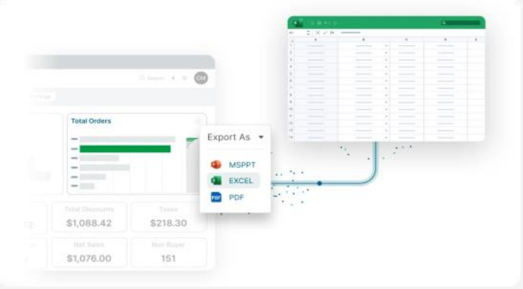
We explore a unique blend of advanced financial econometrics and recent AI/machine development to help our clients make better decisions more efficiently.

1 Multilingual Credit-Focused News Sentiment

Targeting the subjects of your concerns, Criat provides real-time global news and public opinion analysis in English, Chinese and Southeast Asian languages.

2 Gen-AI Credit Analysis Report

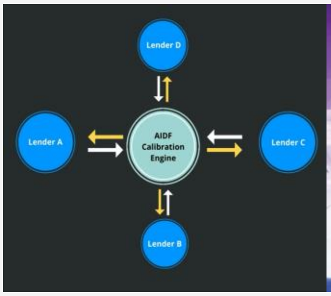
Criat combines the latest LLM model and our internal credit analytical data to generate automated AI-powered reports for your risk management and regulatory compliance.



3 Credit Bureau 3.0 for SMEs Lending

Criat's new federated learning system calibrates SME credit risk models using credit data from multiple lenders while keeping data privacy, bringing forth the next generation of credit bureau.

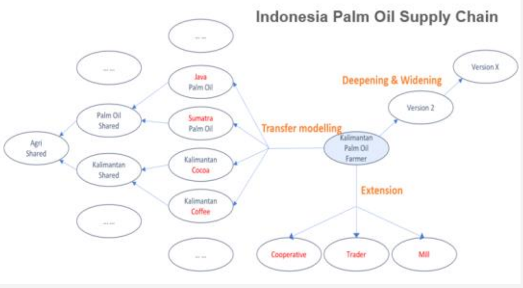
Credit Bureau 3.0 has been adopted by Singapore's ASEAN SME Credit Analytics Consortium. It is also recognized by Asian Development Bank Institute (ADBI) and Abu Dhabi Global Market Academy (ADGMA).



4 Green Credit Analytics

Criat delivers intelligence and tools that assist financial institutions in evaluating the environment impact on credit investment. Our journey began with Indonesia agriculture supply chain finance and now expanded to Thailand.

Criat's exploratory work contributed to the two Projects Greenprint and NovA! of the Monetary Authority of Singapore (MAS).



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Leadership Team

Co-founders

Prof DUAN Jin-Chuan
Co-founder & Chairman

Pioneering Leader
- Founder, NUS Credit Research Initiative (2009-2023)
- Executive Director, NUS Asian Institute of Digital Finance (2020-2023)
- Director, NUS Risk Management Institute (2007-2014)
- IACPM Advisor Board Member

World's Top Scientist
- Jardine Cycle & Carriage Professor of Finance, NUS Business School (2008-2023)
- Academician of Academia Sinica
- Fellow of the Society for Financial Econometrics

Dr MIAO Weimin
Co-founder & CEO

Innovative Entrepreneur
- Expert in Credit Analytics, Statistics, Optimization, and Machine Learning
- Co-developer of the BuDA automated stress testing tool for IMF's policy work
- Former Operations Lead and Senior Research Fellow, NUS Credit Research Initiative (2013-2017)
- Visiting Scholar at the International Monetary Fund (2014)
- Bachelor from Peking University, PhD from NUS

Core Team

The core team members come from a diverse range of global leading financial institutions and universities

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