The Credit Research Initiative (CRI) Default Database

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The Analytical Engine

- The analytical engine that powers the CRI database is the "forward-intensity" default predication model (*Duan et al. 2012, Journal of Econometrics*).

- The model transforms "big data" (firms' financials, market prices, macroeconomic indicators, etc.) into "smart data" (Probability of Default, or PD, and other credit risk measures) for all exchange-traded corporates around the world.

Data Sources

- **Default events**: Bloomberg, corporate announcements in stock exchanges, "Default" rating by credit rating agencies, news sources.

- **Common risk factors**: Bloomberg and Thomson Reuters Datastream. Daily feed.

- **Stock market data**: Bloomberg BackOffice. Daily feed.

Data Sources

- **Financial data**: Bloomberg BackOffice, Compustat, and a few other research databases. Daily feed & some static sources.

- Firms' financial statements come out on a quarterly/ semi-annual/annual basis. There might be occasional revisions to the released statements.

- The CRI applies priority rules to extract data from one particular statement when multiple are available at the same time.

- The CRI uses the FS information for multiple months until the next valid statement comes out.

Operational Platform

- **Monthly calibration**: model parameters are estimated at the beginning of each month with information from 1990s to the last month end.

- Calibration is done for 6 geographic regions:

North America,

Europe,

Asia-Pacific Developed Economies,

Asia-Pacific Developing Economies,

China,

India.

Operational Platform

- **Daily update**: the CRI PDs are updated daily with the monthly calibrated parameters and daily updated economic indicators and stock market information.

- The daily updated PDs are published according to the following schedule in Singapore local time:

  8.30am: Asia

  2.30pm: North America, Europe, Middle East, Africa

  3.30pm: Latin America

Other Credit Risk Measures

- The **CRI Corporate Vulnerability Index (CVI)** measures the creditworthiness for a selection of 25 regions, economies and portfolios.

- It has three sets of indices:

    equally-weighted CVI,

    value-weighted CVI,

    tail CVI

Other Credit Risk Measures

- The **CRI Actuarial Spread** is the annualized premium that is needed to compensate the default risk, as measured by the CRI PD, on an actuarial basis of one's counterparty.

- It is equivalent to the physical CDS par spread.

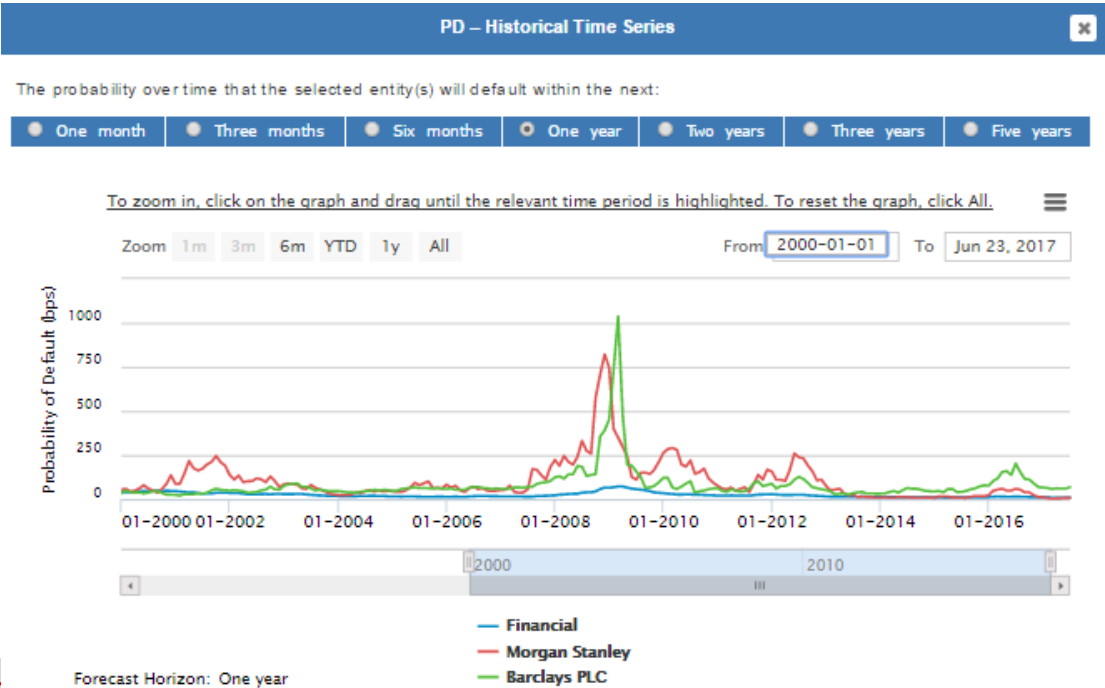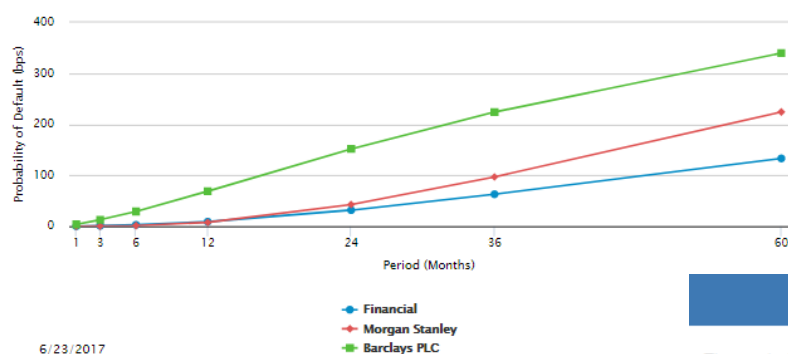- It has contract terms from 1 year to 5 years

Coverage

As of July 2017, the CRI has produced default predictions on around 65,000 exchange-listed firms (some were already delisted) in 121 economies.

The CRI website: https://rmicri.org.
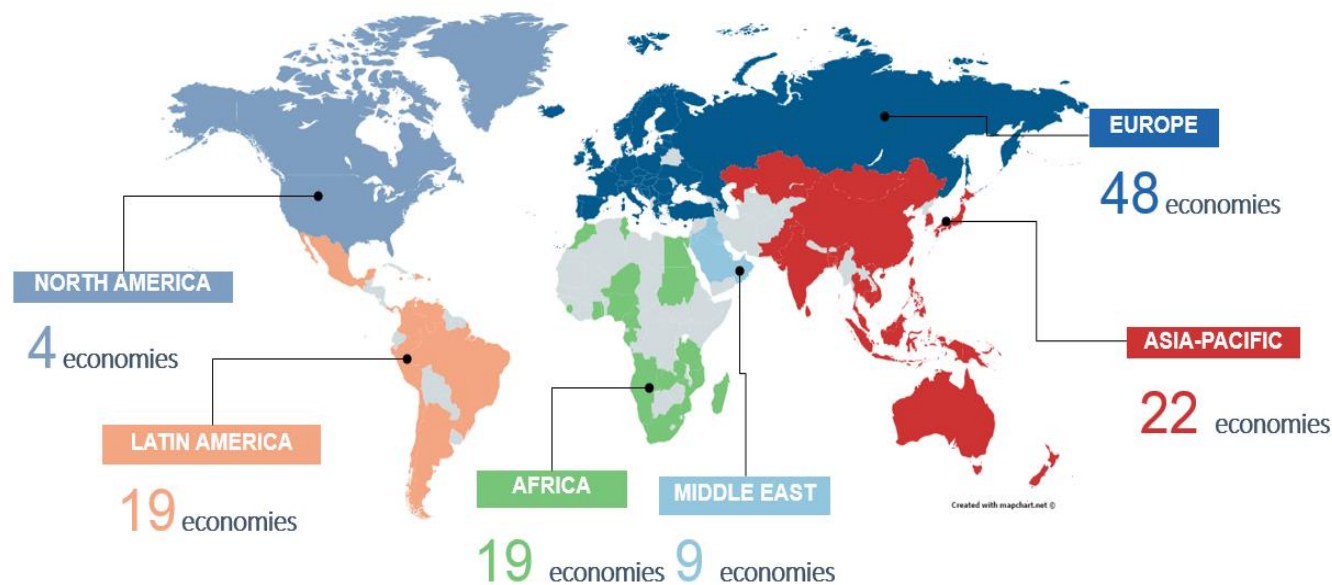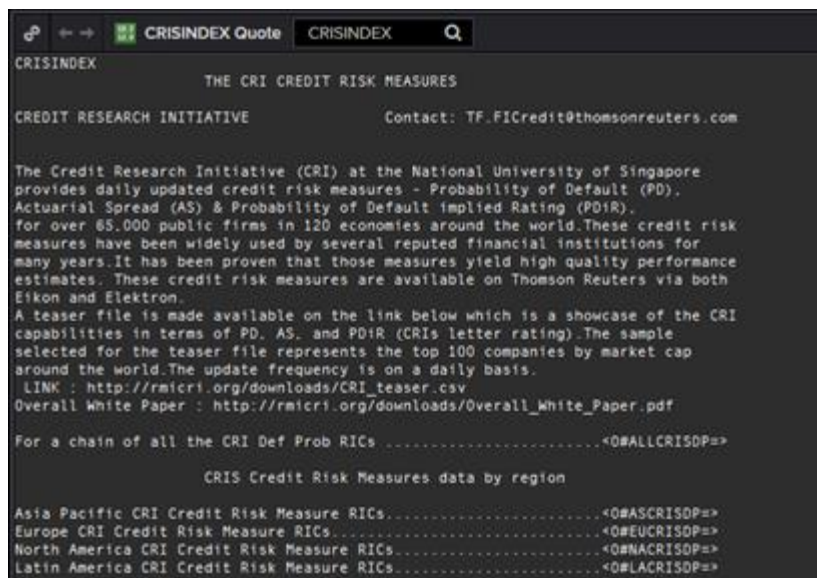
Data Distribution

CVI freely available to their paid subscribers. Bloomberg ticker: RMII.

PD, AS, and CVI are distributed through TR Eikon, DataScope Select, and DataScope Select Real Time platforms at a cost.