2008 Economic Collapse In USA Case Study (EDA)

Author : Rohit Ranjan

Abstract

- Case study regarding economic collapse in USA in 2008-09. For this we need to select top investment banks and do Exploratory Data Analysis(EDA).
- Will check data of last 13 years i.e, 2006 -19.
- List of Investment Banks
  - Bank of America
  - City Group
  - Goldman Sachs
  - JP Morgan Chase
  - Morgan Stanley
  - Wells Fargo

Problem Solving Methodology – CRISP DM First Three Steps

Business Understanding

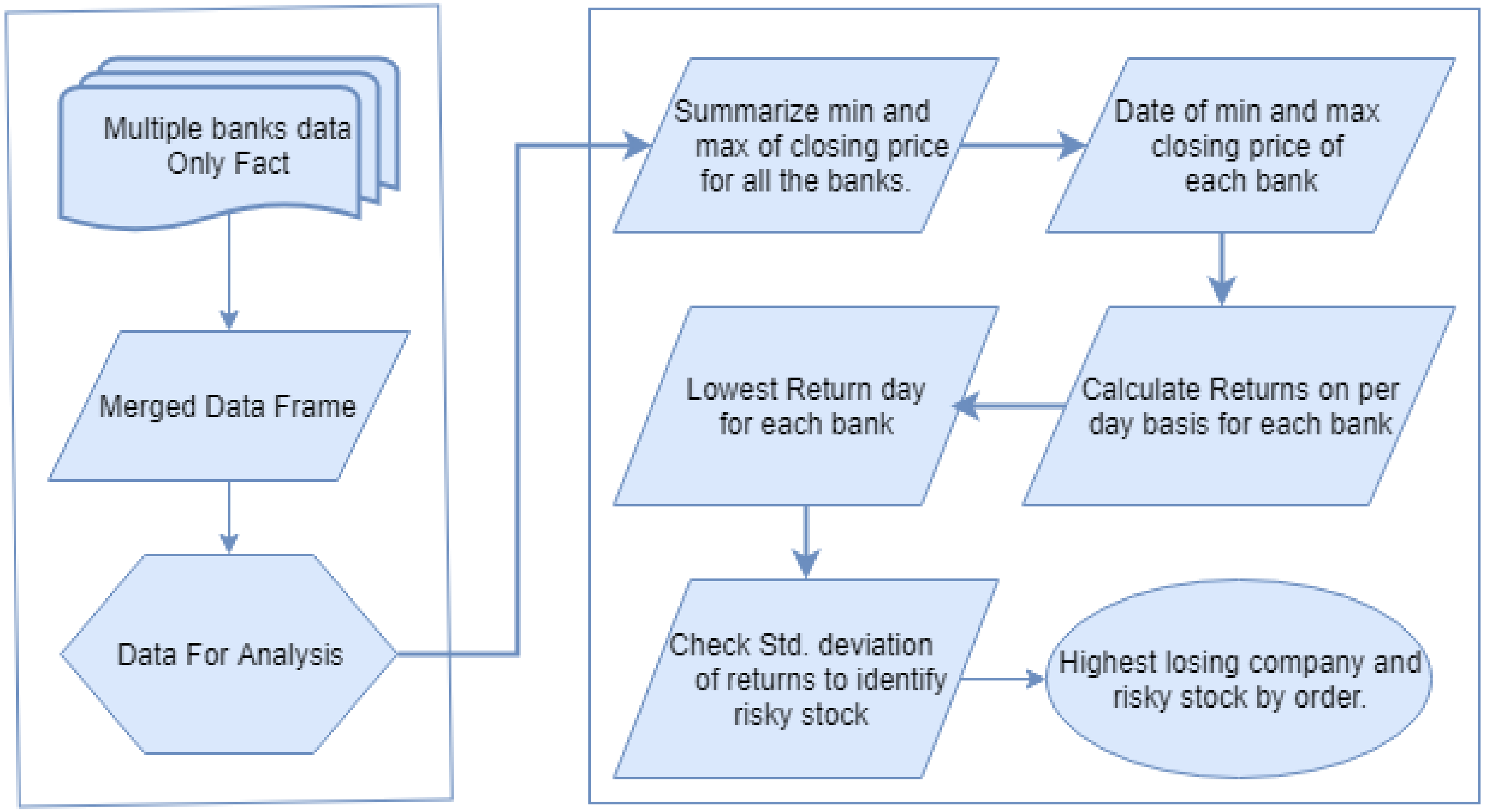
Analyzing the trends of risky stocks and what was the reason behind economic collapse.

Business Objective
Identifying the investment bank which lost the most.

Business Condition
Only US investment banking data and from 2016 - 19.

Data Understanding and Preparation

Data Analysis



Business Understanding and Goal of Data Analysis

Business Objective : To understand the economic collapse in US during 2008 – 09.
Date Range : From 01-01-2006 to 01-01-2019
Strategy for Understanding Loss : Check per day return and deviation in returns as well lowest and highest closing price.

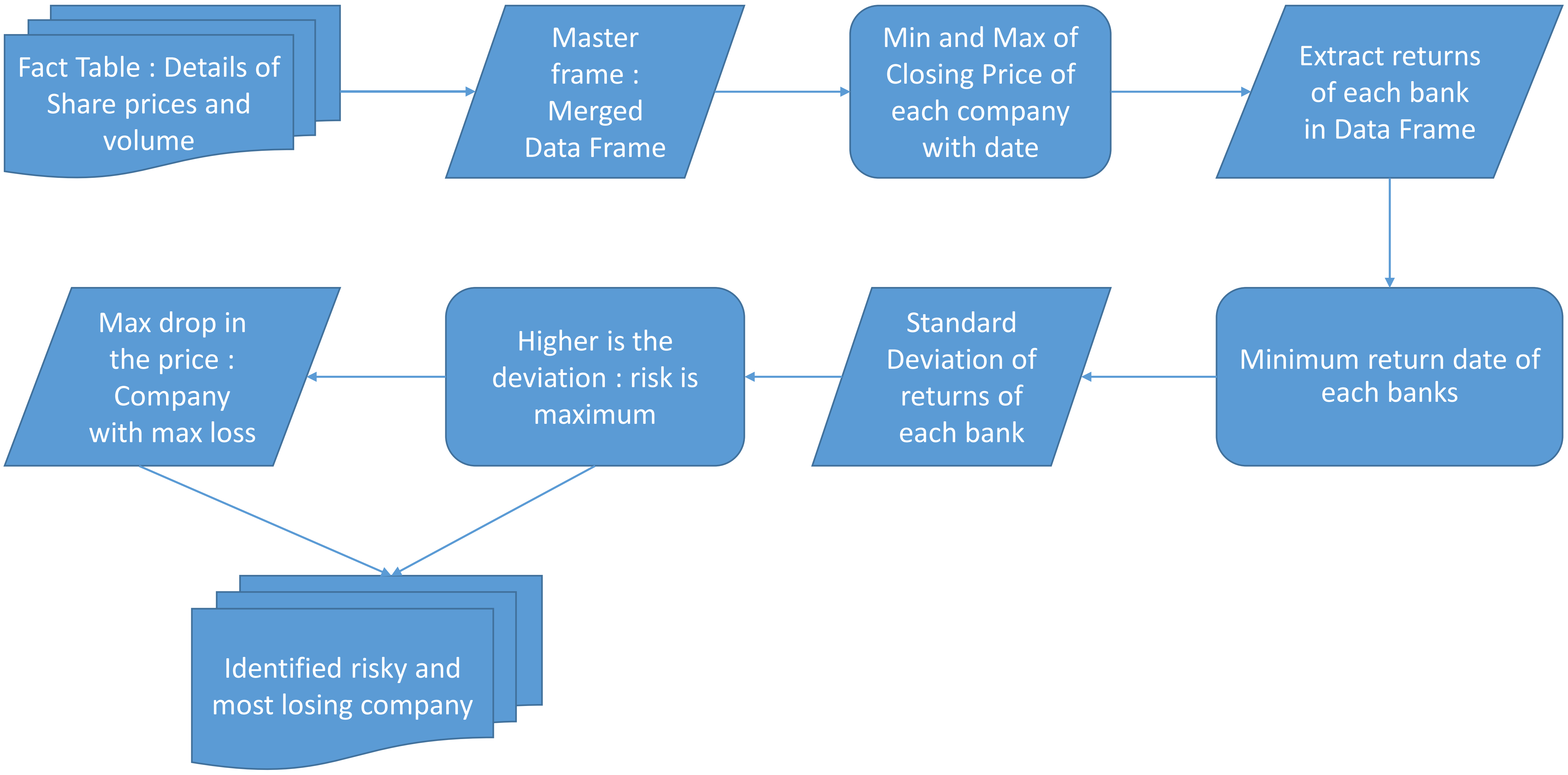
Goal of Business Analysis

Identify the risky stock and the most losing investment bank.

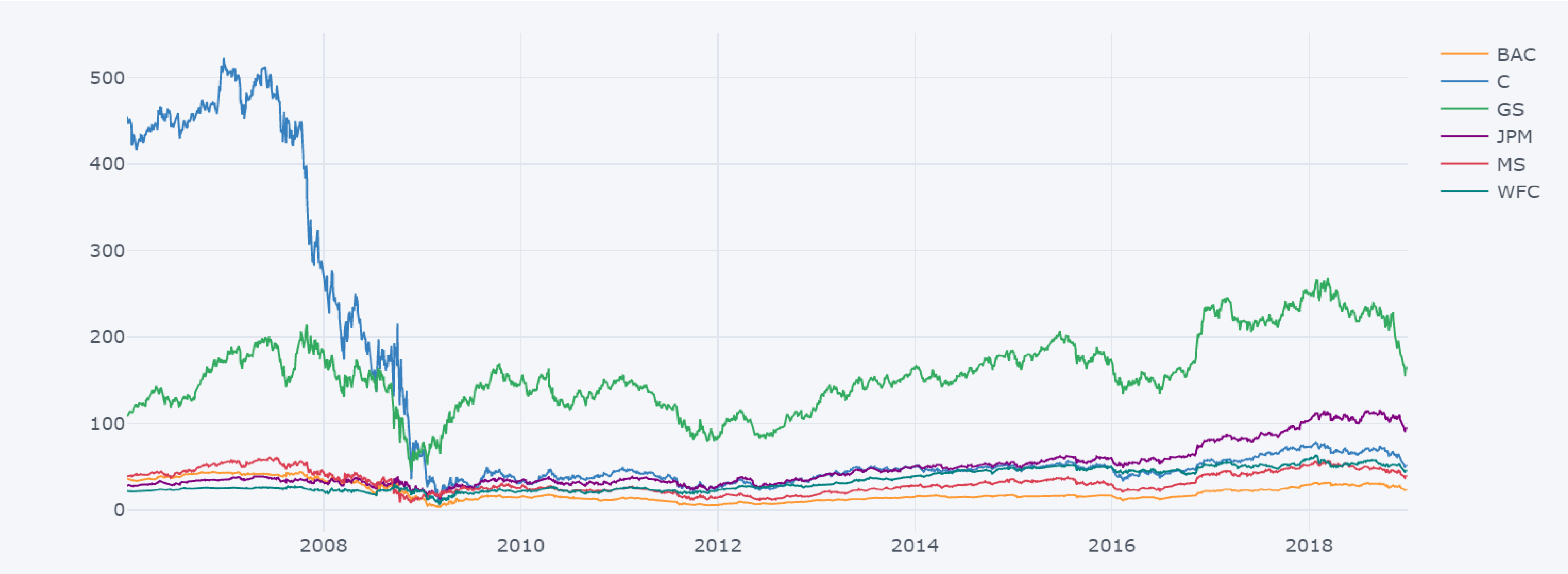
Goal of Data Analysis

Stocks Returns Analysis: To understand returns of each day so that identify day of big change.
Date range of loss : check the period in which they lost the most.

Data understanding, Preparation and Analysis



Closing Price Graph of each bank with years



- BAC – Bank Of America
- C – City Group
- JPM – JP Mprgan Chase
- GS – Goldman Sachs
- MS – Morgan Stanley
- WFC – Wells Fargo

Standard Deviation of Banks

As Deviation is high for city group, it is the most risky share.

Hierarchical Clustering of co-related stocks