

A glimpse of the development of IT companies

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Abstract

Google, Apple, Yahoo, IBM, Facebook, Twitter... this list can go longer and longer. Yes, they are all IT companies and they represent new trends, science and technology.

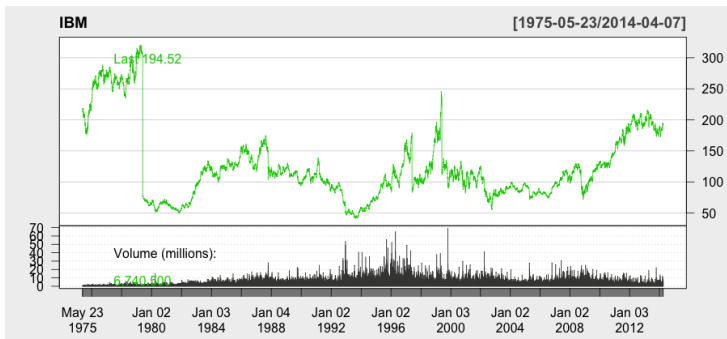
Some of them are new, else are old. Some of them are developing and some seem "expired". And a lot of them were once on top of the tides.

So let us take a look at stock prices of all those companies and make comparison among them and try to summarize some conclusions.

In this project, we use the package `quantmod`. And we pick IBM, Intel, Apple, Microsoft, Yahoo, Amazon, Google, Facebook and Twitter as representatives.

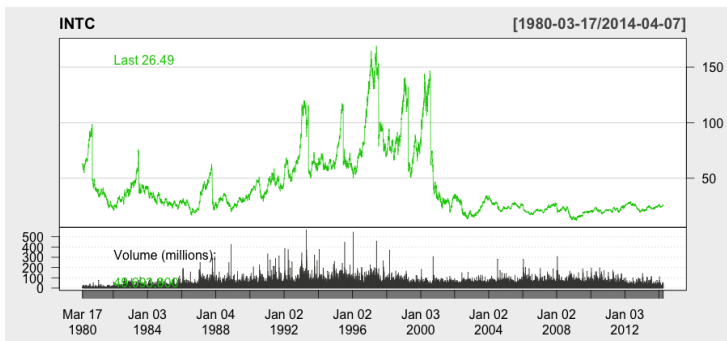
1. BIG Blue: IBM

There are two big drops around the year 1980 and 2000. It seems that 1992 is also an important year. IBM goes through a lot of years and is the oldest IT company among the list.



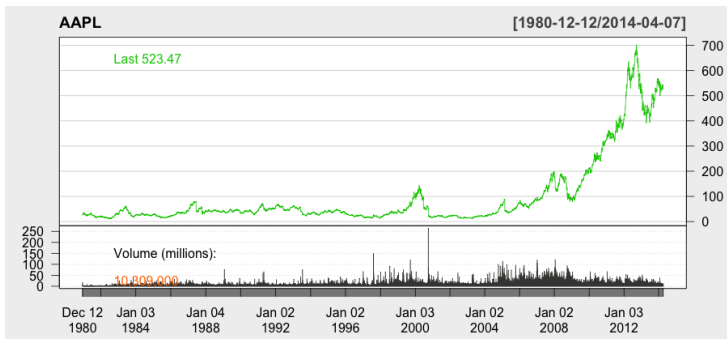
2. Leap ahead: Intel

Intel went high and low several times. After 2000, the development of Intel seems peaceful.



3. Think different: Apple

Apple seems to have a steady development. There are three drops around 2000, 2008 and 2012.



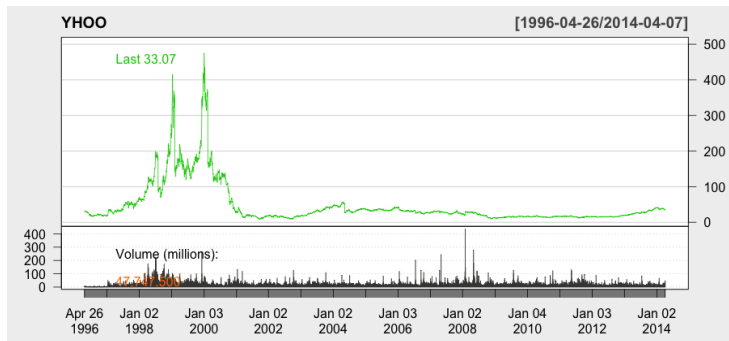
4. Roman Empire: Microsoft

Microsoft seems to have an excited development before 2004. Then it goes a flat way.



5. Do you: Yahoo!

Yahoo has two peaks. One is around 1999 and another is around 2000. Later it seems expired.



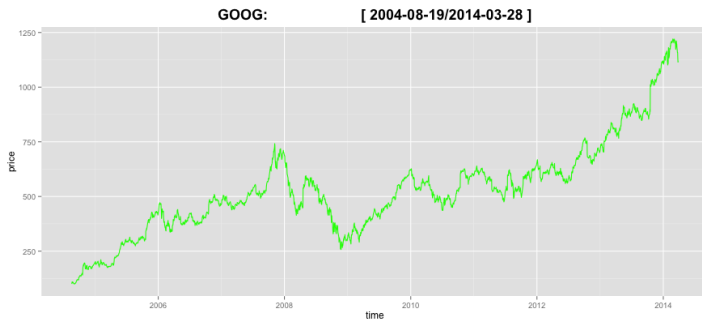
6. ...and You're Done: Amazon

Amazon has one peak around 1999. Later it went through almost 10 years flat area and now it is peaking up again.



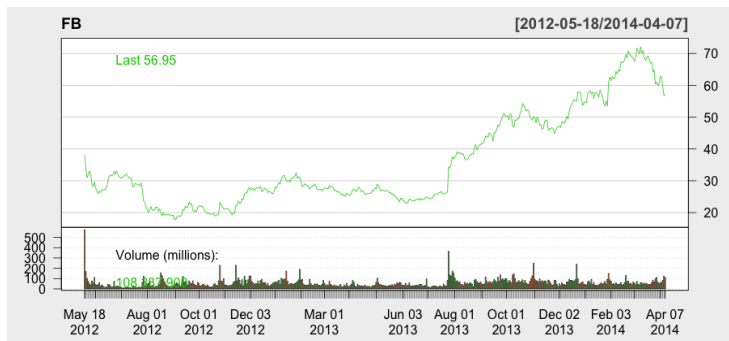
7. Dont be evil: Google

Google reached a peak and turned the direction around 2008. Then a little bounce followed by another drop. Later it took almost 5 years for Google to beat its own record again and drove all the way up.



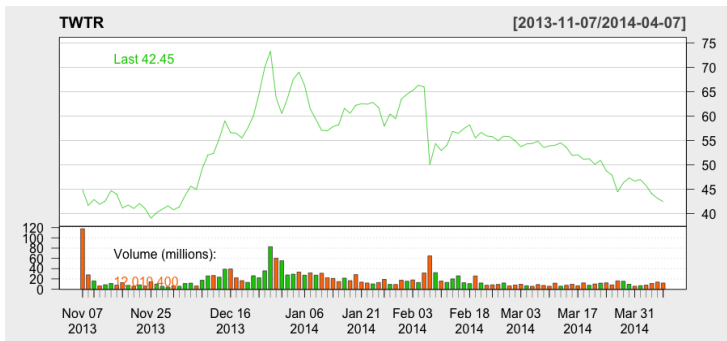
8. Be connected: Facebook

Facebook had a hard beginning but later a good development. Facebook had a hard beginning but later a good development.



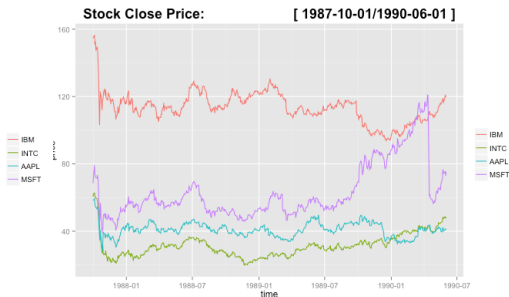
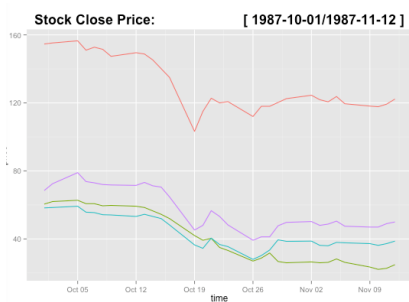
9. Yours to discover: Twitter

Twitter already went through a roller coaster within a short time.



Crisis 1: 1987

The Black Monday decline was the largest one-day percentage decline in the Dow Jones.



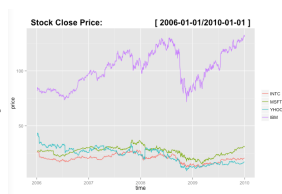
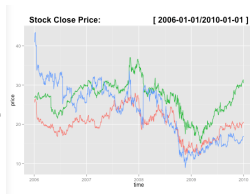
Crisis 2: 2000

The dot-com bubble was a historic speculative bubble covering roughly 1997-2000 during which stock markets in industrialized nations saw their equity value rise rapidly from growth in the Internet sector and related fields.

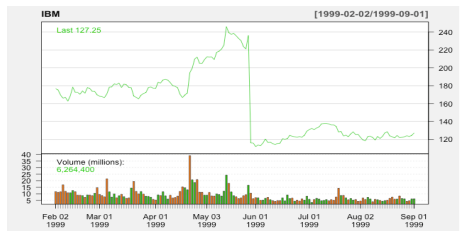


Crisis 3: 2008

The U.S. stock market peaked in October 2007, when the Dow Jones Industrial Average index exceeded 14,000 points. It then entered a pronounced decline, which accelerated markedly in October 2008. By March 2009, the Dow Jones average had reached a trough of around 6,600.



Extra about quantmod



```
> getSymbols("IBM", from = "1970-01-01", auto.assign = T)
[1] "IBM"
> getSplits("IBM")
      IBM.spl
1973-05-29  0.80
1979-06-01  0.25
1997-05-28  0.50
1999-05-27  0.50
```

Conclusion

1. We looked back on the stock prices of several IT companies.
2. We tried to find the corresponding moments.
3. We had a brief review of the three important stock crises.
4. We also built an app that can help us get the historical data and draw the graph of stocks.

Thank You