

M2 Research Internship: Market impact of share buyback programs

September 9, 2020

Laboratory name: CFM Chair of Econophysics & Complex Systems, LadHyX

CNRS identification code: UMR CNRS 7646

Internship location: Ecole polytechnique, Palaiseau, and Capital Fund Management, Paris.

Thesis possibility after internship: YES

Funding: YES

Supervision: Charles-Albert Lehalle (Capital Fund Management)

Michael Benzaquen (Ecole Polytechnique) & Jean-Philippe Bouchaud (Capital Fund Management)

Email: michael.benzaquen@polytechnique.edu

Subject

Share buyback programs are a very special moment in the life of listed companies, since they are buying back their own shares. This can be done for several reasons: for example to modify the structure of the debt (the company Total has long been customary of the fact, using part of its profits to buy back its shares and cancel them), or to plan large employee participation programs (via "stock options" or participation agreements), or to counter a possible takeover or a strong aggressive acquisition by another company, etc. There are also share issuance programs: When a company increases its capital through shares, these shares are created immediately on a given date and then slowly released into the market by a broker.

All of these programs are public, either on a daily basis, or with a one month lag depending on local regulations. The study of their market impact is particularly interesting: they contain little information about the company (although some conditionings could be studied), but often represent a significant fraction of the company capitalization. This may be a time when the microstructure meets the capital structure of companies, as well as the governance decisions of a company. In any case, the cost of capital for companies via financial markets is partly known during the execution of these programs.

Stock Buybacks S&P 500... +60% w/ 2018 Tax Cuts!

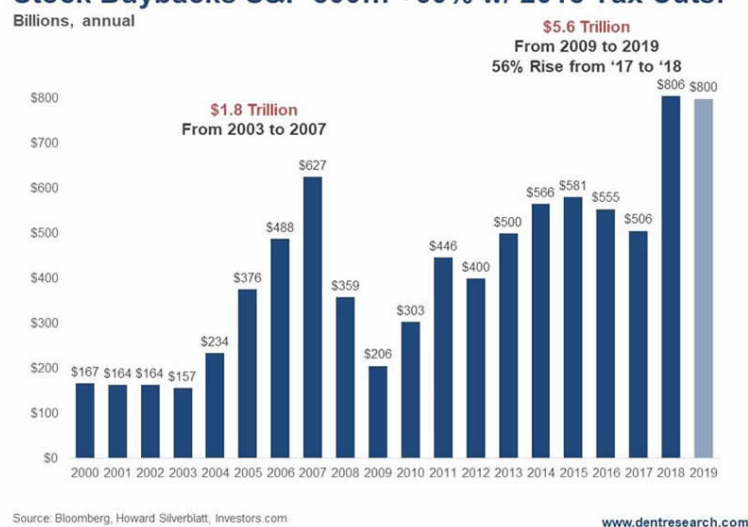


Figure 1: Illustration, from [1].

The internship will be held within the CFM Chair of Econophysics and Complex Systems at Ecole polytechnique (visit www.econophysix.com) in close connection with Charles-Albert Lehalle and Jean-Philippe Bouchaud (Capital Fund Management). The internship will comprise theoretical and numerical components. A good background in data analysis and Python is advised.

[1] <https://www.marketoracle.co.uk/Article64607.html>