

To bail or not to bail, that is the question.

Eco 110/2

Fall 2008

In a tightly interconnected world, everything moves rapidly – even the crises. In the current iteration, this signifies that the economical crisis will soon engulf the whole planetary economy, and all of its industries. Some of the most severely affected companies will go bankrupt, some will come to the brink of bankruptcy. This has been the case of airlines after 9/11/2001 and is the case today with many large companies, like banks and car makers – to mention the most visible ones. These companies are coming to the governments, pleading to be bailed out. I shall not explore whether I deem it morally right or wrong for the governments to grant such enormous gifts, for such discussion would lead us completely out of the economic territory; let's assume that bailing out large corporations is good and should therefore be done. Immediately, we reach another question: since money doesn't grow on trees and printing too much of it is not healthy either, which corporations should the government bail out, when, and what should the amount be?

These are the assumptions I'm going to make:

- there is a potentially infinite pool of companies queuing for government handouts
- all these companies operate in a single country (or at least, are applying for bailout only in this country)
- the government is actually willing to bail out some companies (and therefore by necessity, not bail out others)
- the financial help will be given to the selected companies at a given time (i.e. all at once, not first-come-first-served¹)
- the govt. has a limited amount of money set aside for this purpose²
- there exists some formal process for evaluating a given company for the purpose of financial bailout
- and most importantly, the process won't be swept aside on a political whim

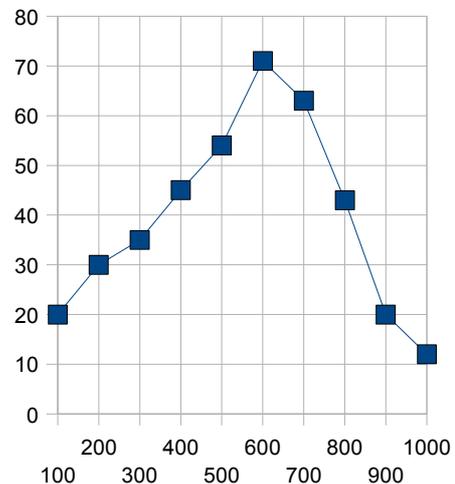
The process itself is the matter I'll be discussing here. The output of this process should be rather simple, despite the gross oversimplification – after all, the whole process at some point boils down

¹ this method, although it has its own ample share of failure modes, at least alleviates a „run on the government“

² although as we have seen recently (Nov-Dec 2008), this will go out of the window at the first sign of mass hysteria; let's assume a limited amount at a given point in time

to a go/no-go decision – but allowing for some granularity³. Therefore, probably the simplest output would be a 2D graph: money to be given on x, advisability on y; aggregate data for all companies thus helped should (by our assumptions) not exceed the total funds allocated.

On the right, you see an example of such output: let's assume that the x-axis contains the amount of money requested in thousands of euros (with the 100% requested at the right edge) and the y-axis the advisability of such action. (It's not entirely necessary for the graph to have only a single local maximum). Such graph is easy to understand and act upon, since it would condense many variables into a few.



Example decision graph

The input for the process would be much wider, consisting of weighted data about the company in question, gathered from existing past sources, i.e. cut off the data approx. 1 year before the beginning of this particular crisis. This might limit „gaming the process,“ while at the same time giving some information about the health of the company – it would be an exercise in futility to pour money a company which would have even without a global crisis, gone bankrupt in two, three years instead of now⁴.

examples of possible variable domains
size of company (market share)
impact of potential bankruptcy on economy (size of ripple effect)
past performance
risk factors
expected impact of financial injection
number of jobs at the company

The hardest task will be selection and weighting of these variables, and here lies the main problem, which is however inherent in the whole bailing-out process: the selection must be done as

³ it may be a bit ironic that this process looks more and more similar to government unemployment handouts

⁴ I'm specifically not looking at GM Motors

objectively as possible, but in absence of AI must be given to humans, who are very much subjective. With some modifications, the process could be seen as „evaluating the companies for partial purchase⁵“, therefore much of existing criteria could be re-used here.

To hinder some desperate and/or ethically challenged entities in gaming the process in their favour, the entire evaluation algorithm should be publicly available and the whole process reviewable. Although this won't solve all the gaming problems, it might alleviate them: the data on which the evaluation is based already exists and there's no need to miraculously dig it out of archives, and it is publicly known enough that any edits could be noted by correlating sources.

In conclusion, although the process I've outlined has its share of bugs and problems (namely, the selection of factors and their weighting, not to mention the assumptions), it's slightly more transparent than the current batch of „we lied to you, now give us money“ pleadings.

⁵ who'd have thought I'll be advocating nationalization?