

## AN ALGORITHM FOR THE FUTURE

by [Steve Brown](#)

It has scared us in science fiction for years "Man vs. Computer. The twinges of HAL 2000 were brought to reality in 1997, when chess Grandmaster Garry Kasparov played against IBM's Deep Blue and lost. The computer was able to analyze millions of moves to choose the best path. Humans on the other hand, tend to look at just 8 moves on average and analyze only about 3 of them into the future. While the computer relies on brute force, the human falls back on experience and intuition.

Chess is easy to analyze by computer, as there is a finite number of moves. Running a bank is much more difficult, as there are an infinite number of variables daily. However, for insight, Kasparov came up with a fascinating idea and put together a competition. He allowed computers and teams of humans to play against each other. Each human team could use a computer to assist in analysis. The results were interesting. Human teams with even a normal laptop eliminated most supercomputers (like Deep Blue) the first round. However, the real surprise came at the final game where the tournament was won by 2 amateur (non-Grandmaster level) chess players using 3 laptops at the same time. In other words, what these 2 amateurs lacked in experience and ability, they made up for with computer models and process (utilizing 3 computers each with different functions). The lesson here is possibly an algorithm for the future, in that the average human with a good model and strong processes may be better than an expert human (or a supercomputer) with an average processes.

This conclusion holds ramifications for how bank managers conduct business, because so much of our lives now transpire in precisely this fashion. Google amplifies our ability to find information; social networking shifts our sense of community and leverages communication; while profitability, ALM, credit stress and loan pricing models help us peer into the future of banking. While these tools in one form or another have been around for years, the process is ever-changing. Technology applications are going from being a sideshow, to being deeply embedded into our daily business decisions and processes. Loan pricing models are one classic example of this evolution, as they are going from a way to decide on singular loans, to helping banks set allocation targets, train personnel and enhance structuring of the whole loan portfolio.

Technology tools don't replace human intelligence, or even work the same way. These applications are cognitively a different approach, which is why they can be unsettling to many bankers. When we get passionate emails and calls regarding social networking or the use of a loan pricing model, we have come to learn that these actions are an attempt to understand how we want, or don't want, our interactions with machine intelligence to be in the future.

Kasparov's game gives a hint to the future of banking "a better process to augment human intelligence with machine intellect. The game results, like what we are learning as a result of this economic downturn, suggest a superior ROE will accrue to those that figure out the best way to use thought-enhancing software. The process matters as much as the technology itself.

## BANK NEWS

### **Banks Closed (41 YTD)**

The FDIC closed: 1) McIntosh Commercial Bank (\$363mm, GA) and sold to CharterBank (\$943mm, GA) all deposits (no premium) and nearly all assets (\$263mm under a loss share). 2) Key West Bank

(\$88mm, FL) and sold to Centennial bank (\$2.8B, AR) all deposits (0.50% premium) and essentially all assets (\$76mm under a loss share). 3) Unity National Bank (\$292mm, GA) and sold to Bank of the Ozarks (\$2.8B, AR) all deposits (no premium) and practically all assets (\$206mm under a loss share). 4) Desert Hills Bank (\$497mm, AZ) and sold to New York Community Bank (\$40.2B, NY) all deposits (no premium) and virtually all assets (\$326mm covered by loss share). For more data, go here under our Failed Banks list..

### **Momentum on Bank Tax**

In an effort to mitigate TBTF, the Treasury, in coordination with other regulators worldwide, have proposed a "financial crisis responsibility fee" on the short-term liabilities of banks with assets of more than \$50B. This will be on the agenda at the upcoming G20 meeting in Jun.

### **SBA Fees**

H.R. 4938 was passed that extends (through Apr 30) the current reduced fees for the SBA's 7(a) loan program. The reduced fees were set to expire at the end of the month. The Bill also extends the 90% guarantee for small business loans under the 504 loan program.

### **Suspected**

Bankers at over a dozen banks (including BofA, Citigroup, GE, JPMorgan Chase, Lehman, Societe Generale, UBS and Wells Fargo) are being accused of allegedly co-conspired in fixing muni bond prices.

### **Irish**

The Irish Times is reporting that the Gov't of Ireland is moving to nationalize Allied Irish Bank by taking a 70% stake.

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