## Damn Excel! How the 'most important software application of all time' is ruining the world

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## The popular Microsoft program has been implicated in the financial crisis, Europe's growth problems, the U.S.'s weak economic recovery, and pretty much everything else.

FORTUNE -- Apparently some really smart people have trouble mastering Microsoft Office.

Early Wednesday morning, in an e-mail that went out to reporters around 2 A.M., Harvard professors Carmen Reinhart and Kenneth Rogoff copped to making an Excel error in their research paper tying high levels of government debt to low levels of growth. The paper, "Growth in Time of Debt," has become a powerful data point for those who argue against government spending even to revive the economy -- Congressman Paul Ryan cited it in his most recent budget -- and is the basis for the two professors' best-selling book *This Time is Different*.

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When it comes to Excel, though, Reinhart and Rogoff aren't all that different. Wall Streeters can relate. Prominent financial blogger <u>James Kwak</u> calls Excel "one of the greatest, most powerful, most important software applications of all time." But perhaps we ask too much of the program, or perhaps of our ability to cut and paste. In the past few years, Excel has been implicated in some of the biggest blunders on Wall Street and in finance in general. Here are some notable Excel victims:

**Kenneth Rogoff:** Reinhart and Rogoff in their 2010 paper claimed that when a country's debt hits 90% of its GDP, economic grows slows dramatically. The two Harvard professors said the conclusion was based on looking at the debt levels of dozens of countries going back to the 1800s. But according to a new paper from three economists at Amherst, a coding error in the Harvard professors' spreadsheet completely excluded the first five countries in their dataset, including Australia and Canada, from their calculations. The error, along with some other potential mistakes (which the professors refute), caused the professors to conclude that on average, countries in the 90% plus category tended to see their economies shrink -0.1% a year, according to the Amherst researchers. In fact, the economies grew 2.2%.



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London Whale: In the wake of last year's \$6.2 billion JPMorgan Chase (JPM) trading loss, traders have been fired, top executives have been hauled in front of Congress, and the FBI, among other regulators, is investigating. But you know who really needs to be questioned? Bill Gates. According to an internal report on the trading loss released in February, the model that was supposed to monitor and limit the amount of risk the bank's London traders were taking was "operated through a series of Excel spreadsheets, which had to be completed manually, by a process of copying and pasting data from one spreadsheet to another." One key measure was added when it should have been averaged. The result: Risk officers at JPMorgan believed the credit derivatives bets were half as risky as they actually were. So, I guess, CEO Jamie Dimon can pass \$3.1 billion off on Excel. The rest is still on him.



**MF Global:** About a year before MF Global went bust, consultants hired by the firm determined it needed to improve the "end user computer tools such as Excel spreadsheets" that the commodities broker used to monitor risk and how much money it had in its customers accounts, and to make sure that some of that money didn't end up in the account being used by CEO Jon Corzine to bet on whether or not Europe was about to implode. Those upgrades were never made.

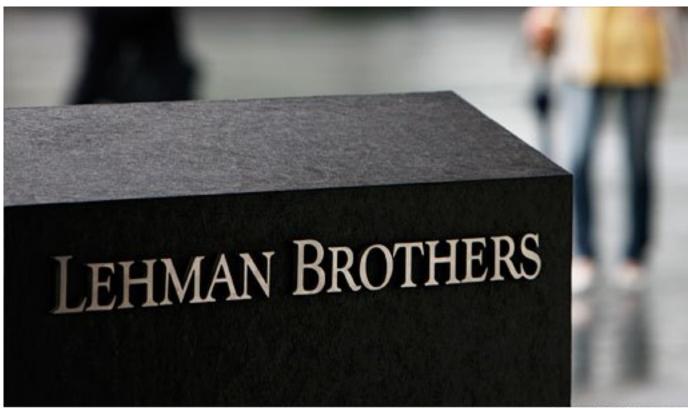


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Barclays purchase of Lehman Brothers: When Barclays sent over its offer to buy up Lehman Brothers in the immediate wake of the firm's September 2008 collapse, it did so with an Excel spreadshet. The makers of the spreadsheet, which detailed Lehman's assets and what Barclays was willing to buy, hid, rather than deleted, nearly 200 cells. But when a junior law associate at Cleary Gottlieb Steen & Hamilton converted the Excel file to a PDF and e-mailed it over to the bankruptcy court, the hidden parts of the spreadsheet reappeared. The result: Along with the parts of Lehman Barclays wanted, the British bank was also forced to swallow losses on an additional 179 toxic deals it never intended to buy.



**Utah:** Last year, a miscalculation in Utah's office of education understated the number of students who would enroll in the state's public schools and led to a \$25 million budget shortfall. The state's superintendent eventually attributed the error to a "faulty reference in a spreadsheet," and two of the state's top finance officials were forced to resign.



**Fannie Mae:** We should have seen the financial crisis coming. Back in 2003, the giant mortgage guarantor made an error in an Excel spreadsheet when transitioning to a new accounting regulation. The result: an error that made Fannie look \$1.3 billion more profitable than it actually was. The company was forced to later restate its results.



**Native Americans:** A tribe of Native Americans entered the wrong row into the cell of the Excel spreadsheet that contained the formula to compute the net present value of the Island of Manhattan, mistakenly leading them to believe that what was to become New York City was only worth \$24, which they accepted in beads and trinkets. Just kidding. The error was made in Lotus.

Posted in: carmen reinhart, excel, financial crisis, Kenneth Rogoff, Microsoft