

How not to Excel: Austerity economics paper is coding-flawed

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(Phys.org) —Required reading for those examining the cause and effect of bread lines: Two papers, one published in 2010 and the other published just this month, poking holes into the 2010 study and inciting a global wave of publicity. The 2010 paper, by Harvard economists Carmen Reinhart and Kenneth Rogoff, "Growth in a Time of Debt." claimed that as countries see debt/GDP going above 90 percent, growth slows dramatically: High levels of national debt lead to low or negative economic growth. The paper was supported by those involved in policy debates from the U.S, to Europe, calling for austerity measures as a



panacea to balance budgets and ease high levels of national debt, turning back a perceived tide of continued negative economic growth.

This month, however, University of Massachusetts academics said the 2010 study had errors. The real headline-maker by those viewing the new study turned out to be that, among the weaknesses found, was a coding error in Excel.

The new report is a turning point in long-standing controversy over the 2010 paper, as other <u>economists</u> sought to replicate the results drawn in the two authors' presentation, yet they were unable to do so. The authors of the <u>new paper</u>, "Does High Public Debt Consistently Stifle <u>Economic Growth</u>? A Critique of Reinhart and Rogoff," by Thomas Herndon, Michael Ash, and Robert Pollin, figured out why other scholars had such a difficult time replicating the results. Examining the data spreadsheet used in the 2010 study, the University of Massachusetts authors discovered several flaws.

The Excel error was not the primary problem but part of a number of weaknesses, according to the three authors. In addition to the Excel spreadsheet errors, they said they identified excluded data, and what they said were unusual weightings of statistics from which the two authors' conclusions were drawn. The abstract of the newly published paper said, "Herndon, Ash and Pollin replicate Reinhart and Rogoff and find that coding errors, selective exclusion of available data, and unconventional weighting of summary statistics lead to serious errors that inaccurately represent the relationship between public debt and GDP growth among 20 advanced economies in the post-war period."

In addition, the authors wrote that, "Overall, the evidence we review contradicts Reinhart and Rogoff's claim to have identified an important stylized fact, that public debt loads greater than 90 percent of GDP consistently reduce GDP growth."



At the same time, one of the co-authors, Ash, told *Businessweek* that the new <u>paper</u>, in examining the 2010 study, did indicate a modest <u>diminishment</u> in growth in countries suffering large debts but not like the stagnation or decline in the study by the Harvard authors.

In response, according to the *Financial Times*, Rogoff and Reinhart acknowledged the Excel spreadsheet mistake: "Herndon, Ash and Pollin accurately point out the coding error that omits several countries from the averages in figure 2. Full stop. HAP are on point," they said. At the same time, they defended their basic research conclusion regarding higher debt leading to slower growth.

More information: <u>www.nextnewdeal.net/rortybomb/ ... are-serious-problems</u>

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