Overcoming the Tyranny of the Stylized Fact

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When Thomas Herndon's professors at the <u>University of</u> <u>Massachusetts</u> asked the students in their graduate economics seminar to replicate an analysis in a published paper, little did they know that the results of Herndon's homework would soon be the <u>talk</u> of the discipline. The episode has been the focus of much discussion among economists but offers much broader lessons for how we think about the relationship between academic research and policy making.

As has now been widely reported, Herndon and his professors, **Michael Ash** and **Robert Pollin**, were unable to replicate the findings of a <u>widely influential paper by Carmen Reinhart and</u> <u>Kenneth Rogoff</u>, which claimed to find a "threshold for public debt ... Above 90 percent, median growth rates fall by one percent." The apparent **debt threshold** had been widely cited in debates over

government **austerity policies** in **Europe** and the **United States**. After Reinhart and Rogoff shared their working spreadsheet, the Massachusetts researchers, identified several questionable methodological choices as well as an embarrassing error in the Excel file, subsequently <u>described in a discussion paper</u>.

Economics, like many other academic disciplines, often finds its way into policy debates via what the discipline calls "**stylized facts**," which is usually taken to mean economic findings that hold generally, if not in all instances. In principle, the "stylized fact" thus provides the policy maker with a useful starting point for debate about alternative courses of action.

Unfortunately, the "**stylized fact**" – in economics and beyond – is often more effective for clouding debate than for clarifying it.

In their critique, **Herndon** and colleagues observed that **Reinhart and Rogoff** sought "to build the case for a **stylized fact**" and dryly pointed out that "a necessary condition for a stylized fact is accuracy." However, the Massachusetts team is not quite right about the notion of "stylized fact" – accuracy is in fact secondary.

The phrase was first introduced in 1962 by <u>Nicholas Kaldor</u>, an economist at <u>Cambridge University</u>, to suggest how economists should build theoretical understandings. He wrote that the theorist "should be free to start off with a '**stylized** ' view of the facts – i.e., concentrate on broad tendencies, ignoring individual detail ... without necessarily committing himself on the historical accuracy, or sufficiency, of the facts or tendencies thus summarized."

There is a big difference between simplifying the world's complexity in order to build generalizable theoretical models and simplifying the world's complexity in order to inform practical action. Context, nuance, and detail hardly matter for generalizable academic theory, but in policy making they can mean everything. The "**styled fact**" is thus an aid to theoreticians, and as such, should always be approached warily by policy makers.

Several years before the "**stylized fact**" was coined, John Kenneth Galbraith, <u>Harvard</u> economics professor and a contemporary of Kaldor's, <u>popularized the phrase "conventional wisdom"</u> to describe "ideas which are esteemed at any time for their acceptability." Galbraith gave the phrase a negative connotation, explaining that the ideas that constitute the conventional wisdom are often resistant to challenge: "they yield not to the attack of other ideas ... what is convenient has become sacrosanct."

The resistance comes from two directions: First, there are policy makers who depend upon the authority of expertise to buttress their political agendas. Jared Bernstein, a former advisor to President Obama, explained why the critique of the **Reinhart and Rogoff paper** would not have much impact on the public debate over **austerity**: "Why wouldn't we expect a reaction from policymakers? Because they're using research findings the way a drunk uses a lamppost: for support, not for illumination."

That politicians often use research expediently should come as a surprise to no one. Nor is it surprising that researchers may seek fame and influence by providing analyses that can serve as lampposts. Yet, in any system as complex as the economy, there will be ample data, methods, and perspectives for scholars to construct legitimate arguments that might be enlisted by just about any political perspective. Dan Sarewitz, at <u>Arizona State University</u>, has called this dynamic an <u>"excess of objectivity."</u> He explains: "Science is sufficiently rich, diverse, and Balkanized to provide comfort and support for a range of subjective, political positions on complex issues such as climate change, nuclear waste disposal, acid rain, or endangered species." To that list we can add economics too.

In the face of politicians who cherry-pick, academics who enable them, and those who don't (but nevertheless contribute to filling the metaphorical bowl of ideas with ever more cherries), it would be easy to throw one's arms in the air and abandon any hope of better connecting expertise with decision making.

But not all hope is lost. Academics can take two important steps to militate against the tyranny of the "stylized fact" as conventional wisdom.

First, academics can facilitate the understanding and accuracy of published work by making data, methods and, if applicable, computer code publicly available upon publication to facilitate replication by independent parties. Just this month the scientific publisher, Nature, is adopting new standards for its publications in the life sciences: "[W]e will more systematically ensure the reporting of key methodological details, give more space to Methods sections, examine the statistics more closely and offer more ways for authors to be transparent about these matters." Such steps should be adopted broadly across disciplines and journals. In the case of **Reinhart and Rogoff**, a long delay in releasing their data spreadsheet allowed their error to go uncorrected and their methods uncritiqued.

Second, in policy making, debates about "facts" often substitute for open debates about alternative courses of action. Experts and policy makers seeking to improve the quality of debates can help to avoid such proxy arguments by focusing attention on policy options. As I have often argued, such attention can take the form of advocacy, which seeks to argue for a particular course of action, or honest brokering, which seeks to characterize or even expand the scope of available choices.

Ultimately, we must remember that securing better connections between experts and decision makers guarantees neither that such advice will be heard, nor that it will compel particular decisions. Just a few days after the **Reinhart and Rogoff** "stylized fact" of a 90%-debt-to-GDP threshold was shown to be badly flawed, <u>Fitch Ratings, the ratings agency, downgraded its credit rating of the United Kingdom, based in part on the 90%-debt-to-GDP threshold</u>.

The general lesson here was captured not by an economist but by <u>Mark Twain</u>, who explained, "What gets us into trouble is not what we don't know. It's what we know for sure that just ain't so." To help keep research from turning into the drunkard's lamppost, beware **stylized facts** and challenge the **conventional wisdom**.

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