As Seen In СНАТТА N О О G А THE AUSTERITY magazine BY RAY RYAN, CFA DEBATE



) aseball players are well known for b their superstitions. Numerous accounts identify idiosyncrasies such as wearing the same pair of socks, driving the same route to the ballpark, eating the same pre-game meal as quite common among Big Leaguers. These behaviors do not occur by accident. At some point, each player must have identified a pattern associated with certain rituals relative to his performance on the field. Most certainly, superstitious players would only change their socks if there was assurance that such actions would not prove detrimental to their results during games. Those players, therefore, must conclude that better performance is somehow dependent upon the undergarments they wear or the food they consume or the traffic flow on game days.

While superstitions of ball players are entirely intuitive, the players are responding to a mathematical concept known as correlation. Correlation simply measures the interrelationship, or dependence, between two random variables. High correlations, when properly measured, can offer some predictive value. Thus, there might indeed be a high correlation between pre-game meals and performance during the game. A ballplayer might insist on maintaining this routine, and after consuming the same meal, his confidence might be boosted because of this knowledge. With a greater degree of confidence, performance might follow suit. This is known as a positive feedback loop.

Correlations vary with time, and they often suffer from periodic breakdowns. A player might notice for several games that wearing the same pair of socks coincided with better performance on the field. It is also quite probable that he could experience several games during which performance suffered while wearing those same socks. Most important, correlations should not be construed as causal. It is unlikely that socks are the cause of better performance.

Researchers have studied relationships between economic indicators in the search for predictive variables that might assist in policy development. For example, one of the most studied relationships is the trade-off between unemployment and inflation. Both monetary and fiscal policies have been implemented with this type of research as a guide.

Ray Ryan is a Principal and Portfolio Manager of Patten and Patten, an investment management firm, and a Registered Investment Adviser in Chattanooga. Ray is a CFA Charter Holder, a member of the Advisory Board for UTC's College of Business, and an Adjunct Professor of Finance at UTC. He is a graduate of Princeton University, where he had the privilege of taking a course taught by current Fed Chairman Ben Bernanke.

In 2010, two well-known economists published a comprehensive paper on the relationship between national (i.e., sovereign) debt and economic performance (i.e., as measured by Gross Domestic Product, or GDP). They calculated a simple ratio, Debt/ GDP, for a large number of sample countries over a lengthy period of time. Their work measured GDP growth rates for various levels of indebtedness and identified a correlation - debt ratios greater than 90% of GDP were associated with significantly slower rates of economic growth. In fact, they noticed that GDP growth rates for the countries in their sample experienced a sharp decline once the 90% Debt/GDP threshold was breached.



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Intuitively, this seemed to be a reasonable conclusion. Countries depend on investors to provide capital for the services they provide to their citizens. If countries were permitted to borrow without limit, the annual cost of the debt service would eventually consume their entire budget. Investors would likely balk well before such levels of debt were realized, and countries would suffer from interest rate volatility as they approached this "natural" limit on debt. A country that cannot borrow in a cost effective manner loses the ability to fund its basic services. Several economies in Europe have recently suffered massive disruptions to their banking systems and credit markets because investors feared the amount of debt had become excessive. In response, policy makers required that such economies adopt severe austerity measures to shrink budget deficits and arrest debt accumulation.

Interestingly, the authors of the study never assigned causality. In fact, they acknowledged that slow GDP growth rates could contribute to high debt levels to the same degree that high debt levels correspond with slower economic growth. Global policy makers did not accept that the research merely identified a correlation. Their policies were instead focused on high debt levels as the cause of slower economic growth, with 90% Debt/GDP serving as an important and dangerous threshold. The policy prescription since the Financial Crisis of 2008 has been to impose austerity measures as countries approached high levels of Debt/GDP.

Fuel was recently added to the fire known as the "austerity debate" when the authors of the seminal research acknowledged a significant error in their calculations. This error was identified by a different group of researchers that attempted to replicate the original results. The second group of researchers acknowledged that Debt/GDP ratios greater than 90% corresponded with slower economic growth, but the decline in the GDP growth rate they measured was not nearly as severe. They concluded that the original research was flawed, and as a result, the focus on austerity as a policy prescription was fundamentally misguided.

This development has created a firestorm among academic economists. There has also been a subtle, yet noticeable, shift among certain policy makers that were previous advocates for austerity. One wonders whether far too much damage has already been inflicted, particularly in Europe, related to such measures. The Debt/GDP ratio is influenced by both the numerator and the denominator. A shrinking denominator (i.e., GDP) has the net effect of worsening the ratio. This is

precisely what occurred in Europe as austerity measures exacerbated the effects of the recession and policy contributed to declines in GDP growth rates. Ironically, much of the current debate echoes the intense disagreement between notable economists during the 1930s over many of the same issues. Sadly, it appears that eighty years of research have definitively answered few questions.

It is without question that governments need to operate with greater efficiency. Inefficiencies, to a significant degree, reflect the political process and influence of bureaucracy. It also must be acknowledged that the private sector could not supplant the government in all the basic services that are provided to the public. Thus, policy should strive to achieve a sustainable balance between government services and private sector solutions.

Advocates of the austerity approach should acknowledge that reduced government spending will initially result in reduced economic growth. Whether one works directly for the government or works for a government contractor, reductions in federal outlays will likely cause a contraction in the economy. Consumption is the largest contributor to our nation's GDP, and government spending is second. Austerity has the net effect of directly reducing government spending and indirectly reducing consumption. Initially, therefore, the Debt/GDP ratio would worsen, as has been the experience in Europe.

Pro growth advocates need to acknowledge that fiscal stability is necessary for our nation's long-term economic sustainability and national security. Reform of non-discretionary budget outlays and the overall tax code are necessary. While a "line in the sand" approach with respect to fiscal policy limits seems fraught with dangerous implications, it is unlikely that investors will indefinitely subsidize profligacy. Thus, the markets will impose some limit in the future on debt accumulation, and if that occurs at the 90% Debt/GDP, the correlation will be tested yet again.

The key to developing sound policy is to achieve balance. Extreme austerity will dampen economic growth while undisciplined spending will damage long term creditworthiness. More important, policy makers should pay close attention to the caveats in research and not conclude that correlations imply causation. After all, a baseball player might feel confident wearing his lucky socks, but his performance will be dependent upon many factors.