

E C O N O M I C S B U L L E T I N

Theory and evidence on economic freedom and economic growth: A comment

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Abstract

Altman (2007) examines the impact of economic freedom, including its various component parts, on aggregate economic performance across countries. He claims that some of the component parts of economic freedom, measured primarily with the Economic Freedom of the World index, are correlated positively with higher levels of per capita income and growth while others are not. He also attempts to identify "threshold effects" within the data that indicate differential impacts of economic freedom on economic performance at different levels. Although both questions are worthwhile, ultimately his efforts are unconvincing for both theoretical and empirical reasons which we discuss.

The authors would like to thank John Conley and an anonymous referee for helpful comments. The usual disclaimer applies.

Citation: Hall, Joshua and Robert Lawson, (2008) "Theory and evidence on economic freedom and economic growth: A comment." *Economics Bulletin*, Vol. 15, No. 18 pp. 1-6

Submitted: May 13, 2008. **Accepted:** November 2, 2008.

URL: <http://economicsbulletin.vanderbilt.edu/2008/volume15/EB-08O00006A.pdf>

1 Introduction

In a previous issue of this journal Altman (2007) examines the impact of economic freedom, including its various component parts, on aggregate economic performance across countries. There are two main thrusts in his paper. First Altman claims that some of the component parts of economic freedom, measured primarily with the Economic Freedom of the World (EFW) index constructed by Gwartney and Lawson (2007) and published by the Fraser Institute, are correlated positively with higher levels of per capita income and growth while others are not. Second, Altman proposes to identify threshold effects within the data that indicate differential impacts of economic freedom on economic performance at different levels. Although both questions are worthwhile, ultimately his efforts are unconvincing.

2 Engaging In A Conversation

Properly understood, economics is a conversation. Our understanding of the world advances when different perspectives are brought to bear on difficult problems. In order for this conversation to occur, however, participants have to speak so that others in the conversation can understand them. Therefore it is incumbent on those desiring to enter and contribute to a conversation to properly situate their contribution within the larger conversation (DeLong, 1998). Altman does not do this and as a result his findings are not convincing

For example, while he is careful to discuss the New Institutional Economics (NIE) literature inspired by Douglass North, F.A. Hayek and others, he ignores the more basic neo-classical theoretical framework upon which the NIE literature was founded. In the case of aggregate GDP per capita, standard neoclassical theory would propose that a nation's aggregate productivity is a function of the stock of capital, labor (human capital), and technology. Recently, scholars such as Hall and Jones (1999) have incorporated measures of institutions within this framework. Similarly, the new growth theory that focuses on institutions initiated by Barro (1991) among others was an outgrowth from Solow (1956) growth models. Standard empirical growth models include measures of the initial level of income (to test for conditional convergence), measures of investment in physical and human capital, and other institutional and environmental variables of interest.

Unfortunately, Altman's analysis mostly misses this body of theoretical and empirical work. His empirical analysis is little more than simple correlations, and based on the vast existing literature we would argue that his univariate regressions are all guilty of omitted variable bias. As a result, the slope coefficients that he estimates are biased. It is hard to take seriously any conclusions arising from a set of simple correlations that control for none of the confounding variables that both theory and the vast existing empirical literature say are important.

More importantly, he appears completely unaware of a large existing literature that does try to carefully examine the growth and income impact of the EFW index and its components. De Haan, Lundström, and Sturm (2006) provide an extensive survey of literally dozens of papers that examine the impact of economic freedom on growth. It is clear from

these studies that EF [economic freedom] seems to have a positive association with growth. None of the studies summarized reports that economic freedom is bad for growth. Even though many studies have drawbacks, it is a strong result that emerges when looking at these studies collectively. Furthermore, those studies that deal with the problems of model specification and sensitivity in a more rigorous way also find that there is a positive growth effect from EF. (De Haan, Lundström, and Sturm, 2006: 170)

In addition, a number of studies examine the impact of different components of the EFW index on growth (e.g., Heckelman and Stroup, 2000; Heckelman, 2000; Ayal and Karras, 1998; Carlsson and Lundstrom, 2002; Dawson, 2003, and Berggren and Jordahl, 2006). Although all these studies agree that some aspects of economic freedom may matter more for growth than others, this issue is highly complex both theoretically and statistically (Lawson, 2006), and no consensus has yet emerged. Regrettably, Altman's simple correlations add nothing to this conversation.

3 Examining the Evidence

One particular result deserves extra attention. He notes the slope coefficient between the economic freedom component measuring the fiscal size of government and GDP per capita is negative indicating that larger government spending correlates with higher levels of income. There is much debate about this question. Generally Lindert (2003), whom Altman cites approvingly, argues that this is evidence that large governments are not a hindrance to economic productivity and may even be helpful. Others (Bergh, 2006) suggest that the causality runs in the other direction—that highly productive countries ultimately choose to have large governments. Still others suggest that the result is a function of not controlling for other factors such as property rights enforcement, trade and monetary policies, the quality of government spending, etc. Angelopoulos, Philippopoulos, and Tsionas (2007) for example find that almost all governments are too large from the standpoint of growth if controlling for the efficiency of government spending.

It turns out that some of the most productive economies have large but highly efficient governments, thus we observe a spurious positive relationship between government size and income. Altman actually acknowledges this when he writes regarding government spending that “Much depends, as common sense would lead us to expect, on how funds are spent.” True, other variables matter, but this point merely highlights the unreliability of the simple correlations in which he places so much faith.

Somewhat related to this, it is worth noting that Altman questions the inclusion of factors such as labor market flexibility in the EFW index that he says can be positives for the economy. We believe he misunderstands the nature of the EFW project. The point of the EFW index is to measure economic freedom in a positive sense. Whether economic freedom is normatively good or bad in relation to other social desiderata is not the focus of the index per se, but rather should be evaluated by the ensuing research.

Another interesting result is Altman's claim that the correlation between the change (and percentage change) in the EFW index is negatively related to GDP per capita. This

is no surprising result. Most of the high income countries in the world score near the top of the EFW index, and with few exceptions have been at the top for years. There is simply no way for their EFW index to increase much. Meanwhile, countries with increasing EFW scores are low-income nations with low initial EFW ratings. The correlation between income and the change in the EFW index is negative simply because it is poor countries that are reforming the most. Rich countries are already market economies and have little reforming to do. There is simply no theoretical reason that the change in the EFW index should be highly correlated with the current level of income.

Related to this point, Altman reports a very curious result with respect to changes in the EFW index and growth. He reports a negative 0.833 correlation coefficient between the percentage change in the EFW index and growth but a positive 0.084 correlation between the absolute change in the EFW index and growth. According to our calculations, the simple correlation between the percentage and the absolute change in the EFW index from 1990-2005 is 0.964 so the divergence in Altman's numbers is odd to say the least. Indeed, we are unable to replicate the first result using our own data. We find the corresponding correlations both to be positive and of about the same magnitude.

The second portion of Altman's paper critically examines whether the relationship between economic freedom and its components and income and growth is linear. To this end, he plots out scattergrams among the various variables with simple straight-line regression lines included. To the best of our reading, he then visually inspects, in what can only be described as "ocular least squares", these charts to argue that the slopes tend to get steeper as the EFW index increases. That is, increases in economic freedom tend to have small marginal impacts at low levels of economic freedom, and that the impact of economic freedom grows larger at higher levels of economic freedom.

Leaving aside the still valid criticism from above that these results are highly suspect because of their failure to control for known-to-be-important confounding variables, we question this approach. Basically, Altman is arguing that the functional relationship between economic freedom and income and growth is not linear as is usually assumed in the literature. This is surely a worthwhile point to consider, but rather than simply eyeballing the data, we suggest experimenting with different functional forms (quadratics, logs, exponentials) or dummy variable interactions to test for this.

In addition, he suggests that the data are heteroskedastic, though he does not use this term explicitly, with larger ranges in the dependent variable (i.e., errors) at different levels of the economic freedom data. But this is surely a function of the misspecified model more than anything else since heteroskedasticity is often a result of simple misspecification. In any case, there are many better ways to test for heteroskedasticity than a visual inspection.

4 Conclusion

In the end, Altman's simple correlations add nothing to the on-going and important discussion about the role of economic freedom in contributing to aggregate economic performance.

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