

MEMORANDUM

To: Helen Clark Administrator, United Nations Development Program
From: ██████████ Consulting
Re: Policy application of the research paper “Who Works in the Public Sector?”
Date: June 6, 2013

I have reviewed “Who Works in the Public Sector?” by Sarah Smith and Edd Cowley. They cite evidence from the World Values Survey (WVS) to support their thesis that intrinsically motivated people are more likely to work in the public sector, however the perception of government corruption has a diminishing effect on this trend. Their initial analysis shows a positive correlation between intrinsic motivation and public sector employment in a majority of the countries examined, the authors note that their first model produces some variation, in that several countries show a negative correlation. Both of their subsequent analyses quantify the influence of perceptions of governmental corruption (CPI). They put forth a compelling argument, which logically makes sense and is supported by their analysis. However, I have serious reservations about basing a multi-million-dollar international policy on this paper’s key conclusions. I believe that their analysis is sound and their conclusions make intuitive sense. However I do have a few concerns regarding the data used and their reporting results. Below I will:

- Summarize the authors’ *techniques and conclusions*.
- Outline my *reservations about this research*.
- Explain the *problems with using these conclusions* to shape policy.

Methods and Conclusions

The authors come to their conclusion with the use of three regression models:



- The first model seeks to answer the question: *are intrinsically motivated individuals more inclined to work in the public or nonprofit sectors?*
- The second model intends to address *the variation seen between different countries in percentages of intrinsically motivated people working in the public vs. private sectors* by quantifying the relationship between corrupt governments and the employment of this type of person.
- The final model uses an *interaction term to examine intrinsic motivation and government corruption in relation to each other*.

The First Model


In this model Smith and Cowley identify the percentage of intrinsically motivated people working in the public and private sectors. This model uses a binary dependent variable: PUB_i defined as a 1 if an individual from the sample data works in the public sector and a 0 if they do not. These values are explained with independent variables implying intrinsic motivation. To quantify this, the authors have used self reported responses to WVS questions regarding the value that the respondent puts on *having a meaningful job* and *helping and caring about people nearby*, additionally they considered responses about working with charities/environmental organizations and participation in sports. As a control for they also consider the effect that age, gender, and degree status have on an individual’s sector of employment.


Variable Influence and Statistical Significance

The impacts of the independent variables make intuitive sense: all of the control variables have positive correlations with public sector work. In most countries having a college degree has the greatest amount of influence on an individual's likelihood to work in the public sector and age has the least.


-  The variables relating to their path of inquiry are also in line with reasonable expectations: being motivated by the desire to have an “important” job is positively correlated with work in the public sector in 30/51 of the countries analyzed. These results are statistically significant in 6 to 16 countries, depending on how the authors stratified their data. Measures of “life motivation” also
-  have a positive correlation with public sector employment in 33/51 countries, these results are statistically significant in only 10 countries. Indicating that 21 and 18 countries show a negative correlation between intrinsically motivated people and employment in the public sector. Similar results were observed relating to participation in charities/environmental organizations.

The Second Model

In this model the researchers identify the influence that the perception of corruption in government has on discouraging intrinsically motivated people from work in the public sector. The purpose of this inquiry is to explain why the model described above indicates a minority of countries where there is a negative correlation between intrinsically motivated people and public sector work, implying that these people are more drawn to work in the private sector. In this analysis the dependent variable, M_c^{PUB} , is the difference between the percentages of intrinsically motivated people working in the public vs. private sector of a given country. The researchers use the Corruption Perception Index (*CPI*), to rate the level of corruption in a given country, a 0 to 10 scale is used to quantify this variable, with 10 being high. This measure is cross-referenced, to account for potential dishonesty in self reporting in more corrupt countries, by including the variables: years of continuous democracy and geographic latitude, the authors cite the latter as a  measure of European influence, which they equate to a lower level of corruption. In this model as well Smith and Cowley use age, gender, and degree status.


The conclusions of this regression analysis are that for every increase in perceptions of corruptions in government equal to one on the scale used there will be a three percentage point decrease in the concentration of intrinsically motivated people working in that government. 

The Third Model

This model best supports the authors' thesis. With this linear regression the researchers consider the percentage of government workers who are intrinsically motivated as well as the level of government corruption. For this regression they use the variables M_i , the proportion of government employees who are intrinsic motivated and CPI_c , the level perceived corruption in a given country. The crucial variable in this analysis is an *interaction term* measuring the interplay of the two variables mentioned above. The purpose of this variable is to gauge the effect that the two variables have when considered jointly. These three variables are used to calculate the binary variable *PUB*, 1 if the individual works in the public sector 0 if not. 



Variable Influence and Statistical Significance





In this analysis the authors find that the interaction term is negative with more than three times as large of an influence than *CPI* alone, indicating the perception of governmental corruption has a negative influence on the intrinsically motivated employees working in the public sector. By

introducing the interaction term, the coefficient of intrinsically motivated people is also tripled from the first equation. This indicates that other equations were incomplete. 



The researchers conclusion is that the variation observed in the first analysis showing a negative correlation between intrinsic motivation and public employment in several countries can be explained with the inclusion of a variable representing corruption.

Reservations About this Research

Throughout their paper Smith and Cowley report statistically insignificant results when they support their thesis. However, in their first attempt to include the interaction term the model produced a statistically significant positive correlation between intrinsically motivated people working in the public sector and the levels of perceived government corruption. Because of this they adjusted the model to account for the size of government, the new model resulted in a very low negative correlation for that variable. My skepticism of their results is further heightened by the fact that any indication of “goodness of fit” for their modeling is omitted. In fact throughout all of their analyses the strongest correlation between intrinsically motivated people and public sector employment is whether or not they have attained a college degree. This fact leads me to believe that the authors are driven more to prove the validity of their thesis than to answer the question of why different people are motivated to work in different sectors. Furthermore the authors do not show that corruption in government causes a loss of intrinsically motivated public sector employees, only correlation. 


The intrinsic motivation of an individual respondent, for the purposes of this paper, was identified through the value that was placed on having an “important” job. For obvious reasons the meaning of having an “important” job will be different in socialist countries than in capitalist economies. This is just one example of the unreliability a large multi-lingual/cultural survey such as the WVS. The hyper focus on a literal interpretation of responses and phrasing of certain questions begs consumers to consider what could potentially be lost through the translation of words and meanings. 




Policy Implications

 As I have said the conclusions of this paper make intuitive sense and the methods of analysis are appropriate. Nearly all of the correlations that are identified imply that this research is a good fit for international policy, and reducing governmental corruption would be viewed by most as a worthy endeavor. Having said this I do not believe that the analysis presented in this paper should be used as the justification to impose such a policy. Though the authors attempt to show that government corruption causes a loss of intrinsically motivated people there is no evidence given  that the relationship would work the other way.

Conclusion

This paper is not a sound basis for a major policy endeavor. The authors do show a correlation between intrinsically motivated people and public sector employment and that there is weak negative correlation between governmental corruption and this same group working in the government. However, their presentation and omission of data makes me skeptical of their methods as does the nature of the data that their analysis is based on.