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**Undergraduate Studies**

BA, Economics, Auburn University, 2007

**Graduate Studies**

The University of Arizona 2007-present

Thesis Title: "Land Grabs, Malaria, and Electricity: The Lasting Impacts of the TVA"

Expected Completion Date: May 2012

**References:**

Professor Price Fishback (Dissertation Chair)  
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**Teaching and Research Fields:**

Primary fields: Economic History

Secondary fields: Health, Development, Law and Economics

**Teaching Experience (Sole Instructor)**

Econ 300 Intermediate Microeconomics for Business Decisions – Summer 2008, 2010 (2 Sessions)

Econ 323 The Economics of Sports- Summer 2009, Summer 2010, Fall 2010, Fall 2011

**Professional Activities and Presentations:**

Referee for the Journal of Economic History

Southern Economic Association, Annual Meeting, November 2011

The University of Michigan, Department of Economics, October 2011

NBER Summer Institute America and the Developing Economy, July 2011 (Poster Session)

The American Economic Association, Annual Meeting, January 2011

The Economic History Association, Annual Meeting, September 2010 (Poster Session)

The University of Tennessee, Knoxville, Department of Economics, September 2010

### **Honors, Scholarships, and Fellowships:**

The National Science Foundation Doctoral Dissertation Improvement Grant, 2010  
The Economic History Association Exploratory Travel Grant, 2010  
The Institute for Humane Studies Humane Studies Fellowship, 2010, 2011  
The Economic Science Lab Grants for Researchers (with Alex Roomets), 2010  
The University of Arizona: Don Wells Teaching Fellowship, 2010  
The University of Arizona: Elmer Brown Memorial Scholarship, 2011

### **Published Book Reviews:**

Review of *Mosquito Soldiers: Malaria, Yellow Fever, and the Course of the American Civil War* by Andrew McIlwaine Bell. *The Journal of Economic History*. 2010

### **Research Papers:**

*"A Dam Problem: TVA's Fight Against Malaria 1926-1951"* (Job Market Paper)

Under Review at the Review of Economics and Statistics

Large Scale Dams and Public Works Projects have wide-ranging impacts on the surrounding areas, including disease environments. The TVA has long been held in high esteem for its programs designed to reduce malaria mortality and morbidity rates in the Southeast following its establishment in 1933. On the other hand, the TVA dams created large bodies of standing water that contributed to increased problems with malaria. I compiled and digitized a new panel data set of annual data for Alabama and Tennessee counties for the period 1926 through 1951 to estimate the net impact of the TVA on malaria mortality and morbidity. The implementation of the TVA led to a net increase in malaria morbidity and mortality rates of 40 percent and 120 percent relative to rates prior to the arrival of TVA dams. Some TVA efforts helped reduce the net increase but did not lead to a reduction below the malaria rates prior to the TVA's introduction. The additional loss of 430 to 650 lives to malaria implies a mortality cost of the TVA of \$4.3 billion (2010\$) using standard statistical life value estimates over the period 1933 and 1951.

*"The Use of Eminent Domain in Land Assembly: A Case Study of the Tennessee Valley Authority"*

To construct dams and reservoirs, the TVA had to purchase approximately 700,000 acres of land for flooding. The TVA was granted the right to use eminent domain in order to acquire the land needed for each project. This paper uses newly digitized records of TVA property purchases and newly digitized records of families living in the reservoir area to assess how prices for the properties were determined under the threat of eminent. The model developed in the paper predicts that the TVA will blanket offer all sellers a low price using the court system as a screening process to determine who the high value sellers are. If the court can credibly determine a seller's value, the model predicts that court awards should be higher than privately negotiated transactions. Empirically, the results show that sellers refusing a TVA appraisal receive a premium from the court. It is also possible to identify the set of characteristics that make an individual more likely to refuse a private offer by using the family level data reported in the TVA records. These results show that individuals with strong roots in the community are most likely to holdout until they are removed from the land.

*"The Role of Publicly Provided Electricity in Economic Development: The Experience of the Tennessee Valley Authority 1929-1955"*

This paper examines the long term impact of TVA electrification programs on county level incomes, manufacturing activity, and rural electrification rates using panel data. To control for the endogenous selection of counties and municipalities into power contracts with the TVA, I instrument for TVA power contract status using a negative cost shock based on the distance that a county is located from the nearest

TVA dam. I find that counties that entered into a TVA power contract did not have improved outcomes relative to their privately electrified counterparts.

*“Dealing with Eminent Domain”* (with Alex Roomets)

We develop a Sequential Nash Bargaining game to study the efficiency of bargaining under the credible threat of eminent domain relative to private contingently contracted transactions. We then test the model experimentally to examine the efficiency of each treatment and the division of surplus. We find that efficiency is equal across the treatments, and observed prices in the eminent domain treatment matched their theoretical predictions, however, the observed prices in the contingent contract treatment differed from equilibrium predictions. These results suggest that when there is complete information, eminent domain does not alter surplus, and may not in practice alter the distribution of surplus

### **Works in Progress:**

*“Swat that Mosquito: Estimating Causal Factors in the Decline of Malaria Rates 1937-1947”*

Between 1930 and 1950 the malaria morbidity and mortality rate in the southeast United States plummeted from infecting 30 percent of the population to near zero. This paper examines the role of the Works Progress Administration drainage programs, the Malaria Control in War Areas programs, and the arrival of DDT to estimate the impact and cost effectiveness of each malaria control activity. I then back out the implied cost per life saved.

*“Holding! Estimating Changes in the Distribution of Crime: Evidence from the National Football League”*

Between the 2009 and 2010 National Football League seasons, the league repositioned one official to prevent on the field injuries. This creates an exogenous change in the locational distribution of police, allowing changes in the distribution of crime to be identified. This paper uses play by play data from the 2009 and 2010 NFL seasons to identify the distributional change of penalties for position players affected by the repositioning. I find that repositioning led to a 17 percent increase in offensive holding penalties, and an equivalent decrease in defensive holding penalties. Furthermore, the results imply that NFL officials detect approximately 60 percent of all penalties during the course of a game.