

# **Schnatter Institute Research Day:** 2016 Working Paper Series

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Leonce Barger  
David Bradshaw  
James S. Fackler  
John Garen  
William C. Gerken  
Kristine W. Hankins  
Frank Scott  
Aaron Yelowitz  
David A. Ziebart

*September 1, 2017  
12:30-2:30  
311 Gatton College*

 **John H. Schnatter**  
Institute for the Study of Free Enterprise

University of Kentucky  
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## *About the John H. Schnatter Institute for the Study of Free Enterprise*

University of Kentucky's John H. Schnatter Institute for the Study of Free Enterprise enhances public understanding of the connections among free enterprise, markets and individual freedom through rigorous research and open dialogue.

The Schnatter Institute produces unbiased, data-driven research on key economic issues of importance to society. Key areas of research interest include health care markets, labor markets, financial markets, and fiscal and regulatory policy.

The Schnatter Institute was founded in December 2015 with a generous gift from the John H. Schnatter Family Foundation and the Charles Koch Foundation to the Gatton College of Business and Economics.

## *About John H. Schnatter*

In 1983, John Schnatter delivered his last college campus pizza, received his business degree from Ball State University, and headed home to Jeffersonville, IN. There, at age 22, he knocked down a broom closet in his father's tavern, installed an oven, and began delivering pizza out of the back of the bar.

From day one, John believed he could make a better traditional pizza by using fresh dough and superior-quality ingredients. His goal: to make the same great-tasting pizza that locally owned shops offered, but didn't deliver. Today, Papa John's boasts more than 5,000 locations in 44 countries and territories around the world.

John believes that if you are curious, innovative, and work hard in America, you can get ahead—especially when you have the right ingredients.

Research was funded through the BB&T Program for the Study of Capitalism and the John H. Schnatter Institute for the Study of Free Enterprise

## Leonce Bargeron – The Buffering Effect of Brands for Companies Facing Legislative Homogenization: Evidence from the Introduction of Sarbanes-Oxley

How do corporations—who balance making sales today and planning for the future—respond to regulatory change? Thomaz, Bargeron, Hulland, and Zutter’s study provides evidence that legislative changes, such as Sarbanes-Oxley, can significantly affect a corporation’s priorities. The passage of Sarbanes-Oxley incentivized U.S. corporations to focus more on reaping the immediate gains from marketing rather than investment in research and development.

Dr. Leonce Bargeron is an assistant professor of finance and Ashland Oil Endowed Faculty Fellow in the Department of Finance and Quantitative Methods at the University of Kentucky. Dr. Bargeron received his PhD from the University of North Carolina.

## David Bradshaw – Passions' Republic

Dr. Bradshaw explores today’s political, social and moral divides with reference to the works of John Locke and Jean-Jacques Rousseau. Finding that behind these thinkers’ rationalizations are destructive forms of thinking and feeling, Bradshaw argues that to unify requires returning to the classical disciplines imbedded in Plato, Aristotle and the Christian ideal of educating the passions.

Dr. David Bradshaw is a professor in the Department of Philosophy at the University of Kentucky. He received his PhD from the University of Texas at Austin.

## James S. Fackler – Interwar Price Level Targeting

The Great Depression may have been preventable. Using a formalized policy rule instead of relying on the Federal Reserve’s discretionary policy decisions, may have prevented the country’s worst economic crisis. Fackler and Parker analyze what could have happened if the country had adopted Irving Fisher’s recommendations in 1930.

Dr. James Fackler is a professor in the Department of Economics at the University of Kentucky and an affiliate of the John H. Schnatter Institute for the Study of Free Enterprise. Dr. Fackler received his PhD from Indiana University.

## John Garen – Educational Test Scores and Educational Spending: A Look Across States, 1992 – 2015

Dr. Garen takes a bird's eye view of educational test scores and spending from 1992 through 2015 across the United States. Most states increased educational spending dramatically and these increases are correlated with higher educational test scores. However, the very small increases in test scores came with very large increases in spending, lowering the effectiveness of spending. The productivity of spending on student outcomes has continued to fall.

Dr. John Garen is the BB&T Professor of Economics in the Gatton College of Business and Economics at the University of Kentucky. He is the founding director and an affiliate of the John H. Schnatter Institute for the Study of Free Enterprise. He is a member of the Mercatus Center's Faculty Network and of the Board of Scholars for the Bluegrass Institute for Public Policy Solutions. Dr. Garen received his PhD from Ohio State University.

## William C. Gerken – Hedge Fund Boards and the Market for Independent Directors

Why do hedge fund investors feel confident that their money is in good hands despite lax government regulation? Reputation. Clifford, Ellis, and Gerken's research find strong, market-based incentives for fund managers to hire reputable directors to monitor their funds. And while managers are looking for reputable directors, directors are looking for high quality funds to work for—creating mutual interests for close monitoring and honest dealing.

Dr. William Gerken is an Assistant Professor of Finance in the Department of Finance and Quantitative Methods at the University of Kentucky. He serves as the principal contact for the CFA Institute University Recognition Program. He has a PhD in Finance from Michigan State University.

## Kristine W. Hankins – Understanding Precautionary Cash at Home and Abroad

Does the U.S. tax code push corporations to save more cash abroad? While the desire to fund future investment encourages domestic corporate savings, lower international tax rates encourage U.S. corporations—especially those with intensive research and development programs—to save larger amounts of cash abroad, according to this research by Faulkender, Hankins, and Petersen.

Dr. Kristine Hankins is the William E. Seale Professor and Associate Professor of Finance at the University of Kentucky. She completed her PhD at the University of Florida.

## Frank Scott – Single Bidders and Tacit Collusion in Highway Procurement Auctions

Kentucky spent over \$590 million between 2005 and 2007 on asphalt paving projects. Barrus and Scott analyzed companies' choices to bid and how much to bid in that period to explore the affect that varying levels of competition had on the price the Commonwealth paid. With a majority of contracts attracting only one bidder these projects cost the Commonwealth between 9.3% and 16.5% more than projects with additional bidders.

Dr. Frank Scott is Gatton Professor of Economics at the University of Kentucky and an affiliate of the John H. Schnatter Institute for the Study of Free Enterprise. He received his PhD in economics from the University of Virginia.

## Aaron Yelowitz – How Did the ACA Affect Health Insurance Coverage in Kentucky?

Dr. Yelowitz's research explores the unintended consequences and individual incentives that arise when the government sets up health insurance markets outside of the free enterprise system. Following the Affordable Care Act expansion, the integrity of the Kentucky Medicaid program may be at risk. This first look finds that 38 percent of Kentucky's new Medicaid enrollees were not eligible for the program in 2014, according to data from the American Community Survey.

Dr. Aaron Yelowitz is an associate professor in the Department of Economics at the University of Kentucky and Director of the John H. Schnatter Institute for the Study of Free Enterprise. He is also a joint faculty member in the Martin School of Public Policy and Administration at the University of Kentucky and an adjunct scholar with the Cato Institute. He serves on the editorial boards for Journal of Labor Research, Public Finance Review and Inquiry. Dr. Yelowitz received his PhD from MIT.

## David A. Ziebart – Transaction Complexity and the Movement to Fair Value Accounting

As technology becomes more complex, business transactions and accounting standards both become more complex. But do accounting standards need to match the complexity of business transactions? Rusli, Zhao and Ziebart find that accounting standards can be simpler if they rely on market-established prices of relevant assets.

Dr. David Ziebart is the PwC Endowed Professor of Accountancy in the Von Allmen School of Accountancy at the University of Kentucky. He received his doctorate from Michigan State University and is a CPA (non-practicing) in Illinois.



## RESEARCH SUMMARY

### The Buffering Effect of Brands for Companies Facing Legislative Homogenization: Evidence from the Introduction of Sarbanes-Oxley

Felipe Thomaz, University of South Carolina  
Leonce Bargeron, University of Kentucky  
John Hulland, University of Georgia  
Chad Zutter, University of Pittsburgh

How do corporations respond to changes in their regulatory environment? How does it affect their spending on two critical activities:

1. Value creation (researching and developing new products) and
2. Value appropriation (extracting profits from existing products)?

Corporations balance their expenditures between planning for the future (value creation) and making sales today (value appropriation). Excessive research and development may result in too many costs without enough benefits, while too little innovation may reduce their competitive advantage in the future.

Analyzing corporate behavior change following the passage of the 2002 Sarbanes-Oxley Act, Thomaz, Bargeron, Hulland, and Zutter found that, on average, corporations shifted their spending away from value creation and towards value appropriation. This shift led to reduced marketing efficiency—the proportion of sales to marketing expenditures decreased. However, companies with strong brands were shielded from the efficiency reduction.

#### BACKGROUND

In the wake of a series of accounting scandals (Enron, WorldCom, and Adelphia), the United States Congress attempted to restore investor confidence and prevent future scandals by passing the Sarbanes-Oxley Act of 2002 (SOX). The act targets U.S. companies with asset values greater than \$75 million. Two elements of the act increased the costs of risky investments:

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1. The chief executive and chief financial officers must certify the correctness of the firm's financial statements (and potentially face related criminal charges); and
2. Corporations must evaluate and disclose the effectiveness of internal control systems to avoid or identify misstatements about investments.

The increased costs of risky investments has been confirmed by prior research which found that risk-taking in U.S. firms decreased after SOX. Using financial accounting and stock data, the authors explore the increased cost of risky investment by analyzing the trade-off between value creation (R&D) and value appropriation (advertising) before and after the passage of the act.

## FINDINGS

This study provides evidence that legislative changes such as Sarbanes-Oxley can significantly affect corporate marketing policies and result in less efficient expenditures.

In the post-SOX environment, U.S. corporations are trading away their future (investments in research and development) for immediate gains (sales from advertising). This response may jeopardize their future and their stakeholders' (shareholders, suppliers, employees, and customers) future wellbeing.

- On average, corporations shifted their emphasis away from riskier R&D investments and towards safer marketing activities.
- Increased corporate marketing expenses across industries led to decreases in marketing efficiency—the proportion of sales to marketing costs.
- However, firms that invested in building their brand prior to SOX maintained more of their marketing efficiency.

In the future, Sarbanes-Oxley may make U.S. corporations vulnerable to innovative foreign competitors that can leverage their size without having to comply with the law.



## RESEARCH SUMMARY

### Passions' Republic

David Bradshaw, University of Kentucky

Why is our society today so sharply divided—politically, socially and morally?

Professor Bradshaw argues that the answer can be found in two of the foundational philosophers of the modern era, Locke and Rousseau. Although they are sharply opposed in many ways, they share some common features that set the pattern for modern politics.

Locke defends the freedom of the individual to accumulate wealth, along with a minimal state whose main role is to protect natural rights. Rousseau attacks the Lockean state as a tool by which the wealthy maintain their privilege at the expense of the poor. He sees all existing social structures as fundamental forms of oppression.

Bradshaw suggests that both Locke and Rousseau can be seen as rationalizing what are in fact passions—destructive forms thinking and feeling that prevent us from recognizing the true good. In the case of Locke, these passions are greed, the desire for domination and the sort of pride which says that no one can tell me what to do. In the case of Rousseau, they are envy, resentment and the sort of pride which says that nothing that happens to me is my own fault.

He argues that the solution to our current disarray can be found by returning to the classical discipline of the passions. Both Plato and Aristotle advocated forms of education that are aimed at helping the passionate part of the soul learn to follow reason. Much of their teaching was later adapted into Christianity, which added further disciplines of its own such as fasting and confession. Bradshaw argues that only by recovering the classical and Christian ideal of educating the passions can we begin to overcome the entrenched divisions of modern politics.

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## RESEARCH SUMMARY

### Interwar Price Level Targeting

James S. Fackler, University of Kentucky  
Randall E. Parker, East Carolina University

Fackler and Parker argue that the Great Depression may have been preventable with a formalized policy rule proposed by economist Irving Fisher. Policymakers have an ongoing debate about whether formalized policy rules are better than discretionary policy decisions for economic outcomes. The authors' analysis suggests that in the case of the Great Depression, if Fisher's policy rule had been adopted in 1930 the collapse of the economy would have been avoided.

In the 1920s Irving Fisher believed that the major cause of economic disruption was price variability, which could be fixed with price level targeting. As early as 1922, Congressman T. Alan Goldsborough had proposed a bill that would have made price level targeting a formal Federal Reserve policy. Fisher developed a policy by the early 1930s that would have:

- Quickly raise deflated prices,
- Maintain this price level within reason, and
- If needed, change the price of gold.

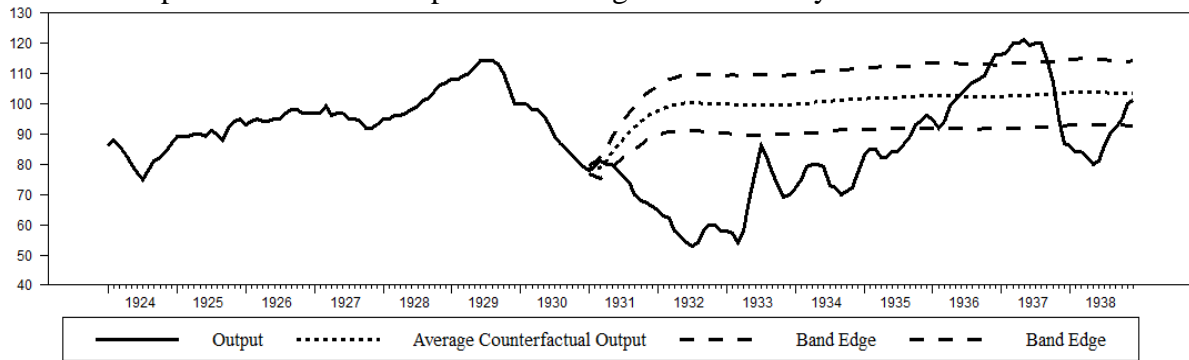
These policy changes could have been implemented by controlling the supply of money in the economy—increasing or decreasing the amount of currency in circulation. However, this legislation (after passing in the House 289-60 in 1932) died in the Senate under one of the main authors of the Federal Reserve Act.

Fackler and Parker use a selection of monetary data along with time series techniques to model the effect of Fisher's policy change before the Great Depression. While modern statistical techniques are used, the authors argue that Fisher's plan could have been implemented at the time using money supply (M2) to target a desired price level. If this had happened, the economy would likely have avoided the Great Depression—see the figure, which shows actual output, output as it would have evolved under the plan, and confidence bands around the estimated path of output.

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### Historical Output vs. Predicted Output from Irving Fisher's Policy Rule



*Note:* Output is the historical measure of industrial production.

## RESEARCH SUMMARY

### Educational Test Scores and Education Spending: A Look Across States, 1992-2015

John Garen, University of Kentucky

Past studies have raised substantial concerns about the efficacy of spending on public K-12 education, with many showing a lack of effectiveness and worsening outcomes on a per dollar basis. This has led some to suggest deeper reform in public schools, such as enabling broader choice and competition. Garen re-examines this issue by looking at the variety of experiences across states and over time (from 1992 forward) regarding spending and educational outcomes. Most states did experience increases in their educational test scores during this period, as well as, very large increases in spending. There is a consistently positive and significant association between state spending and test scores. However, the magnitude of this relationship is quite small, indicating that very small increases in test scores have come with very large increases in spending. Outcomes per dollar spent continue to fall.

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## RESEARCH SUMMARY

### Hedge Fund Boards and the Market for Independent Directors

Christopher P. Clifford, University of Kentucky  
Jesse A. Ellis, North Carolina State University  
William C. Gerken, University of Kentucky

Hedge funds collectively manage over \$3.4 trillion dollars in assets for their investors, typically wealthy individuals or large institutions such as pension funds and university endowments. Media scrutiny of hedge funds—and their historically lax government regulation—has increased following recent scandals. So, why do their investors feel confident that their money is in good hands?

Clifford, Ellis, and Gerken demonstrate that hedge fund managers face market incentives to hire credible, independent board directors that will effectively monitor their funds. And, investors use the reputation of these directors to certify the quality of the hedge fund or they withdraw their money. It seems to be working. Hedge funds with reputable, independent directors are far less likely to commit fraud or partake in other “bad” behavior.

Why does it work?

- Directors use their reputation to get more work (directorships).
- These busier directors’ reputations and careers are at stake if they neglect their fiduciary duties by “rubber-stamping” the fund managers’ decisions.
- Directors that work for many different funds are less beholden to any single employer, and therefore act independently from fund management.
- Directors seek jobs at high quality funds and funds seek to hire high quality directors (creating assortative matching similar to the market for marriages).

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## BACKGROUND

Hedge funds are private investment vehicles that face less regulation than most investment companies. In most cases, the hedge fund complies with government regulations for board structure if the board has two inside directors (i.e., fund owners, employees, or related parties) and no outside directors.

A hedge fund board of directors has a legal obligation to monitor the fund and the manager's decisions. They serve as an advocate for investor rights. However, because the fund manager appoints the directors, critics are concerned that directors simply "rubber-stamp" the manager's decisions.

This paper examines the role that boards and their directors play in the governance of hedge funds. Despite increased media attention questioning the independence and monitoring capability of hedge fund boards, this is the first empirical study of its kind.

A recent disclosure law forces hedge funds to electronically report their board membership to the Securities and Exchange Commission. The authors use filings from 2009 through 2013 to build a database comprised of 5,400 different directors for 5,126 hedge funds.

## FINDINGS

Hedge fund managers voluntarily choose outside directors (those with no other connection to the fund) to certify their fund and monitor them—80 percent of boards have at least one outside director. Directors rely on the success of the funds whose board they have served on to build a positive reputation. A director relies on this reputation and credibility to get more directorships.

A relatively small set of professional directors hold a majority of hedge fund directorships—each sitting on more than 20 boards at once. These busier directors tend to work for professional directorship firms that employ several directors and a support staff. Directorship firms also rely on reputation to grow their business.

Investors rely on the director's reputation to certify the hedge fund quality. In fact, when a reputable director leaves a fund, investors withdraw from the fund—creating, on average, a 4.7 percent outflow of capital in that quarter.

A director's reputation is a good signal. Successful directors work for funds with fewer regulatory violations and that perform better. Hedge funds with reputable independent directors are 83 percent less likely to commit fraud, abuse discretionary liquidity restrictions, and shift risk to improve relative performance.



## RESEARCH SUMMARY

### Understanding Precautionary Cash at Home and Abroad

Michael W. Faulkender, University of Maryland  
Kristine W. Hankins, University of Kentucky  
Mitchell A. Petersen, Northwestern University

United States corporations have saved the largest amount of cash, and marketable securities, in U.S. history—\$3 trillion. The vast savings are attributable to two things:

1. Corporate resources for future investment needs, and
2. U.S. and international tax policies.

This research shows that U.S. corporations save money domestically to preserve the ability to fund future investment. However, lower international tax rates have encouraged U.S. corporations—especially those with intensive research and development programs—to save larger amounts of cash abroad. Faulkender, Hankins, and Petersen found that companies hold cash overseas when there is a larger difference between the domestic and foreign tax rates. Additionally, corporations developing intellectual property—trademarks, patents, and copyrights—transfer those assets to foreign subsidiaries, shifting their earnings and savings to countries with lower tax rates than the U.S.

While striving to maximize growth and profits, corporations respond to numerous incentives in the marketplace and policy world. Policymakers need to consider how firms can relocate assets abroad as they consider new proposals that are meant to discourage corporate savings.

#### BACKGROUND

According to recent Flow of Funds estimates, U.S. non-financial corporations are sitting on approximately \$3 trillion in cash and marketable securities. The academic literature has largely focused on the precautionary motive for saving cash (i.e. future investment needs). However, given the tax consequences of bringing cash back to the U.S. (repatriating), it is not clear that cash held internationally is all held for a ‘rainy day.’

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The U.S. tax code makes it costly to repatriate. Excess cash held by the U.S. parent company can fund investments elsewhere without paying additional tax. But cash held by the foreign subsidiary can only fund investments in the U.S. at additional tax costs. In addition, foreign cash is often invested in securities that cannot be easily sold. This makes foreign held cash a poor substitute for precautionary savings held in the U.S.

So, are corporations really stockpiling \$3 trillion because they anticipate needing that much for investment purposes? How much is instead being held because of taxes? Does the money held for tax purposes also provide precautionary benefits? These are the questions explored in this paper.

Publicly available data sources do not separate U.S. held and foreign held cash. And thus, past literature has struggled to differentiate between the cash held for precautionary reasons versus the cash held for tax reasons. However, the Bureau of Economic Analysis conducts a mandatory survey of U.S. multinational companies that differentiates between domestic and foreign held cash helping to tell the precautionary cash and tax stories.

## FINDINGS

Previous literature on corporate cash holdings and company characteristics explains the variation in domestic savings but not in foreign savings.

The primary factors explaining the variation in foreign savings are tax rates and repatriation costs. Lower foreign tax rates are associated with greater cash savings.

- Companies respond to differences between the U.S. and foreign tax rates by keeping cash abroad to defer the cost of repatriating profits.
- Corporations with intellectual property can relocate those assets to their foreign subsidiaries to move earnings from higher tax jurisdictions to lower tax jurisdictions, contributing to their international cash holdings.

## RESEARCH SUMMARY

### Single Bidders and Tacit Collusion in Highway Procurement Auctions

David Barrus, Brigham Young University-Idaho  
Frank Scott, University of Kentucky

#### BACKGROUND

Detection and deterrence of collusion—illegal cooperation between competitors—are perhaps the primary challenges of antitrust policy. Economists frequently play the role of detective in diagnosing collusion in government procurement auctions. Often such collusion is overt and involves determining a winner and the submission of complementary bids. Alternatively, companies may reciprocally refrain from bidding. When the number of bidders is small and there is an obvious focal point for such coordination, firms may successfully suppress competition without direct communication.

Certain market areas, like the asphalt paving industry, lend themselves to such tacit collusion. Given that asphalt must be laid before it cools, firms have limited feasible service territories. Market areas with few roads and little commercial activity may only be able to support a limited number of suppliers. State highway departments sometimes set up their procurement auctions in a way that creates a market environment that facilitates collusive outcomes.

To determine whether such collusion might occur Barrus and Scott collected data on asphalt paving auctions by the Kentucky Transportation Cabinet from 2005 to 2007. They analyzed bidding behavior for the 31 registered asphalt contractors in Kentucky. They analyzed firms' decisions whether to bid on projects within their feasible service territories, taking into account (a) cost factors such as distance from plant to project, capacity constraints and scale of the project and (b) strategic factors such as the number of actual or potential rivals. Similarly, they analyzed how much firms bid on projects, taking into account cost factors and strategic factors as well. They included county identifier variables to see if firms use county boundaries as focal points to coordinate their bidding.

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After estimating these equations for the entire state, they separately analyzed the more competitive regions of Louisville and northern Kentucky and the less competitive regions in the remainder of the state.

## FINDINGS

In choosing whether to bid, firms in competitive regions are primarily influenced by distance and are not deterred by the presence of another likely bidder. Firms in less competitive markets are significantly less likely to bid in an adjacent county where a rival firm has a plant and if another firm has indicated its intention to bid by purchasing an official set of project plans.

In choosing how much to bid, the bid pricing decisions of firms in competitive markets are not significantly different when a firm is bidding in its own or an adjacent county, with or without a rival firm present. In non-competitive markets, however, bid pricing behavior differs considerably according to county type. Bids in counties where a rival firm also has a plant are significantly lower. Bids in adjacent counties where there are no rival plants are essentially the same. Bids in adjacent counties where a rival firm has a plant are significantly higher than bids in counties where a firm has the only plant.

That county boundaries in Kentucky are such an obvious focal point for firms to coordinate bidding activity is not surprising, since 72 out of 120 counties have one and only one asphalt plant. The upshot is that 64 percent of asphalt paving contracts attracted only a single bidder from 2005 to 2007. Controlling for other factors, winning bids for single-bid asphalt projects were 9.3% higher than winning bids in auctions with three or more bidders in the competitive regions of the state. In non-competitive regions, the price markup in single-bid auctions was 16.5% greater than in auctions where there were three or more bidders. Given the amount of money Kentucky spends on asphalt paving projects—over \$590 million during the sample period—the potential savings from increasing competition are substantial.

Several policy changes suggest themselves. First, social functions for contractors sponsored by the KYTC on the eve of a bid letting may create the wrong atmosphere. Second, requiring bidders to publicly declare their intent to bid by publicizing the list of firms that have purchased official plans allows rivals to adjust their bids downward in response to the threat of entry; and thereby reduces the expected gain and hence likelihood of entry by a non-cooperating bidder. It would be simple and easy for the KYTC to distribute plans freely to any contractor that could feasibly carry out a given project and to delay revealing the identity and number of bidders until bids are opened. A third change likely to enhance competition in highway procurement auctions would be to remove the focal point that facilitates collusion, namely, the delineation of projects by county lines. The state could even go one step further and structure projects so that they are within the potential service territories of multiple asphalt plants.

## RESEARCH SUMMARY

### How Did the ACA Affect Health Insurance Coverage in Kentucky?

Aaron Yelowitz, University of Kentucky

This research suggests that the integrity of the Kentucky Medicaid program is at risk. Following the Affordable Care Act expansion, Kentucky's Medicaid program exceeded new enrollment expectations. However, it appears the program exceeded expectations because of people who were not actually allowed to be on Medicaid—38 percent of new enrollees were not eligible for the program, according to American Community Survey data. ACA rules funneled ineligible people on to Medicaid by requiring them to estimate their future income—they evidently underestimated.

The 2014 ACS data leave many questions:

- Were ineligible new enrollees purposefully underestimating their future income?
- Are the ineligible new enrollees just a symptom of Medicaid expansion growing pains?
- Since 2014, has Kentucky improved enrollment to weed out ineligible enrollees?

To answer these questions and fully understand how Kentucky's Medicaid program is operating, deeper analysis of administrative data is needed. And then, if necessary, legislators have a number of policy tools to address underreporting of future income, including more vigilant real-time enforcement throughout the year or repayment of subsidies at the end of the year.

#### BACKGROUND

The 2014 rollout of the Affordable Care Act had several features to encourage health insurance coverage, including:

- The individual mandate, which requires everyone to have health insurance or pay a fine;
- Requirements for insurance companies to allow anyone to sign-up for a plan and pay the same price as everyone else regardless of health status;

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- The creation of the Health Insurance Marketplace (Exchange), which is aimed at helping people shop for and enroll in health insurance;
- Insurance subsidies for people with incomes between 100 and 400 percent of the Federal Poverty Level (use through the Exchange); and
- The Medicaid expansion for adults under age 65 with incomes below 138 percent of FPL.

Kentucky stands out for 1) being one of two southern states to expand Medicaid and 2) experiencing one of the largest increases in health insurance coverage. Using the American Community Survey, this exploratory study analyzes the sources of insurance coverage in Kentucky.

## FINDINGS

From 2013 to 2014 the health insurance coverage of the Kentucky population increased by 5.7 percentage points (from 85.1% to 90.8%). Among the roughly 268,000 people who gained coverage, the overwhelming majority (85%) were adults aged 19–64. Both children and the elderly had only small increases in coverage.

Among adults, roughly 80 percent of the increase in insurance coverage came from Medicaid. Individual coverage accounted for most of the other sources. Using 2014 income reported in the American Community Survey, this exploratory study found:

- In Kentucky, 38 percent of new adult Medicaid recipients (73,000 people) had incomes exceeding the eligibility threshold (roughly \$33,000 for a family of four).
- Of those, 13,000 had incomes above 250 percent of the Federal Poverty Level (or nearly twice the income limit for Medicaid).
- Almost all ineligible, new participants qualify for private, non-group coverage and insurance subsidies.
- West Virginia also expanded Medicaid and had a large proportion (44%) of ineligible new enrollees.

## RESEARCH SUMMARY

### Transaction Complexity and the Movement to Fair Value Accounting

Pinky Rusli, Montana State University  
Xinlei Zhao, University of Kentucky  
David A. Ziebart, University of Kentucky

As technology rapidly improves, businesses have become more complex and accounting standards more difficult to understand. Accounting standards that define what, when and how information is measured become more difficult for more complex transactions. Do accounting standards need to match the complexity of business transactions? No.

Rusli, Zhao and Ziebart find that it is possible to write simpler accounting rules that do not have to determine the what, when and how but rather rely on the market to determine those answers by using the price an asset would receive in the market—market valuation.

#### BACKGROUND

Information and technology allow businesses to become more interconnected and transactions more complicated. What used to be a simple exchange of goods and services between two entities now often includes sophisticated contracts, financial instruments and multiple intertwined entities. These complicated exchanges may lead to complicated accounting standards. Unfortunately, as accounting becomes more complex the usefulness of accounting information may deteriorate and may be costly for investors and companies.

Rusli, Zhao and Ziebart analyze transaction complexity compared to the readability of accounting rules. The authors rank transaction complexity using a survey of peers. The readability of the associated accounting standard is measured using the Flesch-Kincaid Grade Level Formula, which is used in education to express the grade level needed to understand a text.

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The authors then study one accounting standard that regulates fair value measurements (which often rely on market valuations), SFAS No. 157. They test whether relying on observable market values simplifies accounting standards. They also analyze an explicit cost of accounting standards—auditing fees. They compare audit fees for underlying transactions that can be measured using market values to those that are measured using promulgated accounting measurement standards.

## FINDINGS

*Complex business transactions result in accounting standards that are difficult to read and understand.* Rusli, Zhao and Ziebart find that transaction complexity encourages standard setters to pass accounting rules that are increasingly difficult to read. Figure 1 graphs the education grade needed to read the accounting standard for each group of business transactions. An ideal reading score for the general public is usually around eight. The reading scores for the accounting standards of the business transactions in this study varied from just under 13 to more than 16.

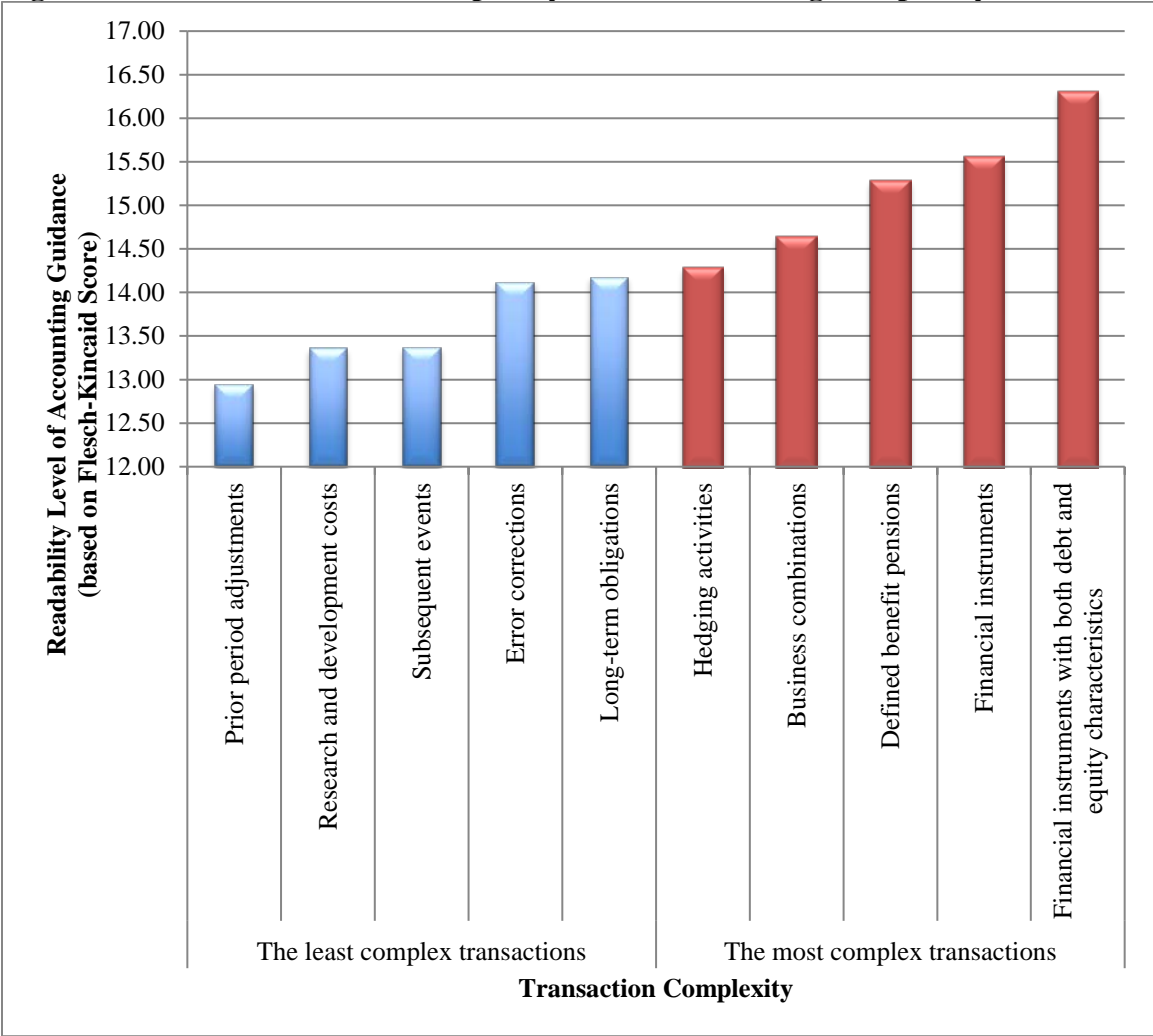
*Fair value accounting allows standard setters to write simple accounting rules for complex transactions.* However, when fair value measurements rely on explicit authoritative guidance in situations where no fair values (market values) are available, fair value accounting is no longer able to “tame” transaction complexity.

*Simpler fair value accounting standards reduce auditing fees.* However, a reliance on more authoritative guidance that provides what to measure, when to measure and how to measure leads to higher auditing fees.

*The authors recommend using market valuation in accounting standards with a caveat.* The benefit of market valuations could be outweighed by deterioration in other accounting properties. Standard setters should examine these trade-offs before establishing financial reporting rules. For example, fair value accounting does not force reported earnings and cash flows to converge over a reasonable time horizon.



**Figure 1: Plot of Transaction Complexity versus Accounting Complexity**



## Tax Policy and Economic Growth in Kentucky: A Panel Discussion



*September 7*  
5:30pm – 7:00pm  
Kincaid Auditorium

Tax policy is central to the Commonwealth's economic growth and affects our growing entitlement and pension spending commitments. With the Kentucky Legislature likely headed into a special session to address the Commonwealth's tax code and public pension system, the Schnatter Institute is hosting an open dialogue with world-renowned economists on tax policy and economic growth in Kentucky. Please join us for this conversation.

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