Research Statement – Jeffrey Clemens

Overview

My research analyzes several domains of public sector activity. My primary line of work considers the public sector’s role in the U.S. health sector, with an emphasis on the federal Medicare program. A second line of research analyzes the design of the social safety net. Additional projects explore dimensions of public sector activity including tax policy, fiscal policy, state and local public finance, and the regulation of illicit drug production.

I apply empirical methods to quantify public policies’ effects and assess their influence on economic activity (for example, the Medicare program’s influence on the health sector’s composition and long-run growth). My research proceeds with two goals in mind. The first is to understand the economic forces and behaviors underlying outcomes of both policy interest and more general interest. The second, when applicable, is to gain insight into what policy interventions or reforms are best equipped to achieve society’s objectives (for example, improving the health system’s efficiency or enhancing the economic prospects of disadvantaged households).

Analyses of Physicians, Insurers, and Developments in the U.S. Health Sector

My primary line of research explores channels through which the federal Medicare program shapes the U.S. health sector. My research highlights a set of channels, some standard and some novel, through which Medicare affects not only its elderly beneficiaries, but also the privately insured, private insurers, the evolution of the medical workforce, and the development of new medical technologies. This research utilizes detailed institutional knowledge to identify settings in which the determinants of physician and insurer behaviors can be effectively analyzed.

A first paper in this area (Clemens and Gottlieb, AER, 2014) explores the relatively direct effects of Medicare’s payment rates on the treatments physicians provide to Medicare beneficiaries. We find that care provision responds significantly to changes in Medicare’s payment rates, suggesting that financial incentives play an important role in shaping patterns of treatment. The paper develops a conceptual framework for further exploring how different environments (in particular as they pertain to physicians’ production costs and degree of concern for their patients’ health) can give rise to variations in how dramatically physicians’ treatment decisions respond to financial incentives. Key insights from this framework highlight a) differences between relatively elective and non-elective services and b) the importance of margins along which physicians invest in the future productivity of their practices (e.g., by acquiring the capacity to administer diagnostic tests within their practice). The latter margins, to which we have returned in work that remains in progress, point to important differences between the health system’s short- and long-run evolution following changes in providers’ financial incentives. [112 GS cites as of 8.7.2017]

A second paper in this area (Clemens and Gottlieb, JPE, 2017) investigates Medicare’s influence on the payments negotiated between physicians and private insurers. We find Medicare’s
influence to be substantial, with private payments moving roughly dollar for dollar with administrative changes in Medicare’s payments. Our findings suggest that Medicare has significant capacity to steer the division of resources across physician specialties. This division of resources then shapes new medical school graduates’ incentives to enter those specialties (for example, orthopedics versus primary care). Consequently, Medicare can play a significant role in resolving (or, conversely, contributing to) such issues as projected shortages in the availability of primary care physicians. [69 GS cites as of 8.7.2017]

A third paper (Clemens, Gottlieb, and Molnar, JHE, Accepted) takes an even deeper look into the Medicare program’s influence on private sector contracting. We use medical claims data from Blue Cross Blue Shield (BCBS) of Texas to examine contracts between BCBS and individual physician groups. Our ability to isolate these physician-insurer relationships allows us to demonstrate quite directly that a large fraction of BCBS’s payments are negotiated using the Medicare payment menu as a reference point. This finding implies that both inefficiencies and improvements in Medicare’s payment model will tend to spill over into the private insurance landscape. The value of Medicare payment reforms will thus tend to be greater than they would be if their benefits were driven solely by their effects on the Medicare program itself. [6 GS cites as of 8.7.2017]

These analyses of linkages between public and private payment rates (Clemens and Gottlieb, JPE, 2017; Clemens, Gottlieb, and Molnar, JHE, Accepted) raise the question of why private insurers rely so heavily on Medicare’s payment model. Conversations with practitioners have yielded important institutional insights on this point. One rationale for this contracting choice involves the benefit of simplicity. Negotiating contracts that cover payments for thousands of distinct service codes can be costly. Benchmarking against Medicare’s relative rate structure dramatically reduces the complexity of the contract over which the insurer and physician must bargain. A second rationale involves Medicare’s size in these markets. As the single largest payer for physicians’ services, Medicare is relevant as many physician groups’ outside option in their negotiations with private insurers. Through both of these channels, for which my research finds evidence, private insurers’ responsiveness to Medicare’s payment menu amplifies Medicare’s influence on the health system.

A fourth paper (Clemens, NBER Working Paper 19761) considers the effect of Medicare’s introduction on the development of new medical technologies. Advances in medical technology are widely regarded as being the primary source of long-run increases in both life expectancy and health expenditures, and are thus of considerable interest. Following Medicare’s introduction, I find that U.S.-based medical device patenting increased by 40 percent relative to both other U.S.-based patenting and foreign medical device patenting. This finding, coupled with additional analysis, point to the Medicare program’s influence on the development of new technologies as an important channel through which it has shaped the health sector’s growth. [21 GS cites as of 8.7.2017]

The post-Medicare surge in U.S.-based medical device patenting raises the question of why innovation might respond regionally rather than globally to Medicare’s introduction. To further understand this phenomenon, I looked to historical case studies of the processes through which
medical equipment and devices are developed. The case studies reveal that innovation in this space has historically been a practitioner-driven process of trial and error. The role of end users, namely physicians with patients whose insurance covers costly treatments, may thus explain Medicare’s relatively regional effect on patenting activity.

A fifth paper (Clemens and Veuger, COEP, 2017) uses the case study of Myriad Genetics, Inc. (Myriad), to develop further insights into the incentives facing the developers of medical technologies. Myriad’s experience is distinctive in that several of its patents, which pertain to molecular diagnostic screening for breast and ovarian cancer, were invalidated by a 2013 decision of the Supreme Court of the United States. We investigate the effects of events in this litigation’s timeline on Myriad’s market capitalization. We find that revisions to the reimbursements Medicare pays for Myriad’s services, which occurred on two discrete dates over the year following the Supreme Court’s decision, dramatically altered Myriad’s market capitalization. These reimbursement changes affected Myriad’s market capitalization by far more than their direct effects on Myriad’s future Medicare revenue streams. Consistent with the mechanisms analyzed in Clemens and Gottlieb (JPE, 2017) and Clemens, Gottlieb, and Molnar (JHE, Accepted), the evidence suggests that investors anticipated follow-on changes in private insurers’ reimbursement rates.

The Medicare program’s effects on care provision, private insurers’ contracts, and the development of medical technologies give research in these areas a direct connection to questions of public policy. As a result, this work has been cited by the Medicare Payment Advisory Commission, the Council of Economic Advisers, and in an essay, which appeared in the Journal of the American Medical Association, by former President Obama. To further enhance this research’s impact, I have contributed to several non-peer reviewed analyses that connect my peer reviewed research to issues of policy interest. Two of these analyses (Clemens, Gottlieb, and Shapiro, FRBSF Economic Letter, 2014; 2016) connect my research on public-private payment interactions to discussions of overall price inflation. These analyses highlight that Medicare payment changes in the 2010 Affordable Care Act, the 2011 Budget Control Act, and the 2015 Medicare Access and CHIP Reauthorization Act non-trivially reduced health care price inflation and, by extension, moderated overall price inflation. The policy relevant insight is that general inflationary pressures might best be monitored by tracking inflation outside of the health sector, since medical price inflation is heavily influenced by public policy. These analyses were referenced by San Francisco Federal Reserve President John Williams in commentary on his views regarding the outlook for inflation.

Analyses of the Design of the Social Safety Net

My second line of research considers the expanding role of regulations in the context of U.S. safety net policy. Long-run changes in the income distribution have heightened interest in the topics of redistribution and social mobility. A classic public finance debate considers the relative merits of maintaining a simple approach to redistribution (for example, through a negative income tax) versus adopting a “patchwork” approach. The patchwork approach, which
accurately describes U.S. redistributive policy, uses a multiplicity of mechanisms for targeting benefits and screening beneficiaries, but is complex to administer and evaluate. Against this backdrop, I consider the role of redistributive regulations. I do so with interests in a) understanding their effects and b) contrasting their effects with the effects of more traditional tax-and-transfer programs.

A first paper in this area (Clemens, AEJ: Applied, 2015) considers the effects of health insurance rules known as community rating regulations, which play a prominent role in the Affordable Care Act (ACA). Community rating regulations prevent insurance companies from setting premiums on the basis of pre-existing medical conditions. They are implemented with the intent of reducing the premiums faced by those who are unhealthy. This intended increase in affordability will not occur, however, if the healthy choose not to participate in the market. The phenomenon of healthy individuals opting out of such markets is commonly referred to as the “adverse selection” problem. My analysis emphasizes that the severity of this problem hinges in large part on the distribution of health care costs across individuals in the market for private insurance. I highlight that this cost distribution depends, in turn, on the extent to which individuals with costly conditions are covered by public programs.

The line of logic sketched above connects the performance of community rated insurance markets to the extent to which states’ Medicaid programs cover high cost individuals. Theoretically, I show that expansions of public coverage can combat adverse selection by removing high cost individuals from the risk pool. Empirically, I show that private coverage rates rose in community rated markets when states expanded Medicaid’s coverage of relatively unhealthy adults. The analysis thus highlights that the effects of Medicaid and community rating regulations are tightly connected. In the context of the ACA, it highlights that the effects of the decision to expand Medicaid may have been even farther reaching than its effects on potential Medicaid beneficiaries themselves. The functioning of states’ insurance exchanges may also have been at stake. [26 GS cites as of 8.7.2017]

A second paper in this area (Clemens and Ippolito, NBER Working Paper 23758) considers the historical use of hospital price regulation (specifically, through “all-payer rate setting regimes”) as a mechanism for financing the cost of care for the uninsured. Through case studies of Connecticut, Massachusetts, New Jersey, and New York, the analysis shows that uncompensated care surcharges contributed to the combination of economic, legal, and political instability that resulted in the abandonment of all-payer rate regulation regimes. The analysis shows that uncompensated care surcharges made states’ all-payer regimes prone to a form of unwinding that is, in some but not all respects, comparable to the adverse selection problem: surcharge increases raise the cost of insurance, which leads marginal purchasers to drop coverage, which increases the number of individuals without insurance, which further increases the amount of uncompensated care that needs to be financed. By way of comparison, we observe that a broad-based income tax is a more stable mechanism for either financing uncompensated care or for reducing uncompensated care needs by expanding insurance coverage. Further, the income tax can be targeted across the income distribution in accordance with policy makers’ distributional objectives. This contrasts with uncompensated care surcharges, which have opaque and
potentially regressive distributional implications. This is relevant because policy makers’ objectives in establishing uncompensated care pools were, by most accounts, redistributive in nature.

A third paper in this area (Clemens and Wither, NBER Working Paper 20724) considers the effects of the 2007 to 2009 increases in the federal minimum wage. This period’s federal minimum wage increases were differentially binding across states, creating a natural experiment. The paper analyzes these minimum wage changes using the 2008 panel of the Survey of Income and Program Participation (SIPP) and the Current Population Survey (CPS). The SIPP enables us to use 12 months of baseline wage data to divide low-skilled workers into a “target” group, whose baseline wage rates were directly affected by the July 2009 increase, and a “within-state control” group with slightly higher baseline wage rates. We find that binding minimum wage increases had significant, negative effects on the employment and subsequent income growth of targeted workers. The analysis thus adds to the research literature’s understanding of the severity of the sustained declines in employment among low-skilled groups during the Great Recession and its aftermath. Further, because we are able to track affected workers for three years following the minimum wage increase we analyze, we provide some of the first direct evidence on the minimum wage’s effects on medium-run economic mobility. [43 GS cites as of 8.7.2017]

In related work in progress, I am developing cross-country evidence on the relevance of wage setting institutions in shaping the magnitudes of declines in young adult employment over the decade surrounding the global financial crisis. I provide evidence that collective bargaining institutions exhibited greater wage flexibility than institutions under which wage floors are set statutorily. I show that industrialized countries with collective bargaining regimes experienced macroeconomic crises of roughly the same severity, on average, as industrialized countries with statutory minimum wage regimes. I then show that these similarly sized crises generated much smaller declines in young adult employment in countries with collective bargaining regimes.

In two additional papers, I consider the minimum wage’s effects in the broader context of social safety net policy. One of these papers (Clemens, TP&E, 2016) analyses whether the minimum wage increases enacted during the Great Recession were associated with spillovers into either public budgets or into individuals’ participation in a variety of low-income support programs. I find that such spillovers are likely modest. A second paper (Clemens and Wither, Works in Progress C5) considers the novel labor market implications of interactions between the minimum wage and low income individuals’ Medicaid eligibility thresholds. The analysis suggests that low income households face frictions that make it costly for them to adjust in response to changes in the number of hours they can work while maintaining eligibility for Medicaid.

The minimum wage literature is a locus of substantial debate regarding best practice methods for analyzing the effects of public policy. My work in this area has, as a result, led to a series of practical methodological contributions that supplement the analysis in Clemens and Wither (NBER Working Paper 20724). I have made the code underlying these analyses public so that they can be used as a resource for teaching the econometrics of program evaluation methods to both graduate and advanced undergraduate students. A first piece of supplemental analysis
(Clemens, ESSPRI Working Paper Series 20171) highlights issues that arise when standard “state panel difference-in-differences” research designs are augmented with “multi-dimensional fixed effects.” In this context, the key issue is that multi-dimensional fixed effects can significantly alter the policy variation underlying estimates of the minimum wage’s effects on employment or on other outcomes of interest. My analysis emphasizes that the appropriateness of such methods should be expected to vary across settings. Direct evidence on whether such methods improve or worsen the balance between “treatment” and “control” groups’ exposure to likely sources of bias is crucial for adjudicating across methods in any given setting. A second piece of supplemental analysis (Clemens, ESSPRI Working Paper Series 20172) highlights that seemingly natural approaches to developing “falsification tests” can generate tests that are exposed to considerable bias and are prone to insufficiently conservative inference. Both of these issues can result in unwarranted rejection of research designs for which a falsification test is proposed as a diagnostic. A third piece of supplemental analysis (Clemens, ESSPRI Working Paper Series 20173) explores a set of choices that researchers must make when using wage data from the SIPP to isolate analysis samples of low-skilled workers.

In a separate contribution (Clemens and Strain, NBER Working Paper 20384), I have developed and pre-committed to an analysis plan for investigating the effects of recent state minimum wage increases. The analysis plan draws on and applies lessons from recent research, including the research discussed above, on earlier periods’ minimum wage increases. By committing to an analysis plan at an early stage, we seek to overcome standard “specification searching” concerns.

Analyses of Additional Issues in Public Finance and Public Policy

I have conducted analyses in several additional areas of public finance. The first area involves issues related to state and local government budgets and fiscal policy. One paper in this area (Clemens and Miran, AEJ: Policy, 2012) uses state budgeting institutions to estimate the multiplier on state government spending. Differences in states’ balanced budget requirements shape the pace at which they must respond to economic shocks. Conditional on a shock’s size, states with strict balanced budget requirements enact relatively large mid-year rescissions to their planned expenditures. An important feature of these rescissions is that states are playing with their own money; those that do not balance their budget when a shock occurs must adjust later. This contrasts with the sources of spending analyzed in much recent work on regional fiscal policy, which typically involve windfalls and are thus not financed through debt. Consistent with standard theory, the estimated multipliers are positive, but smaller than those found in most analyses of windfall-financed spending. [135 GS cites as of 8.7.2017]

A second paper (Clemens and Cutler, JHE, 2014) analyzes who bears the burden of recent growth in the cost of health insurance benefits for state and local government employees. Because these benefits are negotiated through the political process, the relevant labor market institutions deviate significantly from the competitive, private-sector benchmark. Empirically, we estimate that roughly 15 percent of the cost of recent benefit growth was passed onto school district employees through reductions in wages and salaries. Strong teachers’ unions were
associated with relatively strong linkages between benefit growth and growth in total compensation. We speculate that the modest wage offsets we estimate can be explained in part by the voting public’s difficulty in monitoring the liabilities associated with public workers’ benefits. [7 GS cites as of 8.7.2017]

A third paper (Baicker, Clemens, and Singhal, JPubEc, 2012) documents the evolution of state and local governments over the last half century. State and local governments’ roles have expanded significantly over time. The analysis highlights the role of intergovernmental relations (for example, Medicaid’s matching grant structure and the history of federally encouraged coverage expansions), as a driver of state government growth. [37 GS cites as of 8.7.2017]

Two additional papers touch on perennial public finance policy issues. The first, (Anderson, Clemens, and Hanson, NTJ, 2007) conducts a geographic incidence analysis of caps on the mortgage interest deduction, which appear somewhat regularly in “base broadening” tax reform proposals [27 GS cites as of 8.7.2017]. The second (Clemens and Ippolito, in Preparation for TP&E, 2018) explores the political economy and incentive implications of common proposals for reforming the federal government’s contributions to states’ Medicaid programs.

In a final, less active, line of research, I analyze the U.S. government’s effort to suppress opium production in Afghanistan. My two papers on this topic illustrate the capacity for straightforward economic reasoning to shed light on the circumstances in which interventions are more and less likely to achieve their stated objectives.

The first paper (Clemens, JLawEcon, 2008) makes a straightforward observation about the economics of efforts to reduce opium production through source-oriented policies (for example, poppy eradication and the promotion of alternative crop development). These policies seek to reduce poppy cultivation by targeting farmers’ incentives, which implies shifting the supply curve. The success of such efforts depends primarily on the extent to which the supply curve can be shifted and on the elasticity of the relevant demand curve. I show that Afghan farmers’ production possibilities were such that the policies under consideration could only moderately shift the supply curve. Further, I provide evidence that the relevant demand curve is relatively inelastic. These factors imply that anti-opium efforts were unlikely to be successful. Subsequent experience has born this prediction out. [33 GS cites as of 8.7.2017]

In policy making circles, anti-opium efforts were widely rationalized as being a way to reduce the flow of drug trade resources to the Taliban. In a second paper (Clemens, AER P&P, 2013), I assess the conditions under which this policy objective could be achieved. The paper makes two observations. First, inelastic demand poses a difficulty because quantity reductions result in significant price increases, potentially increasing traffickers’ incomes rather than reducing them. Second, drug trafficking was being undertaken in both Taliban and non-Taliban areas. For the policy’s objective to be achieved, anti-opium efforts needed to target Taliban resources with reasonable precision. Unsurprisingly, however, it proved more difficult to enforce the opium ban in Taliban controlled areas than in government controlled areas. Enforcement thus shifted production into Taliban controlled areas, likely increasing the Taliban’s opium-source incomes substantially.
Paper Listings

Published and Forthcoming Articles:

Also circulated as NBER Working Paper 21642.

Also circulated as NBER Working Paper 19503.

Medicare Payment Cuts Continue to Restrain Inflation. *FRBSF Economic Letter*, 2016-15, May 2016. (Joint with Joshua Gottlieb and Adam Shapiro)


Also circulated as NBER Working Paper 19904 and SIEPR Discussion Paper 11-011.

Also circulated as NBER Working Paper 19574.


*Note:* A fuller treatment of the topic, including a detailed empirical analysis and additional conceptual extensions, can be found in “Evaluating Economic Warfare: Lessons from Efforts to Suppress the Afghan Opium Trade.”


**Note:** Previously circulated as “The Effects of State Budget Cuts on Employment and Income” and “The Role of Fiscal Institutions in Analysis of Fiscal Policy”


Capping the Mortgage Interest Deduction. *National Tax Journal, 60*(4): 769-785. 2007. (Joint with John Anderson and Andrew Hanson)

**Working Papers:**

Is Tinkering with Safety Net Programs Harmful to Beneficiaries? Evidence from the Medicaid Notch and the Minimum Wage. (with Michael J. Wither). Revisions Requested at the *Journal of Public Economics*


The Spillover Effects of Top Income Inequality (with Joshua Gottlieb, David Hemous, and Morten Olsen).


**Manuscripts in Progress:**

Uncompensated Care and the Collapse of Hospital Payment Regulation: An Application of the Tinbergen Rule. (with Benedic Ippolito)


Cross-Country Evidence on Labor Market Institutions and Young Adult Employment through the Financial Crisis.
Wage Regulation, Employment Arrangements, and Worker Welfare. (with Lisa Kahn and Jonathan Meer)

**Supplemental Minimum Wage Analyses with Replication Archives Available on Request:**


**Supplements:**


State Fiscal Adjustment During Times of Stress: Possible Causes of the Severity and Composition of Budget Cuts.

Evaluating Economic Warfare: Lessons from Efforts to Suppress the Afghan Opium Trade.

**Instructional and Policy Writing:**

Available at: https://medium.com/@esspri_uci/new-working-paper-set-interpreting-recent-research-on-the-effects-of-minimum-wage-increases-4d750d8516bd

Available at: http://www.realclearhealth.com/articles/2017/01/04/medicaid_reform_the_elephant_in_the_room_110358.html
Available at: http://journalofethics.ama-assn.org/2015/11/pfor1-1511.html

Expanding Medicaid may also help to improve the coverage of Obamacare’s health insurance exchanges. USAPP (The London School of Economics blog on American Politics and Policy). June 2, 2015. 
Available at: http://blogs.lse.ac.uk/usappblog/2015/06/02/expanding-medicaid-may-also-help-to-improve-the-coverage-of-obamacares-health-insurance-exchanges/

Available at: http://www.cato.org/publications/research-briefs-economic-policy/minimum-wage-great-recession-evidence-effects

Available at: http://www.voxeu.org/article/minimum-wage-and-us-employment-slump

Available at: http://www.scholarsstrategynetwork.org/content/why-state-decisions-about-expanding-medicaid-matter-success-their-insurance-marketplaces


How Medicare Shapes the U.S. Health Sector. (Economics in Action, Spring 2014)
Available at http://economics.ucsd.edu/economicsinaction/issue-10/headline.php.

Health Reform and the Future of Medical Innovation (Scholars Strategy Network Key Findings Brief, January 2014.)
Available at: http://www.scholarsstrategynetwork.org/scholar-profile/428

Implications of Physician Ethics, Billing Norms, and Service Cost Structures for Medicare’s Fee Schedule. (Written for UCSD’s course Economics 140: The Economics of Health Care Producers.)

Can Financing Reforms Reduce Costs While Improving Health Care Quality? (SIEPR Policy Brief, January 2012.)
Available at: http://siepr.stanford.edu/publicationsprofile/2379