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## **Program Report**

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### **Public Economics**

James M. Poterba

In the three years since the last report on the NBER's public economics program, national policy debates have drawn attention to a number of questions that are central to the research of program members. The tax policy debate of 1993 resulted in substantial increases in marginal tax rates for some households, raising new questions about the incentive effects of tax rates. The emerging debate on a flat tax or a consumption-based alternative to the federal income tax is sure to result in far-reaching discussion of both equity and efficiency issues in the design of tax policy. The recent debate on health care reform generated a host of new research questions concerning the role of government intervention in the marketplace, and the efficacy of particular social insurance policies. Current discussion of proposals to change the level and structure of federal spending on entitlement programs, including Medicare and a variety of programs for low-income, nonelderly households, is also certain to draw heavily on past research, and to stimulate further research, in public economics.

This report summarizes recent work by NBER researchers on a wide range of subjects in public economics. It begins with a survey of work that bears on some of the recent and current federal policy debates, and then proceeds to describe research on a variety of other issues.

### **Empirical Studies of Taxation and Individual Behavior**

The substantial changes in tax rates during the last decade have provided an extraordinary research opportunity for studying the effect of taxation on individual behavior. Researchers have exploited this "natural experiment" in tax policy to analyze behavioral responses. Several widely cited studies suggest that the 1986 reductions in marginal tax rates on high-income households led to substantial increases in their reported taxable income.<sup>1</sup> This effect is important both because it affects revenue estimation, and because the effect of tax rates on taxable income can be an

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important determinant of the efficiency cost of the tax system.<sup>2</sup> While the source of tax-rate-related increases in taxable income is not yet clear, there is evidence of a significant increase in labor supply among married women who experienced large reductions in their households' marginal tax rates.<sup>3</sup> Other empirical studies have considered the effect of marginal tax rates on the decision to realize capital gains,<sup>4</sup> and on the choice between receiving income as taxable wages rather than as fringe benefits.<sup>5</sup> Identifying the channels through which tax rate changes affect individual behavior remains a central item on the program's research agenda.

Several NBER researchers have done related work on individual taxation that is relevant to discussions of tax reform. This includes analyzing the changing nature of the "marriage penalty" in the federal income tax;<sup>6</sup> developing a theory of income taxation when income cannot be measured precisely;<sup>7</sup> and evaluating the efficiency and distributional effects of replacing the current income tax with a value-added tax.<sup>8</sup>

## Tax Policy and Saving

NBER researchers also have studied personal saving and how it is affected by tax rates. Several NBER affiliates participated in a project comparing personal saving rates in industrial nations, and summarizing the tax incentives and other public policies that could affect personal saving in these nations.<sup>9</sup>

A number of other studies have described or modeled household saving behavior. One documents the stylized patterns of saving across ages and cohorts in the United

States;<sup>10</sup> others focus on the precautionary motives for household saving;<sup>11</sup> and a third set is concerned with the effects of targeted retirement saving plans, such as Individual Retirement Accounts and 401(k) plans, on personal saving.<sup>12</sup>

Another strand of research on private saving has considered the implications of the ongoing demographic transition in the United States. This includes work describing the current adequacy of young households' retirement saving,<sup>13</sup> as well as research on the link between population aging, economy-wide rates of saving and dissaving, and the rates of return on various financial assets.<sup>14</sup>

## Tax Policy and Corporation Behavior

One of the perennial subjects studied by researchers in the public economics program is the effect of taxation on the financial and other decisions of corporations. In the last three years, NBER researchers have addressed a range of new questions, including how liquidity constraints influence corporate start-up decisions by entrepreneurs;<sup>15</sup> how security transaction taxes affect financial markets and the cost of capital;<sup>16</sup> what role after-tax versus pretax returns play as measures of mutual fund performance;<sup>17</sup> and whether tax policy encourages or discourages firm spending on R and D.<sup>18</sup>

NBER scholars also have continued their work on traditional issues in business taxation and finance, developing new insights on the effect of taxation on firm dividend payout policy;<sup>19</sup> on the choice between corporate and noncorporate forms of organization for productive activity;<sup>20</sup> and on the general question of whether equipment in-

vestment yields social externalities that warrant special tax subsidies.<sup>21</sup>

## International Tax Policy

One rather specialized issue in corporate tax policy that has emerged in the last decade is the role of taxation in an increasingly global economy. A number of NBER researchers have studied a range of questions about international tax policy, paying particular attention to the taxation of capital income in a global economy.<sup>22</sup> Research in this vein has considered the effect of international tax rules on the location of research and development activities;<sup>23</sup> the impact of tax rules on capital investment and the financial decisions of multinational firms;<sup>24</sup> the viability of capital income taxes in open economies;<sup>25</sup> and the effect of specialized tax rules, such as those governing U.S. firms operating in Puerto Rico, on investment behavior.<sup>26</sup>

A number of other studies have tackled broader questions, for example whether outbound foreign direct investment depresses domestic investment in the nation that undertakes the investment;<sup>27</sup> why domestic saving and investment tend to move roughly in tandem over periods of several years;<sup>28</sup> and the link between tax policy and trade policy in achieving government policy objectives.<sup>29</sup>

## Social Insurance

The economic effects of social insurance programs have attracted an enormous volume of research activity during the last few years. The national health care policy debate turned the attention of researchers to a new set of problems in policy design and evaluation. Long-term demographic trends that

point toward a growing share of elderly households in the U.S. population make social insurance outlays a critical component of prospective government expenditures.

NBER researchers have analyzed many aspects of social insurance programs. To highlight the range of this work, I first report on research on the effects of government policies involving health care markets, and then consider other topics. In the area of health care, Bureau researchers have asked how wages respond to mandated health insurance benefits for workers;<sup>30</sup> how employer-provided health insurance affects job mobility;<sup>31</sup> how changes from fee-for-service to prospective payment have affected the delivery of health care;<sup>32</sup> and how changes in Medicaid rules have affected the likelihood that newly eligible families receive medical care and experience improvements in their health status.<sup>33</sup> Some work on health insurance has tried to evaluate the welfare gains from alternative insurance regimes;<sup>34</sup> the allocative effects of the current tax subsidies on the demand for insurance;<sup>35</sup> and the degree to which public insurance crowds out its private sector counterpart.<sup>36</sup>

Another set of studies has advanced our understanding of unemployment insurance and its effects on smoothing fluctuations in consumption;<sup>37</sup> of how disability insurance affects labor market behavior;<sup>38</sup> and how programs that afford AFDC eligibility to families with two unemployed parents affect the labor supply of such parents.<sup>39</sup> In the area of social insurance programs primarily directed at the elderly, program members have considered the effect of rising social insurance outlays on the degree to which elderly households

are annuitized;<sup>40</sup> and on their labor market decisions, particularly the decision to retire.<sup>41</sup>

## State and Local Public Finance

New interest in shifting responsibilities for programs from the federal government to states and localities has heightened Bureau researchers' attention to a new set of tax policy issues. One group of studies considers the impact of school competition on the relationship between inputs and outputs in public education.<sup>42</sup> These studies analyze competition between public and private schools as well as between public schools in different communities, and provide original and innovative evidence on the real effects of competition. Another line of research looks at the degree to which states and localities can affect the aftertax distribution of income by enacting progressive income tax schedules.<sup>43</sup> A third line of work explores the efficacy of police spending in deterring crime,<sup>44</sup> using the ingenious strategy of tracking crime rates around the time of elections in large cities, when the police force typically is expanding.

Other NBER researchers have investigated capital and infrastructure spending, including the effect of institutions for capital budgeting on state capital spending,<sup>45</sup> and the spillovers across states and localities that result from infrastructure investments.<sup>46</sup>

## Environmental Taxes

The revenue potential and efficiency effects of taxing various goods that are perceived as imposing external costs on society have been active issues of public policy

debate in the last several years. NBER researchers have considered a number of issues relating to environmental tax policy. At the most general level, there have been advances in building computable general equilibrium models used to analyze environmental taxes<sup>47</sup> and in the theory of tax design in the presence of externalities.<sup>48</sup> Specific environmental taxes singled out for analysis include those on alcohol and tobacco,<sup>49</sup> oil and petrochemical feedstocks,<sup>50</sup> and "Superfund" taxes on a variety of chemical inputs to production processes.<sup>51</sup>

## Public Policy and Housing Markets

The effect of public policies, particularly tax and financial policies, on housing markets is central to the emerging tax reform debate, but is also of independent interest. During the last two years, Patric H. Hendershott of Ohio State University has directed an NBER Project on Public Policy and Housing Markets. Research in this project has considered the determinants of household mortgage indebtedness<sup>52</sup> and the impact of housing markets on the wealth accumulation patterns of younger households<sup>53</sup> among other topics. Many of the findings from this project were presented at an October 1994 conference, which was summarized in the Winter 1994/5 *NBER Reporter*.

## Political Economy of Tax and Spending Policies

One of the newer, but rapidly growing, areas of research in public economics is the political economy of tax and expenditure policies, including: the effect on

spending behavior of electoral institutions, such as term limits;<sup>54</sup> whether fiscal institutions and fiscal constraints affect deficit policy;<sup>55</sup> and general discussions of the political economy of the welfare state.<sup>56</sup> One intriguing line of research that has emerged from this area, and that bears directly on much of the empirical research on social insurance, involves the exogeneity of state-level changes in policy that frequently are the subject of so-called "natural experiment" studies.<sup>57</sup> Without a framework for evaluating why policies change, it is difficult to analyze their effects as if they were laboratory experiments, complete with "control" and "experimental" groups.

## Government Service

Researchers affiliated with the NBER's Program in Public Economics have a long tradition of testing their expertise through public service. Since the last program report, Michael J. Boskin and David F. Bradford have completed their service on the Council of Economic Advisers (CEA), and Joseph E. Stiglitz has joined the Council. In addition, Faculty Research Fellow David M. Cutler has returned from his stint as a senior staff economist at the CEA. Lawrence H. Summers, formerly Chief Economist at the World Bank, became Undersecretary for International Affairs, and more recently the nominee as Deputy Secretary at the U.S. Department of the Treasury. Alan B. Krueger is currently the Chief Economist of the U.S. Department of Labor.

- <sup>1</sup>M. Feldstein, "The Effect of Marginal Tax Rates on Taxable Income: A Panel Study of the 1986 Tax Reform Act," NBER Working Paper No. 4496, October 1993; M. Feldstein, "Behavioral Responses to Tax Rates: Evidence from TRA86," NBER Working Paper No. 5000, January 1995; and D. R. Feenberg and J. M. Poterba, "Income Inequality and the Incomes of Very High Income Taxpayers: Evidence from Tax Returns," NBER Reprint No. 1797, June 1993, and in *Tax Policy and the Economy*, Volume 7, J. M. Poterba, ed. Cambridge: MIT Press, 1993.
- <sup>2</sup>M. Feldstein, "Tax Avoidance and the Deadweight Loss of the Income Tax," NBER Working Paper No. 5055, March 1995.
- <sup>3</sup>N. Eissa, "Taxation and Labor Supply of Married Women: The Tax Reform Act of 1986 as a Natural Experiment," NBER Working Paper No. 5023, February 1995.
- <sup>4</sup>W. T. Bogart and W. M. Gentry, "Capital Gains Taxes and Realizations: Evidence from Interstate Comparisons," NBER Working Paper No. 4254, January 1993.
- <sup>5</sup>J. Gruber and J. M. Poterba, "Tax Incentives and the Decision to Purchase Health Insurance: Evidence from the Self-Employed," NBER Working Paper No. 4435, August 1993, and *Quarterly Journal of Economics* 109 (August 1994), pp. 701-733.
- <sup>6</sup>D. R. Feenberg and H. S. Rosen, "Recent Developments in the Marriage Tax," NBER Reprint No. 1958, April 1995, and *National Tax Journal* 48/1 (March 1995), pp. 91-191.
- <sup>7</sup>L. Kaplow, "Accuracy, Complexity, and the Income Tax," NBER Working Paper No. 4631, January 1994.
- <sup>8</sup>E. Caspersen and G. E. Metcalf, "Is a Value-Added Tax Progressive? Annual Versus Lifetime Incidence Measures," NBER Reprint No. 1937, February 1995, and *National Tax Journal* 47 (1994), pp. 731-746; and G. E. Metcalf, "Life-Cycle Versus Annual Perspectives on the Incidence of a Value-Added Tax," NBER Reprint No. 1892, June 1994, and in *Tax Policy and the Economy*, Volume 8, J. M. Poterba, ed. Cambridge: MIT Press, 1994.
- <sup>9</sup>Public Policies and Household Saving, J. M. Poterba, ed. Chicago: University of Chicago Press, 1994; and *International Comparisons of Household Saving*, J. M. Poterba, ed. Chicago: University of Chicago Press, 1994.
- <sup>10</sup>O. P. Attanasio, "A Cohort Analysis of Saving Behavior by U.S. Households," NBER Working Paper No. 4454, September 1993.
- <sup>11</sup>R. G. Hubbard, J. S. Skinner, and S. P. Zeldes, "Precautionary Saving and Social Insurance," NBER Working Paper No. 4884, October 1994, and *Journal of Political Economy* 103/2 (April 1995), pp. 360-399; and "The Importance of Precautionary Motives in Explaining Individual and Aggregate Saving," NBER Reprint No. 1920, November 1994, and *Carnegie-Rochester Conference Series on Public Policy* 40 (June 1994), pp. 59-126.
- <sup>12</sup>J. M. Poterba, S. F. Venti, and D. A. Wise, "Do 401(k) Contributions Crowd Out Other Personal Saving?" *Journal of Public Economics*, forthcoming; A. L. Kusko, J. M. Poterba, and D. W. Wilcox, "Employee Decisions with Respect to 401(k) Plans: Evidence from Individual-Level Data," NBER Working Paper No. 4635, February 1994; and O. P. Attanasio and T. C. DeLeire, "IRAs and Household Saving Revisited: Some New Evidence," NBER Working Paper No. 4900, October 1994.
- <sup>13</sup>B. D. Bernheim and J. K. Scholz, "Private Saving and Public Policy," NBER Working Paper No. 4215, November 1992, and in *Tax Policy and the Economy*, Volume 7, op. cit.
- <sup>14</sup>S. J. Schieber and J. B. Shoven, "The Consequences of Population Aging on Private Pension Fund Saving and Asset Markets," NBER Working Paper No. 4665, March 1994.
- <sup>15</sup>D. Holtz-Eakin, D. Joulfaian, and H. S. Rosen, "Sticking It Out: Entrepreneurial Survival and Liquidity Constraints," *Journal of Political Economy* (February 1994), pp. 53-75; and "Entrepreneurial Decisions and Liquidity Constraints," NBER Reprint No. 1891, June 1994, and *RAND Journal of Economics* 25/2 (Summer 1994), pp. 334-347.
- <sup>16</sup>J. Y. Campbell and K. A. Froot, "International Experiences with Securities Transaction Taxes," NBER Working Paper No. 4587, December 1993, and in *The Internationalization of Equity Markets*, J. A. Frankel, ed. Chicago: University of Chicago Press, 1994, pp. 277-303.
- <sup>17</sup>J. M. Dickson and J. B. Shoven, "A Stock Index Mutual Fund Without Net Capital Gains Realizations," NBER Working Paper No. 4717, April 1994; and "Ranking Mutual Funds on an After-tax Basis," NBER Working Paper No. 4393, July 1993.
- <sup>18</sup>B. H. Hall, "R and D Tax Policy During the 1980s: Success or Failure?" NBER Reprint No. 1872, April 1994, and in *Tax Policy and the Economy*, Volume 7, op. cit.
- <sup>19</sup>B. D. Bernheim and A. Wantz, "A Tax-Based Test of the Dividend Signaling Hypothesis," NBER Working Paper No. 4244, December 1992.
- <sup>20</sup>R. H. Gordon and J. K. MacKie-Mason, "Tax Distortions to the Choice of Organizational Form," NBER Working Paper No. 4227, December 1992, and *Journal of Public Economics* 55/2 (October 1994), pp. 279-306.
- <sup>21</sup>A. J. Auerbach, K. A. Hassett, and S. D. Oliner, "Reassessing the Social Returns to Equipment Investment," NBER Working Paper No. 4405, July 1993, and *Quarterly Journal of Economics* (August 1994).
- <sup>22</sup>See The Effects of Taxation on Multinational Corporations, and Taxing Multinational Corporations, M. Feldstein, J. R. Hines, Jr., and R. G. Hubbard, eds., both forthcoming from the University of Chicago Press.
- <sup>23</sup>J. R. Hines, Jr., "No Place Like Home: Tax Incentives and the Location of R and D by American Multinationals," NBER Reprint No. 1883, May 1994, and in *Tax Policy and the Economy*, Volume 8, op. cit.
- <sup>24</sup>J. G. Cummins and R. G. Hubbard, "The Tax Sensitivity of Foreign Direct Investment: Evidence from Firm-Level Panel Data," NBER Working Paper No. 4703, April 1994, and Feldstein, Hines, and Hubbard, op. cit., forthcoming; K. A. Froot and J. R. Hines, Jr., "Interest Allocation Rules, Financing Patterns, and the Operations of U.S. Multinationals," NBER Working Paper No. 4924, November 1994; R. Altschuler and J. Mintz, "U.S. Interest Allocation Rules: Effects and Policy," NBER Working Paper No. 4712, April 1994; A. B. Lyon and G. Silverstein, "The Alternative Minimum Tax and the Behavior of Multinational Corporations," NBER Working Paper No. 4783, June 1994; J. R. Hines, Jr., "Altered States: Taxes and the Location of Foreign Direct Investment in America,"

- NBER Working Paper No. 4397, July 1993; R. Altsbuler, T. S. Newlon, and W. C. Randolph, "Do Repatriation Taxes Matter? Evidence from the Tax Returns of U.S. Multinationals," NBER Working Paper No. 4667, March 1994, and Feldstein, Hines, and Hubbard, *op. cit.*, forthcoming.
- <sup>25</sup>D. Fullerton and T. C. Kinnaman, "Household Demand for Garbage and Recycling Collection with the Start of a Price Per Bag," NBER Working Paper No. 4670, March 1994.
- <sup>26</sup>H. Grubert and J. B. Slemrod, "The Effect of Taxes on Investment and Income Shifting to Puerto Rico," NBER Working Paper No. 4869, September 1994.
- <sup>27</sup>M. Feldstein, "Taxes, Leverage, and the National Return on Outbound Foreign Direct Investment," NBER Working Paper No. 4689, March 1994; and "The Effects of Outbound Foreign Direct Investment on the Domestic Capital Stock," NBER Working Paper No. 4668, March 1994.
- <sup>28</sup>R. H. Gordon and A. L. Bovenberg, "Why Is Capital So Immobile Internationally? Possible Explanations and Implications for Capital Income Taxation," NBER Working Paper No. 4796, July 1994.
- <sup>29</sup>J. B. Slemrod, "Free Trade Taxation and Protectionist Taxation," NBER Working Paper No. 4902, October 1994.
- <sup>30</sup>J. Gruber, "State-Mandated Benefits and Employer-Provided Health Insurance," NBER Working Paper No. 4239, December 1992, and *Journal of Public Economics*, forthcoming.
- <sup>31</sup>D. Holtz-Eakin, "Health Insurance Provision and Labor Market Efficiency in the United States and Germany," NBER Working Paper No. 4388, June 1993, and in *Social Protection Versus Economic Flexibility: Is There a Trade-Off?* R. Blank, ed. Chicago: University of Chicago Press, 1994; B. C. Madrian, "Employment-Based Health Insurance and Job Mobility: Is There Evidence of Job-Lock?" NBER Working Paper No. 4476, September 1993, and *Quarterly Journal of Economics* 109 (February 1994), pp. 27-54; and J. Gruber and B. C. Madrian, "Limited Insurance Portability and Job Mobility: The Effects of Public Policy on Job-Lock," NBER Working Paper No. 4479, September 1993, and as "Health Insurance and Job Mobility: The Effects of Public Policy on Job-Lock," *Industrial and Labor Relations Review* 48 (October 1994), pp. 86-102.
- <sup>32</sup>D. M. Cutler, "The Incidence of Adverse Medical Outcomes Under Prospective Payments," NBER Working Paper No. 4300, March 1993.
- <sup>33</sup>J. Currie and J. Gruber, "Health Insurance Eligibility, Utilization of Medical Care, and Child Health," NBER Working Paper No. 5052, March 1995; J. Currie and D. Thomas, "Medicaid and Medical Care for Children," NBER Working Paper No. 4284, March 1993, and *Journal of Human Resources*, forthcoming; and J. Gruber and M. J. Hanratty, "The Labor Market Effects of Introducing National Health Insurance: Evidence from Canada," NBER Working Paper No. 4589, December 1993, and *Journal of Business & Economic Statistics*, forthcoming.
- <sup>34</sup>M. Feldstein and J. Gruber, "A Major-Risk Approach to Health Insurance Reform," NBER Working Paper No. 4852, September 1994, and in *Tax Policy and the Economy*, Volume 9, J. M. Poterba, ed. Cambridge: MIT Press, 1995, forthcoming.
- <sup>35</sup>J. Gruber and J. M. Poterba, "Tax Incentives and the Decision to Purchase Health Insurance: Evidence from the Self-Employed," *op. cit.*
- <sup>36</sup>D. M. Cutler and J. Gruber, "Does Public Insurance Crowd Out Private Insurance?" NBER Working Paper No. 5082, April 1995; D. M. Cutler and L. M. Sheiner, "Policy Options for Long-Term Care," NBER Working Paper No. 4302, March 1993, and in *Studies in the Economics of Aging*, D. A. Wise, ed. Chicago: University of Chicago Press, 1994.
- <sup>37</sup>J. Gruber, "The Consumption Smoothing Benefits of Unemployment Insurance," NBER Working Paper No. 4750, May 1994.
- <sup>38</sup>J. Gruber and J. D. Kubik, "Disability Insurance Rejection Rates and the Labor Supply of Older Workers," NBER Working Paper No. 4941, November 1994.
- <sup>39</sup>H. W. Hoynes, "Welfare Transfers in Two-Parent Families: Labor Supply and Welfare Participation Under AFDC-UP," NBER Working Paper No. 4407, July 1993, and *Econometrica*, forthcoming.
- <sup>40</sup>A. J. Auerbach, J. Gokhale, L. J. Kotlikoff, J. Sabelhaus, and D. N. Weil, "The Annuitization of Americans' Resources: A Cohort Analysis," NBER Working Paper No. 5089, April 1995.
- <sup>41</sup>R. L. Lumsdaine, J. H. Stock, and D. A. Wise, "Retirement Incentives: The Interaction Between Employer-Provided Pensions, Social Security, and Retiree Health Benefits," NBER Working Paper No. 4613, January 1994.
- <sup>42</sup>R. Fernandez and R. Rogerson, "Public Education and Income Distribution: A Quantitative Evaluation of Education Finance Reform," NBER Working Paper No. 4883, October 1994; C. M. Hoxby, "Do Private Schools Provide Competition for Public Schools?" NBER Working Paper No. 4978, December 1994, and "Does Competition Among Public Schools Benefit Students and Taxpayers?" NBER Working Paper No. 4979, December 1994.
- <sup>43</sup>M. Feldstein and M. Vaillant, "Can State Taxes Redistribute Income?" NBER Working Paper No. 4785, June 1994.
- <sup>44</sup>S. D. Levitt, "Using Electoral Cycles in Police Hiring to Estimate the Effect of Police on Crime," NBER Working Paper No. 4991, January 1995.
- <sup>45</sup>J. M. Poterba, "Capital Budgets, Borrowing Rules, and State Capital Spending," NBER Working Paper No. 4235, December 1992, and *Journal of Public Economics* (January 1995), pp. 165-187.
- <sup>46</sup>D. Holtz-Eakin and A. E. Schwartz, "Spatial Productivity Spillovers from Public Infrastructure: Evidence from State Highways," NBER Working Paper No. 5004, February 1995.
- <sup>47</sup>L. H. Goulder, "Energy Taxes: Traditional Efficiency Effects and Environmental Implications," NBER Working Paper No. 4582, December 1993, and in *Tax Policy and the Economy*, Volume 8, *op. cit.*
- <sup>48</sup>L. H. Goulder, "Environmental Taxation and the 'Double Dividend': A Reader's Guide," NBER Working Paper No. 4896, October 1994; and A. L. Bovenberg and L. H. Goulder, "Optimal Environmental Taxation in the Presence of Other Taxes: General Equilibrium Analyses," NBER Working Paper No. 4897, October 1994.
- <sup>49</sup>M. Grossman, F. J. Chaloupka, H. Saffer, and A. Laixuthai, "Effects of Alcohol Price Policy on Youth," NBER Reprint No. 1910, September 1994, and *Journal of Research on Adolescence* 4/2 (1994), pp. 347-364; J. E. Harris,

"A Working Model for Predicting the Consumption and Revenue Impacts of Large Increases in the U.S. Federal Cigarette Excise Tax," NBER Working Paper No. 4803, July 1994; and W. K. Viscusi, "Cigarette Taxation and the Social Consequences of Smoking," NBER Working Paper No. 4891, October 1994.

<sup>50</sup>J. J. Rotemberg and M. Woodford, "Energy Taxes and Aggregate Economic Activity," NBER Working Paper No. 4576, December 1993, and in *Tax Policy and the Economy*, Volume 8, op. cit.

<sup>51</sup>D. Fullerton and S. Tsang, "Environmental Costs Paid by the Polluter or the Beneficiary? The Case of CERCLA and Superfund," NBER Working Paper No. 4418, August 1993.

<sup>52</sup>P. H. Hendershott and W. R. Schultz, "Equity and Nonequity Determinants of FHA Single-Family Mortgage Foreclosures in the 1980s," NBER Working Paper No. 4440, August 1993, and *Journal of the American Real Estate and Urban Economic Association* (Winter 1995), pp. 405-430; and P. H. Hendershott and W. C. LaFayette, "Debt Usage and Mortgage Choice: Sensitivity to Default Insurance Costs," NBER Working Paper No. 5069, March 1995.

<sup>53</sup>D. A. Haurin, P. H. Hendershott, and S. M. Wachter, "Wealth Accumulation and Housing Choices of Young Households: An Exploratory Investigation," NBER Working Paper No. 5070, March 1995.

<sup>54</sup>T. J. Besley and A. C. Case, "Does Electoral Accountability Affect Economic Policy Choices? Evidence from Gubernatorial Term Limits," NBER Working Paper No. 4575, December 1993.

<sup>55</sup>J. M. Poterba, "State Responses to Fiscal Crisis: The Effects of Budgetary Institutions and Politics," NBER Working Paper No. 4375, May 1993, and *Journal of Political Economy* 102 (August 1994), pp. 799-821; A. F. Alesina and R. Perotti, "The Political Economy of Budget Deficits," NBER Working Paper No. 4637, February 1994; A. J. Auerbach, "The U.S. Fiscal Problem: Where We Are, How We Got Here, and Where We're Going," NBER Working Paper No. 4709, April 1994, and in *NBER Macroeconomics Annual 1994*, S. Fischer and J. J. Rotemberg, eds. Cambridge: MIT Press, 1994, pp. 141-175; and A. J. Auerbach, "Tax Projections and the Budget: Lessons from the 1980s," NBER Working Paper No. 5009, February 1995.

<sup>56</sup>H.-W. Sinn, "A Theory of the Welfare State," NBER Working Paper No. 4856, September 1994; and A. F. Alesina and R. Perotti, "The Welfare State and Competitiveness," NBER Working Paper No. 4810, July 1994.

<sup>57</sup>T. J. Besley and A. C. Case, "Unnatural Experiments? Estimating the Incidence of Endogenous Policies," NBER Working Paper No. 4956, December 1994.

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## Research Summaries

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### Measuring and Controlling Inflation

Stephen G. Cecchetti

In many ways, the monetary policy of the last 15 years has been strikingly successful: inflation has fallen dramatically, from well over 10 percent per year in the late 1970s to only about 3 percent in recent years. But this new low-inflation environment brings with it a host of questions that do not arise when inflation is at moderate or high levels. For example, is inflation being measured accurately? And, how can policymakers control the future path of inflation? These questions have guided much of my research over the past several years.

Michael F. Bryan of the Federal Reserve Bank of Cleveland and I studied the measurement of the most popular and commonly used aggregate price statistic in the United States: the Consumer Price Index (CPI). The CPI is the most prominent measure of inflation, and thus has become a focal point in the Federal Reserve's inflation fight. Broadly speaking, there are two problems associated with using the CPI to measure inflation: First, it represents month-to-month price changes that may not reflect changes in long-term trends accurately. Measured changes in the CPI often contain substantial short-run, transitory noise that does not constitute long-term inflation, and can easily mislead the monetary authorities

