



# Summary

---

Winter 2005

Vol. 14, No. 1

## Contents

---

### INSTITUTE RESEARCH

#### Levy Institute Measure of Economic Well-Being

- 4 EDWARD N. WOLFF, AJIT ZACHARIAS, and ASENA CANER, How Much Does Wealth Matter for Well-Being? Alternative Measures of Income from Wealth

#### Strategic Analysis

- 5 WYNNE GODLEY, ALEX IZURIETA, and GENNARO ZEZZA, Prospects and Policies for the U.S. Economy: Why Net Exports Must Now Be the Motor for U.S. Growth

#### Program: Distribution of Income and Wealth

- 7 CONFERENCE: The Distributional Effects of Government Spending and Taxation

#### Program: Financial Markets and Monetary Policy

- 26 JÖRG BIBOW, Assessing the ECB's Performance since the Global Slowdown: A Structural Policy Bias Coming Home to Roost?
- 28 PHILIP ARESTIS and ASENA CANER, Financial Liberalization and Poverty: Channels of Influence

#### Explorations in Theory and Empirical Analysis

- 29 GREG HANNSGEN, Gibson's Paradox, Monetary Policy, and the Emergence of Cycles
- 30 GREG HANNSGEN, The Transmission Mechanism of Monetary Policy: A Critical Review
- 31 MATHEW FORSTATER, Visions and Scenarios: Heilbroner's Worldly Philosophy, Lowe's Political Economics, and the Methodology of Ecological Economics

### INSTITUTE NEWS

- 32 New Appointment: DIANE ELSON
- 33 New Research Associate
- 33 New Research Scholars
- 33 NIHCM Foundation Award

### CALL FOR PAPERS

- 34 Conference: "Time Use and Economic Well-Being"

### PUBLICATIONS AND PRESENTATIONS

- 34 Publications and Presentations by Levy Institute Scholars
- 37 Recent Levy Institute Publications

## Scholars

WYNNE GODLEY, Distinguished Scholar  
PHILIP ARESTIS, Institute Professor of Economics  
ASENA CANER, Research Scholar  
CLAUDIO H. DOS SANTOS, Research Scholar  
DIANE ELSON, Senior Scholar  
JAMES K. GALBRAITH, Senior Scholar  
GREG HANNSGEN, Resident Research Associate  
HYUNSUB KUM, Research Scholar  
DIMITRI B. PAPADIMITRIOU, President  
JOEL PERLMANN, Senior Scholar  
MALCOLM SAWYER, Senior Scholar  
ANWAR M. SHAIKH, Senior Scholar  
W. RAY TOWLE, Resident Research Associate  
EDWARD N. WOLFF, Senior Scholar  
L. RANDALL WRAY, Senior Scholar  
AJIT ZACHARIAS, Research Scholar  
GENNARO ZEZZA, Research Scholar  
KAYE K. W. LEE, Junior Fellow  
RUBABA ALI, Research Assistant

## Research Associates

RANIA ANTONOPOULOS  
WILLIAM J. BAUMOL  
JÖRG BIBOW  
BARRY BLUESTONE  
NILÜFER ÇAĞATAY  
ROBERT E. CARPENTER  
YUVAL ELMELECH  
KORKUT A. ERTÜRK  
STEVEN M. FAZZARI  
MARIA SAGRARIO FLORO  
MATHEW FORSTATER  
ROBERT HAVEMAN  
THOMAS L. HUNGERFORD  
ALEX IZURIETA  
CHRISTOPHER JENCKS  
THOMAS KARIER  
WILLIAM H. LAZONICK  
SUSAN MAYER  
JAMEE K. MOUDUD  
MARY O'SULLIVAN  
JAMES B. REBITZER  
WILLEM THORBECKE  
ROGER WALDINGER  
BARBARA WOLFE

---

The Levy Economics Institute of Bard College, founded in 1986, is a nonprofit, nonpartisan research organization devoted to public service. Through scholarship and economic research it generates viable, effective public policy responses to important economic issues that profoundly affect the quality of life in the United States and abroad.

The *Summary* is published three times a year (Winter, Spring, and Fall) and is intended to keep the academic community informed about the Institute's research. To accomplish this goal, it contains summaries of recent research publications and reports on other activities.

Editor: W. Ray Towle  
Text Editor: Mikhail Horowitz

The *Summary* and other Levy Institute publications are available on the Institute's website.  
To comment on or inquire about publications, research, and events, contact the Institute online at [www.levy.org](http://www.levy.org).

The Levy Economics Institute of Bard College  
Blithewood, Annandale-on-Hudson, NY 12504-5000  
Phone: 845-758-7700, 202-887-8464 (in Washington, D.C.)  
Fax: 845-758-1149 E-mail: [info@levy.org](mailto:info@levy.org) Website: [www.levy.org](http://www.levy.org)

## LETTER FROM THE PRESIDENT

---

### To our readers:

This issue begins with a sensitivity analysis of income and wealth in relation to economic well-being in the United States by Senior Scholar Edward N. Wolff and Research Scholars Ajit Zacharias and Asena Caner. Using the Levy Institute Measure of Economic Well-Being (LIMEW), they find that their initial results remain intact using alternative estimation procedures: mean income from wealth increases by decile of the LIMEW, the share of mean income from wealth rises between 1989 and 2000, and inequality is higher in 2000 than 1989.

Under strategic analysis, a paper by Distinguished Scholar Wynne Godley, Research Associate Alex Izurieta, and Research Scholar Gennaro Zezza analyzes the financial balances of the U.S. economy, which is characterized by large government and external deficits along with a heavily indebted private sector. The authors believe that the situation cannot continue and has only one remedy—a sustained rise in net export demand, which requires a large, further devaluation of the U.S. dollar. They recommend preemptive action by authorities at home and abroad, as the necessary improvement in the U.S. current account balance would impart a deflationary impulse to the rest of the world.

A conference on the distributional effects of government spending and taxation was held at our conference center on October 15–16 and is summarized under the distribution of income and wealth program. The presentations outlined how governments play a large role in affecting inequality, since countries spend at least a quarter of GDP on social welfare and most governments tax one group in order to transfer benefits to another. A general observation was that most tax-benefit systems are progressive and substantially reduce income inequality, as a result of extensive redistribution among households toward the aged and single-parent households. However, there are international differences in attitudes and levels of economic resources and support, as the redistributive effects of social welfare expenditures and the equalizing effect of pensions vary greatly across countries. Since the 1980s, inequality has continued to grow along with a decline in the redistributive effect of taxes and public transfers. The authors expressed the need for a more comprehensive measure of well-being in order to derive a total picture of how governments affect well-being. They noted the onset of serious fiscal problems because of

changing demographics, escalating healthcare costs, and early retirement. A major concern was what was happening within the top and bottom deciles of the income distribution.

Two working papers are included under the financial markets and monetary policy program. Research Associate Jörg Bibow assesses the performance of the European Central Bank (ECB) since the global economic slowdown and finds an anti-growth bias as a result of the bank's institutional roots and unbounded discretion. The ECB's policies adversely affect growth, employment, and price stability, and are responsible for Europe's malaise, he says. Noting that inept macroeconomic policy management stands in the way of euroland's economic recovery, he recommends that the ECB be reformed.

Institute Professor Philip Arestis and Research Scholar Asena Caner study the relationship between financial liberalization and poverty, and find no clear understanding of the mechanisms underlying the transformation from financial repression to a liberalized regime or their effects on different segments of the population, particularly the poor. They conclude that, if financial liberalization is introduced, it must be designed with the poor in mind and to provide them with sufficient access to consumption smoothing mechanisms.

Three working papers are included under explorations in theory and empirical analysis. Resident Research Associate Greg Hannsgen analyzes Gibson's paradox and finds a positive correlation between interest rates and price levels, and that aggressive monetary policy can be destabilizing when the sensitivity of policy to inflation is high. In another working paper, he evaluates the monetary transmission mechanism and concludes that interest rates affect the economy in a complex way, so they should be kept low and stable.

Research Associate Mathew Forstater reviews the methodological themes in the ecological economics literature and concludes that the works of Adolph Lowe and Robert Heilbroner develop the issues and provide further insights of the themes. He recommends that ecological economists consider the authors' insights when they develop their methodologies.

I am pleased to announce that Diane Elson, professor of economics and sociology at the University of Essex and adviser to the United Nations on gender issues, has just accepted an appointment as Senior Scholar at the Levy Institute to head the new program on Gender Equality and the Economy.

As always, I welcome your comments and suggestions.

Dimitri B. Papadimitriou, *President*

## Levy Institute Measure of Economic Well-Being

---

### How Much Does Wealth Matter for Well-Being? Alternative Measures of Income from Wealth

EDWARD N. WOLFF, AJIT ZACHARIAS, and ASENA CANER  
Levy Institute Measure of Economic Well-Being, September 2004  
<http://www.levy.org/pubs/limew/limew0904s.pdf>

In response to questions about the sensitivity of LIMEW estimates, Senior Scholar Edward N. Wolff of New York University and Research Scholars Ajit Zacharias and Asena Caner explore the sensitivity associated with imputing the values of income from home and nonhome wealth—which together comprise a major component of the LIMEW. The authors provide new calculations for 1989 and 2000, which show that their initial major findings remain intact using alternative estimation procedures: mean income from wealth increases by decile of the LIMEW, the share of mean income from wealth rises between 1989 and 2000, and inequality is higher in 2000 than 1989.

The authors' approach to imputing income from wealth differs from the standard approach in two significant ways: they distinguish between home and nonhome wealth and modify the standard lifetime annuity method by accounting for differences in portfolio composition across households. They evaluate two alternative assumptions that can be used to impute income values for the home and nonhome components of wealth by changing one component and holding everything else constant, and compare their results with the benchmark case (the original estimates using the LIMEW).

Under the first assumption, homeowners are assigned the annual benefit of converting their home equity into an annuity, as calculated by the Census Bureau. The variation is due to the value of home equity, which depends on house values and the remaining mortgage principal, as opposed to the benchmark case where the variation is determined by house values. Under the second assumption, the benefits generated by nonhome wealth are assumed to be the sum of property income (interest,

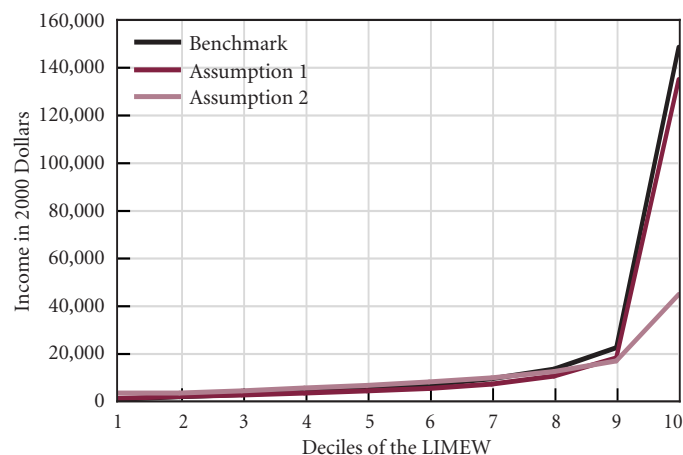
dividends, and rent) and net realized capital gains. The variation is determined by the actual income from assets, as opposed to the benchmark case where the variation is due to three factors: the value of nonhome wealth, the life expectancy of wealth holders, and portfolio composition.

The authors find that the imputed rental cost of homes in the benchmark case is higher than the annuity value of home equity in the first assumption for all but the lowest decile of the LIMEW, and that the differences by decile appear to be higher in 2000 than 1989 (the overall mean values in the benchmark case are higher in 1989 and 2000 by 41 percent and 78 percent, respectively). There is also greater divergence with increasing deciles between the benchmark case and the first assumption.

The authors also find that the income from nonhome wealth estimated under the second assumption is much lower than the benchmark case—approximately 40 percent—and that the gap between the estimates widens drastically for the top decile. Moreover, the differences between the benchmark case and the second assumption appear to be larger in 2000 than 1989. A further finding is that the positive correlation between mean income from wealth and deciles of the LIMEW is unaffected, generally, by alternative assumptions (*see* Figure 1). A new finding is that changing the treatment of nonhome wealth has a significant effect on both the level and distribution of economic well-being (*see* Figure 2). The differences are striking, especially at the very top of the distribution. Consequently, the authors argue that actual annual income generated by nonhome wealth underestimates the benefit from those assets and that their initial method (the benchmark case) is better at capturing the value of total benefits from nonhome wealth.

The authors' next supplementary report will explore the sensitivity associated with the public consumption component of the LIMEW.

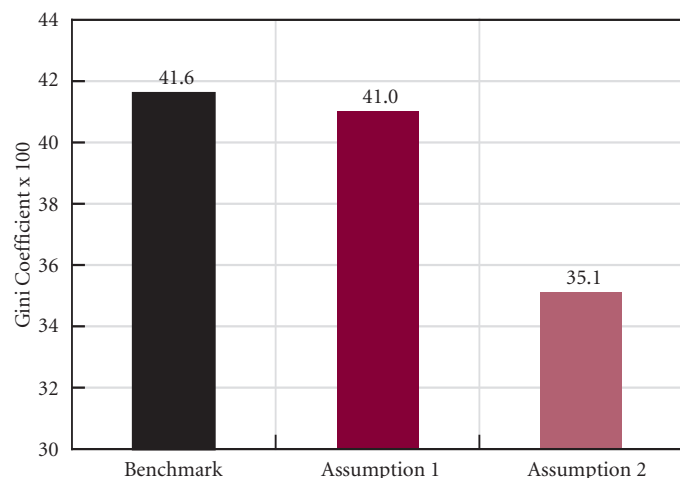
**Figure 1 Mean Income from Wealth, 2000**



Notes: Benchmark case: our original estimates using the LIMEW.  
 Assumption 1: using return on home equity instead of imputed rental cost. The benefit from nonhome wealth is estimated in the same way as the benchmark case.  
 Assumption 2: using property income plus net realized capital gains instead of the annuity value of nonhome wealth. The benefit from home wealth is estimated in the same way as the benchmark case.

Source: Authors' calculations

**Figure 2 The Effects of Alternative Assumptions on Inequality, 2000**



Notes: Benchmark case: our original estimates using the LIMEW.  
 Assumption 1: using return on home equity instead of imputed rental cost. The benefit from nonhome wealth is estimated in the same way as the benchmark case.  
 Assumption 2: using property income plus net realized capital gains instead of the annuity value of nonhome wealth. The benefit from home wealth is estimated in the same way as the benchmark case.

Source: Authors' calculations

## Strategic Analysis

### Prospects and Policies for the U.S. Economy: Why Net Exports Must Now Be the Motor for U.S. Growth

WYNNE GODLEY, ALEX IZURIETA, and GENNARO ZEZZA

Strategic Analysis, August 2004

[www.levy.org/pubs/files/sa/stratan-aug-04.pdf](http://www.levy.org/pubs/files/sa/stratan-aug-04.pdf)

The U.S. economy is characterized by large government and external deficits, and by a heavily indebted private sector. According to Distinguished Scholar Wynne Godley and Research Associate Alex Izurieta of the Cambridge Endowment for Research and Finance, and Research Scholar Gennaro Zezza, the deficit and debt levels are unprecedented and cannot continue, and they may not correct themselves spontaneously in an orderly way. The authors recommend that authorities in the United States and abroad collaborate and take preemptive action, as the necessary cut in the domestic absorption of goods and services in the United States (and increase in net export demand) would impart a deflationary impulse to the rest of the world.

The authors analyze the financial balances of the three major sectors of the U.S. economy (government, external, and private). They note that the economic expansion from 1992 to 2000 was driven by a rise in private expenditure relative to income, which created a record private financial deficit. A major recession was avoided because of a revolution in the stance of fiscal policy. Government expenditure relative to receipts rose (the balance of payments deficit increased to more than 5 percent of GDP in the first quarter of 2003), while interest rate cuts allowed the personal sector to continue to borrow.

To assess the medium-term prospects for the U.S. economy, identify obstacles and strategic predicaments, and evaluate policy options, the authors model a consistent system of stock and flow variables and trace out a range of possible scenarios for the period to 2008. Their base run projection includes a number of conservative assumptions: GDP expands at an average rate of 3.2 percent per annum, world output rises to an average rate of 4 percent per annum by 2008, and there is no further change in the exchange rate. They find that the current account deficit rises to about 7.5 percent of GDP over

the next four years, while the primary balance flattens out in response to the previous 9 percent devaluation of the Fed's "broad" real dollar index (see Figure 1).

The authors observe that the net saving of the personal sector fell to a record low in 2001 (6 percent of personal disposable income) from which no real recovery has occurred. As a result, personal indebtedness accelerated to a record 140 percent of disposable income in the first quarter of 2004. Furthermore, the financial obligations of households to service debt are also at a record high (18.5 percent of income), notwithstanding very low interest rates. The authors expect that personal net saving, which is 6 percentage points below the historic average, will rise significantly during the projection period. The base run projection for the balance of payments and private sector saving implies that the general government deficit would have to rise to nearly 9 percent of GDP by 2008. The authors note, however, that the situation described in the base run could not be allowed to develop in view of commitments by both presidential candidates to cut the existing deficit in half. Moreover, with interest rates in excess of 5 percent, the internal and external debts would hurtle toward 100 percent of GDP.

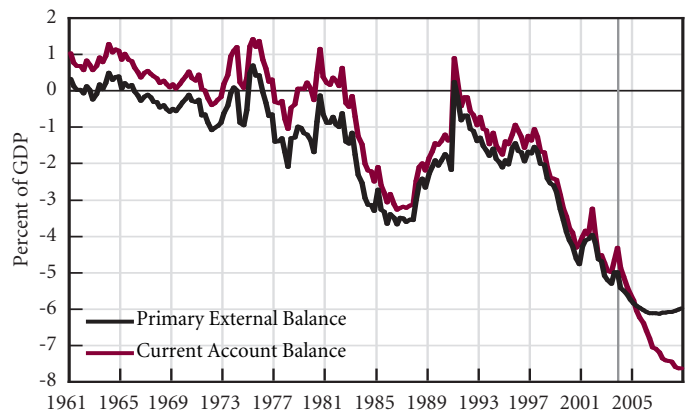
According to the authors, this disastrous situation has only one remedy—a sustained rise in net export demand must soon become the motor for U.S. growth. The remedy requires a large, further devaluation of the U.S. dollar. For example, a total (real) devaluation of 33 percent between the beginning of 2002 and the end of 2008 would completely eliminate the net outflow of factor income from the United States and reduce the net foreign debt, notwithstanding the fact that the current account balance remains in deficit (see Figure 2). This dream scenario has a satisfactory rate of export-led growth, with the government and external deficits declining in a satisfactory way.

The authors disagree with the notion that the balance of payments will right itself spontaneously without any government intervention. They cite two reasons why an effective devaluation may be difficult to achieve: (1) the non-U.S. world has become heavily dependent on the growing U.S. deficit as a motor for growth and has accumulated enormous foreign exchange reserves, and there is no inherent constraint on the continuation of this process; and (2) there is a transfer problem, as any improvement in the deficit would reduce domestic absorption by an equivalent amount.

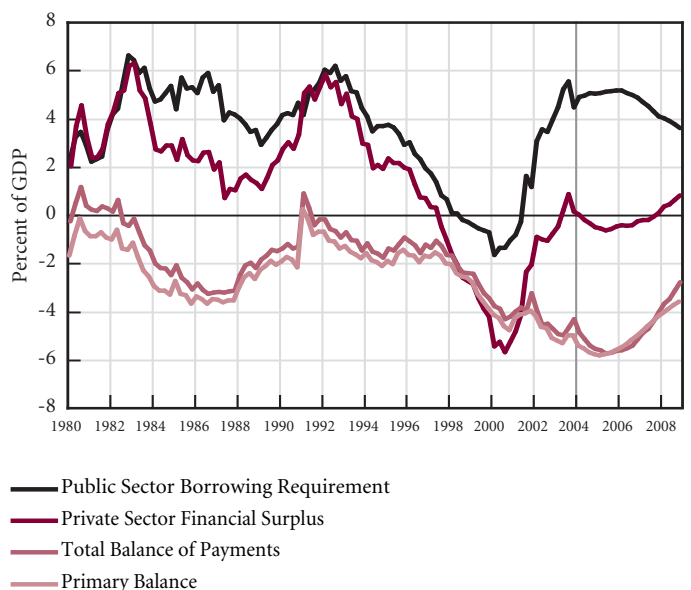
The public appears to assume that the budget deficit can be cut without affecting aggregate demand and output, but this

view is very seriously mistaken, say the authors. They find that when they simulate their base run and reduce the government deficit by half in 2008, the result is similar to the main balances projected when growth is achieved by devaluation (Figure 2). This result shows the importance of using the financial balance method in conjunction with a model of how the various configurations are generated. If the fall in the government deficit is driven by a rise in tax rates coupled with a reduction in public expenditure, the improvement in the balance of payments comes about because U.S. output is reduced from 3.2 percent, on average, to 1.2 percent—the slowest in postwar history.

**Figure 1 External Balances, Historic and Projected, According to Baseline**



**Figure 2 The Main Balances Projected, When Growth Is Achieved by Devaluation**



# Program: Distribution of Income and Wealth

---

## Conference: The Distributional Effects of Government Spending and Taxation

*This conference, organized by Senior Scholar Edward N. Wolff of New York University, represents the Levy Institute's ongoing research into the distribution of income and wealth, and how this distribution affects the quality of life. The conference was held October 15–16, 2004, at the Levy Institute conference center located at Bard College, Annandale-on-Hudson, New York, and it focused on the distributional consequences of the public sector. The primary emphasis was on the effects on personal distribution, but it also examined the relationship between the public sector and functional distribution of national income. Papers analyzed governmental activity on the federal, state, and local government levels, and considered the distribution of both the costs and benefits of a single government program, such as the Social Security system in the United States, and compared studies among a set of countries. Summaries of the sessions and speakers' remarks are given below. Audio of the conference can be accessed under the Quick Search, Conference Audio section of the Institute's website.*

### Session 1. International Comparisons

Chair for this session was Levy Institute President DIMITRI B. PAPANIMITRIOU. The participants were MICHAEL FÖRSTER, European Centre Vienna and OECD; PIERRE PESTIEAU, University of Liège, CORE, CEPR, and Delta; JONATHAN SCHWABISH, TIMOTHY SMEEDING, MICHAEL ERIKSEN, and JOSEPH T. MARCHAND, The Maxwell School, Syracuse University; and LARS OSBERG, Dalhousie University. The discussant was AMY ELLEN SCHWARTZ, New York University.

The concept of generosity is important but very ambiguous. In a coauthored paper with Pierre Pestieau, and Mathieu Lefèbvre, CREPP and the University of Liège, FÖRSTER outlined three types of generosity based on average benefits, early retirement, and alleviating intragenerational inequality and poverty, and two extreme types of public pension systems: Bismarckian or contributive (earnings-related benefits) and Beveridgean or redistributive (i.e., the replacement rate, or benefit-to-earnings ratio, declines as earnings increase).

A well-known political economy proposition is that targeting the benefits to the lower part of the income distribution is unsustainable because of a lack of political support. Contributory programs tend to be larger than redistributive ones, and are likely to improve the standard of living of the poor. However, noted the authors, these kinds of programs can be very costly and may not have much effect on income redistribution. The authors also noted that no government that tries to achieve some redistribution can avoid tax distortions. They further noted that ongoing economic integration allegedly impedes redistributive policies at the national level and threatens the future of the welfare state as a result of the “race to the bottom.”

Two types of data were used to evaluate the average generosity of public pension systems in 12 countries in 1995: the share of public pension spending in GDP, and the rate of replacement at age 65 for six typical households distinguished by earnings and marital status. The most and least generous countries were Italy and Australia, according to the first data type, and Italy and Norway, according to the second. The analysis found that the two concepts are positively, but not perfectly, correlated.

Two indicators were used to evaluate the generosity toward early retirement: the effective age of retirement of male workers, and the ratio of replacement at age 55. The most and least generous countries were Norway and the Netherlands, according to the first indicator, and Italy and four other countries (the United States, Norway, Canada, and Australia), according to the second. Countries characterized by generous rates of replacement for early retirees counted more early retirees.

Two indicators were also used to evaluate the level of redistributive generosity: the difference in poverty with and without net public transfers; and the ratio of the income share of public pensions of total income in the bottom quintile, to the same share in the top quintile. The most and least generous countries were France and Finland, according to the first indicator, and Australia and France, according to the second. These two indicators were not positively related because poverty is only one aspect of inequality.

The correlation coefficients of generosity indicators suggested that the more contributory a pension scheme, the more generous it will be in average terms (i.e., rich programs are good for the poor); that generous schemes, on average, include programs that alleviate poverty; and that countries with generous, but restricted, early retirement, are also those that have, on average, a generous pension system. The study showed a negative

correlation between redistributive generosity and early retirement, which vindicated the idea of a double dividend.

The authors analyzed the correlation coefficients from 1985 to 2000, a period of increased economic integration. They found little change in the correlations among the types of generosity; no trend toward less poverty alleviation; a trend toward less reduction in inequality (i.e., more contributiveness); and a distinct trend for countries to reduce the generosity of social security systems toward early retirement. They also found that poverty alleviation is negatively related to the degree of openness of a country's economy.

The authors concluded that the three definitions of generosity were not closely correlated. The main result was that Bismarckian contributory programs tend to offer generous pensions and benefit the poor, which vindicates the idea that programs for the poor are poor programs, and that rich programs are good for the poor.

SCHWABISH et al. hypothesized that high levels of income inequality reduce support for redistributive social spending. The authors reviewed four main threads of research in economics and political science: (1) social capital and inequality; (2) median voter models of inequality and social spending; (3) social spending and economic growth; and (4) politics and social spending. They found that the older literature suggested that higher inequality leads to more social spending. They also found that most models paid little attention to desired levels of redistribution in combination with institutions and voting mechanisms. Moreover, the literature and models included (homogeneous) cross-national beliefs that were questionable. They noted that measures of inequality that reflect differences in the impact of inequality at the top and bottom of the distribution were preferable to single-parameter estimates.

The authors modeled the empirical relationship between inequality and social spending for 17 countries. They focused on the effects of inequality and trust in providing public expenditures that provide income, or goods and services, directly to households. (Health and education expenditures were excluded from the analysis because of a lack of data.) Conflicting theories forced the authors to consider the endogeneity of inequality in regression models, so they focused on pretax and transfer income (i.e., market income). The empirical work used market-income measures of inequality, as well as distinct measures of inequality (e.g., Gini and percentile ratios). A heuristic model outlined how preferences toward

equality affect redistributive spending via voting, lobbying, and related institutions.

The authors used data from the Luxembourg Income Study (various measures of inequality), the Organisation for Economic Co-operation and Development (OECD) (growth and social expenditures), and World Value Survey data sets on values (expressed by trust for others). Using preference data from the International Social Survey Programme (ISSP), they tried to understand how different attitudes toward inequality affect public policy. They believed that citizens do not necessarily get what the majority wants, and that political and social institutions, such as collective bargaining arrangements and unions, are likely to intervene in the relationship between inequality and social spending. They noted that U.S. respondents to ISSP questionnaires were least likely to agree that the government was responsible for reducing income differences. They also noted that these respondents started from a considerably higher base rate of income inequality. The analysis found strong evidence for international differences in attitudes toward the role of government in reducing inequality, but weaker evidence for systematic differences in attitudes toward income inequality.

In developed countries, total social expenditures as a percent of GDP ranged from 15 percent in the United States to more than 30 percent in Sweden, while total social expenditures as a fraction of total government spending in OECD countries ranged from 0.67 in Australia to 0.90 in Denmark and Sweden. The authors believed that income inequality at the top of the distribution affects social spending differently than income inequality at the bottom. Therefore, they compared the ratio of the top income group to the middle group (i.e., the 90th percentile divided by the 50th percentile), and the ratio of the middle group to the bottom group (the 50th percentile to the 10th percentile). They surmised that there may be a "tipping" point beyond which affluent citizens become less civically engaged and less likely to support public policies that benefit all of society.

The authors regressed total cash and near-cash social expenditures of the nonelderly as a percentage of GDP on a set of demographic, political, and macroeconomic covariates (e.g., trust, inequality measures, macroeconomic controls, and per capita GDP growth rates). They found that a 1-percent increase in GDP growth decreases nonelderly social expenditures by slightly more than 0.2 percent; and that a 1-percent increase



in trust increases social expenditures by 0.4 to 0.9 percent. A more open (less homogeneous) society is less willing to spend on social goods, while centralized wage bargaining helps to transfer social policy preferences into programs and policies that support greater spending.

The empirical results suggested that inequality and trust have important effects on public spending, and that higher economic inequality produces lower levels of publicly-shared goods, which foster greater equality of opportunity, income insurance, and upward mobility. The results also suggested that both ideology (the meaning of “fairness,” altruism, and basic human rights) and efficacy (how social institutions and political parties influence government) matter. The authors found that social values and institutions in the United States differ from other nations. Although Americans believe in the market system, which is critical to social outcomes, they do not have the social institutions or political movements that might lead to greater levels of redistribution.

The inequality in market income between the middle class and the poor (the 50/10 percentile ratio) had a positive, but statistically insignificant, impact on social spending, while that between the middle class and affluent (the 90/50 percentile ratio) had a statistically significant and negative impact. The aggregate insignificance of inequality in market income was due to offsetting influences of inequality at the top and bottom of the distribution (before taxes and transfers). The result confirmed the authors’ assertion that there is a “tipping” level at the top of the income distribution, where further support for public expenditures may be lost. The authors’ findings contrast with much of the literature and may reflect changes since the 1980s, as inequality continues to grow and incomes grow more slowly.

SCHWARTZ, as discussant, noted that the papers had ambitious research agendas and that the overarching goal was to understand the causes and consequences of social expenditures and income inequality. She questioned the ability to disentangle the causes and consequences of the goal in light of profound data, measurement, and modeling issues. How does one get enough observations and test them when there are limitations, such as degrees of freedom, and differences in values that generate different ideas about redistribution?

Schwartz questioned the definition of social expenditures, which, she suggested, has shifted over time. She was concerned about causality and the lack of a claim by the authors to have disentangled the problem (e.g., income inequality affects social

expenditures and vice versa). She suggested that people have a political response to social expenditures, and that rising expenditures would be problematic for the low end of the income distribution.

Another suggestion was to study what is happening at the subnational and metropolitan levels in order to secure more data and enhance the degrees of freedom of models. For example, what happens to income distribution at the state level when there is a federal policy shock that leads to changes in the generosity of social welfare programs? Schwartz noted that the results of the papers seem to suggest that the rich are the bad guys and do not support public services. She wondered if that was really true at this point in time, as the rich pay the taxes and they pay for private education. She expressed a need to understand the dynamics of open economies and redistribution in light of the values, attitudes, and potential migration of the rich.

## **Session 2. Cross-national Comparisons within Europe**

Chair for this session was Senior Scholar EDWARD N. WOLFF, Levy Institute and New York University. The participants were HOLLY SUTHERLAND, University of Cambridge, University of Essex, and DIW Berlin; IRWIN GARFINKEL, Columbia University; and TIMOTHY SMEEDING, The Maxwell School, Syracuse University. The discussant was MARC LEE, Canadian Centre for Policy Alternatives.

In a coauthored paper with Herwig Immervoll, University of Cambridge and European Centre Vienna; Horacio Levy, Universitat Autònoma de Barcelona; Christine Lietz, University of Cambridge; Daniela Mantovani, University of Cambridge and Prometeia, Bologna; Cathal O’Donoghue, National University of Ireland, Galway, IZA, Bonn, and ICER, Turin; and Gerlinde Verbist, University of Antwerp; SUTHERLAND outlined the redistributive effects of income taxes, social contributions, and cash benefits on household incomes in the European Union (EU). The study used a tax-benefit model (EUROMOD) for 15 member states (pre-May 2004) and found that the variation in size and structure of direct taxes and cash benefits affected income inequality. State pensions had a strong equalizing effect, although the effect was rather small in Ireland and the United Kingdom, where pensions are primarily provided through the private sector. Another finding was that countries achieving high redistributive effects and inequality reduction through their tax-benefit systems, such as the Scandinavian countries and most of the continental welfare states, mainly

used non-means-tested benefits and taxes (e.g., unemployment and child benefits). Social insurance contributions had relatively weak redistributive powers, while the contribution of taxes in reducing inequality was relatively high or moderate in most countries, with the exception of Italy, France, and Sweden.

The authors noted that the growing availability of micro data allows researchers to estimate the effect of redistributive policies, but that a comparison of national datasets has to be handled with care because of differences in definitions, survey collection practices, time periods, and economic cycles. They also noted that few studies analyze the joint effect of social transfers and taxes on income inequality, or make international comparisons.

A microsimulation model represents a socioeconomic reality with the purpose of gaining insight into the consequences of proposed policy changes. EUROMOD is a static microsimulation model that attempts to improve comparisons across datasets, apply a consistent modeling strategy to the data, and provide measures of direct taxes, social contributions, and cash benefits. The authors collected data for the period from 1993 to 1999, adjusted the data to 1998 prices and incomes, and simulated their results according to policies prevailing in mid 1998. They employed two starting points: market income, as conventionally defined; and market income, including income from public pensions. Both points consider private pensions as part of market income. The authors explained that they excluded the effect of other taxes (e.g., indirect taxes) and noncash benefits (e.g., subsidized childcare), which may have important effects on redistribution in some countries, so their study was a partial analysis. No adjustments were made for purchasing power differences across countries and market exchange rates were assigned as of December 31, 1998. The distributional analysis derived equivalent household incomes (and components) using the modified OECD scale, and allocated income to each person in a household.

According to the first starting point, the authors found that the tax-benefit system is highly redistributive in countries with the lowest level of disposable income inequality, such as Finland, Denmark, Belgium, Austria, Luxembourg, and Germany. A low degree of redistribution is found in Greece, Italy, and Portugal. The picture was altered when pensions were added to market income, indicating that the equalizing effect of pensions varied greatly across countries.

The redistributive effect of taxes and benefits is measured as the difference between the Gini coefficients of income before and after taxes or benefits. Tax progressivity is measured using the Kakwani index, which is defined as the difference between the generalized concentration index of taxes and the generalized Gini coefficient for income before taxes. Benefit regressivity is measured using a transformation of the Kakwani index and is defined as the difference between the generalized Gini coefficient for income before benefits and the generalized concentration index of benefits. The authors noted that the computations of redistribution and measures of progressivity are sensitive to the definition of “base income.” They measured the effect of individual taxes and benefits by comparing disposable income (after all taxes) and benefits with disposable income, minus the effect of the instrument of interest.

A general observation was that all tax-benefit systems substantially reduced income inequality. Southern European countries show the highest level of disposable income inequality, even though their market-income positions are different (e.g., Spain, Portugal, Greece, and Italy). Using unequivalent incomes (major parts of government revenue and spending are not included), which give a budgetary rather than a welfare perspective, they found that most countries take about the same amount in taxes and employee contributions as they give in cash benefits (i.e., market income is 95–105 percent of disposable income). The main exceptions are Belgium, Denmark, the Netherlands, Germany, and Sweden, where market income greatly exceeds disposable income, and Spain and France, where households receive notably more benefits than they pay in taxes and public pensions form more than 15 percent of disposable income. Market income and state transfers each account for half of disposable income in about half of EU countries. Pensions make up a larger share of household income in the bottom quintile. Although most tax systems are progressive, the study found that the tax burden for the bottom quintile can be relatively high (e.g., Denmark and Sweden). The authors suggested that the key equalizing role of non-means-tested benefits deserves further investigation.

In a coauthored paper with Smeeding and Lee Rainwater, Harvard University, GARFINKEL presented the redistributive effects of welfare state expenditures on disparities in the economic well-being of citizens in 10 advanced industrialized countries. The authors found a wide range of differences in levels of economic resources and support, and among groups

and countries. English-speaking countries devote less GDP to social welfare spending than continental European and Scandinavian countries. Differences among countries were substantially narrower using net- rather than gross social welfare expenditures. Per capita expenditures were the highest in the United States because its GDP greatly exceeded that of other countries. Although the United States spends comparatively less on cash and near-cash assistance, it spends more on education and health. The authors also found that the redistributive effects of social welfare expenditures are large for all countries, the aged are the highest net beneficiaries of redistribution, and poor children are relatively worse off in English-speaking countries.

The authors combined data from the OECD and micro data on household income from the Luxembourg Income Study (LIS) to estimate the redistributive effects of expenditures and taxes, and measure the differences in standards of living across income classes. Estimates were made for each country and for three groups: households with children, households without children, and the elderly. Households were ranked by equivalent household market income before adding cash transfers and noncash benefits for healthcare and education, and subtracting taxes that financed the social transfers. It was assumed that there were fairly equal distributions of publicly financed health and education expenditures within countries, with the exception of employer-provided healthcare in the United States (the only country without universal national health insurance or service).

Garfinkel et al. used “full income” (post all-tax and all-transfer income), which is a more comprehensive measure of well-being than disposable income, a preferable measure of efforts by welfare states to redistribute opportunities and access critical goods, and a more comprehensive measure of relative costs and benefits among countries. Their aim was to measure the degree that social welfare expenditures closed the “economic distance” in economic resources between the poor (10th percentile), middle-income (50th percentile), and rich (90th percentile) groups.

The authors found that countries spend at least a quarter of GDP on social welfare and that most governments tax one group in order to transfer benefits to another. Social benefits, as a measure of total government spending, varied between 68 percent in Australia and 91 percent in Sweden. Most of the differences were attributable to history, culture, and political choices. The Scandinavian and continental European countries

were more likely to tax cash transfers and to finance social welfare expenditures through indirect taxes than English-speaking countries. In most countries the largest single source of welfare state expenditures is cash benefits, including employer-provided pensions, followed by noncash spending on health and education. The United States spends relatively more on noncash benefits and much less on cash transfers. A striking feature is that Americans spend much more on healthcare (one-third of social expenditures) because of higher prices, but receive relatively fewer healthcare services. Another feature is that the United States no longer leads in spending on education. However, in terms of real per capita social welfare expenditures, it is higher than all countries, except Sweden.

The authors also found that welfare state benefits net of taxes substantially and systematically redistribute resources from the top to the bottom of the income distribution. Welfare states more than double market incomes in the bottom quintile, which consists primarily of the elderly and single mothers. Countries take away, on average, 23 percent of full income from the top quintile. Families with children receive in benefits about what they pay in taxes. Children in the United States are net gainers until the 80th percentile, which is the highest of any country, because of relatively higher education and health benefits. Elders averaged approximately 55 percent of their final full incomes in net transfers (countries such as France, where public pensions are large, are the highest at more than 80 percent; while countries such as Finland and the United States, which have the strongest occupational [private] pension schemes, are the lowest). Because welfare states provide very large net transfers to the aged, they face serious fiscal problems because of changing demographics, escalating healthcare costs, and early retirement, warned the authors. Further findings were that childless couples are net taxpayers (by about 22 percent) in all societies and that the second quintile is the average tipping point (where benefits equal taxes).

Using cash disposable incomes, the economic distance between persons at the 10th and 90th percentiles (a measure of equal opportunity for children and equality of provision for others) was greatest in the United States. Taking account of noncash transfers and indirect taxes (full income), the economic distance shrank for all countries, but the United States still led. The reasons for the shrinkage were that, compared to other countries, the United States is short on cash and long on in-kind benefits, and that big-spending welfare states rely on

indirect taxes and taxation of cash benefits more than the United States. The authors pointed out that, when health and education spending is included in the analysis, the absolute size of the U.S. welfare system is not small, as total benefits per household amount to \$17,276. In terms of redistribution, children and elders in the United States are below average and the economic distance for elders is the highest among countries.

The authors suggested that the results may be sensitive to a number of assumptions underlying the simulations (e.g., non-cash benefits are the same for rich and poor, and cross-national differences in expenditures on health and education measure real differences in quantity of services). Under all scenarios for families with children, health and education expenditures substantially reduced differences among countries and improved the relative position of the United States. The authors noted that their sensitivity analysis pointed out the need to undertake research on differences in expenditures on health and education within countries by income class, but that it was unclear how to empirically address this issue. It was also unclear that expenditures should be valued at government cost.

LEE, as discussant, noted that governments play a large role in affecting inequality, so there is plenty of room for policy choices. He wondered how to explain the differences among countries in reducing inequality in terms of programs, institutional mechanisms, and structures, and what actually works. He noted that there are different models, such as the tax mix of Scandinavian countries, which have struck a social bargain so that value added taxes (regressive) fund very generous welfare states.

Lee observed that the two papers in the session used different methodological strategies. He found that the micro simulation approach of the Sutherland et al. paper was limited to direct and value added taxes, and did not include the value of public services or tax expenditures. Furthermore, the income concept was narrow and there was a comparability issue, since the data base varied by year and reflected different points in the economic cycle among countries. Lee liked the use of the economic distance concept in terms of presenting inequality and factoring in the impact of government. He proposed using other parameters in lieu of the Gini coefficient to determine what is happening within the top and bottom deciles of the income distribution.

According to Lee, the strength of the Garfinkel et al. paper was that it expanded the nature of taxes, the value of public

services, and the concept of income, but he questioned the inclusion of employer-provided benefits as “social welfare expenditures.” He noted that these benefits can be large and encouraged the authors to think about who actually pays for them. Lee questioned the assumption that the distribution of healthcare was even because of major differences in coverage (e.g., employee copayments), and he wondered if supplemental health benefits were included in the analysis. Lee suspected that the relative position of the United States may be too high and misleading, as U.S. healthcare expenditures include higher administrative costs and inefficiencies of multiple private insurance bureaucracies.

### **Session 3. Distributional Effects of Taxes and Government Spending in the United States**

Chair for this session was Resident Research Scholar GREG HANNSGEN, Levy Institute. The participants were Senior Scholar EDWARD N. WOLFF, Levy Institute and New York University; Research Scholar AJIT ZACHARIAS, Levy Institute; and WILLIAM G. GALE, The Brookings Institution. The discussant was SOURUSHE ZANDVAKILI, University of Cincinnati.

ZACHARIAS presented a paper coauthored by Wolff that assessed the effects of government expenditures and taxation on household economic well-being in the United States in 1989 and 2000. Noting that public provisioning (e.g., government expenditures on schools and highways) has a crucial effect on economic well-being, the authors developed a more comprehensive measure of well-being by accounting for all relevant expenditures and taxes. They adopted a social accounting method and a concept of household economic well-being outlined in previous studies under the Levy Institute Measure of Economic Well-Being (LIMEW). In the social accounting approach, taxes paid by the household sector reduce the command over products, while transfers and public provisioning expand them.

The authors constructed two alternative measures of economic well-being: “pre-fisc” income, which reflects the income that members of a household derive from market or quasi-market transactions; and “post-fisc” income, which is the sum of pre-fisc income and net government expenditures, including cash transfers, noncash transfers, and public consumption. The data sources included the public-use datafiles developed by the U.S. Bureau of the Census, household surveys on wealth, the National Income and Product Accounts (NIPA), and the

Survey of Consumer Finances (SCF) by the Federal Reserve Board. Government transfers reported in the Annual Demographic Supplement were aggregated across recipients and compared against the appropriate NIPA benchmarks. State and local consumption taxes were based on estimates published by the Institute on Taxation and Economic Policy.

The authors estimated that public consumption represented 44 percent (\$485.2 billion) of government expenditures (\$1.1 trillion) in 1989 and 51 percent (\$892 billion) of expenditures (\$1.75 trillion) in 2000. State and local government services were the largest component of public consumption (about 86 percent), while two-thirds of total state and local government spending directly benefited residents, compared to 13 and 21 percent of federal expenditures in 1989 and 2000, respectively.

A notable finding was that total personal benefits from government activity were less than personal tax revenues, and that there was a more rapid growth in taxes than either transfers or public consumption. The authors investigated the distribution of components of net government expenditures by household characteristics and found that transfer payments were equalizing. The higher public consumption of nonwhites was mainly a reflection of differences in household size and composition. Differences in taxes paid by household group reflected differences in household income, but the elderly enjoyed substantial net benefits. Married-couple families were net losers, whereas single-headed families were net beneficiaries. Another notable finding was that net government expenditures were positive for the lowest six deciles and negative for the top four.

Using a wealth-adjusted comprehensive income (CIW) measure, the authors found that total government transfers are extremely progressive (falling from 50 percent for the lowest decile to 2.6 percent for the top in 2000). The same pattern holds for Social Security, other transfer payments, and public consumption. Federal and state income taxes are uniformly progressive, while state consumption and property taxes are generally regressive. Total personal taxes by decile are generally progressive.

Measured racial and family-type disparities were considerably reduced when the authors compared the post-fisc income measure to gross money income measures. The elderly were better off, due to relatively higher values of annuities and non-cash transfers (e.g., Medicare), while other age groups appeared to be worse off.

A comparison of measures showed that economic well-being was the lowest using money income, followed by

pre- and post-fisc income, and CIW. Negative net government expenditures resulted in lower mean values of post-fisc than pre-fisc income, while the redistributive impact of net government expenditures resulted in higher median values. In terms of changes in decile shares, the pattern for the three income measures was similar: the bottom three or four deciles showed positive, but small gains; the next five to six deciles showed negative changes; while the top decile showed a substantial gain, which reflected the sharp decline in tax rates for upper income levels.

The Gini coefficient showed a marked rise for all income measures during the period. The effect of moving from pre-fisc to post-tax pre-fisc income is a slight increase in the coefficient, which reflects a sharp drop in the overall average tax rate between the ninth and tenth decile. Therefore, the tax system as a whole is neutral at best and slightly regressive at worst. Moving from pre-fisc income less taxes to an income definition that includes transfers, or public consumption, reduces inequality. A comparison between 1989 and 2000 suggests that the effect of net government expenditures in reducing inequality has weakened as a result of a decline in the progressive redistributive effect.

An examination of the impact of major individual components of taxes, transfers, and public consumption on pre-fisc inequality showed that the progressive effect of income taxes is substantially reduced when the regressive effects of payroll, property, and consumption taxes are added to the household tax burden, and significantly enhanced by Social Security, Medicare, and educational benefits. The authors found that the inequality-reducing effect of net government expenditures is entirely attributable to government expenditures (i.e., transfers and public consumption).

In sum, the authors noted that Americans pay more in taxes than they receive in benefits, so they are not getting a good deal from the government. Net government expenditures alter the level and distribution of economic well-being, and disparities between households that are grouped according to certain salient social and economic characteristics. However, the relatively smaller difference between the levels of pre-fisc and post-fisc income, and the larger disparity between either measure and money income, suggest that the crucial factor is not net government expenditures, but the treatment of income from wealth.

The analysis of marginal effects of the components of post-fisc income indicates that government expenditures for

the household sector are far more potent in reducing inequality than taxes. The finding suggests that, from a policy standpoint, it may be misleading to consider that economic inequality is shaped predominantly by inequalities in labor income.

In a coauthored paper with Leonard E. Burman, Urban Institute, and Matthew Hall and Peter R. Orszag, The Brookings Institution, GALE explained how the authors developed an enhanced version of the Tax Policy Center microsimulation tax model of the federal income tax system to examine how pensions are distributed across the U.S. population. The authors used a retirement saving module and presented estimates of the current distribution of benefits from defined contribution (DC) plans and individual retirement arrangements (IRAs). The authors noted that the present value of the federal revenue loss from new contributions to employer pensions exceeded \$184 billion in 2003. They further noted that retirement saving programs targeted at households with high income and wealth do not encourage saving where it is needed most, and may be relatively ineffective in raising private and national saving.

The authors focused on the structure of saving incentives as of 2004. The tax model uses two data sources: the 1999 public-use file (PUF), which contains 132,108 income tax records and is produced by the Statistics of Income Division of the Internal Revenue Service (IRS), and the 2000 Current Population Survey (CPS) of the U.S. Census Bureau. For the period from 2000 to 2013, the authors “aged” the data based on forecasts and projections for income growth from the Congressional Budget Office, for tax returns from the IRS, and for demographic composition of the population from the CPS. Based on the extrapolated data set, the authors simulated policy options using a detailed tax calculator that captured most features of the federal individual income tax system, including the alternative minimum tax (AMT).

The benefits of retirement saving were modeled in three steps: (1) the estimation of DC and IRA coverage and contributions; (2) the imputation of estimates with records in the PUF and CPS databases; and (3) the calculation of the value of tax benefits associated with the contributions. The data were supplemented with information from the 2001 Survey of Consumer Finances and the Survey of Income and Program Participation. To measure the distribution of tax benefits from saving incentives, the authors’ methodology was similar to that developed by the U.S. Department of the Treasury: the benefit

received by a tax filing unit in a given year was defined as the present value of the tax benefits associated with a tax filer’s own contributions to the IRA plus the tax filer’s and employer’s contributions to DC pensions. The authors assumed that the taxpayer’s marginal tax rate did not change and that amounts contributed in tax-free accounts were withdrawn in equal installments after age 65. The value of tax subsidies was measured in terms of the discounted present value of tax savings compared with an equivalent contribution to a taxable account.

The authors presented their results in terms of “cash income,” which is a broader measure than adjusted gross income, a better reflection of economic status, and a similar measure used by government agencies. They found that contributory pension plans in 2004 reduced the present value of income taxes by an average of \$528 per tax filing unit (1.2 percent of after-tax income) and were concentrated in high income units (70 percent of benefits were allocated to the top quintile, while the bottom quintile received almost no benefits). The vast majority of tax benefits (92 percent) arose from DC plans sponsored by employers and the distribution was similar to that associated with the combined DC and IRA pension plans. The likelihood of participating in an employer DC plan and average contributions grew steadily with income. The benefits from pension plans as a share of income were highest for households with income between \$75,000 and \$500,000 (the 80th to 99th percentile of the income distribution).

The study estimated that only 3 percent of tax units would contribute to a traditional IRA in 2004 because the vast majority of low- and middle-income households do not contribute, even though they are eligible. Because eligibility for IRAs is subject to income limits, the tax benefits of IRAs are less skewed by income than contributions to DC plans. However, almost 60 percent of benefits accrue to the top 20 percent of households.

The authors considered two policy options: (1) making the saver’s credit in 2004 refundable (i.e., available to tax filers even if they do not owe income tax) would provide 87 percent of benefits to the bottom 60 percent of taxpayers; and (2) accelerating the phased-in pension and IRA limit increases to 2004 would provide little benefit to the bottom half of the income distribution. The authors noted that the tax benefits of pension plans vary by age for several reasons (e.g., earnings peak in the 40s and 50s and older workers face higher tax rates). They found that the tax benefits from pension plans are worth the

most to workers between the ages of 35 and 54 (\$800–\$900), while participation rates are substantially higher in the 45 to 54 age group than the population as a whole (i.e., benefits are skewed somewhat by income).

ZANDVAKILI, as discussant, stated that the two papers made important contributions to the income distribution literature. He found that the Wolff and Zacharias paper provided a valuable framework to derive postfiscal income from money income, and allowed a more comprehensive assessment of the distributional consequences of government spending and taxation. He suggested that the framework should be used in a dynamic setting in order to assess both pre-fisc and post-fisc distribution in a given year and over time. Measures other than the Gini coefficient should test the robustness of the results and statistical inferences need to be conducted to evaluate the observed distributional changes. The discussant also suggested that the authors construct confidence intervals for various measures of inequality and conduct hypothesis tests to determine whether observed changes in the distribution of income (taxes, transfers, and spending) are statistically significant. He encouraged the authors to consider the bootstrap methods to compute interval estimates and perform hypothesis tests for measures of inequality.

In the Gale et al. paper, Zandvakili noted that the authors merged four data sets and created, not surprisingly, some strong results. However, some transfers were not captured and he wondered why only the wealthy took advantage of transfers, such as educational accounts. He suggested that consumption data would complement the analysis, wondered why there are restrictions to save (is there a lack of education, awareness, or economic means?), and queried if incentives to save should be directed toward the bottom 80 percent of the distribution, since saving is not being generated where it is needed the most.

#### **Session 4. Distributional Effects in Other Countries I**

Chair for this session was DIANE ELSON, Levy Institute and University of Essex. The participants were ANN HARDING, National Centre for Social and Economic Modelling (NATSEM), University of Canberra, Australia; and KWANG SOO CHEONG, Johns Hopkins University. The discussant was LARS OSBERG, Dalhousie University.

A fiscal incidence study attempts to estimate the impact of selected outlays (benefits) and taxes (burdens) upon the income distribution of households. In a coauthored study with

Rachel Lloyd and Neil Warren, NATSEM, HARDING outlined a fiscal incidence study for Australia in 2001–02 and explained how the authors found that there is extensive redistribution among households. The finding was consistent with the intended consequences of tax and service programs included in the study, and the Australian welfare system.

The authors noted that some government taxes and expenditures were excluded in the study and that their results were dependent upon the quality of the 1998–99 Household Expenditure Survey, which was restricted to people living in private dwellings and excluded sparsely settled areas, and upon their assumptions about government services. Their procedure updated private incomes, housing costs, and population weights to 2001–02 levels and estimated the distribution of major social security cash transfers and family payments, income tax and selected income tax rebates and concessions, the Goods and Services Tax (GST) and excise taxes, and non-cash benefits, such as health, housing, welfare, and education.

“Final income,” the authors’ income measure, is a broader measure than the income concept used in recent studies of income distribution and financial disadvantage in Australia, and the most comprehensive measure of relative economic well-being of households. The study allocated slightly more government benefits than taxes—57 percent versus 53 percent—and employed the modified OECD equivalence scale in order to capture the economies of scale when individuals share households (the authors assumed no economies of scale for noncash income). The analysis used quintiles of persons rather than of households in order to mitigate any differences in average household size across quintiles.

The study found that direct cash benefits, which are highly progressive and reflect the tightly targeted nature of direct transfers in Australia, have the greatest redistributive impact; direct and indirect income taxes have little impact on the bottom two quintiles; and indirect benefits accrue to all quintiles and are also highly progressive. Cash and noncash benefits are particularly important in boosting incomes in the bottom three quintiles, while taxes are more significant in reducing incomes in the top quintile.

The authors were particularly interested in the effect of indirect (noncash) benefits, which tend to be overlooked, and whose value has been increasing more rapidly than cash benefits. Indirect benefits are now almost twice as important as cash benefits to the average household. They found that the

controversial Private Health Insurance rebate is progressive, although more than half of rebates are received by the top two quintiles, because it is more evenly distributed than gross income. They also found that the Australian Pharmaceutical Benefits scheme is highly progressive, which is consistent with previous studies. Another finding was that government school subsidies are much more redistributive toward lower-income families than nongovernment school subsidies. A further finding was that housing benefits are the most progressive of non-cash benefits, but total spending was relatively low compared to other services. The bottom two quintiles receive about 60 percent of total direct and indirect benefits, while the top two receive only 22 percent.

A striking observation was that, while direct taxes paid by the top quintile are highly progressive and an important contributor to the redistributive impact of tax and benefit programs, indirect taxes are regressive, since they do not vary much with income. The overall impact of taxes, however, remained progressive, as the tax burden increased from 21.9 percent of gross income in the bottom quintile to 34.9 percent in the top. An important note was that state and local government taxes, which are regressive, were not included in the study.

The final incomes of the aged (65 and over) and sole parent households were the most affected by redistribution, while couples with children were, on average, marginal gainers. Couples without children and single persons were net payers into the Australian welfare state.

Using household and individual data from the Korean Household Panel Study from 1992 to 1998, CHEONG examined the redistribution effects of the Korean personal income tax system from the perspective of vertical and horizontal equity, and tax-induced income rerankings. He found that the tax effects on vertical equity were insignificant despite statutory progressivity; a result that agreed with previous studies. He also found, however, evidence against progressive taxation: the absolute tax payments and average effective tax rates did not increase monotonically by income decile. Despite improvement in overall inequality in some years (i.e., 1992 and 1996), income inequality within income deciles was negatively affected by income taxation and there were extensive income rerankings that affected most households, particularly the middle-income class.

The author noted differences between his research and previous studies: he used equivalent household income as the unit of analysis and included all six waves of the panel study, so

his results were comparable between sample years, and he addressed the matter of tax-induced income rerankings. He also noted that the sample years represented a period of moderate economic growth (the annual real GDP growth rate exceeded 5 percent) and that 1998 coincided with a period of economic crisis in Korea when the growth rate was negative and the unemployment rate abruptly increased to 7 percent in the wake of socioeconomic consequences.

Equivalent household income is household income adjusted for household structure using an equivalence scale, which is a money-metric measure of household well-being that allows cross-household comparisons. Tax-induced rerankings of equivalent household income violates tax equity principles. Cheong outlined the extent of tax-induced rerankings in order to measure tax inequity and to construct tax mobility (transition) matrices. To measure overall income inequality as well as within- and between-group inequality, he used a center of gravity (COG) of income distribution, which is the average of households' relative income rankings weighted by income shares (the COG identifies the household on which an ordered income distribution is centered and can be expressed as a simple linear transformation of the Gini coefficient).

Cheong outlined the tax reform and policy changes in Korea during the sample period and noted that, in spite of a progressive rate structure, the effects of policy changes were ambiguous in terms of tax equity. He computed pretax and post-tax equivalent household incomes by applying household equivalence scales to household income and income taxes. He noted that households in a pretax decile are not necessarily the same as those in a corresponding post-tax decile. He found that income taxation did not significantly affect the distribution of income, but the rate of income growth varied by decile, particularly as a result of the economic crisis in 1998 (the income gap between rich and poor widened sharply and the average effective tax rate changed the most between the poorest and richest decile). He also found that the growth rates of pre- and post-tax average equivalent household incomes by decile were almost identical because the effective income tax rates were very low relative to the statutory tax rates.

Cheong substantiated the fact that there was no vertical equity or progressivity of the Korean income tax system (i.e., the average effective tax rate was not truly progressive during the sample period) despite the system's statutory progressivity (i.e., increasing marginal tax rates by income bracket).



The seemingly high progressivity in 1998 should be attributed to the combination of the existing tax structure and the distinctive income dynamics during the economic crisis rather than the implementation of new tax changes, he said.

The tax mobility matrix is a fractile transition matrix where income rankings are transformed as a result of taxation. Cheong constructed two matrices for each year based on equivalent household income and household income. Reranking of equivalent household income indicates horizontal inequity. He found that rank-shifts mainly occurred between neighboring deciles and that the fifth and sixth deciles (the middle-income class) experienced the most rerankings.

As a complementary instrument to the tax mobility matrix, the author measured the overall income rerankings within each income decile. He found that most households (94–97 percent) experienced tax-induced rerankings in each sample year, so the Korean income tax system was not compatible with classical horizontal equity. He also found that the frequency and amplitude of tax-induced income rerankings in 1998 significantly deviated from previous trends. The exact causes of these deviations will require further investigation, said Cheong.

Overall pretax (equivalent income) inequality significantly decreased between 1992 and 1997 in Korea. This finding was contrary to previous studies, but the data was different in terms of geographical and occupational coverage, income sources, and the definition of sample years. The finding that income inequality sharply deteriorated during the economic crisis in 1998 concurred with previous studies. Cheong noted that, since there was no trade-off between vertical and horizontal equity, the flexibility of government policy toward tax equity was not restricted. Another main finding was that the change in overall inequality was driven by between-group rather than within-group inequality.

OSBERG, as discussant, found that the Harding et al. paper was more ambitious than the Cheong paper because it dealt with net fiscal incidence, which includes direct and indirect taxes by individuals and households, as well as benefits received through cash transfers and services, such as education and health. He noted that, in the public finance literature, the ability to pay is an important concept in assessing the degree of vertical and horizontal equity in tax and benefit systems. Much of the literature also studies the possible distinction among the taxation unit, the income recipient unit, and the consumption pooling unit in the assessment of welfare, so he proposed that

welfare comparisons should be made, perhaps, on the basis of household or family income.

Osberg presented a number of numerical examples that showed that there could be significant reranking, depending upon the way that people or income-earning patterns are combined into households, and what parameters are assigned to household economies of scale. As a result, there is much debate in the literature about households' ability to pay. Something that is progressive at the individual level may be quite different at the household level, he observed. Both papers assessed the ability to pay in terms of equivalent post-tax income, but Osberg questioned the implication of the chosen equivalent scale in the authors' comparisons and conclusions, and cautioned against mixing real and equivalent values in the calculations.

Osberg also noted the importance of education and healthcare, and suggested that, since private schools and hospitals are getting a tax expenditure, the authors should also count these expenditures along with those in the public sector. Referring to Cheong's paper on Korea, Osberg questioned the use of the COG, which is a linear form of the Gini coefficient; the consistency of exceptionally low income tax rates with the macro data; and the importance of the degree and location of reranking within the tax mobility matrices.

**Keynote Address:** DAVID CAY JOHNSTON, *New York Times*

A dominant au courant idea in America is that taxes must be reduced on the highest-income Americans, as this approach is the only way to create economic growth and jobs. According to Johnston, this idea is profoundly radical and contradicts 2,500 years of history. He noted that, when the Athenians developed the idea of taxation based on the ability to pay (a moral principle), they invented democracy. The people who are the greatest economic beneficiaries of a society have the greatest obligation to maintain that society and make it endure. However, there is a group of people in Washington who are ahistorical and they are running policy.

Johnston outlined his background as an investigative reporter, which led to an analysis of the Internal Revenue Service (IRS) and tax policy, and his latest book, *Perfectly Legal*. The book won an award as the investigative book of the year and is the best-selling popular book on tax policy of all time.

The speaker defined the super-rich as the top 1/100th of 1 percent of Americans, or approximately 28,000 people in 2000. The poor were defined as the bottom third of Americans, or 96

million people. According to an analysis of IRS data and his computations, the total income of the poor was 10 times that of the super-rich in 1970, but the total incomes were equal in 2000. Moreover, the latter comparison understates the real nature of income by a significant degree. As an example, Johnston used the just revealed Form 1040 tax return for Mrs. Heinz Kerry. Her income was a little over two million dollars last year (in addition to almost three million dollars of tax-exempt interest from municipal bonds) out of a billion-dollar trust fund. The official data on wealth and incomes, and the rules on realizing incomes in America, substantially understate the size and scope of wealth at the top, he observed.

Johnston also outlined examples of how American society sets rules of government that focus on the interests of a very narrow class of people and makes it increasingly difficult for other people to save. This narrow class does not want to share the burdens of living in America, and members of Congress spend an inordinate amount of time dealing with the “political donor” class because of the campaign system of finance, where roughly one in 10,000 Americans account for two-thirds of campaign contributions.

A major problem related to the enormous concentration of media is the rules about television passed by Congress. Johnston recounted that a number of members of Congress told him that their worst vote in Congress was to repeal the Fairness Doctrine to broadcasters. Intentionally or not, members of Congress are completely distorting the economic system in America to benefit those at the top.

Johnston maintained that people making \$60,000 to \$10 million a year pay a larger share of income in total federal taxes per year than those making in excess of \$10 million per year. This situation is not consistent with the classic, historical, most conservative idea in the development of Western civilization—taxes should be based on the ability to pay. He outlined examples of how the system has taken away the ability to save from the middle class. A family making \$50,000 a year today does not save, but the same family saved 8 percent of income in 1970. Where did the money go?

Johnston focused on two of many programs that have been particularly important in turning the American tax system into a subsidy program for the super-rich financed by the middle and upper-middle classes (and highly concentrated in the \$50,000 to \$400,000 group). The first program was a 1983 Democratic program of tax collection based on an idea by Alan

Greenspan. Instead of a pay-as-you-go Social Security system, baby boomers were to pay for Social Security in advance, which would allow the federal government to pay its approximately \$1 trillion debt. This program was a device to defer taxes for 30 years, but now the government debt is \$7 trillion and it will increase at the current rate to \$12 trillion by 2014, and there is no capacity to borrow. Johnston contended that the \$2 trillion in excess Social Security taxes collected to date from people making less than \$90,000 a year has been used to finance tax cuts for the super-rich (and the unified budget does not care where the money comes from).

The second program is the Alternative Minimum Tax (AMT), which Johnston referred to as the “stealth tax.” The AMT will apply to 40 million out of 130 million American taxpayers by 2008, he said. Since it is such a big money maker, it would be cheaper to throw out the regular income tax and replace it with the AMT than to repeal it. He noted that George W. Bush’s campaign wants to kill the death tax (and save the family farm), and that his proposed \$1.8 trillion tax cut has been limited to \$1.3 trillion by the Senate leaders. Since Congress does not coordinate the AMT and tax cuts, the AMT will increase by \$550 billion over 10 years. If you are married with three children and make \$75–\$100,000 per year, there is a 97 percent chance that you will pay the AMT by 2008 and lose 42 percent of the tax cuts. The AMT is explicitly used by Bush to finance and justify reducing the top income tax rate from 39.6 percent to 35 percent, asserted Johnston. He outlined examples in his book of people attempting to rectify the tax system, but were subdued. We have a tax system that has nothing to do with the political rhetoric that we hear, he said, and outlined such examples as the exemption from the estate tax for victims of 9/11, and the existence of so many corporate jets.

Johnston stated that his book does not propose solutions or a new tax system, but tells people what they need to think about. For example, a national retail sales tax is regressive, will create a black market, and will require an enormous enforcement mechanism. He pointed out that under the Steve Forbes flat tax proposal, Forbes would never pay any taxes because of the way the plan is set up. He also pointed out that the protest of the Boston Tea Party was against an exemption from tax for the King’s friends in the British East India Company, which created an unlevel playing field. He observed that Americans would rather be entertained than be citizens, and charged that

not participating in government is as bad as the two billionaires in New York City who have never filed a tax return and are free-riding parasites.

Under questioning, Johnston said that it is necessary to understand the principles of what is happening in order to understand the mechanics, and that we don't teach critical thinking. Conservative writers who say that President Reagan proved that budget deficits do not matter may be correct politically, but deficits do matter economically. David Ricardo gave us four basic tax principles: horizontal equity, vertical progressivity, ease of administration, and transparency. In response to the question, "Who in the conservative branch of society agrees with you?", Johnston replied that principled libertarians and conservatives loved his book.

Johnston stated that the tax system should grease the wheels of commerce, encourage investment in capital (especially education), promote stability, and reward good behavior. He was optimistic that there was a reasonable possibility of developing a tax system that serves our interests and solves our problems, but we have to decide that we want to solve them. People need the lens to see, the ability to hear the argument, and the ability to understand what is really going on.

The speaker noted that George W. Bush made his fortune as a result of a sales tax increase and a public subsidy for his baseball team. He also noted that Congress has the power to lay and collect taxes, so the solution depends on who controls Congress. We are the only nation in the world whose de facto policy is to lower wages, and the rules running our society are not set by labor, but by finance people, multinational companies (who are against the interests of domestic companies, which tend to be family-owned businesses), and capital. We have an incredibly unlevel playing field, he exclaimed. One of the shortcomings of democracy is that people often do not respond until there is a crisis. Although he was fundamentally optimistic that we can solve our problems, Johnston cautioned that if we don't solve them, it could lead to a very bloody revolution.

### **Session 5. Distributional Effects in Other Countries II**

Chair for this session was Research Associate RANIA ANTONOPOULOS, Levy Institute and New York University. The participants were LEON PODKAMINER, The Vienna Institute for International Economic Studies (WIIW); and MARKUS JÄNTTI, Abo Akademi University, Finland. The discussant was STEPHEN DAVIES, Colorado State University.

PODKAMINER examined the distributional effects of spending and tax policies in Poland after the socialist economic system collapsed in 1989. In the first stage following the emergence of free enterprise (1990–91), the unemployment rate rose from 0 percent to 6.5 percent, and incomes and living standards of large segments of the population fell precipitously. The official policy response was inaction and the prevailing official view was that cuts in income were necessary to prevent hyperinflation. The dismal effects of the protracted "shock therapy" were a fast rise in inequality, a deep recession, and rising unemployment that forced some policy changes in taxation and social spending.

During the second stage (1992–97), a "tax-and-spend" policy was much more redistributive and had favorable effects on inequality, poverty, the unemployment rate, inflation, the current account, and the economy (the average GDP growth rate was 5.8 percent). There was a uniform corporate income tax (CIT) rate of 40 percent through 1996, the introduction of a personal income tax (PIT) system with three inflation-indexed income brackets and initial PIT rates of 20, 30, and 40 percent, and a new system of indirect taxes. The shares of both the revenues and expenditures of the general government in the GDP rose sharply and stayed at a relatively high level (approximately 47 percent of GDP).

Podkaminer observed that the very successful policies of 1992–97 were significantly changed when the "conservatives," who had administered the "shock therapy" of 1990–91, returned to power in 1998. The third stage (1998 to the present) has been characterized by a quick reduction in levels of taxation (e.g., the shares of PIT and CIT were cut in half), which has forced cuts in spending, including social security transfers ("reverse redistribution"), and rapid increases in income inequality and poverty. There has been a slowdown of gross fixed investment, stagnating GDP growth, higher unemployment, and huge unproductive deficits in public finances, as a result of misguided reforms of the public health and pension systems.

Since 95 percent of taxpayers now fall into the lowest income bracket, the PIT is actually a flat tax system. An analysis by the Finance Ministry on PIT statistics collected in 1997 and 2003 suggests that the effective tax rate fell the most for the highest-income taxpayers and that there is evidence of growing income disparities. The distribution of all taxes (including social security contributions) is highly uneven. Farm households receive roughly the same amount of social transfers as they pay

in social contribution taxes, while net taxes are a relatively small fraction of the gross primary income of employers and self-employed households. Retirees and the unemployed have been the major losers in terms of old-age pensions and unemployment benefits (and the proportion of unemployed receiving benefits has been falling), but they continue to be taxed with PIT. As a result, approximately 57 percent of individuals lived below the poverty line in 2001 and those living below the absolute poverty line (the “subsistence level”) rose to 9.5 percent.

The author noted that the introduction of a general flat tax system for all personal income was unsuccessful, and that the overhaul of the public education, health, and social security systems was only moderately successful in relation to public spending on education, which rose slightly. The quality and quantity of the public health system fell precipitously as reform created a corrupt network of health service administration and a two-tier health system. Pension reform (e.g., cuts in contributions of the most affluent employees and the self-employed, the creation of individual accounts, and partial privatization of the pension system) has turned out to be a bad deal for the government and individuals who are affected by cuts in government spending or are “members” of private funds.

Podkaminer concluded that there has been a strong association between government policy and real economic outcomes in Poland. A policy of “reverse redistribution” leads to a poor economic performance, while a policy stipulating high levels of distribution leads to an outstanding performance. He noted that other factors may be relevant, such as monetary and exchange rate policies conducted in the 1992–95 period, so his general proposition—that high levels of redistribution are good for growth—may require some caveats.

JÄNTTI examined the distribution of direct and indirect tax burdens in Finland during the period from 1985 to 2001. His results suggested that both the progressivity of direct taxes and the regressivity of indirect taxes have increased over time, but the total tax system remains slightly progressive. Relative income inequality increased in the latter part of the 1990s, as the richest decile increased at a much faster rate than the rest of the distribution. A main reason was the substantial increase in property income, as well as changes in taxes and transfers.

The author noted that income inequality in Finland increased substantially during the 1990s (although the level of inequality was moderate by international standards) and was due in part to declines in the redistributive effect of taxes and

public transfers. Although direct tax rates were lowered annually after 1995, the effect was offset by increased inequality of the tax base. Meanwhile, indirect taxes, which are likely to be regressive, remained intact, so the distribution of the tax burden shifted toward the poor.

Jäntti used disaggregated household consumption expenditures and associated tax data from the Household Expenditure Surveys (HES) by Statistics Finland and the Finnish input-output tables to calculate the indirect taxes paid by individuals and households. He also compared the HES income-inequality trends with those identified using the Income Distribution Survey. Jäntti found that indirect taxes amounted to approximately one-third to one-half of direct taxes. He noted that direct taxes included municipal income and other taxes, apart from those paid to the central government, and that the central government tax scale was the only progressive one. Jäntti measured progression (regression) by examining both liability and residual progression. Liability progression is the ratio of the marginal tax rate to the tax rate. Residual progression is the ratio of 1 minus the tax rate to 1 minus the marginal tax rate. The level of progressivity was determined by focusing on “departures from proportionality,” which compares the inequality of the tax base with that of taxes. The “redistributive effect” was determined by comparing the inequality of the tax base with that of the tax base minus taxes.

Jäntti examined the measures of progression and progressivity by estimating average and marginal tax rates conditional on gross income. The average tax rates suggested that direct and overall taxes have increased for low incomes and decreased substantially for higher incomes after 1985, while indirect taxes have remained about the same. The results of estimating marginal tax rates were relatively more erratic and suggested that they have increased for low incomes and decreased substantially for higher incomes. The evidence suggests that direct tax schedules and the overall tax system have become less progressive over time.

Jäntti outlined the tax rates by decile of disposable income and found that the direct tax rate paid by the lowest three-tenths of the population increased between 1985 and 1995, before stabilizing at the higher rate, while the rate dropped significantly for higher income groups after 1995. The indirect tax rate paid by the lowest two deciles stayed the same, but declined substantially for the top decile. The overall tax rates tended to decline at the top of the distribution and to remain

flat or increase at the bottom. These findings confirmed that tax rates became more regressive over time. The tax rates for disposable income in 1985 and 2001 showed that, for all household types, direct taxes increased and indirect taxes decreased with income. The author cautioned against focusing only on direct taxes, as this approach biases the nature of tax changes over time.

In terms of changes in the progressivity and regressivity of different types of taxes, Jäntti compared the Lorenz curve of pretax income and the concentration curve of taxes (i.e., the departure from proportionality), and the Lorenz curves for pre- and post-tax income (i.e., the redistributive effect). Progressivity declined for direct and overall taxes, while regressivity increased for indirect taxes. He also found that direct and indirect taxes were progressively and regressively redistributive, respectively, while overall taxes were progressively redistributive, except for the lowest 5 percent of the distribution.

The trends in inequality from 1985 to 2001 using disposable and extended income (Lorenz curves and Gini coefficients) showed increasing inequality, but at different rates. Jäntti concluded that ignoring indirect taxes results in overestimates of tax progressivity and redistribution, of living standard improvements, and of the level of well-being for low-income households. He recommended further study of changes in the profiles of income transfers and the monetary values of public service before evaluating the distribution of welfare-related incomes over the past two decades.

DAVIES, as discussant, stated that Podkaminer's paper was a polemic on growth with equity issues, but the growth with equity thesis is unproven and represents initial conditions (i.e., the effect of private farmers). He noted that a number of exogenous events in the GDP graph cannot be attributed to changes in policies, since changes take time, and that the level of government activity in the economy was still very high in spite of some success in returning to high GDP growth rates and lower unemployment. Davies wondered about the other sources of government revenues, since high PIT tax rates did not generate very much revenue (95 percent of the people were poor).

Davies found that Jäntti's paper was a technical and careful analysis, and he particularly liked the input-output, value-added approach. He recommended that the author include the regressions in the paper so that one could determine if particular control variables (e.g., marginal tax rates) cause variations in the tax base.

Davies suggested that both papers include the effect of tax levels on the performance indicators in the general economy. He also suggested that the papers could benefit each other if the growth with equity approach for Poland was woven into the Finland paper and the analysis for Poland was extended in line with that for Finland. He further suggested that the papers include a number of items covered by other conference papers, such as the distribution of social expenditures, an expanded definition of transfers, standard errors and take-up rates, alternatives to the Gini coefficients, and externalities. In order to get the total picture of how government affects well-being, one should look at other policies besides expenditures and taxes (e.g., monetary policy, housing, local government zoning, and agriculture) and how these policies are relevant in the context of the flat tax debate.

### **Session 6. Distributional Effects at the Subnational Level**

Chair for the session was Resident Research Associate W. RAY TOWLE, Levy Institute. The participants were HARVEY CUTLER and STEPHEN DAVIES, Colorado State University; and HOWARD CHERNICK and PAUL STURM, Hunter College, CUNY. The discussant was ELISSA BRAUNSTEIN, Political Economy Research Institute (PERI), University of Massachusetts.

In a coauthored paper with Davies, CUTLER explored the relationship between economic growth and wage inequality using a data-intensive, computable general equilibrium (CGE) model for the city of Fort Collins, Colorado. The authors found that the relationship was influenced by migration and commuting patterns, initial wage distributions, and by levels of intermediate demand within the city.

The CGE model consists of 17 productive sectors employing three labor and six household groups that are distinguished by income. The authors examined the medium-term impact (i.e., up to four years) on income inequality, tax revenue, and land use of expanding five sectors: computer manufacturing, manufacturing, retailing, high services (e.g., legal, medical), and university.

The authors collected data on employment and wages, nonlabor expenditures for city services, and a range of taxes collected by the local government. Their medium-term simulations showed that expanding computer manufacturing causes the largest in-migration and leads to a much greater change in gross city product, several components of tax revenue, and employment. The impact of expanding the

university was the smallest of all simulations, even though the sector paid the second-highest average wage. Expanding the high-services sector also resulted in a relatively small impact. The authors noted that an important policy implication associated with attracting new firms to an area is a possible contraction in employment in other sectors of the local economy.

The authors found that computer manufacturing led to the most balanced growth in the local economy. If policymakers seek to maximize tax revenue per household in order to increase the quality of city services, then there should be a priority in attracting firms in the manufacturing and retailing sectors. Another important economic impact, however, is the effect on wages and prices. The manufacturing and retailing simulations suggested that there would be a reduction in wage inequality, while the computer manufacturing and university simulations suggested an increase in wage inequality. The main change in the distribution of wages was due to the size of the increase in the demand for labor relative to the new supply of labor through in-migration rather than through changing commuting patterns or converting nonworking to working households. The authors obtained a more complete picture of wage inequality by considering land and capital income, as well as real household income.

The results suggest that, if the city of Fort Collins seeks to attract new manufacturing employers, then manufacturing firms offering moderate wages (or retail expansion) will reduce wage inequality and improve affordable housing for lower-income households. In addition, since the retail sector uses the least amount of land, there would be less congestion. The authors' results of rising aggregate wages and wage/income inequality (i.e., a positive relationship) for the computer manufacturing sector and rising aggregate wages and declining wage/income inequality for the retailing and manufacturing sectors (i.e., a negative relationship) show that studies of intraregional distributions can reveal very different results. This finding is consistent with previous studies about the relationship between economic growth and wage/income inequality that give diverse results.

The authors suggested that the results of the computer manufacturing simulation (a positive relationship between economic growth and wage/income inequality) could be widespread and applied to any rapidly growing area with a relatively elastic supply of land that seeks to attract a high-wage

industry. Some examples were the suburbs surrounding Seattle, Portland, Salt Lake City, Albuquerque, and Santa Fe.

The authors also simulated the effects of restricted labor and household flows, and examined the sensitivity of taxes per new household to changes in migration patterns. They found that the restrictions did not have large impacts on the manufacturing or computer manufacturing sectors. They also found that retail expansion in the medium term is the most efficient way to raise tax revenues and reduce wage inequality. Cutler and Davies maintained that the results of their study provide useful insights to local policymakers who consider offering incentives to a wide range of new industries.

In a coauthored paper with Sturm, CHERNICK studied the causes and consequences of redistribution at the state and local level to determine if subnational redistribution retarded economic growth. They used a variety of measures of growth and well-being, and data on state and local tax incidence from the Citizens for Tax Justice, which they merged with Phares data to create a four-year panel spanning the period from 1977 to 1995. In their model, variations of state compared to regional economic growth depend on the tax incidence of the state's immediate neighbors, as well as differences in fiscal policy. The authors found that tax progressivity does not have a statistically significant effect on the measures of economic growth. An exception was that higher welfare benefits showed a negative relationship with five-year aggregate income and population growth. The results also showed that a state can benefit from a less progressive tax structure relative to its neighbors.

Theory suggests that, in an open economy, a progressive fiscal stance will result in an out-migration of productive factors and in-migration of the poor. If fiscal stances differ across jurisdictions with similar levels of human and physical capital, there is an incentive for households and firms to move to the most favorable jurisdiction. The theory implies that states are constrained in their distributional choices by tax and budget choices of other states.

The authors found that the most progressive states had progressivity ratios almost three times as high as the most regressive states. They classified state and local expenditures into three groups: pure public goods (e.g., police, fire, and transportation services); primarily redistributive programs (e.g., publicly-provided health insurance); and education. For the social welfare component of spending, Chernick and Sturm used the maximum monthly welfare benefit, which

clearly signals redistributive preferences and is highly correlated with alternative measures of welfare generosity. Mean welfare benefits declined over time, but the variation across states remained the same.

The authors also found that relatively more spending on state education does not necessarily imply more equality in the distribution of resources, but state aid to education, which is rising and amounts to 55 percent of total spending, tends to offset local inequalities. Chernick and Sturm measured the distributional impact of higher education using spending levels per capita, tuition revenues per capita, and the share of tuition in spending. Both tuition revenues and expenditures rose over time, which implies less redistribution.

In the longer term (i.e., 10 years), the growth model showed that fiscal policy had no effect on economic growth or economic convergence among states. The significance of the neighbor effect and higher welfare benefits disappeared. The analysis suggested that the more unequal states grew more slowly over time.

The authors disaggregated tax progressivity into separate tax burdens for the top, middle, and bottom quintiles of the income distribution. They regressed per capita growth rates over five and ten years by quintile on the tax burdens of the state and its neighbors. Their regressions did not support the argument that a state's relatively high tax rates for the rich send a negative signal that hurts economic growth. A notable finding was that none of a state's own tax burdens had any effect on average income growth. In the longer run, a state benefits if its tax rate for the middle class is lower than adjacent states, since regional labor supplies are responsive to differential tax rates for a given earnings capacity.

When examining the effects of distributional policy on alternative measures of state economic performance, Chernick and Sturm found that population and aggregate income growth over five years, and population and per capita income growth, are strongly and weakly correlated, respectively. Rapid population growth does not necessarily mean an increase in average income levels. The poverty rate is not correlated with any growth measure, but it is positively correlated with the unemployment rate, which is negatively correlated with aggregate income and population growth. Regressions of unemployment and poverty rates on the distributional variables indicated that a state's tax progressivity had no effect on unemployment or poverty rates; a finding consistent with economic growth

models. The overall result was that state redistributive choices have, at best, a small and inconsistent effect on economic performance, so states have some latitude in their choices.

Studying the interrelationships between various aspects of fiscal progressivity and the role of exogenous state characteristics, the authors found a significantly negative relationship for progressivity in neighboring states; a finding that challenges a model of tax convergence. Deductibility of state and local income, and property, taxes is a powerful force for subnational tax progressivity, while tax and expenditure progressivity are largely independent of one another. Another finding is that greater state aid for education is typically financed by higher taxes on the upper income quintile relative to the middle, so the median income group has a fiscal incentive to shift educational financing to the state level. A further finding is that substantial political control is necessary to translate state preferences into measurable tax effects.

A surprising result is that the income elasticity of demand for higher educational expenditures is negative. The degree of income inequality in a state is also negatively associated with higher educational spending. In terms of redistribution the maximum welfare benefit is the most exclusively pro-poor of all expenditure measures. A lack of negative progressivity suggests that tax cuts for high-income taxpayers cannot be justified in terms of a state's average income growth.

In light of a number of studies showing negative effects of taxation on growth and job creation at the local and metropolitan levels, the authors surmise that the state may not be the right level for analyzing economic growth, as differences may be stronger across metropolitan areas than states. They suggest that future research should pursue their supposition, as well as the spillover benefits of neighboring states that are progressive.

There is little evidence of a positive income elasticity of demand for subnational redistribution, with the exception of welfare benefits. Tax structure is unrelated to income levels and higher education has a negative relationship. Greater inequality in the income distribution does not systematically lead to more progressive fiscal systems. These findings suggest that income growth at the subnational level will not lead, naturally, to more redistribution to the poor, and that further decentralization of distributional responsibility carries significant risks. Redistribution cannot be left to the states and the federal government's role remains primary.

BRAUNSTEIN, as discussant, noted that both papers use the relationship between state policy and distributional issues to answer questions about growth and development. She also noted that growth is becoming a more significant player in the political structure in terms of determining state and local taxes, and that the two papers approach these relationships in different ways.

Braunstein was impressed by the CGE model used in the Cutler and Davies paper, as it captured the general equilibrium effects of economic activity and the relationship between public policy, economic growth, and distribution in a quantitatively rigorous way. She expressed a need to address the quality of jobs and assess other measures of inequality in addition to income inequality (e.g., access to healthcare). She suggested that growth impact studies should compare job quality and inequality from gender and intrahousehold perspectives, and include market and nonmarket income, paid and unpaid time, and leisure. Otherwise, a household's "full income" is underestimated and may indicate different inequality dynamics and impacts on total production.

Braunstein encouraged the authors to think of ways in which to differentiate households (e.g., with and without children) and add the nonmarket sector to the CGE model. A key question among public offices of economic development is the use of public subsidies and tax breaks, so it would be useful to incorporate such factors and understand more about how the public sector is actually modeled. How can the model answer questions about the fiscal surplus and account for the effects of immigration? Braunstein also questioned if the model accounted for the increase in students and spending as a result of growth in the university.

Braunstein observed that, from a public policy standpoint, it was important to study how progressivity affects growth and how growth changes over time. She thought that the Chernick and Sturm paper should consider whether the tax haven effect is consistent with the lack of correlation between own progressivity and growth. She suggested that the authors extend their paper and consider the structural changes in the relationship between progressive taxation and the mobility of capital. She also observed that the growth equation did not include capital and labor, and expressed a need to think about the precise role of a state's redistributive policies in economic growth, particularly in terms of human capital. She further observed the absence of a human capital variable, which is correlated with

state spending on education and population growth that, in turn, is correlated with welfare benefits, income inequality, urbanization, and economic growth. This absence from the growth equation could bias the estimates to the extent that growth in the labor force leads to higher economic growth.

Another issue was not controlling for prior economic growth because of endogeneity (e.g., prior growth rates may affect state generosity in terms of social spending). Braunstein suggested that the authors think about the relationship between prior growth and redistributive policies, and between redistributive policies and future growth. She also suggested that the model should be considered in terms of a system of simultaneous equations if one is looking at it over time.

### **Session 7. Distributional Effects of Public Education and Social Security**

Chair for the session was CAREN GROWN, Poverty Reduction and Economic Growth Team, International Center for Research on Women. The participants were WILLIAM R. JOHNSON, University of Virginia; BARBARA A. BUTRICA, Urban Institute; and HOWARD M. IAMS, Social Security Administration. The discussant was TERESA GHILARDUCCI, University of Notre Dame.

The Hansen and Weisbrod thesis in the 1960s claimed that public support for higher education could be regressive. Their empirical observations for California showed that the distribution of higher-education benefits appeared to be more concentrated among upper-income households than the associated tax burden. Contrary to the thesis, JOHNSON used data from the National Longitudinal Survey of Youth (NLSY) and found that higher education subsidies are not regressive.

Johnson developed a basic dynastic family model of redistribution (without behavioral responses or borrowing constraints), where dynastic income is the sum of lifetime income of parents and student, since the appropriate measure of distribution effects is the extent that policy affects the long-run welfare of families rather than the short-run income of particular generations. The compensating variation measure of tax and subsidy policies across families is the present discounted value of the subsidy received by a family less the extra taxes paid by the parent and student generations (leisure, market wages, and prices are unchanged because households do not change their behavior). Johnson assumed that subsidies received by a subset of families are financed by taxes imposed on the same subset



(to focus on intracohort redistribution), so the sum of compensating variations within a cohort is zero. Policies are deemed to be progressive if the subset of higher-income families pays more in taxes than it receives in benefits.

Johnson examined the basic model according to lifetime income, education, race, and other characteristics (e.g., student academic skills). His approach used a more complete sample and better data on subsidies and lifetime incomes than similar studies, and his findings indicated mild progressivity. Moreover, the inclusion of liquidity constraints, distortions introduced by taxes and subsidies, and externalities would cause his results to be more progressive, he said.

Using a measure derived from the HEGIS/IPEDS annual data on the finances of higher educational institutions, Johnson observed that children of higher-income families receive greater public and private subsidies than children of lower-income families—a finding in line with previous studies. He also observed that the overall pattern of progressivity is hardly affected when the additional indirect tax subsidy to private institutions (approximately 40 percent) is added to the direct tax subsidy for public institutions.

Johnson adjusted the NLSY sample to correct for misrepresentations of the data base and potential biases (e.g., family size and lifetime income). His modifications did not significantly affect the overall pattern of subsidies. An adjustment for transitory effects, however, resulted in compression of the income distribution, which reduced the taxes paid by upper deciles. The reduction, however, was insufficient to reverse the progressive nature of higher-education subsidies. An analysis of dynastic income showed that high-income dynasties enjoyed greater public subsidies than low-income dynasties, while private subsidies were substantial for both the top- and lower-income deciles.

A review of the distributional pattern of subsidies according to lifetime income and educational level showed that subsidies are highly skewed toward participants with academic skills and children of well-educated parents (and exceed what parents pay in taxes). Progressivity was retained, however, because the proportional tax system results in higher relative taxes (i.e., the net impact of policy is the difference between benefits and costs).

Johnson noted that Hansen and Weisbrod studied one state in the 1960s, while he studied the entire country in the 1980s. Using a parallel exercise with the Hansen/Weisbrod approach, the author found that his data generated a

progressive rather than a regressive pattern. The key to the apparent disparity is that 70 percent of high-income households pay substantial taxes, but they have no children that receive subsidies. Hansen and Weisbrod got the numbers right, exclaimed Johnson, but they drew an incorrect conclusion (regressivity) from the evidence.

An investigation of the impact of less restrictive and more realistic assumptions about the excess burden of taxes and subsidies, borrowing constraints, changes in prices, and externalities (fiscal and real) found that the assumptions enhanced the pattern of progressivity related to subsidies (and reduced relative income inequality).

In a coauthored study with Iams and Karen E. Smith, Urban Institute, *BUTRICA* presented the role of government income programs for current, early baby boomer, and late baby boomer retirees. The authors noted that Social Security benefits have played a major role of income support for the elderly in the United States, but the benefits may be affected by social, demographic, and labor market changes that have transformed retirement expectations for the baby boomer cohort. They further noted that the trend away from defined benefit to defined contribution pension plans might affect the relative importance of government programs.

Social Security benefits are no longer linked exclusively to an individual's earnings history; they are also affected by the earnings history of spouses and the individual's marriage history. Changes in marriage trends affect benefit patterns and are accompanied by rising life expectancy and lifetime earnings (e.g., higher labor force participation rates among women). The authors observed that lifetime benefits paid by Social Security have declined relative to lifetime contributions among more recent birth cohorts entering retirement. Social Security is becoming less generous and more progressive, and is projected to become less important as a source of income for retirees on a lifetime basis. As a result, baby boomers are less likely than current retirees to have sufficient postretirement income to maintain preretirement living standards.

Using projections of major sources of income from the most recent Social Security Administration's Model of Income in the Near Term (MINT3) model, which includes adjustments for expected demographic and socioeconomic changes, the authors found that retiree characteristics at age 67 will change over the next 20 years. Baby boomer retirees are less likely to be married or widowed, and more likely to be divorced

or single, members of a minority (especially Hispanic), and college graduates. Since baby boomer retirees will spend more years in the labor force and have higher lifetime earnings, they can expect higher incomes and lower poverty rates than current retirees. However, their replacement rate—postretirement income as a share of preretirement income—will be lower (80 percent compared to 93 percent for current retirees). The decline in the replacement rate is driven, in part, by a decline in the Social Security replacement rate. MINT projects that most retirees will live in families receiving income from both retirement and nonretirement (e.g., earnings, assets, and supplementary security income) sources, but the share of retirement sources—the most important income source—will decline. An increasing proportion of more recent cohorts will replace less than 75 percent, and less than 50 percent, of preretirement income, and a much larger proportion of nonmarried women will experience economic stress.

GHILARDUCCI, as discussant, noted that the two papers in the session studied the opposite ends of the life cycle. She wondered if some of the good news about progressivity was overstated, since the papers ignored, for example, the insurance aspect of social programs.

The discussant liked the esthetics of the Johnson paper and noted that the authors used the same methodology as previous studies, but some of the findings were reversed (e.g., all higher-income people do not send their children to college, and we now have a culture and programs that induce children from lower-income families to go to college). She suspected that the optimistic results (e.g., lower-income families and blacks receive greater net subsidies) would be tempered if loan and grant programs were included in the analysis, since the average total aid package is regressive. Ghilarducci suggested that the authors emphasize the policy implications of their study, such as the idea that colleges should be expanded for people in the lower-income deciles, and that the progressivity in net subsidies only works if colleges are subsidized by proportional or progressive taxes.

In terms of the Butrica et al. paper, Ghilarducci stated that it did not completely analyze the net lifetime benefits of Social Security. She noted that the good news (e.g., a decrease in projected poverty rates among the elderly and a more progressive Social Security system) is based on the standard target replacement rate of 70–80 percent, which is the wrong benchmark. She believed that the replacement rates of baby boomers

should be higher (e.g., 100–120 percent) in light of additional medical expenses, lifestyle preservation, and increasing longevity. In addition, there is the changing composition of private sector contributions, which results in fewer benefits and higher inequality, as service and white-collar pensions diverge and earnings replace defined benefit contributions. Therefore, more baby boomers will be unable to replace their income in retirement. She further noted that both wages and pension contributions are becoming more unequal.

Ghilarducci observed that people have a legacy target, so inheritance wealth transfers, which are distributed unequally, should be included in the study. She recommended that the authors include the distribution of time and household production in their measurement of well-being in old age, an approach that is in line with the methodology used in the Levy Institute Measure of Economic Well-Being (LIMEW).

## Program: Financial Markets and Monetary Policy

---

### **Assessing the ECB's Performance since the Global Slowdown: A Structural Policy Bias Coming Home to Roost?**

JÖRG BIBOW

Working Paper No. 409, July 2004

[www.levy.org/pubs/wp/409.pdf](http://www.levy.org/pubs/wp/409.pdf)

Since the global slowdown in 2001, economic growth in Europe has lagged behind that of the United States. According to Research Associate Jörg Bibow, Europe's malaise stems from the European Central Bank (ECB), whose policies adversely affect growth and price stability. Bibow undertakes a comprehensive assessment of the ECB's performance since 1998 and finds that the bank's errors are systematically biased and likely to continue, with dire consequences for growth, employment, and public finances in euroland and abroad.

Bibow finds contradictory perceptions of the ECB between the financial markets (including the media) and academic economists. Approval of the ECB's interest rate policies is the result of Taylor rule assessment exercises, while criticism of the ECB's communications is based on attempts

to rationalize the bank's conduct within the theory of inflation targeting. Bibow finds fault with both approaches and rejects the idea that the ECB's words and deeds are mutually exclusive.

Most academic economists believe that the ECB's monetary policy has been appropriate and in line with conventional wisdom, since conventional Taylor rule assessment exercises appear to support ECB policy prescriptions, including its inflation-targeting framework. However, the ECB's asymmetric approach to monetary policy has resulted in missed opportunities during a period of very low inflation and an economy stuck in protracted stagnation and fragility, observes Bibow. He points out that euroland's brief span of prosperity from 1998 to 2000 was the result of economic growth in the United States (i.e., exports). Moreover, monetary tightening between November 1999 and October 2000 (225 basis points) was supposed to keep inflation expectations in check, boost confidence in price stability, and stimulate growth, but there was an economic slowdown in 2001 followed by protracted stagnation. The ECB should not blame external developments, but should focus on domestic factors, such as the plunge in domestic demand and macroeconomic policymaking, says Bibow.

Bibow finds that the euro's plunge in 1999–2000 exemplified market perceptions rather well, as interest rate hikes by the central bank failed to bolster confidence or to anchor market expectations in line with policy intentions. Aggregate demand was further skewed toward exports as interest rate hikes took their toll on domestic demand, while the euro's decline pushed headline inflation to above 2 percent. The ECB misjudged external developments and the slump in domestic demand, and it continued to hike interest rates because of the perceived risk that rising headline inflation would feed inflation expectations. The bank proceeded to confuse the financial markets by unexpectedly cutting interest rates by 25 basis points and linking the decline in investment to adverse influences in the world economy (e.g., increases in energy and food prices). The ECB's reasoning and rhetoric were flawed, asserts Bibow. By pushing the exchange rate of the euro down and the rate of inflation up, the bank justified its interest rate hikes in the first place. Moreover, the bank continued its obsession with inflation at a time of slow economic growth and amid significant uncertainty about the strength of a recovery.

Bibow notes that the ECB was unresponsive when the economic slump persisted throughout 2002 and stirred up domestic headwinds, such as rising unemployment, banking

problems, and a deteriorating fiscal position (a stance in opposition to interventions by the U.S. Federal Reserve to stave off the threat of deflation). The ECB, however, continued to believe that structural reforms and fiscal consolidation would boost confidence and spending in the short run, in spite of warnings about the risks of recovery by other organizations, such as the International Monetary Fund. Stubbornly high inflation in 2001–03 was due to tax-push inflation and the budgetary consequences of stagnation and consolidation efforts inspired by the Stability and Growth Pact, not excess demand or excessive wage inflation, says Bibow.

The author also notes that net exports, euroland's last lifeline, was cut off when the euro appreciated after April 2002. After misjudging external and internal developments, and neglecting domestic headwinds arising from economic stagnation, the ECB continued its complacency when monetary conditions tightened. The bank failed to reach its price stability goal for four years in a row, so it was inflexible and did not have due respect for economic growth, concludes Bibow.

Bibow outlines the antigrowth bias of the ECB as a result of its institutional roots (German economic thought and Bundesbank "wisdom") and unbounded discretion. He contends that inflation targeting should be flexible in order to fine-tune the economy, as exemplified by the Bank of England, and that one should account for the vital interdependencies between monetary and fiscal policies. The objective is to optimally adjust the policy instrument (i.e., interest rate) and stabilize the economy through deliberate demand management with updated inflation forecasts that provide the key input for some desired mix between inflation and output volatilities.

There is a widespread perception that the ECB overemphasizes upward risks to price stability at the expense of growth risks and generally responds to actual rather than expected declines in inflation. A central bank that targets internal price stability does not have a target exchange rate, but the exchange rate is a key channel in policy transmission that affects output and prices, says the author. Setting inflation targets *ex ante* would account for the prevailing financial market and steer market expectations and perceptions in line with policy intentions.

Bibow outlines some of the pitfalls of Taylor's rule (e.g., neither the equilibrium real interest rate nor the output gap are directly observable) and contends that it is a flexible assessment tool, which gives an infinite number of results. Standard Taylor rule assessments that support the ECB's interest rate policies

are fundamentally flawed, he says, since these assessments camouflage monetary policy mistakes.

The author outlines three key recommendations for reforming the ECB: (1) replace central bank independence with a form that is conducive with democracy and good performance, such as the monetary structure of the United Kingdom; (2) the government should formulate the bank's policy (e.g., the dual mandate of the U.S. Federal Reserve) and the European Parliament should supervise the bank's conduct; and (3) its leadership should include non-European Union nationalities and individuals outside central-banking circles, as exemplified in the Bank of England's Monetary Policy Committee.

The ECB has no concept of a symmetric, growth-oriented monetary policy based on Wicksellian monetary theory, says Bibow. Inept macroeconomic policy management rather than the world economy, external shocks, the euro, or structural rigidities stand in the way of euroland's economic recovery.

### **Financial Liberalization and Poverty: Channels of Influence**

PHILIP ARESTIS and ASENA CANER

Working Paper No. 411, July 2004

[www.levy.org/pubs/wp/411.pdf](http://www.levy.org/pubs/wp/411.pdf)

The process of financial liberalization has a complex relationship with changes in the living standards of the poor. According to Institute Professor Philip Arestis and Research Scholar Asena Caner, few research papers focus on the relationship between financial liberalization and poverty. They conduct a literature review of financial development and find that most papers are based on the neoclassical view (i.e., financial liberalization increases economic growth and income, and reduces poverty) and focus on the growth channel. The authors investigate the effects of two additional channels that influence poverty: the crisis channel, and the access to credit and financial services channel. They find that there is still no clear understanding of the mechanisms underlying the transformation from financial repression to a liberalized regime and their effect on different segments of the population, particularly the poor. They conclude that, if financial liberalization is introduced, it must be designed with poverty reduction and the poor in mind.

Arestis and Caner adopt the multidimensional definition of financial liberalization by Kaminsky and Schmukler: financial liberalization consists of the deregulation of the foreign sector capital account, the domestic financial sector, and the stock market sector, and the process is complete when at least two of the sectors are fully liberalized and the third is partially liberalized. Banks and corporations are allowed to borrow freely from abroad and there are no special exchange rates or restrictions to capital outflows. There is a lack of controls on interest rates (when lending or borrowing), and no subsidies or credit allocations. Foreign investors are allowed to hold domestic equity without restrictions, while capital, dividends, and interest can be repatriated freely within two years of the initial investment.

The link between financial liberalization and poverty depends on the links between financial liberalization and growth, and between growth and poverty. The authors note that there has been a lot of criticism of the financial liberalization theory based on dubious assumptions (e.g., markets, if left to themselves, will work reasonably efficiently and savings will increase). They also note that tests of the relationship between financial liberalization and growth result in findings that are mixed and inconclusive. Although there is general agreement that a higher level of financial sector development is associated with a higher rate of economic growth, there may be "reverse causation" (i.e., faster-growing economies are more likely to liberalize their economies).

The authors suggest various reasons for the ambiguity of findings related to financial liberalization and growth: the use of different empirical measures and techniques, and divergence in terms of the set of countries, the sample period, and the data set. Since the differences in income per capita can be explained by differences in "social infrastructure," liberalization is unlikely to increase growth by itself. The authors conclude that the empirical work on financial liberalization and saving does not support the financial liberalization hypothesis.

In terms of the link between growth and poverty, the authors find that the empirical evidence has one clear message—as countries get richer, the incidence of income poverty falls (on average). However, the conclusions vary in terms of defining the institutions and policies that benefit the poor. A common finding is that inflation has a negative effect on poverty, but the effects of social spending, such as health and education, are mixed due to different methodologies or samples. The literature review suggests that there is more agreement on the existence

and strength of the link between growth and poverty than the link between financial liberalization and growth.

The authors point out that the positive view of financial liberalization has been clouded by the financial fragility of many countries in the aftermath of pursuing financial liberalization policies. They review how financial liberalization can lead to financial crises, which affect poverty. The empirical evidence provides evidence of a greater likelihood of financial crises for countries that have adopted financial liberalization, which tends to trigger larger financial cycles. In addition, the experience of emerging markets suggests that larger booms and crashes emerge immediately following the adoption of financial liberalization. Crises affect poverty and income distribution through a variety of channels and will likely hurt the poor disproportionately. The challenge for policymakers is to take appropriate measures to avoid crises that stem from liberalization of the financial sector and to respond in ways that help the poor (e.g., the roles of exchange rate policy, capital controls, and countercyclical fiscal policy).

While proponents of financial liberalization argue that it improves access to credit for marginalized borrowers and savers, the authors find that the validity of this assertion is unclear. For example, financial liberalization that expands the formal rather than the informal sector of the financial markets can hurt the poor who operate mainly in the informal sector (e.g., rural investment projects). Furthermore, in many countries financial sector reforms have not provided the institutional structure or instruments to satisfy the needs of small enterprises and the poor. Therefore, policymakers should ensure that these services are more readily available to all segments of society by providing macroeconomic stability, adequate regulation and supervision of financial institutions, specialized financial institutions for certain industries or types of lending, simple credit-scoring models, the establishment of credit information bureaus, a strengthening of property rights, new approaches (e.g., group lending and risk-sharing schemes), and emphasizing microfinancial institutions. In order to alleviate poverty it is important to provide the poor with sufficient access to consumption-smoothing mechanisms.

## Explorations in Theory and Empirical Analysis

---

### Gibson's Paradox, Monetary Policy, and the Emergence of Cycles

GREG HANNSGEN

Working Paper No. 410, July 2004

[www.levy.org/pubs/wp/410.pdf](http://www.levy.org/pubs/wp/410.pdf)

Contrary to the conventional Keynesian model, which suggests that a decrease in interest rates reduces the pace of economic activity and puts downward pressure on inflation rates, Gibson's paradox is that interest rates and price levels are positively correlated. Advocates of the theory of interest rate cost-push inflation recognize that this correlation has important policy implications, since raising interest rates would be the wrong medicine to combat inflation. If the cost-push channel of monetary transmission is operative, then counterinflationary monetary policy would generate instability by destabilizing output, notes Resident Research Associate Greg Hannsgen. He develops a model based on the suggestions of Keynesian, Sraffian, and Kaleckian scholars, and theoretically examines the cost-push channel in the situation where interest rates that target inflation are determined by the central bank, and the dynamics of output are affected by a Minskyan effect of interest rates on output (i.e., firms and individuals lend "long" and borrow "short"). The author's findings show that aggressive monetary policy can be destabilizing.

Hannsgen determines that a number of factors, including the Gibson effect, can destabilize the economy when the sensitivity of policy to inflation is high. The Gibson paradox can cause an economy that would otherwise tend toward equilibrium to move into a cyclical path that is outside the "corridor of stability," which shrinks as the flexibility of prices changes. The author's empirical investigation finds that interest rates and inflation (i.e., the price level) are positively correlated according to various measures. In light of problems of trends in the data and alternative explanations of posited relationships, Hannsgen calls for further study using more sophisticated multivariate techniques.

Hannsgen derives his model by positing a cost-driven price determination mechanism and assuming two factors of production: labor and bank loans. The cost of production of

one unit of output, which includes a normal rate of profit, is a function of the interest rate, the (fixed) labor/output ratio, and the hourly wage. Interest rates are adjusted by the central bank according to its preferences regarding inflation and output levels. The central bank raises interest rates when output and inflation are high, and lowers rates in the opposite case (a general form of a Taylor rule, which is consistent with the assumption of an endogenous money supply and an exogenous interest rate). Wages are driven by the power of labor, which is positively affected by a vigorous economy. Growth is negatively affected by the rate of change of the interest rate and positively affected by the existing level of output. Hannsgen's model is in contrast with standard theories, which relate output to the level of the interest rate.

The economic meaning of the dynamics of Hannsgen's model is that the stability of the system depends upon the flexibility of inflation, which determines the existence and amplitude of the cycle. Flexible adjustment of inflation to cost changes reduces the stability of the system, while rapid adjustment can be associated with instability. He finds that highly responsive policy has a destabilizing effect for some values of the parameters of the system. He also finds that high or low values of the price adjustment parameter lead to a greater degree of instability because of the "cost-push" effect of interest rates, which also lies behind the paradoxical conclusion that aggressive monetary policy can destabilize output and inflation.

Hannsgen analyzes Gibson's paradox using data for the period 1954 to 2004 for the federal funds rate (directly controlled by policymakers) and the log of the consumer price index (CPI) for all urban consumers. Because the data contain trends, the data are differenced and provide a measure of inflation. He finds that the relationship between the federal funds rate and the CPI works in the expected direction, but less than seven-tenths of each percentage point increase in interest-rate costs are passed on as inflation. As a result of a high degree of autocorrelation, hypothesis tests should be interpreted with caution, says Hannsgen. Further regressions suggest that those involving differenced variables may not be the right approach, so the author outlines two reasons why it might be preferable to use a bivariate autoregression to analyze his results: (1) lagged values of the variables may be important in the relationship; and (2) there is an identification problem, as interest rate hikes may be passed along as price increases, and the Fed may respond to actual or prospective price increases by hiking the federal funds rate.

In his investigation of bivariate relationships, Hannsgen finds many reasons to believe that the Gibson effect is operative. However, he notes that it is difficult to measure this effect or find a single conclusive test of its existence, because of issues associated with detrending.

The empirical findings imply that one has to be aware of possible perverse effects in implementing monetary policy. The key causal chain is that an increase in inflation increases the central bank's tendency to raise rates, which only exacerbates the original inflationary problem and can generate instability, whether or not cycles are involved. It is clear that Gibson's paradox, along with Minskyan ideas about the real effects of monetary policy and Sraffian theories about distribution, can be part of an explanation of cycles in modern economies, says Hannsgen.

### **The Transmission Mechanism of Monetary Policy: A Critical Review**

GREG HANNSGEN

Working Paper No. 412, October 2004

[www.levy.org/pubs/wp/412.pdf](http://www.levy.org/pubs/wp/412.pdf)

"Is there a theory of how endogenous money affects the economy?" Resident Research Associate Greg Hannsgen attempts to answer this question by reviewing the logic and empirical evidence of theories by Kalecki, Keynes, Minsky, Galbraith, and other economists. He finds and evaluates several explanations of the monetary transmission mechanism, including the effect of interest rate changes on investment, consumer spending, the exchange rate, and financial markets. Although interest rates affect output, the author cautions against the notion that monetary policy is highly effective. Since the effect on fixed investment of dramatic changes in interest rates is uncertain, monetary policy should not be thought of as a precise means of steering the economy, he says. Furthermore, the interest rate could be kept at a low level, such as the post-World War II period in the United States.

Endogeneity implies that the amount of money in the economy adjusts to demand. Post-Keynesian theorists emphasize that monetary policy affects interest rates (and credit) rather than the amount of money in circulation. Hannsgen finds that there are many theories focusing on the effects of interest rates on fixed investment and inventories, that cash flow as a source of

investment funds is more important than borrowing, and that interest rates are an important cost for the firm.

Hannsgen reviews data showing the effect of changing interest rates on economic activity and concludes that monetary policy has significant effects over a long period of time (e.g., 24 months). He attempts to unravel the effects by reviewing alternative theories of the monetary transmission mechanism (e.g., the “Q” and net present value [NPV] theories). Since the central bank can affect the ex ante real interest rate, it strongly influences investment (i.e., lower interest rates will increase the NPV of projects and stimulate investment). However, there is fundamental uncertainty in terms of future sales and profitability, which cannot be predicted based on prior empirical observations. Therefore, expectations of future profits (NPVs and investment) follow no natural law that can be observed.

The author presents some criticisms of various theories and outlines several problems with all cost-based theories of business investment. Keynes’s theories do not peg investment to any observable variables and are difficult to test. Expectations of rates of return and NPVs are likely to have a wide range because they have no rational basis. The NPV and Q theories rest on an inverse relationship between the amount of capital and the interest rate. Another problem with the Q theory is that managers may set goals that are independent of stock market valuations. The author argues that large corporations with access to internal funds (using profits to finance investment and reduce risk) can make their own decisions apart from market values that are determined by the state of expectation of stockholders. He conjectures that the assumption of perfect foresight by managers and stockholders should be dropped and replaced with expectations (possibly irrational) based on partial information. A result could be diverging signals about the desirability of new investment.

An interesting observation is that takeover activity is the result of bullishness affecting both merging firms and other stock purchasers rather than bargain hunting when markets are undervalued (merger activity and stock market valuation are part of the same phenomenon). He notes that firms and households who least need credit are most able to obtain it, and that households may not be very responsive to slight changes in interest rates.

The importance of nonprice factors leads one to suspect that empirical studies would indicate a low elasticity of

investment to interest rates, observes Hannsgen. In line with the theory of Minsky and Davidson, he argues that cash flow is, perhaps, a more important determinant of investment than cost-of-capital variables.

The most important effect of interest rates may involve cross-border transactions, particularly in small, open economies. Some theorists believe that the exchange rate, the interest rate, and stock prices are all set largely by convention and mass psychology. According to Hannsgen, capital flows often impact the exchange rate and the economy, and interest rates influence asset prices.

The author notes the effect of arbitrage, which forces all short-term interest rates to adjust to the open-market rate that is set by the central bank. Therefore, controlling the federal funds rate will control the entire range of short-term interest rates. He also notes that long-term interest rates are subject to the same kind of arbitrage.

### **Visions and Scenarios: Heilbroner’s Worldly Philosophy, Lowe’s Political Economics, and the Methodology of Ecological Economics**

MATHEW FORSTATER

Working Paper No. 413, October 2004

[www.levy.org/pubs/wp/413.pdf](http://www.levy.org/pubs/wp/413.pdf)

Ecological economics is a transdisciplinary alternative to mainstream environmental economics. Research Associate Mathew Forstater, of the University of Missouri–Kansas City, reviews the methodological themes in the ecological economics literature and concludes that the works of Adolph Lowe and Robert Heilbroner develop the main issues and provide further insights into the themes. His goal is to promote the works of Lowe and Heilbroner so that ecological economists will consider the authors’ insights as they develop their methodologies.

As early as the 1930s, and more prominently in the late 1960s, an important theme of Lowe and Heilbroner was that the economic system transforms the natural as well as the social, technical, and institutional environments. The authors expressed concerns about the environmental challenges facing humanity long before economics, as a discipline, or society at large, addressed these issues, notes Forstater. Lowe and Heilbroner attempted to incorporate environmental factors and ecological concerns into their works and to insist that

these issues were placed high on the agenda of economists and policymakers. They recognized the endogeneity of the natural environment, the impact of human activity on the environment, and the implications of these relationships in terms of method.

Ecological economists recognize that ecological and biophysical realities impose certain conditions on economic activity, if sustainability is to be achieved. Forstater believes Lowe's political economics and Heilbroner's worldly philosophy are useful in developing appropriate methodological foundations for ecological economics. He outlines the economists' backgrounds and their dissatisfaction with the static equilibrium models of neoclassical economics, economic analysis, and dynamic process analysis. They prefer a return to classical economists, who applied method over a wider range than neoclassical economists (by including the social-historical and environmental context of economic processes). They believe that the trajectory of the capitalist system is inseparable from the wider sociopolitical and environmental context within which the economy is situated.

Ecological economics takes a pluralistic approach to methodological issues, but common themes include the importance of vision, analysis (including structural analysis), scenarios, and implementation (synthesis), and the rejection of the positive/normative dichotomy. Policy formation begins with vision (e.g., socially shared goals), which is "preanalytical" and requires imagination. Vision (and envisioning) has to be flexible and evolving, and the analysis attempts to link the imagined future back to the present reality.

Structural analysis is used to build scenarios (i.e., a possible route leading to a vision of the future) and imagination works in tandem with analysis, including multiple forms of problem-solving approaches. The "ends" are derived through careful consideration of available scientific information and the "precautionary principle" of erring on the side of caution. Analysis then "works backwards" from the vision of the desired ends to find suitable sustainable paths for its attainment. Principles of flexibility and adaptability mean that the researcher must remain open to adjustments in light of radical or fundamental uncertainty.

Forstater notes that the terms used in the ecological economics literature are close to those by Lowe and related to those by Heilbroner. Lowe began to develop the thesis that historical changes in the structure of capitalist society had

altered the object of the inquiry, so the traditional approach had to be abandoned and the analysis conducted within an alternative, "instrumental" methodological framework. Rather than taking only the initial conditions, as given, and addressing theory to predict outcomes, Lowe proposed taking a predetermined end state, as given (i.e., a vision of desired outcomes). Heilbroner came to the same conclusion.

Forstater observed that Heilbroner's theory is inescapably value-laden and important in terms of notions of scenario, vision, analysis, and ideology. Heilbroner believed that scenarios and visions do not lend themselves to formal analytical procedures, and that economic behaviors that set the system on its path have become less dependable, while political interventions have become more strategic. Although Heilbroner and Lowe came to the conclusion that worldly philosophy is no longer possible, Forstater suggests that their notions of vision, analysis, and scenario only need to be modified to keep Heilbroner's worldly philosophy relevant.

## INSTITUTE NEWS

---

### New Appointment

---

The Levy Institute welcomes DIANE ELSON as senior scholar to head our recently instituted program, Gender Equality and the Economy, along with the Institute's Research Associates Rania Antonopoulos and Nilüfer Çağatay. Elson holds positions at the University of Essex and the United Nations Development Fund for Women (UNIFEM). Her current research interests include the relationship of gender to fiscal policy and international trade. Recent publications include: "The Social Content of Macroeconomic Policies" (with N. Çağatay), *World Development*, July 2000; Progress of the World's Women 2002 (with H. Keklik), UNIFEM, New York, 2002; "Engendering Government Budgets in the Context of Globalisation(s)," *International Feminist Journal of Politics*, forthcoming; and "Social Policy and Macroeconomic Performance: Integrating 'the Economic' and 'the Social,'" in T. Mkandawire, ed., *Social Policy in a Development Context*, Palgrave, forthcoming.



Elson is a member of the United Nations Millennium Project Task Force on Education and Gender Equality and the Advisory Committee for the United Nations Research Institute for Social Development Policy Report on Gender and Development. She is vice president of the International Association for Feminist Economics. She is also a founding member of the International Working Group on Gender, Macroeconomics, and International Economics at the Department of Economics, University of Utah, under the direction of Professor Nilüfer Çağatay. Elson received a B.A. from Oxford University and a Ph.D. from the University of Manchester.

## New Research Associate

---

NİLÜFER ÇAĞATAY is associate professor of economics at the University of Utah. Her research has focused on gender and development, international trade theories, and engendering macroeconomics and international trade theories and policies. Along with Diane Elson and Caren Grown, she founded the International Working Group on Gender, Macroeconomics, and International Economics (GEM-IWG) in 1994. She is coeditor of the November 1995 special issue of *World Development* on gender, adjustment, and macroeconomics and the July 2000 special issue of *World Development* on growth, trade, finance, and gender inequalities. Çağatay was an economic adviser at UNDP's Social Development and Poverty Elimination Division in New York from 1997 to 2000. She received a B.A. in economics and political science from Yale University and an M.A. and Ph.D. in economics from Stanford University. Çağatay is from Turkey.

## New Research Scholars

---

HYUNSUB KUM has joined the Levy Institute as a research scholar to develop the Levy Institute Measure of Economic Well-Being (LIMEW) within the distribution of income and wealth program. His research interests include the measurement of inequality, inequality and economic growth, and the distributional effects of public spending, including cross-country comparisons. He recently published articles with

Senior Scholar James K. Galbraith in *CESifo Economic Studies* and *Review of Income and Wealth*. Kum received a Ph.D. in public policy from the University of Texas at Austin; an M.P.P. from the University of Michigan, Ann Arbor; and an M.P.A. and B.A. from Seoul National University, Korea.

RUBABA ALI has joined the Levy Institute as a research assistant for the LIMEW. She will research different components of the LIMEW and develop and update the measure for additional years. Ali's research interests lie in the broader schema of development economics and include the impact on women's well-being of the absence of a social safety net in developing countries. A special interest is the role of Islamic laws of inheritance on gender bias in intrahousehold bargaining power, the allocation of resources, and the time devoted to housework. Ali received a B.A. in economics and mathematics from Bard College and plans to enroll in a Ph.D. program in economics in the fall of 2005.

KAYE K. W. LEE has joined the Institute as a Junior Fellow in association with the Cambridge University Visiting Scholar Program. His research focuses on developing the theoretical link between personality and earnings, thus uniting the existing empirical work. Lee also aims at providing psychological foundations for furthering economic theory. His research interests are in the distribution of income, the definition and refinement of economic methodology, cross-disciplinary implications for economics, capital theory, and the history of economic thought. His most recent work, under the supervision of Dr. Geoff Harcourt, involved a study of Joan Robinson and the Cambridge controversies in capital theory. Lee received a B.A. in economics from the University of Cambridge.

## NIHCM Foundation Award

---

Research Associate JAMES B. REBITZER has won an award from the National Institute for Health Care Management Research and Educational Foundation for an article he completed with support from the Levy Institute. Coauthored with Martin Gaynor and Lowell J. Taylor, the article was published as "Physician Incentives in Health Maintenance Organizations" in the *Journal of Political Economy*, Vol. 112, No. 4, 2004.

## CALL FOR PAPERS

---

### Conference: “Time Use and Economic Well-Being”

The Levy Economics Institute of Bard College  
October 28–29, 2005

The conference will cover issues and topics related to time allocation. Our primary interest is in papers that utilize time-use data in:

- investigating the determinants of time allocation by gender, and other demographic and economic characteristics (e.g., by family-type or employment status)
- valuing unpaid household work
- developing measures of individual or household economic well-being that includes unpaid household production
- the distribution of household production and augmented measures of household well-being

We are also interested in papers that address:

- problems of statistical methodology and data in dealing with the topics listed above
- problems associated with theoretical perspectives and models used in dealing with the topics listed above
- incorporation of the value of household production in national income accounts

We plan to give special preference to studies that attempt international comparisons. Scholars working in areas other than economics, such as sociology and gender studies, are also encouraged to submit proposals.

The conference will take place at the Levy Institute, which is located in Annandale-on-Hudson, about 100 miles north of New York City. The Institute will cover normal travel expenses to and from the conference and accommodation expenses.

If you are interested in presenting a paper, please send an abstract (about 500 words) of your proposed paper to both Edward N. Wolff (ew1@nyu.edu) and Ajit Zacharias (zacharia@levy.org) by March 15, 2005. Notification of decisions will be made by April 15, 2005.

## PUBLICATIONS AND PRESENTATIONS

---

### Publications and Presentations by Levy Institute Scholars

**PHILIP ARESTIS** *Institute Professor of Economics*

**Publications:** “Is There a Trade-Off between Inflation Variability and Output-Gap Variability in the EMU Countries?” (with K. Mouratides), *Scottish Journal of Political Economy*, Vol. 51, No. 5 (November 2004); “The Economic and Monetary Union: Current and Future Prospects” (with M. C. Sawyer), in F. Ferrari-Filho and L. F. R. de Paula (eds.), *Financial Globalisation: Essays on Open Economies* (in Portuguese), Vozes Publishers: 2004; *What Global Economic Crisis?* (with M. Baddeley and J. McCombie), paperback edition, Palgrave Macmillan 2004; *The Post-Bubble US Economy: Implications for Financial Markets and the Economy* (with E. Karakitsos), Palgrave Macmillan 2004; *Re-examining Monetary and Fiscal Policies in the Twenty First Century* (with M. C. Sawyer), Cheltenham, U.K.: Edward Elgar Publishing Limited, 2004; “Restrictive Fiscal Stance of German Economic Model Cuts Hopes of Robust Eurozone Recovery” (with W. Mosler), *Financial Times*, September 6, 2004; “Eurozone ‘Surplus’: 0.1 Per Cent of GDP is Hardly a Surplus At All,” *Financial Times*, September 15; “O euro e a UME: lições para o Mercosul” (with F. Ferrari-Filho, L. Fernando de Paula, and M. C. Sawyer), *Economia Esociedade*, Vol. 12, No. 1, 2004.

**Presentations:** “Does Financial Structure Matter?” at the Annual International Conference of the ESRC-funded Money, Macro, and Finance Research Group held at Cass Business School, City University, U.K., September 6–8; “New Consensus Monetary Policy: An Assessment,” at a staff/post-graduate student seminar of the University of the State of Rio De Janeiro, Rio De Janeiro, Brazil, October 4, and the University of Rio Grande Do Sul, Porto Alegre, Brazil, October 6; “Economic Integration: EMU and Lessons for Mercosur,” at a staff/postgraduate student seminar of the University of Getulio Vargas Foundation, Rio De Janeiro, Brazil, October 5, and the University of Rio Grande Do Sul, Porto Alegre, Brazil, October 7–8; “Macroeconomic Policies of the EMU,” at a staff seminar, Department of Land Economy, University of Cambridge, U.K., October 20; “Reinventing Fiscal Policy” and “Monetary Policies in the Eurosystem and

Alternatives for Full Employment” (coauthored by M. C. Sawyer), at the International Symposium to honor John Kenneth Galbraith, sponsored by the University of Du Littoral Côte d’Opale, Dunkerque, and held at the Institut de Gestion Sociale, Campus Parodi, Paris, France, September 22–25; “Capital Stock, Unemployment and Wages in Selected EMU Countries” (coauthored by Michelle Baddeley and M. C. Sawyer), at the Eighth International Workshop on Wages, Distribution and Growth organized by the Hans Böckler Stiftung and held at the Willy-Brandt-Haus, Berlin, Germany, October 29–30.

**MATHEW FORSTATER** *Research Associate*

**Publications:** “Envisioning Provisioning: Adolph Lowe and Heilbroner’s Worldly Philosophy,” *Social Research*, Vol. 71, No. 2; “Full Employment and Social Justice” (with L. Randall Wray), in D. P. Champlin and J. T. Knoedler, eds., *The Institutionalist Tradition in Labor Economics*, Armonk, N.Y.: M. E. Sharpe, 2004; “Jobs for All’: A Fitting Tribute to the Rev. Dr. Martin Luther King, Jr.” in D. Menkart, A. D. Murray, and J. L. View, eds., *Putting the Movement Back into Civil Rights Teaching*, Washington, D.C.: Teaching for Change and Poverty & Race Research Action Council, 2004; “Cumulative Causation à la Lowe: Radical Endogeneity, Methodology, and Human Intervention” in *Growth, Distribution, and Effective Demand: Alternatives to Economic Orthodoxy: Essays in Honor of Edward J. Nell*, G. Argyrous, M. Forstater, and G. Mongiovi, eds., Armonk, N.Y.: M. E. Sharpe, 2004; edited *Growth, Distribution, and Effective Demand: Alternatives to Economic Orthodoxy: Essays in Honor of Edward J. Nell* (with George Argyrous and Gary Mongiovi), Armonk, N.Y.: M. E. Sharpe, 2004; edited *Full Employment and Price Stability: The Macroeconomic Vision of William S. Vickrey* (with Pavlina R. Tcherneva), Cheltenham, U.K.: Edward Elgar, 2004.

**JAMES K. GALBRAITH** *Senior Scholar*

**Publications:** “Unemployment, Inequality and the Policy of Europe, 1984–2000” (with Enrique Garcilazo), *Banca Nazionale del Lavoro Quarterly Review*, Vol. LVII, No. 228, March 2004; “The American Economic Problem,” *Interventions*, Vol. 1, No. 1, March 2004, and *Post-Autistic Economic Review*, No. 25, May 21; a review of “Great Transformations: Economic Ideas and Institutional Change in the Twentieth Century” by Mark Blyth in *International*

*History Review*, Vol. XXVI, No. 1, March 2004; “Public Deficits and Private Savings: A Little Lesson,” *Texas Observer*, April; “On the Immigration Proposal,” *The Responsive Community*, Vol. 14, Issue 2/3, Spring/Summer 2004; “Bankers Versus Base,” *The American Prospect*, 5(11), May 2004; “In Memoriam: Walt Whitman Rostow” (with Douglas Dacy and Bobby R. Inman), *Documents of the General Faculty*, The University of Texas at Austin, 2004; “The Worldly Philosophers and the War Economy,” *Social Research*, Vol. 71, No. 2, Summer 2004; “The Experience of Rising Inequality in Russia and China during the Transition” (with Ludmila Krytynskaia and Qifei Wang), *European Journal of Comparative Economics*, Vol. 1, No. 1, 2004; epilogue in *Full Employment and Price Stability: The Macroeconomic Vision of William S. Vickrey* (Mathew Forstater and Pavlina R. Tcherneva, eds.), London: Edward Elgar, 2004; “Full Employment and the Perils of Empire” in *Patriotism, Democracy and Common Sense: Restoring America’s Promise at Home and Abroad* (Alan Curtis, ed.), Lanham, Maryland: Rowman and Littlefield, 2004; “An Economy, not an Empire: A Progressive Program for Jobs and Security After the Election” in *What We Stand For: A Progressive Platform for a Changing America* (Mark Green, ed.), New York: Newmarket Press, 2004; “Full Economic Recovery and Full Employment” in *Taking Back America* (Robert Borosage and Katrina vanden Heuvel, eds.), New York: NationBooks, 2004; “The Bush Jobs Chasm,” *Salon*, April 6; “How You Will Pay for the War,” *Salon*, April 20; “Fidel, the Fall Guy,” *Salon*, May 4; “The Man Who Stayed Too Long,” *Salon*, May 20; “Coming to our senses?” *Salon*, May 22; “The Rich Got Richer,” *Salon*, June 9; “Squeezing Workers,” *Salon*, June 28; “Length Matters,” *Salon*, July 7; “Pay Inequality in the Indian Manufacturing Sector, 1979–1998” (with Deepshikha Roy Chowdhury and Sanjeev Shrivastava), *Economic and Political Weekly*, New Delhi, Vol. 39, No. 28, July 10; “A People’s Platform,” *The Nation*, July 22; “Armed and Dangerous,” *Salon*, July 22; “Fed Ache,” a review of *A Term at the Fed: An Insider’s View* by Laurence H. Meyer, *Washington Monthly*, Vol. 36, No. 7 & 8, July–August 2004; “Our Sinking Ship,” *Salon*, August 10; “Dazzle Them With Demographics,” a review of *The Coming Generational Storm: What You Need to Know about America’s Economic Future* by Laurence J. Kotlikoff and Scott Burns, *Texas Observer*, August 13; “November Surprise,” *Salon*, August 20; “Social Security Scare Campaign,” *Salon*, August 31; “The Plutocrats Go Wild,”

*The Washington Monthly*, September 2004; “The Issue Isn’t Vietnam,” *Salon*, September 7; “The Afghan Effect?” *Salon*, September 21; “Dissecting Cheney,” *Salon*, October 5, and republished in *Slovo* (Moscow), October 15; “What Economic Recovery?” *Salon*, October 10 and republished in *Vanguardia* (Barcelona), October 13.

**Presentations:** “The Experience of Rising Inequality in Russia and China during the Transition,” Department of Government, The University of Texas at Austin, February 26; “Democracy and Globalization,” 35th Anniversary Conference of CEDAL, San Jose, Costa Rica, February 28; “Toward a New Macro-Economics of Inequality: Examples from Global, Continental and National Studies” and “Strategic Alternatives for Peace and Security,” The University of Denver Economics Department, Denver, Colorado, March 29; “Inequality and Unemployment in Europe,” Economics Honors Undergraduates, Department of Economics, The University of Texas at Austin, March 30; “Pay Inequality in India,” Asian Studies Seminar Series, The University of Texas at Austin, April 1; “The Election and the Economy,” *UT Quest*, April 6; panel participant on “The State of the U.S. and World Economies,” The 14th Annual Hyman P. Minsky Conference on Financial Structure, The Levy Economics Institute, Annandale-on-Hudson, New York, April 23; invited speaker, New Democracy Project, New York City, May 15; “Estimating Household Income Inequality,” Conference on Growth and Distribution, Lucca, Italy, June 17; luncheon debates speaker, “European Unemployment and Inequality,” European Commission, Brussels, Belgium, June 29; panel participant, “The American Economy,” Center for American Progress, Washington, D.C., July 1; panel organizer and participant, “The Abuse of Power,” Communitarian Summit, George Washington University, Washington, D. C., July 9; testimony, CSIS Infrastructure Commission, New York City, July 14; organizer and lead instructor, Workshop on the Measurement of Inequality, San Jose, Costa Rica, August 5–6; “Estimating Inequality of Household Incomes” and “Rising Inequality in Russia and China,” World Institute for Development Economics Research, Helsinki, Finland, August 18; “Estimating Inequality of Household Incomes,” International Association for Research on Income and Wealth, Cork, Ireland, August 26; keynote lecture, “The Problem of Unemployment in Europe and America,” European Social Welfare Conference, Roskilde, Denmark, August 27.

**HYUNSUB KUM** *Research Scholar*

**Presentations:** “Income Inequality and Global Macroeconomics” (with J. K. Galbraith), Eastern Economics Association 2004 Conference, Washington, D.C., February 19–22; “Estimating the Evolution of Global Income Inequality” (with J. K. Galbraith), 100th American Political Science Association annual meeting, Chicago, September 2–5.

**DIMITRI B. PAPADIMITRIOU** *President*

**Presentations:** Interview regarding the state of the global economy with Al Scott, *The Seattle Times*, October 4; interview regarding the economic impact of the current account deficit with Bill Shepherd, *Investment Dealers’ Digest*, October 18.

**MALCOLM SAWYER** *Senior Scholar*

**Publications:** “Kalecki, Michal (1899–1970)” in *Oxford Dictionary of National Biography*, H. C. G. Matthew and Brian Harrison, eds., Oxford: Oxford University Press, 2004, <http://www.oxforddnb.com/view/article/54007>; “The NAIRU, labour market ‘flexibility’ and full employment,” in Jim Stanford and Leah Vosko, eds., *Challenging the Market: The Struggle to Regulate Work and Income*, McGill–Queen’s University Press, 2004; *Re-examining Monetary and Fiscal Policies in the Twenty First Century* (with P. Arestis), Cheltenham, U.K.: Edward Elgar Publishing Limited, 2004; “O euro e a UME: lições para o Mercosul” (with P. Arestis, F. Ferrari-Filho, and L. Fernando de Paula), *Economia Esociedade*, Vol. 12, No. 1, 2004.

**Presentations:** “Policy Alternatives for the Euro Area” (coauthored by P. Arestis), at the International Symposium to honor John Kenneth Galbraith, sponsored by the University of Du Littoral Côte d’Opale, Dunkerque, and held at the Institut de Gestion Sociale, Campus Parodi, Paris, France, September 22–25.

**EDWARD N. WOLFF** *Senior Scholar*

**Publications:** *What Has Happened to the Quality of Life in the Advanced Industrialized Nations?* (E. N. Wolff, ed.), Cheltenham, U.K.: Edward Elgar Publishing Ltd., 2004; “Recent Trends in Living Standard in the United States” in *What Has Happened to the Quality of Life in the Advanced Industrialized Nations?* (E. N. Wolff, ed.), Cheltenham, U.K.: Edward Elgar Publishing Ltd., 2004.

**Presentations:** “The Transformation of the American Pension System, 1983–2001,” at the conference on Pension Fund Capitalism and the Crisis of Old-Age Security in the United States, New School University, New York, September 10–11; “On Point,” hosted by Tom Ashbrook, NPR Radio, September 28; “An Overall Assessment of the Distributional Consequences of Government Spending and Taxation in the U.S., 1989 and 2000” (with A. Zacharias), conference on The Distributional Effects of Government Spending and Taxation, The Levy Economics Institute, Annandale-on-Hudson, New York, October 15–16.

**L. RANDALL WRAY** *Senior Scholar*

**Publication:** “The War on Poverty Forty Years On” (with Stephanie Bell), *Challenge*, September–October 2004, Vol. 47, No. 5.

**Presentations:** Teorias del Dinero, del credito y del Estado (Credit and State Theories of Money); Aspectos internacionales de la politica monetaria (International Aspects of Monetary Policy); El nuevo consenso monetarista (The New Monetary Consensus), and Globalizacion y desarrollo economic (Globalization and Economic Development); at a conference, Estrategias & Politicas Para El Desarrollo Economico En Países En Desarrollo, held at the Universidad Nacional Autonoma De Mexico (Mexico City), September 9–10, 2004.

**AJIT ZACHARIAS** *Research Scholar*

**Presentations:** “A Levy Institute Measure of Economic Well-Being (with E. N. Wolff and A. Caner), 28th General Conference of the International Association for Research in Income and Wealth, Cork, Ireland, August 22–28; “An Overall Assessment of the Distributional Consequences of Government Spending and Taxation in the U.S., 1989 and 2000” (with E. N. Wolff), conference on the Distributional Effects of Government Spending and Taxation, The Levy Economics Institute, Annandale-on-Hudson, New York, October 15–16.

**GENNARO ZEZZA** *Research Scholar*

**Presentation:** “Distribution and Growth in a Post-Keynesian Stock-Flow Consistent Model,” international conference on Economic Growth and Distribution: on the Nature and Causes of the Wealth of Nations, Lucca, Italy, June 16–18.

## Recent Levy Institute Publications

*Levy Institute Measure of Economic Well-Being  
How Much Does Wealth Matter for Well-Being? Alternative  
Measures of Income from Wealth*

EDWARD N. WOLFF, AJIT ZACHARIAS, and ASENA CANER  
September 2004

*Levy Institute Measure of Economic Well-Being  
United States, 1989, 1995, 2000, and 2001*

EDWARD N. WOLFF, AJIT ZACHARIAS, and ASENA CANER  
May 2004

*Levy Institute Measure of Economic Well-Being  
Concept, Measurement, and Findings: United States, 1989  
and 2000*

EDWARD N. WOLFF, AJIT ZACHARIAS, and ASENA CANER  
February 2004

*Levy Institute Measure of Economic Well-Being  
United States, 1989 and 2000*

EDWARD N. WOLFF, AJIT ZACHARIAS, and ASENA CANER  
December 2003

### POLICY NOTES

*Those “D” Words: Deficits, Debt, Deflation, and Depreciation*

L. RANDALL WRAY  
2004/2

*Inflation Targeting and the Natural Rate of Unemployment*

WILLEM THORBECKE  
2004/1

*The Future of the Dollar: Has the Unthinkable Become  
Thinkable?*

KORKUT A. ERTÜRK  
2003/7

*Is International Growth the Way Out of U.S. Current  
Account Deficits? A Note of Caution*

ANWAR M. SHAIKH, GENNARO ZEZZA,  
and CLAUDIO H. DOS SANTOS  
2003/6

*Deflation Worries*

L. RANDALL WRAY  
2003/5

*Pushing Germany Off the Cliff Edge*

JÖRG BIBOW  
2003/4

*Caring for a Large Geriatric Generation: The Coming Crisis in U.S. Health Care*

WALTER M. CADETTE  
2003/3

*Reforming the Euro's Institutional Framework*

PHILIP ARESTIS and MALCOLM SAWYER  
2003/2

*The Big Fix: The Case for Public Spending*

JAMES K. GALBRAITH  
2003/1

**PUBLIC POLICY BRIEFS**

*The Case for Rate Hikes*

*Did the Fed Prematurely Raise Rates?*

L. RANDALL WRAY  
No. 79, 2004 (Highlights, No. 79A)

*The War on Poverty after 40 Years*

*A Minskyan Assessment*

STEPHANIE A. BELL and L. RANDALL WRAY  
No. 78, 2004 (Highlights, No. 78A)

*The Sustainability of Economic Recovery in the United States*

*The Risks to Consumption and Investment*

PHILIP ARESTIS and ELIAS KARAKITSOS  
No. 77, 2004 (Highlights, No. 77A)

*Asset Poverty in The United States*

*Its Persistence in an Expansionary Economy*

ASENA CANER and EDWARD N. WOLFF  
No. 76, 2004 (Highlights, No. 76A)

*Is Financial Globalization Truly Global?*

*New Institutions for an Inclusive Capital Market*  
PHILIP ARESTIS and SANTONU BASU  
No. 75, 2003 (Highlights, No. 75A)

*Understanding Deflation*

*Treating the Disease, Not the Symptoms*

L. RANDALL WRAY and DIMITRI B. PAPADIMITRIOU  
No. 74, 2003 (Highlights, No. 74A)

*Asset and Debt Deflation in the United States*

*How Far Can Equity Prices Fall?*

PHILIP ARESTIS and ELIAS KARAKITSOS  
No. 73, 2003 (Highlights, No. 73A)

*What Is the American Model Really About?*

*Soft Budgets and the Keynesian Devolution*

JAMES K. GALBRAITH  
No. 72, 2003 (Highlights, No. 72A)

*Can Monetary Policy Affect the Real Economy?*

*The Dubious Effectiveness of Interest Rate Policy*

PHILIP ARESTIS and MALCOLM SAWYER  
No. 71, 2003 (Highlights, No. 71A)

**STRATEGIC ANALYSES**

*Prospects and Policies for the U.S. Economy:*

*Why Net Exports Must Now Be the Motor for U.S. Growth*

WYNNE GODLEY, ALEX IZURIETA, and GENNARO ZEZZA  
August 2004

*Is Deficit-Financed Growth Limited? Policies and Prospects in an Election Year*

DIMITRI B. PAPADIMITRIOU, ANWAR M. SHAIKH, CLAUDIO H. DOS SANTOS, and GENNARO ZEZZA  
April 2004

*Deficits, Debts, and Growth: A Reprieve But Not a Pardon*

ANWAR M. SHAIKH, DIMITRI B. PAPADIMITRIOU, CLAUDIO H. DOS SANTOS, and GENNARO ZEZZA  
October 2003

*The U.S. Economy: A Changing Strategic Predicament*

WYNNE GODLEY

March 2003

**WORKING PAPERS**

*Visions and Scenarios: Heilbroner's Worldly Philosophy,  
Lowe's Political Economics, and the Methodology of  
Ecological Economics*

MATHEW FORSTATER

No. 413, October 2004

*The Transmission Mechanism of Monetary Policy:*

*A Critical Review*

GREG HANNSGEN

No. 412, October 2004

*Financial Liberalization and Poverty: Channels of Influence*

PHILIP ARESTIS and ASENA CANER

No. 411, July 2004

*Gibson's Paradox, Monetary Policy, and the Emergence  
of Cycles*

GREG HANNSGEN

No. 410, July 2004

*Assessing the ECB's Performance since the Global Slowdown:  
A Structural Policy Bias Coming Home to Roost?*

JÖRG BIBOW

No. 409, July 2004

*Keynesian Theorizing during Hard Times: Stock-Flow  
Consistent Models as an Unexplored "Frontier" of Keynesian  
Macroeconomics*

CLAUDIO H. DOS SANTOS

No. 408, May 2004

*Changes in Household Wealth in the 1980s and 1990s in  
the United States*

EDWARD N. WOLFF

No. 407, May 2004

*Investigating the Intellectual Origins of Euroland's  
Macroeconomic Policy Regime: Central Banking Institutions  
and Traditions in West Germany after the War*

JÖRG BIBOW

No. 406, May 2004

*Some Simple, Consistent Models of the Monetary Circuit*

GENNARO ZEZZA

No. 405, April 2004

*The "War on Poverty" after 40 Years: A Minskyan  
Assessment*

STEPHANIE A. BELL and L. RANDALL WRAY

No. 404, April 2004

*A Stock-Flow Consistent General Framework for Formal  
Minskyan Analyses of Closed Economies*

CLAUDIO H. DOS SANTOS

No. 403, February 2004

The Summary and all other Levy Institute publications are available online on the Levy Institute website, [www.levy.org](http://www.levy.org).

To order a Levy Institute publication, call 845-758-7700 or 202-887-8464 (in Washington, D.C.), fax 845-758-1149, e-mail [info@levy.org](mailto:info@levy.org), write The Levy Economics Institute of Bard College, Blithewood, PO Box 5000, Annandale-on-Hudson, NY 12504-5000, or visit our website at [www.levy.org](http://www.levy.org).

**The Levy Economics Institute of Bard College**

Blithewood

PO Box 5000

Annandale-on-Hudson, NY 12504-5000

**NONPROFIT ORGANIZATION**

**U.S. POSTAGE PAID**

**BARD COLLEGE**

*Address Service Requested*