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DIMITRI B. PAPADIMITRIOU, President
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ROGER WALDINGER, Research Associate

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BARRY BLUESTONE, Research Associate
ROBERT HAVEMAN, Research Associate
CHRISTOPHER JENCKS, Research Associate
THOMAS KARIER, Research Associate
SUSAN E. MAYER, Research Associate
BARBARA WOLFE, Research Associate

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.

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The *Summary* and other Levy Institute publications are available on the Institute's website.
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LETTER FROM THE PRESIDENT

To our readers:

This issue begins with a strategic analysis by Distinguished Scholar Wynne Godley, Research Scholars Claudio H. Dos Santos and Gennaro Zezza, and me under the state of the U.S. and world economies program. Our review of the financial balances in the United States shows that neither net lending to the personal sector nor the trade deficit can be sustained. As a result, the U.S. economy risks entering a period of deficient aggregate demand that will inaugurate a growth recession at home and abroad. A resolution of strategic problems facing the U.S. and world economies can only be achieved via an international agreement that changes country patterns of aggregate demand and relative prices, thereby ensuring that trade is generally balanced at full employment.

The Levy Institute's conference on "Time Use and Economic Well-Being" is featured under the distribution of income and wealth program. The main topics included valuing unpaid household work, identifying time allocations within the workplace and the household, addressing problems of statistical methodology and data, and comparing time use across countries. The research showed that nonmarket work represents up to half of the total economy, and that prevailing cultures and traditions contribute to the vulnerable position of women and children. It is necessary to improve conventional time-use surveys in order to adequately measure activities such as child care and discretionary time, and outputs such as health and education.

The global conference on "Unpaid Work and the Economy: Gender, Poverty, and the Millennium Development Goals" is featured under the gender equality and the economy program. The conference was organized by the Bureau for Development Policy within the United Nations Development Programme in partnership with the Levy Institute. It was designed to provide a forum for three groups: experts in the collection of time-use data, researchers who use time-use data to investigate unpaid work, and policy analysts and advisors in international development organizations.

Participants from approximately 20 countries presented research that showed remarkable consistency across cultures and countries. Women work more than men if you consider unpaid

work. Women's share of paid work is lower than men's, but their share of unpaid work (mainly child care and housework) is much higher. National statistical accounts either lack time-use data or do not use the data to recognize the contribution of unpaid work and the way this work burdens women and children. Economic reforms often fail to account for impacts on vulnerable groups, while fiscal policies often increase care burdens relating to health, education, and social welfare.

Both conferences concluded that frequent, comprehensive, and well-designed time-use surveys could be used to identify gender and intrahousehold inequalities, to design effective social and economic government policies that mitigate income and time poverty, to reduce disparities between rich and poor, and to enhance well-being.

The program on economic policy for the 21st century begins with a working paper by Research Associate Jörg Bibow. He believes that the European Central Bank is out of touch with financial markets and the economy. He notes that euroland's domestic demand has plunged and warns that its economy is heading for protracted stagnation because it is trapped in the dogma of thrift and stability. The problem of fragility will worsen if the bank raises real interest rates, a response that could sink the euro, he says.

A policy brief by Senior Scholar L. Randall Wray reviews proposals by the Bush administration (the neocon agenda) to create an ownership society by privatizing Social Security and "reforming" education, pensions, the judicial system, and health care. Wray believes that the proposals will likely increase inequality, with gains to the wealthy at the expense of the poor, the sick, and the elderly. Neocon reforms should not be undertaken until there is a more equal distribution of income and wealth, he says.

In a policy note Wray assesses the notion that Social Security requires thorough reform and maintains that the need for reform is not because of a looming financial crisis (i.e., Social Security is a federal government program that cannot become insolvent) but because of demographic and economic changes such as increasing inequality. The debate has ignored aspects of the program that make it a good deal for most Americans, and current trends such as the disappearance of employment security strengthen arguments for more generous and secure publicly provided safety nets.

As always, I welcome your comments and suggestions.

Dimitri B. Papadimitriou, *President*

Program: The State of the U.S. and World Economies, and Strategic Analysis

The United States and Her Creditors: Can the Symbiosis Last?

WYNNE GODLEY, DIMITRI B. PAPADIMITRIOU, CLAUDIO H. DOS SANTOS, and GENNARO ZEZZA
 Strategic Analysis, September 2005
www.levy.org/pubs/sa_sep_05.pdf

The United States is currently consuming 6 percent more goods and services than it produces, with high employment, low interest rates, and low inflation. According to Distinguished Scholar Wynne Godley, President Dimitri B. Papadimitriou, and Research Scholars Claudio H. Dos Santos and Gennaro Zezza, a resolution of strategic problems facing the U.S. and world economies can be achieved via an international agreement that changes country patterns of aggregate demand and relative prices, thereby ensuring that trade is generally balanced at full employment. However, there is no immediate pressure to change the status quo, in spite of fewer strategic policy options for the United States.

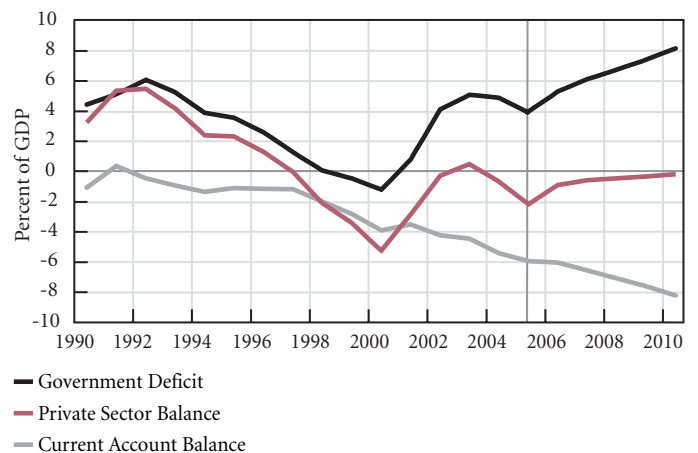
The authors review the three financial balances (government, private sector, and balance of payments) in the United States since 1960 and find that the balances fluctuated with fairly narrow bands until 1992. Since then, the U.S. economy experienced a Goldilocks phase (1992–2001), a small recession (2001–2002), and renewed expansion, as private net saving alternatively fell sharply into deficit, rose sharply, and then fell sharply once again. The authors also find that the trade deficit has risen since 1998 in spite of no decisive change in the real exchange rate. A surprising finding is that the recent fall in the exchange rate has had no effect on import prices or the dollar price of exports.

Using standard econometric specifications and status quo assumptions of the U.S. growth rate, unemployment, the value of the dollar, and rising interest rates, the authors' base case

scenario projects a trade deficit of 7.5 percent of GDP by the end of the decade (Figure 1). If the trade deficit worsens, the U.S. current account deficit could reach 8.5 percent of GDP. The authors believe that the housing market will peak, while net lending falls and net saving by the private sector recovers. As a result, the (general) government deficit must increase from 4 to 8.5 percent of GDP, while public debt rises toward 150 percent of GDP in the long run. If net export demand does not improve and the U.S. government is unwilling to apply a huge fiscal stimulus, then the U.S. economy will enter a period of deficient aggregate demand, which will have serious disinflationary consequences at home and abroad and will inaugurate a growth recession. A depreciation of the U.S. dollar by 25 percent might sustain U.S. growth and reduce deficits in the budget and current account balance, so long as domestic demand is curtailed by restrictive fiscal measures and overseas demand is increased by a counterpart fiscal expansion.

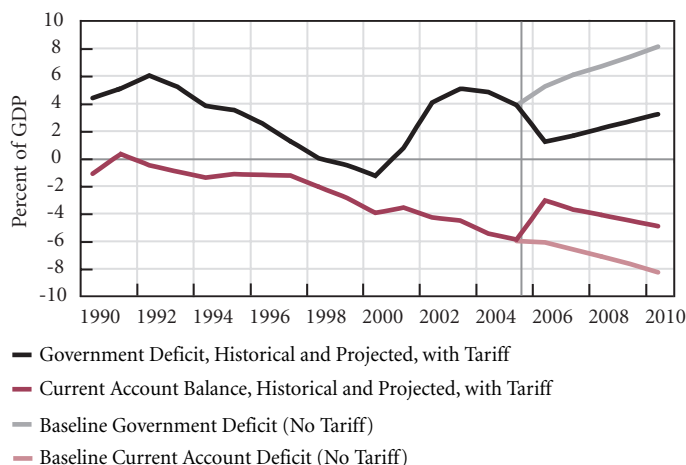
The authors note that the negative asset position of the United States at the end of 2004 was virtually unchanged since 2001 because of price and exchange rate changes. They also note that net lending could fall if there is a slowdown in the growth rate of debt, which would lead to instability. It is unlikely that house prices will remain high and that the level of indebtedness relative to housing wealth will remain constant (i.e., a permanent higher flow of lending and lower level of net saving). If incomes are overcommitted, borrowers are vulnerable to a range of nightmare possibilities since incomes are vulnerable, nominal interest rates may rise, and house

Figure 1 Baseline. Main Sector Balances



Sources: BEA and authors' calculations

**Figure 2 Scenario with a Tariff on Imports:
Main Sector Balances**



Sources: BEA and authors' calculations

prices (and equity) fall in the wake of a classic housing bubble. A further reason to believe that net lending to the U.S. personal sector cannot be sustained is that the whole process has been fed by institutional changes (and a progressive easing of underwriting standards) that have run their course. Since net lending and saving by the corporate sector have an inverse relationship, a recovery in corporate investment by 2010 could drive corporate net saving into deficit once again.

The authors observe that in lieu of a huge rise in the budget deficit, there needs to be a sustained increase in net export demand. However, it is impossible for the U.S. economy to rebalance without a large cut in domestic absorption. Moreover, increasing penetration of U.S. markets by foreign exports has a devastating effect on the U.S. manufacturing industry. Selective tariff or quota restrictions would not be effective in rebalancing the U.S. and world economies, the authors argue.

If there is pressure for protection (not recommended by the authors), a less damaging selective measure is the adoption of principles in the World Trade Organization's "Article 12 Restrictions [A12Rs]." These principles sponsor the use of import controls (nonselective, price-based import restrictions) in the event of conflict between the objectives of full employment and balance of payments equilibrium. The significant difference between devaluation and A12Rs is that the former tends to deteriorate the devaluing country's terms of trade whereas the latter tends to improve the devaluing country's terms of trade.

The authors introduce a tariff scenario into their formal model that results in a significant improvement in the current account and the budget deficit without adversely affecting the growth rate of total output (Figure 2). They anticipate that the tariff would be removed when there is global consensus to rearrange patterns of trade and production that are sustainable in the long term. It is urgently important that the United States increase net export demand in the medium term, say the authors. A satisfactory long-term solution resides in new international arrangements whereby the price mechanism redirects trade flows and changes in fiscal and monetary stance sustain aggregate demand on a global scale.

Program: Distribution of Income and Wealth, and the LIMEW

Conference: Time Use and Economic Well-Being

This conference was part of the Levy Institute's research and policy program on the distribution of income and wealth. Its purpose was to cover issues and topics related to time allocation. Presentations focused on using time-use data to investigate the determinants of time allocation by gender and other demographic and economic characteristics (e.g., family type or employment status); value unpaid household work; develop measures of individual or household economic well-being that include unpaid household production; and analyze the distribution of household production and augmented measures of household well-being. The papers also addressed problems of statistical methodology and data in dealing with these topics.

The conference was held October 28–29, 2005, at the Levy Institute, located at Bard College, Annandale-on-Hudson, New York. Summaries of the sessions and speakers' remarks are given below.

Session 1. Determinants of Household Production I

The chair for this session was President DIMITRI B. PAPADIMITRIOU, Levy Institute. The speakers were SUZANNE M. BIANCHI, University of Maryland; and DANIEL S. HAMERMESH, University of Texas at Austin, National Bureau of Economic Research (NBER), and Institute for the Study of

Labor (IZA). The discussant was SUSAN HIMMELWEIT, Open University, United Kingdom.

Based on a coauthored paper with Sara Raley and Melissa Milkie, BIANCHI examined changes over time and differences between employed and nonemployed mothers in a comprehensive set of activities (e.g., housework, child care, leisure, and personal care). She noted that despite a large shift of mothers into the paid workforce, maternal time spent in child care did not decrease. Time spent in other activities must have been affected by the shift, she said.

Bianchi assessed the total workloads as well as the differences in nonmarket time allocation and subjective assessments of time pressures between employed and nonemployed mothers. She chose the U.S. time diary studies for 1975 and 2000 (the 1998–99 Family Interaction, Social Capital, and Time-Use Study; and the 2000–2001 National Survey of Parents) because these studies identified requisite measures of secondary activity (e.g., child care in conjunction with other activities).

Bianchi found that overall workloads increased for both employed and nonemployed mothers (weekly hours of child care almost doubled) and that workloads were much higher for employed mothers (71 versus 52 hours per week in 2000). One way that mothers “financed” their paid work was to shed unpaid housework, reduce sleep, and spend much less time in discretionary activities. Employed mothers experienced time deficits in an array of activities and greater time pressures than nonemployed mothers. Both groups experienced a dilution of free-time pursuits.

Bianchi noted that the two groups are not mutually exclusive but at different points in the life course. She recommended that future research should explore these differences at various stages. She also noted that temporary labor force exits may partially explain why it is difficult for women to achieve labor market parity with men, and that opportunity costs are substantial when women work in or outside the home.

HAMERMESH examined how people combine expenditures on goods and time in regard to the commodity “eating” within the household. He also examined how choices are affected by differences in economic incentives and rising inequality. His model of eating included time and food expenditure inputs for a two-adult household. He expected that the three economic variables—the husband and wife’s value of time and unearned income—would have a positive effect on expenditures for food.

In his study, Hamermesh used the 1985 and 2003 time-use surveys and consumer-expenditure surveys for the United States. He noted that there are no data sets that combine information on household goods expenditures and time spent by household members in the production of eating. Hamermesh arbitrarily classified certain time and expenditure categories as inputs into eating. Time inputs included such activities as eating at or away from home, meal preparation and cleanup, and grocery shopping and associated travel. Expenditure inputs included such items as food and alcohol, spending on small appliances, and one-third of expenditures on major appliances.

Hamermesh also used other data sets such as the 1986 and 2003 Panel Studies of Income Dynamics to acquire data on household net income and to create instruments for net income. He outlined a number of adjustments he made to the data sets in order to find instrumental variables for the wage and income measures and to obtain unbiased estimates of the household production function.

An initial examination of the time and goods devoted to eating showed that the average couple spent about 5.5 hours per day in 1985 compared to 4 hours per day in 2003 (a decline of more than 25 percent). Most of the decline can be attributed to wives, who have the most input into the production of eating (husbands spend only one-third as much time on eating as their wives). Rising real incomes enable households to purchase market substitutes, so the decline could reflect optimizing behavior by households.

Hamermesh found that the distribution of time inputs and goods spending is skewed to the right and that there is great heterogeneity in time inputs (e.g., the time input quadruples between the 10th and 90th percentiles). He also found that the coefficients of variation of imputed net incomes and wage rates increased between 1985 and 2003, and that the greatest increase in inequality was associated with the husbands’ imputed earnings. This finding is in accord with the facts and enhances Hamermesh’s confidence in using the instrumental-variables approach.

The findings suggest that the demand for food increases with (imputed) net income and that food eaten outside the home is more income elastic than food consumed at home. Using various measures of goods expenditures, Hamermesh also found that the expenditure elasticity was lower in 2003 than in 1985. Goods spending in 1985 doubled (101 percent)

over the range of the distribution of (imputed) net incomes, while time expenditures rose only 10 percent. The comparable figures for 2003—72 percent and 40 percent—were substantially different, as goods and time expenditures rose less and more sharply, respectively.

The central conclusions reached by Hamermesh matched his expectations; e.g., households with higher full incomes produce this commodity (eating) more goods-intensively than households with lower time prices and incomes. This result suggests that it is relatively difficult for people to substitute goods for time in the production of eating.

Because eating is apparently full-income inelastic and the household production function for eating exhibits less substitution between goods and time relative to overall household production, goods expenditures on food are nonlinear to the prices of time. Hamermesh pointed out that his approach could be applied to other commodities that are produced at home in order to examine how production changes over time and with changing distributions of earnings and income.

Session 2. Determinants of Household Production II

The chair for this session was Senior Scholar EDWARD N. WOLFF, Levy Institute and New York University. The speakers were LYN CRAIG, Social Policy Research Centre, University of New South Wales, Australia; and CHARLENE KALENKOSKI, Ohio University. The discussant was JEAN KIMMEL, Western Michigan University.

Time-use studies show that parents in paid employment do not reduce their child care time on an hour-for-hour basis. CRAIG asked the question, “How do mothers who undertake paid labor or place their children in nonparental care manage to spend similar amounts of time in child care activities as nonemployed mothers?”

Craig’s review of associated research finds that the assumption that nonparental child care and maternal employment equate with a substantial loss of parental attention is inaccurate. The quality of parenting is the overriding factor in child outcomes, and mothers attempt to maintain a time commitment to both employment and family. Although working mothers’ time is more limited, it is spread among fewer children, and mothers appear to target a certain minimum amount of interaction time with their children. Therefore, the time spent in activities with children does not decline when mothers enter the labor force.

The study addresses two hypotheses: (1) employed mothers try to avoid time trade-offs between market work and child care by reducing (time squeeze) and rescheduling (time shift) other activities; and (2) parents use nonparental child care to make adjustments in other forms of time use and to shift the times when they are together with their children.

Craig used data from the 1997 Time Use Survey of the Australian Bureau of Statistics. The survey was a quarterly national probability sample of 4,059 households that used a two-day time diary method for all household residents 15 years or older. Activities were divided into nine broad categories and numerous subcategories, and recorded in terms of primary and secondary activities at 5-minute intervals. The sample for Craig’s study was restricted to families with parents between the ages of 25 and 54 and at least one child under the age of 5. A multivariate analysis was used to investigate the second hypothesis.

The results showed that mothers who work full-time have a higher participation rate than nonemployed mothers in “active child care” before 8:00 a.m. and after 8:30 p.m. (by 8–10 percentage points). Craig noted that time shifting may be more pronounced in families with older children. The study also found evidence of time squeezing, as employed mothers spend relatively less time in such activities as personal care, recreation, and sleep, and they catch up on domestic duties on the weekends.

The results support the author’s first hypothesis but were mixed on the second hypothesis. The use of nonparental child care does not help employed mothers find more time for other activities than employed mothers without child care. Fathers and nonemployed mothers who use nonparental care gain more flexibility than employed mothers in activities outside work and child care activities. Craig cautioned that some of her conclusions are limited by the small sample size of mothers who were employed full-time. She encouraged additional research using data from other countries to test and extend her investigation.

Based on a coauthored paper with David C. Ribar, George Washington University, and Leslie S. Stratton, Virginia Commonwealth University, KALENKOSKI presented the results of an investigation into parental child care in the United States and the United Kingdom. The analysis evaluated primary and secondary child care activities and market work based on time diaries used in the 2003 American Time Use Survey (ATUS)

and the 2000 United Kingdom Time Use Survey (UKTUS). Unlike most economic studies, the authors examined alternative child care activities according to family structure (i.e., among married, cohabiting, and single-parent families), the work week, and weekends.

Family structure (and gender) is presumed to affect caregiving through a number of mechanisms in the household production model. Changes in family structure affect resources, while family structure affects opportunities for specialization, levels of stability and stress, and the amount of conflict.

The ATUS consists of a time-use component, a household roster, and demographic information. The authors focused on time use reported by parents with coresident children under the age of 18. Their sample selection criteria reduced the sample to 6,864 caregivers living in separate households. The empirical analysis included key variables such as gender, living arrangements, number of adults and children in the household, day of the week, other standard demographic variables (e.g., race, age, and education of the caregiver), and geographic information.

In contrast to the ATUS, the UKTUS data included multiple diaries for household respondents as well as diaries for their partners, which allowed the authors to control for more intrahousehold factors. Using sample selection criteria similar to those applied to the ATUS, the U.K. sample was 2,715 adults living in 1,639 households. Kalenkoski noted that there were some differences between the national databases (e.g., the measure of child care time in the United Kingdom was restricted to children aged 14 and under compared to 18 and under in the United States).

Kalenkoski found different living arrangements between countries. In the U.K. sample, three times more parents were cohabiting (10–12 percent) than in the United States, and fewer parents were single. A comparison of time-use measures showed that gender differences across countries are similar and substantial (e.g., women spend twice as much time as men on primary child care on weekdays and half as much time as men on market work). While U.S. parents spend more time in primary child care, U.K. parents spend more time in passive child care on weekdays. There was no evidence that cohabiting and married parents allocate different amounts of time to child care.

Results from the correlated Tobit models of time use for the United States indicate that single fathers spend significantly more time in primary child care on weekdays, less time in market work, and substantially less time in passive child

care on weekends than their married or cohabiting counterparts. Child care among single mothers does not differ greatly from child care among married or cohabiting mothers, even though single mothers spend more time in market work. Another finding is that the number of children aged 11 and younger is a statistically and substantially important determinant of time use. Further findings are that other adults in the household act as substitute caregivers and that time spent by adults in primary child care and market work increases with higher educational levels (better job opportunities do not necessarily come at the expense of child care time). An unexpected finding is that summer has a negative effect on primary child care time on weekdays.

The results for the United Kingdom were similar to those for the United States with a few exceptions: single fathers spend more time in passive child care on weekdays, single mothers perform less market work than married mothers, a mother's passive child care time on weekdays is not significantly influenced by the presence of older children, and education does not appear to be an important determinant of child care time. Additional correlation terms in the British sample indicate that people who spend more time on a weekend activity will also spend more time on the same activity during the week. There is also a positive correlation between the time reports of men and women in the same household, which suggests that parents have similar preferences about how they spend their time.

Session 3. Labor Market Developments and Workers' Time Allocation Patterns

The chair for this session was Senior Scholar DIANE ELSON, Levy Institute and University of Essex, Great Britain. The speakers were JOACHIM MERZ, University of Lüneburg, Research Institute on Professions (Forschungsinstitut Freie Berufe [FFB]), Center for Research in Entrepreneurship, Professions and Small Business Economics (CREPS), and Institute for the Study of Labor (IZA); and IRINA SOBOLEVA, Laboratory for Human Development, Institute of Economics, Russian Academy of Sciences. The discussant was IRINA PALEY, U.S. Department of the Treasury.

MERZ noted the erosion of the "normal" working day as a result of alternative working arrangements (e.g., part-time work, self-employment, and increased flexibility of work times). His central objective was to identify the income/wage

consequences of working-hour arrangements with regard to the daily timing and fragmentation of work time. These arrangements resulted in different income and wage patterns because of premium wage rates for atypical working hours and fluctuating productivity levels.

Merz hypothesized that a reduction in time sovereignty results in higher premiums, while an increase in time sovereignty results in a better coordination of productive time; fragmented and atypical working patterns result in higher wages and income; and wage/income differences between atypical and typical working patterns for the self-employed are small.

Merz used the German Time Budget Survey (2001/02) to analyze working-hour arrangements and income inequality. The survey included 5,171 households and consisted of time diaries at 10-minute intervals for three consecutive days for persons 10 years of age and older. Core working time was between 7:00 a.m. and 5:00 p.m. Fragmentation of daily work—an episode—was deemed to occur if a break exceeded one hour.

Merz identified four working-time arrangement categories: mainly core, one episode (65.1 percent); mainly core, more than one episode (25.1 percent); mainly noncore, one episode (6.5 percent), and mainly noncore, more than one episode (3.3 percent). He found that mean wages, hours of work, and incomes were highest in the fragmented categories; the most equal distribution was in the mainly noncore, more-than-one-episode category; and the most unequal distribution occurred in the mainly noncore, one-episode category.

Employing an interdependent two-stage modeling strategy, Merz used a bivariate probit model with a Heckman-type common-treatment-effects approach (based on a new approach by Heckman and Vytlacil [2004]). He found that working-time arrangements, such as the flexibility and fragmentation of working hours, matter in terms of hours of work and income. Other variables, such as personal characteristics (e.g., occupation, education, and nonmarket time use), household characteristics (composition and wealth), the demand side (business sectors), and regional indicators, also matter in terms of the relationship between workers and the various working-time categories. Human capital returns were most significant in non-core working arrangements, while work experience returns were most significant in core working arrangements. Multiple jobs resulted in lower relative earnings in all working arrangements.

Merz's findings support targeted modern economic and social policy with regard to nontraditional labor markets. His

study contributes to economic well-being by adding insights into particular work effort characteristics and their income distributive effects. The timing and fragmentation of work time have distinct consequences on the level and distribution of earnings.

Using official statistical data from Russia supplemented by independent surveys, SOBOLEVA observed unfavorable structural changes and time-allocation patterns; a trend toward lower quality and lower-paying jobs (de-skilling), particularly for women; an increase in secondary employment and subsistence production combined with a loss of leisure time; and an increase in the paid and unpaid work burden for women. During the Soviet era, the structure of employment and work-time patterns were very rigid. During the process of economic liberalization in the 1990s, there was a pronounced shift in the structure and patterns.

Soboleva reviewed the surveys conducted by the Center for Labor Market Studies of the Institute of Economics, Russian Academy of Sciences (1999); the Population Security Survey (2002); and the annual Russian Labor Force Survey (since 1992). Although there has been a long-term shift in employment observed in developed market economies, the decline in industrial employment was due to a profound economic crisis accompanied by unfavorable changes within the economic sectors. The growth of employment in the tertiary sector was mainly due to a twofold expansion of trade and rapid growth of public administration. The structural changes within the service sector as a whole, however, were unfavorable for sustainable development and point toward lower-quality jobs. The share of mining increased while the shares related to engineering and light industries declined along with per capita basic food production and consumer goods.

The worsening employment structure was accompanied by a threefold reduction in average real wages and the emergence of the “working poor,” which included professionals in health and education (e.g., medical doctors). Women accounted for the main share of low-paid employment (e.g., public service sector, retail trade, and catering). Thirty-two percent of women received wages that were below the subsistence minimum despite the fact that women, on average, have more education than men and constitute the majority of employees in sectors such as health, science, and education. Soboleva also found that the scale of nonmarket agricultural activities had increased rapidly in spite of limited benefits relative to time and effort.

During the period of economic decline (1992–99), GDP fell by 28.9 percent, while employment declined by 11.8 percent as a result of involuntary work-time reduction. The adaptation of changes in labor demand was achieved mainly at the expense of women (the gender gap in work hours is 3–4 hours per week). The substantial drop in real wages during the period of reform, coupled with the reduction in state services, resulted in a large share of the Russian population looking for additional sources of income. Although real wages have risen since 1999, wages in 2003 represented only 65 percent of pre-reform levels.

People work substantially more hours than the official norm (i.e., 40 hours per week), and men work longer than women in paid employment. Including unpaid labor, women work more than men (single and divorced women work more than married women). An increase in the number of children in the household results in men working more hours in paid employment and women spending more time with housework.

Soboleva noted that the destruction of social infrastructure and higher prices for daily services have increased the household burden of women (e.g., as the average cost of preschool increased tenfold, households that could no longer afford kindergarten increased from 10 percent in 1990 to 58 percent in 1999). Prevailing cultures and traditions have also contributed to the more vulnerable position of women in the household and labor market, she said.

Session 4. Time Use, Macroeconomic Modeling, and Social Policy

The chair for this session was Research Scholar RANIA ANTONOPOULOS, Levy Institute and New York University. The speakers were ALFRED A. R. LATIGO, United Nations Economic Commission for Africa (ECA), Addis Ababa, Ethiopia; and JAMES MAHMUD RICE, Australian National University, Canberra. The discussant was Research Associate MARZIA FONTANA, University of Sussex, Great Britain.

Based on a coauthored paper with Omar Abdourahamani and Neijwa Mohammed, ECA, and Ismael Fofana, Bernard Decaluwe, and John Cockburn, University of Laval, Canada, LATIGO reviewed the current status of national time accounts (NTA) and national satellite accounts of household production (NSAHP) in Africa. He explained that time-use survey data and building gender-aware macroeconomic models using NTA and NSAHP are important because nonmarket work

constitutes half of the total economy. Latigo outlined the steps required to build an extended gender-aware social accounting matrix (SAM) that can be used as an input to economic and social development discussions and policy decisions.

Latigo noted that the ECA is introducing a new round of cost-effective, annual time-use surveys throughout Africa. The ECA will link the continuous household surveys to ongoing national income and expenditure surveys and labor force surveys in order to measure the gross household product (GHP), which is the equivalent of GDP in the national accounts. There are plans to establish a central operations center and processing facility.

Latigo noted that total work time is more stable than paid or unpaid work components through the business cycle. He also noted that GDP estimates would have to be reduced because the imputed value of owner-occupied housing is a nonmonetary estimate. He recommended that the development of NTA should be an interactive process among the model builders, policymakers, and official statistical offices. GHP is derived from NSAHP, which consists of regular household input/output tables that show the complex interdependence between household and market activities in a more realistic way. The sum of SNA and non-SNA production is termed “extended production,” or gross economic product (GEP).

Latigo outlined the steps that are required to create gender-aware models: (1) build a SAM that integrates traditional market activities, nonmarket production and consumption exclusive to households, and leisure time; (2) compute income and expenditure data, as well as male and female market work; (3) disaggregate the labor accounts in the SAM by gender, age, and skill; (4) generate NSAHP from time-use studies; (5) extend the gender-disaggregated SAM using the NSAHP; and (6) construct a gender-aware model based on the gender-aware SAM.

The ECA used a basic South African NSAHP to develop two types of models to evaluate the impact of policies on poverty reduction and to monitor implementation of the Millennium Development Goals. The gender-aware models showed that women’s contribution in nonmarket production was almost double that of men; that women have 30–50 percent less time for personal care and leisure; that household production constitutes about 44 percent of the total economy; that the elimination of import tariffs would reduce real wages for women by more than double that for men and would

reduce labor market participation by women; and that trade liberalization would increase time burdens for women. These results would go unnoticed if the SAM and model were not disaggregated by gender, stated Latigo.

The results of the South African example show that gender-based models of GEP can be used to guide policymakers in addressing issues related to nonmarket activities, such as improving time productivity so that women have better access to education, land, finance, information, and technology. This work creates opportunities to examine the effect of macroeconomic variables such as public expenditures, value added taxes, and sales taxes on income distribution and poverty reduction.

Based on a paper coauthored with Robert E. Goodin and Antti Parpo, Australian National University, Canberra, RICE compared the temporal welfare regimes in Australia, France, Germany, and Sweden. He noted that welfare derives from both monetary and temporal sources, so it should be based on information about income and time use using a temporal metric scale, which is more easily compared across time and space. He also noted that his study includes the concept of “discretionary time,” which is constructed on the basis of time-use surveys and is a function of how much time people *need* to spend in paid labor, unpaid household labor, and personal care, rather than the conventional time-use category of “free time,” which is a function of how much time people *actually* spend in activities.

Australia is a classically liberal welfare state, while France and Germany are corporatist, and Sweden is social-democratic. The liberal regime’s main mechanism for promoting welfare is the capitalist economic market (individualism lies at the core of its ideology). The corporatist regime is conservative and society is viewed as a cooperative venture that encourages the family and traditional gender roles. The social-democratic regime is highly egalitarian and characterized by class politics and socialist economics. All of these regimes strive to provide some kind of social safety net for especially disadvantaged people.

The authors used two multinational data sets: the Luxembourg Income Study and the Multinational Time Use Study (MTUS). The MTUS was the source of the basic parameters used in calculating discretionary time in unpaid household labor and personal care. The poverty line is defined as 50 percent of the median equivalent income across all people and calculated on the basis of household income net of welfare state taxes and transfers and imputed child care costs.

The authors calculated pre- and post-government discretionary time and found substantial differences among countries. Adults in Australia have the lowest levels of discretionary time, while adults in Sweden have the highest (the pre- and post-government differences were 11.63 and 12.92 hours per week). On average, the government’s effect in Australia, France, and Germany was a decrease in discretionary time, while the effect in Sweden was positive. There were, however, some consistent cross-national patterns: mothers in two-earner couples have the least amount of free time; nonearning men in childless one-earner couples have the greatest amount of free time; single mothers and mothers in one-earner couples have low levels of post-government discretionary time; and men in two-earner childless couples enjoy the highest levels of post-government discretionary time.

Other general patterns that emerged are that nonearning men and women in one-earner couples have more free time; men and women in households without children have more free and discretionary time; men and women in two-earner couples have more post-government discretionary time; and men have more post-government discretionary time than their female counterparts. Groups with comparatively small (great) amounts of free time are not necessarily the same as groups with relatively low (high) levels of post-government discretionary time.

The difference between pre- and post-government discretionary time indicates the impact of welfare-gender regimes on the temporal autonomy of citizens. The regime in Australia has marginal negative effects with the exception of single parents (discretionary time is increased by 6.09 and 4.63 hours per week for single mothers and fathers, respectively). In France households with children experience positive impacts but their counterparts do not. The German regime also supports families, but it is more selective than the French regime. The corporatist welfare-gender regimes of France and Germany are the only ones to affect the discretionary time enjoyed by stay-at-home mothers. The regime in Sweden is similar to that in France, but with some differences (e.g., the differences between two-earner couples with or without children are less subdued). Sweden is the only country that makes a positive impact on the discretionary time of parents in dual-earner households.

Most of the differences among countries come from divergent styles of macroeconomic management and the effect of various wage rates rather than on tax transfers and child care

arrangements. The results confirm the authors' expectations about the groups that are favored by various welfare-gender regimes.

Keynote Address: NANCY FOLBRE

Folbre, University of Massachusetts Amherst, reviewed some important insights of classical political economy and neoclassical economics in terms of valuing time. She concluded that we should always ask the question, "Which value and the value to whom?" Additionally, she said we must pay more attention to such time characteristics as the care of dependents, which is the most seriously undermeasured and undervalued category of time use.

Folbre noted that her introduction to time use came by way of domestic labor debates that revolved around the relationship between gender equality and class equality. Her article "Exploitation Comes Home" argues that a worker who is exploited by a capitalist will probably spread his or her exploitation to other household members. Therefore, it is important to value time and understand its distribution because time relates to a form of inequality within the global capitalist system. In the Marxist tradition, there is a resistance to treating household and market work in the same terms because the notion violates the boundary between use and exchange values. Folbre cautioned against applying a market metric to nonmarket work in a simplistic way and expressed concern about the abstraction of commodification. Preferences are endogenous and determined by social norms. She disagreed with the notion that time and money are perfect substitutes and recommended that we think about the range of substitutability and the limits of thresholds. She also noted that neoclassical theory has a better apparatus for understanding time allocation in terms of a utility optimization framework.

There is a lack of effort to value nonmarket time and to develop imputations (e.g., the Chicago school of neoclassical theory), and the reason is the logic of revealed preference, suggested Folbre. Although there is a kernel of truth in the logic, it is not very helpful in understanding such things as the high level of poverty among single mothers or why we adjust for family size when a couple can be viewed as just maximizing their utility. A number of neoclassical theorists, however, were willing to push beyond a simplistic version of revealed preference (e.g., macroeconomists such as Robert Eisner and John Kendrick).

Folbre noted that she learned a lot about the insights of neoclassical theory when she served on a National Academy of Sciences panel that discussed methods of valuing market work. Rather than simply evaluating the approaches to value non-market work, the report insisted on valuing the output of the health and education sectors of the market economy when considering household production. It is misleading to measure only input prices and not understand the outputs of sectors that are not bought and sold in the market (i.e., health and human capital are fundamentally nonmarket outputs). According to Folbre, the report did not pay enough attention to intellectual history or to differences between the classical and neoclassical economic traditions.

Four different approaches to valuation are often paired: replacement cost and opportunity cost; and output valuation and willingness to pay, which are broader approaches. Folbre believed that using a replacement-cost approach for housework and an opportunity-cost approach (the logic of revealed preference) for students represented a double standard. Legitimate ways to value time depend on purpose and context. Opportunity cost is relevant when an individual values his or her own time, while replacement cost is relevant when measuring the value of a particular time-use activity to society (and this approach should be used for national income accounting). The disjuncture between the approaches is that a lot of nonmarket work has no exchange value, and the approaches have a different conceptual logic.

Developing countries will not appear to be better off when using a broader household production approach because the overall value of the household production sector in such countries as the United States is very large (it has a more complicated production function). Folbre suggested that we reconsider some of the neoclassical tools, particularly those that are based on willingness to pay (e.g., the trade-offs between income and health), without obscuring the difference between willingness to pay and ability to pay.

Folbre recommended the book *Priceless* by Frank Ackerman and Lisa Heinzerling, a searing indictment of conventional methods of valuing human life. She suggested that we might need to use something that resembles a willingness-to-pay criterion, such as a social willingness-to-pay criterion. An example of a collective effort to determine a social willingness to pay was the debate in California about Rule 1403 on asbestos emissions. What is the level of risk that a community is willing

to tolerate in return for additional economic benefits of jobs and development?

Our measurement of care time is inaccurate because we fail to include secondary child care time. This failure has huge implications for valuation, as child care represents the largest industry in the world in terms of value of output. Care time should also be considered in light of its limited substitutability.

Folbre concluded that we cannot simply assign a value to labor inputs and add that value to GDP, nor can we simply use output valuation to derive an expanded gross economic product. We also have to think about how to measure the outputs of health and education, which are part of market and non-market work; are not adequately captured or respected by conventional national income accounts; and are increasingly important to our quality of life and economic system.

The most important thing we produce in our economic system is not what we consume, but ourselves. We need to understand the way we reproduce ourselves and we need to use metrics associated with both neoclassical and classical theory. It is a tribute to classical political economy to say that to value care we have to care about value.

Session 5. Measurement Issues in Time-Use Research

The chair for this session was Research Scholar HYUNSUB KUM, Levy Institute. The speakers were N. ANDERS KLEVMARKEN, Uppsala University, Sweden; and KIMBERLY FISHER, Institute for Social and Economic Research, University of Essex, Great Britain. The discussant was HARLEY FRAZIS, U.S. Bureau of Labor Statistics.

KLEVMARKEN presented a paper about the use of auxiliary data to compensate for the data limitations of time-use surveys. He stated that problems such as short data collection periods, underreporting, and inconsistent coding of activities are handled best by improving data collection procedures. He noted the inefficiency of estimating partial relationships compared to a complete model that allocates time among leisure, household work, and market work, because these activities are interdependent. He focused on the use of auxiliary methods to explain behavior and improve parameter estimates within time-use models.

Klevmarken outlined various approaches to incorporate auxiliary information and reduce the problems of zero observations and daily variations in time use. He noted that more sample days would reduce some problems, but at the expense

of higher nonresponse rates and increased field costs. It is possible to improve the accuracy of results by using simple calibration estimators, thus reducing the need for Tobit-type models.

A latent-variable-indicator approach, using quality information about specific activities in order to estimate separate measures of time use (e.g., a survey measure of normal weekly hours of market work and a time-use diary), will result in a gain in efficiency. Using a labor supply sample, Klevmarken found that it is impossible to estimate wage rate and income effects with any precision using time-use data. Combining the data with regular survey data, however, improves the estimations considerably. Most of the information about these effects comes from the survey data, so supplementing survey data with time-use data improves the precision of survey-based estimates only marginally.

Using a constrained estimation approach along with time-use diaries that are supplemented with questions about the normalcy of activities can optimize the relationships and improve the results. Atypical or heterogeneous behavior is captured if the survey includes relevant explanatory variables (e.g., age of children and overtime work). However, it is not possible to capture the multitude of reasons why people deviate from normal behavior. The degree of deviation from normal helps to distinguish between normal and abnormal observations and to weight the observations.

The 2002 Panel Study of Income Dynamics (PSID) Child Development Supplement (time-use diaries collected for children aged 5–18) includes a question, “How typical was the survey day?” Klevmarken analyzed a model of television viewing by children during typical and atypical days, using alternative weighting schemes. He found that many estimates change systematically as the weight of atypical days declines, so it matters how an analyst handles atypical days.

Klevmarken found that responses to the question indicated systematically deviant behavior, suggesting that atypical days do not contribute much information about typical behavior (and should be given little weight in the analysis). Excluding all atypical observations from the sample reduces the risk of bias but increases the uncertainty of estimates. He also found that simple model structures, such as Tobit models, lead to inconsistent and biased estimates of normal time-use behavior. He cautioned that analysts should choose a strategy that uses all of the information efficiently because the approach depends on the nature of the auxiliary data and the economic problem.

FISHER examined the dynamics of child care using the 2003 American Time Use Survey (ATUS) in combination with earlier surveys. She noted that the ATUS was the most important data set to date because of its sample size, longitudinal component, and innovative approach regarding care (i.e., an “in your care” question). She also noted that her sample was restricted to persons who recorded child care time during a diary day. Her objective was to determine the influence of the ATUS question on the total time spent in child care.

Fisher estimated the effect of the ATUS question on earlier surveys that used the concept of the “presence of others” during an activity. She compared data from time-use surveys on what people were doing when child care was itemized as a secondary activity and whether there was any impact on specific components of child care. She found that surveys in which child care could be shown as a secondary activity resulted in a doubling of the amount of child care time (from one hour and 26–50 minutes to three hours and 20 minutes), so secondary activity matters a great deal. The ATUS “in your care” question resulted in a further doubling of primary and secondary child care (to 7 hours and 18 minutes).

The ATUS child care data were also analyzed in terms of “Who else is present?” and “Is the child actually present?” Fisher found that a high proportion of people were engaged in child care when the child was not physically present (e.g., driving back from school), that people spent time with children without doing child care (e.g., leisure activities), and that people without children participated in child care. “Children in your care” and “present at the same time” do not necessarily overlap. The four main activities associated with secondary child care include meals (at home), food preparation, watching television, and travel related to consumption.

Fisher wondered about overlooking some child care time because the secondary care question related only to children under the age of 13, and because the diary surveys omitted the recipient of child care. Two data sets included information about children aged 13–17: the 1975–76 Inter-university Consortium for Political and Social Research longitudinal study and the ATUS survey. In the 1975–76 survey, child care related to the teenage group was one hour as a main activity and three hours as a main and secondary activity. In the ATUS, time use also increased when child care as a secondary activity was added to child care as a main activity (from one hour and 10 minutes to one hour and 50 minutes). The increase in time

use suggests that the “in your care” variable, which is restricted to children under the age of 13, may understate child care time. Fisher noted that this variable could be used to identify other underreported care activities, such as the care of older persons and children with disabilities.

Another objective was to find out if the “in your care” category (as an alternative to secondary activity) affects our ability to analyze the subcomponents of child care. Fisher found that the number of episodes in 10 subcomponents remained the same across surveys with the exception of a huge decline in the number of episodes and time related to social and reading time with children. She observed that there were differences in recording these activities among the surveys. Reading with children represented only 20 percent of time as a main activity but over 50 percent as a secondary activity. She noted that her analysis of subcomponents would improve if there were both secondary and “in your care” categories. She also noted that she is continuing her work on ways to handle the social and reading time subcomponents and to show gender differences in child care.

Session 6. Household Production and Economic Inequality

The chair for this session was Resident Research Associate W. RAY TOWLE, Levy Institute. The speakers were Research Scholar AJIT ZACHARIAS, Levy Institute; and JAY STEWART, U.S. Bureau of Labor Statistics. The discussant was FRANK STAFFORD, University of Michigan.

ZACHARIAS analyzed aspects of household production in the United States in 1989 and 2000. He noted that paid labor and household labor are integral components of the social labor process that provides the material basis for economic well-being. He also noted that the employment-to-population ratio for men remained in the range of 70–72 percent, while the ratio for women increased from 54.3 to 57.5 percent during the 1989–2000 period.

Zacharias combined information from time-use and income-employment surveys using a new method of valuation. He observed that the contribution of household labor in monetary terms must be imputed in order to examine the relationship between household labor and economic well-being. He also combined the imputed value of household labor with labor income and money income to develop measures of “augmented labor income” (ALI) and “augmented money income” (AMI). He used these measures to address issues such as the

gender division of total social labor, labor income inequalities, and intrahousehold disparities in labor.

The study used the public-use data files developed by the U.S. Bureau of the Census for the Current Population Survey's Annual Demographic Supplement (ADS) and statistically matched household production data from the Americans' Use of Time Project (AUTP) (1985) and the Family Interaction, Social Capital, and Trends in Time-Use Study (FISCT) (1998–99). Household labor included three broad categories: core production (e.g., cooking and cleaning); procurement (e.g., grocery shopping); and care (e.g., reading to a child). Such items as personal care, leisure, and education were excluded. Household labor was valued using an input-cost approach, multiplying the quantities of inputs in each household labor process by corresponding prices (i.e., a replacement-cost method using generalist wages).

Zacharias found that the total annual hours of labor (paid and household work) per working person increased by 5.1 percent (131 hours) between 1989 and 2000. Total annual hours of paid work rose 6 percent (174 hours), lending support to the notion that Americans are “overworked.” In absolute terms the increase in men's total hours was twice the increase in women's total hours as a result of an increase in household labor (mainly child care). Although there was a decline in gender disparity in both paid and household work, the separation between men and women in terms of spheres of labor—the household for women and the workplace for men—remains a dominant feature in the United States.

Although there was near parity in total labor between men and women in 2000, disparity persisted according to ALI. In terms of the distribution of total labor hours and ALI, women are overrepresented among the hardest workers and men are overrepresented among those receiving the highest rewards from work. The higher earnings inequality in 2000 relative to 1989 was mainly a result of the rapid growth in inequality among men.

Zacharias found significant differences in paid labor among men and women according to household types. Disparities in total labor were highest in single female-headed households with children. Gender disparity in total labor diminished among all household types between 1989 and 2000. For married couples with children, women worked 2 percent more than men in 1989 but 6 percent less by 2000. The progress in economic well-being, however, is much lower

when you take into account the increase in total labor performed by household members. While money income for single female-headed families was 22 percent higher in 2000 than in 1989 (according to AMI), the increase was a mere 2 percent on an hourly basis.

Zacharias constructed an intrahousehold index (i.e., the difference between women and men's annual hours of labor—household or paid—divided by the household-level sum of total labor). He found that the values of the index and the mean values by household type both indicate that work and household labor maintain gender divisions. He also found that household production contributes substantially to household well-being (25 percent of AMI in 2000). He cautioned that his estimates were based on synthetic data sets, and wondered how the trends that he documented may have been reversed as a consequence of a less robust labor market since 2001.

Based on a coauthored paper with Harley Frazis, STEWART outlined how he used the 2003 American Time Use Survey (ATUS) to construct measures of earnings inequality that include household production. Most measures of economic welfare are incomplete because they focus on money income, and most time-use surveys present an incomplete picture of household production because they lack income data. Matching data sets of imputed values of household production and income data was not an option because income could not be used as a covariate in the imputation process.

Household production models expect a negative correlation between money income and time spent in household production. This expectation implies that extended income is more equally distributed than money income, and studies have supported this theory. Stewart noted that his paper makes two main contributions to the literature: (1) that it is possible to include earnings as a covariate in the imputation process using the ATUS, which results in better imputations of the value of household production; and (2) sensitivity analyses can be used to determine the significance of the imputation process.

The ATUS is a stratified random sample drawn from households that have participated in the Current Population Survey (CPS) and is representative of the U.S. civilian population. Although the ATUS contains labor force information that is comparable to that in the CPS, a drawback of the sample is that there is only one interview per household and one diary per person.

Stewart and Frazis matched the ATUS data to the March supplement of the CPS to obtain data on unearned income and used Bonke's (1992) regression method to predict household production. Separate regressions were performed according to marital status, sex, and two alternative definitions of nonmarket work (child care as a primary or secondary activity). The replacement-cost approach (specialist and generalist wages) was used to value household production. Because households are different sizes, extended income measures were adjusted using alternative equivalence scales.

The authors found that household production is a substantial fraction of household money earnings according to all definitions of household production (30–46 percent) or combinations of labor earnings and household production (23–32 percent). The shift from money income to extended income substantially reduces measured inequality. The inclusion of secondary child care and, to a lesser extent, the use of specialist rather than generalist wages to value household production tend to reduce measured inequality (due to greater mean levels of household production).

Session 7. Well-Being and Deprivation: Subjective and Objective Measures Utilizing Time-Use Data

The chair for this session was Resident Research Associate GREG HANNSGEN, Levy Institute. The speakers were JENS BONKE, The Danish National Institute of Social Research, Copenhagen; and Research Associate INDIRA HIRWAY, Centre for Development Alternatives, Ahmedabad, India. The discussant was LARS OSBERG, Dalhousie University, Halifax, Canada.

Based on a coauthored paper with Mette Deding and Mette Lausten, BONKE presented a study of the determination of economic and leisure satisfaction based on the 2001 Danish Time Use Survey. He noted a lack of similar studies and the small correlation between income and happiness in most empirical research.

The objective of the paper was to test the empirical importance of several hypotheses for a sample of individuals (1,614 people aged 16–74) living in couples: satisfaction with money depends on the amount of money (i.e., the quantity), whereas satisfaction with leisure depends on the quantity and quality of leisure (i.e., the goods and social intensiveness of leisure time). The authors also studied the effect of intra-household allocation of resources (e.g., income sharing between spouses), consequences of aspiration levels as specified through

peer groups, and intraindividual effects (e.g., changes in income over time).

The authors used an ordered probit model that took different forms for economic and leisure satisfaction. The dependent variables were the domain satisfactions measured on an ordinal scale. The basic income concept was annual household gross income, and leisure (including sleep) was calculated using information on working hours and housework. A proxy of the goods intensiveness was income/consumption and durable variables, and social intensiveness was based on variables about the ways leisure is spent with other people. The peer groups were defined by gender, employment status, age, and urbanization.

The authors found that men and women are equally satisfied on average, but with some differences in the distributions (e.g., more women than men are fully satisfied with income or leisure). The domain satisfactions are positively correlated, indicating that some individuals are more satisfied than others. The correlation between the satisfactions and domains, as well as between satisfactions, are stronger for women than men.

The authors analyzed the effect of their hypotheses on the satisfactions with money and time. As expected, economic satisfaction increases with income, but the intrahousehold effects differ between the sexes. In terms of all factors, women are more economically satisfied than men, and this finding corresponds with the results of other studies.

As expected, more leisure time is associated with a higher level of satisfaction, and the marginal satisfaction of more leisure decreases after reaching a maximum of 12 hours and 45 minutes per day for men and 18 hours and 8 minutes for women. The authors suggest that the difference may be that women place more value on daily leisure, while men place more value on annual holidays. In terms of social intensiveness, the significant effects relate to women. In terms of intrahousehold effects, relative leisure time between spouses significantly impacts men's satisfaction, while relatively lower education reduces satisfaction for both men and women.

Contrary to the authors' findings on economic satisfaction, women are less satisfied with their leisure time than men. Other findings show that higher education for men reduces leisure satisfaction, poor health negatively affects women, and age has no effect.

The authors find that the domains—time and money—are complementary, as well as substitutable, which is paradoxical.

cal. Leisure satisfaction depends on the kind and availability of leisure. Income affects economic satisfaction directly and leisure satisfaction indirectly by improving the possibilities of leisure consumption.

The overall conclusions confirm the authors' hypotheses: the domains are positively related to the satisfactions of both men and women, whereas the intrahousehold, intergroup, and intraindividual effects vary by gender because of differences in what matters to men and women (e.g., goods intensiveness is more important for men, while social intensiveness is more important for women). The authors found that the intrahousehold allocation of resources is more important for economic and leisure satisfactions than the intergroup or intraindividual effects.

HIRWAY examined the time-use patterns of the poor and nonpoor in India using the 1998–99 time-use survey of six states in different regions of the country. The quarterly survey was based on a stratified random sample from which Hirway selected 18,628 households. She noted that conventional employment surveys do not capture the total workforce because informal work is underreported.

Time-use data improve information on economic participation of the poor and nonpoor, as well as time spent on such activities as child care, voluntary work, personal care, and other household activities. Hirway found that both poor and nonpoor households spend considerable time on economic (SNA) and extended economic (ESNA) work, but the poor spend more total time than the nonpoor (less time on SNA but more time on ESNA). Men spend more time on SNA and less time on ESNA than women. Poor women work significantly more hours than nonpoor women, while women invariably spend more time on total work than men. The major difference between the work patterns of poor and nonpoor households is that the poor are overburdened by work, particularly ESNA work, observed Hirway.

Hirway found that the poor are tied to primary and tertiary sector employment (e.g., agriculture, and petty trade and services), lack economic diversification, and are vulnerable to natural resource depletion and natural calamities. Many economic activities are stressful and have low productivity and low income (e.g., water and fuel collection). Poor households (mainly women and children) spend 10–20 percent of their time collecting free goods from community-owned common property resources. The poor (and nonpoor) are forced to spend con-

siderable time acquiring basic needs rather than undertaking productive work or attending school. This information is not captured by the census or other surveys, said Hirway.

The major household characteristics that affect economic participation are occupation, income, land holdings, social group, and education. A multivariate analysis showed that income is the most important characteristic forcing households to participate in the free collection of goods or animal husbandry, followed by social group (caste). Although there is only a marginal difference in the educational participation rate between poor and nonpoor households, there is a significant difference between the ultrapoor and rich.

Poverty is reflected in the poor's participation in SNA, ESNA, and personal activities. It is not easy for the poor to diversify their sources of income or to develop social capital, said Hirway. Moreover, women suffer more than men from deprivation and time stress, and have limited prospects for exiting poverty because they are predominantly engaged in ESNA activities such as the collection of free goods.

Based on her analysis of time-use data, Hirway outlined several indicators of poverty: the burden of total and ESNA work, the percentage of time spent collecting free goods, the time spent on rest and relaxation, and measures of gender inequality. She noted that leisure time could be considered an indicator of well-being in developing countries (e.g., people "do nothing" because no work is available). She also noted that the standard poverty line is not an adequate measure of poverty. The indicators show that poverty reduction is related to the provision of basic infrastructure, technological innovations, child care facilities, and employment diversification, and that these provisions have important implications for fiscal and environmental policy.

Session 8. International Comparisons of Time Allocation

The chair for this session was Research Scholar AJIT ZACHARIAS, Levy Institute. The speakers were RONALD SCHETTKAT, Bergische Universität Wuppertal, Germany; and ELSA FONTAINHA, ISEG–Technical University of Lisbon, Portugal. The discussant was YOUNGHWAN SONG, Union College.

Based on a coauthored paper with Richard B. Freeman, Harvard University and NBER, SCHETTKAT spoke on the substantial gap in market work hours between the United States and European countries. He noted that U.S. per capita income and productivity were superior in the 1970s, but that

the advanced European economies had caught up with U.S. productivity levels by the end of the 20th century. Higher U.S. per capita income today, therefore, is a result of an increase in the employment-to-population rate and a rise in working hours per household head (230 hours). In Germany (taken as a proxy for continental Europe) the employment rate increased slightly and working hours declined by more than 300 hours per head. The result is that Americans now work almost 350 hours more per year than Germans. Schettkat did not adhere to previous explanations of these opposing trends, such as differences in tax rates and in preferences for leisure.

The marketization hypothesis suggests that household production hours decline as market hours expand (outsourcing household activities to the market is a characteristic of economic development). Schettkat noted that the DEMPATEM study (a major international research project that included six countries) shows that household income is the major determinant for spending. He also noted that labor supply studies and his own investigations show that men's time allocation is not affected by demographics. His focus, therefore, is the time allocation of mothers with young children, a group that has changed its labor market participation rate dramatically over the last decades. Since the 2003 ATUS data indicates that U.S. household production hours are substantially higher than in previous surveys, Schettkat also investigated whether the marketization hypothesis still held given the new data.

Schettkat's review of countries with at least two time-use surveys suggested that there is a negative association between changes in market work and changes in household production. In general, when women increased their market time, they reduced their household production time. In spite of the substantial decline in household production that is indicated in the ATUS, the relationship between market and household work remained. The data also showed that the increase in market work was achieved partly by a reduction in leisure or personal time. A comparison of the 1992 and 2003 U.S. time-use studies showed that most of the difference in household production related to child care and that the ATUS overestimated this activity.

The 1992 time-use surveys for the United States and Germany show a stark contrast in the time allocation of women. Total working hours are similar but the allocation between categories differs dramatically. Women in Germany spent approximately one-third of their time in market work and two-thirds in

household work, while women in the United States spent approximately one-half of their time in each category (the differences were greater for women with a child below the age of 5, as German mothers with young children have a particularly low labor force participation rate). Schettkat noted that American mothers with young children increased their labor force participation rate from 36 percent in 1975 to 65 percent in 2003, while German mothers maintained a rate of 27 percent and participated more in part-time employment. He also noted a strong intertemporal substitution of market and household activities among working mothers, particularly in the United States.

Schettkat observed that U.S. companies combine a wider range of skills in their production processes than German companies, while German companies have a more homogeneous skill structure. He also observed different gross wage costs in identical industries located in both countries (e.g., costs are higher in Germany as a result of universal Social Security). He further observed that the share of U.S. women in wage groups above the mean increased from 19 to 40 percent between 1970 and the mid-1990s, while the share of German women remained at only 5 percent (which is partially explained by the higher share of U.S. women with tertiary education). Schettkat concluded that these differences contributed to transatlantic differences in market work.

FONTAINHA conducted an international comparison of time allocation and well-being among the elderly, including those in transition from employee to retiree. She was motivated by population aging and the current debate in the United States and Europe about raising the retirement age in the context of Social Security sustainability. She noted that there were aspects of well-being apart from economic well-being, such as self-perceptions of well-being and satisfaction. It is possible to use time-use surveys to measure well-being as a result of time allocation data, such as leisure and social time, and questions that begin "With whom . . ."

The data sources that were used for the international comparison include the Harmonised European Time Use Survey (HETUS); the Multinational Time Use Study (MTUS); the European Community Household Panel (ECHP); and the Survey of Health, Aging, and Retirement in Europe (SHARE). Fontainha's empirical strategy focused on time allocation changes and comparisons of independent groups in the same age interval both within and outside the labor market. She noted that the data sources did not include the elderly living in

institutions, that retirement definitions and upper age limits vary across countries, and that panel data are essential.

Fontainha compared the 65+ and 45–64 age groups in various countries. As expected, the main activities that increased after retirement were leisure, personal care, and domestic work. In terms of satisfaction and socialization, health satisfaction and child care time declined while time spent in social relations increased. Using data in the MTUS, which includes the United States, total leisure time increased by approximately 25 percent and personal care increased by one hour per day. The income replacement ratio was about 75 percent.

Despite the diversity of models for Social Security and differences in retirement characteristics, the elderly population displays similar time use patterns in all countries. National institutions and cultural heritage seem to influence employed individuals more than retirees. In terms of time allocation of the elderly, formal studies and intergenerational support care appear to be missing.

Fontainha recommended further study of the elderly, since they are a growing proportion of the population. She also recommended the inclusion of subjective questions associated with the activities listed in time-use surveys in order to account for perceptions of well-being. Another recommendation was to conduct probability studies that delimited the propensity of retirees to be in the upper quartile of leisure or the bottom quartile of domestic work in light of such variables as age, education, income, family type, and gender.

Program: Gender Equality and the Economy

Global Conference on “Unpaid Work and the Economy: Gender, Poverty, and the Millennium Development Goals”

The conference was organized by the Bureau for Development Policy within the United Nations Development Programme (UNDP) in partnership with the Levy Institute. The purpose was to share experiences and methodologies from around the world on women’s unpaid work in the context of achieving the Millennium Development Goals (MDGs).

During the last decade, time allocated to unpaid work has received increased attention as several countries collected time-use data and developed satellite accounts. Despite such efforts, nonmarket activities have not been taken sufficiently into account in the formulation of public policies and pro-poor alternative macroeconomic strategies. In most developing countries, efforts to reduce poverty and reach the MDGs provide a timely opportunity to draw attention to the contribution of unpaid work to economic and social development. The search for new methodologies to cost the MDGs and policy alternatives that are pro-poor creates an opening for serious dialogue on the significance of unpaid work, including unpaid care work.

The conference was held October 1–3, 2005 at the Levy Institute, located at Bard College, Annandale-on-Hudson, New York. Participants discussed the growing body of research on unpaid work and its application to pro-poor economics, and tested tools such as time-use surveys and economic models that include unpaid work and their use in policy analysis. Summaries of the sessions and speakers’ remarks are given below.

Welcome and Introductory Remarks

ASTER ZAOUDE of the Bureau for Development Policy, United Nations Development Programme, outlined the reasons for convening the conference. In order to achieve the MDGs, it is vital to bring to bear a gender perspective on economic policy. Such a perspective recognizes not only paid work, but also unpaid work. She also noted that the integration of the gender perspective into economic analysis and policy is difficult using existing frameworks.

Zaoude further noted her frustration regarding the costing of the MDGs, which includes a long list of women’s needs and concerns but neglects the gender transformation of overall policy. As an example of the costs of this neglect, she cited a report on southern Africa by Stephen Lewis, Special Advisor to the UN Secretary General on HIV/AIDS, which showed the shift of costs from public services to women who cared for HIV/AIDS patients in their families and communities. We need to bring women’s unpaid work to the attention of policymakers, she said. It is important to make consideration of the burdens of unpaid work a part of public expenditure policies and policies for transport and employment.

Zaoude called for policymakers to recognize and use the body of knowledge on time use and unpaid work that exists. She encouraged the participants to share their time-use surveys

and methodologies, and most importantly, to strategize on how to influence policies. The recognition of the links among unpaid work, gender, and poverty is extremely important for the UNDP, she said, since its business is to help the millions of people—more than half of the world’s population—that live in poverty.

Senior Scholar **DIANE ELSON** of the Levy Institute explained that the conference was part of the Institute’s new program on gender equality and the economy. One purpose of the program is to develop a dialogue between researchers and policy analysts. Time use and unpaid work are important dimensions of this program, together with gender and public finance, macroeconomic policy, and international trade.

Elson explained that the conference was designed to promote discussion between three groups: experts in the collection of time-use data, researchers who utilize time-use data to investigate unpaid work, and policy analysts and advisors in international development organizations. She suggested that a key challenge before the conference was to identify ways of enabling time-use data to “speak” more effectively in the policy process. It is vital to ensure that the time-use data being produced by national statistical offices do not just stay in their databases but are used to show the extent of unpaid work and time poverty and to inform policies on gender, poverty, and development.

Session 1. Why Is Unpaid Work Important for Development Policy?

The chair for this session was **ASTER ZAOUDE**, Bureau for Development Policy, UNDP. The speakers were Research Associate **INDIRA HIRWAY**, Centre for Development Alternatives, Ahmedabad, India; **ALFRED A. R. LATIGO**, United Nations Economic Commission for Africa (ECA), Addis Ababa, Ethiopia; and **REBECA GRYNSPAN**, Economic Commission for Latin America and the Caribbean (ECLAC), Mexico City. The discussant was **CECILIA VALDIVIESO**, UNDP Regional Centre, Colombo, Sri Lanka.

HIRWAY’S presentation focused on integrating unpaid work into development policy. She divided unpaid work into two parts: (1) the unpaid work that is included in the United Nations System of National Accounts (SNA), which is within the production boundary, as defined by the SNA, and (2) the unpaid work that falls outside the SNA production boundary (which divides economic work from noneconomic work) but

within the general production boundary dividing work from nonwork activities. She argued that this type of unpaid work could be considered as within an Extended System of National Accounts (ESNA).

Hirway noted that the first category of unpaid work includes household production of goods for self-consumption and owner-occupied dwelling services, and was included in the SNA production boundary in 1993. It should be counted as part of GDP, alongside paid work. The inclusion of this unpaid work in the SNA leads to better estimation of macroeconomic aggregates, such as the workforce and total GDP, and this leads to a better understanding of the macro economy and better policies related to employment and the labor market.

The ESNA unpaid work includes providing services to other household members and voluntary work. This unpaid work is currently excluded from the measurement of the national economy on the grounds that it has limited repercussions for the rest of the economy, cannot easily be given a monetary value, and would undermine the usefulness of aggregates like GDP if included. Hirway questioned the validity of these arguments and stated that defining the scope of the SNA was an ongoing process.

SNA and ESNA activities are interlinked, and macro policies do not impact equally on them. Responsibility for ESNA work constrains the extent of women’s labor market participation. It is important to expand the paradigm of national statistical systems to include ESNA activities in order to have a comprehensive view of the economy and include the full extent of unpaid work in policymaking and policy monitoring, she said. Time-use studies enable statisticians to measure both paid and unpaid work.

Hirway noted that there are hierarchies of paid and unpaid work, with unpaid work lacking not only pay, but also constraining opportunities for upward mobility, access to retirement pensions, and social protection. Unpaid work is unequally distributed between women and men, between poor and non-poor people, and between regions. Policymakers should ensure that those who perform a large amount of unpaid work are not disadvantaged because of this.

Hirway was concerned about the impact of economic reforms on vulnerable groups in developing countries. A major limitation of previous studies was the failure to account for the impact of reforms on unpaid work. One example of misjudgment is fiscal policy, which reduces fiscal deficits to meet

targets but increases ESNA unpaid work related to health, education, and social welfare as public services are cut. These issues are neglected because no data is collected on unpaid ESNA work. Economic adjustment policies increase women's burden of unpaid work as well as their paid work in economic activities. Three approaches that promote gender equality in the labor market are family-friendly work policies, financial compensation for child care, and policies that promote women's skills and productivity.

Children, as well as women, do a large amount of unpaid work. Time-use data on children in India have helped our understanding of the child labor problem by showing that children are engaged in unpaid household work and that this may be a factor responsible for their absence from school.

Addressing unpaid work can help policymakers understand intrahousehold inequalities and formulate policies to break the vicious cycle of unpaid work and poverty. Analysis of Indian time-use data shows that poor people depend extensively on unpaid work, both unpaid SNA work and unpaid ESNA work. Because of this, they have less time for skill formation and cannot participate in the labor market on an equal basis with those who are not poor. Unpaid work has cycles just like paid work, but these cycles are the reverse of business cycles. So anticyclical policy needs to take this into account and protect people against excessive burdens of unpaid work in the downswing of the business cycle. Time-use data helps to establish that people engaged exclusively in unpaid work have a claim on national resources, so there should be budget allocation to improve the well-being of unpaid workers, including expenditure on social protection (e.g., retirement benefits to housewives); investment to reduce the drudgery of long hours spent collecting fuel, water and fodder; and support for the care of children, sick people, and the elderly.

It is vital to give visibility to unpaid work by conducting periodic time-use surveys and using the data in national policy formulation. Although a growing number of countries collect time-use data, many do not use the data when formulating policy. There is a need to continue to develop standardized concepts, methods, and analysis, including the classification of time-use activities. Organizations such as the International Labour Organization (ILO), United Nations Statistical Division (UNSD), and UNDP can take the lead in developing training materials and organizing capacity building programs. Hirway concluded that although a beginning has been made

in including unpaid work in economic analysis, there is still a long way to go to secure its full integration.

Based on a coauthored paper with Mohammed Neijwa, LATIGO argued that time-use data has important implications for policy in terms of reforming statistical systems, promoting gender equality, enhancing women's employment and income, reducing gender bias in macroeconomic policies, and monitoring the impact of policies on household production and poverty. Latigo encouraged African development stakeholders to change their thinking about what constitutes "work" and "economic activity." He also recommended that governments introduce time-use studies as part of normal official data collection and harmonize labor-force and time-use surveys.

Women enter the labor force with a huge burden of unpaid work, so policies should be introduced that provide time- and labor-saving technologies, skills upgrading, and gender-sensitive infrastructure investments. Latigo warned that unpaid work of care providers could intensify as a result of government cutbacks in education, health, and social services, so there should be gender-responsive budgeting initiatives. Policy analysis and the design of poverty-reduction strategies often fail to recognize the distinct circumstances of men and women.

Latigo described a new round of harmonized annual time-use surveys to be introduced in Africa, and the application of these surveys in national time accounts and national satellite accounts of household production. The ultimate objective is to integrate gender perspectives and household production in national accounts, budgets, and policies, using gender-aware microsimulation and macroeconomic models.

Latigo noted that regular time-use studies enhance estimates of the size of the labor force and make possible estimates of the extent of unpaid work. However, the lack of time-use surveys is a significant data gap in statistical systems. To date, only six African countries have conducted time-use surveys, but they have not conducted them on a regular, ongoing basis. The author reviewed the results of time-use surveys in Benin, Madagascar, Morocco, and South Africa. Taking account of unpaid work as well as paid work, they found that women work more than men in terms of total production. These results led to upward revisions in the estimates of participation rates of women in paid work and women's share in the labor market, as well as an appreciation of the extent of their unpaid work. Latigo noted, however, that women lack

equal access (compared to men) to time, health, education, finance, and other resources. He noted that in countries for which estimates exist, the value of unpaid household work as a proportion of GDP varies between 33 and 55 percent.

The new round of time-use surveys introduced by the ECA in six African countries recognizes the importance of unpaid work and uses a representative sample of up to 5,000 households. Cooperation among African statistical offices will allow economies of scale regarding coding, editing, tabulating, publishing, and preparing unit record files for research. The ECA has also produced a new Africa-specific guidebook on mainstreaming gender perspective in national accounts and budget policies, with an emphasis on unpaid household production.

Latigo explained that the time-use data would be used to derive a measure of gross household production (GHP) to set alongside the conventional measure of GDP. The goal is to create a common framework for market and household economies, and to measure the contribution of unpaid household production in the national economy.

The creation of national satellite accounts of household production in turn makes possible the building of gender-aware models of a national economy. This enables governments to assess the comparative impact of their policies on women and men, taking account of both paid and unpaid work. The ECA is assisting governments to evaluate the impact of policies, using such models. This analysis has shown that the elimination of import tariffs in South Africa would reduce real wages for women by more than double that for men. It would also reduce labor market participation for women while increasing participation for men.

GRYNSPAN focused on the relevance of unpaid domestic work to economic and social policies. She noted that the economy is more than just the market, as households produce and distribute goods and services, and supply labor. The preferences of any society about what goods and services to produce imply an underlying distribution of paid and unpaid work. In the course of development, there is a decrease in the amount of unpaid work and an increase in the amount of paid work that people do.

Grynsan observed that poverty in middle-income countries in Latin America (such as Costa Rica, Panama, and Argentina) is increasing in households headed by women and that it would be 10 points higher without the contribution of women's income from paid work. She noted that men's partic-

ipation in the labor market in Latin America is falling, while women's participation is rising.

Grynsan discussed the factors that determine the amount of unpaid work that is undertaken and how that work is combined with paid work. She differentiated between individual and collective strategies. Individuals make decisions on participation in the labor market depending on factors such as the extent of their unpaid work, the structure of wages and employment, the distribution of resources within families, and the public policy on social protection and provision of public services. This tends to result in women being segregated into the informal sector of the labor market and the persistence of a gender wage gap, despite an increase in women's education. Indeed, in Latin America the gender wage gap is higher for women who are educated than for those who have very little education. Individual women struggle to reconcile the competing demands of paid and unpaid work using a variety of strategies, including reducing their goals for achievement in the workplace and for achievement as parents.

But the context for individual strategies can be improved by collective strategies that increase the provision of public services and social protections for people who undertake unpaid work. Policies that promote a better reconciliation of paid work and unpaid work depend on changes in social preferences, as articulated in political decision making.

Unfortunately, women are not well represented in the processes through which collective preferences are articulated. The only countries in Latin America that have been able to sustain political representation of women in parliament and the senate are countries that have pursued affirmative action. A lasting and egalitarian reconciliation of participation in the labor market and contribution to family life depends upon the construction of a new form of welfare state that builds gender equality into its architecture. This would support both autonomy for women and the participation of men in unpaid work, as well as provide more extensive public services.

Session 2. Unpaid Work, the Care Economy, and the MDGs

The chair for this session was MEENA ACHARYA, Tanka Prasad Acharya Memorial Foundation. The speakers were Senior Scholar DIANE ELSON, Levy Institute and University of Essex, Great Britain; and Senior Scholar CAREN A. GROWN, Levy Institute. The discussant was RATHIN ROY, Bureau for Development Policy, UNDP.

ELSON'S presentation focused on unpaid work within the context of the MDGs and on analytical strategies to produce a more holistic understanding of poverty, inequality, and capital accumulation. She noted that the MDGs themselves mention neither paid nor unpaid work, though there are numerous references to both in several of the Millennium Project Task Force Reports. In addition, the report by Jeffrey Sachs, Director of the Millennium Project, does not address work in its vision of how the MDGs can be achieved. She clarified that the unpaid work included in the production boundary of the SNA should be counted in the GNP, and that remaining unpaid work, which falls within the general production boundary, should be included in a satellite account. Examples of the first type of unpaid work (SNA unpaid work) are unpaid work in family farms and enterprises to produce goods that are marketed; and unpaid work to produce goods for household consumption, including food, fuel, and water. Examples of the second type of unpaid work (called ESNA unpaid work by some analysts and non-SNA unpaid work by others) are services to other household members and to community members. These include housework services such as laundry, cleaning, and meal preparation; and also provision of care for children, the sick, and the elderly. With the exception of unpaid work in family farms and enterprises to produce marketed goods, unpaid work is nonmarket work.

Elson noted that the division of labor between paid and unpaid work and among varieties of unpaid work was organized by gender, and that people engaged primarily in unpaid work are at a disadvantage in a monetized world. The poor, in particular, are not free to choose their workload; and they are constrained by institutional regulations, social norms, and the necessity to cover basic consumption needs for both market and nonmarket products.

Elson described the links between capital accumulation, economic growth, and the MDGs in the vision of MDG achievement put forward in the Sachs report. This vision focuses on outputs, but not on the work that is done to produce outputs.

Since a full accounting of unpaid work would show higher levels of national and household income, Elson saw a need to recalibrate existing poverty lines to account for the nonmarket goods and services required to meet basic needs, as well as for market goods and services. That is, poverty lines should take into account the fact that households do not just need to buy food, they also need to do unpaid work to turn

the food into nourishing meals. She argued that without increases in the productivity of nonmarket work, MDG goals to eradicate extreme poverty, hunger, and child mortality, and to realize universal primary education are jeopardized.

The basic problem is that a sustainable capital accumulation process that generates increased tax revenues and increased foreign exchange to pay for MDG realization requires an increase in marketed output. But this either reduces the output and quality of nonmarketed output, or overburdens women and girls, requiring them to do more paid work while maintaining their unpaid work. The key solution is investment in appropriate infrastructure to reduce women's burdens; however, there are strong barriers to this approach, such as the lack of visibility of the nonmarket sector and the lack of voice and bargaining power of women.

Elson argued that it is vital to bring work, both paid and unpaid, into the discussion of strategies to realize the MDGs. The full picture of the amount of work being done in a country is only revealed by time-use surveys. Time-use data needs to be analyzed to show the distribution of paid and unpaid work by variables such as gender, age, income, activity, and location, in order to target, sequence, and design better public investments; to understand the constraints affecting poor people; to chart the unevenness of economic growth; and to broaden our understanding of poverty and inequality.

Elson outlined the various regimes under which paid and unpaid work are typically distributed between women and men during the process of capital accumulation. From the perspective of gender equality, women's empowerment, and overall well-being, the most desirable regime engages both men and women in earning *and* unpaid caring activities. This dual-earner, dual-care regime permits the reconciliation of work and family life, but it requires high investment in supportive public services and an appropriate design of tax, social welfare, and pension systems.

GROWN reviewed unpaid work and the MDGs, drawing upon the work of the Millennium Project Task Force, national MDG reports, and MDG costing exercises in selected countries. She introduced the seven strategic priorities for achieving MDG Goal 3, gender equality and women's empowerment, as identified by the Task Force. The Task Force report particularly focused on unpaid work in relation to investment in infrastructure (to reduce women's and girls' time burdens) and measures to eliminate gender inequality in employment. Indicators to

track the success of initiatives in these areas include the number of hours per day that males and females spend fetching water and collecting fuel; the share of women in both wage and self-employment by type; and gender gaps in earnings by type.

Grown noted that there was little recognition of unpaid work in country-level MDG reports: few countries among the 78 that have reports include unpaid work in their diagnostics or use data from time-use surveys, even when such data is available. Of the needs assessments that are carried out as the first stage of MDG costing exercises, only two of the countries that have conducted such assessments mention unpaid work (India and Ethiopia). This is far from satisfactory. She called for more efforts to produce and analyze time-use data in ways that are relevant to the MDGs, including time use as it relates to poverty status. The national-level MDG reports that did refer to time use often referred to time poverty but lacked a clear definition of time poverty.

Grown concluded with an illustration of how time-use data can throw light on what policies are required to achieve the MDGs. A study in Morocco showed that an investment critical to boosting the school enrollment rates of girls in a particular region was not, in fact, an investment in the education sector, but rather an investment in transport, which reduced the time it took girls to get to school. When girls no longer had to walk two hours to get to school, parents were less concerned about their safety and much more willing for their daughters to go to school.

Session 3. Unpaid Work, Poverty, and Well-Being

The chair for this session was CHRISTINE MUSISI, UNDP Regional Service Centre, Johannesburg, South Africa. The speakers were MARCELO MEDEIROS, UNDP, International Poverty Centre, Brasilia, Brazil; Research Scholar AJIT ZACHARIAS, Levy Institute; and SHAHRA RAZAVI, United Nations Research Institute for Social Development (UNRISD), Geneva, Switzerland. The discussant was Research Associate NILÜFER ÇAĞATAY, University of Utah and The International Working Group on Gender, Macroeconomics, and International Economics (GEM-IWG).

Based on a paper coauthored with Joanna Costa, MEDEIROS presented the results of an analysis of time-use inequalities among urban adults in Brazil (2003) and Bolivia (2001), comparing the distribution of time spent in paid

(market) work and in unpaid work in domestic tasks in households. The data are not from a special time-use survey, but from general household surveys that included some questions on time spent on paid and unpaid work.

Medeiros found that time allocation is strongly differentiated by gender. For example, women in Brazil spend just over half of their work time in unpaid work compared to only about one-tenth for men. Moreover, the distribution of time spent in both paid and unpaid work is unequal, with greater disparities in time allocated to paid work than unpaid work. In Bolivia, for example, more than one-quarter of the urban adult population does not engage in paid work, and 21 percent of men and 10 percent of women do not engage in unpaid household work.

Using Lorenz curves, Medeiros found that half of the urban adult population of Bolivia accounts for 10 percent of total paid work time, while less than 20 percent accounts for half of all unpaid household work time. He also finds that age is less relevant than gender in explaining inequality in time distribution. Unpaid household work is distributed unequally between women and men, but the inequalities among men are higher than among women; 10 percent of men account for 40 percent of male unpaid household work time.

Using regression models, Medeiros analyzed the substitution effect on the allocation of time spent in unpaid household work in Brazil. Women's unpaid domestic work is negatively correlated to the time they spend in market work and positively correlated to the time their husbands spend in both domestic work and market work. An increase in women's labor market participation is associated with a sharp reduction in time they spend for personal and social activities, but with only a small decrease in the time they spend in unpaid domestic work.

As expected, children reinforce the allocation of time according to gender roles, so any measure that aims to reduce gender inequalities in time use must address the issue of child care. Higher education reduces engagement in household work for both men and women and increases female participation in the labor market. Medeiros suggested that highly educated women employ other women to substitute for them in domestic work.

Using 1989 and 2000 U.S. census data, ZACHARIAS explained how unpaid household labor is integrated into the Levy Institute's Measure of Economic Well-Being (LIMEW). He distinguished two types of unpaid household work: the work

that produces new goods and services (such as meals and child care) and the work that consists of shopping and making payments (“procurement”). In his analysis, time spent in procurement work is not included in the measurement of household production. As a result, the aggregate value of household production and the relative contribution of population subgroups will likely differ in the LIMEW approach from the standard (official) approach to the evaluation of household production.

Zacharias outlined how the LIMEW model values household production by using a variant of the replacement-cost approach and adjusting for productivity differences between specialists performing the tasks for pay and household members doing the same tasks on an unpaid basis. The model uses the University of Maryland time-use surveys for 1985 and 1998–99 in combination with the Annual Demographic Supplement of the U.S. Census Bureau.

Zacharias compared unpaid household labor between 1989 and 2000 by family type and by the intrahousehold division of labor. He found that household labor increased by two hours over this period and that wives contributed much more time to this activity than husbands (although the ratio of wives’ time to husbands’ time declined during the period). The contribution of household labor to economic well-being fell for all family households without children, but rose for those with children. However, household labor in poor households with children contributed less to economic well-being in 2000 than in 1989.

Zacharias concluded by recommending the creation of satellite accounts for household labor and more investigation of the relationship between poverty and household labor.

RAZAVI discussed the relevance of women’s unpaid work to social policy in developing countries. She supported a major rethinking of social policy because the current agenda of social sector restructuring will likely entrench gender inequalities (in accessing social services and income supports) and do little to enhance capacities to provide care, both paid and unpaid.

Although the post-Washington Consensus seems to embrace concerns such as poverty reduction and social protection, Razavi questioned the assumption at the heart of the “embedded liberalism” model—that the deleterious effects of macroeconomic policies can be redressed through social policies. Within this framework, it is assumed that care work will shift to the formal (paid) sector, but this assumption does not reflect social realities. Unpaid care continues to be significant and mainly done by women, even in industrialized countries.

Razavi also critiqued the approach of “developmental” social policy. This approach, put forward in East Asia and South Africa, is built on “productivist logic,” which does not acknowledge the importance of unpaid labor. It prioritizes those social expenditures that increase economic growth and employment, but does not include income transfers such as child allowances, family benefits, and pensions. Razavi noted several issues that are forcing unpaid work onto the policy agenda: HIV/AIDS in sub-Saharan Africa, and fertility decline and aging populations in Japan (and, to some extent, in South Korea). She noted that the lack of health and social infrastructure for HIV/AIDS patients in sub-Saharan Africa inflicts a “time famine” on women who provide unpaid care and limits their possibilities to engage in productive work. It is important, therefore, to reduce women’s unpaid work burdens. Razavi highlighted a proposal from South Africa for community-care work to be included in an expanded public works program so that caregivers are paid a wage. In Japan and South Korea, where there are concerns about who is going to care for the aging population, publicly financed care services for the elderly and for children have been expanded.

Razavi considered three examples of social policy reforms, the first being health sector reform. She contrasted mutual health insurance and social health insurance. Mutual health insurance schemes have tried to include the poor by pooling risks and providing exemptions, but most schemes have low participation rates and lack adequate financial backing without significant government subsidies. Contributory social insurance linked to employment is an alternative, but this tends to cover only workers in the formal sector of paid employment. It excludes those women who work in informal employment and those women who do not have paid work. However, in South Korea, social insurance has been reformed to be more inclusive. The South Korean National Health Insurance plan includes women who are not in the formal labor force, even those who are full-time housewives. The plan has achieved more equitable burden sharing. Lower income groups pay less than before while the highest income groups pay more than before.

Razavi next considered pension reform. She suggested that privatization has exacerbated gender-based exclusions and inequalities in pensions. She found many disadvantageous factors for women in Chile’s private pension system because it is based on a contributory scheme in which benefits depend

upon at least 20 years of full-time labor market participation. In comparison, South Africa's noncontributory, means-tested scheme (funded from general revenue) is well targeted in terms of race, gender, and location. Because they live longer and are poorer, three times as many women as men receive this pension. Those who have done a lot of unpaid work have a guarantee of partial economic security in old age.

The third reform considered by Razavi is family and child benefit programs. She discussed programs such as *Oportunidades* in Mexico that provide a cash transfer to poor mothers who comply with program requirements on educating their children and improving their health. Such programs have increased school attendance and improved child nutrition. Critics point to problems associated with targeted interventions (e.g., community divisions) and to the fact that cash stipends do not resolve problems of inadequate public services or of women's access to income and economic security. Rather, stipends tend to reinforce gender stereotypes. In contrast, South Africa's "child support grant" program recognizes the great diversity of households in the country, and the grant is paid to the primary caregiver on behalf of the child, irrespective of whether the primary caregiver is the child's mother or not. More than half of all children aged 6 years or younger, including 71 percent of poor children, benefit from the grant. Unlike programs such as *Oportunidades*, no unpaid work is required from recipients of the grant.

Session 4. Unpaid Work, the Care Economy, and HIV/AIDS

The chair for this session was COUMBA MAR GADIO, UNDP, West Africa. The speakers were OLAGOKE AKINTOLA, University of KwaZulu-Natal, Durban, South Africa; and TONY BARNETT, London School of Economics, Great Britain. The discussant was STEPHANIE URDANG, Development Connections, Inc.

Home-based care has become a national policy response to the HIV/AIDS crisis in many countries in southern Africa, noted AKINTOLA, but there is a lack of recognition of the burdens on caregivers.

The data sources used for his presentation were primarily from South Africa and include qualitative ethnographic studies of semirural communities near Durban, assessments of HIV/AIDS care programs in KwaZulu-Natal, and discussions with key players in southern Africa. The data indicate, among other things, that there has been an increase in caring for sick

people at home (e.g., 50 percent of HIV/AIDS patients die at home in South Africa) and that primary caregivers are mainly women with a low level of education who have had to reduce their time spent in production, in spite of living in abject poverty. In many of the affected households, the water and sanitation infrastructure was poor and there was no food. In addition to family members, volunteers organized by a variety of groups (churches, NGOs, retired nurses, etc.) also provide care.

Akintola discussed the burden of home care on caregivers, including the psychological and emotional aspects, as well as the reluctance of caregivers to report stress due to sociocultural values. Many caregivers are at risk of infection since they lack protective devices. Caregivers also have to cope with an increased cost of living, a decrease in income from a loss of job opportunities, and funeral costs. There are greater physical and psychological burdens for children, and girls are typically withdrawn from school to care for the sick and dying.

Akintola stated a need to recognize that home-based care may be entrenching gender inequalities and that limited male involvement in provision of care in the home is a major problem. He also noted that caring for people living with HIV/AIDS both undermines the well-being of family members and volunteers and exacerbates their poverty. Therefore, there is a need for resources, including financial resources, to provide for people providing unpaid care. Social development institutions and international development agencies should provide funding to pay volunteers and create career paths in care giving. Girls should be protected from providing home care because this jeopardizes their education. Patients should not be discharged to home care before there is an assessment of the ability of families to care for them. Currently, home-based care is often seen as a cheap alternative, but in reality, it shifts the costs of care from hospitals to caregivers.

BARNETT outlined the virus life cycle and the typical course of HIV infection leading to AIDS. He predicted that there would be 18 million orphans in Africa by 2010. He argued that HIV/AIDS is having a profoundly destructive effect on the social bonds that maintain societies.

Barnett criticized the way economists typically assess the costs of HIV/AIDS, which is by focusing only on the paid economy. As an example, he cited a study of the impact of HIV/AIDS on labor productivity at tea estates in Kenya. The study ignored the impact on the unpaid household economy, in which tea workers and other family members produce food

for their own consumption (in the process, subsidizing the commercial sector). The costs that the study omitted included the costs of dying, the costs of orphan care, and the costs of weakening social bonds.

Economists suggest that the AIDS-related reduction of GDP per capita in sub-Saharan Africa is in the range of 1 to 2 percent per year. Standard economic methods largely exclude the nonmoney economy and the “noneconomic” work of reproducing societies. This understates the full costs of the HIV/AIDS epidemic. Barnett called for an exploration of a wider approach to understanding costs, including contributions from the new literature on happiness and economics, and from analysis of time budgets. It is also important to focus on social reproduction—the social structures that keep a community going. The answers have important operational implications for the allocation of HIV/AIDS resources, as well as the rationing and distribution of antiretroviral drugs. Barnett concluded that we must consider nonmarket costs and benefits because we are dealing with the valuation of other people’s lives.

Keynote Speaker: REBECA GRYNSPAN

Grynspar, director of the Subregional Headquarters, Economic Commission for Latin America and the Caribbean, spoke about how to develop national agendas in Latin America that have a gender perspective. After two decades of orthodox economics in the region, she believes that there is a window of opportunity following the disappointing results of the Washington Consensus. She noted that growth has recovered somewhat, price stability has been achieved, and the region has attracted investment. The growth rate, however, is still disappointing. It has averaged 2 percent per year since the 1980s and is well below expectations of 6–7 percent per year. The growth rate volatility is double that of developed countries, while private consumption volatility is even higher because of the lack of a safety net. She also noted that poverty and inequality increase very quickly during an economic downturn and that poverty declines very slowly, while inequality never seems to decline when the economic cycle turns upward. There is more poverty and inequality over time because the region does not have the instruments to counteract consumption and production volatility.

There has been increasing heterogeneity in the productive structure of the region over the last two decades. The export sectors are linked to the global economy, but they have almost no links to the domestic economy. Jobs have become more

precarious. Labor is very flexible, and people lack social security. Middle class people have become impoverished, so the middle class is disappointed with the social and economic results of democracy.

Grynspar indicated that she expects there to be a second round of reforms to address these failures. She expressed concerns that women are waiting to see what the reform proposals are before trying to introduce gender issues into the dialogue. She argued that women should instead seek to shape reform proposals from the outset.

Grynspar gave the example of pension reform in Costa Rica, where the government (of which she was a member) opted to set its own strategy rather than accept the conditions of the World Bank. Sometimes there is more room to maneuver and set national policies than politicians realize, she said. At the time, she did not have a gender perspective on pension reform, but she believed in solidarity and a universal system for all citizens of Costa Rica. In fact, a universal system turns out to be the best from a gender perspective.

Grynspar’s main message was that women must engage in the development of national policies right from the beginning instead of waiting for policies to be determined and then seeking to compensate for any adverse effects on women. She questioned whether it is possible to make progress in terms of the gender-equality agenda in a society with increasing inequality. Equality has to be the center of concern, not only for gender but for society as a whole.

Another important area is macroeconomic policy. Central banks are applauded by the financial sector if they achieve price stability, in spite of very poor economic growth and lack of quality employment (e.g., Mexico). This situation is of concern to economists who believe that productive structures matter. Lack of quality employment also hampers the reconciliation of work and family life. Women must participate in discussions about the objectives of macroeconomic policy with a view to securing policies that stabilize growth and employment and reduce the volatility of production and consumption. If we do not develop anticyclical fiscal policies that stabilize growth and mitigate the effects of volatility, the MDG’s objective of halving poverty will not be realized.

Countries with successful open economies and a very high human development index combine openness with social protection. Latin America opened its economies but failed to provide adequate social protection for its labor force, in the

belief that this response would increase employment. This belief was wrong. We ended up with social protection systems, like the Chilean one, that increase inequalities and risks. People were told that pay-as-you-go systems of social protection generate very large public deficits, while individual accounts do not. However, in countries that privatized the pension system, not only will governments transfer 3–4 percent of GDP for the next 10 years to the private pension providers in order to pay for the transition, they will also have to pay an additional 2 percent of GDP just to maintain minimum pensions (e.g., 60 percent of people in Chile won't reach the legally established minimum pension level just by relying on their private pensions).

Education is also an important issue. From a gender perspective, improvement in quality of education (longer hours in school and closing the gap between public and private education) and provision of early education (preschool) should be part of the agenda. Access to education is not a problem for women in Latin America, but quality and length of education is. With respect to labor market reforms, women have to risk supporting labor law reform in order to get the kind of labor market flexibility that will benefit them. Current forms of flexibility are at the expense of social protection. Women need both (e.g., part-time jobs that also provide social security entitlements). Unless women participate at the negotiating table, there will be an increase in flexibility, but at the expense of social protection.

Grynspar's final point was on the institution-building agenda, which includes justice system reform and political reform. Reform of the justice system must not focus only on new laws, but also on improving access to justice. Often, women do not know where to go to demand their rights. Grynspar worried that political reforms that diminish the role of parties in the candidate-selection process will adversely affect women. She expressed a need to change public laws relating to the public financing of campaigns and advocated political reform from within existing parties rather than a disruption of the current party system.

Session 5. Unpaid Work and Employment Strategies

The chair for this session was BHARATI SILAWAL, UNDP, Nepal. The speakers were NAOMI CASSIRER, Program on Conditions of Work and Employment, International Labour Organization (ILO); Research Associate IMRAAN VALODIA, University of

KwaZulu-Natal, Durban, South Africa; and NANAK KAKWANI, Director of the International Poverty Centre, UNDP, Brasilia, Brazil. The discussant was Levy Institute President DIMITRI B. PAPANIMITRIOU.

CASSIRER discussed the promotion of gender equality through “decent work,” that is, work that recognizes responsibilities for unpaid work. Such responsibilities determine participation and time spent in paid work as well as the type and location of paid work. The policy challenge is reducing the constraints of unpaid work to improve women's employment opportunities and allow them financial independence. She noted that women's earnings are often essential for raising families out of poverty.

Cassirer outlined recommendations from the 1981 ILO Workers with Family Responsibilities Convention, in conjunction with other ILO standards. The Convention calls for governments to take measures that enable workers to engage in employment without suffering discrimination on account of their family responsibilities, and to reconcile family and work responsibilities. The measures should also take into account the needs of workers with family responsibilities, in terms of working conditions, social security, community planning, and the development of public and private community services, such as child care. Additional measures should include vocational guidance and training to enable reentry to the labor force, education and information to promote public awareness, and guarantees that family responsibilities are not a valid reason for termination of employment.

The focus of the Convention was not just on making the workplace family friendly, but also on treating family responsibilities as collective responsibilities, not just individual responsibilities. The collective responsibility implies lightening the unpaid work load, recognizing men's role in providing care for other family members, and promoting more equal sharing of family responsibilities between men and women.

The low value placed on unpaid work spills over into low pay for similar work done on a paid basis (e.g., child care, health services, cleaning). Women are concentrated in these forms of employment, which are characterized by high turnover, poor working conditions, and few social protections. The ILO addresses all of these problems through the idea of “decent work,” which includes dignity and rights in the workplace, social protection, and voice and representation.

Cassirer concluded that it was necessary to complement time-use surveys with the development of policy frameworks.

She observed that one could not assume that policymakers are aware of the significance of unpaid work and the interrelationships between paid and unpaid work.

Based on a coauthored paper with Richard Devey, VALODIA presented the results of a preliminary analysis of how time spent on paid work is affected by time spent on unpaid work, based on a time-use survey in South Africa in 2000. The survey was representative of the total population and included 8,564 households (14,553 respondents). Activities were divided into 30-minute time slots and coded according to a trial UN classification system that was appropriate for developing countries yet consistent with the United Nations SNA. Ten broad categories were used to identify SNA production, non-SNA production, and nonproductive activities (e.g., leisure and personal care).

Valodia explained that his study used data from a subsample of the national survey comprising households in which there was data for two employed members of the household, one male and one female. Employment was classified as formal or informal, and household income was classified in three categories: ultrapoor, poor, and nonpoor.

The analysis showed that time-use patterns are linked to both gender and type of paid employment. Women spend more time on unpaid work and less time on paid work than men, irrespective of which employment combinations and income category the household falls into. However, women tend to spend less time on unpaid work in nonpoor households, probably because they employ domestic workers. Men's time use also differs by income category. Men in informal employment in ultrapoor and poor households spend the highest amount of time (compared to both men and women) on nonwork activities and the smallest amount of time (compared to men) on paid work. Men's lack of access to paid work did not result in their undertaking relatively more unpaid work; their wives carried high burdens of unpaid work.

The study also investigated the constraints that lack of infrastructure places on participation in paid work. It found that women, particularly those living in rural areas, spend a significant amount of time collecting fuel and water (up to 4.6 hours per day). Women living in poor rural households, however, are able to dramatically increase their time spent on paid work if they do not have to collect fuel and water.

Valodia concluded that time-use surveys are important for probing issues of gender and employment in developing

countries. His subsequent work will explore the causal relationships between gender, employment, and time use.

Based on a coauthored work with Hyun H. Son, KAKWANI presented an analysis of gender discrimination and segregation in the labor markets (paid work) of Vietnam (2004), Thailand (2002), and South Africa (2002). The determinants of earnings are hours of work, education, work experience, location, and ethnicity. In all three countries, males undertook more hours of paid work per week, but the gap was not large in Vietnam and Thailand. In almost all cases in the three countries, the hourly earnings of men were higher than those of women with the same level of education.

Using Atkinson's welfare function (which allows for different weights to be given to different incomes) and comparing welfare enjoyed by men and women, Kakwani measured the extent to which welfare is lost because of inequality. He decomposed the loss into that attributable to occupational segregation and that attributable to labor market discrimination.

He found that segregation is less important than discrimination in all three countries but relatively more significant in South Africa than in Vietnam or Thailand. Kakwani plans to apply his methodology to other countries for comparative purposes and to formulate policies that reduce gender disparity.

Session 6. Unpaid Work, the Care Economy, and Investment in Infrastructure

The chair for this session was Research Associate MARIA S. FLORO, American University and GEM-IWG. The speakers were NALINI BURN, UN consultant on unpaid work, poverty, and gender budgeting; ASLIHAN KES, International Center for Research on Women (ICRW), Washington, D.C.; and LEKHA CHAKRABORTY, National Institute of Public Finance and Policy (NIPFP), India, and GEM-IWG. The discussant was MARK BLACKDEN, Poverty Reduction and Economic Management, Africa Region, World Bank.

BURN addressed the interconnections between the use of human time and energy and access to energy resources. She described the Multifunctional Platform (MFP), a simple diesel engine with a range of different tools that can be used in a variety of ways to improve the productivity of unpaid work and reduce women's time burdens. MFPs are being introduced in West Africa and set up as small-scale energy enterprises. They are owned by a women's association and managed by a remunerated committee, providing a flow of services at the village level. The

introduction of an MFP is preceded by a participatory feasibility study of the ability and willingness of women and men to buy the end-use equipment and pay for energy services. The women who run an MFP are trained in record keeping and bookkeeping as well as in the operation of the equipment.

Burn discussed how MFPs address the gendered energy poverty trap (i.e., the fact that you need money to access modern energy services to stop depletion of your own time and energy, but you need to find time and energy to get the money in the first place). She outlined strategies for showing policymakers why investment in facilities like MFPs is important. These strategies included exercises to analyze the full cost to poor people of producing meals, including time spent fetching water and firewood; grinding, pounding, and dehusking basic foods; collecting wild ingredients; and cooking, serving, and cleaning up. Through such exercises, they could understand that the total cost per meal is high, with low productivity. This information can then be used to examine gendered poverty and equality within state budgets in order to promote investment that addresses infrastructure deficits and produces gender-responsive results. She outlined the many challenges in making state budgets gender-responsive, including input-driven budgeting systems and the division between capital and recurrent budgets; inadequate monitoring and auditing systems; and a supply-driven, rather than user-driven, approach to investment in infrastructure.

Work in progress to overcome some of these challenges includes budgetary reforms (enlarging macroeconomic frameworks and shifting to result-based budgeting) and decentralization (including adaptation of localized MDGs and community-based monitoring systems). Additional measures include the introduction of time-use surveys and other data quality improvements (e.g., the measurement of the energy intensity of activities). Burn recommended that designing a strategy to invest in MFPs should involve local planners and policymakers, and that the strategy should ensure a strong data-policy-action linkage.

Based on a coauthored paper with Hema Swaminathan, KES discussed gender and time poverty in sub-Saharan Africa. She noted that competing claims on an individual's time require trade-offs between time spent in unpaid work and other activities. Using national time-use surveys for Benin (1998), South Africa (2000), Madagascar (2001), and Mauritius (2003) and a Living Standards Survey from Ghana (1998–99),

Kes reported that women work longer per day and spend more time on care activities than men. For instance, women spend thirteen times more time on child care in South Africa than do men, seven times more in Benin, six times more in Madagascar, three times more in Mauritius, and twice as much time in Ghana. In South Africa, women spend three times longer than women in the other countries on unpaid caring for adults, the handicapped, and elderly people, which is probably a reflection of the higher prevalence of HIV/AIDS in South Africa than in the other countries under discussion. Inadequate infrastructure for transport, water, sanitation, and energy contribute to women's time poverty. Women spend more time than men on collecting water and in collecting firewood, except in Madagascar, where boys do more firewood collection. Children spend more time than adults in collecting water.

Kes gave two examples of the benefits of investment in a better infrastructure. In Mbade in eastern Uganda, a study showed that if wood lots were within 30 minutes of the homestead and the water source within 400 meters, women and girls would save more than 900 hours per year. The introduction of MFPs in Mali saved women's time and allowed them to do more income-generating activities, increasing their incomes by a daily average of \$0.47.

Kes recommended that women should be involved in the planning and implementation of infrastructure projects and that poor women should have better access to affordable infrastructure.

CHAKRABORTY reviewed the implications of time-use data for public investment. She noted that unpaid work and leisure are not affected by changes in socioeconomic variables in the same way. Therefore, it is important to move from a twofold classification of time into work and leisure to a threefold classification: work in the market, unpaid work, and leisure. This disaggregation has important implications when integrating the unpaid economy into economic modeling and formulating macropolicy. Time-use statistics can be used to identify complementary public expenditure. For example, a study in Madagascar found that 83 percent of the girls who did not go to school spent their time collecting water, while only 58 percent of the girls who attended school spent time collecting water. Thus, investing in the water supply infrastructure is likely to improve the educational enrollment rate of girls.

Data on time allocation across selected developed and developing countries show that non-SNA work (referred to by

some analysts as ESNA work) takes up almost as much time as SNA work in many countries, but it takes up a much larger share of women's total work time than of men's.

A time-use survey in six states in India (1998–99) revealed that men spend about 41.9 hours per week in SNA work compared to 18.7 hours by women. The corresponding hours per week for non-SNA work are 3.6 and 34.6, respectively. The survey showed that, on average, rural males spend virtually no time collecting water. Changes in the availability of water infrastructure could lessen women's and girls' burdens in fetching water and increase their time in the market economy or in education.

Chakraborty reported on the results of a study that valued time spent on non-SNA work, using the cost of hiring someone to carry out these tasks. The value of time spent on non-SNA work by women ranges from 41 percent of the state domestic product (SDP) in Madhya Pradesh to almost 23 percent in Tamil Nadu. The value of non-SNA work undertaken by men, as a proportion of SDP, was 6 percent in Madhya Pradesh and 3.5 percent in Tamil Nadu.

Chakraborty concluded that efforts to produce gender-sensitive budgets should include lifting the veil of statistical invisibility from unpaid work and integrating it into macropolicies. Fiscal policy, especially capital expenditures for infrastructure, can redress the time burden of women. Allocations of finance in the budget need to be tracked to see what impact they actually have on women's time use.

Session 7. Issues in Time-Use Measurement I

The chair for this session was NANAK KAKWANI, UNDP, Brasilia, Brazil. The speakers were Research Associate INDIRA HIRWAY, Centre for Development Alternatives, Ahmedabad, India; JACQUES CHARMES, Institut de Recherche pour le Développement (IRD), France; and MEENA ACHARYA, Tanka Prasad Acharya Memorial Foundation, Nepal. The discussant was JOANN VANEK, Women in Informal Employment: Globalizing and Organizing (WIEGO).

HIRWAY discussed how time-use data could be used to more accurately estimate GDP, prepare national time accounts, and develop social indicators. She outlined production, expenditure, and income approaches to measuring GDP, and noted that national account compilations are often a patchwork of approaches. They also tend to undercount the informal economy, she noted. The informal economy covers a large variety of

economic activities and is not captured adequately by conventional labor force surveys. Rather than add supplementary questions to labor force surveys, Hirway recommended the use of time-use surveys, which have a clear advantage in accounting for workers in the informal economy. Better measurement of the numbers of people in informal work can improve the GDP estimates in countries in which output of the informal economy is calculated by multiplying an estimate of average productivity by number of workers in the informal economy.

Hirway noted that the revision to the SNA in 1993 added several nonmarket activities (such as collecting fuel and water), but that most developing countries have yet to include these activities in the calculation of their national income because of data problems and unresolved questions about the valuation of time spent in unpaid work. She outlined the input and output methods for valuing unpaid work. The output method seems to be more acceptable conceptually because it fits the output-based approach of the national accounts, but data on output are lacking. Most countries that have valued unpaid work have used the input method, valuing the inputs of unpaid time at the wage rate that would have to be paid for these inputs in the labor market. Using this approach, decisions have to be made about whether to use the generalist wage rate or a specialist wage rate, and whether to adjust for differences between the productivity of market and nonmarket work.

Time-use data are the starting point for creating a satellite account to measure unpaid work that is outside the SNA (labeled ESNA work by Hirway). A few countries have produced satellite accounts, which show that ESNA activities are comparable in value with those counted in the GDP.

Another useful instrument is a national time account that provides information on how individuals, households, and the country as a whole allocate time among SNA activities, ESNA activities, and non-SNA activities (personal care, leisure, sleep, education). However, Hirway noted that as of yet, there is no internationally agreed list of activities, so the structure of national time accounts is not standardized. Hirway called for the analysis of the distribution of time disaggregated by socioeconomic group and location. Social indicators can be developed from time-use data in terms of time poverty and time stress, human development, and gender equality.

Hirway concluded that time-use data have immense possibilities, but that only a few of these have been tapped so far.

She suggested that the United Nations Statistics Division (UNSD), ILO, and UNDP take leading roles by promoting networking among time-use experts in developed and developing countries.

CHARMES presented some key findings from six national time-use surveys that have been conducted in Africa in recent years. He explained that the African Centre for Gender and Development at the UN Economic Commission for Africa would soon launch a continuous program of time-use household surveys in South Africa, Uganda, Cameroon, and Djibouti. He discussed some of the technical issues related to surveying time use among populations with no clocks, as well as seasonality, sampling procedures (e.g., survey timing and frequency), and ways to account for overlapping and simultaneous activities. He noted, for example, that caring for children often takes place at the same time as other activities, such as paid work, preparing meals, or socializing. The time spent caring for children is very often underreported as a result.

Charmes found that time-use surveys were not effectively used for analytical purposes. It was rare to find analysis of time use by socioeconomic status of household head, by household income categories, by education and health status of the individuals, or by proximity to infrastructure. Moreover, policymakers did not use the available data. He expressed a need to improve national institutional awareness of the significance of time-use surveys and to conduct more frequent time-use surveys.

ACHARYA outlined the process of designing the 2001 Nepal Census to ensure that it covered all the activities, both paid and unpaid, included in the 1993 United Nations SNA. The design sought to redress previous deficiencies (e.g., women's work not counted due to cultural biases). Making the census gender sensitive is part of a larger exercise by the Central Bureau of Statistics (CBS) to improve the quality of census data. The project also includes the establishment of an inter-agency group involving the UNDP, UNIFEM, the United Nations Population Fund (UNFPA), and UNICEF. The questionnaire includes new definitions and categories that are designed to make women's work more visible. For example, full-time students and housewives fall in the economically active category if they work at least one hour per day for 15 days during the reference year. In terms of capturing unpaid economic activities and accounting for multiple economic activities (which are characteristic of subsistence economies), the

reforms are positive from a gender perspective, observed Acharya.

Accounting for multiple activities in the 2001 census resulted in the inclusion of an additional 1.5 million people who performed some economic activity. Women's economic activity rates increased by 18 percentage points and men's by 8 percentage points. Taking into account all work, both paid and unpaid, a larger proportion of women work than men (72.4 versus 66.5 percent) and more girls work than boys (22 versus 12 percent). A realistic evaluation of women's work requires more detailed questions about total work rather than focusing only on work included in the SNA, suggested Acharya.

Acharya noted that the 2001 census improved data on women's share of employment and made women's work more visible. Women's share in the labor force increased from 34.6 percent to 43.2 percent in the period from 1981 to 2001. The census also revealed that women are concentrated in agriculture (48.1 percent) and have a low share of administrative, technical, professional, and clerical occupations. The census showed that women constitute 22.4 percent of workers with wages and 50.2 percent of nonwage workers (employers, the self-employed, and family workers). Unfortunately, Acharya's recommendation to collect separate data for the different categories of nonwage workers was not followed.

Acharya noted that the recall method was preferred over the diary method when conducting time-use studies in developing countries with low levels of literacy and education. She also noted that regular conduct of large-scale time-use surveys is beyond the finances and infrastructure of the CBS in Nepal. The country, however, has experience in collecting and analyzing time-budget information in small-scale case studies and as part of labor force surveys. She concluded that much can be done to improve the coverage provided by census data of the total amount of work, both paid and unpaid, done by women and children.

Session 8. Issues in Time-Use Measurement II

The chair for this session was MARIJKE VALZEBOER-SALCEDO, United Nations Development Fund for Women (UNIFEM). The speakers were VALERIA ESQUIVEL, Universidad Nacional de General Sarmiento, Buenos Aires, Argentina, and GEM-IWG; HRACHYA PETROSYAN, State Council on Statistics, Republic of Armenia; and Research Associate MARIA S. FLORO, American

University, Washington, D.C., and GEM-IWG. The discussant was Research Scholar HYUNSUB KUM, Levy Institute.

ESQUIVEL discussed the issues involved in designing a time-use survey for Buenos Aires. She outlined the approaches and methods of existing time-use surveys in Latin America. The task survey method had been used for all time-use surveys to date, with the exception of Cuba, which used the activity diary method. She noted that self-administered questionnaires are extremely demanding on respondents and tend to produce high nonresponse rates. She also noted that all surveys (except Cuba's) were ad hoc modules attached to household or labor market surveys. The ad hoc modules facilitate making links between time-use data and data on socioeconomic status.

Esquivel outlined the objectives, characteristics, advantages, and weaknesses of the task survey and diary methods as options for the design of the forthcoming Buenos Aires Time-Use Study (BATUS). The objectives of the task survey method include making women's unpaid domestic work visible and measuring time use in the home production of goods and services consumed by household members. An advantage of this method is the simplicity of a yes/no questionnaire, as well as its comparability with other Latin American surveys. The weaknesses include results for time use that do not add up to—or exceed—24 hours; an inability to differentiate simultaneous activities or account for repetitive tasks; and results that are sensitive to the way activities are listed.

In terms of the diary method (completed through an interview), the objectives include gathering information on the division of paid and unpaid work between women and men, an understanding of the dynamics of (invisible) productive activities (e.g., subsistence or informal work), and the use of time by different individuals on different days. The advantages of an interview rather than a self-administered diary include a diminished work load for respondents, a lower nonresponse rate, the capture of simultaneous activities and the relationship between paid and unpaid work, and compliance with UN recommendations. The weaknesses include a greater demand on sample design and fieldwork, as well as the loss of intra-household information.

The 2005 BATUS aims to have the lowest possible nonresponse rate, to be representative of the Buenos Aires population, and to follow UN recommendations. Prospective tasks include fieldwork training and adapting the classification of activities to Buenos Aires.

PETROSYAN presented an account of unpaid work and gender inequality in Armenia. He noted that the constitution gives women equal rights, but in reality, women's rights are violated in terms of decision making, labor and employment, business, and the family.

In 2003, the National Statistical Service of Armenia conducted a time-use survey of women and men between the ages of 15 and 80. The survey found that more men are involved in paid employment than women (65 versus 34 percent) and that men spend about three hours more per day in paid employment than women. When also accounting for unpaid work, however, women work more hours than men (by almost 1.5 hours per day) because they do almost all of the housework and child care. Shopping and travel related to housework is evenly divided between women and men.

Armenian women spend five times more time than men on unpaid work. Men have more free time than women during the week and on the weekend, and they are able to make a clear distinction between work and free time. The statistics indicate that a redistribution of housework in terms of responsibility and time is necessary because housework is a barrier to equal employment opportunities for women, stated Petrosyan. In most sectors of the market economy, women earn only 50–55 percent of what men earn.

Based on a coauthored paper with Marjorie Miles, FLORO discussed the significance of overlapping activities in time-use studies. Floro used a subsample of 1,983 two-adult households (3,966 individuals) from the 1992 Australian Time-Use Survey. In this survey, respondents were asked to keep time diaries for randomly chosen 24-hour periods, and to record not only their main activity, but also any other activities undertaken simultaneously; where they were; and who was with them.

As shown in other time-use studies, Australian women engage in labor market activities to a lesser extent than men, both in terms of the participation rate and average time spent. Women spend more time in child care, domestic work, and shopping.

Floro's analysis showed that the extent of overlapping activities in time use was significant and that women are more likely to overlap activities than men (e.g., child care is often combined with other activities). Overlapping work activities contribute, on average, about 32 percent of the total working time (paid and unpaid) of the individuals in the subsample. Overlapping means that people can perform more work in a given time. For

women, overlapping allowed them to stretch their time by between 8 and 15 percent; for men, time was stretched from between 3 and 7 percent. Nearly twice the proportion of women to men performs additional domestic chores as overlapping or secondary activities (30 versus 18 percent).

The presence and significance of overlapping activities imply that time-allocation decisions are more complicated than normally assumed in existing models. Demographic factors, educational attainment, cultural norms, individual earnings, and employment influence the length and intensity of overlapping. A surprising result is that part-time or unemployed workers overlap more work activities than fully employed workers.

Floro concluded that omitting overlapping activities seriously underestimates the contributions of individuals, especially in nonmarket production. It is important to accurately measure time use, since overlapping activities can intensify work and affect individual stress levels. A more informed understanding of how individuals organize their daily lives can provide a better assessment of the effects of economic and social policies on labor markets, consumption patterns, and individual well-being.

Keynote Speaker: NANCY FOLBRE

Folbre, University of Massachusetts Amherst, discussed the economics of care. Provision of care, she said, requires not only time and other resources, but also an emotional connection between provider and receiver. She argued that families raising children provide a benefit to the economy as a whole, since they produce the future generation of workers. But national income accounting fails to recognize this fact. For example, if a government hires workers to provide child care, this action counts as an addition to national expenditure that mobilizes production of services. However, if the government pays a family allowance to families, so that they can afford to care for their children themselves, this allowance is not counted as an addition to national expenditure that mobilizes production of services, but as unproductive expenditure, or merely a redistribution of income.

Folbre suggested that in developed market economies, like the American economy, care work is devalued, irrespective of whether it is done by women or men, on a paid or unpaid basis, or by Americans or immigrant labor. Care work produces many externalities that spread beyond the immediate beneficiaries, and markets are not good at valuing externalities.

Time-use surveys go some way toward making care more economically visible, but they typically underestimate the time spent on care because they focus on activities rather than responsibilities. They usually measure the time that people are engaged in specific care-providing activities but not the time that people are “on call,” ready to provide care when required. It is as if you measured the amount of time that a firefighter works only in terms of the time he or she spends fighting fires, ignoring the time that they are on duty. The recent American Time Use Survey recognized this problem and inquired not just about the time people spend actively caring for children, but also the time for which they are responsible for children. On average, American adults spend about two hours a day actively caring for children, but five hours a day with children in their care.

The time it takes to care for children is not taken into account by conventional analyses of the standard of living. Standard measures assume that children require only half the goods and services required by an adult, based on difference in food requirements. But children require more, not less, care services than an adult. Households with young children have a lower standard of living, for a given money income, than the conventional measures reveal. They either have to purchase child care, or look after their children themselves and give up things that contribute to well-being, such as other forms of production or leisure.

Folbre concluded that care cannot be fully brought into the market, nor can the market properly value care. Care has to be treated in the same way as environmental services, and the sustainability of our social and family environment has to be promoted in ways comparable to the sustainability of our natural environment.

Session 9. Issues in Accounting for Unpaid Work

The chair for this session was Senior Scholar CAREN A. GROWN, Levy Institute. The speakers were BARBARA FRAUMENI, University of Southern Maine; MONICA OROZCO, Ministry of Social Development, Mexico; and EUGENIA GOMEZ LUNA, Instituto Nacional de Estadística, Geografía e Informática (INEGI), Mexico. The discussant was Research Scholar AJIT ZACHARIAS, Levy Institute.

FRAUMENI focused on the importance of nonmarket accounts when examining the sources of economic growth and the role of women in the economy. Considering both market and nonmarket activities is critical to achieving the MDGs, she

said. The division between what is included in market and non-market accounts can be arbitrary (e.g., imputing the value of owner-occupied housing and including it in the market account [6 percent of U.S. GDP] but omitting the value of consumer-durable services, which would amount to about 8 percent of U.S. GDP). In addition, movements of activities from nonmarket to market accounts lead to an overstatement of the GDP growth rate. The female participation rate in the U.S. labor force almost doubled between 1950 and 2000, and this shift is associated with a change of several activities from the nonmarket to market sector (e.g., child care), rather than a real increase in output.

Ideally, nonmarket accounts should include all unpaid activities, not just unpaid work. Household production accounts do not include education, health care, or childbearing activities that represent human capital formation. These activities should be included in nonmarket accounts, which are wider in scope than household production accounts.

The key to the construction of nonmarket accounts is information on time use, such as the American Time Use Survey. The central problem is valuing nonmarket activities, since there are no monetary transactions and indirect and proxy monetary measures have shortcomings. Fraumeni outlined commonly used valuation methods for labor inputs that use market-wage proxies—the generalist, specialist, and opportunity-cost approaches. She noted that all approaches use average wages, which can overstate the value of time. She also noted that a U.S. Committee on National Statistics (CNSTAT) panel recommended a productivity-adjusted replacement wage method to value time spent in household production, time spent by parents educating their children, and volunteer work. An opportunity-cost wage is recommended for time spent in education by students and by individuals in maintaining or improving their health.

Fraumeni suggested that nonlabor inputs to nonmarket activities should be included in nonmarket accounts (e.g., capital services and energy), and that these accounts should be comparable with market accounts and constructed to avoid double counting. She presented various options to determine output values for three sets of accounts—household production, education accounts, and health accounts—described in the book *Beyond the Market: Designing Nonmarket Accounts for the United States*. Fraumeni recommended the addition of a human capital account, which would include bearing children, to the menu of nonmarket accounts.

OROZCO studied the economic contribution of women in Mexico using a subsample of the 2002 National Income and Expenditure Survey in association with a module for time use. The data sources allowed her to integrate socioeconomic information, especially income distribution and poverty, with time-use analysis. The focus of her research was identifying the kind of activities that overburden women with domestic work and the ways differences among women are related to income and poverty.

Orozco found that women spend most of their working time on unpaid domestic work, while men are engaged in the labor market. Children increase a woman's time (but not a man's time) in unpaid household activities by 11 hours per week, or 24 percent, for households with three children under the age of 12. Poor women spend twice the amount of time in food preparation as nonpoor women. Lack of infrastructure increases women's unpaid work. For example, no running water increases women's unpaid household work by 3 hours per day, while a stove, microwave, and freezer can save 7 hours per week. Many poor households lack even basic infrastructure. She also found that women who participate in the labor market continue to do a significant amount of unpaid domestic work (6 hours per day), which results in a total working day of 14 hours. Men enjoy an additional four hours per week in leisure activities compared to women.

Orozco cited the importance of government programs like *Oportunidades*, an antipoverty initiative that includes educational components. The program seeks to increase school participation and reduce the gender gap in school attendance. The time-use survey showed that the receipt of an educational scholarship by a poor student results in a doubling of study hours (from 17 to 32 hours per week), a closing of the study hours gap between girls and boys, and a reduction in time spent on household activities, particularly for girls (by 8 hours per week, on average).

Orozco explained that the usual way to measure the economic value of unpaid domestic work in Mexico is to use average salaries for each kind of work, based on the National Employment Survey, as a proxy for the value of unpaid household work. Since there is selection bias using this approach to measure the opportunity cost of time spent in household work, she corrected the bias using the Heckman specification. She estimated that the annual value of unpaid domestic activities by women, using an opportunity cost approach, amounted to

approximately 17 percent of GDP. Caring for children and the sick amounted to another 5 percent of GDP.

Orozco concluded that good policy design, which includes incentives and effective implementation, produces results. She surmised that policymakers are unaware that the lack of household infrastructure significantly affects women's unpaid domestic work but not men's. While labor force participation requires child care support today, it will require more elder care support in the future (the 70+ population group will increase from 3.8 percent in 2005 to 8 percent in 2050).

GOMEZ LUNA described a methodology to create a satellite account of unpaid work using the results of time-use surveys for Mexico. The reasons for measuring unpaid work include the need to measure the total economy and reconcile the social and economic spheres, and to link reproductive activity and economic production. For example, it is important that policymakers know what services are being transferred from the public sector to the household sector as a result of the fiscal policies adopted in response to globalization.

Gomez Luna also described the economy from a woman's viewpoint, showing how unpaid domestic work in households and unpaid volunteer work in NGOs contributes to the circular flow of income. She noted, however, that unpaid work is not able to cushion households completely in times of economic crisis or make up for the loss of public services.

In order to construct a satellite account for Mexico, Gomez Luna used time-use surveys for 1996 and 2002 and the National Survey on Household Income and Expenditure. Voluntary work was not included in the time-use surveys, and so could not be included in the satellite account. She found that women spend more time than men in most unpaid services (with the exception of water and fuel collection and keeping domestic animals). The value of unpaid household services represented 19.5 percent of GDP in 2002 and was comparable in value to the contributions of manufacturing and commerce (the percentage is different from that shown in Orozco's paper—17 percent—because Gomez Luna used a somewhat different definition of unpaid domestic work). Gomez Luna also found that women contributed 82.5 percent of the total value of unpaid work. She noted that the relative value of unpaid services was higher in 1996 (22.7 percent of GDP) because the market economy was in a poor state and unemployment was high.

Gomez Luna concluded that satellite accounts are an important tool for designing and analyzing economic and

social policies in Mexico. The national budget is incomplete if it does not consider indicators linked to unpaid work. Only this will provide a total picture of the economy.

Session 10. Including Unpaid Work in Economic Modeling

The chair for this session was MARTHA MELESSE, International Development Research Centre (IDRC), Canada. The speakers were Research Scholar RANIA ANTONOPOULOS, Levy Institute and New York University; and Research Associate MARZIA FONTANA, University of Sussex, Great Britain. The discussant was HAMIDOU POUFON, Ministry of Economy and Finance, Cameroon.

ANTONOPOULOS outlined the importance of gender-aware modeling in macroeconomic analysis. The standard macroeconomic models consist of three types of markets (goods and services, labor inputs, and financial assets) and three types of economic agents (households, firms, and government). The purpose of gender-aware macroeconomic analysis is to show how macroeconomic policy impacts differentially on women and men, as well as to show how gender differences impact macroeconomic outcomes. This kind of analysis requires extending the scope of the economy to include the unpaid household economy in addition to the monetized (paid) economy.

Antonopoulos introduced three types of gender-aware macroeconomic modeling strategies. The first is the gender-disaggregation method, which highlights differences in behavior between women and men in investment, savings, and consumption. The gender-variable method recognizes existing patterns of gender biases (e.g., discrimination in the labor, credit, and goods markets). A third method divides the economy into two sectors: (1) productive (traditional macroeconomic variables) and (2) reproductive (unpaid labor, nonmonetized goods and services, and human resource production). Antonopoulos noted that these three methods have been used in articles in the 1995 and 2000 *World Development* special issues on "Gender, Macroeconomics, and Globalisation" and "Gender, Adjustment, and Macroeconomics," edited by Çağatay, Elson, and Grown. She also noted that it is important to complement analytical models with empirical models. An important step is to introduce gender into the social accounting matrix (SAM).

A social accounting matrix has the advantage of capturing income distribution and consumption relationships, as well as the production relationships of standard input-output models, in an internally consistent manner. The process of gender sen-

sitizing a SAM includes the disaggregation of labor by gender and skill level, and the inclusion of unpaid care work (identified through time-use studies). Household classifications in the SAM should be carried out in a way that highlights the distinctive economic and social characteristics of women and men.

Antonopoulos noted that the Levy Institute Measure of Economic Well-Being (LIMEW) uses a social accounting matrix methodology that includes unpaid household production as well as goods and services supplied by businesses and the state. She suggested two principle ways to enhance the usefulness of the LIMEW and other SAMS: (1) incorporate the possibility of depletion of human capabilities within the household sector; and (2) keep track of gender inequalities in household production.

FONTANA focused on the ways in which computable general equilibrium (CGE) models can be made gender-aware. These models emphasize the interactions and feedback effects among sectors and are effective tools for making time-use data “speak.” A gender-aware CGE model shows how the time of men and women is allocated between work in the market, social reproduction (i.e., non-SNA work in the household), and leisure.

She noted some of the limitations of CGE models, but suggested that they can nevertheless be used to generate important insights into how economies function. Unpaid non-SNA household production and leisure time can be incorporated into CGE models as additional sectors that respond to price incentives in a similar way to market sectors of production. The gender division of labor can be included in the model by incorporating constraints on the substitutability of male and female labor.

Fontana presented the results of the application of a gender-aware CGE model to Bangladesh. The model was used to calculate the impact of a threefold increase in female-intensive manufactured exports. The effect on women’s time use was an increase in time spent in market activities (8.9 percent) and a decrease in time spent in social reproduction (-3.6 percent) and leisure (-6.4 percent). In terms of output, this corresponded to an increase in market output of 2.9 percent, a decrease in non-SNA household output of 2.8 percent, and a decrease in “output” of leisure of 8.7 percent. The model also indicated a reduction in the gender wage gap.

The model indicated that the market outcomes were good for women, Fontana noted, but these outcomes were obtained

at the cost of a decline in women’s leisure and of the production of care and other services in households. In other words, the impact on overall well-being is more complex than is revealed by market outcomes alone.

Fontana made a number of suggestions on how to improve gender-aware CGE models. These included the incorporation of a detailed breakdown of the activities of the unpaid sector, a more explicit link between care and labor force productivity, and a distinction between leisure time and idleness due to lack of employment. It is important to model the effects of maternal care on children’s nutritional status and performance at school, and the implications of the effects for labor force productivity. CGE models should also take into account the growing evidence of inequality in intrahousehold resource allocation and incorporate bargaining rather than unitary models of the household.

Presentation of Projects by Students from Columbia University, New York, and the Institute of Political Science, Paris

In association with UNDP, students from Columbia University compiled a database and manual of time-use studies in order to map unpaid work. Time-use studies were identified by country and recommendations were made to improve the methodologies, statistics, and applications of time-use data.

The team from Sciences Po in Paris presented a case study of the 1998 Time-Use Survey in Benin. They found that policy analysts and policymakers had made little use of this data, and recommended ways to improve knowledge of and use of the data.

Roundtable Sessions

Group 1. Unpaid Work and Economic Policy in Latin America and the Caribbean

The discussion leader was REBECA GRYNSPAN, Economic Commission for Latin America and the Caribbean (ECLAC), Mexico City.

The Latin American group decided to continue the annual meetings of time-use statisticians in Latin America. In addition, the group intends to make a presentation about time-use statistics at the November meeting of Latin American statistics officers. A key objective is to make results of time-use research public and use them in policy processes.

The group noted that the German technical cooperation agency GTZ is supporting a project on policies to reconcile

responsibilities for paid and unpaid work that includes four case studies in Latin America—Mexico, Costa Rica, Panama, and Chile. The results of these studies were to be presented at an international conference of technical analysts and politicians in Mexico at the end of October. An additional four national case studies will be conducted in the next year.

Group 2. Unpaid Work and Economic Policy in Africa

The discussion leaders were ALFRED A. R. LATIGO, United Nations Economic Commission for Africa (ECA), Addis Ababa, Ethiopia; and HAMIDOU POUFON, Ministry of Economy and Finance, Cameroon.

The group identified several important issues for the region, including strengthening capacities to make better use of time-use surveys in policymaking and advocacy, and more research on the impact of HIV/AIDS on paid and unpaid work.

It is important to identify future surveys, especially household surveys, to which modules on time use could be added. There is also a need to improve coordination between development agencies in Africa. An initial step is to start with this meeting and disseminate the conference's recommendations to the UN organizations that the participants represent as well as to relevant ministries in African governments.

Group 3. Unpaid Work and Economic Policy in Asia and the Pacific

The discussion leaders were Research Associate INDIRA HIRWAY, Centre for Development Alternatives, Ahmedabad, India, and MEENA ACHARYA, Tanka Prasad Acharya Memorial Foundation, Nepal.

The future action of the Asia group is twofold: improving time-use surveys (TUS) and using the results. The questions are how to standardize and harmonize TUS methodologies, how to develop a paradigm of the macroeconomy that includes unpaid work, and how to address poverty and time use.

The group outlined a five-step program: (1) a status report and analysis of TUS in the region; (2) harmonization of TUS methodologies; (3) analysis of time-use data; (4) integration of the results of the analysis into policymaking; and (5) capacity building. The group recommended the publication of conference papers and proposed a collaboration between the UNDP International Poverty Center and the Levy Institute. A further recommendation was to strengthen the initiatives on time use and modeling by the GEM-IWG network.

Concluding Session

Concluding recommendations were made by Rebeca Grynspan, Economic Commission for Latin America and the Caribbean (ECLAC), Mexico City; Jacques Charmes, Institut de Recherche pour le Développement (IRD), France; Research Associate Indira Hirway, Centre for Development Alternatives, Ahmedabad, India; Senior Scholar Diane Elson, Levy Institute and University of Essex, Great Britain; and Aster Zaoude, Bureau for Development Policy, UNDP

Grynspan concluded that it was important to build upon the analysis presented in the conference to refine the design of pro-poor development programs, to improve poverty reduction strategy papers, and to improve the design of new development financing mechanisms.

Charmes recommended that preparation of satellite accounts of household production be placed on the agenda of the next international meeting of national accounting statisticians. He also called for researchers working on such accounts to standardize their definitions and classifications, and to recognize that satellite accounts of household production should include three types of household production: extended SNA unpaid work, SNA unpaid work, and household-based paid work.

Hirway agreed with the recommendation for standardizing concepts and methods. She also urged more use of time-use data to analyze poverty and to integrate consideration of unpaid work into poverty reduction policies.

Elson supported the recommendations that had been made and added a recommendation to rethink the concept of leisure time. It is important to distinguish between free time and the enforced idleness that results from unemployment and underemployment, she said. Some poor people had a lot of time left after doing paid and unpaid work, but this was the result of lack of employment opportunities, not of choosing leisure.

Zaoude promised that the findings of the conference would be taken back to UNDP and presented at an international meeting in January 2006. She encouraged all participants at the conference to continue to work together to insure that unpaid work is fully recognized in strategies to achieve the MDGs.

Program: Economic Policy for the 21st Century

Financial Markets and Monetary Policy

Bad for Euroland, Worse for Germany— The ECB's Record

JÖRG BIBOW

Working Paper No. 429, November 2005

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The European Central Bank (ECB), which conducts monetary policy in euroland, was modeled after Germany's Bundesbank. According to Research Associate Jörg Bibow of Franklin College Switzerland, the Bundesbank's inept macroeconomic policies were not good examples to use when structuring monetary policy and conducting proper demand management within the Economic and Monetary Union (EMU). Germany's economy has operated well below potential since the early 1980s, and the Bundesbank's occasional success was a result of offsetting economic policies in other parts of Europe and the world. Since the EMU's inception, the German economic malaise has spread throughout euroland, says Bibow.

Bibow finds that the ECB is even more independent than the Bundesbank. He criticizes the ECB's autocratic style and its dismissal of criticism directed toward its policies and practices (on the pretext of independence infringement). Bibow dismisses ECB allegations that structural problems are the sole cause of euroland's problems.

The author reviews the myth about the burden of German unification, the success of transfers between western and eastern Germany, and Germany's macroeconomic policy blunders in response to unification. These blunders (e.g., raising interest rates quickly but cutting interest rates sluggishly, ultra-tight money, and fiscal tightening in excess of initial borrowing requirements) caused a decline in GDP growth and investment, a debt trap, and tax-push inflation rather than a reduction in the deficit ratio. The EMU started with a united Germany in particularly poor shape, observes Bibow.

The author notes that the EMU's Stability and Growth Pact (SGP) rule—a budget deficit of 3 percent no matter what—and the ECB's inability to recognize the negative

demand effects of fiscal consolidation have led euroland's two key "stability-oriented" institutions to shoot each other in the foot. Bibow notes that in order to compensate public thrift campaigns, the whole burden shifts to monetary policy.

Bibow believes that the ECB is out of touch with financial markets and the economy. The bank does not recognize that domestic demand tanked when the euro's plunge extended the export boom, that the severe productivity slowdown resulted in a corresponding rise in unit labor costs, that protracted stagnation and rising unemployment caused budgetary problems, or that sound monetary policymakers should internalize fiscal policy.

Attempts by finance ministers to reduce budget deficits have caused rising indirect taxes and administered prices as well as an upward distortion in headline inflation. Protracted stagnation caused inflation to remain above 2 percent, and the gap between headline and market-determined inflation has widened. Without tax-push inflation, the ECB would have achieved its price stability mandate during the last four years, says the author. With the exception of Ireland and Spain, euroland's domestic demand has plunged and its economy appears to be heading for subdued growth or protracted stagnation. Bibow emphasizes that the sustainability of public finances hinges crucially on GDP growth.

The ECB's view that its interest rates (historically low) cannot hinder growth ignores Knut Wicksell's fundamental insight that the absolute level of the market rate of interest is not an adequate indicator of monetary stance. What matters is the interest rate level relative to the equilibrium interest rate. ECB arguments effectively admit that euroland may be in a "liquidity trap," which is the ultimate blunder for a central bank, says the author.

In spite of soaring trade and current account surpluses in Germany, the adverse mechanisms brought about by the EMU (Maastricht) regime change combined with Germany's chosen responses have caused more havoc in the German economy than most other euro countries. Germany faces relatively higher real interest rates and a reduction in its competitive advantage. Furthermore, tax-push inflation is bound to gain new impetus with the scheduled rise in the value-added tax (VAT) in January 2006, combined with a drastic decline in public investment. By depressing GDP growth, the debt burden (e.g., unemployment) becomes heavier.

While Germany and euroland remain trapped in the dogma of thrift and stability, the problems of fragility and divergence

are set to worsen. Germany's case clearly shows that structural reforms combined with antidemand policies undermine confidence and weaken growth. The EMU is undermined by competitive devaluations such as wage inflation, which is static in Germany but 3 percent in Italy. Wage deflation drives up real interest rates and triggers other destabilizing forces. While divergence within euroland could diminish, fragility would increase with rising real interest rates across euroland. This response could sink the euro, suggests Bibow.

Federal Budget Policy

The Ownership Society: Social Security Is Only the Beginning . . .

L. RANDALL WRAY

Public Policy Brief No. 82, 2005

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Proposals by the Bush administration to create an ownership society promise to broaden access to wealth. According to Senior Scholar L. Randall Wray, University of Missouri–Kansas City and director of research, the Center for Full Employment and Price Stability, these proposals are likely to increase inequality. They would result in gains to the wealthy at the expense of the poor, the sick, and the elderly, he says.

An important element of the neocon agenda is the effort to privatize Social Security. Wray notes, however, that the administration's ownership society also includes "reform" of education, pensions (e.g., the conversion to defined-contribution plans), the judicial system (e.g., restricting access to the courts), and health care (e.g., the erosion of Medicare and Medicaid). Rising costs, penalties, program complexity, and cuts to other benefits create dissatisfaction with "entitlement" programs and nudge recipients to "responsibility-enhancing" private plans. Wray also notes that both the transformation of the tax system in favor of ownership and the movement by reformers toward a consumption tax will burden working families.

Wray reviews data on wealth and debt from the Federal Reserve's 2001 Survey of Consumer Finances and finds a significantly unequal distribution of ownership and indebtedness. He finds that American families have taken on a lot of debt, which varies inversely with income and wealth. Apart

from the top couple of deciles, most Americans do not have enough financial wealth for retirement. While the case for an ownership society rests on home ownership, the author outlines two reasons why home values should not be counted as "wealth": (1) many homeowners have mortgages, and such debt has been rising quickly; and (2) families have to live somewhere, so homes do not really represent much disposable net wealth. One cannot equate holding a mortgaged family home with membership in a class of "citizen investors," he says. Many homeowners merely occupy, manage, and improve homes proximately owned by banks and mortgage companies that are in turn owned by the true owner class (i.e., those above the 97th income and wealth percentile).

Wray speculates that if the reformers succeed, government policy would increasingly be directed by and for the owners. Retirement annuities will be insufficient to support low-wealth households, while high consumption taxes, the deterioration of private pensions, and rising health care premiums along with Medicare and Medicaid reforms will result in many aged persons facing an uncertain retirement. Ownership-society reforms, therefore, will likely increase inequality and concentrate wealth among the owner classes.

The reformers have yet to present arguments or evidence in support of the belief that removing safety nets will achieve a more equal distribution of wealth while promoting "efficient" decisions, says Wray. He suggests that policy should follow an alternative path because most of the proposed reforms are likely to worsen distribution and restrict access to ownership. Neocon reforms should not be undertaken until there is a more equal distribution of income and wealth. Redistribution is necessary before the benefits of the new ownership society can be achieved, he says. A real alternative would strengthen household and public sector safety nets, increase income and wealth at the bottom of the distribution, guarantee universal access to higher education, and provide the guarantee of a job at a living wage. Such policy changes would increase the probability that more Americans could join the ownership class.

Social Security's 70th Anniversary: Surviving 20 Years of Reform

L. RANDALL WRAY

Policy Note 2005/6

www.levy.org/pubs/pn_6_05.pdf

Social Security has come under attack by well-organized and well-funded opponents for the past two decades. The critics seized on an apparent weakness of the program: slower economic growth, lower birth rates, longer life spans, and the retirement of baby boomers supposedly threaten its long-run financial viability. The critics sought to convince younger workers that they would never collect benefits equal to what they paid into Social Security.

Wray assesses the transformation of America's most popular and efficient safety net into a program that is widely regarded as requiring thorough reform. He notes that the debate has mostly ignored aspects of the program such as disability and survivors' benefits that make it a good deal for most Americans. He also notes that the Social Security Administration adopted increasingly pessimistic assumptions for its long-run forecasts, and that this supported the notion of a "looming financial crisis." He further claims that both Republicans and Democrats exploit popular fears and then play the role of savior (privatization versus untouchable Trust Funds, respectively).

Wray is critical of alternative plans to "save" Social Security. He argues that a larger Trust Fund could not provide for future retirees or add to national savings (it represents a leakage that lowers aggregate demand and economic growth). There is no need to run budget surpluses in order to credit Social Security's Trust Fund because the government can immediately credit the fund, which is offset by the Treasury's commitment to make timely benefit payments as necessary.

According to Wray, the issues stated by Charles P. Blahous, the executive director of President Bush's Reform Commission to study the Social Security problem, are bizarre (e.g., faster economic growth would make the problem worse, and Social Security is a terrible deal for blacks and for women). Recent changes proposed by Bush (e.g., dropping the notion of private accounts and wage indexing of future benefits) would substantially erode the support of middle- and upper-income earners, who would face huge cuts to benefits and higher taxes. In addition, partial privatization would lead to lower

retirement payments for many lower-income workers. In the long run, the nonprivatized portion of Social Security would be converted to a "welfare" program, important only to low-income people.

Social Security does not, and cannot, face any financial crisis, says Wray. It is a federal government program that cannot become insolvent, although we pretend that payroll taxes "pay for" benefits. Further, the Trust Fund does not and cannot provide finance for Social Security. In reality, trying to maintain a balance between these flows is purely a politically inspired accounting procedure, and irregular accounting hinders our understanding of the issues.

The necessity for Social Security reform is not because of a looming financial crisis, but because of demographic and economic changes (e.g., a greater proportion of female-headed households, higher immigration, and increasing economic inequality). Combined with the disappearance of employer-provided defined benefit pension plans and reduced employment security, these trends might strengthen the arguments for more generous and secure publicly provided safety nets.

INSTITUTE NEWS

New Research Scholar

MARINA DURANO has joined the Levy Institute as a Research Scholar for the Distribution of Income and Wealth program. Over the last five years, she has worked on a gender analysis of international trade policy. Her research interests also include human development and economic governance. Durano received B.S. and M.A. degrees in economics from the University of the Philippines and a Ph.D. degree in economics from the University of Manchester.

New Research Associates

MARZIA FONTANA has joined the Gender Equality and the Economy program. She is a development economist with particular interests in gender inequalities and international trade, labor markets, and income distribution. Her recent work has focused on modeling gender constraints in general equilibrium models, with applications to Bangladesh and Zambia.

Fontana has worked at the Trade and Macroeconomics Division of the International Food Policy Research Institute in Washington, D.C., and at the Research Department of the Reserve Bank of Fiji. She also taught economics for two years at the University of Sussex. She is a member of the IDRC Poverty and Economic Policy Research Network steering committee, an advisor for the Expert Group on Gender and Trade at the Department of Trade and Industry in the United Kingdom, and an associate member of the European Development Research Network (EUDN).

Fontana holds D.Phil. and M. Phil degrees in economics and development studies, respectively, from the Institute of Development Studies at Sussex, and a Laurea in economics and politics from the University of Florence.

IMRAAN VALODIA has also joined the Gender Equality and the Economy program. He will be working on two collaborative projects: a 10-country study of gender and taxation with Caren Grown and time-use analysis with Rania Antonopoulos and Maria Floro.

Valodia is a senior research fellow in the School of Development Studies (SDS), University of KwaZulu-Natal, Durban, South Africa. He has worked on gender, employment, and economic policy, including the women's budget initiative in South Africa, as well as gender and taxation. He has also worked extensively on the informal economy, critically examining informal economic statistics; on conducting industry-level studies of informalization; and on linking informal employment to broader labor market trends in South Africa. He previously conducted research on behalf of the Trade Union Research Project in South Africa.

Valodia is currently exploring the links between time use, gender, and employment, using South African time-use data. His other research interests include trade and industrial policy in South Africa and new social movements. He has just com-

pleted an edited volume on new social movements in South Africa with colleagues at SDS (to be published by the University of KwaZulu-Natal Press in 2006).

Valodia is a member of Women in Informal Employment: Globalizing and Organizing (WIEGO), a global research-policy network that seeks to improve the status of the working poor, especially women working in the informal economy; and the International Working Group on Gender, Macroeconomics, and International Economics (GEM-IWG), where he is incorporating the informal economy in macroeconomic models. Some of his most recent academic publications include "Macro-Micro Linkages in Trade: Trade, Efficiency and Competitiveness of Manufacturing Firms in Durban, South Africa" (with M. Velia), *Journal of African Economies*, forthcoming; *Globalisation, Marginalisation and New Social Movements in Post-Apartheid South Africa* (with R. Ballard and A. Habib), forthcoming; "Definitions, Data and the Informal Economy in South Africa: A Critical Analysis" in *The Development Decade? Economic and Social Change in South Africa, 1994–2004*, V. Padayachee, ed., 2005; "Local Government Support for Women in the Informal Economy in Durban, South Africa" (with C. Skinner), *International Journal of Politics, Culture, and Society*, 16(3); and "Economic Policy and Women's Informal and Flexible Work in South Africa," *Development and Change*, 32(5).

Valodia received a B.Com. (Hon) degree from the University of Natal, South Africa, and an M.Sc. degree in international trade and finance from Lancaster University, England. He expects to receive his Ph.D. in economics from the University of KwaZulu-Natal in early 2006.

New Levy Institute Book

Italians Then, Mexicans Now: Immigrant Origins and Second-Generation Progress, 1890–2000

JOEL PERLMANN

New York, N.Y.: Russell Sage Foundation and The Levy Economics Institute, 2005

According to the American dream, hard work and a good education can lift people from poverty to success in the "land of opportunity." The unskilled immigrants who came to the United

States from Southern, Central, and Eastern Europe in the late 19th and early 20th centuries largely realized that vision. Within a few generations, their descendants rose to the middle class and beyond. But can today's unskilled immigrant arrivals—especially Mexicans, the nation's most numerous immigrant group—expect to achieve the same for their descendants? Social scientists disagree on this question, basing their arguments primarily on how well contemporary arrivals are faring. In *Italians Then, Mexicans Now*, Senior Scholar Joel Perlmann uses the latest immigration data as well as 100 years of historical census data to compare the progress of unskilled immigrants and their American-born children both then and now.

The crucial difference between the immigrant experience a century ago and today is that relatively well-paid jobs were once plentiful for workers with little education while today's immigrants arrive in an increasingly unequal America. Perlmann finds that while this change over time is real, its impact has not been as strong as many scholars have argued. In particular, these changes have not been great enough to force the second generation of Mexican immigrants into an inner city “underclass.” Perlmann emphasizes that high school dropout rates among second-generation Mexican Americans are alarmingly high, which is likely to have a strong impact on the group's well-being. Yet despite their high dropout rates, Mexican Americans earn at least as much as African Americans, and they fare better on social measures such as unwed child-bearing and incarceration, which often lead to economic hardship. Perlmann concludes that intergenerational progress is a reality—though it is likely to be slower than it was for the European immigrants a century ago—and could be enhanced if policy interventions are taken to boost high school graduation rates for Mexican children.

Rich with historical data, *Italians Then, Mexicans Now* persuasively argues that today's Mexican immigrants are making slow but steady socioeconomic progress and may one day reach parity with earlier immigrant groups whose descendants were able to move up into the heart of the American middle class.

Upcoming Event

Conference: Government Spending on the Elderly

April 28–29, 2006

Blithewood

Annandale-on-Hudson, New York

The aging of the U.S. population will be a primary domestic public policy issue during the next decades. According to Census Bureau projections, the proportion of the elderly in the total population will increase from its 2002 level of 12.5 percent to 16.3 percent by 2020. Concomitantly, the proportion of the working-age population (20–64) is projected to decline from its current level of about 59 percent to 57.2 percent in 2020. These demographic changes imply a significant growth in the number of beneficiaries in major federal entitlement programs. Apart from this growth, existing program rules and rapidly escalating health care costs are expected to lead to fiscal pressures and pose challenges for economic growth. The United States is not alone in facing these challenges; in fact, in most countries with advanced economies, the problem is far more severe. The challenges of coping with an aging population require action in the near term to forestall more difficult choices in the long term. This conference will provide an assessment of forces that currently drive and will continue to drive government spending on retirees. Papers will examine how the retirement and health care of older citizens might be financed and will measure the potential impact of different reform proposals.

Among those presenting papers at the conference will be Axel Borsch-Supan, Barbara Butrica, Romain Duval, Melissa Favreault, Teresa Ghilarducci, Jagadeesh Gokhale, Michael Hurd, James Marton, Lois Shaw, Karen Smith, Shripad Tuljapurkar, Edward N. Wolff, Stephen A. Woodbury, and Ajit Zacharias. Further information will be posted as it becomes available on the Levy Institute website.

CALL FOR PAPERS

Symposium: Gender, Tax Policies, and Tax Reform in Comparative Perspective

May 17–18, 2006

Blithewood

Annandale-on-Hudson, New York

The symposium will focus on the gender dimensions of tax policy and tax reforms in countries at different levels of development. Topics of interest include the following:

- Gender biases in direct taxation, including biases in individual and joint filing; and the structure of exemptions, deductions, and allowances
- Gender biases in indirect taxation, including VAT and excise or sales taxes
- Impacts of personal income taxation on labor supply, household production, and time use
- Gender issues in tax reform and fiscal decentralization
- Methodological issues in tax burden analysis and tax incidence analysis from a gender perspective

Papers can explore a single type of tax or a combination of taxes within one country, or they can provide comparative analyses across developed and developing countries. We are also interested in papers that track changes over time.

The symposium is being convened as part of the new Gender Equality and the Economy Program at The Levy Economics Institute. This program considers how economic processes and policies affect gender equality, and how existing gender inequalities influence economic outcomes. It hopes to stimulate reexamination of key economic concepts, models, and indicators—with a particular view to reformulating policy—and offer a broader view of what an economy is and how it functions. The purpose of the program is to contribute knowledge that improves women's status and helps them realize their rights, in the United States and other countries.

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

If you are interested in presenting a paper at the conference, please send an abstract (of up to 1,000 words) to Caren Grown (cgrown@levy.org) and Jessica Dixon (dixon@levy.org) by January 30, 2006. Notification of decisions will be made by February 15, 2006.

PUBLICATIONS AND PRESENTATIONS

Publications and Presentations by Levy Institute Scholars

RANIA ANTONOPOULOS *Research Scholar*

Presentation: “The Importance of Time Use in Economic Deprivation Impact Analysis,” technical workshop on Gender, Time Use, and Poverty: Issues and Avenues, organized by the World Bank's Africa Region Gender and Poverty teams and the International Center for Research on Women, November 11.

DIANE ELSON *Senior Scholar*

Presentation: “Gender and the Millennium Development Goals,” Connecticut College, November 8.

JAMES K. GALBRAITH *Senior Scholar*

Publications: “The Floodgates Have Opened,” *The American Prospect* online, available at <http://www.prospect.org/web/view-web.wv?id=10237>, September 12; “Fair, Not Balanced,” *Mother Jones*, July–August; “Dragon Tales,” *Mother Jones*, September–October; “Katrina and the Public Sector,” *The Texas Observer*, September.

Presentations: “Endogenous Doctrine: Why is Monetary Policy So Much Better in the United States than in Europe?” Conference on Developments in Economic Theory and Policy, University of the Basque Country, Bilbao, Spain, July 7; “Global Inequality: The UTIP Data and What They Show,” first meeting of the Society for the Study of Economic Inequality (ECINEQ), Palma de Mallorca, Spain, July 20–22; “Globalization and Global Inequality: New Facts for a Stalemated Debate,” Cambridge Advanced Program on Reconstructing Development Economics, Queens College, University of Cambridge, July 25; “Between the Dollar and the Deep Sea: The Future of the U.S. Economy in the Global Context,” Clayton State University,

Atlanta, September 12; “Global Inequality and Global Macroeconomics,” and “America, Europe, and the Chimera of Labor Market Reform,” the 34th Conference of Economists, University of Melbourne, Australia, September 23–28; “Inequality, Unemployment, and the Chimera of Labor Market Reform,” The Treasury, Wellington, New Zealand, September 28–30; “Global Inequality and Global Macroeconomics,” Christchurch, New Zealand, September 30 – October 3; “The Fiscal Facts: Public and Private Debt and the Future of the American Economy,” American College of Bankruptcy, San Antonio, Texas, November 3.

CAREN A. GROWN *Senior Scholar*

Publications: “Answering the Skeptics: Achieving Gender Equality and the Millennium Development Goals,” *Development*, Vol. 48, No. 3; “The Pathways between Trade Liberalization and Reproductive Health: A Review of the Literature and Some Propositions for Research and Action” in *Globalization, Women, and Health in the Twenty-First Century*, I. Kickbusch, K. Hartwig, and J. List, eds, New York: Palgrave Macmillan, November, 2005; “What Gender Equality Advocates Should Know about Taxation,” AWID discussion paper, Association for Women’s Rights in Development, Toronto, November; “Trade Liberalization and Reproductive Health: A Framework for Understanding the Linkages,” *Development*, Vol. 48, No. 4.

Presentations: “Economic Change, Changing Economics: An Overview of Economic Justice, Economic Rights, Development Frameworks, and What New Lessons We Can Learn,” “Taxes Are a Feminist Issue: Making Public Finance Work for Women’s Rights and Poverty Alleviation,” and “Transforming Health Systems for Women: Building on Recommendations from the UN Millennium Project Task Force,” the 10th AWID International Forum on Women’s Rights and Development, Bangkok, Thailand, October 27–30.

DIMITRI B. PAPADIMITRIOU *President*

Presentations: Participant and discussant of “Keynesian Money Endogeneity,” international conference on The Keynesian Legacy in Macroeconomic Modeling, Cassino, Italy, September 16–17; interview regarding the financial system, speculative funds, and the energy crisis with Richard Freeman, *Executive Intelligence Review*, September 29; interviews regarding the nomination of Ben Bernanke to replace Alan Greenspan as chair of the Federal Reserve with Irwin M. Goldberg, *Poughkeepsie*

Journal, October 24, and Ben Merens, Wisconsin Public Radio, October 25.

JOEL PERLMANN *Senior Scholar*

Publication: *Italians Then, Mexicans Now: Immigrant Origins and Second-Generation Progress, 1890–2000*, New York: Russell Sage Foundation and The Levy Economics Institute, 2005.

Presentations: “Federal Race Classifications for Europeans in America, 1898–1913,” Society for the Advancement of Socio-economics (SASE), Budapest, Hungary, July 1; comments on “Entering the Mainstream” by R. Alba and V. Nee, at ‘author meets critics’ session of American Sociological Association, August 14.

EDWARD N. WOLFF *Senior Scholar*

Publications: “Who Are the Asset Poor? Levels, Trends, and Composition, 1983–1998” (with R. Haveman), in *Inclusion in the American Dream: Assets, Poverty, and Public Policy*, Michael Sherraden, ed., Oxford University Press, 2005; “Household Wealth, Public Consumption, and Economic Well-Being in the United States” (with A. Zacharias and A. Caner), *Cambridge Journal of Economics*, Vol. 29, 2005; “The Growth of Information Workers in the U.S. Economy,” *Communications of the ACM*, Vol. 48, No. 10, October 2005.

Presentations: “An Overall Assessment of the Distributional Consequences of Government Spending and Taxation in the United States” and “Social Security, Pensions, and the Inequality of Household Wealth in the United States, 1983–2001,” first meeting of the Society for the Study of Economic Inequality (ECINEQ), Palma de Mallorca, Spain, July 20–22; taping for *The Housing Bubble*, Munhwa Broadcasting Corporation, South Korea, September 12; taping for a news program hosted by Thomas Faobe, Danish Broadcasting Corporation, September 23; “The Distribution of Wealth in the USA: Trends and Contributory Factors,” conference on the Distribution of Wealth, Federal Chamber of Labour, Vienna, November 7.

L. RANDALL WRAY *Senior Scholar*

Presentations: “Common Goals – Different Solutions: Can Basic Income and Job Guarantees Deliver Their Own Promises?” (with Pavlina Tcherneva), and “The Fed’s Neutral Rate and the New Monetary Consensus,” Eastern Economic Association annual meetings, New York City, March 4–6; “Is Argentina’s Jefes de Hogar an Employer of Last Resort Program?” (with Pavlina

Tcherneva), Asociacion Argentina de Especialistas en Estudios del Trabajo annual conference, Buenos Aires, August 13.

GENNARO ZEZZA *Research Scholar*

Presentation: "A Post-Keynesian Growth Model," Department of Economics, University of Cassino, Italy, November 17.

Recent Levy Institute Publications

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