The Jerome Levy Economics Institute of Bard College

LEVY INSTITUTE

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Summary

Winter 1999–2000 *Volume 9, Number 1*

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Institute Research

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

The *Summary* is a quarterly publication of The Jerome Levy Economics Institute of Bard College intended to keep the academic community informed about the Levy Institute's research. To accomplish this goal, it contains summaries of recent research publications and reports on other activities.

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Letter from the President

To our readers:

This issue of the Summary *begins with a special feature, an article written by Distinguished Scholar Wynne Godley in which he discusses the relationship between inventory investment and the U.S. business cycle.*

An event in the program on the distribution of income and wealth was the conference on economic inequality. There were six working papers in the program. Resident Scholar Oren M. Levin-Waldman discusses the rhetoric of the minimum wage. Conchita D'Ambrosio, of Bocconi University and New York University, presents a new method for analyzing movements in a distribution and measuring variations in inequality. Robert A. Margo, of Vanderbilt University, reviews the early history of wage inequality in the United States. Resident Scholar Michael J. Handel discusses the effect of computerization on the U.S. wage structure, and Handel and Maury Gittleman, of the U.S. Bureau of Labor Statistics, examine effects of innovative work practices on wages. Resident Research Associate Karl Widerquist reviews recent books on the guaranteed income. A program publication in addition to these working papers was a Public Policy Brief by Research Assistant Marc-André Pigeon and Senior Scholar L. Randall Wray on the out-of-the-labor-force population. Joan R. Rodgers and John L. Rodgers, both of the University of Wollongong, led a seminar on their study of the effects of geographic mobility on wages in the United States.

In the program on financial markets and monetary policy, Laurence H. Meyer, a member of the Board of Governors of the Federal Reserve System, gives a central banker's perspective on the lessons of the Asian crisis. Charles J. Whalen, of Cornell University, discusses Minsky's theory of capitalist development. Senior Scholar Steven M. Fazzari compares Minsky's view and the mainstream's view of the role of financial factors in the business cycle. Jan Toporowski, of South Bank University, discusses the effect of capital market inflation on the efficacy of monetary policy. Distinguished Scholar Wynne Godley is developing a method of analysis to examine open economy macroeconomics using closed system simulation models. Visiting Senior Scholar Philip Arestis, of the University of East London, and Visiting Senior Scholar Malcolm Sawyer, of Leeds University, outline problems as the European Union moves toward a single-currency area. Stephanie Bell, of the University of Missouri–Kansas City, makes a case for using principles of Lerner's functional finance as a guide for fiscal and monetary policy. Resident Scholar Jamee K. Moudud presents an extension of his nonlinear dynamic model of growth and cycles. Leon Levy, vice chairman of the Levy Institute Board of Governors, and Brian F. Wruble, a member of the board, held a seminar on the psychology of the stock market.

In the program on federal budget policy, Senior Scholar Walter M. Cadette offers a plan for financing long-term health care that blends private insurance and public money. The Institute published a special report—Wynne Godley's analysis of the processes fueling the economic expansion, especially the unprecedented scale of private borrowing, and medium-term prospects given the current fiscal and trade policy stances. Activities in other projects included a seminar led by Christopher Magee, of Bard College, on his study of political action committees' campaign contributions.

Note that we now provide the online address for our publications in order to give you faster access to them. As always, I invite your comments on the Summary.

Dimitri B. Papadimitriou
President

Special Feature

Inventories and the U.S. Business Cycle

Wynne Godley[1]

Earlier this year Alessandria Guariglia published an article on inventory investment in *Economica* that opens with the words "Inventory investment plays a critical role in business cycle fluctuations. Blinder and Maccini (1991) document that in the average U.S. postwar recession declines in inventory investment accounted for about 87% of the total drop in inventories." The article by Blinder and Maccini (B&M) to which Guariglia refers has been widely cited and their proposition, with which Guariglia concurs, that "inventory movements are a dominant feature of business cycles" is coming to have the status of a stylized fact. This note disputes the B&M conclusion (which if correct would have important policy implications) without criticizing the substance of Guariglia's article.

There are two different questions at issue here which are conflated by both B&M and Guariglia. One concerns the contribution of inventory investment to U.S. *recessions*, defined, as is normal in the United States, as periods when GDP declines absolutely. Defined this way, the United States has undergone eight recessions since World War II, taking up about one-seventh of the whole period. The other, far more important, question concerns the contribution of inventory investment to *business cycles*, which went on throughout the postwar period and, as the word implies, included upswings as well as downswings in the GDP growth rate.

B&M's conclusions were based entirely on the figures relating to periods of recession that are reproduced in Table 1, but their conclusions cannot be justified by these figures for three different reasons. First, in calculating the percentage of the falls in GDP that were accounted for by inventory investment, B&M did not weight the contributions of individual recessions by their size. Suppose the table had contained only the entries in Table 2. The B&M method of calculating the average percentage would be to add up the final column (3) and divide by two, yielding 250.5 percent (501/2). It would be more appropriate to calculate the percentage [(1)/(2)] using the sums of the first two columns, yielding 6 percent (6/101). If the entries are weighted in this way, the contribution of inventory investment to the recessions, using the B&M figures in Table 1, comes down from 87 percent to 56 percent.

Table 1 Inventory Investment and Recessions, according to B&M

Recession Period, Peak to Trough	(1) Change in Inventory Investment ($ Billion)	(2) Change in Real GNP ($ Billion)	(3) Change in Investment as a Percentage of Change in GNP [(1)/(2)]
1. 1948:4–1949:4	–28.2	–22.2	127
2. 1953:2–1954:2	–18.4	–43.7	42
3. 1957:3–1958:1	–21.7	–55.4	39
4. 1960:1–1960:4	–40.6	–17.5	232
5. 1969:3–1970:4	–28.2	–19.4	145
6. 1973:4–1975:1	–78.1	–120.1	65
7. 1980:1–1980:2	–1.8	–76.4	2
8. 1981:3–1982:3	–45.1	–110.1	41
			Average: 87%

Source: Blinder and Maccini (1991).

Table 2 Calculating the Percentage of Falls in GDP Accounted for by Inventory Investment

Recession Period	(1) Change in Inventory Investment ($ Billion)	(2) Change in GDP ($ Billion)	(3) Change in Investment as a Percentage of Change in GDP [(1)/(2)]
1	–5	–1	500
2	–1	–100	1
			Average: 250.5%

A second objection to the B&M calculation is that it measures the scale of each recession by simply subtracting the number for GDP at each trough from what it had been when it started to fall. It would seem more appropriate, since GDP normally rises, to measure the scale of each recession by the extent to which GDP progressively diverges from its underlying trend. Consider, for instance, the two recessions in the five quarters ending in, respectively, 1970:4 and 1975:1. According to B&M, the size of the earlier of these two recessions was a trivial $19 billion—although the recession was real enough, giving rise to a 2 million increase in unemployment. However, if the recession is measured by changes compared with trend,[2] its scale is transformed; it changes from minus $20 billion (using the revised and reweighted figures that now appear in the NIPA, as shown in Table 3) to minus $147 billion. Similarly, the size of the 1975:1 recession changes from minus $146 billion to minus $279 billion.

The figures in Table 3 tell an entirely different story from that told by B&M. The revisions to the figures bring the contribution of inventory investment to the recessions down further from 56 percent to only 46 percent, scarcely more than half B&M's figure of 87 percent. The average contribution of inventory investment relative to trend to falls in GDP relative to trend during periods of recession is only 23.6 percent, barely a quarter of B&M's estimate.[3]

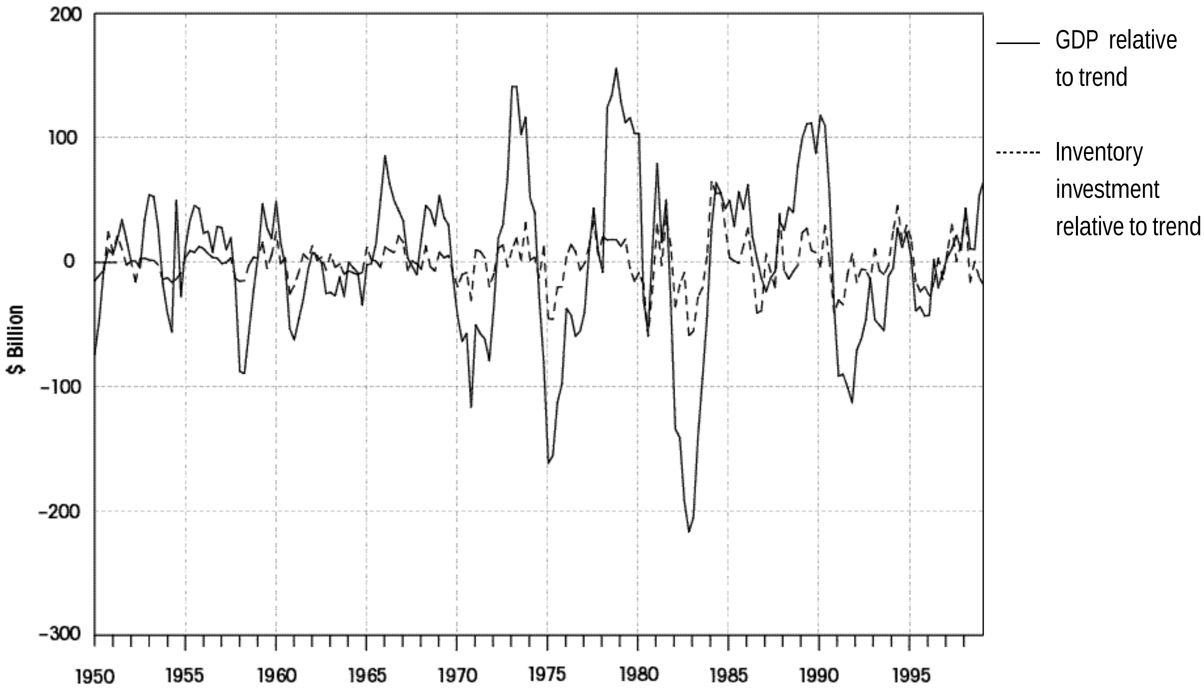
B&M produce no evidence to support their more general and much more important claim that "inventories are a dominant feature of business cycles."[4] To examine this claim,

Table 3 Inventory Investment and Falls in GDP Measured by Divergence from Trend

Recession Period	(1) Change in Inventory Investment ($ Billion)	(2) Change in GDP ($ Billion)	(3) Change in Investment Relative to Trend ($ Billion)	(4) Change in GDP Relative to Trend ($ Billion)
1	–33.0	–24.4	–36.0	–97.2
2	–20.0	–48.8	–18.1	–110.2
3	–18.4	–81.4	–18.6	–107.1
4	–47.9	–40.7	–49.5	–102.9
5	–38.5	–20.3	–36.0	–147.1
6	–77.0	–146.2	–77.0	–279.3
7	–10.6	–112.3	–9.6	–133.8
8	–43.4	–140.9	–44.7	–245.1
Total	–288.8	–615.0	–289.5	–1,222.7
Change in investment as a percentage of change in real GDP	46.7 (1)/(2)		23.6 (3)/(4)	

Source: Data from NIPA.

Figure 1 Inventor y Investment and Business Cycles



it is necessary to take the whole period since 1947, that is, 255 quarters compared with B&M's 28. The simplest test is a visual one. Figure 1 plots quarterly movements in the gap between actual and trend GDP; the figure also shows the gap between actual and trend inventory investment.[5] The visual impression that inventories play only a small role is confirmed by the fact that the variance of inventory investment was only 12 percent of the variance of GDP.

The conclusion of this note is that the contribution of inventory investment to U.S. recessions, narrowly defined as periods of falling output, has been quite small and that its contribution to the business cycle, broadly defined to include upswings as well as downswings, has been negligible.

Notes

1. I am indebted to Ajit Zacharias for guidance with the statistics.

2. The trend was measured using a Hodrick-Prescott filter.

3. The contributions could also be weighted by the size of GDP, which rose about sixfold over the period. This would raise the average contribution from 23.6 percent to 25.5 percent.

4. Relevant evidence was provided in Blinder and Holtz-Eakin (1986), but this evidence does not support the claim under review. It shows (Table 3.2, p. 188) that the variance of inventory investment to the variance of total final sales (GDP) was under 4 percent during the period 1947 to 1983.

5. Trends were measured using a Hodrick-Prescott filter. A smoothing parameter of 1,600 was used. There is a difference between the two trends, but it is not large enough to make a significant difference to the results.

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Program: Distribution of Income and Wealth

Conference: The Macrodynamics of Inequality in the Industrialized and Developing Countries

The conference, held on October 28 and 29 at the Levy Institute, was coordinated by James K. Galbraith, of the University of Texas at Austin and the Levy Institute, and was sponsored jointly by the Levy Institute and the Ford Foundation through the University of Texas Inequality Project.

Keynote: James K. Galbraith

There are many different sources of the concern about economic inequality: proliferation of the poor, inequality of genders and races, and the role of altruism and interdependence in economic life. Galbraith added his own concern with the politics of economic inequality—the tendency of a highly unequal society to identify itself not as a single society but as separate societies, each with its own interests and each excessively jealous of its own share of resources. Unifying these different sources is the fact that inequality is a quintessentially American concern. It suffuses the political culture, although it is often not at the surface of politics, and, over the course of this century, Americans have come to prize the self-definition of the United States as a middle-class democracy.

Most of the literature on the change in inequality in our time has been fixed within the mainstream approach, which considers the allocation of resources and the distribution of income to be largely microeconomic questions. Economists have argued over the effects of trade, immigration, and technology on the relative supply and demand of skilled and unskilled workers, but none of these accounts for most of the change in inequality.

There are two alternatives to the mainstream perspective on inequality. One emphasizes structure, institutions, politics, market power, labor organization, labor rents due to imperfect competition, and the distribution of monopoly and oligopoly profits. The other treats the shape of the income distribution as a macroeconomic variable associated with the level of income and economic growth. The two perspectives can be fruitfully combined into a coherent vision: structural forces, which are relatively stable, determine the distribution of incomes, but macroeconomic forces—aggregate demand, unemployment, exchange rates, economic growth—drive the changes in the shape of the distribution.

The three-sector taxonomy that Galbraith proposes is his attempt to refine this vision. At least for the advanced economies, it is useful to distinguish an advanced sector, which supplies capital goods and technology products and whose rents are thus determined principally by the flow of investment demand; a consumption goods sector, which supplies mainly consumption goods, with rents determined mainly by the flow of consumption demand and distribution of market power; and a large services sector, with wages largely driven by political and social factors, which can themselves be influenced by macroeconomic performance. The proposed taxonomy may be considered as the elements of a Keynesian microeconomics.

Empirical work within the proposed framework has been approached in two ways. One is the construction of long and dense time-series measuring inequality, mainly in manufacturing earnings, using the between-group component of the Theil statistic, in a great many countries over a great many years. A second line of work consists of reorganizing industrial data sets so as to reveal more clearly the main patterns of change in the distribution of pay through time. These patterns of between-group variation are then related to the historical forces that have differentiated the paths of income of different industrial groups.

This work is rooted in Galbraith's view of economics as an empirical science, concerned above all with the search for useful generalizations about important policy topics, such as inequality, unemployment, and growth. He said that the conference participants may have other perspectives, other sources of data, and other methods, but he believes that they all share three beliefs. First, the study of economic inequality is properly and necessarily empirical. Second, inequality is an important and worthy focus for economists' work. Third, if there are policies to reduce inequality so as to restore the nation's sense of itself as a progressive, substantially middle-class democracy, we should adopt such policies.

Speaker: Robert Z. Lawrence

According to Robert Z. Lawrence, a member of the Council of Economic Advisers, three explanations have been given for increasing inequality in the United States: skill-biased technological change caused by increased use of computers in the workplace, globalization and trade liberalization, and institutional changes such as welfare reform and the decline in unionization. He cautioned, however, that any discussion of inequality should take the facts of the recent past into account. He cited evidence supporting the claim that the trend toward inequality seems to have slowed or stopped in the last five years or so. Labor's share of output fell from 1992 to 1996, but has since recovered to its 1992 levels. The education premium increased from 1979 to 1994, but seems to have stopped rising since then. Hourly wages have increased since 1994, with the largest increase in the lowest income percentiles. The Gini coefficient has been flat in the last few years. The poverty rate has fallen since 1994 and has now reached its lowest level since 1979. The unemployment rate has fallen among all races.

Lawrence discussed possible reasons for the slowdown in the trend toward more inequality. It is possible that the high-pressure economy is offsetting the factors that have been leading to greater inequality. Perhaps technology has allowed the economy to pay higher wages without sparking inflation. Perhaps the U.S. economy has adjusted to the new global pattern of trade by specializing in goods that do not face competition from lower-wage countries.

Lawrence also suggested that the factors cited as accounting for increasing inequality should be reexamined in light of the change in trend. Has there been a change in those factors or were they not the causes to begin with? He wondered how technological change could be great enough to cause increased inequality and to wrench the labor market for so many years, but still not show up as increased productivity. Today the opposite is occurring; productivity is on the rise while less-skilled workers appear to be doing better than they had previously. Lawrence concluded that even if the trend toward increasing inequality seems to have stalled, there is no reason for complacency. Policies, such as increases in the minimum wage and the earned income tax credit, are still needed to remedy the inequality that exists.

Session 1. Inequality in American Wages: Social and Institutional Change

According to Patrick L. Mason, of Florida State University, there is general consensus among researchers that wage inequality between African Americans and whites has grown since the mid 1970s. One explanation is the labor quality hypothesis, which holds that interracial inequality widened because general inequality expanded. The rise in the relative wages of workers with higher cognitive skills resulted in a rise in general inequality. Since the average cognitive skill of African Americans is located in the lower half of the skill distribution, interracial inequality expanded as general inequality expanded. An alternative explanation is the discrimination hypothesis, which holds that interracial inequality widened because of an increase in discrimination generated by a decline in antidiscrimination enforcement and a labor market weakened by losses in bargaining power and unemployment during much of the 1970s and the 1980s. Mason evaluated the two hypotheses on the basis of panel data on African American males and white males from 1967 to 1988. He found that, for the period as a whole, increases in the cognitive skill premium and the educational premium are factors contributing to rising interracial inequality. However, these increases did not occur until the early 1980s, *after* inequality began to widen in 1974. Moreover, even during the 1980s, these factors had only a modest effect on racial wage inequality. This evidence, along with the reversals in antidiscrimination policy in the 1980s, suggests that interracial wage inequality increased mostly as a result of increasing discrimination.

Thomas I. Palley , of the AFL-CIO, argued that the explanation for rising inequality may lie in changes in the structure of the labor market and in international trade. These changes have shifted bargaining power away from labor and toward management and in doing so have changed the pattern of income distribution. Palley presented estimates from a variety of econometric specifications of this hypothesis. The explanatory variables in the regressions were union density, unemployment rate, real minimum wage, share of families headed by single females, and trade openness. His results were that, between 1980 and 1997, 40 percent of the increase in the degree of income inequality was attributable to a decline in union density, 9 percent to a decline in the real minimum wage, 24 percent to an increase in the share of families headed by single females, and 24 percent to an increase in trade openness. According to Palley, his results indicate that reducing unemployment by itself cannot reverse inequality. Much more effective in this regard would be labor law reform that makes organizing easier, raises in the real minimum wage, and encouragement of trade based on international labor standards.

Michael J. Handel, of the Levy Institute, pointed out that the evidence does not support an increasing rate of skill-biased technological change as the explanation for the rise in inequality in the 1980s and the 1990s. For this explanation to be supported, in these two decades either the growth in the relative supply of technologically skilled workers should have decelerated or the growth in the relative demand for such workers should have accelerated. The explanation suffers from a timing problem because about 50 percent of the growth in inequality between 1979 and 1993 occurred in just two years, between 1981 and 1983. Estimates of relative supply and demand based on their past trends indicate no shortage of skilled workers for these years. The labor force became better educated on the average between 1962 and 1997 and the dispersion of educational attainment declined, indicating that human capital inequalities declined. Handel also addressed the effect of computer use on skill requirements. Regression analyses based on detailed occupational and educational data show that computer use or an increase in computer use is a good indicator of occupations that demand more in terms of educational requirements. However, since similar effects are found also during the early 1970s, when computerization was at relatively low levels, there is no strong basis for any causal interpretation. An examination of occupational shifts also shows that a number of occupations likely to be sensitive to computerization have not grown or declined as rapidly as expected by proponents of skill-biased technological change.

According to J. Bradford Jensen, of the Center for Economic Studies at the Bureau of the Census, research on inequality has typically relied on national data, while new insights into the forces driving inequality may be gained by examining patterns in regional data. Jensen and Andrew B. Bernard, of Dartmouth College and the National Bureau of Economic Research, have examined the effect in different regions in the United States over the last 20 years of changes in industrial structure on residual wage inequality (wage inequality after controlling for gender, race, age, and educational attainment). At the national level, residual wage inequality has increased steadily between 1970 and 1990, but, strikingly, the variation across regions in the increase in inequality at any given time is much greater than the increase at a national level. The traditional industrial regions had relatively large increases; the rust belt had big increases and the southeast lower increases or decreases. Regression analysis shows that among explanatory variables such as the share of employment in durable goods manufacturing, changes in the capital-to-labor ratio in the manufacturing sector, international trade, union density, real minimum wage, and immigration, the variable with the largest impact on inequality is the share of employment in durable goods manufacturing. Regions with expanding durable goods manufacturing employment experienced lower wage inequality, and those with decreasing employment in that sector had higher inequality. Jensen suggested that the positive impact of durable goods manufacturing on wage compression may be due to the character of employers in this sector: this activity is concentrated in large plants owned by large companies that provide jobs with low turnover rates.

Discussant William Spriggs, of the National Urban League, stated that popular opinion is swayed by explanations that reinforce the status quo. In a capitalist society, explanations that support capitalism appear to make more sense than alternative accounts; in a racist society, explanations that support racism appear more reasonable than alternatives. The popularity of the skill-biased technological change as an explanation for inequality derives from its ideological function: it justifies employers' hiring practices and it justifies social activists' proposals for spending to develop skills. Spriggs suggested that the presentations by Mason, Palley, Handel, and Jensen challenge the ideological status quo. Mason challenges the notion that wage inequality between blacks and whites can be explained by skill differences and points to structural and institutional factors that contribute to that inequality. Palley shows that union density, trade policy, and minimum wage all matter for inequality. (However, Spriggs found Palley's treatment of single-female–headed families as an explanatory variable perplexing since it can be considered a function of growing inequality.) Handel's work challenges the idea that there has been a growing skills gap. The decline in the dispersion of educational attainment of the labor force to which he draws attention deserves more consideration since by rendering workers more substitutable, it can contribute to the erosion of bargaining strength and greater inequality. Jensen's point that inequality varies with industrial structure is problematic for the skill-biased technological change hypothesis. Spriggs warned, however, that the rejection of the hypothesis should not be taken to mean that improving worker skills does not matter.

Discussant Barry Bluestone, of Northeastern University, cited Richard Freeman and Larry Katz's estimates that the bulk of the growth in wage inequality for males during the 1980s and the early 1990s is attributable to de-industrialization, de-unionization, trade and immigration, and the trade deficit, with technological change accounting for about 7 to 25 percent. Bluestone noted that although all of these factors did contribute to increasing inequality, it is important to recognize that what ties them together to produce this effect is macroeconomic forces. Thus, the economic recovery during the Reagan years did not lead to a reduction in inequality because during that period unions were crushed, the real minimum wage declined rapidly, and international competition intensified. Since 1994 economic growth has been solid, the unemployment rate has fallen dramatically, and labor has regained some of its bargaining power, thus leading to a slowdown in the growth in inequality. However, to achieve substantial reduction in inequality, solid macroeconomic fundamentals are not sufficient: institutional changes in the form of stronger unions, a higher minimum wage, an expanded earned income tax credit, and the elimination of discrimination in the labor market are also necessary. Bluestone highlighted the need for institutional change by reporting a finding from his recent study of earnings in Boston. Although low unemployment there has produced a convergence in wage rates between black and white males (after controlling for other factors), it has not closed the annual earnings gap because a large proportion of black men are in part-time and contingent employment.

Session 2. Inequality in the OECD

Lars Osberg, of Dalhousie University, discussed his study of the inequality within and between birth cohorts in Canada, Germany, Sweden, the United Kingdom, and the United States using data from the Luxembourg Income Study (LIS) from 1969–1970 to 1994–1995. He found that at any point in time, within any of the countries examined, only a small percentage of inequality in household, after-tax, equivalent income is accounted for by intergenerational inequality. (Equivalent income is calculated using the LIS equivalence scale, which adjusts household income to account for economies of scale in consumption.) However, the experience of different birth cohorts over time varied widely across countries in the study. In the United States and the United Kingdom, incomes of the top decile of each cohort rose dramatically and incomes of the bottom quintile stagnated, but the other countries did not experience such regressive trends. Osberg concluded that if only 10 percent of the income gains of the top deciles in those two countries had been transferred to the bottom deciles, poverty would have declined substantially rather than increased.

Kevin Lang, of Boston University, criticized work-sharing (the mandated reduction of the workweek to spread the available work over more workers) as a government policy to deal with persistent unemployment. He argued that many surveys in the United States show that most workers do not want to work fewer hours (and earn less pay) and that many would choose to work more hours if given the opportunity. The evidence for Europe is more mixed. Lang and Shulamit Kahn, of Boston University, developed a simple model of bilateral search in which wages depend on hours worked, but the hours worked do not necessarily equal the desired number of hours. Such a model allows for the occurrence of both unemployment and job vacancies. They found that although most workers want to work fewer hours, imposing a legally mandated shorter workweek could worsen unemployment, reduce wages, and reduce worker welfare (as compared to the Pareto optimum). Based on these findings, Lang also asserted that work-sharing would lead to the taking of second jobs by more people in the United States and Canada. Thus, he urged caution regarding proposals to promote work-sharing.

David R. Howell, of New School University, criticized on theoretical and empirical grounds the "unified theory" of unemployment, which holds that global forces of technology and trade have caused a profound shift in labor demand from the least-skilled toward the most-skilled workers, generating rising earnings inequality in more flexible labor markets (in the United States) and rising unemployment in more rigid labor markets (in Europe). According to the theory, flexible markets should experience higher earnings inequality (but a lower ratio of low- to high-skilled unemployment) as declining demand for low-skilled workers puts downward pressure on wages. Less flexible markets would adjust the number of workers instead of wages, and unemployment across all skill groups should rise. The data, however, do not support these predictions. These findings challenge the economic orthodoxy of the 1990s, which holds that high European unemployment could be solved by adopting the U.S. labor market model and that the low-wage problem in the United States could be solved by improving workers' skills.

Discussant Thomas Ferguson, of the University of Massachusetts Boston, criticized Lang's interpretation of the survey data. For example, workers may not be convinced that their opportunities for promotion would remain the same if they were to request shorter hours. Also, Ferguson believes opponents of decreasing the workweek exaggerate its dangers; when the workweek was reduced in the past, the predicted gloomy consequences did not materialize. Discussant Stephen Rose, of the Educational Testing Service, criticized Osberg for creating synthetic birth cohorts out of survey data that do not follow individuals. Rose praised Howell and noted that the skill-biased demand shift hypothesis is the second line of defense by economists who had denied the trend of an increase in inequality until the mid to late 1980s. According to Rose, the most skilled—scientists and engineers, for example—have experienced stagnant wages. The winners in recent decades have been office managers and professionals, who often are not the most skilled.

Session 3. Inequality and Industrial Change: New Perspectives

Senior Scholar James K. Galbraith and four of his past or current graduate students reported on their work at the University of Texas Inequality Project (UTIP) at the Lyndon B. Johnson School of Public Affairs. Galbraith explained that most of the work uses cluster analysis to track wage inequality in manufacturing industries. Monthly data on manufacturing wages are available over long periods of time in many countries and can be used to construct a long and dense time-series using a Theil index of inequality. This method makes it possible to examine changes in inequality and the processes that determine those changes more thoroughly than measures based on limited household survey data.

Vidal Garza Cantú discussed the evolution of wage inequality in the NAFTA region. Wage inequality declined in Mexico in the 1960s and 1970s and has increased since about 1982. Every devaluation of the Mexican peso has been followed by an increase in inequality in Mexico. Canada has experienced the most stable inequality in the region. The United States saw a decline in wage inequality among workers in the manufacturing industry during both the Johnson and the Reagan administrations.

Pedro Conceição and Pedro Ferreira presented evidence that inequality and unemployment are related positively across the European continent. This finding contradicts the often-repeated view that unemployment in Europe is attributable to rigid wage structures, high minimum wages, and generous social welfare systems. Conceição and Ferreira believe that large intercountry inequalities across the European Union aggravate the continental unemployment problem. The lower U.S. unemployment stems in part from the U.S. programs of redistribution that reach across all 50 states, including the Social Security system, the earned income tax credit, the federal minimum wage, and a uniform regime of monetary policy geared toward full employment, all of which reduce interregional inequality and all of which Conceição and Ferreira recommend be adopted by the European Union.

Amy Calistri presented her paper, written with Galbraith, on industrial wages in a selection of OECD countries, using data drawn from the Structural Analysis Database and a sequence of techniques that apply cluster and discriminant analysis to time-series of wage change by industry. The principal finding is that a small number of well-defined groups of industries usually exist whose cross-group differences account for almost all interindustry wage variation. Although the specific structure of groups varies according to patterns of natural resources, comparative advantage, and trade union organization within each country, the between-group variation across time usually reflects the movement of macroeconomic variables, such as inflation and exchange rates. In other words, Calistri believes that individual countries appear to be able to control their internal institutional structures, but they do not exercise control over the evolution of wage differentials across these groups except insofar as they can manipulate the macroeconomic conditions to which the groups are differentially sensitive.

Discussant L. Randall Wray, of the University of Missouri–Kansas City and the Levy Institute, noted that Calistri is aware that she has found only correlation between macroeconomic factors and inequality, not causation; she asserts only that it is reasonable to attribute the change in wages to changes in macroeconomic factors. He also noted that statistically significant correlations were found, but the size of the correlations was not discussed. Discussant Brian K. MacLean, of Laurentian University, felt that Conceição and Ferreira had an intriguing hypothesis, but criticized them for not specifying their model, which seems to incorporate elements of search theory and labor rent theory. He noted that they compared output and population in the United States to that of Europe as a whole, but compared inequality in the United States to individual countries in Europe.

Speaker: S Jay Levy

Senior-citizen household poverty has greatly diminished to become relatively rare over the past quarter of a century, and workers' real incomes have generally declined since 1980. Levy Institute chairman S Jay Levy sees these two phenomena as related: We have a leisure class that has grown rapidly in size and purchasing power, one that lives quite well but off the labors of workers. Researchers and policymakers have shied away from attributing workers' shrinking portion of the economic pie to retirees' larger bites. No one wants to say to their grandparents, "Your lifestyle is too luxurious"; most workers are looking forward to comfortable retirements; and, because senior citizens vote when others do not, officials are not inclined to blame older persons' consumption for workers' belt-tightening.

From 1980 to 1997, Levy pointed out, our economy, increased its manufacture of consumer goods 51 percent and more than doubled its net import of consumer goods. But retirees, who consumed 17.4 percent of workers' output in 1980, were taking 22.4 percent in 1993. From 1994 to 1998 this percentage barely changed and neither did the ratio of workers to retirees. The worker-retiree ratio will change little during the next 15 years, but between 2015 and 2030 the population of workers will rise less than 5 percent and that of retirees will rise almost 55 percent. Levy said that belt-tightening and turmoil lie ahead.

Speaker: William Darity Jr.

William Darity Jr., of the University of North Carolina, Chapel Hill, has traced between-group and within-group inequalities in several countries and their effect on the overall degree of inequality in a country. Theil's T-index decomposes the overall inequality into between-group inequality and within-group inequality, but it can be interpreted in two ways. One interpretation is that the extent of disparity between racial or ethnic groups shapes the overall inequality. In this interpretation, it is group affiliation that plays the pivotal role. The other interpretation is that overall inequality shapes the extent of disparity between groups. This interpretation implies that the more unequal the distribution of income in a country, the greater will be the income inequalities between racial or ethnic groups in that country. In other words, racial or ethnic differences matter because class differences matter.

Evidence on inequality needs to be examined from both perspectives. Complicating any such examination is the fact that between-group inequality and within-group inequality are interdependent. For example, the gaps between groups may lead to the introduction of a social program to redress such gaps; if a well-positioned minority within the target group benefits disproportionately from such a program, within-group inequality will increase, even though between-group inequality may have been reduced. It has been charged that the affirmative action program in Malaysia (begun in 1970) to reduce the income gap between the native Malays and people of Chinese and East Indian origins had this effect. The evidence on the question is, however, mixed, with some data pointing to progressive closure of the between-group gaps and some data pointing to the opposite.

In contrast, the data are clear regarding racial inequality in the United States over the last 20 years. The interracial gap in earnings narrowed in the 1970s, but the 1980s and the 1990s have been characterized by both rising inequality between blacks and whites and rising within-group inequality for both blacks and whites. As pointed out by James Galbraith, even a successful affirmative action program is not inconsistent with rising inequality between the races because even while the share of blacks in higher-paying jobs has risen, the average wage of blacks has fallen relative to that of the white population. This has happened because the majority of blacks remain in occupations in which affirmative action provides no meaningful relief and in industries that are losing ground. The rise in general inequality of earnings has thus contributed to a widening between-group inequality.

The universal persistence of racial and ethnic discrimination in countries at all stages of development in the absence or presence of programs of redress for groups with inferior status suggests that it has a salience for group differences that is independent of the degree of general inequality. The debate surrounding the system of compensatory discrimination, also known as the "reservation system," in India is instructive in this respect. There is a constitutional commitment in India to reserve 22.5 percent of government jobs and seats in educational institutions and electorates at all levels for those in the bottom rung of the caste system and tribal groups, who together account for an equivalent share of the population. The reason behind this policy is the sustained social and economic backwardness of these groups. While the success of the policy is admittedly limited, critics have often argued, in an exact parallel with critics of affirmative action in the United States, that through the reservation system "unqualified" persons obtain positions, leading to a general lowering of quality and efficiency in educational institutions and the workplace. These critics often ignore that qualified persons of inferior status may not be able to obtain appropriate positions in the absence of the program and that the quality and efficiency of those in nonreserved positions is not necessarily optimal.

Recent research on apartheid South Africa (using 1980 and 1991 data) shows that there were high levels of discrimination, lowering relative wages of blacks, in spite of the fact the substantially lower educational attainment of blacks suggests that there was no need for nonmarket-based discrimination by whites to exclude the blacks. Similarly, in Brazil, significant discriminatory losses for blacks and mulattos have been identified despite the absence of any historic structure of exclusion and the presence of a relatively market-oriented economy. The maintenance of dominant and inferior status between groups suggests the need to consider the first interpretation of the Theil index—the importance of intergroup disparity in shaping overall disparity—at least as seriously as the second.

Session 4. Measuring Inequality in the World Economy

Inequality and growth have recently figured prominently in theoretical and policy discussions in development economics. Klaus Deininger , of the World Bank, argued on the basis of his joint work with Pedro Olinto, also of the World Bank, that the empirical evidence on which the discussions are based is weak. Theory suggests that the links between distribution and growth operate via households' access to assets, but most empirical work relies on data concerning distribution of income. Moreover, most empirical work employs cross-country and cross-sectional data rather than panel data. Deininger and his colleagues at the World Bank have developed a panel data set for roughly 100 countries to strengthen the empirical basis of investigations into inequality and growth. Their analysis of the data shows that initial asset inequality, as measured by land distribution, has a negative effect on growth; human capital stock has a positive impact on growth; and policies to expand human capital stock via education have only a negligible effect on growth in countries with a high degree of asset inequality. They also find that income inequality has a positive impact on growth, consistent with the findings of most other studies. Deininger argues that these results have some direct policy implications. Countries engaged in structural adjustment and liberalization must ensure that such policies do not worsen asset inequality. Governments in these countries should also maintain an appropriate regulatory framework and provide key public goods and safety nets for the poor and the economically vulnerable social groups. Finally, although policies to redistribute assets are desirable, the adoption of such steps must be preceded by careful case-by-case cost-benefit analysis.

James Galbraith stated that his joint work with Lu Jiaqing, of the University of Texas at Austin, shows that changing inequality in industrial earnings in over 70 countries reflects changing political and economic conditions in these countries. Galbraith identified three phases in global inequality from 1970 to 1995. The oil-price shocks of the 1970s and the policy responses to them brought about growing inequality in the oil-importing countries and declining inequality in the oil-exporting countries. With the decline of oil prices and the debt crisis from 1981 to 1988, inequality in most oil-exporting countries and in most other countries widened, with China and India the major exceptions. Global liberalization and the fall of communism in Europe from 1989 to 1995 generally led to an increase in inequality, most remarkably in the case of Russia. Galbraith drew some policy implications from the evidence on inequality. Maintaining high levels of growth encourages greater equality. However, rapid growth of high-wage exports is a solution open only to a few countries at a time, suggesting that a reduction of inequality on a global scale would require growth based on expansion of domestic markets or a substantially higher pace of world economic growth attained via coordinated policy measures led by wealthy nations. It cannot be achieved by liberalizing reform of small developing and transition economies. This policy conclusion is at odds with the conventional thinking that holds that each country is responsible for its own economic performance in a global economy. It suggests the need for a truly global approach in combating problems of growth, employment, and equality.

Rober t Summers, of the University of Pennsylvania, reported findings from his joint work with Alan Heston, also of the University of Pennsylvania, on inequalities in consumption levels. According to Summers, consumption level is a more tangible and direct measure of current material well-being than indicators such as per capita GDP. Income inequalities in the world are truly staggering, but if one takes into account the diminishing utility of income, the degree of inequality becomes much smaller. Summers also pointed out that inequality in income between countries is much greater than inequality within countries. He presented estimates of intercountry inequality in private consumption and in private and public consumption combined, based on data covering 98 percent of world population for some benchmark years between 1970 and 1990. The overall degree of inequality is the same for both measures of consumption: in 1990 the share of the low-income countries (about 58 percent of world population) in world consumption (private plus public) was only about 17 percent, while the share of the high-income countries (only 16 percent of world population) was 56 percent. However, the low-income and high-income countries had slightly lower shares in world consumption when only private consumption was taken into account. Summers also indicated that a set of estimates incorporating both intercountry differentials and intracountry differentials could provide world size distributions of individual consumption levels. At this stage, since detailed country data are not available for all countries, strong parametric assumptions had to be made regarding the distributions of consumption levels to obtain the world size distributions. Tentative estimates from this procedure indicate that the world size distributions of individual consumption are extremely skewed toward individuals in the higher income brackets.

Discussant Edward N. Wolff, of New York University and the Levy Institute, stated that each presenter had contributed new data that could stimulate further research and debate. However, he would like to see more "truth in labeling." Wolfe said that Deininger attempts to incorporate asset inequality but takes only one type of asset, agricultural land, into account; he should therefore restrict empirical analysis only to countries in which agricultural land is the most important type of asset. Galbraith focuses on manufacturing interindustrial wage differentials, but it is problematic to use this measure of inequality as a proxy for overall inequality at a national level since the two have different trends. Wolff expressed skepticism about Summers's argument that consumption level is a better proxy for welfare than income and about the strong parametric assumption Summers made regarding distribution of individual consumption.

Discussant Paul Davidson, of University of Tennessee, said that Deininger's finding that inequality in landownership inhibits growth may not be historically valid. England during the industrial revolution saw greater concentration in landownership, but no one would argue that growth was inhibited as a result. Galbraith's argument that rapid growth will favor greater equality ignores the Kalecki-Levy argument that propensities to consume are differentiated by kinds of income and that some inequality may be necessary to sustain saving and growth. Davidson also stated that Summers's undifferentiated treatment of consumption may be difficult to justify; consumer durables and public goods such as educational services included in current consumption actually have characteristics of investment goods.

Speaker: Joseph J. Minarik

Joseph J. Minarik, associate director for economic policy at the Office of Management and Budget, discussed economic policy opportunities. With its budget surplus, the federal government has money to spend on various programs. If additional spending is to be undertaken, the administration needs to decide where additional spending will be most effective. How can we target programs to help those who most need them? If there has been skill-biased technical change, can we retrain people for the skills that firms demand? Should we send every high school graduate to college? Should we send every child to preschool?

Minarik believes that the earned income tax credit is a marvelous creation of U.S. policymaking; it can increase the returns to low-wage labor without engendering the political resistence that the minimum wage does. But, it has flaws. One improvement might be to make payments each month rather than once a year in a lump sum at tax time, but this also has problems. Workers who receive more funds than they are eligible for would have to find money to pay back the government at tax time.

Positive reforms would be to create pensions or savings accounts for workers whose jobs do not provide pensions and to set up savings accounts to help parents send their children to college. The income tax system has been attacked with supply-side arguments, and, unfortunately, in the current political climate a regressive tax cut is far more likely than the introduction of a job guarantee program.

Minarik concluded that the administration has a good record for the last six and a half years. Unemployment is down, it is easier to find a job now than it has been in a long time, and the trend toward increasing inequality has been cut off. However, the administration must continue to be sensitive to these issues.

Session 5. Development Strategies: Successes and Disasters

Pan A. Yotopoulos, of Stanford University, stated that "disequilibrium in fundamentals" and "crony capitalism" cannot explain the implosion of the East Asian miracle economies in 1997. The crisis in these countries was characterized by large declines in asset values, sharp currency devaluation, and dramatic declines in output. The crises they experienced are explained better by a currency-substitution theory of systematic devaluations that is independent of the fundamentals of the economy but related to the position of the currency in the continuum of hard (reserve) to soft currencies. These countries had soft currencies (currencies that are not generally held as assets). In a free currency market, such as those adopted by these countries, a precautionary motive creates an asymmetric demand for hard currency. The asymmetry implies that soft currencies will depreciate systematically, while hard currencies will fluctuate based largely on fundamentals. The policy remedy for the asymmetry is rationing, that is, restrictions on converting the soft currency into hard currency for precautionary purposes. According to Yotopoulos, his theory implies that currency substitution leading to devaluation can result in systematic misallocation of resources in soft-currency countries and thus offers an explanation for the large "real" effects of the currency crises in East Asia. The theory has also been empirically tested, with good results, for a sample of about 70 countries.

Junmo Kim, of the Korea Institute of Public Administration (Seoul), examined the heavy and chemical industrialization strategy followed in Korea since the 1960s (known as the HCI) and its impact on the country's present industrial structure. The performance of individual industries was assessed using wages. With data from 1971 to 1991, cluster analysis was used to classify industries into groups that are internally similar in wage growth. Interestingly, the industries targeted by the HCI formed a coherent group. Underlying forces driving wage growth were identified using discriminant analysis. Results showed that cumulative wage growth is positively related to investment growth and the pattern of this relationship is similar to that found in most industrialized countries: industries that employ relatively more skilled labor and industries targeted by the HCI earn industry rents large enough to pay relatively higher wages to their workers. According to Kim, this suggests that the HCI did not lead to a distorted industrial structure. His results also indicate that the provision of long-term loans at cheap interest rates to industries targeted by the HCI protected them from the turbulence in world financial markets without allowing them to earn industry-specific labor rents. Kim concluded that the HCI was successful in transforming Korea into an industrialized economy. However, he warned that an overcapacity problem at present has to be confronted through a reform of corporate governance.

According to Nancy Birdsall, of the Carnegie Endowment for International Peace, it is important to examine the relationship between inequality in education and general inequality in developing countries. The distribution of assets, especially the special asset of education, matters for growth and for poverty reduction. Birdsall said that cross-sectional data on income inequality and per capita GDP growth for a large number of countries show that East Asian countries were unusual in that they had high growth with low income inequality. Land reform and higher educational levels were responsible for this special feature. In general, cross-country growth regressions that include the distribution of education as an explanatory variable show that the distribution is important and has a more pronounced effect on the income growth of the poor than on average income growth. Birdsall used the example of Latin America during the 1980s to show how increases in inequality can lead to increases in poverty. Inequality in education has a deleterious effect on income inequality and vice versa. Children from relatively richer households have a better chance of getting more education, and since the incremental increase in income due to education is much higher in the developing countries, the differential access to education strongly affects the distribution of labor income. Poorer households often cannot afford to send their children to school, and, since the children's chances of success at school are relatively low, are also less motivated to do so. Birdsall also has examined the link between the income and schooling of parents and children's schooling. She and her colleagues have related this link to a few macroeconomic and policy variables for several countries and found that developed financial markets and quality of primary education are crucial in explaining how upwardly mobile children are.

Michael D. Intriligator, of the Milken Institute and the University of California at Los Angeles, commented on the papers in the session and presented his thoughts on the economic crisis in Russia. He suggested in relation to Yotopoulos's presentation that a Tobin tax on foreign exchange transactions may be helpful in quelling speculative trading in currency markets. The main problem with a Tobin tax, however, is the sharing of the proceeds from it; attempts to devise a plan that is satisfactory to the major countries have been unsuccessful. Intriligator commented that Kim had debunked some of the common myths about Korea's industrialization policy and had brought to the fore the importance of government planning for developing countries. He stated that Birdsall's characterization of education as an asset was inaccurate since education is the activity of building an asset, human capital.

Intriligator remarked that the economic crisis in Russia is a transition disaster since GDP has declined drastically and the number of people in poverty has skyrocketed from 2 million in 1992 to 60 million today. According to Intriligator, the reason behind the disaster was the acceptance by the Russian government of the Washington consensus that macroeconomic stabilization, liberalization of markets, and privatization of state enterprises would ensure a smooth transition to a market economy. Intriligator stated that, instead, a successful transition requires development of the institutions of a free-market economy, such as private property rights, banks, a commercial code, and legal institutions; fostering of active competition in product markets so that state monopolies are not converted into private monopolies; an important role for government in institution building and providing an appropriate regulatory framework.

According to discussant Jan A. Kregel, of UNCTAD and the Levy Institute, Yotopoulos's theory is incomplete in that it does not explain how currencies differentiate themselves into soft and hard currencies. Models of currency markets during the Bretton Woods era concentrated on the current account or flow variables such as income because under the Bretton Woods system current account balances or flow variables dominated currency markets. Models that did include the capital account did so without recognizing the stock implication of capital account adjustments. However, accumulated debt became a serious problem in the 1980s and capital flows began to dominate the international financial system. Because stock variables now dominate flow variables, those fundamentals that are linked to the current account have only a weak effect on currency fluctuations. Demand for foreign exchange now stems not only from the need to finance current account transactions but also from the desire to hold currency as an asset. The factors at work behind investors' decisions to hold or discard a particular currency are varied and a watertight distinction between soft and hard currencies is not always possible. For example, before the 1994 crisis the Mexican peso could be considered a hard currency relative to the dollar because of interest rate differentials, yet after the onset of the crisis it became a soft currency and suffered severe devaluation.

Discussant Robert A. Blecker, of American University and the Economic Policy Institute, remarked that the appreciation of a hard currency like the dollar has real effects on the economy of the hard-currency country. The chronic tendency of the dollar to become overvalued has led to mounting trade deficits and a shift in the composition of employment toward nontradable services, which have lower wages relative to export-oriented industries. An appropriate exchange rate is therefore likely to reduce wage inequality in the United States. Blecker suggested that Kim's analysis of the Korean industrialization strategy may be incomplete because he paid attention only to wages to the exclusion of other variables such as profits or productivity. He also expressed skepticism about Kim's assertion that the absence of correlation between the interest rate differential and cumulative wage growth in different industries could be interpreted as indicating the unimportance of credit subsidies in serving as sources of industry-specific rents because credit subsidies could have directly influenced investment that did contribute to such rents. Blecker agreed with the overall thrust of Birdsall's link between educational inequality and income inequality, but noted that improving the educational system and directing more educational resources toward the poor will not by themselves be sufficient. Poor families often cannot afford to send their children to school and poor children often do not have the incentive to stay in school. Furthermore, under the current neoliberal economic regime, there may not be enough employment growth to provide jobs for the newly educated. Blecker concluded that if the neoliberal development strategy as a whole is not challenged, better education will not make a significant difference.

Session 6. Policy Roundtable

James K. Galbraith said that the world is facing a crisis of globalization. Financial liberalization does not work for developing countries. New policies are needed at the global, regional, and national levels. New leadership and new policies are needed at international institutions such as the International Monetary Fund, and the United States and other large nations need to be aware that their policies have global effects. Regional institutions such as the European Central Bank could play an important role if properly used. China is a good example of how a single national government can implement policies to stabilize financial flows effectively.

Pan A. Yotopoulos, of Stanford University, said that currency devaluations have profound effects on local populations. For example, Korea lost 18 percent of its GDP following devaluation in 1997. Similar patterns were experienced in the Philippines, Thailand, Indonesia, and Malaysia. In each country, the poor suffered disproportionately. According to Yotopoulos, those making the decisions currently have no plan on the table that would really do any good. The belief that competitive markets will make every nation strong is mistaken. China, however, was able to avoid a financial crisis by keeping its currency inconvertible. There was no flood of foreign funds into China, and so there could be no flood of funds out of the country when the crisis hit nearby countries. Yotopoulos concluded that it was not contagion, but bad policies that led to the Asian crisis.

Michael D. Intriligator stressed that the central problem policymakers must address is not inequality per se, but poverty. Policymakers need to adopt different strategies in developing, transitional, and industrialized countries. Convergence between the developing and the industrialized nations as predicted by mainstream economists is not happening; polarization is happening instead. With only a few exceptions, the industrialized countries are growing more quickly than the developing nations. Developing nations need access to loans for small business and forgiveness of debt. Transition countries need proper institutions, competition, and government involvement to build viable capitalist economies. Industrialized nations need to revive the war on poverty by, for example, using a national "demogrant," partially financed by a national energy tax, to set a floor for standard of living.

Edward N. Wolff stressed the need to focus on the inequality of wealth, which is three times as unequal as income. Since 1989 only the relatively wealthy have seen an increase in their wealth and median wealth has declined. Despite talk about the spread of benefits from a rising stock market, the richest 10 percent of households own 85 percent of stock and only 30 percent of Americans own more than $5,000 worth of stock. Household debt has increased from 11 to 15 percent of net wealth. The 1 percent increase in home ownership can be attributed entirely to an increase in ownership of mobile homes. Wolff asserted that to solve the problem of unequal wealth, the nation needs a serious income policy, including, for example, a family allowance plan, GI bill–like support for mortgages, and a wealth tax used to finance support for low-income individuals.

Transcripts of the speakers' addresses and extended summaries of the sessions will be published in the conference proceedings. Audio webcasts of the addresses and sessions are available on our web site (see the Webcasts page in the What's New section, www.levy.org).

The Rhetorical Evolution of the Minimum Wage

Oren M. Levin-Waldman
Working Paper No. 280, September 1999
http://www.levy.org/docs/wrkpap/papers/280.html

The debate over the minimum wage in the United States has been polarized into two camps. Proponents of minimum wage increases argue that they are conducive to better macroeconomic performance and the creation of a just society. A just society is one in which, as a matter of fairness, workers earn wages sufficient to allow them and their families to live out of poverty and in dignity. Minimum wage increases thus become an issue of social justice, not just an issue of poverty. Opponents of minimum wage increases maintain that the increases will not help the poor because most minimum wage earners are secondary earners or teenagers and will harm those who earn the minimum wage by triggering disemployment effects.

Resident Scholar Oren M. Levin-Waldman traces the changes in the rhetoric of the debate. The early arguments for the minimum wage, in the late nineteenth century, were couched in terms of a living wage, a wage sufficient for a male worker to support his family. These arguments reflected an attempt on the part of the wage workers to be economically independent and to gain dignity for wage labor. Opponents claimed that an individual's wages were his own responsibility. The same rhetoric of a living wage was employed in the struggle, in the early twentieth century, to make the statutory minimum wage applicable to women workers. During the Great Depression and the subsequent New Deal era, however, the rhetoric changed and the minimum wage came to be portrayed as part of macroeconomic policy. Higher wages would stimulate aggregate demand by giving workers more purchasing power. Higher wages would also improve economic efficiency because employers would be forced to improve labor productivity to maintain profit rates, workers would be better motivated and more likely to improve their skills, and the least productive members of the workforce would be left unemployed.

During the 1980s, with the weakening of labor unions, the rollback of the welfare state, and deregulation, the nature of the debate began to change again. The minimum wage began to be portrayed by its opponents as ineffective in combating poverty. They argued that the means to higher wages was better education and training, the responsibility for which lay with the individual worker. So, the rhetoric has come full circle. The shift to an individualist argument marks a return to the arguments of the opponents of the minimum wage before it was first adopted. The arguments of the current living wage movement, which is gaining strength in some U.S. cities, are similar to those of the early advocates of the minimum wage. Levin-Waldman recognizes the merits of a living wage. In addition, he believes that the role of the minimum wage as a means to redress income inequalities should be recognized.

The Distribution of Wages: A Non-parametric Decomposition

Conchita D'Ambrosio
Working Paper No. 284, October 1999

Conchita D'Ambrosio, of Bocconi University and New York University, presents a non-parametric procedure to analyze the effects of different factors on observed movements in any distribution. She estimates these effects by applying kernel density methods to weighted samples to obtain counterfactual distributions. One advantage of this approach over previous procedures is that it provides a direct means of investigating what factors exert an impact, where in the density that impact occurs, and what determines the variation in the level of polarization observed. It also offers a new decomposition method of within- and between-group components.

D'Ambrosio applies this methodology to examine the increase in inequality in the northern, southern, and central regions of Italy, using data from surveys conducted by the Bank of Italy in 1987 and 1995. She finds that inequality in Italy has increased over this period as the dispersion of the distribution of wages has increased. In 1987 the wage distributions in the three Italian regions were quite similar, but by 1995 the three distributions had both moved apart and become more differentiated in shape. Gini coefficients calculated for the whole Italian wage distribution at different times fail to distinguish adequately between convergence to the global mean and clustering around local means. There is, therefore, a need to extend the economic analysis to explain what factors caused the movements in the distributions. D'Ambrosio uses kernel density estimation methods to obtain an estimate of the wage distribution and its change through time for the whole population and for its subgroups without imposing any assumption about the distribution of the observed data, as other methods require. She achieves this by estimating counterfactual distributions, which attempt to determine what the density of income would be in a given year if workers' characteristics were the same as they had been (or would be) in some other year.

To understand the causes of the movements in the regional distribution of wages, D'Ambrosio decomposes the total working population into subgroups based on four characteristics—education, age, industry, and occupation. She uses an index of polarization (modified from one proposed by Esteban and Ray) to take into account the distance between distributions of income of each regional group. Her results are consistent with earlier observations of the changes in the Italian distribution of income; that is, the increase in regional polarization observed in Italy from 1987 to 1995 can be attributed to movements within educational and age groups, but the evidence on the effects of other groupings is mixed.

Computers and the Wage Structure

Michael J. Handel
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http://www.levy.org/docs/wrkpap/papers/285.html

Many economists have blamed the recent increase in inequality in the United States on a shift in demand toward more highly skilled workers caused largely by the increased use of computers in the workplace. Often cited as evidence for this hypothesis is Alan Krueger's 1993 study in which he claimed that returns to computer use ranged from 10 to 15 percent and that computer use explained about 40 percent of the increase in returns to education that occurred between 1984 and 1989.* He concluded, therefore, that computers have contributed significantly to the increase in inequality.

According to Resident Scholar Michael J. Handel, one reason to doubt Krueger's findings is that estimates of the returns to computer use—about double the estimated returns to a full year of education—are too high to be realistic. It is possible that the correlation Krueger found between computer use and wages is due to coefficient bias rather than to returns to the ability to use a computer. Krueger used control variables to account for workers' education, experience, race, and other worker attributes, but he used computer use as the only indicator of the type of tasks the individual performs on the job. Handel proposes instead that because office workers are more likely to use computers and are likely to be paid more than other workers, the use of computers might simply serve as a proxy for having an office job.

Handel tested this hypothesis by using eight job task indicators included in the 1991 Current Population Survey: reading articles or reports; reading or using diagrams, plans, or blueprints; reading or using forms; reading or using letters; reading or using instruction manuals or rules; writing memos, reports, or other texts; using mathematics; and using a computer. He found that, when entered individually into a wage equation, each of the job tasks is associated with large and statistically significant wage differentials of roughly similar magnitude. Those who perform any one of these job tasks earn roughly 21 percent more than those who do not. Few would argue that the ability to read a letter is specifically rewarded so highly. Instead, these job task variables may be

* Alan B. Krueger, "How Computers Have Changed the Wage Structure: Evidence from Microdata, 1984–1989," *Quarterly Journal of Economics* 108 (1993).

correlated with unmeasured variables that affect wages, such as human capital, occupational position, and firm characteristics. When entered jointly into the regression equation, most of the coefficients for the seven noncomputer job tasks remain significant. When the job content variables and other controls for human capital, occupation, and industry are added to the regression equation, the coefficient for computer use falls to 0.066, less than half of Krueger's commonly cited estimate of 0.15. Even that reduced size of the coefficient may still reflect the computer variable's ability to pick up correlation with unobserved variables affecting wages.

Another reason to doubt the significance of the contribution of computer use to wage inequality, according to Handel, is that the trend increase in inequality did not coincide with the trend increase in computer use. The most rapid increase in inequality occurred during the recession years of the early 1980s, prior to the widespread use of computers in the workplace. Inequality actually declined modestly between 1989 and 1992, when the minimum wage was raised, even though the use of computers was still growing rapidly. These facts seem to indicate that institutional and macroeconomic factors have been more important than the use of computers in determining the overall level of inequality. To test this hypothesis, Handel used data from 1984 and 1989 Current Population Surveys and adjusted the 1989 rates of computer use to 1984 levels while holding other variables constant. This method indicated that, when all components of computers' contribution to the overall variance are taken into account, computers did not play even a secondary role in raising inequality during the 1980s.

The History of Wage Inequality in America, 1820 to 1970

Robert A. Margo
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http://www.levy.org/docs/wrkpap/papers/286.html

Economists have written extensively about the remarkable rise in wage inequality since the 1970s in the United States, but these analyses often lack a historical perspective. Robert A. Margo, of Vanderbilt University and the National Bureau of Economic Research, fills this lacuna by surveying patterns of wage inequality from 1820 to 1970. According to Margo, a historical perspective can help in assessing the uniqueness of the recent growth in wage inequality between skilled and unskilled workers, in determining the existence of secular trends in inequality, and in isolating the institutional and other factors responsible for differential growth of inequality in different phases of economic growth.

The conventional wisdom regarding wage inequality is that it follows an inverted U-pattern, rising and then falling, over the course of economic development, with relative imbalances of supply and demand and the technical change that causes demand shifts. Margo points out that this theoretical framework cannot reveal the effects of institutional factors (for example, unions), government policy, and general macroeconomic conditions on the evolution of wage inequality. He also argues that it relies on data and data analysis that are open to serious criticism. The main problem is that the data pertain to average wages for specific occupations rather than to wages of individual workers.

Margo finds, based on new data, that between 1820 and 1860 the real wages of skilled artisans did not grow more rapidly than the wages of unskilled laborers, but the wages of clerks (the educated workers of the day) did. He also finds that the relative wages for educated labor continued to rise throughout the rest of the nineteenth century before dropping dramatically at the turn of the century and declining in the 1940s. Thus, the existence of an inverted U-shape for returns to educated labor may be accepted as a stylized fact. Margo concludes on the basis of manufacturing data that wage inequality between skilled and unskilled labor grew steadily from 1860 to 1880, probably due to the North-South wage differentials and to capital-intensity and firm-size differentials.

Overall wage inequality declined considerably between 1900 and 1950. The wages of skilled labor and educated labor declined relative to unskilled labor between these years as a result of declines in immigration, increased unionization, and educational expansion. Recent work has suggested that although these long-term factors were important, much of the decline took place in the1940s and that decline can be attributed to factors specific to the economy during World War II. By the 1960s wage inequality rose back toward its pre-1940 level, but the baby boom prevented it from rising further until the 1970s. The record shows that although the post-1970s inequality levels are higher than the early 1950s level, they are comparable to the prewar levels. Margo concludes that the history of wage inequality is one of both episodes (for example, the government policies duringWorld War II) and secular trends (for example, immigration and technical change).

Is There a Wage Payoff to Innovative Work Practices?

Michael J. Handel and Maury Gittleman
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Most scholars agree that recent years have witnessed the growth of secondary labor market jobs, such as low-wage service sector jobs, and a slowdown in the growth of manufacturing jobs. However, many believe that there is an alternative to the low-wage, low-skills strategy for employers of less-skilled workers. This alternative is often referred to as a high performance model. It involves a significantly reorganized workplace with more skilled and interesting jobs and greater employee involvement in organizational decision making. Proponents of the high performance model hope that it will lead to better paying and more rewarding jobs for workers at the low end of the skills spectrum and reduce wage inequality. However, there have been only a few studies to see if employers who adopt the high performance work practices actually pay their workers relatively more than employers who stick to other types of workplace organization.

To study the effect of the high performance model on wages, Resident Scholar Michael J. Handel and Maury Gittleman, of the OECD and U.S. Bureau of Labor Statistics, used the Survey of Employer-Provided Training for 1995 conducted by the U.S. Bureau of Labor Statistics. The survey was based on a nationally representative sample of nonagricultural private establishments with 50 or more employees. It included items relating to establishment training practices and items on a broader range of high performance and related work practices than in previous surveys. A distinctive feature of the survey was that the questionnaire was given not only to the employer but also to two randomly selected employees at each establishment.

The availability of data on employers and employees allowed the estimation of two parallel regression models. In the first, the log of the average establishment wage was regressed on high performance and related work practices; in the second, the log of the individual employee's average hourly wage was regressed on high performance and related work practices. In both cases, appropriate control variables were applied. For the first model, control variables were establishment size, industry and region, percentage of part-time workers, extent of unionization, and the establishment's occupational distribution. For the second model, controls were included for race, age, gender, part-time status, and tenure as well as for establishment size, unionization, industry, and region. Several variants of the two models were estimated using interaction terms, using different measures of the adoption of high performance practices, and separating establishments with at least 65 percent of employees in service and production occupations.

According to Handel and Gittleman, their results indicate that the high performance work practices generally do not have a wage payoff, at the establishment or the individual level. They suggest that the failure to find a positive relationship may be due to the absence of such a relationship or to the limitations of the data used. Most previous studies that found a significant payoff were based on unrepresentative samples, did not control for nonrandom factors affecting adoption appropriately, and had other methodological problems. It may be that the absence of a payoff stems from disproportionate accrual of the productivity gains to capital rather than to higher wages for labor. There may be data problems due to missing information, such as the absence of data on the proportion of employees covered by the practices within establishments. Handel and Gittleman conclude that although more research needs to be done, their results suggest that, contrary to the hopes of proponents of high performance work systems, the practices may not reverse the growth of wage inequality.

New Perspectives on the Guaranteed Income

Karl Widerquist
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"Guaranteed income" is a generic term for a number of similar programs—basic income, citizens' income, the negative income tax, the national tax rebate, and others—all of which guarantee a certain level of income for all citizens without any conditions such as a work requirement. Resident Research Associate Karl Widerquist reviews seven recent books on the subject.

Arguing for Basic Income: Ethical Foundations for a Radical Reform, edited by Philippe Van Parijs, contains essays on specific issues relating to the subject, including libertarian, communitarian, egalitarian, and efficiency-based arguments for and against basic income. In *Real Freedom for All: What (If Anything) Can Justify Capitalism?* Van Parijs defines "real freedom" as the freedom for an individual to do whatever he or she might want to do and argues that the most just society is the one that can provide the most real freedom for the least advantaged citizen, subject to the constraints of formal freedom (as defined by libertarians). Van Parijs's main focus is his lengthy justification of the highest sustainable basic income as the policy that can maximize the real freedom of the least advantaged. He provides only a brief justification of capitalism, arguing simply that the observed higher productivity of a regulated capitalist economy makes it more capable of providing a higher basic income than a socialist economy.

According to Widerquist, Anthony Atkinson's *Public Economics in Action: The Basic Income/Flat Tax Proposal* is more useful for students of public economics than for those interested in basic income. Basic income is used only as an example to teach the reader how to use the tools of public economics, but the reader learns little about basic income itself. Robert R. Schutz's *The $30,000 Solution* argues for an extremely high minimum income ($30,000 for an individual and up to $80,000 for a family of four) without sufficient explanation of how a country with a per capita GDP of only $28,000 can sustain such a minimum. Michael Murray's *". . . And Economic Justice for All": Welfare Reform for the 21st Century* makes a solid case for the guaranteed income with a good discussion of how it could work, but it does not discuss the recent literature on the proposal.

Leonard M. Greene's *The National Tax Rebate: A New America with Less Government* presents a small guaranteed income as a way to reduce taxes and to give recipients a better work incentive than the current income maintenance system. Greene does not demonstrate how the national tax rebate would be better than eliminating the social welfare system and reducing tax rates. Widerquist feels the absence of this argument is a weakness because the conservative audience to which the book is addressed is likely to agree that the current system is inefficient but is also likely to prefer simply eliminating government redistribution of income to replacing it with a more efficient system.

Only one of the seven books Widerquist reviews—*The Benefits of Another's Pains: Parasitism, Scarcity, Basic Income* by Gijs Van Donselaar—opposes the guaranteed income. Van Donselaar argues that any unconditional income exploits workers. By his definition, person A exploits person B if A is better off than he would have been had B not existed and B is worse off than he would have been had A not existed. In Van Donselaar's example, all individuals begin with the ability to produce their own means of subsistence without participating in exchange and use basic income to obtain higher consumption or to reduce their work effort. Widerquist asserts, however, in most modern nations, the least advantaged individuals must enter into exchange in order to obtain their means of subsistence. This makes them vulnerable to exploitation in exchanges with more advantaged individuals. According to Widerquist, Van Donselaar's example demonstrates that an unconditional income can exploit workers, but fails to demonstrate that an unconditional income inherently exploits workers or that it does not benefit people who would be exploited in its absence. Widerquist concludes that a small unconditional income is necessary to bring individuals even to the starting point of Van Donselaar's example.

Down and Out in the United States: An Inside Look at the Out of the Labor Force Population

Marc-André Pigeon and L. Randall Wray
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Full text: http://www.levy.org/docs/ppb/ppb54.pdf
Highlights: http://www.levy.org/docs/hili/54a.html

The Clinton administration has made much of its record on employment growth. The 1999 *Economic Report of the President*, for example, says that gains from the ongoing economic expansion have been distributed throughout the population, reaching groups that had previously been left out. Research Assistant Marc-André Pigeon and Senior Scholar L. Randall Wray grant that the gains of the past seven years represent an important achievement, but they believe the story of this expansion is far more complex. Behind a host of healthy macroeconomic numbers lurk some inconvenient and disturbing facts. For example, despite rising employment statistics throughout the expansion, more than 20 percent of the age 25 to 64 population (28 million persons) were officially classified as out of the labor force (OLF) in 1998.

Pigeon and Wray look at some of the demographic characteristics of a subset of the OLF population that they label the "did not work (DNW)" population—people who said they did no work for pay in the previous year. In any given year, the DNW population accounts for at least 90 percent of those who are 25 and over and officially defined as out of the labor force. The authors find that the DNW population tends to be less educated, older, in poorer health, and with lower household income than the broader population. The largest percentage give retired as their reason for not working, followed by home responsibilities and ill or disabled (with small percentages who cite going to school, could not find work, or other). Women make up a disproportionate share of those who give home responsibilities as their reason for not working, and men dominate the illness or disability category.

Pigeon and Wray next look at flows of the DNW population into and out of the labor force. They observe that the flows into the labor force do not seem to vary with the economic cycle, except for people who cite home responsibilities as their reason for not working. Whereas only 12 percent of this category moved into the labor force in the period of slow growth from 1991 to 1992, almost 20 percent did so in the faster growth period from 1996 to 1997. This fact implies that many of those who cite home responsibilities as their reason for not working would work if jobs were available. Surveys show that many of the ill or disabled and the retired would also choose to work if jobs were offered. Pigeon and Wray find that most of the DNW population cannot find work on their own when they want it and so need some kind of active labor market policies. Pigeon and Wray review some policy options and suggest that a public employment program presents an attractive solution to a problem that has persisted despite eight years of economic growth.

The Effect of Geographic Mobility on Male Labor Force Participants in the United States

Joan R. Rodgers and John L. Rodgers
Seminar, September 21

Human capital theory leads to the conclusion that the relatively flexible and unregulated nature of the U.S. labor market during the last two decades has produced lower unemployment rates and higher labor force participation rates than have been achieved in other developed countries. High rates of geographic mobility are one aspect of labor-market flexibility in the United States. Human capital theory predicts that moving will lead to increased earnings among workers who move. Joan R. Rodgers and John L. Rodgers, both of the University of Wollongong, discussed the results of their examination of this hypothesis using data from the 1969–1992 University of Michigan Panel Study of Income Dynamics (PSID). (Their study was restricted to males because the PSID assumes household heads are male.)

Rodgers and Rodgers define a “mover” as one who changes his county of residence. One who does not move or moves within a county is a “stayer.” Rodgers and Rodgers estimated the earnings that a mover would have achieved had he not moved by comparing his earnings to a group of stayers with similar characteristics. Bias resulting from self-selection in the decision to move was reduced by using panel data to model unobserved heterogeneity among workers and by including as controls various factors that affect the probability of moving, such as marital status and the presence of school-age children. Rodgers and Rodgers noted that this kind of bias cannot be eliminated completely.

Rodgers and Rodgers found that moving has a substantial, statistically significant, positive, long-run effect on earnings. Six years after moving real annual earnings were about 20 percent higher for movers than for stayers. They also found that younger workers were more likely to benefit from moving than older workers and that workers from less affluent families were more likely to benefit from moving than workers from more affluent families. The wages of spouses, however, were not significantly affected by the move. Rodgers and Rodgers concluded that these results are generally consistent with the human capital model and that geographic mobility in the U.S. labor market improves the economic status of movers.

Program: Financial Markets and Monetary Policy

Lessons from the Asian Crisis: A Central Banker's Perspective

Laurence H. Meyer
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Laurence H. Meyer, a member of the Board of Governors of the Federal Reserve System, analyzes the origins of and policy responses to the Asian crisis by employing insights from Hyman Minsky. According to Meyer, recessions, especially when accompanied by financial crises, are the product of a coincidence of adverse shocks and an already vulnerable economy. The vulnerability of the Asian economies stemmed from excessive leverage, speculative excess in asset markets, poor risk management, and inadequate regulation and supervision in the banking sector. The adverse shocks included sharp declines in exports and the appreciation of the dollar relative to the yen, which undermined the international competitiveness of the region.

Financial vulnerabilities increase during an economic expansion, as Minsky emphasized, but in the case of the Asian economies, there were also systemic vulnerabilities: weakness in corporate governance and moral hazard associated with government guarantees. Other significant sources of instability were fixed exchange rates, market psychology, and contagion effects. These additional sources of instability, coupled with the adverse shocks, led to a sharp economic downturn and significant obstacles to recovery. Shortfalls in risk management in the industrial countries and attempts to diversify portfolios in these economies following a run-up in domestic equity prices contributed to the surge in capital flows into the Asian economies. The large foreign capital inflows led to overheating and set the stage for an abrupt and dramatic reversal of capital flows. The mismatch between the requirements imposed by liberalization and the institutional structures and policy regimes prevalent in these countries made the crisis more severe.

The Asian crisis has shown that exchange rate regimes that fall somewhere between fully flexible and fully fixed are difficult to sustain and when they break down, the costs can be high. The transition to a flexible regime is best accomplished during a period of normalcy, not when the currency is under speculative attack. If a country did not switch to a flexible regime during normal times and is confronted with a speculative attack, the key question becomes whether and when to make the transition. Ideally, the existing system should be maintained as long as it can be defended, but, in practice, identifying the probability that a system can be defended under volatile conditions is extremely difficult.

Weakness in bank supervision and regulation and excessive leverage in the corporate sector clearly contributed to making the Asian crisis an intersection of currency, banking, and corporate debt crises. According to Meyer, two lessons emerge clearly. First, high priority should be given to sound corporate governance, narrow and explicit government guarantees, and adequate prudential supervision of banks. Second, once a crisis has occurred, the first priority should be to restore health to banking and corporate balance sheets; banking systems have to be restructured and recapitalized and corporate balance sheets must be "de-leveraged." Insolvent banks and corporations are a burden on the economy and a serious obstacle to recovery.

There are also policy measures that need to be adopted by the industrial countries with the participation of regulators from the emerging economies. International standards for banking and banking supervision should be updated to include emerging market economies. Monitoring and reporting on compliance with the international standards have to be improved. Technical assistance for the adoption of the international standards has to be provided to the emerging economies. Private lenders from industrial countries should be made to bear the consequences of the risks they take and bank supervision has to place proper focus on lending risks to emerging markets. Supporting international financial institutions and maintaining a pro-growth macroeconomic policy are other ways in which the industrial countries can contribute to global financial stability.

Sound macroeconomic policies are a prerequisite for minimizing the costs of financial instability. By conventional standards, the macroeconomic situation before the crisis was good, but there was evidence of speculative excesses in financial and real estate markets and a tendency toward real appreciation in the exchange rate. This suggests that adequate monetary tightening prior to the crisis, in the first part of 1997, could have moderated or avoided the crisis.

Economic theory offers little guidance as to the appropriate stance of monetary policy once a crisis begins and recent experience is also inconclusive. On the fiscal policy front, it seems clear in retrospect that the policy of fiscal restraint set by the IMF during the crisis was inappropriate. Financial markets recognized that fiscal profligacy was not behind the crisis and a policy of fiscal austerity was not likely to resolve it. Output losses in these countries have been more severe than expected and therefore an expansive fiscal policy is required.

Hyman Minsky's Theory of Capitalist Development

Charles J. Whalen
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According to Charles Whalen, of Cornell University, Hyman Minsky is well known for his financial instability hypothesis, but few have noticed that Minsky also explored a broader historical framework, which can be called his theory of capitalist development. Minsky believed that effective policy making requires an understanding of both short-term macroeconomic fluctuations and longer-term economic evolution. Such an understanding can help guide necessary institutional reform and can reveal the flawed nature of unregulated macroeconomic activity.

Minsky's theory of capitalist development combined Schumpeter's vision of a resilient intertemporal capitalist process with Keynes's insights into the fragility of capitalism. Minsky believed that capitalism is a complex, time-dependent system. The economy's institutional structure is a fundamental determinant of the path of capitalism's development, but this structure is also dynamic, changing with the profit-seeking decisions of businesses and financial institutions. The financial system has special importance in this theory because finance exerts a strong influence on business activity and because the financial sector is particularly prone to innovation. Because the institutional structure evolves, no policy regime can provide a once-and-for-all solution to economic problems; policy must change with the institutional structure. Public policy is an essential element in Minsky's theory. Government action is an inescapable determinant of capitalist economic development. Its decisions shape the institutional framework and its discretionary policy interventions can promote stability.

Minsky believed that there were many different possible forms or stages of capitalism. The key factors that distinguish one stage from another are the types of enterprises being financed and the primary sources of finance. Whalen identifies at least five stages of capitalism in U.S. history, with a sixth possibly on its way. Merchant capitalism took root in what is now the United States with the establishment of the British colonies in the early 1600s. It was characterized by owner-managed enterprises financed by merchant banking. Industrial capitalism, which emerged at the beginning of the nineteenth century, was characterized by financial organizations that could mobilize the resources needed to finance factories, capital-intensive transportation, mills, and mines. Banker capitalism appeared at the end of the century when large industrial combinations were created to insulate firms from the cut-throat competition characteristic of industrial capitalism. These trusts needed investment banks to finance their acquisitions, and these banks obtained a controlling position in the economy. Investment banks were able to reduce economic fluctuations for a time, but they were unable to cope with the stock market crash of 1929 and the depression that followed.

New Deal reforms, beginning in 1933, ushered in the era of managerial capitalism. The government's countercyclical fiscal policy, farm policies, and labor regulations set the stage for an unprecedented period of stability and prosperity in the years following World War II. The stable economic environment allowed corporate managers to assume a high degree of independence from bank and stockholder pressures. Unfortunately, many managers neglected adaptation and the result was economic upheaval in the 1970s. Money-manager capitalism became a reality in the 1980s when larger institutional investors, such as pensions, bank trusts, and mutual funds, began to exert their influence over business enterprise. This era has brought an increasing focus on short-term profits and stock values. Workers have had greater autonomy, but also greater insecurity. Government has encouraged these developments by removing many regulations imposed during the New Deal, giving greater incentives for takeovers, buyouts, and restructuring. Although money-manger capitalism has already been subject to global influences, the increasing pace of globalization requiring coordinated international policies and institutions may be ushering in an era of global finance capitalism.

According to Whalen, Minsky's ideas on capitalist development point to directions for research. One is more exploration of the interrelations of finance and business within each stage in the U.S. economy. Another is to examine the transition from one period to another within each stage: from financial exploration and experimentation to institutionalization and diffusion of new practices to erosion. Another direction is to consider how the essential elements of Minsky's theory can be applied to other nations. Still another research possibility is to use Minsky's ideas as a guide to explore specific questions with contemporary political significance. Whalen concludes that Minsky's theory of capitalist development provides the foundation for a comprehensive research program. Minsky started with the idea that policy would be more apt if it reflected an understanding of the economy as an evolving entity and from this he constructed a formidable alternative to the neoclassical paradigm.

Minsky and the Mainstream: Has Recent Research Rediscovered Financial Keynesianism?

Steven M. Fazzari
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Steven M. Fazzari, of Washington University in St. Louis and the Levy Institute, examines the extent to which recent mainstream research has captured Hyman Minsky's insights and extended his work. Minsky focused on the central role of finance in modern economies at a time when finance was not considered important by most mainstream economists. Most macroeconomic models assumed that financial conditions are irrelevant for "real" economic decisions and that finance is largely an adjunct to the engine of economic activity driven by preferences and technology. In contrast, Minsky's macroeconomics involves an investment theory of output and a finance theory of investment. Balance sheet conditions, which are independent of the productivity of new investment and reflect the financing of past investment, influence the ability of firms to undertake new investment projects by affecting their access to finance.

Recent mainstream research, inspired by the economics of information, has examined how asymmetric information in credit markets can create a situation in which a firm with a positive net present value investment project may not be able to obtain credit and hence to undertake the project. This result is fundamentally inconsistent with the usual mainstream assumption that any positive net present value investment project will be undertaken. Empirical work on the influence of finance on investment also has yielded results that strongly support Minsky's idea that financial factors (such as cash flow and leverage) have a decisive influence on investment.

According to Fazzari, Minsky developed a link between investment and finance at the microeconomic level primarily to employ it as a piece of a macroeconomic model designed to explain cyclical fluctuations. Recent mainstream macroeconomic models that have attempted to incorporate financial factors into the business cycle by formulating how access to credit and debt burden can influence investment spending differ from Minsky's approach in three fundamental respects. First, Minsky held the view that the finance-expenditure link is the source of macroeconomic instability, whereas in the recent models financial factors merely aggravate the effects of exogenous shocks. Second, the Kalecki-Levy link, which implies that higher investment leads to higher profits, is present in Minsky's framework, but is not to be found in the mainstream. Third, Minsky rejected the neoclassical synthesis view that deflation (or disinflation) pushes the economy to full employment equilibrium. He argued that because historical liability structures are denominated in nominal terms, deflation raises the incidence of bankruptcy and insolvency and lowers investment sufficiently to overcome any stimulus to demand that arises from increasing consumer wealth via the "real balance effect."

Fazzari argues that in terms of stabilization policy serious differences remain between Minsky and the mainstream. Minsky argued that government deficits in contractions sustain aggregate profits, which helps avoid a chain of bankruptcies that can change a downturn into a depression. In contrast, mainstream models largely ignore the stabilizing role of fiscal policy. Minsky also argued that monetary policy intervention, including lender-of-last-resort activities, is a fundamental part of the structure needed to contain financial instability. Mainstream models address a much narrower issue of the effect of interest rate changes on real economic activity. The emphasis on moral hazard in the recent mainstream analyses of capital market imperfections appears to imply that a "hands-off" policy by the central bank is desirable. Minsky's analysis, although cognizant of moral hazard, suggests that central bank intervention has to be evaluated in light of its implications for a possible downturn. Bailouts can contribute to financial fragility, but their absence can trigger a debt deflation that leads to a depression.

Monetary Policy in an Era of Capital Market Inflation

Jan Toporowski
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The mainstream theory of finance is largely a sophisticated version of Walras's theory of loanable funds, which holds that through an arbitrage process that occurs instantly and perfectly, saving is brought into equilibrium with investment in the market for loanable funds. The assumption of instantaneous arbitrage does not correspond to actual markets operating in real time and its implication that capital markets are perfectly liquid contradicts the Keynesian theory of liquidity preference.

Jan Toporowski, of South Bank University, offers an alternative theory of capital markets (that is, the markets for long-term securities), based on Hyman Minsky's theory of finance, and explores the implications of the alternative for monetary policy. His theory of capital market inflation is a nonequilibrium theory of capital markets. It holds that the actual value of a capital market is determined by the inflow of funds into that market. Most of that inflow is taken out by the net issue of bonds by governments, and a large part of the remainder is taken out by the net issue of securities by corporations. The balance, or net excess inflow, forms the market's liquidity. The liquidity allows the market to absorb a modest degree of net sales by financial investors.

When the net excess inflow increases over an extended period of time, capital markets, especially equity markets, inflate. The market inflation has economy-wide consequences. Financial investors shift their portfolios toward equities, reducing their liquidity preference at a time when an increase in their liquidity preference is required for "equilibrium." Productive activities of corporations become incidental to the restructuring of corporate balance sheets, mainly in the form of substituting equity finance for bank finance and seeking profit from financial market operations (such as acquisitions and share buybacks). An important consequence of the capital market inflation underway since the mid 1970s has been a process of bank disintermediation, as large corporations have found it cheaper to raise capital via the equity market. As a result, banks have been forced to cater increasingly to marginal, high-risk borrowers, thus contributing to financial fragility.

In a capital market, future claims and liabilities are interconnected in such a way (what Minsky called "layering") that a discrepancy between future cash flows and liabilities can have a chain reaction in the market leading to financial distress. Today's funded pension systems and their involvement in capital markets represent an important instance of such layering. Capital markets have also tended to move from hedge to speculative to Ponzi finance. Capital market inflation pushes financial investors' portfolios toward long-term securities and they become dependent on future inflows of funds into the capital market to be able to realize their expected capital gains. And that makes the capital market itself more fragile.

Capital market inflation and bank disintermediation have reduced the effectiveness of monetary policy. The principal expenditure effects of changes in interest rates occur among the net debtors of the economy, but the debtors' reduced dependence on bank finance substantially lowers the sensitivity of their expenditures to interest rate changes and therefore weakens the ability of monetary policy to control product prices. Similarly, with regard to asset prices, the effectiveness of interest rate changes depends on the extent to which the credit used to inflate the capital market is short term. Evidence suggests that short-term borrowing has not been a significant factor in the recent capital market inflation.

According to Toporowski, the way in which increases in short-term interest rates have been able to burst asset market bubbles is illustrative of the degree to which a stable relationship between short-term interest rates and capital markets (as implied by the yield curve or Keynes's theory of speculative motive) has been undermined, rather than the efficacy of interest rate policy. Capital market inflation puts the monetary authorities in the uncomfortable position of having to swing between the extremes of bursting speculative bubbles and resurrecting a dormant market by a cheap money policy, thus weakening their ability to regulate the inflationary expectations in the capital market.

Open Economy Macroeconomics Using Models of Closed Systems

Wynne Godley
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Distinguished Scholar Wynne Godley presents the first of a series of theoretical papers that are to form the basis for a more substantial study on open economy macroeconomics. The papers will all present dynamic simulation models of two (or three) countries—models that are closed in the sense that the countries described trade goods, services, and assets only with one another. The accounting will always be comprehensive in that all sectoral flow balances have counterparts in changes in stock variables and everything "goes somewhere." And, the accounting is rigorous to the point that, even with a 300-equation model, one equation must be "dropped" under a version of Walras's law. Steady states are characterized by full stock flow equilibrium.

Godley presents three relatively simple models. In the first, two countries trade goods and services with one another but there is no international capital mobility and exchange rates are fixed—hence all trade deficits are settled by drawing down gold or foreign exchange reserves. The main purpose of this model is to set forth a basic method of analysis, but it does have some interesting properties that follow from the simple fact that the intersectoral accounts are comprehensively, if simply, represented. Thus, while under the institutional arrangements assumed, a trade deficit must be settled using foreign exchange reserves, the loss of gold generates no feedback at all via the monetary system as postulated by advocates of "the monetary approach to the balance of payments" or those who remember Hume's "price-specie-flow mechanism." An emerging external deficit does reduce the national income but only via its direct and indirect (multiplier) effect on demand.

The second and third models permit residents of each country to hold bonds issued by the government of the other country and trade them freely in the open market. In the second model, exchange rates are fixed, and this makes it formally unstable so long as fiscal policy in each country is exogenous. Imbalances in trade are not self-correcting but result in explosively rising interest rates in the deficit country. In the third model, the exchange rate is endogenous. There will always be a rate of exchange at which the supply of internationally traded assets equals the demand. Changes in the exchange rate then feed back into the relative prices of traded goods and, with a lag, to trade volumes and values. This last model is stable in the sense that trade imbalances do eventually get rectified. And the whole structure, in its first incarnation, does imply that a country can choose its level of output and employment, in a way that is not destructive to other countries, by a suitable choice of fiscal policy. While this result is conditional on an array of assumptions that may not be fulfilled in practice (in particular regarding the possible inflationary implications of expansion generated this way), it does contradict the finding of Mundell-Fleming–type models, which use a restricted range of concepts, often ignoring stock equilibrium altogether.

The Economic and Monetary Union: Current and Future Prospects

Philip Arestis and Malcolm Sawyer
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Economic integration in the European Union (EU) entered a new stage with the introduction of the euro and its adoption as legal tender (although in a virtual form) by 11 countries of the EU at the beginning of this year. It is intended that by 2002 the national currencies of these 11 countries, which form the European Monetary Union (EMU), will be replaced fully by the euro. The Maastricht Treaty requires that for membership in the single-currency area, each country has to meet convergence criteria, that is, it has to maintain some of its key economic variables (such as the inflation rate, government deficit and debt, and long-term interest rates) at values common to all countries and to maintain its exchange rate within a narrow range of fluctuation without any devaluation. The institutional arrangements for the single-currency area involve the creation of a European system of central banks, with the sole policy goal of price stability and consisting of a European Central Bank (ECB) and the national central banks functioning as the ECB's operating arm.

Official accounts of the EMU countries' progress toward the single currency and the institutional structures that will govern economic policy are filled with optimism, but Visiting Senior Scholars Philip Arestis and Malcolm Sawyer find strong grounds for caution and skepticism. They point out that although the convergence criteria were partly met by the EMU countries in 1997 and 1998, it cannot be assumed that this performance is sustainable. Relatively robust economic growth since 1993 helped countries meet the criterion for government deficit, but it is not at all clear how they can do so in the event of a cyclical downturn. Furthermore, the current cyclical upturn has had little impact on the unemployment rate, which remains stuck at around 10 percent on average, and on regional disparities in growth and unemployment. The strict limitation placed on national budget deficits precludes the use of national fiscal policy for reviving aggregate demand to address the problems of unemployment and regional disparities, both of which could be further aggravated by a cyclical downturn.

The combination of a restrictive fiscal policy and a monetary policy aimed solely at price stability means that there is no policy instrument to be used to redress unemployment, and unemployment itself disappears as a policy target. The loss of control over exchange rate policy implies that a positive shock affecting a country will give only a limited boost to employment and a negative shock can have a depressing effect. Under the current circumstances, the only policy instrument available to individual countries is the interest rate, which is mainly devoted to price stability. However, according to Arestis and Sawyer, the effectiveness of interest rate changes to achieve price stability is contingent on two assumptions that are not particularly realistic: a one-way causality running from money supply to inflation and a strict separation between the monetary and real sides of the economy. The failure of these two assumptions in the context of the current policy framework implies that other policy instruments, such as incomes policy, coordinated pay bargaining, and fiscal deflation, are unavailable for controlling inflation.

Arestis and Sawyer outline certain problems in exchange rate and monetary policies likely to be faced by the EMU countries in the immediate future. First, the "optimum currency area" literature suggests that a single-currency area should be characterized by factor mobility and open markets, relative price flexibility, fiscal transfers, and relative uniformity in underlying economic conditions. Given the low mobility of labor across the EMU countries, differential wages, the absence of price flexibility and fiscal transfers, and significant disparities in unemployment rates and growth rates, the EMU will not be an optimum currency area. Second, differences in the banking and financial institutions and differences in the timing and amplitude of business cycles will render the effects of EMU monetary policy asymmetric across countries. Third, the possible convergence of national interest rates on the relatively high repo rate set by the ECB in order to maintain credibility in financial markets can add to the already high unemployment in the EMU countries. Fourth, when foreign exchange risks and restrictions on financial capital mobility are removed, financial flows, especially short-term flows, are bound to increase considerably, thus contributing to financial instability.

Arestis and Sawyer offer institutional and policy recommendations to address these problems. The ECB has to adopt economic growth and full employment along with price stability as policy objectives. The ECB should also be engaged, like a traditional central bank, in regulation and supervision and should be ready to assume the role of lender of last resort. A wider board of directors, including representatives of industry, labor, regions, and other groups, can contribute to democratic control over the ECB and improve its accountability. A subsidiary institution that would provide long-term financing for investment projects, especially in areas of acute unemployment, is desirable. The problems of unemployment and regional disparities in growth should be comprehensively addressed by a system of regional transfers implemented via an EMU-wide fiscal policy to accompany the proposed EMU monetary policy.

Functional Finance: What, Why, and How?

Stephanie Bell
Working Paper No. 287, November 1999
http://www.levy.org/docs/wrkpap/papers/287.html

Abba P. Lerner's theory of functional finance set out two principles by which the government could use its fiscal powers to maintain economic prosperity. Although no nation has ever committed itself to an ongoing application of these principles, Stephanie Bell, of the University of Missouri–Kansas City, makes a case for their consideration. Using T-account balance sheet entries, she recommends that functional finance, or something like it, should guide modern fiscal and monetary policy.

Lerner believed that capitalist economic systems are nearly always demand constrained and, consequently, tend to generate lasting periods of excessive unemployment. Based on this belief, he formulated two "laws" of functional finance. The first law makes the government responsible for maintaining the total rate of spending at the level necessary to purchase all of the output that a fully employed labor force can produce. When spending is at the requisite level, there will be neither inflation nor unemployment. The second law says there is only one circumstance in which the government should sell interest-bearing debt, and that is in the event that private spending would otherwise generate excessive aggregate demand. But, because the economy is expected to be demand constrained, private spending is unlikely to cause cost-push inflation. Thus, Lerner concludes that printing money is the most desirable way to finance deficit spending.

Bell refutes two common objections to these principles. The first is that they would prove to be inflationary. Models that obtain this result, however, usually start with the assumption of a fully employed economy. A criticism based on this assumption is irrelevant to Lerner's theory, which advocates the use of expansionary fiscal policy only when the economy is operating below full employment. Moreover, Bell argues, even if inflation does begin to rise before full employment is reached, it is not clear that the costs (if any) associated with moderate price increases would outweigh the benefits of reduced unemployment.

A second objection is that the government cannot run the sort of substantial, persistent deficits that might emerge from adopting the principles because at some point there will be no demand for additional government bonds. According to Bell, even if such an upper limit exists, there is no reason to believe that it will be reached before full employment. Furthermore, interest payments on the national debt do not create a "burden" for society as a whole but, rather, imply a transfer of financial resources from taxpayers to bondholders. But this, Bell contends, is also irrelevant because a growing debt is not a necessary consequence of continuously rising deficits because the government can print money, in accord with Lerner's second principle (through the issuance of non-interest-bearing notes to the Federal Reserve). The only limit to the government's ability to spend these funds would be the private sector's willingness to provide goods and services in exchange for government money.

Bell discusses the recent employment situation in 20 industrialized nations and concludes that all of them have had unemployment rates greater than what she considers to be true full employment. Although the argument for the two principles does not depend on the economic outlook at any particular time, the existence of such high levels of unemployment across the industrialized world demonstrates the need for them. According to Bell, countries that have committed themselves to European economic and monetary union or that have otherwise fixed their exchange rates are institutionally constrained from adopting the principles. Countries that retain control over their sovereign currencies, such as the United States, Britain, Canada, and Australia, have the ability to achieve true full employment by following them.

Finance in a Classical and Harrodian Cyclical Growth Model

Jamee K. Moudud
Working Paper No. 290, December 1999
http://www.levy.org/docs/wrkpap/papers/290.html

This paper is an extension of an earlier working paper ("Finance and the Macroeconomic Process in a Classical Growth and Cycles Model," Levy Institute Working Paper No. 253). The basic structure of the model remains unchanged in that it is based on a social accounting matrix (SAM) with endogenous money. Investment in circulating capital adds to output and investment in fixed capital adds to potential output. Driving the model's *fast adjustment process*, which describes the disequilibrium adjustment between aggregate demand and supply, is the *dual disequilibria* relationship in which the excess of monetary injections over desired money holdings fuels spending in the markets for goods and services. This excess also spills over into the bond market and lowers the interest rate. The model's *slow adjustment process* entails adjustments in fixed investment so that actual and normal (desired) capacity utilization fluctuate around each other. Over the long run, investment is internally financed and regulated by the rate of profit.

The current paper has three innovations. First, inventory investment is treated explicitly. Second, the SAM itself has been split into a current and capital account, thereby making it easier to derive the balance sheet counterpart of the flow matrix. Third, the paper discusses the stability properties of the 4 x 4 nonlinear differential equation system that describes the fast adjustment process. The key to stability is the negative feedback effect of business debt on investment. In the 4 x 4 case, a *necessary* condition for stability is that the reaction coefficient on the debt term in the circulating investment equation be positive; *a necessary and sufficient* condition is that the coefficient be greater than or equal to some critical value of the coefficient. In crossing this critical value, the system undergoes a Hopf bifurcation. Finally, the model can be reduced to a 3 x 3 system by considering a budget deficit that is wholly bond financed. Using the "modified" Routh-Hurwitz conditions, *necessary and sufficient* stability conditions imply that the reaction coefficient on the debt term should be positive.

The Stock Market and Psychology

Leon Levy
Seminar, August 31

Leon Levy, vice chairman of the Levy Institute Board of Governors, and Brian F. Wruble, a member of the board, made several observations on the psychology of stock market investment and on how the democratization of equity ownership and soaring asset values affect the working of the economy. Bull market and asset inflation trends are self-reinforcing and confirming: Whichever forecaster was right last is listened to and the individual who sees a paper profit feels smart and buys more. Behavior is determined by the expectations that these trends will continue. Levy noted some long-term trends in the role of the market. Sixty years ago trust funds were not allowed to buy stocks because their recent performance had been poor and they were considered too risky. Today, trust funds are expected to be in stocks. In the 1940s and 1950s investors looked for good value in a stock, defined as a price at which the value of all the stocks of a firm is equal to the amount a reasonable businessperson would pay for the firm. Today the price of most stocks is far higher.

According to Levy and Wruble, the market in recent years has gone up eightfold but profits have risen only 3 percent. One reason for this is aggressive marketing by mutual funds. Another is the experiences of investors. What seems real to people is their own, their parents', and their children's experience. Memories of the Great Depression are fading fast, and the product of the crash of 1987 is the absence of fear (because the market rebounded so quickly). More people have entered the market as the expectations of optimists have been validated and as memories of instability continue to fade. As gains continue, the economic question arises of how people use those gains. Do they spend them on goods and services? The trend now seems to be to save only for retirement and children's education. Levy and Wruble concluded with the suggestion that, given current conditions, recovery from a serious downturn may be slow.

Program: Federal Budget Policy

Financing Long-Term Care: Options for Policy

Walter M. Cadette
Working Paper No. 283, October 1999
http://www.levy.org/docs/wrkpap/papers/283.html

Senior Scholar Walter M. Cadette argues that financing nursing-home and other long-term care now poses a formidable challenge to the nation as the parents of baby boomers retire, and the problem will become even more serious when the baby boomers reach old age. During the next 30 years the aging of the baby boomers and the lengthening of average life expectancy will cause the nursing-home population to at least double. The nation will be ill-equipped to deal with the growing demand for long-term care if the present system of financing it predominantly through Medicaid and out-of-pocket payments is maintained.

The present system has led to two-tier nursing-home care, with those making payments out of their own pockets or private insurance able to afford first-rate treatment and facilities and those supported by Medicaid often left to second-rate facilities. The system also provides perverse incentives for abuse by middle- and high-income individuals who make themselves eligible for Medicaid by transferring their assets to children or other heirs in advance of the need for nursing-home care. Private insurance for long-term care is underdeveloped because of the easy availability of Medicaid, the absence of advantages of pooling, high administrative costs, moral hazard, and adverse selection.

The policy challenge is to move away from the present system (without dismantling the social safety net for the truly indigent) and to achieve a balance between what people can reasonably be expected to provide for themselves out of private insurance and what they should be able to count on for government to provide. One option is a government subsidy, either directly or through tax rebates, of the premiums of those who purchase long-term care insurance. States that have tried some variant of this system, such as New York and California, have had disappointing experiences. In general, inadequate pooling and adverse selection are bound to plague any scheme of voluntary insurance.

Another option is some form of compulsory long-term care insurance for all Americans either through tax credits or social insurance. In principle, such an alternative can achieve sufficient pooling, overcome problems of adverse selection and moral hazard, and operate with relatively low administrative costs. The critics of this alternative have pointed out that although such a system may not involve a significantly higher tax burden in the immediate future, it would eventually result in a large increase in the overall tax rate. Such an increase would, moreover, come on top of any new taxation that may be required then to finance Social Security and Medicare.

According to Cadette, a plan that blends public money, private insurance, and other private saving is the best feasible alternative. Such a plan would integrate "front-end" care (care for the first six months or a year) into Medicare and cut Medicare reimbursement for routine care, especially for middle- and high-income beneficiaries. There would be mandatory insurance for "back-end" care (care after the first six months or a year) supported with an income-scaled tax credit. These measures would be accompanied by encouraging the insurance industry to provide long-term care insurance and by tightening Medicaid eligibility standards. Cadette believes that his proposed financing structure for long-term care would be more equitable and efficient than the present system.

Seven Unsustainable Processes: Medium-Term Prospects and Policies for the United States and the World

Wynne Godley
Special Report
http://www.levy.org/docs/sreport/sevenproc.html

Distinguished Scholar Wynne Godley argues that the long expansion of the U.S. economy has been propelled by forces that cannot be sustained into the medium term. The growth of total demand has taken place notwithstanding an increasingly restrictive stance of fiscal policy and a large deterioration in the balance of trade; it could not have occurred but for a wholly exceptional rise in private expenditure relative to disposable income. At no time during the last 40 years has private expenditure exceeded income by such a large amount or for so long a time. The rise in private sector deficit could not have occurred without a parallel rise in the flow of net lending to the private sector. In the first half of 1999 private disposable income was supplemented by borrowing to the tune of well over $1 trillion and by midyear the total debt-to-income ratio had risen to nearly 1.7 percent of disposable income. Most of the unusual deficit occurred in the household sector.

According to the latest projections by the Congressional Budget Office, it is government policy to tighten the fiscal stance yet further over the next few years. The trade balance has continued to deteriorate and, according to Godley, there is reason to suppose that foreign trade and payments will continue to act as a drag on the economy for some time. Accordingly, the economic expansion can probably continue into the medium term only if private expenditure continues to grow faster than income. This can happen only if the flow of net lending rises yet further, driving households and firms into debt even further and even faster than hitherto.

Godley argues that the growth of net lending cannot continue indefinitely into the future. It is impossible to put a date on the turning point; credit booms both in the United States and in other countries have often continued for much longer than anyone could have imagined. But come it eventually must, given existing policy. Even if the stock market continued to boom, any substantial further rise in indebtedness would commit households and firms to making dangerously high payments (in the form of interest and repayments of principal) relative to their income for years into the future.

Godley concludes with a series of medium-term projections that attempt to translate the imbalances in the economy (the exceptionally high and rising budget surplus and the high and rising deficits in the balance of payments and in the private financial balance) into numerical estimates of the kind of stagnation—or recession—to be expected when the imbalances finally unravel. All of these projections show below average growth with rising unemployment over the next five years as a whole.

The potential consequences for the rest of the world of all these scenarios are serious. The study uses a simple model of world trade and production to infer the potential scale of the impact of stagnation in the United States. The effect would probably be felt most keenly in Latin America and Asia.

According to Godley, there is nothing inevitable about any of these conclusions, which are entirely conditional on the assumption that government policy remains unchanged. To correct the imbalances so that growth can be sustained into the medium term will probably require at some stage a substantial relaxation in fiscal policy. But the growing deficit in the balance of payments will also have to be corrected at some stage, and it is difficult to see how this is going to be achieved (short of recession) without a substantial depreciation of the dollar.

Other Projects

Why Do Political Action Committees Give Money to Candidates? Campaign Contributions, Policy Choices, and Election Outcomes

Christopher Magee
Seminar, October 19

According to Christopher Magee, of Bard College, a political action committee (PAC) makes campaign contributions to sway the behavior of the likely winner to be more in line with the PAC's views (the influence motive) or to affect the outcome of the election in favor of the candidate whose views are most in line with the PAC's views (the electoral motive). Magee studied which of these motives is more important to PACs by examining campaign contributions in contests between incumbents and challengers in the 1996 election to the U.S. House of Representatives. Data was taken from the Congressional Quarterly Survey of candidates' policy positions.

Magee's analysis focused on six major policy issues: NAFTA, a family leave act, a ban on partial birth abortions, cuts in the B-2 bomber program, reform of the welfare system, and gun control. Unlike previous researchers, who estimated only the effect of campaign contributions on the policy positions of incumbents, Magee also looked at policy positions of challengers, who may or may not have later been elected to office.

On all six issues, Magee finds evidence that PACs give money to challengers primarily to influence the outcome of the election. Campaign contributions do not appear to have affected the policy positions adopted by challengers on any of the six issues, but they do appear to have affected their ability to unseat an incumbent.

Magee's findings about contributions to incumbents are less certain. Contributions received by incumbents do not appear to raise their statistical chances of winning an election, and so the contributions do not serve an electoral purpose. On only one of the six issues examined did contributions significantly increase the probability that the incumbent would subsequently have a voting record favorable to the PACs, which would seem to negate the influence purpose as well. However, there may be a less obvious way in which contributions can affect policy outcomes. Magee finds that PACs give more contributions to incumbents who are in leadership positions in Congress or who are members of committees that are relevant to the PACs' goals. These representatives may be able to provide services that are not as easily observable as their voting record.

Institute News

New Scholar

Milan Boran, a Cambridge University visiting scholar, is studying organizational learning. The focus of his current project is the economics of organizational learning, emphasizing intellectual, venture, and entrepreneurial capital, in an extension of Schumpeter's work. He is also interested in information science and the psychosocial aspects of organizational learning.

Upcoming Conference

Tenth Annual Hyman P. Minsky Conference on Financial Structure

April 27–28, 2000
Blithewood, Annandale-on-Hudson, New York

Publications and Presentations

Publications and Presentations by Levy Institute Scholars

Distinguished Scholar Wynne Godley
Publications: "America's New Era" (with Bill Martin), *Phillips & Drew*, September; "America's New Era" (with Bill Martin), *Economic Outlook* (London Business School), September.

Visiting Senior Scholar Philip Arestis
Publications: "The Independent European Central Bank: Keynesian Alternatives," *Arche Interdisciplinar*, August; "Unit Roots and Structural Breaks in OECD Unemployment" (with I. Biefang-Frisancho Mariscal), *Economics Letters*, November; "Financial Development and Economic Growth: Assessing the Evidence" (with P. Demetriades), in H. Dixon (ed.), *Controversies in Macroeconomics: Growth, Trade and Policy* (Blackwell); "Post Keynesian Economic Policies: Continuing Relevance" (with M. Glickman), in P. Arestis, S. Daniel, and J. Grahl (eds.), *Adjustment, Convergence and Economic Policy: Essays in Macroeconomics in Honour of Bernard Corry and Maurice Peston*, vol. 1 (Elgar); "Wage Determination, Capital Shortage and Unemployment—A Comparison Between Germany and the UK" (with I. Biefang-Frisancho Mariscal), in M. Setterfield (ed.), *The Political Economy of Growth, Employment and Inflation: Essays in Honour of John Cornwall* (Macmillan); "Globalisation of Production and Industrialisation in the Periphery: The Case of the EU and NAFTA" (with E. Paliginis), in J. Deprez and J. Harvey (eds.), *Post-Keynesian Foundations in the Analysis of International Economics* (Routledge).
Presentations: "Financial Policies and the Average Productivity of Capital: Evidence from Developed and Developing Economies" (with P. Demetriades and B. Fattouh), International Conference of the Money, Macro and Finance Research Group, University College, University of Oxford, September 22–24; "The Relevance of Kalecki's 'Political Aspects of Full Employment' to the 21st Century" (with F. E. Skuse), Polish Economic Society, Warsaw, September 27–28, and One Day International Conference on the Economics of Michal Kalecki, University of Leeds, November 13.

Visiting Senior Scholars Philip Arestis and Malcolm Sawyer
Publications: Editors, *The Legacy of Michal Kalecki* (Elgar); "Post Keynesian Economics and Its Critics" (with S. Dunn), *Journal of Post Keynesian Economics* 21, no. 4; "On the Coherence of Post-Keynesian Economics: A Comment" (with S. Dunn), *Scottish Journal of Political Economy*, August; "The Role of the Tobin Tax in the Reform of the Global Financial System," *Kasetsart University Journal of Economics*, August; "The Economic and Monetary Union: Current and Future Prospects," *Revista*, December; "The Deflationary Consequences of the Single Currency," in M. Baimbridge and B. Burkitt (eds.), *A Single Currency for Europe?* (Macmillan); "The Macroeconomics of Industrial Strategy," in K. Cowling and R. Sugden (eds.), *Industrial Policy in Europe* (Routledge); "Prospects for the Single European Currency and Some Proposals for a New Maastricht," in P. Davidson and J. Kregel (eds.), *Full Employment and Price Stability in a Global Economy* (Elgar); "What Role for the Tobin Tax in World Economic Governance?" in J. Grieve Smith and J. Michie (eds.), *Global Instability: The Political Economy of World Economic Governance* (Routledge).
Presentations: "Will the Euro Bring Economic Crisis to Europe?" What Economic Global Crisis? Recent Global Management, Financial, and Institutional Changes and Their Impact on the Global Economy, Cambridge University, September 9–11; "An Alternative Stability and Growth Pact for the EU," Fifth International Workshop for an Alternative Economic Policy in Europe, Brussels, October 1–3.

Senior Scholar Walter M. Cadette
Publications: "Overcoming America's Infrastructure Deficit" (with S Jay Levy), Bridge News, November 4; "Should Social Security Be Privatized?" (with S Jay Levy), Bridge News; "Rx for Health Care Policy," *Quarterly Commentary* (Sanders Research Associates).
Presentation: "Should Social Security Be Privatized?" Forum sponsored by the Life Insurance Committee for Social Responsibility and the Professionals' Network for Social Responsibility, November 10.

Senior Scholar Steven M. Fazzari
Publications: "Capital Income Taxes and Economic Performance," *Proceedings of the Ninety-first Annual Conference of the National Tax Association*; "How Responsive Is Business Capital Formation to Its User Cost? An Exploration with Micro Data" (with R. Chirinko and A. Meyer), *Journal of Public Economics*, October.

Senior Scholar James K. Galbraith
Publications: "Globalization and Pay," *Proceedings of the American Philosophical Society*, June; "The Crisis of Globalization," *Dissent*, Summer; "Inter-Industry Wage Structures: New Evidence from the OECD" (with Amy D. Calistri), UTIP Working Paper No. 13, July; "Inequality and Industrial Wage Change in Brazil" (with Paulo Du Pin Calmon and Pedro Conceição), UTIP Working Paper No. 12, July; Review of *In Praise of Hard Industries: Why Manufacturing, and Not the Information Economy, Is the Key to Future Prosperity* by Eamonn Fingleton, *The New York Times Book Review*, September 12.
Presentations: "Inequality and Industrial Wage Change in Brazil" (with Paulo Du Pin Calmon and Pedro Conceição), Rio Economia 99 Conference, Rio de Janeiro, September 13–17.
Media: "Fire and Ice," *The Texas Observer*, June; "Kill the Raptor" (with J. R. Behrman), *The Texas Observer*, August; "The Wrong Question," *The Texas Observer*, September; "The Fed's Pre-emptive Mis-Fire," *TheStreet.com*, June 29; "Re-runs," *TheStreet.com*, August 2.

Chairman S Jay Levy
Publications: "Overcoming America's Infrastructure Deficit" (with Walter M. Cadette), Bridge News, November 4; "Should Social Security Be Privatized?" (with Walter M. Cadette), Bridge News.

President Dimitri B. Papadimitriou
Publications: Editor, *Modernizing Financial Systems* (Macmillan and St. Martin's Press); "No Cheers for Full Employment," *Challenge*, November–December; "(Full) Employment Policy: Theory and Practice," in A. Warner and S. Rosen (eds.), *Commitment to Full Employment: Macroeconomics and Social Policy in Memory of William Vickrey* (M.E. Sharpe).
Presentations: Panelist, "Economic Causes and Consequences of the War in Yugoslavia," Canadian Economic Association, Toronto, May 30; "Options for Full Employment," XII Congress of the International Economic Association, Buenos Aires, August; Panelist, "Social Security Reform Issues," Massachusetts Federation of Business and Professional Women, Pittsfield, Mass., October 21; "The State of the U.S. Economy and the Debate over the Budget Surplus," Rensselaer Polytechnic Institute, November 18.

Visiting Senior Scholar Malcolm Sawyer
Publications: "Canada's Two Economies" (review of Jim Stanford, *Paper Boom: Why Real Prosperity Requires a New Approach to Canada's Economy*), *International Review of Applied Economics* 14, no. 1; "Algunas Reflexiones Postkeynesianas Sobre el Futuro del Estado del Bienestar," *Ekonomiaz* 42, no. 3.
Presentations: "Kalecki on Money and Finance," Polish Economic Society, Warsaw, September 27; Warsaw School of Economics, September, 29; and Post Keynesian Conference, University of Leeds, November 13; "Endogenous Money and Economic Policy," European Association of Evolutionary Political Economy, Prague, November 6.

Senior Scholar Edward N. Wolf f
Publication: "The Size Distribution of Wealth in the United States: A Comparison among Recent Household Surveys," in James P. Smith and Robert J. Willis (eds.), *Wealth, Work, and Health: Innovations in Measurement in the Social Sciences* (University of Michigan Press).

Visiting Senior Scholar L. Randall Wray
Publication: "Abolish the Surplus," *Dismal.com*, September.
Presentations: "Moneda, Impuestos y Gasto Publico en las Economías Modernas" and "Empleador de Ultima Instancial: Pleno Empleo con Estabilidad de Precios," Universidad Nacional Autonoma de Mexico, Mexico City, September 30–October 1.
Media: Interview, Televisa Chapultepec; Interview, "Should the U.S. Pay Off the National Debt?" Bridge News, October 18.

Resident Scholar Oren M. Levin-Waldman
Media: Interview, on minimum wage, WGR radio, Buffalo, October 13.

Resident Scholar Jamee K. Moudud
Presentations: "The Social Wage, Welfare Policy, and the Phases of Capital Accumulation" (with Ajit Zacharias), International Atlantic Economic Conference, Montreal, October 9; "Crowding In or Crowding Out? A Classical Perspective," Fourth Annual Postgraduate Economics Conference, University of Leeds, November 12.

Resident Research Associate Karl Widerquist
Presentation: "Combining Unemployment Insurance and the Earned Income Tax Credit," International Atlantic Economic Conference, Montreal, October 9.

Resident Research Associate Ajit Zacharias
Presentation: "The Social Wage, Welfare Policy, and the Phases of Capital Accumulation" (with Jamee K. Moudud), International Atlantic Economic Conference, Montreal, October 9.

Research Assistant Marc-André Pigeon
Presentations: "Down and Out in the United States: An Inside Look at the Out of the Labor Force Population," International Atlantic Economic Conference, Montreal, October 9; "Japan's Story: A Mixed Minskian Analysis," Fourth Annual Postgraduate Economics Conference, University of Leeds, November 12.

Recent Institute Publications

Working Papers

Lessons from the Asian Crisis: A Central Banker's Perspective
Laurence H. Meyer
No. 276, August 1999

Hyman Minsky's Theory of Capitalist Development
Charles J. Whalen
No. 277, August 1999

Minsky and the Mainstream: Has Recent Research Rediscovered Financial Keynesianism?
Steven M. Fazzari
No. 278, August 1999

Monetary Policy in an Era of Capital Market Inflation
Jan Toporowski
No. 279, September 1999

The Rhetorical Evolution of the Minimum Wage
Oren M. Levin-Waldman
No. 280, September 1999

Open Economy Macroeconomics Using Models of Closed Systems
Wynne Godley
No. 281, September 1999

The Economic and Monetary Union: Current and Future Prospects
Philip Arestis and Malcolm Sawyer
No. 282, October 1999

Financing Long-Term Care: Options for Policy
Walter M. Cadette
No. 283, October 1999

The Distribution of Wages: A Non-parametric Decomposition
Conchita D'Ambrosio
No. 284, October 1999

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Michael J. Handel
No. 285, October 1999

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Robert A. Margo
No. 286, November 1999

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Stephanie Bell
No. 287, November 1999

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Michael J. Handel and Maury Gittleman
No. 288, November 1999

New Perspectives on the Guaranteed Income
Karl Widerquist
No. 289, November 1999

Finance in a Classical and Harrodian Cyclical Growth Model
Jamee K. Moudud
No. 290, December 1999

Public Policy Briefs

Government Spending in a Growing Economy
Fiscal Policy and Growth Cycles
Jamee K. Moudud
No. 52, 1999 (Highlights, No. 52A)

Full Employment Has Not Been Achieved
Full Employment Policy: Theory and Practice
Dimitri B. Papadimitriou
No. 53, 1999 (Highlights, No. 53A)

Down and Out in the United States
An Inside Look at the Out of the Labor Force Population
Marc-André Pigeon and L. Randall Wray
No. 54, 1999 (Highlights, No. 54A)

Does Social Security Need Saving?
Providing for Retirees throughout the Twenty-first Century
Dimitri B. Papadimitriou and L. Randall Wray
No. 55, 1999 (Highlights, No. 55A)

Risk Reduction in the New Financial Architecture
Realities and Fallacies in International Financial Reform
Martin Mayer
No. 56, 1999 (Highlights, No. 56A)

Policy Notes

The Minimum Wage Can Be Raised: Lessons from the 1999 Levy Institute Survey of Small Business
Oren M. Levin-Waldman
1999/6

Capital Income Taxes and Economic Performance
Steven M. Fazzari
1999/7

More Pain, No Gain: Breaux Plan Slashes Social Security Benefits Unnecessarily
Dimitri B. Papadimitriou and L. Randall Wray
1999/8

1999 Levy Institute Survey of Small Business: An Impending Cash Flow Squeeze?
Jamee K. Moudud
1999/9

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