



# Summary

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

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## LETTER FROM THE PRESIDENT

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### To our readers:

In a strategic analysis under the State of the U.S. and World Economies program, Distinguished Scholar Wynne Godley, Research Scholars Greg Hannsgen and Gennaro Zezza, and I state that the present credit crunch in the United States is more serious than at any other time in modern history. We foresee a significant drop in borrowing and private expenditure in the coming quarters, with severe consequences for growth and unemployment, unless the dollar continues to fall and fiscal policy shifts its course—as it did in the 2001 recession. Recent events suggest that the U.S. economy will likely enter a recession in 2008 rather than a growth recession in 2009.

Senior Scholar L. Randall Wray presents an alternative view of monetary policy in a working paper under the Monetary Policy and Financial Structure program. He proposes a return to John Maynard Keynes's call for low interest rates and euthanasia of the rentier. Monetary policy should set the overnight interbank lending rate at zero and keep it there, he says. In a second paper, Wray concludes that the central bank's influence on the quantity of money is indirect and unpredictable, and therefore should be of little interest to economists.

A working paper by Senior Scholar James K. Galbraith, Olivier Giovannoni, and Ann J. Russo analyzes the relationship between the yield curve and four interrelated macroeconomic variables. Their findings contradict several major tenets of present monetary doctrine (e.g., low employment is an inflation risk and inequality is outside the scope of monetary policy) and show partisan bias at the heart of the Federal Reserve's policy-making process.

A brief by Charles J. Whalen reviews the 2007 credit crunch and demonstrates that it can aptly be described as a "Minsky moment." He concludes that an economic meltdown is unlikely, as responses to the credit crunch—with the exception of actions to preempt financial-market excesses—have been consistent with the advice of the late financial economist Hyman P. Minsky, a Levy Institute distinguished scholar from 1990 until his death in 1996.

Under the Distribution of Income and Wealth program, a working paper by Research Associate Jacques Silber and Amedeo Spadaro suggests new tools of analysis in the measurement of intergenerational mobility, along with the need to distinguish between concepts of gross and net social immobility. Also under the program, participants in an October workshop discussed the feasibility of applying the Levy Institute Measure of

Economic Well-Being to other OECD countries. The workshop was organized with the generous support of the Alfred P. Sloan Foundation.

A working paper by Research Scholar Rania Antonopoulos under the Gender Equality and the Economy program finds that employment programs and policies that guarantee the right to a job are the best means of alleviating unemployment and social service deficits, and achieving the U.N. Millennium Development Goals. The greatest impact of poverty reduction occurs when the policy target is female unskilled labor.

Under the Employment Policy and Labor Markets program, a working paper by Joseph Deutsch, Yves Flückiger, and Silber derives more sophisticated measures of unemployment that they apply to the cantons of Switzerland. In another working paper, Wray finds that Minsky's proposals, which countered U.S. government initiatives such as President Johnson's War on Poverty, could have ameliorated the fundamental faults of capitalism: unemployment and the unequal distribution of income (poverty). These proposals are currently being applied successfully through high-consumption and employer-of-last-resort (ELR) programs.

A working paper by Research Associate Pavlina R. Tcherneva finds that an effective safety net must guarantee both a source of income and work, and tie the provision of income to community participation (e.g., the *Jefes* job guarantee program in Argentina). Moreover, ELR programs can be designed to include environmentally friendly output and employment.

Under the Immigration, Ethnicity, and Social Structure program, two working papers by Senior Scholar Joel Perlmann examine demographic changes and ways to identify and survey the U.S. Jewish population.

The Economic Policy for the 21st Century program begins with a brief by Research Associate Thomas I. Palley that challenges the WTO paradigm after the failure of the Doha Development Round of negotiations. He suggests an alternative trade agenda that emphasizes labor and environmental standards, rules for exchange rates, and domestic demand-led development. In a working paper, Research Associate Lekha S. Chakraborty uses an asymmetric vector autoregressive model and finds no evidence of direct or financial crowding out in India. In another working paper, Wray finds that Keynes's theoretical contributions provide guidance for real-world policy formation that can solve economic problems and advance the public interest, while providing space for individual initiative in a successful capitalist economy (e.g., ELR programs).

As always, I welcome your comments and suggestions.

Dimitri B. Papadimitriou, *President*

## Program: The State of the U.S. and World Economies

### Strategic Analysis

#### The U.S. Economy: Is There a Way Out of the Woods?

WYNNE GODLEY, DIMITRI B. PAPADIMITRIOU,

GREG HANNSGEN, and GENNARO ZEZZA

Strategic Analysis, November 2007

[www.levy.org/pubs/sa\\_nov\\_07.pdf](http://www.levy.org/pubs/sa_nov_07.pdf)

The Levy Institute’s macro model of the U.S. economy is driven by the current account, private, and government sectors. Exports, imports, private expenditure, and taxes are determined as functions of such things as world trade, relative prices, flows of net lending to the private sector, and tax rates. Each sector balance approximately measures its effect on aggregate demand, and the three balances must always sum exactly to zero.

In the past, the Levy Institute model has focused strategic developments in the medium term. In light of the likely adverse developments of the 2007 credit crunch, Distinguished Scholar Wynne Godley, President Dimitri B. Papadimitriou, and Research Scholars Greg Hannsgen and Gennaro Zezza focus on the short term. They find that the fall in private expenditure is so large that the U.S. economy will likely enter a recession in 2008 (i.e., three successive quarters of negative real GDP growth). A rehabilitation of fiscal policy as a key regulator of the U.S. economy is now in order, they say, along with some demotion of monetary policy from its present exalted status.

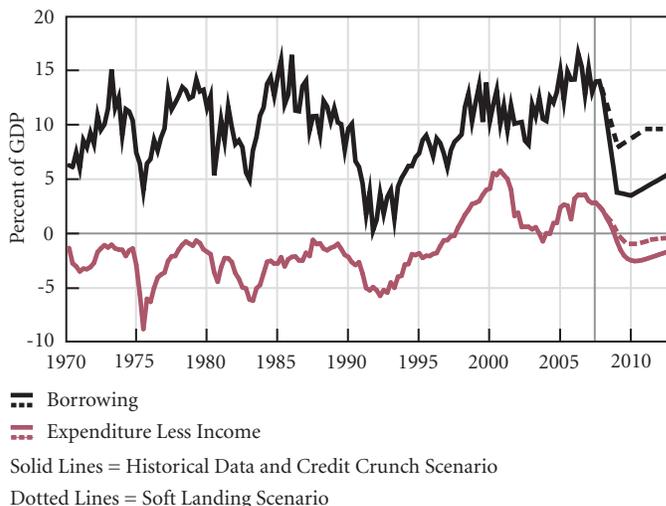
The authors note that their medium-term forecasts of the U.S. economy have been fairly accurate and that their work has proven a useful contribution to the public discussion. In 1999, for example, their model suggested that the boom in private expenditure could not continue indefinitely, and that there should be a large fiscal stimulus combined with a real devaluation of the U.S. dollar of 20 percent. Moreover, the current account deficit would rise to approximately 6 percent of GDP in the absence of measures to improve net exports. Whereas the 2001

recession was caused by a fall in business spending that exceeded the continued rise in personal spending, a huge fiscal stimulus saved the U.S. economy from a deeper recession.

The authors also note that the present credit crunch is more serious than at any other time in modern history. They further note that the last three recessions (in 1982, 1991, and 2001) and recoveries were caused by a sharp fall followed by a sharp rise in private expenditure relative to income.

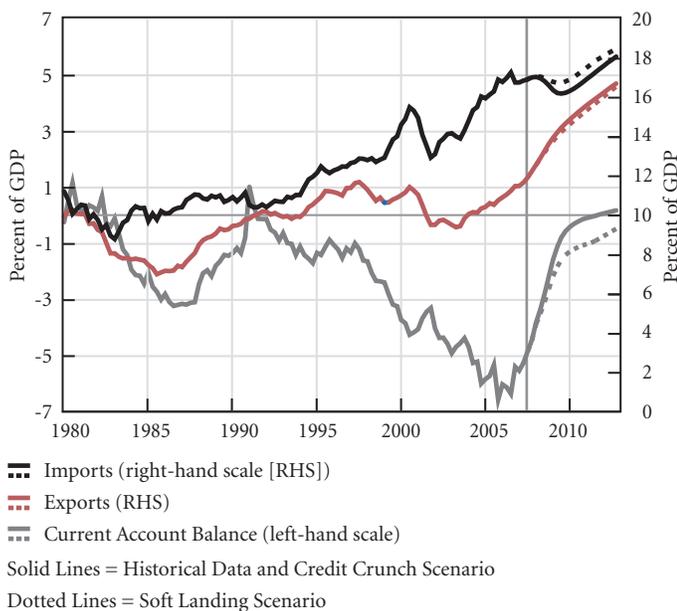
Godley et al. review recent events in the U.S. housing and financial markets to obtain a likely scenario for the evolution of household spending. They outline a range of projections under “credit crunch” (pessimistic) and “soft landing” (optimistic) scenarios for the private sector (borrowing and expenditure less income; Figure 1), the current account sector (imports and exports; Figure 2), and the main sector balances and GDP growth rates (Figures 3 and 4). They assume government deficits broadly in line with Congressional Budget Office predictions and widely accepted forecasts for world output growth, along with no change in current monetary policy and a further 5 percent devaluation of the U.S. dollar by the end of 2007 (followed by a stable exchange rate). These assumptions imply that the U.S. balance of payments improves because of trade (exports will grow at a faster rate than GDP, while imports slow), interest payments on U.S. financial assets denominated in euros, and net property income from U.S. direct investment abroad.

**Figure 1 History and Alternative Projections: Private Sector Borrowing and Expenditure Less Income**



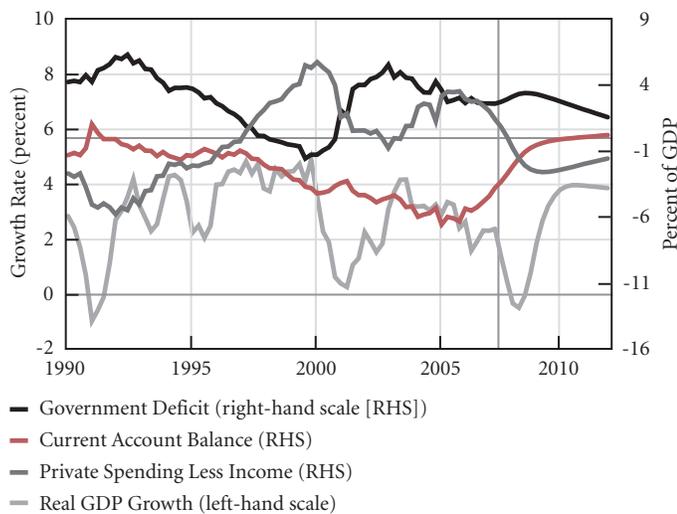
Sources: Bureau of Economic Analysis, Federal Reserve, and authors’ calculations

**Figure 2 History and Alternative Projections: Current Account Balance and Its Components**



Sources: Bureau of Economic Analysis and authors' calculations

**Figure 3 History and "Credit Crunch" Projections: U.S. GDP Growth and Main Sector Balances**



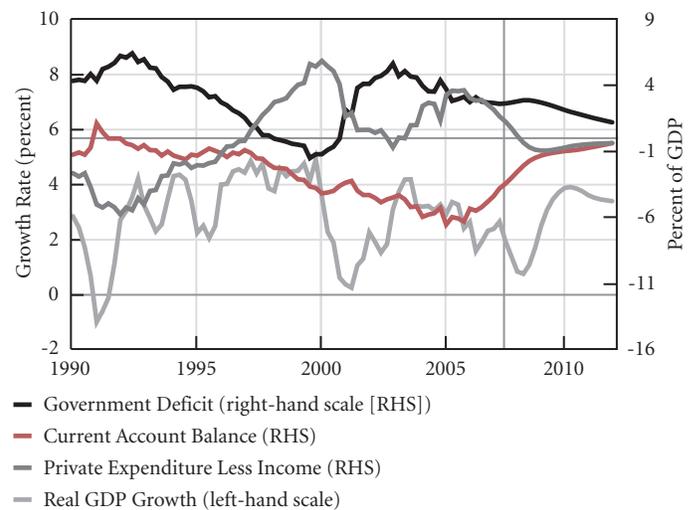
Sources: Bureau of Economic Analysis and authors' calculations

In response to an improvement in net exports, the balance of payments approaches zero by 2010 and helps to sustain aggregate demand. According to the credit crunch scenario, the U.S. economy will enter a recession next year. According to the

soft landing scenario, there will be a growth recession in 2009, with the real GDP growth rate slowing to less than 1 percent. In both scenarios, spending in excess of income returns to negative territory, household debt relative to GDP peaks in 2008 before decreasing, and there is a recovery in total demand when private expenditure, which has been falling steadily, begins to level off. Thus, a significant drop in borrowing is likely to take place in the coming quarters, with severe consequences for growth and unemployment, unless (1) the U.S. dollar is allowed to continue its fall and thus complete the recovery in the U.S. external imbalance, and (2) fiscal policy shifts its course—as it did in the 2001 recession.

Recent events have taken a turn for the worse, so the outcome of the next two years is more likely to resemble the pessimistic (credit crunch) scenario, say the authors. Although there is convergence of all three balances over the next five years, the level of GDP remains well below that of productive capacity over the next two years. The failure of GDP to recover properly is directly related to the fiscal policy stance (1.5 percent of GDP at the end of the five-year projection), which is far below the deficit consistent with balanced growth at full employment. At some stage, fiscal policy should be relaxed so that it can add perhaps another 2 percent of GDP to the budget deficit.

**Figure 4 History and "Soft Landing" Projections: U.S. GDP Growth and Main Sector Balances**



Sources: Bureau of Economic Analysis and authors' calculations

# Program: Monetary Policy and Financial Structure

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## A Post-Keynesian View of Central Bank Independence, Policy Targets, and the Rules-versus-Discretion Debate

L. RANDALL WRAY

Working Paper No. 510, August 2007

[www.levy.org/pubs/wp\\_510.pdf](http://www.levy.org/pubs/wp_510.pdf)

The New Monetary Consensus (NMC) view of monetary policy includes central bank policy independence, an overnight inter-bank interest rate target, and central bank discretion to define a price stability goal. An alternative view is presented by Senior Scholar L. Randall Wray, University of Missouri–Kansas City and director of research for the Center for Full Employment and Price Stability. Wray argues that an effective central bank cannot be independent, nor can it hit an interest rate target. Furthermore, he rejects discretionary policy, along with the notion that the central bank is able to achieve traditional goals such as robust growth, low inflation, and high employment. He suggests a return to John Maynard Keynes’s call for low interest rates and euthanasia of the rentier.

Central bank independence is illusory because the bank’s operations (and interest rate target) cannot be independent of those of the treasury. Moreover, the central bank is not immune from political manipulation, since the members of the U.S. Board of Governors are political appointees with ideologies that influence meetings of the Federal Open Market Committee. Wray is adamant that the central bank lacks the freedom to choose its interest rate target because it is constrained by institutions and regulations, by the financial structure, and by its tolerance of financial and economic disruptions.

Wray notes that a fixed exchange rate system in an open (world) economy narrows the range of discretion and reduces the independence of both fiscal and monetary domestic policy. He also notes that the Federal Reserve’s notion of a “neutral rate” is supposed to be consistent with price stability (i.e., the rate of change of realized prices is so low that it does not affect economic decision makers). It is not clear, however, if the Fed perceives the neutral rate in real or nominal terms. Moreover, some Fed members admit that they have no clear idea of the magnitude of the neutral rate, which seems to fluctuate over time.

For some Post-Keynesians, the relevant concept is a nominal interest rate target, along with future expectations that affect the equilibrium level of output and employment. Since money’s own rate sets the standard in a monetary economy, money’s return is necessarily a nominal return, and the notion of maintaining a constant purchasing power of asset values in terms of consumption baskets is not warranted. Following Keynes’s analysis, the impact of expected inflation across the spectrum of asset prices is probably minimal, says Wray, except to the extent that the monetary authority raises its interest rate target in response to expected inflation. However, if expected inflation affects production and employment, it does so through the general marginal efficiency of capital rather than changes to the interest rate. Wray concludes that a nominal interest rate target is best on two accounts: it is the relevant variable for economic decisions, and it is a rate that the central bank can hit with perfect accuracy.

Since central banks cannot control the money supply and money is not closely linked to spending or inflation, policy uses the interest rate as the intermediate target to achieve price stability. With the rise of the NMC, discretion reemerged as the preferred procedure behind the Fed’s attempts to build a consensus of expectations. The Fed adopted a hyperactive, preemptive strategy that reacts to inflationary pressures long before price increases are observed, says Wray. The main transmission mechanism through which policy is supposed to operate is expectation formation and credibility enhancement, but current policy formation has ventured far from the rules of Milton Friedman.

Wray outlines three reasons why discretionary monetary policy should be avoided: (1) there is no simple relationship between interest rates and inflationary pressures; (2) discretionary changes to interest rates disrupt the financial markets; and (3) discretionary use of interest rates as a policy tool conflicts with Keynes’s call for euthanasia of the rentier. There are reasons to doubt the usual belief that higher interest rates lead to increased borrowing or opportunity costs and reduced spending (e.g., higher rates are unlikely to have the desired effects on the components of the consumer basket that represent inflation as measured by the CPI). There is an obvious conflict between policy efficacy and transparency when the Fed attempts to communicate a policy stance to markets that doubt its implied economic forecast. Monetary policy has uncertain, limited, and lagged impacts on production, aggregate demand, and prices, but large and immediate impacts on asset prices.

However, there is little justification for targeting monetary policy toward the stability of asset prices.

Rather than pursuing a policy of full employment, we have proceeded down a path of deregulation and innovation that exalts the rentier and uses unemployment to fight inflation, says Wray. We have returned to the pre-Keynesian notion that the free market knows best, and policy continues to focus on supply-side incentives—a stance directly counter to Keynes’s belief.

The truth about monetary policy is that it usually doesn’t matter much, says Wray. Gradual policy changes minimize the impact of policy, and interest rate changes within usual ranges have small impacts on aggregate demand. Moreover, there is no a priori reason for guessing the sign or the magnitude of the impact of interest rate changes. Therefore, monetary policy should set the overnight interbank lending rate at zero and keep it there.

### **The Fed’s *Real* Reaction Function: Monetary Policy, Inflation, Unemployment, Inequality—and Presidential Politics**

JAMES K. GALBRAITH, OLIVIER GIOVANNONI, and  
ANN J. RUSSO

Working Paper No. 511, August 2007

[www.levy.org/pubs/wp\\_511.pdf](http://www.levy.org/pubs/wp_511.pdf)

The Federal Reserve operates under a legal mandate that explicitly targets balanced growth and full employment, yet officials are preoccupied with price stability. The claim that the Fed targets and reacts to changes in inflation implies a link between the inflation rate and the term structure of interest rates, or yield curve. Senior Scholar James K. Galbraith, The University of Texas at Austin, and his colleagues Olivier Giovannoni and Ann J. Russo analyze the relationship between the yield curve and four interrelated macroeconomic variables: term structure, unemployment, inflation, and pay inequality. Their findings contradict several major tenets of present monetary doctrine, including the widely assumed connection between inflation and unemployment. They also find a serious partisan bias at the heart of the Federal Reserve’s policymaking process.

The yield curve captures the spread between long- and short-term interest rates, and indicates the stance of monetary policy in any given climate of price change. The authors use a vector autoregression (VAR) model to analyze the relationship between the macroeconomic variables and the yield curve, which

is measured as the difference between a 30-day Treasury bill rate and a 10-year bond rate. The authors note that the yield curve bears a strong relationship to the state of the economy, with periods of inversion historically associated with the onset of recessions. Consumer price inflation (the rate of change in the consumer price index) and unemployment are measured conventionally, while pay inequality is measured as the between-groups component of a Theil index across 31 manufacturing sectors.

Using Granger causality, the authors find that the yield curve (term structure) is the only properly causal variable. This indicates both the importance of monetary policy and the nature of the term structure as a leading indicator of economic conditions. Other results show that the term structure is influenced by changes in unemployment, affects inequality, and is not affected by inflation.

The VAR model emphasizes Federal Reserve decisions made in response to movements in inflation and unemployment. The Taylor Rule adds the extra element of a target. The inflation target is assumed to fall between 2 and 3 percent, and the unemployment target is governed by a stationary nonaccelerating inflation rate of unemployment (NAIRU) set at 5.5 percentage points. The authors note that the model is not very sensitive to minor changes in these assumptions. They also note that the Taylor Rule, in its general format, is often ambiguous when one is attempting to estimate central bank behavior (e.g., two variables tug policy in opposite directions, and there is no way of knowing if the Fed is governed by the level of a variable or its rate of change).

The authors test four variations on the possible functioning of a Taylor Rule. The first hypothesizes that the Fed looks separately at each variable and assigns some weight to the position and movement of each variable. The second suggests a more cautious Fed that responds only to clear signs of trouble and does not adjust interest rates smoothly in response to changing conditions (e.g., inflation is both above target and rising). The third concerns the unambiguous Taylor cases where the spirit of the Taylor Rule holds: the Fed should tighten (ease) when inflation is above (below) and unemployment is below (above) their respective targets. Monetary policy acts only when signals are completely in harmony. The fourth suggests an ultracautious Fed that only reacts when all variables point unambiguously in the same direction.

The authors run regressions for two periods: 1969–1983 and 1984–2006. In the first period, the evidence is broadly consistent with both the Taylor Rule and the Phillips curve view of the economy at that time. The balanced approach to inflation and unemployment seen in the first period is strikingly different in the latter period. The authors find that the Fed reacted to low unemployment and that their reaction was asymmetric (it does not necessarily cut rates to increase the slope of the yield curve when the unemployment rate is above target and rising). Contrary to Taylor specifications, the Fed does not react to high or rising inflation in the postmonetarist period. Although the Fed tightens when inflation and unemployment suggest that it should, inflation alone has no systematic effect on Fed policy, which does not ease when inflation is below the assumed target.

The authors note that a stimulative monetary policy stance is strongly persistent over long periods of time, and that periods of sustained, abnormally low interest rates begin and end during Republican administrations and reelections. Using their model framework, they find that the Fed systematically intervened in election years and that monetary policy has moved strongly in favor of Republicans and (less strongly) against Democrats in election years since 1984. The effects of the economic variables on monetary policy are no stronger than the effect of the political cycle on the term structure of interest rates.

To the extent that the Fed controls the yield curve by setting short-run interest rates, a number of claims are not supported by the model, such as the claim that monetary policy is aimed mostly at fighting inflation, or that the Fed neglects unemployment and fights recessions. The VAR analysis also contradicts several major tenets of present monetary doctrine, such as the notions that low unemployment is an inflation risk and inequality is outside the scope of monetary policy.

### **Endogenous Money: Structuralist and Horizontalist**

L. RANDALL WRAY

Working Paper No. 512, September 2007

[www.levy.org/pubs/wp\\_512.pdf](http://www.levy.org/pubs/wp_512.pdf)

Heterodox economists believe that the profit motive, as well as profit-seeking financial innovations, plays a role in the creation of money by the banking system. Senior Scholar L. Randall Wray, University of Missouri–Kansas City, acknowledges that banks operate within the presence of exogenous and endoge-

nous constraints to money creation, but he concludes that the central bank's influence on the quantity of money is indirect and unpredictable, and therefore should be of little interest to economists.

Wray's working definition of endogenous money is that loans make deposits and deposits make reserves. He focuses on three aspects of endogenous money: the creditary approach, the state money approach, and the relation between sovereignty and policy independence. The creditary approach to money views the market as a clearinghouse for debits and credits (trade in goods and services is subsidiary). Production begins with credit because the firm must hire the inputs before output can be sold. The bank creditors are obliged to accept their own debts (bank money) in loan repayment, at which point the credit money is extinguished.

The state money approach emphasizes the role of government in the origin and evolution of money. The state imposes an obligation (e.g., fees, fines, duties, and taxes) in the form of a chosen social unit of account (e.g., the dollar or euro). The state issues its own IOU (e.g., metal coins and paper notes), which is accepted back in payments made to the state. The fundamental difference from the creditary approach is that the state imposes obligations on its subjects in the form of tax debts. The monetary base, or high-powered money (HPM), represents a small proportion of daily financial transactions, but HPM balances play an important role. Modern capitalist countries follow the creditary and state money models, as described by A. Mitchell Innes and Georg Friedrich Knapp, respectively.

Sovereign nations create a currency for domestic use, and their governments, including the treasury and central bank, issue and spend HPM as their liability. The government spends by issuing a treasury check or by simply crediting a private bank deposit. Credit balances are created when the central bank credits the reserve account of the receiving bank. Analogously, when the government receives tax payments, it reduces the reserve balance of a member bank (i.e., the quantity of HPM the bank holds). With a floating exchange rate and a domestic currency, the sovereign government's ability to make payments is not revenue-constrained because it spends by emitting IOUs. A flexible exchange rate is key to maintaining fiscal and monetary policy independence.

Wray notes that when a sovereign government sells its own debt, its action is not a borrowing operation. Rather, the operational effect of government bond sales is to drain excess reserves

created by treasury deficit spending and to hit the overnight interest rate target (set by monetary policy). Bond sales are really a part of monetary policy, not a required part of fiscal policy, says Wray. Moreover, the interest rate paid on treasury securities is not subject to normal market forces. Leaving excess reserves in the banking system would cause the overnight rate to fall toward zero, and the government could still sell securities for a few basis points above zero. The size of a sovereign government's deficit does not affect the interest rate paid on securities. If treasuries understood the purpose of bond sales, they would not issue long-maturity debt, says Wray. In the case of a nonsovereign government, market forces, rather than exogenous policy, determine the interest rate at which it borrows—a point that has been ignored by horizontalists.

The horizontalist approach to money emphasizes the non-discretionary nature of reserves and aligns with the author's adopted definition of endogenous money. The supply of credit money endogenously expands to meet the needs of trade. The central bank can only set (exogenously) the short-term interest rate at which it supplies reserves "horizontally" on demand to banks (e.g., the U.S. federal funds rate). The difference between the horizontalist and credit money approaches is one of emphasis: the horizontalist approach focuses on bank and central bank decision making and interactions, while the creditary approach focuses on identifying the nature of credit/debit relations. The horizontalist literature neglects the role of the state and the impact of fiscal operations on banks. However, Basil Moore's fundamental point remains: the quantity of HPM remaining in private hands (as bank reserves and cash) is determined by demand, and is not a discretionary variable from the point of view of a central bank targeting an overnight interest rate.

Structuralists argue that financial institutions are profit-seeking firms that create new instruments to economize on reserves, evade interest rate controls, or move assets off balance sheets. It is now well established that central banks target overnight rates and then accommodate the demand for reserves, observes Wray. The demand for reserves is interest-inelastic, so it is not possible to allow market forces to determine the overnight rate. While financial institutions should be viewed as profit seekers, the central bank spurs innovative behavior through its rate setting rather than through quantitative constraints on reserves that are not feasible.

It is best to think of the supply of reserves as horizontal at any point in time, although demand will fall as banks find ways

to economize. The horizontal loan and deposit supply is meant to counter the notion that there is something equivalent to a resource constraint on bank lending. The structuralist concern with innovation and evolution of practice can be incorporated within Moore's framework, since horizontalism is not inconsistent with a rising mark-up as risks in the economy increase. Within the regulatory constraints of the Basle agreements, combined with the adoption of highly sophisticated strategies to determine the mix of assets and the pricing of risk, it is a gross simplification to model the supply of loans as horizontal at an exogenously administered interest rate.

Wray concludes that there are both structural and horizontal aspects of the money supply process. He agrees with the central concern of the structuralist approach—that it is too simplistic to hypothesize simple horizontal loan-and-deposit supply curves—but he does not accept other structuralist arguments.

### **The U.S. Credit Crunch of 2007: A Minsky Moment**

CHARLES J. WHALEN

Public Policy Brief No. 92, 2007

[www.levy.org/pubs/ppb\\_92.pdf](http://www.levy.org/pubs/ppb_92.pdf)

Most economists underestimated the economic impact of the credit crunch that has shaken U.S. financial markets this year. Charles J. Whalen, visiting fellow in the School of Industrial and Labor Relations at Cornell University and editor of *Perspectives on Work* (published by the Labor and Employment Relations Association), reviews the nature of the 2007 credit crunch and concludes that it can be aptly described as a "Minsky moment." He also concludes that the housing difficulties at the root of much of the credit crunch are likely to continue for some time.

Hyman P. Minsky was an economist at the Levy Institute and the foremost expert on credit crunches. He derived his financial instability hypothesis from his reading of John Maynard Keynes's work. In contrast to the "Adam Smith" view of a market economy, where endogenous processes generate an economic equilibrium and business cycles are the product of exogenous shocks, the Keynesian view led Minsky to maintain that endogenous processes breed financial and economic instability, and that cyclical downturns are associated with involuntary unemployment.

Minsky rejected conventional economic ideas such as the efficient market hypothesis. His financial instability hypothesis

holds that the structure of a capitalist economy becomes more fragile over a period of prosperity. Whalen observes that the evolutionary tendency toward Ponzi finance and the financial sector's drive to innovate are connected to the recent situation in the U.S. home loan industry, where there has been a rash of mortgage innovations and a thrust toward more fragile financing by households, lending institutions, and purchasers of mortgage-backed securities.

The expansionary phase of the financial instability hypothesis leads to a Minsky moment. Without intervention in the form of collective action, usually by the central bank, a Minsky moment can engender an economic meltdown (i.e., plummeting asset values and credit, falling investment and output, and rising unemployment).

The key elements behind the 2007 credit crunch include the recent housing boom; "creative" lenders; exotic and subprime mortgages; unregulated mortgage brokers; the securitization of mortgages, whereby bundles of loans are sold to investment funds such as hedge funds; and a conflict of interest among credit-rating agencies. The investment tools widely used by these funds involve a lot more Keynesian uncertainty than probabilistic risk, resulting in a wave of defaults by homeowners, highly leveraged mortgage lenders, and holders of mortgage-backed securities. Moreover, it is now recognized that precarious borrowing has woven its way throughout the entire global financial system.

Despite the arrival of a Minsky moment, a meltdown is unlikely, says Whalen. Central banks have stepped in as "lenders of last resort" to help maintain orderly conditions in financial markets and to prevent credit dislocations from adversely affecting the broader economy. The responses to the credit crunch have been consistent with Minsky's advice, except for recommended actions to preempt financial-market excesses by means of more rigorous bank supervision and tighter regulation of financial institutions.

Whalen believes that Minsky's writings about the financial system and economic dynamics continue to be meaningful and should not be relegated to times of crisis. Minsky's ideas challenge the belief in the inherent efficiency of markets and the *laissez-faire* stance toward economic policy. Moreover, his views draw attention to the value of evolutionary and institutionally focused thinking about the economy.

## Program: The Distribution of Income and Wealth

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### **Inequality of Life Chances and the Measurement of Social Immobility**

JACQUES SILBER and AMEDEO SPADARO

Working Paper No. 513, September 2007

[www.levy.org/pubs/wp\\_513.pdf](http://www.levy.org/pubs/wp_513.pdf)

Approaches to the measurement of intergenerational social mobility include the idea of movement (the degree to which the position of children differs from that of their parents), the inequality of opportunity (the degree to which the income prospects of children do not depend on the social origin of their parents), and the inequality of life chances. Research Associate Jacques Silber, Bar-Ilan University, Israel, and Amedeo Spadaro, Paris-Jourdan Sciences Economiques, FEDEA, Madrid, and Universitat de les Illes Balears, Palma de Mallorca, Spain, suggest new tools of analysis, and stress the need to distinguish between concepts of gross and net social immobility.

The authors emphasize the concept of life chances, which is particularly relevant when analyzing the movement between socioeconomic categories that cannot be ranked in order of importance. They propose two cardinal measures of social immobility that study the transition from the original social category of the parents (educational level or occupation) to the income class of the children. They also stress the importance of marginal distributions when comparing social immobility in two populations.

Silber and Spadaro define two indices of social immobility based on Theil and Gini social immobility indices. They note that social mobility may vary over time as a result of change in the distribution of parents by social origin or change in the income distribution of children. They also note that a third reason that social mobility may vary is a change in the degree of independence between the social origin of parents and the shares of various income brackets. The authors show that it is possible to apply this factor when analyzing changes over time in the degree of social mobility or when comparing the degree of social mobility of two population subgroups.

The methodology used to isolate the specific effects of changes in the margins is borrowed from the literature on the measurement of occupational segregation and extended to the

measurement of variations in the extent of social mobility. A measure of inequality in circumstances (the weighted average of inequalities within each income class) is based on one of Theil's inequality measures and the Gini index. The authors illustrate the difference between an inequality in circumstance curve and a social immobility curve, and note that the slope of the inequality in circumstances curve is not always nondecreasing.

The authors apply their concepts to two data sets: a 1998 survey in France and a 2003 Social Survey in Israel. A striking result from using the French survey is that the degree of social immobility is higher when comparing fathers and sons/daughters than when comparing mothers and sons/daughters. The difference is even greater when controlling for the margins. A striking result using the Israeli data is that social immobility (mobility) is much higher (lower) among individuals born in Asia or Africa than among individuals born in Europe, the United States, or Israel. The difference is even greater when comparing gross and net immobility. The authors find that the Theil index of inequality in circumstances and the Theil index of social immobility are identical, but the corresponding Gini indexes are different.

## Levy Institute Measure of Economic Well-Being

### Workshop: International Comparisons of Economic Well-Being

This workshop was held at the Levy Institute October 11–12. It was organized with the generous support of the Alfred P. Sloan Foundation. The aim of the workshop was to discuss the feasibility of developing estimates of the Levy Institute Measure of Economic Well-Being (LIMEW), an alternative measure of household economic well-being in the United States, for other Organisation of Economic Co-operation and Development (OECD) countries.

The workshop identified three broad groups of countries in terms of the roles of the market and the state of the economy: the United States/Great Britain, Continental Europe, and Scandinavia. The division into groups is intended to serve a principal purpose of the project: to obtain comparative evidence about the type of economic and social systems that is likely to provide better welfare outcomes for citizens.

The participants discussed the availability of similar data across countries and how to deal with data gaps. Workshop participants included Conchita D'Ambrosio, Bicocca University, Italy; Jean-François Arsenault, Centre for the Study of Living Standards, Canada; Markus Grabka, DIW Berlin; Charles Horioka, Institute of Social and Economic Research, Osaka University; Melissa Mahoney, Levy Institute; Thomas Masterson, Levy Institute; Joachim Merz, University of Lüneburg, Germany; Lars Osberg, Dalhousie University, Canada; Dimitri B. Papadimitriou, Levy Institute; Ronald Schettkat, Bergische Universität Wuppertal, Germany; Michael Teitelbaum, Sloan Foundation; Panos Tsakloglou, Athens University of Economics and Business; Edward N. Wolff, Levy Institute and New York University; and Ajit Zacharias, Levy Institute.

## Program: Gender Equality and the Economy

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### *The Right to a Job, the Right Types of Projects: Employment Guarantee Policies from a Gender Perspective*

RANIA ANTONOPOULOS

Working Paper No. 516, September 2007

[www.levy.org/pubs/wp\\_516.pdf](http://www.levy.org/pubs/wp_516.pdf)

Neoliberal policies and unfettered markets do not always reduce poverty, income inequality, and gender inequality, while the private sector is unable to absorb surplus labor. Research Scholar Rania Antonopoulos reviews the nature of unemployment, gender issues, and various social protection policies worldwide. She finds that employment programs that guarantee the right to a job are the best means of alleviating unemployment and social service deficits. She also finds that the greatest impact on poverty reduction occurs when the policy target is female unskilled labor.

Antonopoulos notes that there are many reasons why people are in poverty and lack suitable jobs, so policy should be tailored to confront unemployment, underemployment, and income and gender inequalities. She also notes that the idea of government acting as the employer of last resort by guaranteeing employment has a very long history (e.g., as early as the fourth century in India). Programs in the 20th century, however, were

temporary and implemented only in an emergency (e.g., the New Deal program in the United States during the Great Depression). She further notes that some economists, such as Hyman P. Minsky and William Henry Beveridge, and current Levy Institute scholars Dimitri B. Papadimitriou and L. Randall Wray have made the case for permanent employment guarantee policies, or EGPs.

John Maynard Keynes understood that underemployment of labor and other resources was part of the normal functioning of the market-oriented economic system. In the mid-1900s, economists began to view public employment creation programs as a means to address the endemic problems of low employment and the underutilization of labor resources. By the 1990s, EGPs had disappeared from the policy-dialogue table, replaced by neoliberal strategies (in the northern hemisphere) and structural adjustment programs (in the southern hemisphere). Since “social protection” pointed toward compensatory measures and away from entitlements, these policy interventions were ineffective. However, the post-Washington Consensus view is that government spending is necessary and desirable, so this policy reversal presents an opportune moment for rethinking the role of employment guarantee instruments, says Antonopoulos.

Employer-of-last-resort programs can modify the economic growth path and result in localized engines of economic development that tackle poverty and social exclusion due to joblessness. Moreover, these programs are ideal for achieving the U.N. Millennium Development Goals, which should also consider guaranteeing employment related to the creation of both physical and social infrastructure. Many countries have adopted EGPs in order to counter seasonal unemployment and drought (India), financial crises (Argentina and South Korea), food shortages (Bangladesh and Ethiopia), and chronic poverty (South Africa).

The majority of people living in poverty are women, whose financial vulnerability is strongly linked to the gender division of labor in paid and unpaid work. Therefore, infrastructure that enhances access to communal resources and provides basic social services is extremely important. A key finding is that EGPs overlook “hidden vacancies” that could expand the menu of new employment-intensive projects, which focus on activities related to unpaid work. In developing countries, a substantial amount of time is devoted to health care, water, sanitation, and other family needs due to public sector deficits in provisioning and insufficient income. These needs place an enor-

mous time-tax on people (e.g., HIV/AIDS patient care) and limit time spent on self-employment, subsistence production of foodstuffs, and market participation.

The gender dimensions of EGPs are pertinent both in terms of women’s equitable access to jobs and in terms of designing projects that are responsive to the needs of poor women. Time-use data can reveal the types of jobs that reduce unpaid work and unpaid care burdens. The data also show that women want to enroll in EGPs and to have a say in the choice of works, but there are institutional barriers. Moreover, there is a deficit of EGP impact studies that account for gender issues, so there is a need to develop gender-aware models that link EGPs to household-level data. Without the participation of women in the selection, design, and implementation of EGPs, the risks of failure are high.

Antonopoulos outlines some of the major public employment programs worldwide. The National Rural Employment Guarantee Act in India incorporates several gender dimensions and provisions. In some countries, EGPs have taken the form of employment-intensive infrastructure projects that substitute labor for machines within the same budgetary allocation for creating public physical assets—for example, the Expanded Public Works Programme (EPWP) in South Africa—Chile’s Minimum Employment Program and Argentina’s *Jefes* program show that female participation rates are very high and represent previously hidden unemployment. Nevertheless, EGPs have generally invested much more in infrastructure projects and placed less emphasis on social services and the delivery of public services.

Appropriately designed EGPs have three distinct benefits: income (including the setting of a wage floor), capacity building, and skill acquisition; consumption for underserved communities and populations; and redistribution of unpaid work burdens. According to Antonopoulos, South Africa’s EPWP could occupy a unique place in the international arena of pro-poor, pro-gender project design. Since there is an interface between income poverty and time poverty, care workers should be provided with training, along with work hours to substitute for the unpaid work of overworked household members. It is clear that the EPWP should be scaled up in order to achieve its poverty reduction goal, says Antonopoulos (i.e., social sector job creation is highly employment-intensive). Moreover, households that benefit the most from expanding unskilled female employment are located in urban slums.

## Program: Employment Policy and Labor Markets

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### **On Various Ways of Measuring Unemployment, with Applications to Switzerland**

JOSEPH DEUTSCH, YVES FLÜCKIGER, and JACQUES SILBER  
Working Paper No. 509, August 2007  
[www.levy.org/pubs/wp\\_509.pdf](http://www.levy.org/pubs/wp_509.pdf)

The percentage of unemployed in the population is a simple index that is used by both politicians and the public at large. Joseph Deutsch, Bar-Ilan University, Israel; Yves Flückiger, University of Geneva; and Research Associate Jacques Silber, Bar-Ilan University, derive more sophisticated measures of unemployment and then apply these measures to the cantons of Switzerland.

The authors show that it is possible to develop sophisticated measures of unemployment that account not only for the percentage of individuals who are unemployed, but also for the mean durations of unemployment and the inequality of those durations. Borrowing from the approaches used to measure poverty—the works of Sen (1976), Foster, Greer, and Thorbecke (1984), and Watts (1969)—the authors develop indices that are a function of three components: the unemployment rate, the gap between maximal employment duration and the average cumulative unemployment duration, and the inequality in the employment durations among those who were unemployed at least part of the year.

The authors note that their indices may be computed for areas of a country, as well as for the country as a whole. Using the Shapley decomposition procedure, the areas may be broken down into components that measure the differences in the unemployment rate between the areas and the country as a whole, the gap between the maximal and average values of the cumulative number of days of unemployment, and the inequality of the cumulative number of days of unemployment (employment) among workers who were unemployed at least part of the year.

The authors apply their concepts to the unemployment data for 26 Swiss cantons over the period 1993–2005. Unemployment is measured via monthly information on the expectancy of the interrupted spells of unemployment over the whole year (a maximal value of 365 days). The results are presented in terms of three indices of unemployment: the Sen index, Shorrocks'

generalization of the Sen index, and the Foster-Greer-Thorbecke index. The Shapley decomposition is then applied to the gap between the national value of these indices and the value for each canton. The unemployment rate accounted for 60 to 78 percent of the overall gap in the four cantons with the highest positive or negative gap. However, the average unemployment duration and the differences in the inequality of unemployment durations are important and cannot be ignored, say the authors.

The authors analyze the impact of the choice of a maximum duration of unemployment on the results of the Shapley decomposition using December 2005 data. The results of the three determinants of the unemployment indices are presented in terms of the Sen index of unemployment. The authors find that the role of the average unemployment duration and the impact of the inequality of unemployment durations increase with a longer maximal unemployment duration. They also find cases where the contribution of the average unemployment duration is quite high in comparison to the unemployment rate.

### **Minsky's Approach to Employment Policy and Poverty: Employer of Last Resort and the War on Poverty**

L. RANDALL WRAY  
Working Paper No. 515, September 2007  
[www.levy.org/pubs/wp\\_515.pdf](http://www.levy.org/pubs/wp_515.pdf)

Hyman P. Minsky identified himself as a financial Keynesian, and he endorsed “analytical institutionalism” (how institutions of the real world affect the way in which policy impacts the economy). He recognized that the structure of the economy affects economic performance, including employment, growth, and inflation. Senior Scholar L. Randall Wray, University of Missouri–Kansas City, summarizes Minsky’s general approach to economic theory and policy. He finds that Minsky’s proposals, which countered government initiatives from the 1950s through the 1990s, could have ameliorated the fundamental faults of capitalism: unemployment and the unequal distribution of income (poverty). He observes that Minsky’s proposals are being revisited and applied successfully through high-consumption and employer-of-last-resort (ELR) programs that reduce poverty as a step toward achieving macroeconomic stability (e.g., Argentina’s *Jefes* program).

Minsky recognized that policy must be specific and designed in light of current structures and institutions (i.e., there is no one-size-fits-all policy). Moreover, policy must adapt to change. He also recognized that growth and policy have differential impacts across economic sectors and that financial factors matter. Since a decentralized, unplanned, capitalist economy is not self-correcting, Minsky adopted Keynes's proposal for socialized investment and recommended a "mixed economy" where government investment plays a larger role.

Wray examines Minsky's response to three policy solutions for poverty: human capital investment, economic growth, and redistribution. Minsky argued that these solutions to structural unemployment would not have much of an impact on poverty rates. He rejected the notion that output, employment, and incomes are determined through a neoclassical production function. The gestational period for human capital investment is too long, and structural change ensures that specific skills are continually rendered obsolete as new skills emerge. Growth does not necessarily reduce poverty because it is never equally shared across sectors and regions, and it does not trickle down very much (foretelling the results of Reaganomics). Further, instability is created, in part, when policymakers fear inflation and discretionarily slow the economy. Moreover, schemes to promote saving and investment reward the rich, lower the average propensity to consume, and do nothing to increase aggregate savings. Promoting growth through investment increases financial fragility, inflation, capital's share of national income, and wage inequality.

Although Minsky always supported redistribution policy (e.g., Milton Friedman's negative income tax proposal), he argued that it did not offer a politically feasible means to eradicate poverty and would instead create a dependent class, which is not conducive to social cohesion. He recognized that any successful antipoverty program must be consistent with the underlying behavioral rules of a capitalist economy and provide visible benefits to the average taxpayer.

Wray notes that Minsky was active in the antipoverty movement and a vehement critic of President Johnson's War on Poverty, which relied too heavily on welfare programs, attempted to end poverty by changing people, and redistributed poverty. Although the War on Poverty was designed to raise aggregate demand via fiscal policy, there was a bias toward war spending that both raised demand without increasing the capacity to meet the needs of domestic consumption and

avored economic sectors with monopoly pricing and union wages that lent an inflationary bias to the economy. Thus, higher growth through "military Keynesianism" did not reduce inequality significantly. Minsky argued that policy must take the poor as they are, allow them to work their way out of poverty, and then work with them to improve their "character."

In Minsky's view, poverty could be resolved only through a combination of policies that (1) euthanize the rentier (e.g., lower interest rates) and reduce the importance of the private financial system, (2) put in place a modest bias of taxes and transfers in favor of the poor, and (3) maintain tight full employment. The focus should be tilted toward jobs rather than transfers and welfare. Policy should encourage faster wage growth for low-paying jobs (i.e., at the low end, wage growth exceeds productivity growth, while at the high end, productivity growth exceeds wage growth) and there should be a constraint on prices and wages in high wage sectors (to prevent inflation overall).

Minsky advocated an ELR program that would take workers as they are and provide jobs that fit their skills. He argued that only the federal government could offer an infinitely elastic demand for labor, and he pointed to various New Deal programs as models for a nationwide employment program. He noted that the program wage would become an effective minimum wage and that an ELR program could provide jobs where workers live and slow undesired urban migration. Furthermore, an ELR program would reduce the spread between low- and high-skilled workers, and it could provide goods and services where they were most needed (e.g., urban ghettos). Minsky estimated that two-thirds of all poverty could be eliminated by providing a minimum-wage job to each household.

Minsky also argued that policy should set taxes to balance the budget when ELR employment amounts to 4.5 percent of the labor force (the program and the budget would act as automatic stabilizers), and he insisted that maintaining full employment does not have the same inflationary impact as moving to full employment. The abandonment of the Bretton Woods system of fixed exchange rates in the early 1970s allowed the pursuit of high employment policy because it created domestic policy space to successfully pursue antipoverty programs. Minsky noted that new institutions and policies would be required to contain the financial fragility that would arise when economic security was enhanced by eliminating unemployment and poverty.

## What Are the Relative Macroeconomic Merits and Environmental Impacts of Direct Job Creation and Basic Income Guarantees?

PAVLINA R. TCHERNEVA

Working Paper No. 517, October 2007

[www.levy.org/pubs/wp\\_517.pdf](http://www.levy.org/pubs/wp_517.pdf)

Basic income and job guarantee policies aim to enhance individual freedom, economic opportunity, advanced citizenship, and social inclusion. Basic income policy seeks to mitigate income security by severing the link between work and income (income payments are disbursed universally and unconditionally). By contrast, job guarantee policy seeks to offer meaningful work at a living wage (i.e., labor market problems stem from an insufficient quantity and quality of jobs).

Research Associate Pavlina R. Tcherneva explores the macroeconomic viability of income and job guarantee policies in the context of modern monetary production economies. She finds that an effective safety net must guarantee both a source of income and work. She also finds that it is important to tie the provision of income to community participation in order to stabilize prices and the business cycle, while enhancing the meaning of work and individual freedom (e.g., the *Jefes* job guarantee program in Argentina).

Tcherneva discusses two specific policy proposals: an income guarantee proposal in which each citizen can maintain a basic standard of living, and a job guarantee program in which a federally-funded job is offered to anyone without private sector employment. She emphasizes three specific tenets: (1) taxation and spending are independent operations (a sovereign-currency nation can always pay for its public programs); (2) tax collections are crucial to maintaining the viability of a currency; and (3) unemployment is a monetary phenomenon and reflects a scarce currency (i.e., unemployment is used to maintain a currency's purchasing power).

Taxation does not finance government spending. Rather, it creates a demand for unbacked state currencies and moves resources from the private to the public domain. Moreover, spending must precede taxation. A sovereign government has a public monopoly over its domestic currency and government spending creates new high-powered money (HPM), while taxation destroys it. The state has the power to exogenously set the price at which it provides HPM (i.e., the price at which it buys assets, goods, and services from the private sector). Since a bal-

anced budget is an ex post accounting result despite the economic consequences of “budget neutral policy,” the programs that governments choose to finance are crucially important, says Tcherneva.

The preoccupation with budget neutrality is wrong because it obfuscates the inflationary nature of basic income guarantees by relying on conventional notions of public finance. Attempts to raise sufficient tax revenue to counterbalance increased spending (on basic income guarantees) are likely to be self-defeating, with perverse macroeconomic effects. Since taxes impart value to a currency by creating a demand for it, basic income guarantees lead to currency devaluations, inflation, and a flight to stronger currencies (e.g., Russia in the late 1990s). Income guarantees also negatively impact the labor force, output, employment, income, and tax collections, leading to higher prices and stagflation. Full employment is achieved by conceiving an artificial reduction in the labor supply (“forced inactivity”).

According to Hyman P. Minsky, divorcing full employment from the profitability of hiring can be accomplished only when government creates an infinitely elastic demand for labor. According to Abba P. Lerner's functional finance approach, government should spend at the “right” level in order to ensure full employment and price stability. An employer-of-last-resort (ELR) policy embraces a full-employment strategy, while simultaneously stabilizing the value of a currency.

The key macroeconomic merits of ELR policy that are missing from basic income guarantee proposals are an ability to stabilize the business cycle, the value of the currency (which is linked to the public sector wage), and the overall price level. Government spending on public employment fluctuates countercyclically (countering both inflationary and deflationary pressures) and hiring “off the bottom” does not introduce inflationary pressures. Price stability is enhanced because ELR is a buffer-stock program that operates on a fixed price/floating quantity rule. The price of the buffer stock (the public sector wage) is fixed, anchoring prices in the economy, and the quantity of the commodity (public sector employment) is allowed to float. Deficit spending on public service employment is always at the right level, and the tax-driven approach to money means that there is nothing inherently wrong with running deficits.

Tcherneva notes that income guarantees are unlikely to entice individuals to voluntarily opt for environmentally friendly lifestyles. ELR jobs, however, can be designed to include environmentally friendly output and employment. Although

ELR programs do not depend on growth for financing, they are pro-growth because they stabilize the business cycle, enhance human capital, and improve investment. Moreover, an eco-friendly ELR program can use relatively unskilled labor for such tasks as reforestation, recycling, alternative energy conversions, and improving energy efficiencies (e.g., insulation). In addition, a public jobs corps could be formed to respond to crises. Thus, full employment could enhance environmental sustainability. It would be a mistake, however, to finance ELR programs via ecological taxes, says the author.

## Program: Immigration, Ethnicity, and Social Structure

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### Who's a Jew in an Era of High Intermarriage? Surveys, Operational Definitions, and the Contemporary American Context

JOEL PERLMANN

Working Paper No. 507, July 2007

[www.levy.org/pubs/wp\\_507.pdf](http://www.levy.org/pubs/wp_507.pdf)

Demographic changes in recent decades have made those born to families with only one Jewish parent the largest component of the U.S. Jewish population. In this working paper, Senior Scholar Joel Perlmann explores alternatives to the common survey practice of identifying a Jewish person by religion that are likely to provide more accurate estimates of the current size of the U.S. Jewish population, and a more reliable picture of its views on the Middle East conflict.

Perlmann examines the shortcomings of the American Jewish Committee (AJC) annual political opinion polls, which are limited to respondents who are Jews by religion. He notes that this definition excludes secular Jews, most of whom are likely to have mixed parentage, and whose views about their attachment to Israel are distinctly different from those who define themselves as Jews by religion. The author proposes two alternative definitions. The first is based on the “core” Jewish population, excluding those who report belief in a religion other than Judaism. The problem here, the author argues, is that many with mixed origins who may well have dual attachments, partly to Jewish culture and faith, are left out. The sec-

ond, used in studies on American ethnicity, is to define a Jew by the respondent’s self-identification. Moreover, these two definitions produce similar data on the features of the U.S. Jewish population, although Perlmann notes that the results of these data sets are likely to diverge over time. A comparison of figures from various definitions applied to different Jewish population surveys suggests that the definition of a Jew by religion excludes from one in four to one in eight people who should otherwise be reasonably regarded as Jewish. Perlmann concludes by demonstrating the importance of these definitions for assessing Jewish opinion on the Middle East. His data show that, among those defined as Jews by religion, the proportion reporting feeling distant from Israel is low, but this figure is much higher when the survey is based on the core or self-identity criteria.

### The American Jewish Committee’s Annual Opinion Surveys: An Assessment of Sample Quality

JOEL PERLMANN

Working Paper No. 508, July 2007

[www.levy.org/pubs/wp\\_508.pdf](http://www.levy.org/pubs/wp_508.pdf)

How representative is a survey of American Jews likely to be if based solely on the inclusion of Jews by religion? Senior Scholar Joel Perlmann addresses this question by examining the quality of the six-year survey conducted by the American Jewish Committee (AJC), which is based on sample inclusion by religion. The author admits that some fluctuation in the average characteristics of the AJC annual sample over such a period is likely, but the survey’s stated sampling error of about 3 percent (from its true, population values) is more than that found in most other surveys. The main reason for this, Perlmann believes, is that the AJC modified its design for compiling its consumer mail pool, as well as the procedure for selecting individuals from within that pool. One way to spot the resulting errors, he suggests, is to compare its survey outcomes with those of two other well-known sources, the American Jewish Identity Survey (AJIS) and the National Jewish Population Survey (NJPS). He notes two examples in this regard: marital status, and total household annual income. While marital status outcomes are remarkably close in the AJIS and NJPS, they differ with respect to the mean AJC outcomes, which show 5 percent more respondents are married and 4 percent fewer never married. The author also notes that in the AJC survey, no house-

holds failed to respond to questions on total annual household income. By contrast, the AJIS and the NJPS surveys report 12 percent and 18 percent nonresponse to such questions, respectively. Moreover, the AJC survey has lower total household annual income than the other two surveys. However, since educational attainment levels—an important way in which income differences would usually be relevant to political opinion—are similar across all three surveys, the significance of income differences between the AJC and the AJIS and NJPS are somewhat reduced. The author concludes that the AJC results should be treated with caution.

## **Program: Economic Policy for the 21st Century**

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### **Globalization and the Changing Trade Debate: Suggestions for a New Agenda**

THOMAS I. PALLEY

Public Policy Brief No. 91, 2007

[www.levy.org/pubs/ppb\\_91.pdf](http://www.levy.org/pubs/ppb_91.pdf)

The failure of the Doha Development Round of World Trade Organization (WTO) negotiations in July 2006 was the first major collapse of a multilateral trade round since World War II. Research Associate Thomas I. Palley sees the failure as an event that could mark the close of a 60-year era of trade policy largely centered on increasing market access and reducing tariffs, quotas, and subsidies. Doha's demise represents an opportunity to challenge the intellectual dominance of the current WTO paradigm, to expose the failings of the neoliberal model of economic development, and to reposition the global trade debate.

Palley suggests the development of an alternative trade agenda in association with an exposition of the faulty economics of the existing policy paradigm. A critical element of the new agenda is the need to recognize that trade is an instrument, not the ultimate goal, of policy. The real policy goal is economic development in the context of a fair, inclusive, and politically acceptable globalization.

Palley notes that classical comparative advantage theory no longer captures what is happening in the global economy. New structures of global production organized by multina-

tional companies and retailing giants have changed both the character and the margins of global economic competition. The author also notes that free trade was not the route chosen by industrialized countries in their early stages of economic development. He further notes that economic policy has neglected the development of domestic demand, which has likely slowed growth and made it more unequal between developed and developing countries.

A new, alternative policy paradigm that addresses the economic realities of trade and globalization should emphasize labor and environmental standards, rules for exchange rates, and domestic demand-led development. Wage income is a critical source of demand, so linking wages to productivity can promote a virtuous circle of inclusive economic development. Labor standards are key because they are critical to establishing a floor for the global economy. These standards should be part of the rules of the global trading system, enabling southern hemisphere workers to capture a larger share of income and thus promoting domestic demand growth while mitigating competition between workers. Moreover, labor unions are essential to developing a demand-led system of economic growth, since they correct labor market failures by setting wages in a decentralized fashion.

A post-Doha agenda must permit developing countries to use tariffs and industrial policy as part of their economic development policy toolbox, and policy should be focused on consumption goods tariffs (as opposed to imported capital goods tariffs). The restoration of autonomous national policy (i.e., "policy space") links with the need for good governance and labor standards. This means that labor standards must be the bedrock of a 21st-century trade agenda aimed at refashioning globalization. There is also a need for international environmental standards (e.g., stripping away any competitive advantage achieved through environmental degradation), as well as trade arrangements that incorporate exchange-rate provisions explicitly. Palley suggests a tropical-products trade round involving commodities that are most beneficial to developing countries, such as sugar, coffee, and rice.

In sum, trade policy must be intimately linked with rules for labor markets, the environment, and financial markets, and with an understanding that trade impacts the character of competition, the socioeconomic structure, and policy space.

## **Fiscal Deficit, Capital Formation, and Crowding Out in India: Evidence from an Asymmetric VAR Model**

LEKHA S. CHAKRABORTY

Working Paper No. 518, October 2007

[www.levy.org/pubs/wp\\_518.pdf](http://www.levy.org/pubs/wp_518.pdf)

Real (direct) crowding out occurs when an increase in public investment displaces private capital formation. Financial crowding out occurs when an increase in interest rates results in a loss of private capital formation. Using an asymmetric vector autoregressive (VAR) model, Research Associate Lekha S. Chakraborty, National Institute of Public Finance and Policy, India, finds no evidence of direct or financial crowding out in India. Rather, public infrastructure investment is an important macrovariable that crowds in private investment in the medium and long terms—a result with crucial policy implications.

Chakraborty notes that previous studies of crowding out fail to account for financial aspects or the mix of public investment (infrastructure and noninfrastructure), and that these studies have acute methodological deficiencies. He also notes that the role of government in capital formation and data constraints are significant in developing countries, so standard models of investment do not apply.

The author uses neoclassical flexible-accelerator models to develop a model for private investment in India. Capital formation data are drawn from the new series of National Account Statistics, and macrovariable data (e.g., the rates of interest and inflation, credit, GDP, and gross fiscal deficit) are derived from publications of the Reserve Bank of India for the 1970–2003 period. In terms of estimating capital formation, the economy is divided into three broad institutional sectors: public, private corporate, and household. Gross capital formation for the public sector has declined since the mid-1980s, while private corporate-sector investment increased until the mid-1990s before declining thereafter. These trends relate to the initial dominance of the public sector and the fiscal crisis that followed in the 1990s, when there was retrenchment in public investment and expansion of private capital investment as a result of industrial delicensing and trade liberalization. Noninfrastructure investment in public capital formation has declined more than infrastructure investment since the 1980s.

It is important to analyze the effects of different types of public investment on private capital formation, since public investment is the most significant determinant of crowding

out. Based on flexible-accelerator models of investment behavior, the author expects private corporate investment to be determined by the output expectations in the economy, which, in turn, are represented most closely by the level of the output gap (the index of economic activity).

Cost and quantity of credit variables are included in the model specification to examine the validity of the Ronald I. McKinnon hypothesis (1973) in the Indian context (whether it is the quantity of credit that gets rationed and not the cost of credit that matters for private investment in developing countries). The results of the public/private investment models show that private corporate investment is sensitive to cost and quantity of credit, as well as to public infrastructure and noninfrastructure investment. There is no evidence of direct crowding out of private corporate investment by public investment. Instead, a 1 percent rise in public capital formation increased private capital formation in the corporate sector by 1.48 percent. Since both cost and quantity of credit matter, the McKinnon hypothesis is rejected.

The author analyzes the link between private corporate investment and public investment based on the nonhomogeneity of public capital formation in India. The evidence reveals that public infrastructure investment crowds in private investment, and the magnitude of the effect is substantial (i.e., a 1 percent rise in public infrastructure investment crowds in 1.89 percent of private corporate investment). Thus, if public infrastructure is provided, then investment decisions made by the private corporate sector do not depend on the quantity and cost of credit. The models of public infrastructure and noninfrastructure investment show that there is no evidence of direct crowding out of private corporate investment by public investment. Moreover, dynamic simulations based on the estimated coefficients of VAR (impulse response function results of the reaction of private corporate investment to shocks in public investment) support the nonoccurrence of crowding out.

A real-rate-of-interest macromodel of an open economy that is affected by expected inflation, change in the money supply, and the exchange rate reinforces the absence of financial crowding out, as the fiscal deficit is insignificant in determining the rate of interest. Contrary to the crowding-out debate, the analysis shows no significant relationship between the fiscal deficit and the rate of interest in India.

Chakraborty suggests three reasons why there is no direct or financial crowding out in India: (1) the pattern of savings in

the economy (e.g., households favor financial assets); (2) the increase in financial resources that were raised through the capital markets during the 1980s (in addition to bank credit to the private sector) meant that the private corporate sector did not face a shortage of investable resources; and (3) the overall liquidity in the system might not have pushed up the interest rate, which, in turn, would have crowded out private corporate investment.

## Explorations in Theory and Empirical Analysis

### The Continuing Legacy of John Maynard Keynes

L. RANDALL WRAY

Working Paper No. 514, September 2007

[www.levy.org/pubs/wp\\_514.pdf](http://www.levy.org/pubs/wp_514.pdf)

The central proposition of John Maynard Keynes's *General Theory of Employment, Interest, and Money* (1936) is that entrepreneurs produce what they expect to sell, and there is no reason to presume that the sum of these production decisions is consistent with the full employment level of output, either in the short run or in the long run. Senior Scholar L. Randall Wray, University of Missouri–Kansas City, reviews the works of Post-Keynesian followers, including those in his book *The General Theory after 70 Years* (2007), coauthored with Research Associate Mathew Forstater. Wray finds that Keynes's theoretical contributions continue to provide guidance for real-world policy formation that can solve economic problems and advance the public interest, while providing space for individual initiative in a successful capitalist economy.

Wray notes that the production decision as a first step marks the critical difference between the Keynesian approach and neo-classical economics (which begins with allocations of consumption through time to maximize utility). The decision to produce is simultaneously a decision to employ and provide income for workers. Keynes required only three conditions to ensure an equilibrium with unemployment: historical time (today's decisions depend on past decisions, as well as expected future outcomes), autonomous spending (a portion of spending depends on future expectations rather than present income), and a non-producible store of value (income and spending are in monetary terms). According to Keynes, uncertainty about expectation ful-

fillment (not unstable economic forces) generates a preference for liquid assets, and thus is a barrier to full employment.

Wray also notes that mainstream macro models cannot incorporate real-world features such as “animal spirits” (confidence), market psychology, liquidity preference, or a consumption function relating spending to income that are included in Keynes's model. Moreover, the basic Keynesian model is easily extended to include such features as contagion and heterogeneous credit ratings.

Wray reviews Keynes's impact on economic theory and postwar policy, including the views of his critics, and compares Keynes's theory with orthodox economic theory. Postwar policy to promote saving was wholly inconsistent with Keynes, he says, while policy to promote investment relied on overly simplistic views of entrepreneurial expectation formation and ignored important stability questions. Attempts to maintain full employment by stimulating private investment shifted the distribution of income toward owners of capital, thus worsening inequality and lowering society's propensity to consume. Moreover, a high investment strategy tended to favor capital-intensive industries, and shifted the distribution of income toward higher-paid and unionized workers.

According to Hyman P. Minsky, Big Bank (central bank) intervention as a lender of last resort and countercyclical budget deficits can counter market forces. If the central message of *The General Theory* is the proposition that entrepreneurial production decisions cannot be expected to generate equilibrium at full employment, then the obvious policy response is to use government to try to raise production beyond the level associated with market forces. The sectoral balances approach adopted by Minsky and developed by Distinguished Scholar Wynne Godley shows that expansion led by private-sector deficit spending implies that the government or external sectors will record equivalent surpluses. This result raises sustainability issues, as private debt grows faster than private sector income. Related concerns are raised in Minsky's financial instability hypothesis where private firms stretch liquidity, leading to fragile financial positions at both the micro and macro levels. It is apparent that the government budget plays an important role as rapid income growth moves the government budget toward balance (surplus), which destroys profits (e.g., President Clinton's budget surpluses killed the economic boom and morphed into budget deficits).

Growth led by investment can have both inflationary and exchange rate implications. Orthodoxy claims that inflation is mostly demand-driven, but Keynes argued that “semi-inflation” could arise long before reaching full employment and his followers argue that most experiences with real world inflation occur in conditions of insufficient aggregate demand. An increase in aggregate demand that is induced by rising investment could be associated with a worsening trade balance and a depreciating currency that causes pass-through inflation, even in the presence of widespread unemployment.

Keynesianism is making a comeback in Latin America, where growth is mostly fueled by exports, not investment. There is also a drive to formulate a Keynesian alternative to the neoliberal orthodox reliance on free trade and small government. In terms of Keynes’s approach to monetary policy, several authors have renewed Keynes’s call for (permanently) low interest rates, which improve equity and reduce inequality. Wray suggests setting the overnight interbank lending rate near zero and leaving it there forever because monetary policy should not be used as a countercyclical force. The central bank should promote financial stability by imposing quantity controls during a speculative boom and intervening as lender of last resort in a bust. Proposals to reform the international monetary system are now reviving Keynes’s famous Bancor plan and the notion of flexible but managed exchange rates.

Keynes was rather skeptical of the advantages of trade, arguing that it tends to lead to excessive specialization that lowers the quality of life. While some of Keynes’s followers invite an alternative view of globalization, many do not reject the mainstream outlook that more freedom to trade across borders results in net benefits. Policy, however, should reflect a revised notion of the nature of government finance and focus on raising domestic income and increasing spending on public infrastructure.

Senior Scholar James K. Galbraith updates Keynes’s skepticism over the ability of wage flexibility to resolve unemployment problems and suggests a global Keynesian strategy of wage convergence across countries. Wray aligns himself with Keynes’s argument about U.K. unemployment in the 1920s and Minsky’s argument about U.S. unemployment in the 1960s that most unemployment is structural and requires directed employment programs—that is, an employer-of-last-resort (ELR) program that offers an infinitely elastic demand for labor at a wage set by government that would vary across countries depending on national living standards. ELR programs

provide a “reserve army” of the employed, and they can help reduce immigration, eliminate unemployment, and close wage and standard-of-living gaps internationally.

## INSTITUTE NEWS

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### New Research Scholar

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KIJONG KIM has joined the Levy Institute as a research scholar in the Gender Equality and the Economy program and member of the macro-modeling team. His current research interest lies in strengthening gender aspects of macroeconomic modeling, which includes incorporating time-use data into social accounting matrix (SAM) and gender-oriented macro models. His other areas of interest are economic development in natural-resource-abundant countries, political economy, and environmentally sustainable development.

Kim has taught microeconomics, macroeconomics, and environmental economics at the International School of Economics at Tbilisi State University, a newly established graduate program in Tbilisi, Georgia, and at the Bard Center for Environmental Policy. He received his B.S. in economics from Korea University and a Ph.D. in applied economics from the University of Minnesota, St. Paul.

### New Levy Institute Book

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#### Government Spending on the Elderly

DIMITRI B. PAPADIMITRIOU, ed.

October 2007

Palgrave Macmillan, Ltd., in association with The Levy Economics Institute

This book of individual essays provides an assessment of the forces that drive government spending on retirees and explores alternative means of financing the retirement and health care of older citizens.

## PUBLICATIONS AND PRESENTATIONS

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### Publications and Presentations by Levy Institute Scholars

**RANIA ANTONOPOULOS** *Research Scholar*

**Presentations:** “HIV/AIDS and Women’s Time-tax Burdens” (with T. Toay), presentation for the Expert Meeting organized by UNESCO/SSRC, Paris, October 4–5; “Employment Guarantee Policies from a Gender Perspective,” 12th Regional Seminar for Labour-Intensive Construction, The Government of South Africa and the International Labour Organization, Durban, October 8–12; “What Leads to Poverty?,” Seminar on Global Poverty, International Student Organization and Students for Peoples’ Relief, Bard College, December 4.

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

**Publication:** “Economic Equality and Victory in War: An Empirical Investigation” (with C. Priest and G. Purcell), *Defense and Peace Economics*, Vol. 18, No. 5, October.

**DIMITRI B. PAPADIMITRIOU** *President*

**Publications:** “Economic Perspectives on Aging: An Overview,” in *Government Spending on the Elderly*, D. B. Papadimitriou, ed., Houndmills, Basingstoke, Hampshire, U.K., and New York: Palgrave Macmillan, 2007; book review, “The Future of Europe: Reform or Decline” by A. Alesina and F. Giavazzi, *Comparative Economic Studies*, Vol. 49, No. 2.

**Presentations:** Appearance regarding the role of Greek banks in Turkey on the Turkish television program *TNT*, July 24; interview regarding Bard College’s dual-degree program in economics and finance with Gary Shapiro, *The New York Sun*, July 31, and with Elia Powers, *Inside Higher Education*, August 1; interview regarding the risks of the housing debacle to the larger credit and financial markets with Rex Nutting, *MarketWatch*, August 2; interview regarding financial economist Hyman P. Minsky with Jon Hilsenrath, *The Wall Street Journal*, August 16; interview regarding Basel II and the current U.S. framework with Nicholas Rummell, *Financial Week*, August 22; interview regarding currency intervention with Steve Johnson, Reuters, September 25.

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

**Publications:** “Net Government Expenditures and the Economic Well-Being of the Elderly in the United States, 1989–2001 (with A. Zacharias and H. Kum) and “The Adequacy of Retirement Resources among the Soon-to-Retire, 1983–2001,” in *Government Spending on the Elderly*, D. B. Papadimitriou, ed., Houndmills, Basingstoke, Hampshire, U.K., and New York: Palgrave Macmillan, 2007; “Impact of Wealth Inequality on Economic Well-Being (with A. Zacharias), *Challenge*, Vol. 50, No. 4, July–August; “The Levy Institute Measure of Economic Well-Being, 1989–2001” (with A. Zacharias), *Eastern Economic Journal*, Vol. 33, No. 4, Fall; “The Distributional Consequences of Government Spending and Taxation in the U.S., 1989 and 2000” (with A. Zacharias), *Review of Income and Wealth*, Vol. 53, No. 4, December.

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

**Publications:** “Global Demographic Trends and Provisioning for the Future,” in *Government Spending on the Elderly*, D. B. Papadimitriou, ed., Houndmills, Basingstoke, Hampshire, U.K., and New York: Palgrave Macmillan, 2007; “The Employer of Last Resort Programme: Could It Work for Developing Countries?, Economic and Labour Market Paper 2007/5, International Labour Office, Geneva, August; “A Post Keynesian View of Central Bank Independence, Policy Targets, and the Rules versus Discretion Debate,” *Journal of Post Keynesian Economics*, Vol. 30, No. 1, Fall.

**AJIT ZACHARIAS** *Senior Scholar*

**Publications:** “Net Government Expenditures and the Economic Well-Being of the Elderly in the United States, 1989–2001 (with E. N. Wolff and H. Kum), in *Government Spending on the Elderly*, D. B. Papadimitriou, ed., Houndmills, Basingstoke, Hampshire, U.K., and New York: Palgrave Macmillan, 2007; “Impact of Wealth Inequality on Economic Well-Being (with E. N. Wolff), *Challenge*, Vol. 50, No. 4, July–August; “The Levy Institute Measure of Economic Well-Being, 1989–2001 (with E. N. Wolff), *Eastern Economic Journal*, Vol. 33, No. 4, Fall; “The Distributional Consequences of Government Spending and Taxation in the U.S., 1989 and 2000 (with E. N. Wolff), *Review of Income and Wealth*, Vol. 53, No. 4, December.

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