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New Public Policy Brief No. 96

THE COMMODITIES MARKET BUBBLE: MONEY MANAGER CAPITALISM AND THE FINANCIALIZATION OF COMMODITIES

L. RANDALL WRAY

The commodities market bubble comes fast on the heels of the real estate bubble. As each bust wipes out only a portion of the flows of managed money that generated the bubble, a new boom inevitably explodes from the ashes of the old one. In this Public Policy Brief, Senior Scholar L. Randall Wray analyzes the mechanism that generates successive waves of asset booms and busts, and proposes counterpolicies to prevent their destructive consequences.

Wray examines three explanations for the explosion of commodity prices in recent years: supply constraint combined with rising demand, market manipulation by commodity producers and traders, and financial speculation in commodity futures markets, also known as "index speculation." The first emphasizes excess demand, due to the rapid development of China and India, in the face of inelastic supply as the cause of commodity price rises. The author notes, however, that this development has been offset, to some extent, by sluggish economies in Africa and Europe. The second explanation also has some plausibility, since some traders have engaged in price manipulation. However, the Commodity Futures Trading Commission (CFTC), which sees its mission as rooting out intentional manipulation of the markets, focuses on individual traders who illegally move prices by a few basis points to make a small profit, while ignoring pension and hedge funds, which might be increasing prices fivefold through legal buy-and-hold strategies.

Wray then turns to the third possibility, financial speculation. He examines the arguments and the evidence that this is probably the most important explanation, although he accepts all three are mutually reinforcing. The research findings after the collapse of the equities market in 2000 suggested that commodity prices are not correlated with returns from fixed income instruments such as stocks and bonds. This led to the belief, also promoted by the CFTC, that futures contracts could be used to reduce portfolio risk. However, since there are substantial storage costs for holding physical commodities, money managers prefer to deal in commodity futures; that is,

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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 problems that profoundly affect the quality of life in the United States and abroad.

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in paper claims to commodities to be delivered on some future date. The allocation of a portion of the portfolio to commodity futures is typically undertaken by index speculators, who buy one of the commodity futures indices, such as Standard & Poor's GSCI or the Dow Jones–AIG index. Of course, speculators do not ever want to take shipment, so contracts are "rolled" over into other futures contracts with farther-off delivery dates. This is a buy-and-hold strategy, since speculators only take long positions.

According to "textbook" economic theory, asset prices are set in the spot, not futures, markets. The spot prices are determined by the supply and demand gaps based on competitive bidding, and are often "discovered" with reference to the nearest-to-expiration futures contracts. Futures prices are simply adjusted against current spot prices to allow for additional, long-term expenses such as the costs of carry (e.g., warehousing fees). However, Wray maintains that price determination originates in the futures markets and is then transmitted directly to the spot markets. Such an administered price mechanism triggers a speculative boom, as rising spot prices validate expectations and raise demand for futures contracts, suggesting dominance of the market by speculative demand. Wray admits that there are other influences on futures price determination. Futures markets also enable buyers and sellers to hedge price risks, but he considers index speculators to be the principle driving force behind futures prices. The author also cites evidence indicating that index speculators have driven the spot prices for a range of commodities to historic levels.

Wray suggests some policy adjustments to prevent a commodity price explosion. One is to broaden the mission of the CFTC to enable it to fulfill the objective of limiting the effects of speculation on commodity prices (as set out in the original Commodity Exchange Act of 1936) by bringing more of the market under its regulation. Another is that the CFTC should collect and publish data on participants in futures markets to help distinguish index speculators from other players. He also believes that Congress should limit index speculation by, for example, prohibiting pension funds from investing in commodities, or by taxing all profits from speculation, to reduce the attractiveness of these markets.

For the complete text, go to www.levy.org/pubs/ppb_96.pdf.

New Policy Notes

A Simple Proposal to Resolve the Disruption of Counterparty Risk in Short-Term Credit Markets

JAN KREGEL

Policy Note 2008/4

There is now a consensus that impaired mortgage-backed securities have "clogged" the lending channels. The official solution has been that the government would take these questionable assets off the institutions' balance sheets. In this new Policy Note, Senior Scholar Jan Kregel argues that it is far from certain that this course of action would provide the relief sought, and recommends an alternative based on the provision of bank deposits to the Federal Reserve (Fed).

Kregel notes that the current situation has created a general distrust of the creditworthiness of counterparties to any financial transaction. If the return on a loan at maturity is uncertain, there will be a tendency to hold cash rather than to lend it at interest, and the preference for liquidity will be "absolute"; that is, there is no interest rate that will offset the fear of failure to complete the contract. One way to prevent the disruption of asset prices in these circumstances is to meet the money demand of the financial institutions. Although this policy solves the counterparty risk, with the government as riskless counterparty, it does not remove the problem of reducing counterparty risk in interbank transactions. To overcome the latter, Kregel suggests that banks could hold deposits with the Fed, which would then pay interest on the reserve deposits of member banks. Banks can make loans and seek to raise the legal reserves required; the Fed would have those reserves to lend to member banks seeking additional resources. In this scheme, the Fed is the counterparty to lending in both the Fed funds and private interbank markets, and the latter feature removes the need to assess the counterparty risk of borrowers. The Fed guarantee would take the place of the Treasury's bailout, while the existing regulatory supervision in terms of lending exposures and capital ratios would take the place of counterparty risk assessment. The author further recommends congressional approval for protection of the banks' core deposit base by completely removing the government-insured limit on bank deposits to match the guarantee recently provided to the money market funds. Moreover, member banks

should be allowed to borrow an unlimited amount from the Fed without collateral, to eliminate the possibility that larger banks could dominate the market for retail deposits.
For the complete text, go to www.levy.org/pubs/pn_08_4.pdf

Will the Paulson Bailout Produce the Basis for Another Minsky Moment?

JAN KREGEL
Policy Note 2008/5

The Federal Reserve (Fed) and the U.S. Treasury seem to be supporting a model in which the funds made available through the Emergency Economic Stabilization Act (2008) are used by stronger holding companies, with substantial core deposits from commercial banking activities, to merge with weaker financial institutions. In this new Policy Note, Senior Scholar Jan Kregel argues that this strategy is unlikely to revive the U.S. financial sector because it ignores two essential features required for the safety of banks' savings and loans—namely, narrow definitions of banks' permissible activities, and ease of understanding such activities by regulators and examiners.

There is clear evidence that the current financial crisis is partly due to the fact that regulators were unable to understand and evaluate the risks undertaken by even midsize financial institutions. Moreover, financial managers were equally incapable of understanding and evaluating the risks undertaken by their own institutions. The author points out that experience does not support the presumption, implicit in the current policy, that large financial institutions have a lower likelihood of failure, and warns that if the present trend of bank merger continues, the resolution of the crisis will likely produce sizeable banks and other financial institutions that cannot be regulated, or managed. The events of the past weeks have led some to call for the return to a system similar to that created by the Banking Act of 1933 in response to the Great Depression. However, Kregel examines the work of Hyman P. Minsky in this regard and notes that Minsky did not favor returning to a Glass-Steagall system of banking because of the dramatic changes that have reshaped the financial landscape since, but he saw in that model the basis for regulation of the financial system.

According to Minsky, the basic rules for financial system regulation should limit the size and activities of institutions, and be confined to those activities that supervisors and examiners readily understand. Kregel also notes that Minsky did not support European-style "universal banking"—banking that includes investment services in addition to services related to savings and loans—for similar reasons. By contrast, an enterprise with a holding company structure operates with a wide range of subsidiaries to contain risk; since each subsidiary has its own assigned capital and liabilities, the failure of a particular subsidy would not impair the capital and operational ability of the other subsidiaries. Minsky also favored such structures because each subsidiary would have a relatively well-defined function, thereby making it easier for regulators to understand the operations of the business. Both of these beliefs seem optimistic, notes the author, in light of recent experience (e.g., the AIG crisis). Kregel concludes by suggesting that the aim of the financial regulatory legislation should be to limit each type of holding company to a range of activities that were sufficiently linked to their core function, and to ensure that each company was small enough to be effectively managed and supervised.
For the complete text, go to www.levy.org/pubs/pn_08_5.pdf

Time to Bail Out: Alternatives to the Bush-Paulson Plan

DIMITRI B. PAPADIMITRIOU and L. RANDALL WRAY
Policy Note 2008/6

The financial bailout plan recently approved by the U.S. Congress lacks as much in merit as in popularity. It does not allow the Treasury to exercise any ownership rights, such as replacing the corporate managers that created the current mess; and the disbursement of funds is also an opportunity to consolidate control of the U.S. financial system in the hands of a few large (Wall Street) banks.

In this new Policy Note, President Dimitri B. Papadimitriou and Senior Scholar L. Randall Wray examine the merits of a number of policy alternatives to the Bush-Paulson plan. The authors note that the Federal Reserve (Fed) has opened its discount window to far more institutions by accepting a wider range of assets as collateral, extended FDIC insurance coverage to include deposits of up to $250,000, and provided guarantees for previously uninsured deposits at money market funds. While these measures help to reduce the incentive for depositors to demand cash, the authors argue that to quell the run to liquidity, the Fed should remove all collateral requirements,

and lend without limit. They also suggest that the FDIC eliminate any caps on its insurance to include all deposits in member institutions, in order to protect the larger deposits held by businesses (used to cover payrolls and other expenses.) The vexing issue of insolvency, based on the government purchase of bad assets, requires far larger sums, but unlike the liquidity problem, the authors argue, it does not have to be resolved immediately. However, the authors believe that allowing insolvent thrifts to pursue business as usual would mean leaving the crooks that ran these institutions in charge, and recommend replacing the directorship of the banks taken over by the Treasury with honest and prudent managers. They note that this is something that the current plan refuses to consider: even though the government may purchase ownership shares, it would exercise no control over the financial institutions it owns. The authors also regard preventing financial institutions from growing too fast (by making unsound loans) as the best and safest government strategy, once again running counter to the current moves to consolidate the market position of large banks.

Papadimitriou and Wray also examine policy options for helping homeowners cope with mortgage debt. During the presidential campaign, John McCain proposed that the government provide low fixed-rate mortgages at the current value of the homes, while paying off existing mortgages, and the Treasury, not the financial institutions, would take the full loss between the original mortgage amount and the lower value of the new mortgage. According to the authors, a better alternative is to offer a 5 percent, 30–year mortgage, provided directly by Fannie Mae or Freddie Mac to all comers. A reasonable standard for identifying those needing help is whether their current mortgage payments exceed one-third of their income; if so, the family should be eligible for the new Fannie- and Freddie-supplied loans. Finally, the authors recommend that the costs of "bailing out" homeowners be shared by the Treasury and institutions holding the mortgages, and that a moratorium be imposed on foreclosures.

The authors note that many of their recommended operations would do little to raise aggregate demand and bring the U.S. economy out of recession. Only a fiscal stimulus (tax cuts and spending increases) and direct homeowner relief will do much to stimulate demand, they say. They suggest a temporary suspension of the collection of payroll taxes, with the Treasury directly making all Social Security payments, at least until the economy recovers. This would put more income into the hands of households while lowering the employment costs to firms, fueling spending and employment.

For the complete text, go to www.levy.org/pubs/pn_08_6.pdf.

New Working Papers

Macroeconomics Meets Hyman P. Minsky: The Financial Theory of Investment

L. RANDALL WRAY and ÉRIC TYMOIGNE

Working Paper No. 543

The current financial crisis has focused a great deal of attention on Hyman P. Minsky's instability hypothesis. In this working paper, Senior Scholar L. Randall Wray and Research Associate Éric Tymoigne discuss the basis of that hypothesis; namely, Minsky's financial theory of investment.

Wray and Tymoigne discuss the relationship of this theory to Keynes' investment theory of the cycle. Keynes argued that every durable commodity has its own rate of interest stated in terms of money; the same applies to money itself. The expected return on illiquid assets, such as capital goods, consists of their expected yield, net of carrying costs such as warehouse storage, while most of that for liquid assets consists of liquidity; that is, the returns are in forms that can easily be turned into cash with minimal capital loss. Moreover, increased confidence about future economic performance raises the discounted future profits from illiquid assets relative to those that get much of their return in liquid form, resulting in rising investment and employment. More specifically, only if the discounted future profits of some asset (produced by using labor) exceeds that on money will investment take place, and the process continues until a new equilibrium is reached in which all own rates are equal to the standard set by money's return.

Minsky regarded Keynes's theory as incomplete, and argued that it does not analyze how investment is financed; he intended his own financial theory of investment to provide the missing component. The two basic building blocks of this theory are borrower's risk, based on the demand price of current output; and lender's risk, based on the supply price of assets. Minsky drew on Michal Kalecki's principle of increasing risk, according to which entrepreneurs and bankers assume that it is

more risky to borrow or lend as the expected level of external funding increases. Entrepreneurs become less willing to invest (the demand price declines as the borrower's risk increases) and bankers become more stringent as external funding increases (the supply price increases as the lender's risk increases). Investment can proceed if the demand (adjusted for borrower's risk) exceeds the supply price (adjusted for lender's risk). Because the demand and supply prices each side is willing to pay or charge depend on the amount of external finance required, each of these prices includes a margin of safety. As borrower's risk cannot be calculated for a future yet to unfold, it is subjectively determined. The demand price of an asset includes a subjective margin of safety equal to its expected stream of returns, less the amount one would be willing to pay for it. In the beginning of a recovery from a severe recession, margins are large, as expectations are pessimistic; over time, if an expansion generates returns that exceed the projections, then these margins prove larger than necessary. This leads to a reduction in the perceived borrower's risk and lender's risk, and so increases the demand for more investment goods. This in turn means that, given the expected flow of internal funds, bankers and entrepreneurs expect and accept a higher proportion of external funding and greater investment. Thus, projected success reduces margins. Wray and Tymoigne point out that the development of this theory of investment allowed Minsky to analyze the evolution of modern capitalism toward fragility and instability.

For the complete text, go to www.levy.org/pubs/wp_534.pdf.

Inflation Targeting in Brazil

PHILIP ARESTIS, LUIZ FERNANDO DE PAULA, and
FERNANDO FERRARI-FILHO
Working Paper No. 544

Many emerging economies have adopted inflation targeting (IT) as the aim of monetary policy. In this working paper, Senior Scholar Philip Arestis; Luiz Fernando de Paula, University of the State of Rio de Janeiro; and Fernando Ferrari-Filho, Federal University of Rio Grande do Sul, examine the effectiveness of IT for the case of Brazil, assess whether the policy has succeeded in meeting its objectives, and discuss how that country's experience compares with those of other IT and non-IT emerging economies.

In 1999, Brazil moved to a floating exchange rate; shortly afterward, it also adopted an IT regime. The authors note that Brazil's success in keeping inflation within the official target range in the early years following the adoption of IT coincided with a period of currency appreciation (lowering the cost of traded and imported goods).

Examining Brazil's record of IT since, the authors conclude that, over the period 1999–2007, IT targets in Brazil were within the set range in only three out of the nine years this monetary policy was in effect. Moreover, inflation targets were only met under favorable international financial conditions; that is, IT was successful when the exchange rate appreciation helped the Brazil Central Bank's efforts to control inflation. The authors note that over 1999–2007, Brazil's average inflation rate was relatively high at 7.2 percent, and its GDP growth rate was 3.0 percent, compared to 5.1 percent for emerging countries. They also note that over the same period the average nominal basic interest rate was high at 18.3 percent, a strategy designed to keep inflation under control and minimize exchange rate volatility due to the country's high level of external debt and liberalized capital market. The authors maintain that periods of appreciation in the exchange rate have resulted, after a time lag, in a decrease in the rate of inflation, and that inflation in Brazil is very much influenced by exchange rate movements; according to one study, one quarter of the inflation rate variation over 1999–2004 is explained solely by shifts in the exchange rate.

The authors also compare Brazil's IT experience with that of other developing countries, and observe that a fall in inflation is a recent general tendency in the emerging countries examined, whether or not they adopted an IT regime. Moreover, there is no evidence that emerging countries that adopted IT have had a better performance in GDP terms (e.g., China and India are both non-IT countries.) Consequently, inflation targeting does not appear to improve performance in emerging economies, judging by the behavior of inflation and output. In the case of Brazil, the authors conclude that its high interest rate, one of the highest in the world, has contributed to its low economic growth and relatively high inflation.

For the complete text, go to www.levy.org/pubs/wp_544.pdf.

Promoting Equality Through an Employment of Last Resort Policy

DIMITRI B. PAPADIMITRIOU
Working Paper No. 545

Many economists believe that unemployment tends toward a natural rate below which it cannot go without creating inflation. In this working paper, President Dimitri B. Papadimitriou argues that a government employment guarantee, or employer-of-last-resort (ELR), scheme would satisfy the noninflationary criteria, and examines the international experience of such programs.

The author explains that ELR, advocated by Hyman P. Minsky, is a strategy for full employment for which the government acts as a "market maker for labor" by establishing a "buffer stock of labor." In effect, the government "buys" all unemployed labor at a fixed wage or "sells" it (to the private sector) at a higher wage. Since the price of the commodity (labor) used as a buffer stock remains constant, this policy approach ensures full employment with price stability. The author cites the success of this program as part of employment policy under the New Deal, and notes that crude calculations for the United States indicate that an ELR program covering seven million persons would provide an additional increase in GDP of close to 2 percent, at a program cost of about 1 percent of GDP.

Papadimitriou notes that in 2002, Argentina's government introduced the *Plan Jefes e Jefas de Hogar Desocupados* (*Jefes*) in order to deal with unemployment and poverty in the aftermath of the country's economic crisis of 2001. The program offered 150 pesos per month for four hours work daily to a head of household with children younger than 18 years of age, or households caring for people with disabilities. At its peak, *Jefes*, together with a similar, parallel program, offered employment to nearly two million households, representing 5 percent of the population (37 million) and 13 percent of the labor force. It is estimated that the cost of the program was equal to about 1 percent of GDP, while its effects could potentially amount to 2.49 percent of GDP annually. The program's target population was well focused on poor households with children, and it succeeded in increasing household income and addressing indigence (the lack of food and shelter). However, *Jefes* was not that successful in lifting households above the poverty line. Papadimitriou suggests relaxation of entry requirements to allow participation of more than one person per family, and a modestly higher monthly income to make the program more effective in overcoming poverty.

India's experience of guaranteed employment programs started some 40 years ago in the state of Maharashtra, and that experience contributed to the impetus that brought about passage of the National Rural Employment Guarantee Act (NREGA) in 2005. NREGA has two objectives: provision of jobs to landless labor and marginal farmers in nonagricultural seasons, and creation of durable assets to increase land productivity. The legislation's first phase, implemented in 2006, covered the 200 poorest rural districts and, in April 2008 was extended to all of India's rural districts. It guarantees poor rural adults at least 100 days of work per year within a 5-kilometer (3.1-mile) radius of their homes and at the statutory minimum wage, along with some training and upgrading of skills; NREGA also offers subsidized children's daycare to those who need it. Preliminary evaluations of the program indicate that in 2006–07 it generated 905 million person-days of work for the initial 200 districts, increasing to 1,437 million person-days in 2007–08, reflecting expansion of the program's coverage to 330 districts and improved means of implementation. The author concludes by drawing attention to the potential for a properly designed ELR program to contribute toward the realization of all the Millennium Development Goals as adopted by the United Nations General Assembly.

For the complete text, go to www.levy.org/pubs/wp_545.pdf.

Do the Innovations in a Monetary VAR Have Finite Variances?

GREG HANNSGEN
Working Paper No. 546

At regular intervals, the press is filled with speculation about what the Federal Reserve (Fed) Open Market Committee will do at its next meeting: will it raise rates, lower them, or keep them constant until its next meeting? One fact that is not always appreciated is the difficulty in knowing how interest rate changes will affect the economy. Long ago, economists looked at the correlation between the interest rate and GDP in an attempt to determine those effects. If that correlation were strong and negative, the effects of monetary policy were thought to be significant. But this raises a question of cause and effect: what if the Fed were to raise interest rates when an

economic boom was anticipated, in an effort to preemptively contain inflation? If so, the correlation between the interest rate and economic output might underestimate the true impact of monetary policy.

Mention this problem to a mainstream macroeconomist, and he or she is likely to mention a statistical device called a structural vector autoregression (VAR), which is a technique designed in part to overcome the problem of confusing cause with effect. To use this tool, an economist estimates a multi-equation model. Then he or she can compute what is called an impulse response function. This is a diagram that traces the usual impact of an unpredictable tightening or loosening of monetary policy over a time horizon of several months or several years. Typically, these diagrams depict output declining significantly below what it would have been without the contractionary policy change over a period of many months, then gradually rising back toward levels that would have prevailed without the policy shock.

In this working paper, Research Scholar Greg Hannsgen estimates a VAR that is somewhat typical of those used in textbooks and scholarly papers to gauge the effects of monetary policy and test models. Its impulse response functions prove to be similar to those estimated in earlier studies. Hannsgen then examines the residual quantities that the model fails to explain—the "innovations" of the paper's title. Specifically, he tests these innovations to see if they have an infinite variance. Benoit Mandelbrot, Eugene Fama, and other scholars used similar tests on data sets of stock prices and other financial asset prices in the 1960s and 1970s, though Hannsgen is able to use newer, much more powerful software to obtain more reliable estimates.

Hannsgen finds substantial evidence supporting the hypothesis that the innovations have infinite variance. To construct impulse response functions, a statistician must first take a set of numbers arranged in rows (a matrix), including the variance of each set of innovations, and factor it into the product of *two* such arrays of numbers. This process is almost like taking the "square root" of the matrix. When some variances in the matrix are infinite, this factoring process breaks down, and it becomes impossible to compute impulse response functions that tell us about the economy. At least for this VAR, it turns out that the computed impulse response functions may not answer the questions that they were thought to answer.

For the complete text, go to www.levy.org/pubs/wp_546.pdf.

Minsky and Economic Policy: "Keynesianism" All Over Again?

ÉRIC TYMOIGNE

Working Paper No. 547

The proposed solutions to the current U.S. financial crisis have brought back interest in fiscal policies associated with Keynesian economics, and in Hyman P. Minsky's financial analysis. As initially proposed, such policies have features required for effective application that are rarely implemented in practice. In this working paper, Research Associate Éric Tymoigne argues that true Keynesianism considers government fiscal activism, or Big Government, a necessary stabilizing complement to the profit-oriented sector; as such, this view has never been the basis of economic policy in the United States.

The author observes that the most erratic influence on the gross profits of firms is gross private domestic investment, because of the latter's dependence on the uncertainty of future profit expectations. Minsky argued that this uncertainty has important dynamic implications for the economy, and suggested that the federal deficit can stabilize the gross profit of the business sector. However, his view of the government's role was diametrically opposed to that of the current New Consensus, which considers government intervention in the economy to be temporary, and targeted on removing "market imperfections" such as wage or price rigidities. Minsky believed a major role of government is to intervene continuously over the cycle to promote stable prices and sustain full employment—policies that require Big Government intervention based on permanent and structural programs. He was also keenly aware of the potential problems posed by Big Government—for example, contributing to inflation by raising the wages of its vast number of employees too fast, or by a rapid increase in corporate income taxes. Minsky envisioned Big Government as respecting such constraints. However, he believed that it is necessary to give the government control over some important spheres of activities—for example, determination of the level of employment or investment—rather than leave them to the private sector. The government programs he suggested, however, were meant to remain permanent, largely independent of the political climate of the time, and run by government employees.

Tymoigne examines the period between 1900 and 2007, and notes that before 1946, the United States faced more frequent, longer, and deeper recessions than in the postwar

period. Upswings were also much faster and shorter, making the overall business cycle erratic and unstable. The post-1946 era recorded smoother growth, yet the economy expanded at about the same overall rate as in the pre-1946 period. He notes that this greater stability came from the government's much larger size. U.S. government expenditures accounted for only 2 percent of GDP in 1929; by 2007, this share had grown to about 20 percent. Economic stability was a result of deficit spending compensating for the swings in private domestic investment. The author points out that the government did not reach an adequate size, or about 15 percent of GDP, until the early 1950s.

Tymoigne notes that President Roosevelt, under the influence of "sound finance" (which held that the federal budget should be balanced except in wartime), limited the funding of the New Deal programs in order to generate a budget surplus, especially in election years. Most New Dealers believed that economic recovery would come from the revival of private investment, and saw public spending as a "quick fix"; as a result, the budget deficit never accounted for more than 4 percent of GDP throughout the 1930s. The author points out that Depression-era policies were much closer to what the American economist Irving Fisher had in mind. Fisher believed that the Depression indicated nothing more or less than the breakdown of the monetary system, and thus advocated stabilizing prices by controlling the money supply; he supported temporary fiscal deficits but did not approve of public works program. In a different era, Minsky was critical of the "Keynesian" policy emphasis on tax incentives to stimulate investment and growth in the Kennedy-Johnson era, arguing that such tax breaks do not prompt employment if businesses do not expect sufficient demand to guarantee profits.

For the complete text, go to www.levy.org/pubs/wp_547.pdf.

On Democratizing Financial Turmoil: A Minskyan Analysis of the Subprime Crisis

LUISA FERNANDEZ, FADHEL KABOUB, and
ZDRAVKA TODOROVA
Working Paper No. 548

Inequality plays an important part in the Minskyan process leading from stability to instability. This working paper by Luisa Fernandez, Alvarez and Marsal Taxand; Research Associate Fadhel Kaboub; and Zdravka Todorova, Wright State University, focuses on just how "inequality breeds instability."

The authors offer some data on the scale of inequality in the United States. Between 1980 and 2004, the real average hourly wage (in 2004 dollars) hardly changed, staying around $15.7 per hour. Real average family income also barely changed for the poorest 20 percent of the population between 1979 and 2006, while the richest 20 percent saw their income rise by 56.77 percent and the richest 5 percent enjoyed an 87.47 percent increase. And to make things worse for middle- and low-income groups, since 1980 the top federal tax rate on capital gains has declined by 31 percent and the estate tax by 46 percent, while payroll taxes have increased by 25 percent. Moreover, there was a sharp increase in the cost of buying a home between 1996 and 2006, yet with no corresponding increase in income. The result was that the consumer-debt-to-income ratio rose from 65 percent in 1980 to nearly 80 percent in the mid-1990s, and by 2007 had shot up to over 125 percent. Similarly, the cost of servicing consumer debt rose from 10.5 percent in 1995 to a record 14 percent in 2006. However, consumer debt can only grow so much, since it must be paid down sooner or later. Taken together, these destabilizing effects of inequality ultimately led to financial innovation (securitization), predatory lending, and economic turmoil.

The authors maintain that much of the current financial crisis stems from the fact that the hardcore unemployed and the economically disadvantaged were simply unable to benefit from the Clinton-era expansion. The 2000 recession made it difficult for the real estate market to continue its record expansion. Thankfully for the real estate market, the Federal Reserve (Fed) aggressively slashed its funds rate target from 6.5 percent in May 2000 to 1 percent in June 2003, an all-time historical low, and kept it at that rate until June 2004. This four-year period of incredibly low interest rates allowed middle- and high-income consumers to refinance their homes and to pay off some of the debt accumulated in the 1990s. This was bad news for banks and real estate firms, because creditworthy middle- and upper-income customers were no longer flooding the housing market. Next in line were the subprime borrowers—those with bad credit, those with no credit, and finally, those with no jobs, no income, and no assets. The criteria were consistently relaxed to allow lenders to issue the maximum number of loans (thereby earning substantive fees and commissions). Once the boom in homeownership was under way, the Fed immediately sought to

bring its funds rate back to higher levels. Beginning in June 2004, it raised rates almost continuously, reaching 5.25 percent by June 2006. The subprime time bomb remained unnoticed thanks to the prevalence of 2–28 and 3–27 mortgage schemes, whereby borrowers would pay a very low rate for two to three years before the mortgage reset at rates as high as 12 percent, thus leading to almost certain default and foreclosure.

The author argues that stable employment and rising income, achieved through a government-ensured buffer stock of labor to stabilize wages and inflation, is the only secure mechanism to guarantee a consistent rise in homeownership. They note that such an approach does not eliminate inequality altogether, but it does put a floor to income and aggregate demand levels.
For the complete text, go to www.levy.org/pubs/wp_548.pdf.

Excess Capital and Liquidity Management

JAN TOPOROWSKI
Working Paper No. 549

A crucial feature of large companies is their permanent holding of liquid capital in excess of the amount required by their nonfinancial investment. This suggests that the internal liquidity of large companies, not monetary policy, remains the principal factor in nonfinancial investment decisions. In this working paper, Jan Toporowski, the School of Oriental and African Studies, University of London, and Research Center for the History and Methodology of Economics, University of Amsterdam, develops this excess-capital approach to corporate finance and analyzes its implications.

The author notes that excess capital is held in financial assets, and defines it as the excess of a company's liabilities, issued by other companies, banks, and financial institutes, over its productive capital (i.e., physical infrastructure, equipment, and stocks of unsold products). For an overcapitalized firm, the return from its excess capital may be divided up into an income return and a speculative return. The author also notes that in a banking system with no uncertainty (risk), the speculative return on excess capital would be zero. The income return is calculated as the difference between bank lending and deposit rates of interest, times the amount of excess capital. Since the difference is usually positive, the income stream on excess capital is therefore negative, and hence known as the rental *cost* of capital. However, with uncertainty about future prices, there will be speculative investment, and the speculative return on excess capital is added to the income return. In this more general case, the rental cost of capital reflects the costs of participation in the financial markets. Firms can now vary the rental cost of their capital and their speculative return through financial intermediation. Moreover, in order to acquire more liquid assets against those less liquid ones, firms can at any time vary the liquidity of the assets in their balance sheet, by issuing more long-term capital and holding the proceeds as short-term liquid assets.

Toporowski then examines the implications of his approach. He notes that the possession of accumulated liquid assets means that a firm engaging in speculation does not have to borrow in order to finance its market operations. It follows that, in the most financially advanced countries, bank borrowing is not necessary for investment projects to be undertaken, with the exception of projects undertaken by small firms, whose investments are usually not a significant factor in the dynamics of national income and output. Excess capital allows large companies capable of initiating and sustaining an investment boom to undertake productive investment without a prior expansion of their financial liabilities. The author maintains that where companies can vary the liquidity of their excess capital, and therefore do not have to rely on bank advances to finance their investments, the rate of interest becomes disconnected from the (real) investment process. Moreover, where companies may obtain a speculative return on their excess capital, the rate of interest is a less effective constraint on speculation. In such a situation, the author concludes, the rate of interest becomes a purely monetary phenomenon—that is, a variable or policy instrument whose significance is confined to the sphere of financial intermediation.
For the complete text, go to www.levy.org/pubs/wp_549.pdf.

An Empirical Analysis of Gender Bias in Education Spending in Paraguay

THOMAS MASTERSON
Working Paper No. 550

Two areas of household expenditure patterns have been widely examined for gender effects: the impact of women's share of household resources and income, and ownership of assets such as land, on female intrahousehold bargaining power; and gender

bias in spending on children. There are, however, effects linking these areas. For example, greater female bargaining power may also influence greater spending differences on boys compared to girls. Yet, few studies have addressed the combined aspects of gender's impact on household welfare. In this working paper, Research Scholar Thomas Masterson examines the two gender effects in a single model, and explores their influences for educational expenditure on children simultaneously.

The data for this study comes from a 2000–01 household expenditure survey in Paraguay, with detailed information about consumption and income-generating activities gathered from a random sample of 2,113 households covering both urban and rural sectors. Masterson follows a model from the literature developed specifically to detect both intrahousehold bargaining power and child gender bias effects in expenditure patterns—a model applied to India in a 2005 study, with some interesting results. The author employs spending on education as the dependent variable of his principal equation. In this framework, the share of the household budget allocated to education is to be explained by separate indicators for gender bargaining power and child gender bias. Masterson adopts a number of solutions to statistical problems common to this kind of analysis. His main approach consists of comparing estimation of his education spending equation by two different methods. One method is to employ all sample observations on education spending. The author notes, however, that the large number of households with zero expenditure on education suggests the decisions on whether to spend, and if so how much, are not made simultaneously. Therefore, he also employs a two-stage estimation method, beginning with a dependent variable indicating if a household has positive expenditure on education, and conditional on that outcome, a second equation estimating the effects of gender bargaining and child gender variables on the amount spent. The tests for the effects of female bargaining power are based on whether female landownership and homeownership are statistically significant explanatory variables for education spending. He also examines the effects of parental gender discrimination by testing if coefficient estimates on the age proportions of male and female children in each age group are significantly different from each other. The author applies this method to sample data collected at both the household and the individual level, on the grounds that the more aggregated household-level data may hide gender bias that may become more visible when analyzed against sample data drawn from individual members of the household.

Masterson notes that educational outcomes in Paraguay are consistent with the presence of gender effects in education spending, especially in rural areas. The data show illiteracy is higher among women and in rural areas; that rural households with male children devote greater shares of their spending to education; and that rural female homeownership is associated with greater spending on education. Against this factual background, the author reports extensive results obtained from the application of the above approach, though he notes that some of his findings cannot be clearly explained. Among the household-level findings, one notable result is that three out of four child age group / gender indicators suggest a pro-male bias in education spending. Another relatively clear result is that among urban households, female bargaining power is more strongly determined by income than by asset ownership. Masterson finds that individual-level evidence on the effects of child gender bias and female bargaining power on education spending is much weaker than those obtained from the household-level analysis. He notes that this conclusion is the opposite of that found in a similar study conducted with Indian data published in 2005, which revealed weaker evidence of gender bias at the household than at the individual level.

For the complete text, go to www.levy.org/pubs/wp_550.pdf.

Levy Institute News

Conference: Economists for Peace and Security

The 2008 Economists for Peace and Security (EPS) conference took place at the Schwartz Center for Economic Policy Analysis, New School University, New York, N.Y., on November 14. The conference topic was "The Financial Crisis, the U.S. Economy, and International Security in the New Administration." The joint organizers of the conference were EPS, The Levy Economics Institute, the Schwartz Center, and the Charles Léopold Mayer Foundation Initiative for Rethinking the Economy. The conference examined four specific themes: the nature of the current crisis, economic policy challenges facing the United States, the design of a new domestic financial architecture, and the design of a new global financial architecture. This conference brought together an international group of expert observers of the financial system, including John Eatwell, James K. Galbraith, Joseph E. Stiglitz, and many others.

Upcoming Event: The 18th Annual Hyman P. Minsky Conference: The Financial Crisis and Its Effects on the U.S. and Global Economies

April 16–17, 2009

The topics at this year's conference will include the causes and consequences of the "Minsky moment"; the impact of the credit crunch on the economic and financial market outlook; dislocations and policy options; the rehabilitation of fiscal policy; margins of safety, systemic risk, and the U.S. subprime mortgage market; lessons from earlier times to rehabilitate mortgage financing and the banks; financial markets regulation-reregulation; the inefficiency of computer-driven markets; currency market fluctuations; and exchange rate misalignment.

Further information about the conference, its location, and registration will be posted at www.levy.org as it becomes available.

Publications and Presentations

Publications and Presentations by Levy Institute Scholars

RANIA ANTONOPOULOS *Research Scholar*

Publication: "State, Difference, Diversity: Toward a Path of Expanded Democracy and Gender Equality," in *Democracy, State, and Citizenship in Latin America*, Vol. II (in Spanish), Project on Democratic Development in Latin America, Lima (Peru): United Nations Development Programme (UNDP), 2008.

Presentations: "Employment and Gender Issues," seminar on "Contributing to Employment-anchored Inclusive Development: Focusing on Employment Diagnostics, Promising Approaches, and MDG-Scaling-up," Bureau for Development Policy (BDP), UNDP, New York, N.Y., September 23; "Why Employment Matters," conference on "Well-Being: Are We Happy With Our Standard of Living?" Cassino, Italy, September 26–27; "Economic and Social inclusion: The Role of Work in the Face of Displacement," seminar on "Employment Alternatives for Economic Inclusion in Bogotá," sponsored by the Mayor's Office of Bogotá, Colombia, October 29; "Public Works Programmes and Unpaid Care Work," Expert Group meeting on "Unpaid Work, Economic Development, and Human Well-Being," BDP, UNDP, New York, N.Y., November 16–17, 2008; "Women's Right to Work, Employment Guarantee Policies, and Gender Equality," conference on "Decentralization, Local Power, and Women's Rights: Global Trends in Participation, Representation, and Access to Public Services," sponsored by the Government of Mexico and the International Development Research Centre, Mexico City, November 18–21; "Scaling Up South Africa's Public Job Creation Programme: Impact on Gender Equality and Pro-poor Economic Development," Political Economy Seminar Series, Graduate School of Economics, University of Massachusetts Amherst, November 25.

JAMES K. GALBRAITH *Senior Scholar*

Publications: *The Predator State: How Conservatives Abandoned the Free Market and Why Liberals Should Too*, New York: Free Press, 2008; "Colapso del monetarismo e irrelevancia del nuevo consenso monetario," *Ola Financiero*, No. 1, September–December; "Predatory Pachyderms: Government of Big Business, By Big Business, and For Big Business," *The Texas Observer*, September 5; "A Bailout We Don't Need," *Washington Post*, September 25; "Plan," *Harper's Magazine*, a contribution to the *How to Save Capitalism* Forum, November; "Policy and Security Implications of the Financial Crisis: A Plan for America," *Challenge*, Vol. 51, No. 6, November–December.

Presentations: "The Predator State: How Conservatives Abandoned the Free Market and Why Liberals Should Too," presented at the New America Foundation, Washington, D.C., and the Yale Club of Washington, D.C., October 6; introduction to the opening of the John K. Galbraith Papers, John F. Kennedy Presidential Library and Museum, Boston, Mass., October 12; speech given as part of the John K. Galbraith Centennial, Dutton, Ontario, Canada, October 18; "The Predator State," Schwartz Center for Economic Policy Analysis, New School University, New York, N.Y., October 20; "What Is the Predator State?" The Chapman Dialogues Distinguished Lecture Series, Chapman College School of Law, Orange, Calif., October 27; "Policy and Security Implications of the Financial Crisis: A Plan for America," Global Financial Crisis Meeting, Columbia University, New York, N.Y., October 28; "The Predator State," Global Affairs Lecture Series, Occidental College, Los Angeles, Calif., October 28; "Better 'Bail-out' and 'Bail-in' Packages," conference organized by the Political Economy Research Institute, University of Massachusetts Amherst, at the Schwartz Center, New York, N.Y., November 21.

FERIDOON KOOHI-KAMALI *Research Associate and Editor*
Publication: "Intrahousehold Inequality and Child Gender Bias in Ethiopia," Policy Research Working Paper WPS 4755, The World Bank, October.

JAN KREGEL *Senior Scholar*
Publications: "What Can Keynes Tell Us about Policies to Reduce Unemployment and Financial Instability in a Globalised International Economy?" *METU Studies in Development*, Vol. 35, No. 1, 2008; "Using Minsky's Cushions of Safety to Analyze the Crisis in the U.S. Subprime Mortgage Market," *International Journal of Political Economy*, Vol. 37, No. 1, Spring; "The Discrete Charm of the Washington Consensus," *Journal of Post Keynesian Economics*, Vol. 30, No. 4, Summer.
Presentations: "The Keynesian Roots of Patnaik's Value of Money," plenary presentation, conference on "The Value of Money in Contemporary Capitalism," New Delhi, India, September 12–13; "The Social Impact of Globalization," seminar on "Globalización y distribución del ingreso: Problemas y desafíos de política", sponsored by the Argentine Ministry of Labour and Social Security, International Labour Organization, United Nations Development Programme, and the Economic Commission for Latin America and the Caribbean, Buenos Aires, Argentina, September 22–23; "The Global Financial Crisis and Developing Economies," conference on "The Emerging Global Economy: Is There a Challenge from the South?" Faculty of Economic Sciences, University of Buenos Aires, Argentina, September 24–25; "Managing Uncertainty in a Volatile World," conference on "Beyond Bretton Woods: The Transnational Economy in Search of New Institutions," sponsored by the Instituto de Investigaciones Economicas, Universidad Nacional Autonoma de Mexico (UNAM), Mexico City, with the Observatoire de la Finance, Geneva, Switzerland, and the Pacific Asia Resource Center, Tokyo, Japan, at UNAM, October 15–17; "From U.S. Subprime Crisis to Global Meltdown: Implications for the Baltic Capital Importing Countries," presented at the Estonian Development Fund, Tallinn, Estonia, October 30.

DIMITRI B. PAPADIMITRIOU *President*
Publications: "The Economic Contributions of Hyman Minsky: Varieties of Capitalism and Institutional Reform" (with L. R. Wray), in S. Pressman, ed., *Leading Contemporary Economists: Economics at the Cutting Edge*, Routledge, 2008; "The Economic Crisis and Beyond," *Kathimerini*, October 18.
Presentations: Interview regarding the federal funds rate with Daniel Sturgeon, *Tokyo News*, September 16; interview regarding the financial crisis on Wall Street with Javier Salinas, *Getty Images*, September 16; interview regarding the long-term effects of only a few commercial banks dominating the banking industry with Matthias Rieker, *Dow Jones*, September 17; interview regarding the Federal Reserve's expanding balance sheet and its implications with Neil Roland, *Financial Week*, September 18; interview regarding the Treasury's bailout plan with Greg Robb, *Marketwatch.com*, September 22; interview regarding the Emergency Economic Stabilization Act of 2008 with Matthias Rieker, *Dow Jones*, September 28; interview regarding the economy with Sarah Bradshaw, *Poughkeepsie Journal*, September 29; interview regarding the connection between the market and the presidential election with Karin Price Mueller, Fidelity Interactive Content Services, October 8; interview regarding the implications of the financial crisis with Alejandro Rebossio, *La Nación*, October 8; interview regarding the Bank of England and the recapitalization of banks with Matthias Rieker, *Dow Jones*, October 8; interview regarding the current economic crisis and the measures taken by the government with Zehra Altayli, *Six News* (Turkey), October 13; interview regarding the US economy and recession with Andy Robinson, *La Vanguardia*, October 23; interview regarding alternative stimulus ideas with Michael S. Rosenwald, *The Washington Post*, October 29; interview regarding what's next in the credit crisis with Mary Kane, *The Washington Independent*, November 3; interview regarding the economic challenges facing Barack Obama during the first few months of his presidency with Michael E. Kanell, *The Atlanta Journal-Constitution*, November 6; interview regarding general predictions for the economy going into the new year with Emily Schmall, *La Voz*, November 10; session participant, "A New Domestic Financial Architecture," conference on "The Financial Crisis, the U.S. Economy, and International Security in the New Administration," organized by Economists for Peace and Security, the Charles Léopold Mayer Foundation, and The Levy Economics Institute, Schwartz Center for Economic Policy Analysis, New School University, New York, N.Y., November 14; member, panel on the economy, Bard College at Simon's Rock, Great Barrington, Mass., November 19; participant, working meeting on financial restructuring and re-regulation, organized by the Political Economy Research Institute, University of Massachusetts Amherst, at the Schwartz Center, York, N.Y., November 21.

EDWARD N. WOLFF *Senior Scholar*
Presentation: "Long-Term Trends in the Levy Institute Measure of Economic Well-Being (LIMEW), United States, 1959–2004," Wealth and Inequality Seminary Series, Princeton University, Princeton, N.J., October 22.

L. RANDALL WRAY *Senior Scholar*
Publication: "The Economic Contributions of Hyman Minsky: Varieties of Capitalism and Institutional Reform" (with D. B. Papadimitriou), in S. Pressman, ed., *Leading Contemporary Economists: Economics at the Cutting Edge*, Routledge, 2008.

AJIT ZACHARIAS *Senior Scholar*
Presentation: "Measuring Long-Term Trends in Economic Well-Being in the United States: A New Perspective," conference on "Well-Being: Are We Happy With Our Standard of Living?" Cassino, Italy, September 26–27.

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