

# Working Paper No. 273

Saving-Recycling Public Employment: An Assets-Based Approach To Full Employment and Price Stability

by
<u>Mathew Forstater</u>
The Jerome Levy Economics Institute

July 1999

William Vickrey's single-minded commitment to full employment is evident in a series of papers written in the last years of his life (Vickrey, 1992a, 1992b, 1993a, 1993b, 1993c, 1994, 1996, 1997). In this work, Vickrey formulated an assets-based approach to macroeconomic analysis with definite implications for budgetary and employment policy. In Vickrey's approach, the difference between desired and actual holdings of net financial assets—or net nominal savings— is the crucial relation in understanding macroeconomic processes, and the government budget is the key policy instrument in the necessary recycling of net nominal savings to bring the desired and actual levels into equality at the full employment level of output and income. Vickrey believed that the major task for economists and policymakers was to devise the means whereby the necessary recycling of net nominal savings can take place without unexpected changes in the rate of either inflation or deflation. This paper proposes government deficit-financed guaranteed public employment as an automatic stabilizing policy instrument capable of serving as just such a means.

#### VICKREY'S COMMITMENT TO FULL EMPLOYMENT

For Vickrey, 1926 was the last time there was an acceptable level of employment during peace time in the U.S. (Vickrey, 1994, p. 39). He embraced the Beveridge definition that defines full employment as holding when "there are at least as many unfilled job openings as there are unemployed individuals seeking work" (Vickrey, 1993a, p.1). Elsewhere, he describes full employment—what he called "chock-full employment" (1992b; 1994)—as the situation in which individuals "can find work at a living wage within 48 hours" (Vickrey, 1994, p. 40).

Vickrey recognized that there are huge social and economic costs to unemployment, and that the promotion of full employment must be a top priority. Among these costs are the direct and real costs of loss of potential output and income, as well as the nominal costs of lower tax revenues because of the smaller tax base and higher rates of government expenditure in the form of unemployment compensation and various forms of 'welfare' assistance. But Vickrey also continuously emphasized the social and economic costs linked to unemployment in the form of poverty, crime, drug addiction, homelessness, malnutrition, poor prenatal care, ethnic antagonism, school dropouts, broken families, and other social problems (Vickrey, 1992a, p. 310; 1992b, p. 341; 1993a, p. 2; 1993c, p. 16; 1997, pp. 504-05). He also recognized that unemployment differentially impacts certain sectors of the population, so that an overall official unemployment rate of 5 percent can mean rates of "10, 20, and 40 percent among disadvantaged groups" (1994, p. 39). The benefits of full employment thus include improved security for society's most downtrodden, alleviation of a variety of social ills, and expanded output and income. In addition, full employment also can stabilize business expectations and have a positive impact on the wages and status of unskilled workers (1993a, p. 9; 1997, p. 505).

Given these views, it is not surprising that Vickrey vehemently rejected the notion of the NAIRU (non-accelerating inflation rate of unemployment), and any kind of "natural" rate of unemployment, calling the latter "one of the most vicious euphemisms ever coined" (1992b, p. 341). At the heart of the NAIRU and the "natural" rate of unemployment are the beliefs that there is a trade-off between unemployment and inflation, that inflation is the greater evil of the two, and that some unemployment is necessary to guarantee price stability.

For Vickrey, "unemployment is not needed to control inflation" (1997, p. 507). Adherence to the view that price stability requires maintaining a reserve army of the unemployed, which Vickrey believed was "especially strong in influential financial circles and among monetary authorities," means that the fiscal and monetary brakes have to be slammed every time economic growth causes unemployment to drop below a certain level (1992b, p. 341). One implication of such an approach is that efforts such as worker retraining become "a cruel game of musical chairs" with the "keepers of austerity" making sure the total number of chairs stays fixed (1997, p. 504; 1993b, p. 3). This is a high price to pay given that it is based on a view that "lacks historical or analytical basis" (1997, p. 504).

While he believed the dangers of inflation are overstated, Vickrey recognized that unexpected changes in the rate of inflation, either up of down, can have undesirable effects, and so developing a means to chock-full employment without unstable prices is a priority. But this does not mean that inflation is a greater evil than unemployment. In Vickrey's view, while inflation is a "redistribution of the given total output...unemployment involves a reduction in the total product to be distributed" and therefore clearly does greater social harm (1992b, p. 341). In fact, the greatest danger of inflation for Vickrey turns out to be the measures taken to control it, in other words, enforcing unemployment (1992b, p. 341): political maintenance of "unemployment as prophylactic measure against a highly problematic threat of mismanaged inflation is a cure far worse than the disease (Vickrey, 1997, p. 505).

Vickrey scolded the economics profession and policy makers for what he saw as wasting their time arguing "over which foot is the better to shoot ourselves in" (1993b, p.3). Extolling the benefits of full employment, he urged his colleagues and anyone willing to listen to immediately focus their "concentrated attention to working out ht practical details and bringing the concept to realization" (1992b, p. 345). Vickrey himself led by example, racking his brains until the last moment of his life to lay bare the fundamental causes of unemployment, and devise means for its elimination. His assets based approach to macroeconomics, with its implications for the government deficit-financed recycling of net nominal savings, was the fruit of these untiring efforts, and it is to this work that we now turn.

# SAVINGS AND INVESTMENT: TOWARD AN ASSETS BASED APPROACH TO MACROECONOMICS

Vickrey's assets based approach to macroeconomics is rooted in the analysis of savings and investment. In orthodox neoclassical theory, savings determines investment through variations in the rate of interest. Thus income not consumed is transformed into investment expenditure in the market for loanable funds. It is this mechanism that, under perfectly competitive conditions, ensures that all output will be purchased at the full employment level of output and income. Vickrey rejected such a view, which he identified as the heart of "Say's law," and targeted for rebuttal the implication that economic growth is achieved by promoting an increase in savings (1993c, p. 6).

Vickrey casts doubt on the conventional view of the interest-elastic nature of both savings and investment:

On the one had, the demand for asset accumulation and the supply of savings have come relatively insensitive to interest rates and may even have developed an inverse relationship as lowered interest rates increase the amount of assets required to provide a given level old-age security. On the other hand, high risk, obsolescence, maintenance, and other user costs have diminished the long-run responsiveness to interest rates of investment in productive assets. The implicitly assumption of the neoclassical paradigm that the potential for prof-seeking capital investment would expand without limit as real interest rates fell, so that there would always be an interest rate that would close the gap, fails in the face of the reality of uncertainty concerning conditions that will obtain in the remote future. (Vickrey, 1997, p. 498).

Thus both the positively sloped neoclassical saving function and the downward sloping interest-elastic demand curve for investment are brought into question in Vickrey's analysis.

Key to understanding the savings-investment relation is to understand the two sided nature of saving and

### spending:

most economic transactions have at least two aspects, and much of our present plight is the result of looking at only one aspect and failing to follow through on the obverse aspects and their consequences. Nowhere is this more apparent than in the popular discussions of the levels of saving and capital formation and their impact on the health and growth of our economy. (Vickrey, 1993c, p. 5)

Saving is income not spent. It is, in Vickrey's phrase, "non-spending" (1993b; 1993c, p. 5; 1994). Increased savings is therefore an increase in non-spending, most often in the form of a reduction of consumption, and this causes the income of others to fall. This in turn leads those experiencing falling incomes to reduce their own savings. Vickrey liked to demonstrate this principle with his now well-know story of abstaining from an \$8 haircut:

Savings are not like a sack of potatoes which if not sold at the current price will stay on hand and put a downward pressure on the price until sold. Savings not immediately taken up to create capital simply vanish in reduced income, without even exerting a downward pressure on interest rates. If I yield to the allurements of tax concessions to IRA's to the point of not having my hair cut, this puts \$8 more in my bank account, but \$8 less in the barber's account; there is nothing that makes it any easier for anyone to obtain funds with which to create capital, nor anything that makes the prospect more attractive...If the barber reacts by curtailing his consumption, this further reduces national income and saving. I may succeed in my attempt to save, but only by reducing the saving of others by even more. Savings are an extremely perishable entity. Say's law fails as soon as part of the income generated in the process of producing the supply is shunted off into new savings that fail to get converted into new capital goods. (Vickrey, 1993a, p.6)

Not only has the increased saving not been translated into investment, but the decline in aggregate demand that results may further impact investor expectation so that investment may actually be discouraged (Vickrey, 1993b, p.2).

For Vickrey, the causality runs in the opposite direction, from investment to savings:

if some genius invents a new product of process and obtains a credit of borrows the funds needed to finance the capital involved in its production, this added real wealth is ipso facto, someone's's savings. Instead of Say's law, we have "Capital formation creates its own saving." (Vickrey, 1993a, p.6)

Thus, investment determines savings, and the mechanism that brings them into equality is not variations in the interest rate but rather changes in the level of income:

Attempted saving, with corresponding reduction in spending, does nothing to enhance the willingness of banks and other lenders to finance adequately promising investment projects. With unemployed resources available, saving is neither a prerequisite nor a stimulus to ,but a consequence of capital formation, as the income generated by capital formation provides a source of additional savings. (Vickrey, 1996, p. 5)

Vickrey's analysis of the investment-saving relation leads him to view private sector investment as a means whereby savings is recycled back into the income stream. (Of course, the savings would not exist if it wasn't for some initial investment in the first place.) It is a means whereby non-spending is turn into spending. If the entirety of the full-employment level of savings is not recycled into spending by private investment, some of the full employment level of output fails to be justified by actual sales, and disappointed businesses cut back production, laying off workers. Incomes of the unemployed fall, and saving declines until it is brought into equality with the below full employment level of private investment. In other words, Vickrey's analysis of the savings-investment relation leads him to focus on the crucial issue of the recycling of net nominal savings.

#### NET NOMINAL SAVINGS AND THE SAVINGS-RECYCLING GOVERNMENT BUDGET

Another way of stating the problem is to focus on the relation between the desired and actual levels of holdings of net financial assets, or net nominal savings. If, at the full employment level of output, "the total asset supply held by individuals falls short of what they desire to hold, the curtailing of expenditures by individuals in an attempt to bring their net worth up to a desired level will reduce sales, production, employment, and GNP until the corresponding demand for assets has been reduced to the available supply" (Vickrey 1997, pp. 497-498). Vickrey believed that there are social, institutional, and technological reasons for a growing gap between the private demand and private supply of assets, and that private investment cannot be relied upon to recycle the full employment level of savings. Unemployment is the real, material evidence of a discrepancy between desired and actual levels of net nominal savings, for if the desired level was lower, individuals would be spending more, sales would be higher, and firms would be hiring more workers.

For Vickrey, there is only one solution to closing the gap between desired and actual levels of net nominal savings: government deficits. If we consider the problem from an asset based approach, it is clear why this is in fact the case: there is no other source of change in the private sector's's total holdings of net financial assets (in dollars). If one individual in the private sector wants to increase their holdings of net financial assets, this can only occur if another individual is willing to decrease their holdings by the corresponding amount. The private sector is incapable of creating net nominal assets. Thus, Vickrey concludes, there is "no adequate solution without long-term and continued increases in government debt" (1997, p. 499): "The "deficit" is not an economic sin but an economic necessity (Vickrey, 1993b, p.1).

While many have promoted the use of a capital budget by the Federal Government, for Vickrey, although he considered that there any be political or ideological reasons why capital-budgeting might make deficits more palatable, this is besides the point:

The savings recycling budget is possibly the most important of budgetary concepts form the standpoint of day-to-day policy. This budget would reflect the effect of government outlays...in Recycling savings, in excess of those absorbed by private investment, into the stream of demand for output. It is the crucial element in curbing the business cycle and bring employment of resources up to a satisfactory level. From this standpoint, it matters relatively little whether outlays are for current or for capital-account items. (Vickrey, 1992a, p. 307).

In fact, if government investment replaced private investment, the net effect desired might be offset, while the income recycling function itself would be served just as well from projects with no other justification (1993a, p. 6). Despite the crucial importance of grasping this point, Vickrey did note that government investment that spurs further private investment or otherwise benefits the public refutes the argument that the national debt is a burden on future generations, instead arguing that much of the activity undertaken for the purpose of recycling savings "will form part of the real heritage left to the future" (1996, p. 4). Because savings recycling through government deficits permits chock-full employment economic growth, "[t]his means an increased heritage of real capital plant and equipment, to say nothing of the human capital induced by fuller employment" (1997, p. 509).

Neither is the savings recycling deficit something that can be 'balanced over the cycle' (1997, p. 499): "the supply of government securities will need to grow *pari passu* with the gross domestic product, to correspond to the gap between the demand of the population for assets and the provision of assets by the private sector" (1993b, p. 1). It must be emphasized that this is not a 'closed economy' argument, the foreign sector—including foreign government, firms, and individuals—is included in the private demand for assets. As Vickrey recognized, exporting unemployment through "export surpluses...is essentially a beggar-my neighbor policy not available as a general policy" (1997, p. 499). While Americans could indeed net save dollar assets with a trade surplus, this would only be temporary, as the resulting world-wide dollar squeeze would cause the government deficit to rise.

In promoting the need for savings-recycling government deficits and a growing national debt, Vickrey rejected many of the common myths and misconceptions concerning deficits and the debt held by the economics profession and politicians, and repeated *ad nauseam* by the press (1994; 1996). These include the assertions,

not backed up by either careful analysis or the historical record, that deficits cause inflation, high interest rates, or crowd out private investment. Vickrey point out that not only have deficits and the national debt not resulted in these harmful effects, but that the "existence of large government debt may be one reason we have not had a recurrence of a depression of the severity of the 1930s" (1997, pp. 508-09):

To assure against such a disaster and start on the road to real prosperity it is necessary to relinquish our unreasoned ideological obsession with reducing government deficits, recognize that it is the economy and not the government budget that needs balancing in terms of the demand for and the supply of assets, and proceed to recycle attempted savings into the income stream at an adequate rate, so that they will not simply vanish in reduced income, sales, output and employment. There is too a free lunch out there, indeed a very substantial one. But it will require getting free from the dogmas of the apostles of austerity, most of whom would not share in the sacrifices they recommend for others. Failing this we will all be skating on very thin ice. (Vickrey, 1996, p. 32)

Vickrey's assets based approach to macroeconomic analysis elucidates the fundamental relation between desired and actual net nominal savings as the key to understanding the problems of persistent unemployment. Furthermore, it leads straightaway to the conclusion the savings-recycling deficit is the only way to close the gap and bring the desired and actual levels of net holding of financial assets into equality a the full employment level of output an income. "An economy with 10 percent inflation and 2 percent unemployment would be far healthier in human terms than one with 1 percent inflation and 8 percent unemployment," but fortunately, such a trade-off is not necessary, as unemployment is not needed to keep prices stable (1997, p. 505). Vickrey did feel, however, that a "new tool is needed" to complement fiscal and monetary measures if we are to accomplish the three macroeconomic goals of promoting full employment, stable prices, and economic growth (1993a, p. 7). A number of proposals have been made for government to promote full employment through direct job creation (Minsky, 1986; Lowe, 1988; Harvey, 1989; Collins, et al., 1994; Gordon, 1997). Recently, several proposals have explicitly highlighted the ways in which such guaranteed public employment can serve as an effective automatic stabilizer by recycling savings through government budget deficits in just the manner proposed by Vickrey (Mosler, 1997-1998; Mitchell, 1998; Wray, 1997;1999).

#### SAVINGS-RECYCLING PUBLIC EMPLOYMENT

We have seen that Vickrey's chock-full employment means more vacancies than individuals seeking work, and a situation in which workers can find a decent job at a living wage within 48 hours. We have also seen that Vickrey considered a means to full employment without inflation as a top priority. In addition, Vickrey felt that pursuing three macroeconomic goals with only two policy instruments is like "trying to fly an airplane without ailerons, which were the third dimension of control that was the key to the success of the Wright brothers," so that a new tool is needed (1993a, p. 7). We must devise a means of promoting chock-full employment without unexpected changes in the rate of inflation or deflation and "fill the gap between the asset aspirations of individuals at this level of income and the ability of the private sector to provide assets" through savings recycling deficits (1993b, p.1). "There is no reason inherent in the real resources available to us why we cannot move rapidly...to a state of genuinely full employment and then continue indefinitely at that level" (1993a, p. 10).

Vickrey rejected draconian 'workfare' that is not combined with increases in aggregate demand:

[A]ttempts to move selected unemployed individuals or groups into jobs by training, instruction in job search techniques, threats of benefit withdrawal or denial, and the like, merely move the selected individuals to the head of the queue without reducing the length of the queue. Merely because any one traveler can secure a seat on a flight by getting to the airport sufficiently early does not mean that if everyone get to the airport sufficiently early that 200 passengers can get on a flight with seats for 150. (Vickrey, 1996, p.27).

But when financed by deficit spending, public employment "can indeed" result in net job creation (1996, p. 28). The key, then, is to combine guaranteed public sector employment with the savings-recycling government budget in what we here call 'savings-recycling public employment, 'but which has elsewhere been termed

"buffer stock employment" by Mitchell and "government as employer of last resort" by Mosler, Wray, and others (Mitchell, 1998; Mosler, 1997-1998; Wray, 1997;1999).

Government pledges to hire anyone ready and willing to work at a basic public sector (living)wage, and the wage bill is paid for b deficit expenditure. Since unemployment is the physical evidence of desired greater than actual levels of net holdings of financial assets, the deficit spending fills the gap by employing the unemployed. There is no problem of estimating the level of government deficit spending needed, as it will be reflected in the number of unemployed showing up for government guaranteed jobs. As long as the desired holdings of net financial assets is greater than the actual holdings, there will be unemployed; as the unemployed show up for public employment, the defect will expand to pay the public employment wage bill, recycling the excess of savings over private asset supply, and closing the gap between the desired and actual levels of net nominal savings at chock-full employment. An employer of last resort scheme that is deficit financed thus serves as a powerful automatic stabilizer simultaneously guaranteeing an infinitely elastic demand for labor and the recycling of excess savings.

As Vickrey emphasized, savings-recycling public employment must not replace either private sector or other public sector employment. Under such a program, all the benefits of full employment outlined by Vickrey are obtained, and the social and economic costs of unemployment substantially eliminated. To the extent that savings-recycling public employment involves the enhancement of worker sills, the benefits of the program as a means of job training are actualized, as net job creation means the program is not simply a cruel game of musical chairs, while the retraining effect may prove "essential in abating structural mismatch between job requirements and individual qualifications" (1993c, p. 9). Considering these factors, Vickrey also predicted an increase in "the wages and status levels" of the lowest skilled and least well-paid (1993c, p. 9).

Savings-recycling public employment will not generate deficits that will be inflationary, since the deficit will only be permitted to expand up to the point where the gap between desired and actual holdings of net financial assets is filled at zero involuntary unemployment, which corresponds to the degree to which aggregate demand falls short of the level corresponding to chock-full employment. While increasing deficits beyond that point might be inflationary, there will at that point be no more unemployed workers showing up for savings-recycling jobs, and so the scheme includes a built-in feature preventing the deficit from becoming too large. At the same time, although Vickrey recognized that, depending on the value of the initial savings-recycling public employment wage-benefits package set, "a small one-time increase in the overall price level" might be expected at the start of the program, this is in no way the same thing as "an inflationary spiral" (1997, p. 505). Other features of the program additionally guarantee against unexpected changes in the rate of inflation—which Vickrey emphasized again and again is what we specifically should be concerned with, as opposed to a fear of some vague notion of inflation.

First, savings-recycling public employment may be directed towards public works such as infrastructure revitalization that may promote private sector productivity growth. Second, productivity will also be enhanced by virtue of the fact that while unemployment is associated with the depreciation of human capital, savings-recycling public employees may will experience an appreciation of skills and knowledge. Third, in addition to the decrease in the social and economic costs of unemployment, the sayings-recycling public employees may be engaged in activities that help reduce other social costs, such as environmental protection and clean-up. Fourth, the increase in expenditure on savings-recycling public employment will at least partially be offset by decreases in other forms of expenditure on the unemployed. Thus, expenditures on unemployment insurance and other forms of general assistance should be expected to decline. Fifth, public works tend to be less inflationary than 'the dole' because the former increases both supply and demand, while the latter increases only demand. Sixth, inflationary bottlenecks and structural rigidities associated with high levels of employment can be avoided with the savings-recycling approach. Workers employed in savings-recycling public employment are still available to the private sector should the demand for labor rise, maintaining numerical flexibility without the social and economic costs of unemployment. In addition, flexibility in terms of capital goods and natural resources are maintained as government can strategically choose to utilize methods of production and type of resources that will avoid bottlenecks and even enhance system flexibility (Forstater, 1998; 1999). Seventh, firms may still be expected to maintain planned reserve capacity to meet both peak an unexpected increases in demand, so that full employment of labor will be consistent with a 'normal level of capacity utilization. Eighth, since government is willing to hire as few or as many people who want to work at

the savings-recycling public employment wage, it is free to set that wage exogenously rather than paying a market-determined wage. Being fixed, the program's wage is perfectly stable and sets a benchmark price for labor. It is obviously unlikely that unexpected changes in the rate of inflation will be due to wage-related factors under such a system. In fact, the exogenous pricing component of the savings-recycling public employment approach may b seen as a means of defining the national currency in terms of fairly homogeneous, low or semi-skilled labor. The program wage thus serves as an anchor to which the currency is tied. Because labor is a basic commodity, employed directly and indirectly into the production of every other commodity, the savings-recycling public employment program offers a mechanism for regulating the value of the currency, and thus controlling the price level. In this sense, the savings-recycling public employment approach resembles a commodity buffer-stock scheme, only here it is labor that is being used as the buffer-stock to stabilize the currency.

Savings-recycling public employment is an automatic stabilizing policy instrument that can ensure chock-full employment, generating the savings-recycling deficit necessary to equate the desired and actual levels of net holdings of financial assets as proscribed by Vickrey's assets based approach to macroeconomic analysis without the danger of unexpected changes in the rate of inflation. Guaranteed public employment establishes the infinitely elastic demand for labor required to meet the Vickrey-Beveridge definition of chock-full employment, and financing such employment through deficit spending guarantees the recycling of excess savings necessary to bring the desired and actual levels of holdings of net financial assets into equality at the zero involuntary unemployment level of economic activity. A number of features of the approach establish it as not only a viable means to true full employment, but a tool for price stability as well.

Vickrey's analysis was heavily influenced by the state of affairs existing around the time of the recession of the early 1990s. What are the implications of this work for more recent developments in the U.S.—and the global economy generally—as we prepare to enter the next millennium?

## VICKREY'S MACROECONOMICS AND THE CURRENT SITUATION

In retrospect, Vickrey's articles from the early and mid 1990s seem incredibly prescient, as relevant to the situation in the late 1990s as they were when they were written. We have seen that one of the major emphases of this work is that countries are increasingly unable to rely on conventional monetary policy to counter recessions and depressions, due in no small part to the insensitivity of investment to lower interest rates. One need only cite the recent experience of Japan, where interest rates near zero did nothing to budge the economy out its deep downturn. Vickrey's further related observation, also cited above, about the possibility of lower interest rates being associated with higher rates of saving, also appears to be supported by the Japanese experience.

Vickrey was skeptical of the conditions of the European EMU, and utilized that case to express a more general concern about the desirability of fixed vs. flexible exchange rate policies:

Freely floating exchange rates are the means whereby adaptations are made to disparate price level trends in different countries and trade imbalances are brought into line with capital flows appropriate to increasing the overall productivity of capital. Fixed exchange rates or rates confined to a narrow band can be maintained only by coordinated fiscal policies among the countries involved, by imposing efficiency-impairing tariffs of other restraints on trade, or by imposing costly disciplines involving needlessly high rates of unemployment as is implied by the Maastricht agreements. (Vickrey, 1996, p.15)

As Vickrey recognized, a successful domestic full-employment policy requires flexible exchange rates:

Restraints on exchange rates, such as are involved in the Maastricht agreements, would make it virtually impossible for a small open economy, such as Denmark, to pursue an effective full-employment policy on its own. (Vickrey, 1996, p.16)

Vickrey's articles were written in the context of government budget deficits, private sector surpluses, and trade deficits in the U.S., and it has been noted that Vickrey believed institutional, historical, and social factors

supported the view that private sector surpluses were likely to continue and even grow. He thus warned against the growing calls for budget balancing, decreasing the deficit, and even running budget surpluses to pay down the national debt. The late 1990s have seen the tightening fiscal stance come to pass, and coupled with a deterioration in the foreign trade stance, the result is that the private sector has actually gone into deficit.

The private sector may be divided into firms and households, and since firms have been able to maintain a surplus, it is households that have gone into deficit, with household savings exceeding incomes at record rates (Godley and Wray, 1999). This has been due to credit-financed spending by households, supported by sharp rises in stock market prices. Vickrey noted the possibility of such a scenario and warned against this means of closing the gap between desired and actual levels of net holdings of financial assets: "Meeting the demand for assets by a speculative boom in stock market and other assets prices is a temporary bubble solution that is bound to burse with catastrophic consequences" (Vickrey, 1997, p. 499). Vickrey further warns that this is particularly dangerous when combined with budget balancing, a situation reminiscent of the events leading up to the Great Depression, but that also describes the current scene:

There is a serious danger that the bidding up of asset prices could create a bubble of unsustainable values that is likely to collapse disastrously, as occurred in 1929 after the budget surpluses of the preceding years. Sooner or later a reduction in production and national income will set in until the reduction in income reduces the demand for assets to conform to the supply. (Vickrey, 1993b, p.2)

Whether precipitated by a "correction" in the stock market, a drying up of easy credit for U.S. consumers, further instability in Asia, Latin America, and/or Russia, or problems related to the EMU, the U.S. is woefully ill-prepared for the next economic downturn. As Vickrey's analysis makes clear, conventional fiscal and monetary policy is not sufficient to deal with a significant reduction in output and income and rising unemployment. Fortunately, Vickrey's analysis demonstrates that a Savings-Recycling Public Employment Plan could provide the automatic stabilizer that the system requires to deal with the macroeconomic challenges of modern society. We can have chock-full employment with price stability, if our economic experts and political leaders can exhibit clear-headed, common-sense thinking and the courage of their convictions. They have to look no further than Bill Vickrey for an outstanding example in both these regards.

#### REFERENCES

Collins, Sheila D., Helen Lachs Ginsburg, and Gertrude Schaffner Goldberg, 1994, *Jobs for All: A Plan for the Revitalization of America*, New York: Apex Press.

Forstater, Mathew, 1998, "Flexible Full Employment: Structural Implications of Discretionary Public Sector Employment," *Journal of Economic Issues*, Vol. 32, No. 2, pp.557-63.

—, 1999, "Public Employment and Economic Flexibility: The Job Opportunity Approach to Full Employment," *Public Policy Brief No. 50*, Jerome Levy Economics Institute.

Gordon, Wendell, 1997, "Job Assurance—the Job Guarantee Revisited," *Journal of Economic Issues*, Vol. 31, No. 3, September.

Lowe, Adolph, 1988, Has Freedom a Future? , New York: Praeger.

Godley, Wynne, and L. Randall Wray, 1999, "Can Goldilocks Survive?" *Policy Note 1999/4*, Jerome Levy Economics Institute.

Harvey, Philip, 1989, Securing the Right to Employment, Princeton: Princeton University Press.

Mitchell, William F., 1998, "The Buffer Stock Employment Model and the NAIRU: The Path to Full Employment," *Journal of Economic Issues*, Vol. 32, No. 2, pp. 547-55.

Minsky, Hyman P., 1986, Stabilizing an Unstable Economy, New Haven: Yale University Press.

Mosler, Warren, 1997-1998, "Full Employment and Price stability," *Journal of Post Keynesian Economics*, Vol. 20, No. 2, pp. 167-82.

Vickrey, William, 1992a, "Meaningfully Defining Deficits and Debt," *American Economic Review*, Volume 82, No. 2, May, pp. 305-10.

- —, 1992b, "Chock-Full Employment without Increased Inflation," *American Economic Review*, Volume 82, No. 2, May, pp. 341-45.
- —, 1993a, "Today's Task for Economists," *American Economic Review*, Volume 83, No. 1, March, pp. 1-10.
- —, 1993b, "We Need a Bigger "Deficit"," manuscript.
- —, 1993c, "The Other Side of the Coin," *American Economist*, Vol.37, No.2, pp. 5-16.
- —, 1994, "Why Not Chock-Full Employment?," *Atlantic Economic Journal*, Vol. 25, No. 1, pp. 39-45.
- —, 1996, Fifteen Fatal Fallacies of Financial Fundamentalism, 'Working Paper, Columbia University.
- —, 1997, "A trans-Keynesian manifesto (thoughts about an assets based macroeconomics)," *Journal of Post Keynesian Economics*, Vol. 19, No. 4, pp. 495-510.

Wray, L. Randall, 1997, "Government as Employer of last Resort: Full employment without Inflation,", Working Paper No. 213, *Jerome Levy Economics Institute*.

—, 1999, *Understanding Modern Money: The Key to Full Employment and Price Stability*, Cheltenham, U.K.: Edward Elgar.