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Uncertainty and the Institutional Structure of Capitalist Economies

Remarks Upon Receiving the Veblen-Commons Award

Hyman P. Minsky

There seems to me to be no other economist with whose general way of thinking I feel myself in such genuine accord.
—John Maynard Keynes in a letter to John R. Commons [Keynes 1927]

The agents in the model have a model of the model.
—Peter Albin [Statement at a Jerome Levy Conference]

The scientist has a lot of experience with ignorance and doubt and uncertainty. We take it for granted that it is perfectly consistent to be unsure–that it is possible to live and not know.
—Richard Feynman [Gleick 1992, 171]

Keynes's letter to John R. Commons illustrates the affinity between the economics of Keynes and the American institutionalists. This affinity is as relevant now as it was when Keynes wrote to Commons. The current crisis of performance and confidence in the rich capitalist countries makes it necessary, once again, to think about the institutional prerequisites for successful capitalism.

> Keynes always stressed the importance of "vigilant observation" for successful theory-construction, theory being nothing more, in his view, than a stylized representation of the dominant tendencies of the time, derived from reflection on the salient facts [Skidelsky 1992, 221].

The author is Distinguished Scholar, The Jerome Levy Economics Institute of Bard College. *The author wishes to thank Charles Whalen for help in preparing this paper for publication.*

In this view, relevant theory is not a compendium of propositions derived from axioms assumed to be universally true: economic theory is not a subdivision of mathematics. Relevant theory is the result of the exercise of imagination and logical powers on observations that are due to experience: it yields propositions about the operation of an actual economy. The current methodological fashion, where artificial economies are first specified, then simulated and finally deemed satisfactory (unsatisfactory) if it can be said that the general characteristics of the simulation are similar (dissimilar) to the general characteristics of a time series of constructs based upon observations (such as GNP), would most certainly have been anathema to both Keynes and to the institutionalists of his day [Montgomery 1994]. In today's terminology, Keynes's "beliefs" are mental models that lead to propositions about the behavior of the "real world" economy. This approach makes "real world" outcomes dependent upon institutions. It sanctions state interventions to create institutions that lead to an economy with desirable properties. The last act of Keynes's life was his deep involvement in the creation of the World Bank and the International Monetary Fund. Much earlier he proposed institutions that would create what today we might call "capitalism with a human face," which obviously was the aim of the great institutionalists.[1]

I propose to take up four topics:

1. The link between the position of Keynes, in *A Treatise on Probability* [1921], on the nature of inference in the creation of beliefs and the contemporary view, as exemplified by Thomas J. Sargent in *Bounded Rationality in Macroeconomics* [1993], about the models that enter into decisions once the boundedness of rationality is acknowledged. By accepting that agents need to learn the model of the economy they use in decision making and that the complexity of economic processes and the time consuming nature of learning means that the agents are never sure of the validity of the models they use, the new classical economists have moved toward Keynes's views about uncertainty in *A Treatise in Probability*. Uncertainty viewed as the result of the degree of rational belief in the models that underlie action is central to those parts of *The General Theory* in which the determination of the prices of capital and financial assets and of liability structures for financing positions in capital and financial assets are taken up. Thus, a convergence has taken place between the views about uncertainty between the new classical economics and the economics of *The General Theory* that focuses upon the need for the full integration of financial and monetary relations in determining what happens in a capitalist economy.[2]
2. Capitalism in the United States is now in a new stage, "money manager capitalism," in which the proximate owners of a vast proportion of financial instruments are mutual and pension funds. The total return on the portfolio is

the only criteria used for judging the performance of the managers of these funds, which translates into an emphasis upon the bottom line in the management of business organizations. It makes the long view a luxury that only companies that are essentially owned by a single individual and that are not deeply dependent upon external financing can afford.

3. Public tolerance for uncertainty is limited. The New Deal restructuring of capitalism created institutions that contained uncertainty. The evolution of the economy has decreased the effectiveness of the New Deal reforms, and money manger capitalism has radically increased uncertainty. The creation of new economic institutions that constrain the impact of uncertainty is necessary.
4. I conclude with some thoughts about measures that may constrain the insecurity bred by the attenuation of the effectiveness of the New Deal structures along with the heightened uncertainty due to money manager capitalism.

Uncertainty

By the time he wrote *The General Theory*, Keynes was a "man of the City" as well as an academic economist. The financing of activity and of positions in capital assets, as collected in firms, were central to his thinking.[3] Business investment in inventory and durable capital assets require external financing from banks, other financial institutions, or the floating of bonds or shares. This need for external finance imposes a negotiating process between bankers and business people. This forces agents to acknowledge that ignorance and conjecture enter decisions to create and finance capital assets whose value, once they are in place, depends upon the markets' view of their prospective returns over a long horizon. The uncertainty that permeates the economics of Keynes and the economics of bounded rationality is due to the unsureness about the validity of the model of the economy that enters in the decision process. Action involves a suspension of disbelief by both sides in the negotiations, and economic success fosters such a suspension.

Government institution building can be interpreted as adding dimensions to the economy whose behaviors are not as uncertain as that of market-determined variables. The Bank of England's discount window may well be the paradigm for institution creation that substituted certainty for uncertainty [Minsky 1957]. The core countries of the capitalist world have not had a big depression in the 50 years since the end of World War II. Big government provides insurance against an utter collapse of profit flows and asset prices such as happened between 1929 and 1933.[4]

In *Bounded Rationality in Macroeconomics*, Tom Sargent accepts the critique of rational expectations that holds that the agents in the model have to learn the model that they use in decision making. The "bounded rationality" of the agents means that at any moment of time there is no assurance that the agents are acting on the basis of mutually consistent models such as are needed for the existence of a rational expectations equilibrium. In Sargent's argument, "bounded rationality" means that the agents in the economy are unsure about the degree of rational belief that is warranted in the model that they use at any time to guide their action.

Thus, in Sargent's artificial world, intractable uncertainty is pervasive because the agents in the model need to learn the properties of the model from experience. The self-seeking agents are uncertain (or unsure) in their knowledge of the economy and they accept that others are also unsure. In practice, Sargent's work aims to extract systemic consistency relations out of situations where uncertainty rules. He ignores an aspect of decision making under uncertainty that Keynes emphasized: the elements determining long-term expectations change so often that what happens in the economy at any date will be contaminated by market conditions that reflect actions determined by mental models that differ from the model that now guides expectation formation and therefore actions.

With the acceptance of bounded rationality, the new classical economics has moved toward an essential analytical aspect of the economics of Keynes: bounded rationality is a different type of beast than the rationality of rational expectations. Both the economics of Keynes and frontier neoclassical macroeconomic theory allow that agents need to extract the models of the economy that guide their actions out of their experience and their observations of the "world." Because the agents drawing inferences differ in their place in the economy, their history, and their ability to generalize and abstract, the models that guide decisions any time are likely to differ: the models are likely to be inconsistent.

Uncertainty (or unsureness) is a deep property of decentralized systems in which a myriad of independent agents make decisions whose impacts are aggregated into outcomes that emerge over a range of tomorrows. Uncertainty about what the outcomes will be follows from the uncertainty with which agents hold the model that guides their actions. Agents are not only unsure about the validity of the model that guides their actions, they impute such uncertainty to the other actors in the economy. In the modern world, where governments intervene by way of fiscal and central bank actions, agents in the model impute this same uncertainty about the true nature of the world to the policy agents of the government [Papadimitriou and Wray 1994].

It is now clear that the power of the rational expectations/new classical macroeconomic revolution was derived from the heroic specification of the model that agents use to guide decisions, rather than upon the proposition that agents use "all" of the available information in making decisions where "all information" takes the form of models (theories) of how the world behaves. The heroic specification was that all agents have a common understanding of the environment within which they operate and that in this commonly understood environment the effect of agents seeking their own good sustains a general equilibrium. The assumption of the rationality of expectations takes the role of Smith's "invisible hand" in assuring that equilibrium exists and that the commonly understood environment is logically equivalent to the unsatisfactory assumption of perfect foresight in general equilibrium theory.

In both the Keynesian and the new classical economics of bounded rationality, the prior history of every agent includes a process by which agents learn the model of the model they use in making decisions. It is therefore difficult to see how the requirement for rational expectations equilibrium–that all agents in the model at all times have the identical, or at least a consistent, model of the model–can be satisfied. When learning processes are taken into account the models being used to make decisions at any (every) today are always provisional: they never can be certain final models.

If rational agents doubt the validity of the model that currently guides their actions, then they stand ready to abandon that model as the behavior of the economy produces data that disaffirms the model. Whenever a model with a weak degree of belief guides the actions of an agent, as evidence accrues, initial models are likely to be abandoned and a new set substituted. When this happens, sharp changes in the behavior of agents and of the economy are likely to occur.

Although Keynes and the bounded rationality approaches to uncertainty are similar, fundamental differences remain. One is in the priors of the theorist. Keynes aimed to develop a theory of an economy in which, because of its structure, money cannot be neutral. He achieved this by dividing prices into those which are dominated by the need to recover costs and those which are determined by the value placed upon future income flows. The former consisted of the current outputs of current consumption and investment goods, and the latter consisted of the prices of the outstanding financial and capital assets.[5]

The bounded rationality approach retains the assumption that preference systems are over the reals and that outputs and relative prices can be determined independently of monetary and financial variables. The impact of nominal values and financial relations are only of transitory significance.

The Keynesian vision imposes a structure on spending. Consumption and investment spending are different because households consume and firms (or businesses) invest. A modern capitalist economy is structured so that the capital assets of the economy are owned by firms that are organized as corporations, firms finance control over these assets by liabilities, and directly or through intermediaries households own these liabilities. A premise of Keynesian modelling is that the capitalist economy cannot be understood by splitting it into a real and a financial or monetary sector. Keynesian modelling holds that a basic aspect of the structure of capitalist economies is given by interrelated balance sheets, income statements, and the time series of cash flow commitments that are embodied in financial instruments.

Keynesian economics emphasizes decisions to undertake and finance investment. In skeletal versions, the pace of investment is viewed as calling the tune for both aggregate income and its distribution: distribution is viewed as being determined by the structure of demands, not by production function characteristics. In modern capitalist economies, complex corporate organizations struggle for market power in order to get an edge in the competition for profits. In the neoclassical school, even in its most modern forms, it is not clear that the economy under analysis is capitalist.

The economics of Keynes is not a theory for all economies. It is a theory of capitalist economies: the economies for which Keynesian analysis is relevant have firms and these firms often have market power. The labeling of the volume *The General Theory* was stretching the use of language.

Because of the recognition of uncertainty in the new bounded-rationality learning models, a partial convergence between the economics of Keynes and the new classical economics has occurred. The differences have narrowed so that a fruitful discourse may now be possible.

Money Manager Capitalism

Capitalism is an evolving and dynamic system that has come in many forms and even now different forms coexist. For the United States, the financial stages of American capitalism can be characterized as: commercial capitalism; industrial capitalism and wild cat financing; financial capitalism and state financing; paternalistic, managerial, and welfare state capitalism; money manager capitalism.

It is enough to say that the evolution has been from a financial structure where external finance was mainly used for trade to a structure where there is ever greater use of external funds to finance the long-term capital development of the economy. Furthermore, with affluence, the increase in life expectancy, and the well nigh complete monetization of incomes, the ownership of financial assets has widened.

The Great Breakdown of 1929-33 led to widespread reforms of the financial structure. The premises underlying the New Deal restructuring of the American financial system were that the United States was henceforth to be a capitalist economy in which corporations were to be the dominant form of business organization and in which, in both financial markets and corporate governance, the interests of the shareholders were to be dominant. To deal with such a system, a doctrine of transparency of both financial markets and corporate governance was developed. From 1933 through the end of World War II, the main external financing of activity was by the government. As the Levy-Kalecki relations show, massive government deficits lead to large-scale business profits. At the end of the war, a unique financial structure ruled. For the first time in history, a broad set of households owned financial assets mainly in the form of government debt or as insurance policies and bank deposits. These, in turn, were largely offset by government debt. Business indebtedness was minimal. Many of the great corporations had large net positions in government debts.

Out of this initial position in 1946, money manager capitalism emerged. Characteristics of money manager capitalism are

1. Almost all business is organized through corporations.
2. Dominant proportions of the liabilities of corporations are held either by financial institutions, such as banks and insurance companies, or by mutual and pension funds.
3. This involves the intrusion of a new layer of intermediation, by pension and mutual funds, into the financial structure.
4. Pension and mutual funds are bound only by contract as to what assets they can own and what activities they can engage in.
5. The stated aim of fund managers is to maximize the value of the investments of the holders of its liabilities.
6. The performance of a fund and of fund managers is measured by the total return on assets, which is given by the combination of dividends and interest received and the appreciation in per share value.

In seeking the maximum total return, these funds have often provided the equity investment for highly leveraged buy outs of firms. In addition, because of their "commitment" to maximizing fund holders' value, these funds are constrained to accept bids for their shares that are at a premium to current market values. They are essential for the environment in which corporate raiders and takeovcrs exist and in which the conveyance of the assets of the corporate entity to the those who take over or even threaten to take over can take place.

The pension and mutual funds have made business management especially sensitive to the current stock market valuation of the firm. They are an essential ingredient in accentuation of the predatory nature of current American capitalism.

Money manager capitalism has led to a heightening of uncertainty at the firm and plant level; in particular, it has made the lot of middle management in firms more unsure. Historic patterns of firm paternalism have often unravelled. There is an almost chronic need to downsize overhead and to seek the lowest possible variable cost.

A great cheapening of transport and communication costs has lowered the barriers protecting local production and increased the pressure on current operating costs to meet "foreign" costs. Even as the natural barriers to trade have decreased, the willingness and ability of management to accept lower profit margins to sustain domestic production has vanished. These factors have decreased the assurance of continued employment by blue-collar, white-collar and middle-management personnel.

Although the aggregate performance of the economy is not bad, individual security has diminished.

Social Limits to the Tolerance for Uncertainty

The tolerance for uncertainty is limited. The well-known insurance phenomenon, in which users willingly take an unfair bet in order protect themselves against large contingent losses, can be extended to the domain of the uninsurable: uncertainty. When uncertainty leads to an unsatisfactory result, then it becomes the duty of society in general to protect its citizens against the consequences: a sacrifice of narrow technical efficiency may be called for.

New Deal institutional innovations were designed to attenuate if not to eliminate uncertainty. In some cases, this had very positive consequences. The agricultural programs set floors to prices and provided "crop insurance": these measures had the effect of setting floors to farmer's incomes. In turn, this floor made farmers signatures at banks "good." Financing became available for the mechanization of agriculture, and a trend increase in productivity in agriculture followed. The ability to finance investment transformed agriculture.

Big government sets floors to aggregate profit flows. The success of business in the era after World War II was assured by rigging the game in favor of business profits. For a modern capitalist economy to be able to avoid debt deflations, and therefore great depressions, governments need to be able to run deficits when the incentive to invest by the business sector is compromised.

Economic Policy in an Age of Heightened Uncertainty

Now that for the foreseeable future the entire world can be expected to be capitalist, there is a need to understand that there is not one unique type of capitalism. As a society, we are free to choose the type we want.

I accept Henry Simons's view that the aim of economic policy is not narrowly economic. The aim of policy is to assure that the economic prerequisites for sustaining the civil and civilized standards of an open liberal society exist. If amplified uncertainty, extremes of income distribution, and social inequality attenuate the economic underpinnings of democracy, then the market behavior that creates these conditions should be constrained. If it is necessary to give up a bit of market efficiency, or a bit of aggregate income, in order to contain democracy-threatening uncertainty, then so be it. In particular, there is need to supplement private incomes with socially provided incomes so that civility and civic responsibility are promoted.

Even as workers on the job realize that they are becoming ever more productive their price-level-deflated wage income is falling. The "goods" and "services" that they receive independently of what their private incomes purchase are also deteriorating.

The gross national products of the rich nations (the United States, Canada, the core countries of the Economic Union, Australia, New Zealand, and Japan) are now so high that the continued existence of poverty is evidence of a failure to understand the way in which capitalist economies operate and of a failure of will to make better those things that can be made better. There is no shortfall of economic capacity to end private poverty and public squalor. The possibilities that this immense richness opens need to be understood.

Private money incomes in the form of wages, salaries, dividends, interest and transfer payments are not the sole source of incomes. We receive some of our "income" in the form of goods and services that we pay for with our disposable private money incomes; other parts are independent of our private incomes. These other dimensions are ambience incomes and services rendered to all independent of income. Just as the rich man and the poor man were free to sleep under the bridges of Paris, so the rich and the poor are free to enjoy or suffer from the loss of safe streets.

In a world of increased wealth and income, where our common heritage of knowledge has made the potential for satisfactory life so much greater than in earlier ages, the need for community has made the universal provision of high-level health care and education necessary. Thus, there is much that can be best provided by an expanded government sector, whether the provider is the locality, the state or the nation. Wide disparities in personal incomes and wealth are compatible with a well-functioning society, as long as ambience, health care, and education incomes are available and open to all.

Our rich economy has ample available resources for investment in people and in the material infrastructure of society. The question is not whether resources are available, but of a willingness to mobilize these resources by taxing and borrowing for public projects. Poverty in the United States is due to an unwillingness to tax. Welfare, in the form of aid to families with dependent children, exists because it is the cheapest way, short of a policy to let them die, of taking care of the population in want. Foster homes, orphanages, and guaranteed work for parents are all more expensive. Full employment is the civilized and humane way of getting rid of welfare as we have known it, but the achievement of a fully employed economy requires a larger and more innovative government sector.

The impact of money market capitalism has heightened uncertainty. The wider spread of uncertainty can be offset if there is a willingness of the community to pay a price in the form of a minor "load" on efficiency. Institutional innovations that help offset the impact of uncertainty are needed as the losers in the gambles imposed by uncertainty can become alienated and become potential recruits for an alternative to democracy.

Full employment is a way of attenuating uncertainty. The tradeoff between the full employment and inflation of the 1960s and 1970s was a result of the particular institutional structure of the time. Once President Reagan broke the air controllers' strike, the tradeoff collapsed. Full employment requires special employment programs of the federal, state, and local governments. The New Deal programs that provided income in exchange for work that led to community building–the Works Progress Administration, the Civilian Conservation Corps, and the National Youth Administration–need to be reconsidered as the basis for social policy in the United States.

The primary interest of the government of a nation-state is the well-being of its populace. The smart government that offsets the aggravated uncertainty associated with money manager capitalism will need adequate resources to support activities and to validate the government debt that accumulates as contracyclical and even longer-term deficits occur.

Government debt, like any other debt, has to be validated by revenues. A tax system adequate to support government employment and resource-creating activities is needed. The explosion of the government debt relative to gross domestic product over the 12 years of the Reagan-Bush administrations was largely due to an irresponsible fiscal policy that undermined the revenue system even as it did not reduce government spending. In the present circumstances, a role of tax policy is to assure that a downward trend in the ratio of the federal debt to gross domestic product is maintained, so that over a span of years the ratio of debt to income is lowered from the present 65 percent to about 50 percent.

One feature of the revenue system should be a value added tax, and another a transformation of the current income tax into a progressive consumption tax that has broad bands and a large per-person deduction.

Value added in production or distribution is equal to the value added by the services of labor and by the services of the capital assets. The convention is that the tax is added onto the landed price of imports and rebated from the price of exports: the value added tax is a backdoor tariff and export subsidy. A value added tax would have the sales value of imported and of domestic goods cover the social overhead of the economy. The United States already has a peculiar value added tax in the form of the employer's contribution for Social Security. However, this tax does not have the add-on and rebate provisions of the value added tax.

A flat tax uses a large per-person exemption to turn a constant rate into a moderately progressive result: a better result is achieved if the flat tax is modified by surtaxes on higher incomes. If the flat rate is 20 percent on the first $100,000 and 22 percent on income between $100,000 and $500,000, 25 percent on income between $500,000 and $2,000,000, and 30 percent on incomes of more than $2,000,000 a better result is achieved than by the simplistic flat tax.

Each economic unit has an income and manages a portfolio. In various ways, we allow payments to the portfolio out of incomes to be exempt from taxes. If we generalize such exemptions, the income tax is transformed into a consumption tax. Furthermore we do not pay capital gains taxes on the capital gains that a pension fund makes. The capital gains that accrue over time are taxed when the fund pays out accumulations and "contributions" to finance consumption. We already have compromised the income tax in the direction of a consumption tax.

During the 1992 election campaign, Clinton advocated a network of community development banks. The idea takes on increasing importance because of the heightened uncertainty due to money market capitalism. The attractiveness of small and even micro businesses increases with the uncertainty attached to jobs with firms that are listed and whose future is dependent upon the vagaries of money managers' evaluation. Community development banks should be set up as local holding companies and should incorporate an investment banking division [Minsky et al. 1993].

Conclusion

Macroeconomic theory is in flux: the need to accommodate uncertainty has moved the new classical economics toward the economics of Keynes. With the recognition of uncertainty as a deep attribute of real-world economies the simplistic propositions of laissez-faire no longer hold. Economies with the financial system of modern capitalism can implode, as happened between 1929-33.

The big governments and the relatively unconstrained central banks of the main capitalist countries have prevented any serious approximation to 1929-33 in the years since World War II, although the performance of the main capitalist economies has deteriorated in the past quarter century when compared to the standard set in the earlier quarter century.

There is a need for rethinking the system of intervention in capitalist economies that evolved out of the New Deal. In particular, there is a need to make full employment the main goal of economic policy. A full employment economy is supportive of democracy whereas an economy based on transfer payments supports resentment.

Notes

1. This was most clearly the aim of Keynes in "The End of Laissez Faire" [1972].
2. As I once wrote: "Keynes without uncertainty is like Hamlet without the Prince" [Minsky 1975, 57]. And, "In interpreting *The General Theory* it should be kept in mind that Keynes was first the author of *A Treatise on Probability*" [Minsky 1975, 67].
3. In Keynes's time, household purchases were constrained by current cash flows, well nigh exclusively in the form of wages, to a much greater extent than is now true. Government debt financing was relevant only in time of war.

4. Looking at distribution as determined by the composition of demand was pioneered by Jerome Levy and Michal Kalecki and provides a framework for the dual character of profits in a capitalist economy: profits as the lure for investment and profits as the source of the funds that validate financial instruments that are issued in financing investment [see Kalecki 1971; Levy and Levy 1983].
5. This leads to the interpretation of liquidity preference as the determination of the price level of capital and financial assets where the price of money is always 1. Keynesian theory can be interpreted as a theory in which there are two price levels: one of capital and financial assets, and a second in which the money wage rate directly affects the price level of current outputs [see Minsky 1975; 1986.]

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