



UNIVERSITA' DEGLI STUDI DI TRENTO - DIPARTIMENTO DI ECONOMIA

THE LONG SWINGS IN ECONOMIC UNDERSTANDING

Axel Leijonhufvud

Discussion Paper No. 3, 2003

The Discussion Paper series provides a means for circulating preliminary research results by staff of or visitors to the Department. Its purpose is to stimulate discussion prior to the publication of papers.

Requests for copies of Discussion Papers and address changes should be sent to:

Prof. Andrea Leonardi
Dipartimento di Economia
Università degli Studi
Via Inama 5
38100 TRENTO ITALY

The Long Swings in Economic Understanding*

Axel Leijonhufvud
University of Trento

Changing worldviews

The worldview of a representative macroeconomist has changed repeatedly and drastically over the century from which we have just escaped. With the «new classics», it may indeed seem to have come full circle. But that, on closer inspection, turns out to be largely an illusion. True enough, economists a hundred years ago generally believed that the economy always tended towards equilibrium. Today, «tendencies» do not enter into it one way or another. The modern macroeconomist believes the economy *is* in equilibrium. True enough, the main policy objective of economists a hundred years ago was to stabilize the price level and today low inflation has become the overriding goal of macropolicy. But in seeking to understand how the price level could be controlled, Wicksell and Fisher were motivated by a passionate concern with the distributive injustices arising from inflations and deflations. Distributive justice figures nowhere in the leading school of modern macroeconomics¹ and certainly not in the muddled «shoeleather» arguments marshalled in support of this exclusive concern with eliminating inflation.

If we shorten the time perspective to fifty or forty years, the contrasts are more drastic. The Great Depression had shattered the representative economist's faith in the self-adjusting capabilities of the market system. At the height of the influence of Keynesianism, he -- it was a he -- believed that the private sector was unstable, riddled with market failures, and prone to

* To appear in a Festschrift for Jean-Paul Fitoussi, edited by Kumaraswamy Velupillai.

¹The growing inequality of incomes in recent years is, of course, attracting the attention of prominent economists but hardly within the real business cycle school. In the United States, James K. Galbraith (1998) has played a role corresponding to that of Fitoussi in France.

fluctuations amplified by multiplier and accelerator effects. But he also believed that a benevolent and competent government, dependable in its democratic role as the agent of the electorate, could stabilize the economy and ameliorate most market failures.

Today, he -- or she -- believes the economy keeps to an intertemporal equilibrium path. As long as not disturbed by bad policies, markets will take care of all coordination problems. Trouble may arise in this otherwise idyllic picture on two fronts. First, if «inflexibilities» in the labor market are tolerated, the natural rate of unemployment may be quite high. More importantly, governments are seen to be prone to excessive deficits and inflationary finance, to be constitutionally time-inconsistent and to be addicted to playing the Phillips curve.

To the older generation, macropolicy was *stabilization* policy. To the present generation, it has become the art of *constraining* governments. If the older was uncritical in trusting the power of government to do good, the present one has a distinctly cynical view of representative democracy.

Jean-Paul Fitoussi's work has run counter to this trend of the times. During the 'nineties, it was not easy to get a fair hearing for the view that the high interest rates with which the Bank of France defended the franc exchange rate against the DM bore a lot of responsibility for France's high rates of unemployment.² Indeed, even being allowed to speak was a bit of problem.³ And his concern with the worsening income distribution and its effect, in turn, on the acceptability of the *contrat social* raised hardly an echo in an American-dominated economics profession.

There are many strands to the story how the worldview of the economic profession came to change so radically. The strand that runs through the

²I vividly recall that at the 1997 IEA conference in Trento where Jean-Paul's paper (Fitoussi, 2001) gave both the theoretical argument for and much empirical evidence consistent with this view, Robert Lucas expressed himself shocked to have to listen to such «inflationary» views. Surely, he argued, we knew better by this time. Of course, the ECB was eventually to give Fitoussi the monetary policy that the Bank of France had denied him. The result was that French unemployment finally began to shrink -- without inflation.

³Jean-Paul Fitoussi, *Le débat interdit* (1995).

history of macroeconomics may be the most important of them all and I will concentrate on it here. It is the story of changing views on the «automaticity» of the market economy. A second strand must at least be mentioned. It has developed mainly within the Public Choice literature. It is here that an understanding of politicians and government bureaucrats as utility-maximizing individuals has evolved from a corrective of an earlier, often naive perception of them as «public servants» into an increasingly cynical alternative view of them as causes of, rather than solutions to, all manner of economic problems.

The *General Theory* as a Response to the Depression

The response to the Great Depression among economists and policy makers was confused and incoherent. The challenge was met most effectively by Keynes. The *General Theory* brought a great advance in our understanding of depressions and particularly of the impediments to recovery from such extreme states. The younger generation of economists in particular received it eagerly and, while its positive contribution was not altogether clearly understood, its legacy came to dominate macroeconomics for 30 years. But the work had weaknesses as well as strengths. These flaws in the work, combined with common misunderstandings of it, eventually undermined its influence.

The core of Keynes's theoretical contribution I would (today) describe as follows.⁴ His point of departure was Marshall. Marshall's theory assumed adaptive, rather than optimizing behavior. At the cost, perhaps, of some oversimplification, consider a universe of agents obeying very simple «laws of motion». For example, consumers will increase their consumption of a good whenever their demand-price exceeds the market price. Producers will increase output whenever market price exceeds their supply-price. Middlemen will increase prices when faced with excess demand, etc.

Before Keynes, it was a firmly and generally held opinion that if all agents obeyed these laws of motion, the dynamics of the economy would surely carry it to full employment. Only violations of the laws of motion --

⁴Cf. Leijonhufvud (1998).

such as rigid wages or other «inflexibilities» in the labor market -- could stand in the way of this result. One notes that this is the understanding to which economics has once again come around in recent years. Keynes, however, discovered that this proposition was not true. The monetary and financial institutions of a modern economy are such that saving is not an effective demand for future consumption nor is the offer of labor an effective demand for present consumption. Some of the «market forces» needed to guide the collective adaptation process may be missing therefore. When this occurs the dynamics of the system may fail «automatically» to carry it to full employment. A theory that recognizes the possibility of such effective demand failures has a valid claim to being a more *general theory*. This, I believe, is Keynes's main claim to lasting fame as a theorist.

The core of the theory was the saving-investment nexus, which is to say, the problem of intertemporal coordination. Years before the General Theory was completed, he had reached a diagnosis of the depression that he held with great conviction. The decline in fixed investment was the cause «...without any doubts or reserves whatsoever -- the whole of the explanation of the present state of affairs» (Keynes, 1931, p. 351). The trouble was that the interest rate did not bring saving and investment into line: «In the past it has been usual to believe that there was some preordained harmony by which saving and investment were necessarily equal But unfortunately this is not so, I venture to say with certainty that is not so.» (Ibid, p. 355). There was «a fatal flaw ... in orthodox reasoning ... largely due to the failure of the classical doctrine to develop a satisfactory theory of the rate of interest» (Keynes, 1934, p. 489). (Not a word, of course, about rigid wages being even part of the problem.)

The liquidity preference theory of interest with which Keynes sought to replace that classical doctrine was however worse than unsatisfactory. He had somehow convinced himself that if saving and investment determined income (and not interest), then liquidity preference and money supply must determine interest (and not money income or the price level). This meant, among other things, that it was *not possible* that the interest rate would adjust so as to coordinate consumption and production over time. A far stronger assertion than the proposition that it *cannot be depended on* always to do the job! This

doctrine became a rich source of confusion.⁵ From it stems the Paradox of Thrift, for example, and also the proposition that «investment causes saving but saving does not cause investment» to which Keynes's Cambridge followers have shown a fierce attachment but which fails to throw much light on postwar problems of capital formation around the world.

In the early years of the depression, Keynes had expressed himself forcefully on the dangers of debt-deflation. An «immense burden of bonded debt, both national and international ... fixed in terms of money» had been built up (Keynes, 1930b, p. 128). This entire structure would be «deranged» with disastrous consequences (1931, p. 361). It is surprising, therefore, that this theme is hardly mentioned in the *General Theory* -- despite the evident fact that this is exactly what had happened in the United States in the meantime. But Keynes had apparently convinced himself that the contemporary capitalist economy had a chronic tendency to save in excess of what its capital markets would channel into investment. Now, the saving that does not end up financing investment will be directed towards improving liquidity positions. But there is a crucial qualitative difference between the temporary tidying up of balance sheets in an ordinary recession and the desperate scramble for liquidity in the wake of financial crash. The *General Theory* does not make the distinction. In the midst of the great depression with the capitalist economies in dire straits, while the totalitarian threats were mounting on both left and right, it was surely exceedingly difficult to maintain a balanced perspective on the «fatal flaw» in the economic system that Keynes thought he had identified. But the result was that he generalized from the depression and consequently came to exaggerate the economy's instability, specifically with regard to the frequency with which to expect strong deviation-amplifying effects through the consumption multiplier (Leijonhufvud, 1973).⁶

To Keynes, it was always the saving of households that was the

⁵To be fair, Keynes had set himself a difficult analytical task. On the one hand he had to explain what was going wrong with relative prices and therefore with allocation; on the other, he had to keep track of the flow-of-funds through the economy because households were cash-constrained while firms adjusted output in response to cash flow. Modern theory is easier in not having any reason to deal with these «hydraulic» problems. Even when a cash-in-advance constraint is introduced it only serves to determine aggregate money demand and does not give rise to effective demand failures.

problem. He rather slighted the liquidity management of firms and its role in propagating negative (or positive) impulses.⁶ In a simple model with only outside money, the excess of saving over investment constitutes a straightforward excess demand for money. More generally, in recessions, firms which temporarily are not finding profitable investment opportunities will seek to improve their balance sheets by repaying bank loans while the banks, in turn, respond to this «reflux» by returning their borrowed reserves to the Central Bank. The inside money stock thus covaries with the output. This mechanism was explained very clearly in the *Treatise* but is missing in the *General Theory*. It might have been helpful to the Keynesian side in the Monetarist controversy if it had been an integral part of their canon.

The focus on households directs attention to the inability of the unemployed to exercise effective demand for consumption goods. Most unemployed workers in interwar Britain were surely income-constrained to an extent that, in large part due to the influence of Keynes, has become uncommon in more recent decades. But it also directs attention away from another effective demand failure which, again, pertains to the balance sheets of firms in a depression. In an intertemporal general equilibrium model, it is assumed that firms can exchange the promise of revenues from future output in exchange for the present command over the resources required to realize that output. If this exchange cannot be effectuated, very little growth can be realized. Yet, this is what happens in the wake of a financial crash that leaves large volumes of bad loans outstanding between banks and businesses. Policies that do not tackle this specific effective demand failure directly are unlikely to help, as the experience of Japan over the last decade demonstrates. Conventional Keynesian analysis will suggest public works and low interest rates as the measures to be tried but the Japanese problem is neither household income-constraints nor a «liquidity trap» in the usual sense.

Keynesianism in the United States

⁶Peter Howitt (2002) stresses multiplier-propagation within the business sector rather than through household consumption behavior. His model, however, hinges on a thick market externality rather than on the liquidity argument stressed here.

The Liquidity Preference hypothesis of interest determination is, I have contended, an error which put Cambridge Keynesians onto the wrong track. But it had virtually no influence on the development of Keynesianism in the United States and played no role in its eventual failure. Liquidity Preference vs. Loanable Funds was a contest between two hypotheses about what drives the economy's adaptation to shocks and it proved more or less impossible to make sense of the issue between them with the help of the simultaneous equation approaches that became standard after the war. Indeed, the American Keynesians were constantly surprised at being attacked with such vehemence as «bastard Keynesians» by their Cambridge counterparts, not comprehending that Solow-type growth models in which «saving *did* cause investment» were an outrage to those who counted themselves true believers.

The theoretical troubles of American Keynesianism stem instead from the so-called «Neoclassical synthesis», so named and long insisted upon by Paul Samuelson whose unequalled prestige did much to gain it general acceptance. The «synthesis» maintained that Keynesian theory was a special case of the more general neoclassical theory, obtained by adding the restriction of «rigid wages» to the latter. As an interpretation of Keynes, this was calumny but, given the scholarly standards of the profession as they are today, the sticky wages calumny sticks and cannot be revoked no matter how often it is shown to be false. In any case, for a couple of decades most everyone was pleased to accept the implied contention that Keynesianism was wrong in pure theory but right in policy practice.

However, in switching back to the pre-Keynesian preoccupation with sticky wages, American Keynesianism gradually lost sight of the intertemporal coordination problem. Keynes's distrust of the financial markets was only kept alive by a small band of post-Keynesians while the major American Keynesians made great contributions to the development of modern finance theory (which has been anything but distrustful of them). It is instructive to recall how Keynes's idea that interest rates, rather than wages, might be too high for full employment came to disappear from the theory that was made to bear his name. In Modigliani (1944), two different unemployment solutions to the simultaneous equation model were given. One, the basic one, where the money wage was fixed at too high a level relative to the money stock to allow

full employment; the other, called «Keynes's special case», with the rate of interest too high for investment to equal saving at the full employment level of income. The latter, however, Modigliani thought of as a case of «rigid interest» which would apply only if the economy was in a true liquidity trap. A few years later, Patinkin (1948) pointed out that, in principle, the Pigou effect could take the economy out of the trap and back to full employment and in subsequent revised versions of his famous paper, Modigliani (e.g., 1980) conceded the point. This left the basic case -- unemployment is due to wages that are too high and its persistence is due to their downward rigidity.

Although the Pigou effect argument is flawed almost to the point of fraudulence, the liquidity trap was generally regarded as a theoretical curiosity and its elimination was mourned by nobody. Keynes would not have mourned it either. His concern had been with interest rates that, while not in the least «inflexible», were kept too high by central bank policy or by bearishness on the exchanges, thus setting in motion a decline in real output which in turn would bring with it a worsening of investment expectations. This could happen at *any* level of the interest rate, not just at some small fraction of one percent. But this his central hypothesis now disappeared as it were through a logical «trap» door.

This development allowed a great simplification of «Keynesian» economics which greatly aided its marketing throughout the world. For short-run purposes, all you now needed to know was (a) the volume of nominal expenditure and (b) the level of the inherited rigid money wage. A truncated version of IS-LM will serve as a theory of nominal income and, if just a historically fixed wage rate is too crude, it may be replaced by a Phillips-curve.

It is worth taking note of what this simplification of textbook Keynesianism entails. A complete simultaneous equation representation of the «analytical nucleus» of the *General Theory*, as provided by Barends (1999), will have separate supply-price as well as demand-price functions for capital and for consumer goods. Shocks to investment expectations impinge on this system through the demand-price for capital goods. This model has a relative price structure and reasonable «microfoundations.» It could be modified so as to include the response of the supply price of labor to the volume of employment. But it would not allow the *ad hoc* addition of a Phillips-curve (and even less,

of course, of an aggregate supply function)⁷. The Phillips-curve came in handy, however, as an appendage to an IS-LM model from which relative prices had been removed.

IS-LM understood simplistically as a theory of nominal income and augmented by the Phillips curve, but deprived of the intertemporal coordination issue, constituted the poor, enfeebled, benighted «Keynesian economics» that succumbed to Monetarism.

Monetarism and the Natural Rate

Milton Friedman's (1968) Presidential Address to the American Economics Association, in which he introduced the concept of the Natural Rate of Unemployment, is a milestone in the great shift in economists' worldview. Snowdon (1999, p. 32) has collected a few testimonies: «very likely the most influential article ever published in an economics journal» (James Tobin); «the most influential article written in macroeconomics in the past two decades» (Robert Gordon); «one of the decisive intellectual achievements of postwar economics» (Paul Krugman); «easily the most influential paper on macroeconomics published in the post-war era» (both Mark Blaug and Robert Skidelsky).

The influence of that paper is undeniable. It misled just about everybody and diverted economic theory down a track that, ironically, was to prove destructive also of Friedman's monetarism. It acquired immense authority by the fact that the inflationary decade of the 1970's appeared to verify all its predictions. But even so it could not have swept everything before it had not all the intellectual sloppiness surrounding the neoclassical synthesis enfeebled its potential opposition.

There were two things wrong with it. First, it assumed that all money could be analyzed as if it were outside money -- and therefore neutral.

⁷A number of people have pointed out the over determinacy of adding an aggregate supply function to models that include an IS-schedule which subsumes reduced forms of market demand *and* supply functions. Cf., e.g., Barends (1997).

Second, it presumed that as long as nominal wages adjusted to monetary changes, the economy would settle down to the natural rate of unemployment *whether or not* it were also at the natural rate of interest.⁸

Once anticipated, an outside money inflation would surely displace the Phillips-locus vertically. If we were to suppose that the historical growth rate of outside money had been x% higher than it actually was, it is plausible (abstracting from inflation tax effects) that the historically given scatter of points would have been x% higher in Phillips space. Two things that do *not* follow are worth noting. First, it is not true that all central bank actions entail, or amount to the same thing as, changing the equilibrium nominal scale of the system.⁹ Second, while correctly anticipated inflation means that the scatter will be displaced vertically, it does *not* by itself mean that the scatter will collapse to a single vertical «long run Phillips curve» as soon as wage-adjustments have caught up with changes in the outside money stock. If saving were to exceed investment¹⁰ at NAIRU, employment will not converge to NAIRU.

Two stylized facts should be kept in mind. One is that while the U.S. short-run Phillips curve misbehaved in the 1970's and early '80's as predicted by Friedman, we also have to explain why it behaved quite differently before the late '60's or after the mid-'80's. The answer, I suggest, is that the 1970's was *the* decade of American outside money inflation. The other is that NAIRU has proved empirically hopeless to nail down. The thing is found to move as required to fit the new worldview. So unemployment under Reagan in the 1980's was blamed on the natural rate of unemployment having shifted up, not on the high real rates of interest. In the same manner, unemployment in France in the 1990's was widely blamed -- Professor Fitoussi notably dissenting -- on

⁸Keynesian economics in its early days had overcome this kind of partial equilibrium reasoning about the aggregate labor market. But there has been much backsliding among Keynesians later.

⁹Letting borrowed reserves expand or making them contract are examples of central bank actions that do not change the volume of outside money.

¹⁰Or, if $(S + T + IM) > (I + G + X)$

the inflexibilities of the French labor market, not on the high interest rates. In the same vein, the long Clinton boom was supposedly due to the great flexibility of the American labor market, not to low interest rates and loose liquidity.

Friedman's natural rate hypothesis was accepted by all and sundry. «Keynesians» who had opposed him on a range of issues did not themselves have an explanation for unemployment other than lagging wage-adjustment and, in order to make any case at all for stabilization policy, found themselves in the position of having to argue that money wage inflexibility was more of a problem than monetarists were willing to recognize. The so-called «New Keynesians» have subsequently set themselves the task of finding reasons for wage stickiness that are «rational» enough not to earn them the disapprobation of Lucas & Co.

Acceptance of the natural rate hypothesis left increased labor market «flexibility» as the only remaining remedy for unemployment. So this has become the one-note tune of macroeconomic debate in Europe. No doubt, many European countries have allowed institutional arrangements to develop that inhibit competition and mobility in a way that benefits some groups to the expense of others. A good argument can be made for some of these arrangements to be modified. The problem is that it is not clear how far the flexibility argument is going to be pushed. If «inflexibilities» of one sort or another really are the only reasons for unemployment, are we going to demand of labor that, whenever rates of interest are too high or animal spirits too weak, workers take enough of a cut to encourage business to provide employment? The notion that labor should be obliged to subsidize business whenever intertemporal coordination fails is surely fraught with moral hazard.

Economic ideas have political consequences. The natural rate hypothesis may be logically weak and empirically useless but it has become an ideological pillar of the new right. And its acceptance on the other side of the political spectrum explains much of the evident intellectual incoherence on the left. Stabilization policy used to be something tangibly useful that government could do for lower income citizens. But if you accept that unemployment is the fault of labor and that income distribution has to be whatever a globalized economy may dictate, it becomes difficult to formulate a message that will

carry conviction for the traditional voters on the left.

The New Political Economy

In the monetarism of Friedman or Brunner and Meltzer, nominal wages and/or prices were sticky so that monetary policy would have real effects over the short to medium run. The problem was the long and variable lags which made the appropriate timing and size of policy interventions a matter of unreliable guesswork. Business fluctuations were thought in large part to be due to the monetary authorities engaging in discretionary policies that would be beneficial only by chance and which they therefore had better refrain from in favor of following a constant money growth rate rule.

In the rational expectations version of monetarism, the long and variable lags evaporate leaving only a soon-to-be-resolved momentary confusion resulting from policy «surprises.» The idea that only «unanticipated money» could have real effects completely eviscerated the monetarism of Friedman and of Brunner and Meltzer. Since monetary policy surprises are to no sensible purpose, the rational expectations version of monetarism left central banks with nothing of «real» usefulness to do. This posed a dilemma for the new worldview that the behavior of governments (monetary authorities) is the cause of macro instability. The ultimate resolution of this dilemma was to be real business cycle theory according to which, although governments are up to no good, they are not the cause, and should not attempt to be the «cure», of fluctuations in aggregate activity that are nothing but rational adaptations to variations in productivity growth. Meanwhile, however, there developed a curious literature¹¹ in which it was assumed that self-interested politicians thought voters would reward them for using monetary policy to fool citizens into working harder than consistent with the natural rate of unemployment. This line of analysis produced two policy recommendations which, although not well founded, have had considerable influence, namely, (a) to make central banks independent so as to constrain the politicians and (b) to steer the banks away from any tendency to play the Phillips curve on their own by giving them only the single objective of low inflation.

¹¹Stemming from the twin papers by Barro and Gordon (1983a, 1983b).

This policy doctrine is the perfect expression of the new worldview: the private sector will take care of itself, stabilization policy is a vain ambition, and the government had better be constrained from pursuing it. The underlying cynicism about government is sometimes strikingly expressed: «The past 20 years, which has seen the rise of independent central banks, is all about getting priorities right and *getting rid of democratic money, which is always shortsighted, bad money*» (Dornbusch, 2000, p. 23, italics added).

But central banks don't just «print money». Within reasonably stable monetary regimes, they have considerable short run powers to regulate real rates of interest and the real volume of bank credit. Unless the private sector is *perfectly* stable, these powers will be potentially useful. The financial crises which have multiplied around the world in recent years make the argument for totally forswearing their use anything but persuasive.¹²

Growth theory instead?

The development of equilibrium business cycle theory has had the logical consequence that the leading people in macroeconomics today are losing interest in business fluctuations and are instead turning their attention to economic growth. Assuming that people adjust to business cycles as smoothly and efficiently as to seasonal fluctuations, the welfare loss from cycles can be shown to be relatively trivial. By the force of compound interest the welfare gain from an increase in the growth rate even if by only a fraction of one percent will on the other hand be of great magnitude within a generation or two.

It is interesting to recall that the compound interest argument was made quite eloquently some 70 years ago by Keynes (1930a). But with Keynes there was a crucial difference. When he contemplated the «Economic Prospects of

¹²If low inflation is not to be the only goal of central banks, however, the independence doctrine is in trouble. Making decisions on trade-offs that have distributive consequences is surely an intrinsically *political* responsibility, not to be handed to unelected technocrats.

our Grandchildren», he also knew that the train to that future might very well derail. He had an ever-present sense of «the fragility of the existing social order.»¹³ That sense must have been shared by most educated Europeans between the two wars. Fitoussi is prominent among the fewer Europeans that share it today. But the fragility of the social contract is a rather alien idea to Americans!

Late 20th Century Macropolicies

The worst case scenario of the old worldview was that of a great depression brought about by widespread insolvency in the private sector. The cure would be deficit spending by a solvent government. The worst case envisaged in the new view is high inflation engaged in by an insolvent government. It can be cured by trimming government spending -- or by higher taxes paid by solvent citizens and firms, although that is less often recommended.¹⁴

The Washington consensus reflected the new worldview in the emphasis put on restraining government spending and reducing the size of the public sector through privatizations. In Europe, the debt- and deficit-limits of the Maastricht treaty expressed the same philosophy. In the United States, California law requires the state government to balance the budget each year.

The Washington consensus was to a large extent formed by the economic history of several Latin American countries in the 1980's -- as seen by economists and policy makers in the IMF, the World Bank and the US government. The monetization of large deficits, the high inflation and economic disruption of the problem countries were contrasted to the economic success of Chile. Through the spectacles of the new worldview, one prescription will do for all cases: constrain the government so as to unleash the initiative of the private sector.

¹³The phrase is Moggridge's, cf. his (1993, p. 154)

¹⁴It is reasonably clear what should and can be done in each worst case scenario. It is not easy to prescribe a medicine when, as in Argentina, what materializes combines the worst of both.

The story behind some of these Latin American cases is however not so simple and straightforward.¹⁵ In more than one instance, it started with large defaults in the private sector threatening the solvency also of the banking system. The government then stepped in to stop the financial crises from developing into a general depression. This required in effect the «nationalization» of the bad loans. But the poor ordinary tax payer is not easily persuaded to pay for the mistakes or swindles of the once rich and powerful who by then may be living in fair comfort abroad. It was not in the social contract that he should pay. But someone has to pay, and if the ordinary tax payer will not vote the taxes, he must nonetheless be made to foot the bill through the inflation tax.

Thus distributive conflict often lurks at bottom of these inflations. When this is the case, it is not to be solved, and may be exacerbated, by IMF conditionality although outside pressure may help a particular government to enact responsible policies. In the case of Chile, which managed to resume growth with price level stability, the distributive conflict that had boiled up under Allende was suppressed by Pinochet.

The 1990's also showed the new worldview in action in the wave of privatizations that swept around the world, enthusiastically supported by the international financial organizations and of course by the private institutions that earned the fees in these transactions. Without a doubt governments everywhere have gotten into areas of economic activity that could be handled as well or better by the private sector. But the pell-mell privatizations in Russia, for example, seem to have been carried through on the simple conviction that getting the people's assets out of government control and into private hands in whatever way and on whatever terms would surely be welfare improving. *Whose* welfare was improved did not seem important. Typically, questions of distributive justice were not given high priority.

The East Asian crises of 1998 also showed the new worldview to be too simple. The Indonesian crisis was triggered by large corporations defaulting on

¹⁵Cf. Daniel Vaz (1999)

dollar-denominated debt. The ensuing scramble for dollars sent the exchange rate plummeting, thereby demonstrating the new risk that countries run in a world of globalized finance, namely, foreign currency-denominated debt-deflation. Although the finances of the central Indonesian government had been in reasonable shape for a decade, the IMF, acting on «consensus» instinct, at first demanded fiscal retrenchment and then had to reverse itself. The concept of «crony capitalism» was coined to allow the Indonesian crisis to be fitted into the worldview that the government is still always the problem.

Conclusion

For long periods, the evolution of economics will be driven almost exclusively by the internal logic of successive answers turning into new questions. In macroeconomics, the path from Friedman's monetarism to Prescott's real business cycle theory seems a good example. But from time to time, external events irrupt more or less rudely on the process. Had the Great Depression never happened, the rise and long dominance of Keynesian economics is unthinkable. Less dramatically, the inflation of the 1970's played a significant role in its demise.

External events affect the thinking of economists more strongly the closer to home they come. In recent decades, high-brow economics has been fashioned in Boston and Chicago just as surely as *haute couture* has sprung from Paris and Milano. The various crises in the emerging economies have not had much of an impact on today's economics. The asset-price bubbles that grew and burst in countries such as Japan and Sweden may have felt a bit closer. When a large stock market bubble implodes in the United States itself, intertemporal equilibrium economics and the finance theory built on it is put in question. If an when the dollar exchange rate bubble bursts, it will demand a more thorough reevaluation. Similarly, the depredations of East Asian crony capitalists or Russian oligarchs took place far away. *Credit Lyonnais* was closer. Enron and Global Crossing failed right in the house. Corporations may be no more obedient agents of their stakeholders than are democratic governments as agents of their principals, the voters.

The two worldviews with which I started are obviously simplistic

extremes and as such they will at times prove dangerous guides in a more complex reality. External events of the last few years may start the pendulum of economic opinion swinging back once more. Perhaps it is already in motion.

But these long swings in economic understanding do us no good. Although the impulses of external events play a causal role in bringing them about, their propagation internal to the economics profession seems subject to herd behavior. If we are ever to stabilize the pendulum of economic opinion somewhere in the judicious -- but ideologically always unsatisfactory -- middle and recognize the capacity for good *and* its limits of both markets and governments, it will have to be through people who do not run with the herd but think for themselves and tirelessly follow their convictions. Like our friend, Jean-Paul Fitoussi.

References

Ingo Barends (1997) «What went wrong with IS-LM/AS-AD analysis -- and why?» **Eastern Economic Journal**, 23:1, pp. 89-99.

Ingo Barends (1999) «From Keynes to Hicks -- an aberration? IS-LM and the analytical nucleus of the *General Theory*,» in Peter Howitt, Elisabetta de Antoni and Axel Leijonhufvud, eds., **Money, Markets and Method: Essays in Honour of Robert W. Clower**, Cheltenham: Edward Elgar.

Robert J. Barro and David B. Gordon (1983a) «Rules, Discretion and Reputation in a Model of Monetary Policy,» **Journal of Monetary Economics**, 12:1, pp. 101-21.

Robert J. Barro and David B. Gordon (1983b) «A Positive Theory of Monetary Policy in a Natural Rate Model,» **Journal of Political Economy**, 91:4, pp. 589-610.

- Rudiger Dornbusch (2000), «The Art of Central Banking,» **World Economic Trends**, IX:6, December, Ramsey, NJ: Trans-National Research Corporation.
- Jean-Paul Fitoussi (1995) **Le débat interdit: monnaie, Europe, pauvreté**, Paris, Arléa.
- Jean-Paul Fitoussi (1996 ,with Pierre Rosanvallon) **Le nouvel âge des inégalités**, Paris: Le Seuil, 1996.
- Jean-Paul Fitoussi (2001) «Monetary Policy and the Macroeconomics of ‘Soft’ Growth,» in A. Leijonhufvud, ed., **Monetary Theory as a Basis for Monetary Policy**, London: Palgrave and the International Economic Association.
- Milton Friedman (1968) «The Role of Monetary Policy,» **American Economic Review**, 58, March, pp. 1-17.
- James K. Galbraith (1998) **Created Unequal: The Crisis in American Pay**, New York: The Free Press.
- Peter Howitt (2002) «The Microfoundations of the Multiplier Process,» paper presented at the January 2002 ASSA meetings.
- John Maynard Keynes (1930a, 1972) «The Economic Possibilities of our Grandchildren,» **The Collected Writings of John Maynard Keynes**, Vol. IX: **Essays in Persuasion**, London: Macmillan, pp. 321-332.
- John Maynard Keynes (1930b) «The Great Slump of 1930,» **The Collected Writings of John Maynard Keynes**, Vol. IX: **Essays in Persuasion**, London: Macmillan, pp.126-134.
- John Maynard Keynes (1931, 1973) «An Economic Analysis of World Unemployment,» **The Collected Writings of John Maynard Keynes**, Vol. XIII: **The General Theory and After. Part I: Preparation**,

London: Macmillan, pp. 343-367.

John Maynard Keynes (1934, 1973) «Poverty in Plenty: is the Economic System Self-Adjusting?» **The Collected Writings of John Maynard Keynes**, Vol. XIII: **The General Theory and After. Part I: Preparation**, London: Macmillan, pp. 485-492.

Axel Leijonhufvud (1973, 1981) "Effective Demand Failures," Swedish Economic Journal, March, reprinted in *idem*, **Information and Coordination**, Oxford: Oxford Univ. Press.

Axel Leijonhufvud (1998) "Mr Keynes and the Moderns", **European Journal of the History of Economic Thought**, pp. 169-188. Also in Luigi Pasinetti and Bertram Schefold, eds., **The Impact of Keynes on Economics in the 20th Century**, Cheltenham: Edward Elgar, 1998.

Franco Modigliani (1944, 1980) «Liquidity Preference and the Theory of Interest and Money,» **Econometrica**, 12, pp. 45-88, rev. repr. in A. Abel, ed., **The Collected Papers of Franco Modigliani**, Vol. I, Cambridge, Mass.: MIT Press.

D.E. Moggridge (1976, 1993) **Keynes**, 3d edn, Toronto: University of Toronto Press

Don Patinkin (1948) «Price Flexibility and Full Employment,» **American Economic Review**, 38, pp. 543-64.

Brian Snowdon and Howard R. Vane (1999) **Conversations with Leading Economists: Interpreting Modern Macroeconomics**, Cheltenham: Edward Elgar.

Daniel Vaz (1999) «Four Banking Crises: Their Causes and Consequences,» **Revista de Economia**, IV:1, May, pp. 29-344.

Elenco dei papers del Dipartimento di Economia

1989. 1. *Knowledge and Prediction of Economic Behaviour: Towards A Constructivist Approach.* by Roberto Tamborini.

1989. 2. *Export Stabilization and Optimal Currency Baskets: the Case of Latin American Countries.* by Renzo G.Avesani Giampiero M. Gallo and Peter Pauly.

1989. 3. *Quali garanzie per i sottoscrittori di titoli di Stato? Una rilettura del rapporto della Commissione Economica dell'Assemblea Costituente* di Franco Spinelli e Danilo Vismara.
(*What Guarantees to the Treasury Bill Holders? The Report of the Assemblée Costituente Economic Commission Reconsidered* by Franco Spinelli and Danilo Vismara.)

1989. 4. *L'intervento pubblico nell'economia della "Venezia Tridentina" durante l'immediato dopoguerra* di Angelo Moioli.
(*The Public Intervention in "Venezia Tridentina" Economy in the First War Aftermath* by Angelo Moioli.)

1989. 5. *L'economia lombarda verso la maturità dell'equilibrio agricolo-commerciale durante l'età delle riforme* di Angelo Moioli.
(*The Lombard Economy Towards the Agriculture-Trade Equilibrium in the Reform Age* by Angelo Moioli.)

1989. 6. *L'identificazione delle allocazioni dei fattori produttivi con il duale.* di Quirino Paris e di Luciano Pilati.
(*Identification of Factor Allocations Through the Dual Approach* by Quirino Paris and Luciano Pilati.)

1990. 1. *Le scelte organizzative e localizzative dell'amministrazione postale: un modello interpretativo.* di Gianfranco Cerea.
(*The Post Service's Organizational and Locational Choices: An Interpretative Model* by Gianfranco Cerea.)

1990. 2. *Towards a Consistent Characterization of the Financial Economy.* by Roberto Tamborini.

1990. 3. *Nuova macroeconomia classica ed equilibrio economico generale: considerazioni sulla pretesa matrice walrasiana della N.M.C. di Giuseppe Chirichiello.*
(*New Classical Macroeconomics and General Equilibrium: Some Notes on the Alleged Walrasian Matrix of the N.C.M. by Giuseppe Chirichiello.*)
1990. 4. *Exchange Rate Changes and Price Determination in Polypolistic Markets.* by Roberto Tamborini.
1990. 5. *Congestione urbana e politiche del traffico. Un'analisi economica di Giuseppe Folloni e Gianluigi Gorla.*
(*Urban Congestion and Traffic Policy. An Economic Analysis by Giuseppe Folloni and Gianluigi Gorla.*)
1990. 6. *Il ruolo della qualità nella domanda di servizi pubblici. Un metodo di analisi empirica di Luigi Mittone.*
(*The Role of Quality in the Demand for Public Services. A Methodology for Empirical Analysis by Luigi Mittone.*)
1991. 1. *Consumer Behaviour under Conditions of Incomplete Information on Quality: a Note* by Pilati Luciano and Giuseppe Ricci.
1991. 2. *Current Account and Budget Deficit in an Interdependent World* by Luigi Bosco.
1991. 3. *Scelte di consumo, qualità incerta e razionalità limitata di Luigi Mittone e Roberto Tamborini.*
(*Consumer Choice, Unknown Quality and Bounded Rationality by Luigi Mittone and Roberto Tamborini.*)
1991. 4. *Jumping in the Band: Undeclared Intervention Thresholds in a Target Zone* by Renzo G. Avesani and Giampiero M. Gallo.
1991. 5 *The World Transfer Problem. Capital Flows and the Adjustment of Payments* by Roberto Tamborini.
- 1992.1 *Can People Learn Rational Expectations? An Ecological Approach* by Pier Luigi Sacco.

- 1992.2 *On Cash Dividends as a Social Institution* by Luca Beltrametti.
- 1992.3 *Politica tariffaria e politica informativa nell'offerta di servizi pubblici* di Luigi Mittone
(*Pricing and Information Policy in the Supply of Public Services* by Luigi Mittone.)
- 1992.4 *Technological Change, Technological Systems, Factors of Production* by Gilberto Antonelli and Giovanni Pegoretti.
- 1992.5 *Note in tema di progresso tecnico* di Geremia Gios e Claudio Miglierina.
(*Notes on Technical Progress*, by Geremia Gios and Claudio Miglierina).
- 1992.6 *Deflation in Input Output Tables* by Giuseppe Folloni and Claudio Miglierina.
- 1992.7 *Riduzione della complessità decisionale: politiche normative e produzione di informazione* di Luigi Mittone
(*Reduction in decision complexity: normative policies and information production* by Luigi Mittone)
- 1992.8 *Single Market Emu and Widening. Responses to Three Institutional Shocks in the European Community* by Pier Carlo Padoan and Marcello Pericoli
- 1993.1 *La tutela dei soggetti "privi di mezzi": Criteri e procedure per la valutazione della condizione economica* di Gianfranco Cerea
(*Public policies for the poor: criteria and procedures for a novel means test* by Gianfranco Cerea)
- 1993.2 *La tutela dei soggetti "privi di mezzi": un modello matematico per la rappresentazione della condizione economica* di Wolfgang J. Irler
(*Public policies for the poor: a mathematical model for a novel means test* by Wolfgang J. Irler)
- 1993.3 *Quasi-markets and Uncertainty: the Case of General Practice Service* by Luigi Mittone

1993.4 *Aggregation of Individual Demand Functions and Convergence to Walrasian Equilibria* by Dario Paternoster

1993.5 *A Learning Experiment with Classifier System: the Determinants of the Dollar-Mark Exchange Rate* by Luca Beltrametti, Luigi Marengo and Roberto Tamborini

1993.6 *Alcune considerazioni sui paesi a sviluppo recente di Silvio Goglio*
(*Latecomer Countries: Evidence and Comments* by Silvio Goglio)

1993.7 *Italia ed Europa: note sulla crisi dello SME* di Luigi Bosco
(*Italy and Europe: Notes on the Crisis of the EMS* by Luigi Bosco)

1993.8 *Un contributo all'analisi del mutamento strutturale nei modelli input-output* di Gabriella Berlofffa
(*Measuring Structural Change in Input-Output Models: a Contribution* by Gabriella Berlofffa)

1993.9 *On Competing Theories of Economic Growth: a Cross-country Evidence* by Maurizio Pugno

1993.10 *Le obbligazioni comunali* di Carlo Buratti (*Municipal Bonds* by Carlo Buratti)

1993.11 *Due saggi sull'organizzazione e il finanziamento della scuola statale* di Carlo Buratti
(*Two Essays on the Organization and Financing of Italian State Schools* by Carlo Buratti)

1994.1 *Un'interpretazione della crescita regionale: leaders, attività indotte e conseguenze di policy* di Giuseppe Folloni e Silvio Giove.
(*A Hypothesis about regional Growth: Leaders, induced Activities and Policy* by Giuseppe Folloni and Silvio Giove).

1994.2 *Tax evasion and moral constraints: some experimental evidence* by Luigi Bosco and Luigi Mittone.

1995.1 *A Kaldorian Model of Economic Growth with Shortage of Labour and Innovations* by Maurizio Pugno.

1995.2 *A che punto è la storia d'impresa? Una riflessione storiografica e due ricerche sul campo* a cura di Luigi Trezzi.

1995.3 *Il futuro dell'impresa cooperativa: tra sistemi, reti ed ibridazioni* di Luciano Pilati.
(*The future of the cooperative enterprise: among systems, networks and hybridisation* by Luciano Pilati).

1995.4 *Sulla possibile indeterminatezza di un sistema pensionistico in perfetto equilibrio finanziario* di Luca Beltrametti e Luigi Bonatti.
(*On the indeterminacy of a perfectly balanced social security system* by Luca Beltrametti and Luigi Bonatti).

1995.5 *Two Goodwinian Models of Economic Growth for East Asian NICs* by Maurizio Pugno.

1995.6 *Increasing Returns and Externalities: Introducing Spatial Diffusion into Krugman's Economic Geography* by Giuseppe Folloni and Gianluigi Gorla.

1995.7 *Benefit of Economic Policy Cooperation in a Model with Current Account Dynamics and Budget Deficit* by Luigi Bosco.

1995.8 *Coalition and Cooperation in Interdependent Economies* by Luigi Bosco.

1995.9 *La finanza pubblica italiana e l'ingresso nell'unione monetaria europea* di Ferdinando Targetti.
(*Italian Public Finance and the Entry in the EMU* by Ferdinando Targetti)

1996.1 *Employment, Growth and Income Inequality: some open Questions* by Annamaria Simonazzi and Paola Villa.

1996.2 *Keynes' Idea of Uncertainty: a Proposal for its Quantification* by Guido Fioretti.

1996.3 *The Persistence of a "Low-Skill, Bad-Job Trap" in a Dynamic Model of a Dual Labor Market* by Luigi Bonatti.

1996.4 *Lebanon: from Development to Civil War* by Silvio

Goglio.

1996.5 *A Mediterranean Perspective on the Break-Down of the Relationship between Participation and Fertility* by Francesca Bettio and Paola Villa.

1996.6 *Is there any persistence in innovative activities?* by Elena Cefis.

1997.1 *Imprenditorialità nelle alpi fra età moderna e contemporanea* a cura di Luigi Trezzi.

1997.2 *Il costo del denaro è uno strumento anti-inflazionistico?* di Roberto Tamborini.
(*Is the Interest Rate an Anti-Inflationary Tool?* by Roberto Tamborini).

1997.3 *A Stability Pact for the EMU?* by Roberto Tamborini.

1997.4 *Mr Keynes and the Moderns* by Axel Leijonhufvud.

1997.5 *The Wicksellian Heritage* by Axel Leijonhufvud.

1997.6 *On pension policies in open economies* by Luca Beltrametti and Luigi Bonatti.

1997.7 *The Multi-Stakeholders Versus the Nonprofit Organisation* by Carlo Borzaga and Luigi Mittone.

1997.8 *How can the Choice of a Time-Consistent Monetary Policy have Systematic Real Effects?* by Luigi Bonatti.

1997.9 *Negative Externalities as the Cause of Growth in a Neoclassical Model* by Stefano Bartolini and Luigi Bonatti.

1997.10 *Externalities and Growth in an Evolutionary Game* by Angelo Antoci and Stefano Bartolini.

- 1997.11 *An Investigation into the New Keynesian Macroeconomics of Imperfect Capital Markets* by Roberto Tamborini.
- 1998.1 *Assessing Accuracy in Transition Probability Matrices* by Elena Cefis and Giuseppe Espa.
- 1998.2 *Microfoundations: Adaptive or Optimizing?* by Axel Leijonhufvud.
- 1998.3 *Clower's intellectual voyage: the 'Ariadne's thread' of continuity through changes* by Elisabetta De Antoni.
- 1998.4 *The Persistence of Innovative Activities. A Cross-Countries and Cross-Sectors Comparative Analysis* by Elena Cefis and Luigi Orsenigo
- 1998.5 *Growth as a Coordination Failure* by Stefano Bartolini and Luigi Bonatti
- 1998.6 *Monetary Theory and Central Banking* by Axel Leijonhufvud
- 1998.7 *Monetary policy, credit and aggregate supply: the evidence from Italy* by Riccardo Fiorentini and Roberto Tamborini
- 1998.8 *Stability and multiple equilibria in a model of talent, rent seeking, and growth* by Maurizio Pugno
- 1998.9 *Two types of crisis* by Axel Leijonhufvud
- 1998.10 *Trade and labour markets: vertical and regional differentiation in Italy* by Giuseppe Celi e Maria Luigia Segnana
- 1998.11 *Utilizzo della rete neurale nella costruzione di un trading system* by Giulio Pettenuzzo
- 1998.12 *The impact of social security tax on the size of the informal economy* by Luigi Bonatti
- 1999.1 *L'economia della montagna interna italiana: un approccio storiografico*, a cura di Andrea Leonardi e Andrea Bonoldi.

1999.2 *Unemployment risk, labour force participation and savings*, by Gabriella Berloff e Peter Simmons

1999.3 *Economia sommersa, disoccupazione e crescita*, by Maurizio Pugno

1999.4 *The nationalisation of the British Railways in Uruguay*, by Giorgio Fodor

1999.5 *Elements for the history of the standard commodity*, by Giorgio Fodor

1999.6 *Financial Market Imperfections, Heterogeneity and growth*, by Edoardo Gaffeo

1999.7 *Growth, real interest, employment and wage determination*, by Luigi Bonatti

2000.1 *A two-sector model of the effects of wage compression on unemployment and industry distribution of employment*, by Luigi Bonatti

2000.2 *From Kuwait to Kosovo: What have we learned? Reflections on globalization and peace*, by Roberto Tamborini

2000.3 *Metodo e valutazione in economia. Dall'apriorismo a Friedman*, by Matteo Motterlini

2000.4 *Under tertiarisation and unemployment*. by Maurizio Pugno

2001.1 *Growth and Monetary Rules in a Model with Competitive Labor Markets*, by Luigi Bonatti.

2001.2 *Profit Versus Non-Profit Firms in the Service Sector: an Analysis of the Employment and Welfare Implications*, by Luigi Bonatti, Carlo Borzaga and Luigi Mittone.

2001.3 *Statistical Economic Approach to Mixed Stock-Flows Dynamic Models in Macroeconomics*, by Bernardo Maggi and Giuseppe Espa.

2001.4 *The monetary transmission mechanism in Italy: The credit channel and a missing ring*, by Riccardo Fiorentini and Roberto Tamborini.

2001.5 *Vat evasion: an experimental approach*, by Luigi Mittone

2001.6 *Decomposability and Modularity of Economic Interactions*, by Luigi Marengo, Corrado Pasquali and Marco Valente.

2001.7 *Unbalanced Growth and Women's Homework*, by Maurizio Pugno

2002.1 *The Underground Economy and the Underdevelopment Trap*, by Maria Rosaria Carillo and Maurizio Pugno.

2002.2 *Interregional Income Redistribution and Convergence in a Model with Perfect Capital Mobility and Unionized Labor Markets*, by Luigi Bonatti.

2002.3 *Firms' bankruptcy and turnover in a macroeconomy*, by Marco Bee, Giuseppe Espa and Roberto Tamborini.

2002.4 *One "monetary giant" with many "fiscal dwarfs": the efficiency of macroeconomic stabilization policies in the European Monetary Union*, by Roberto Tamborini.

2002.5 *The Boom that never was? Latin American Loans in London 1822-1825*, by Giorgio Fodor.

2002.6 *L'economia senza banditore di Axel Leijonhufvud: le 'forze oscure del tempo e dell'ignoranza' e la complessità del coordinamento*, by Elisabetta De Antoni.

2002.7 *Why is Trade between the European Union and the Transition Economies Vertical?*, by Hubert Gabrisch and Maria Luigia Segnana.

2003.1 *The service paradox and endogenous economic growth*, by Maurizio Pugno.

2003.2 *Mappe di probabilità di sito archeologico: un passo avanti*, di Giuseppe Espa, Roberto Benedetti, Anna De Meo e Salvatore Espa. (*Probability maps of archaeological site location: one step beyond*, by Giuseppe Espa, Roberto Benedetti, Anna De Meo and Salvatore Espa).

2003.3 *The Long Swings in Economic Understanding*, by Axel Leijonhufvud.

PUBBLICAZIONE REGISTRATA PRESSO IL TRIBUNALE DI TRENTO