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## Assets and Liabilities of International Economics: The Postwar Bankruptcy of Theory and Policy

On the day I started to outline this paper for *Economic Notes*, a *New York Times* story on the economic growth prospect for 1982 quoted an O.E.C.D. economist to the effect that our subject has « no easy answers any more », and an Oxford don saying « we're in a state of intellectual bankruptcy: all we know is that there isn't any single economic formula that will do the trick. »<sup>1</sup> The trick is presumably economic recovery and growth. I choose to shift ground somewhat to a discussion of theory and policy in international economics and more in the macro-economic arena than in trade and welfare.

Confession is said to be good for the soul, and confession of intellectual bankruptcy may be, though it comes with difficulty from an economist of 45 years of research and writing. I hope to be able to salvage a few assets of my own, write off a number of theories and policy prescriptions of others, and, if lucky, suggest a few paths to help the discipline back on its feet. The conclusion is partly that we have been too ready to follow new and beguiling theories and leads, too faddish, too ready to discard the classical teaching. I should perhaps demonstrate *bona fides* by acknowledging that my own work is not without egregious overstatement: « The nation-state is just about through as an economic unit ». <sup>2</sup> « The dollar is finished as international money ». <sup>3</sup> And (in 1950), « customs union in Europa would be a half-way house, untenable in the long run, from which Europe will be obliged either to push forward to full economic and

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<sup>1</sup> « Paltry '82 Growth Forecast for Industrial Nations », *New York Times*, December 16, 1982, p. D.1.

<sup>2</sup> C.P. KINDLEBERGER, *American Business Abroad* (New Haven: Yale University Press, 1969), p. 207.

<sup>3</sup> C.P. KINDLEBERGER, « Systems of International Economic Organization », in DAVID P. CALLEO, ed., *Money and the Coming World Order* (New York: New York University Press, 1976), p. 35.

political unification, or from which it will have to fall back into a congerie of nations ». <sup>4</sup> Whether this last prophecy has been already falsified after 30 years, or is still under test, depends upon one's intellectual rate of interest.

In this paper I suggest in particular that the profession has successively invested too much of its intellectual integrity in unreconstructed Keynesianism, flexible exchange rates, monetarism and the monetary theory of balance-of-payments adjustment, world monetarism, « supply-side » economics, fixity of real exchange rates, planning, growth theory as a contribution to understanding such questions as the long-run determination of the terms of trade, econometrics as a substitute for theory, and mathematical theory as a substitute for economic intuition. I would urge that a considerable number of contributions to theory remain as earning assets: the view of the multinational corporation as a branch of imperfect competition rather than of international capital movements; international financial intermediation; optimal functional areas, such as the optimum-currency, -economic, -political, and -social areas which have different sizes and different criteria; the distinction among private, collective and public goods.

One problem in economics is the fact that observation and experiment change the nature of the relationships, according to the Heisenberg principle. The first monetary or fiscal expansion, exchange-rate change, or clean float will produce one result; the next a different one as people learn, expectations become more sophisticated, and markets react differently to the same stimuli. There is moral hazard: if banks or firms know they will be saved from the consequences of mistakes, they use less care in avoiding mistakes. On both scores, policy runs down. People learn how to beat the system, and old remedies no longer work. There may be no ideal solution. In a trivial problem such as how to organize a firm — whether by product, region, or function, — or the U.S. Department of State, by continent or function, it may be necessary to keep changing back and forth to prevent entropy from taking complete hold.

The discussion is restricted to international economic theory and policy, but the comments apply, *mutatis mutandis*, to domestic

<sup>4</sup> In a lecture at the School for Advanced International Studies, Peterborough, New Hampshire, July 1950.

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macro-economic policy. It is sad for those of us in international economics to have to acknowledge that whereas in its classical phase, international-trade theory led the way and pioneered in the development of economics generally, in recent times the contrary has been the case, with international economics making advances — not all of lasting value — based on borrowings from what may be called closed-economy theorizing.

The emphasis is on theory and policy formulations, and not on practice: not on, for example, the failure of the authors of Bretton Woods to provide financing for capital movements in their mistaken belief that capital movements should and could be controlled; or misunderstanding the problem of international liquidity that led to the creation of Special Drawing Rights to provide more liquidity, though their issue was halted when it was realized there was too much; or to the demand for a New International Economic Order to make poor countries richer through changing institutions governing the world economy without adding human or material capital, natural resources, or technological information.

### *The Keynesian Revolution*

The Keynesian revolution began in the 1930s, but was completed during and after the Second World War. In international context, extension consisted in the foreign-trade multiplier, started by Machlup and perfected by Meade, indicating how changes in spending affected national income and the balance of payments on current account.<sup>5</sup> Prices were assumed constant, because of the availability of unutilized resources. Among these prices was the interest rate, held constant by an infinitely elastic supply of money. Say's law that supply created its own demand was supplanted by Keynes' law that demand created its own supply.

The solution of managing demand spread from the problem of stability to that of growth. The Harrod-Domar model showed what the long-run rate of monetary expansion had to be to employ the capacity generated by investment in the short period. Growth hurt the balance of payments as additional demand spilled over

<sup>5</sup> FRITZ MACHLUP, *International Trade and the National Income Multiplier* (Philadelphia: Blakiston, 1945), JAMES E. MEADE, *The Theory of International Economic Policy*, vol. 1, *The Balance of Payments* (New York: Oxford University Press, 1951).

into imports. It took time to recognize that there were two kinds of growth: demand-led, Keynesian growth which worsened the balance of payments, and Schumpeterian growth from innovation, as in Germany and Japan, which produced new exports and substitutes for imports, and helped the balance.<sup>6</sup> A number of demand-managers took the view that Keynesian growth, while it might hurt the balance of payments in the short run, would help it in the long as new products and new processes emerged from induced investment. The sad experience of Britain in the 1950s, according to such critics as Dow and Maddison, was the result of « stop-go » demand management, and especially of turning off spending too early. Correct policy, they asserted, was « damn the torpedos, full steam ahead ». Few governments long had appetite for such an apparently damaging tactic.

Economists of all persuasions united for a time in thinking that exchange-rate depreciation would cure an adverse balance of payments. Let price clear the market for foreign-exchange, they urged, as a change in the price of wheat clears the market for that good, failing to make the distinction between a partial-equilibrium situation, in which it is safe to assume other things equal, as in a single commodity, and general-equilibrium circumstances, with major feedbacks, as in the case of a price as pervasive in its effects on a country as the exchange rate. If full-employment policies were threatened by adverse balance-of-payment effects, in this view, the obvious remedy was to change the price of foreign exchange. In the early postwar period, indeed, a number of economists such as Haberler, Friederich Lutz, Hazlitt and Roepke thought that Europe's problems could be cured by « balancing the budget and depreciating the exchange rate to the purchasing-power-parity level ».<sup>7</sup> More generally it was held by such an economist as Friedman, that exchange risk would dry up capital movements, and that the clearing of the market for foreign exchange would render the current account automatically in balance.<sup>8</sup>

<sup>6</sup> C.P. KINDLEBERGER, « Foreign Trade and Economic Growth: Lessons from Britain and France, 1850-1913 », *Economic History Review*, December 1961.

<sup>7</sup> See for example, HENRY HAZLITT, *Will Dollars Save the World?* (New York: New York: Appleton-Century), and GOTTFRIED HABERLER, « Dollar Shortage », in S.E. HARRIS, ed., *Foreign Economic Policy for the United States* (Cambridge: Harvard University Press, 1948).

<sup>8</sup> MILTON FRIEDMAN, « The Case for Flexible Exchange Rates », in M. FRIEDMAN, *Essays in Positive Economics* (Chicago: University of Chicago Press, 1953).

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Two sets of experience immediately, and ultimately a third and fourth disturbed the confidence with which it was held that flexible exchange rates were a sovereign remedy for balance-of-payments difficulties. In the first place, Alexander pointed out that change in the current balance involved change in the relation of national expenditure to output. If output were limited by full employment, depreciation could improve the balance of payments only as it cut expenditure, or what Alexander called « absorption ». He mentioned a number of possibilities: money illusion which led people to save more when money incomes and prices rose, despite a constant real income; the Pigou effect, under which price increases reduced the value of real balances and made people save to restore the normal proportions between money and income; a rise in interest rates because of the decline in real balances which raised savings at a given level of real income; and/or redistribution of income from wages with a high marginal propensity to consume to profits with a high marginal propensity to save. Alexander saw little help in any of them, and thought that under full employment the system was likely to be « homogeneous », e.g. a 10 percent depreciation of the exchange rate producing a 10 percent rise in prices and money incomes without affecting the balance of payments in foreign currency.<sup>9</sup>

The second not unrelated discordant note was sounded mainly in developing countries which found it necessary time after time to repeat exchange depreciation. A theory of structural inflation was produced as explanation. To close the balance-of-payments gap, some group or groups had to cut its real income — government, enterprise, labor, agriculture, the rentier class. If each resisted accepting any share of the cut imposed by a rise in foreign-trade prices — government by collecting higher taxes to maintain its real spending, agriculture and industry by raising prices, labor by demanding and achieving higher wages, rentiers by raising interest rates, the balance-of-payments deficit could not be reduced, and depreciation would result only in inflation. A similar theory had been put forward immediately after the war by Henri Aujac in France;<sup>10</sup> and a developed version was produced

<sup>9</sup> S.S. ALEXANDER, « Effects of Devaluation on a Trade Balance », *Staff Papers*, April 1952.

<sup>10</sup> HENRI AUJAC, « Inflation as a Monetary Consequence of the Behavior of Groups », *International Economic Papers*, No. 4, translated from the original in *Economie Appliquée*, vol. 3, April-June, 1950.

at the end of the 1970s by Fred Hirsch and John Goldthorpe under the title of a social theory of inflation<sup>11</sup>.

Later than Alexander's absorption and structural inflation, it was learned that flexible exchange rates need not automatically balance the current account for two other reasons. Exchange risk which had seemed so important in the 1930s failed to inhibit capital movements. This was true not only in relations between the U.S. and the Canadian dollar, where capital movements continued despite risk after the Canadian dollar had been floated — perhaps a special situation because the market thought there was a strong tendency for a dollar to equal a dollar, even though the Swiss, Belgian and French francs had parted company. In this connection Mundell drew the conclusion from the Canadian case that monetary policy was particularly powerful under floating exchange rates through an anti-classical mechanism: tight money produced contraction not through its impact on investment and spending but through attracting foreign short-term capital flows leading to exchange appreciation and deflation of foreign-trade goods prices<sup>12</sup>. When it proved that floating exchange rates did not inhibit short-term capital movements, it followed that abandonment of fixed exchange rates did not provide automatic balancing in the current account.

Fourthly the theory of flexible exchange rates depended upon a belief in fairly high elasticities of demand in international trade. When balances of developed countries were slow to adjust, the J-curve was adduced. As on a J, the balance of payments started down though it was expected ultimately to turn up. The necessity for the balance of payments to get worse before it got better, under the J-curve analysis, was the consequence of prices adjusting rapidly and quantities slowly, especially in imports, so that the value of imports in local currency rose in the short run. The J-curve made adjustment less automatic and rapid. Then came the 1973 increase in the price of oil, making clear that elasticity optimism was not general, and especially was not a law of the Medes and the Persians. A rise in export prices in an oil-exporting country under high elasticities of demand would worsen its

<sup>11</sup> FRED HIRSCH and JOHN GOLDTHORPE, eds., *The Political Economy of Inflation* (Cambridge, Mass.: Harvard University Press, 1978).

<sup>12</sup> ROBERT A. MUNDELL, « Capital Mobility and Stabilization Policy under Fixed and Flexible Exchange Rates », *Canadian Journal of Economics and Political Science*, vol. 29, November 1963.

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balance of payments, not improve it; and a sharp rise in the price of imported oil in the consuming countries, would improve their balances, not worsen them. There is no need to underline the contrary outcome. It was widely asserted that the oil crisis of 1973 would have been much worse if the world had not already adopted flexible exchange rates earlier that year, but the statement rested on faith rather than scientific demonstration. Depreciation of the dollar had no chance of balancing the U.S. accounts with OPEC.

The Keynesian revolution had an answer for world recession caused by the 1973 oil price increase: all countries to expand spending in tandem to raise world income while forestalling individual country balance-of-payments deficits. Each country would increase its own imports, but its exports would rise in offsetting fashion owing to the spending abroad. The remedy was devised and urged by economists during and after World War II. It was pushed by the Carter administration in the 1970s, and briefly tried in the 1979 setback from the second oil price increase, under the designation of the locomotive theory, — the major countries pulling the world out of recession like locomotives in tandem. This time, however, the spending produced inflation more conspicuously than increased output and employment. The uneven efforts of the United States, Japan and Germany were abandoned as one country and another found itself accelerating its inflation and worsening its balance of payments, without enjoying the anticipated lift to exports.

### *Monetarism*

Keynesianism was still riding high in the 1960s, despite its weaknesses and failures, and a participant-observer such as Walter Heller exulted in his Godkin lectures at Harvard that the economy was under control<sup>13</sup>. A counter-revolution had already begun, however, and gathered force in the 1960s as inflation picked up. The Keynesian explanation for the inflation was that the 1964 tax cut had been delayed by legislative lag, and that increased taxes called for by increased spending for the Vietnam war was not undertaken because President Lyndon Johnson did not want

<sup>13</sup> WALTER HELLER, *New Dimensions of Political Economy* (Cambridge, Mass.: Harvard University Press, 1966).

the Congress to question his policies in that country. The failure, it was claimed, was one of politics, not economics.

Initially monetarists had opposed the Keynesian view that money did not matter with the antithesis that money alone mattered. A Hansen-Hicks synthesis based on the interaction between an I-S (investment-saving) curve and an L-M (liquidity-money) curve made clear that under ordinary circumstances money also mattered, along with spending. Monetarists emphasized the L-M curve, Keynesian the I-S.

The international analogue to the rise of monetarism in domestic analysis was a monetary theory of the balance-of-payment adjustment. The current account in the balance of payments, it was hypothesized, is the external manifestation of a disequilibrium between the demand for money in a country and the supply. When government, firms and households have too little money, they produce more goods, consume less; the process improves the balance of payments on current account as imports fall and export rise. The resulting current-account surplus acquires money for the country and restores equilibrium in the market for money. When money balances are larger than wanted by demanders, the excess is spent and worsen the current account by increasing imports and reducing exports. The market for domestic money, unlike the market for foreign exchange in the theory of floating exchanges, is cleared through quantity changes, and price has nothing to do with it. The Pigou effect noted by Alexander as one possible device to bring about balance-of-payments improvement under flexible exchange rates and full employment was generalized into the central mechanism of adjustment.

It is hard for all but true believers to put much credence in the monetary theory of balance-of-payments adjustment, and for two reasons. In the first place, the theory runs counter to economic common sense and intuition. Instead of money serving as a buffer stock to offset temporary disequilibria between income and expenditure, as in conventional economic reasoning, income and expenditure are varied to maintain a wanted stock of money. The intuitive model is stood on its head. Secondly, the theory ignores the function of the banking system in providing liquidity in the form of money. When governments, firms and households want to adjust money stocks, they borrow or repay debt. With

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a fixed domestic stock of money, the processes change interest rates and lead to capital inflows or outflows. If a country wants more money, to use an anthropomorphism, it indulges in international financial intermediation, borrowing long and lending short, acquiring by the latter process foreign-exchange reserves which serve as the basis for an increase in the domestic money stock.

Domestic monetarism has adduced a number of corollaries: efficient markets, rational expectations, the natural rate of unemployment that is impervious to policy, government deficits that crowd out private investment, even under conditions of unemployment, rather than leading to increased spending and national income. Monetarists are somewhat ambiguous on the need for a lender of last resort in financial crisis. Some think that the market can solve any crisis; others admit the possibility of occasional market failure which can be relieved, if not forestalled, by a lender of last resort. Almost all monetarists believed with Milton Friedman in the efficacy of flexible exchange rates, and particularly in clean floating — intervention by government would only make things worse, — with some ambiguity, as noted, in periods of financial crisis. The theory is also somewhat undecided on the possibility of destabilizing speculation. Efficient markets, rational expectations and the impossibility of destabilizing speculation would virtually eliminate financial crises and the need for a lender of last resort. The reasoning which goes into these refinements of monetarism, however, is almost entirely *a priori* in nature: destabilizing speculation — buying when prices are rising and selling when prices are falling — is a certain way to lose money, and losses would wipe out speculators. Since speculators exist they must make a normal profit, which means that they stabilize, buying when prices are low and selling when they are high<sup>14</sup>. Rational expectations can be saved as a theory by explaining every drastic change in prices as a consequence of new information: Jude Wanniski explains the stock-market crash of 1929, for example, by the market realization, based on the news that a Senate subcommittee had voted down a tariff on carbide, that the Hawley-Smoot tariff would be passed nine months later, be signed into law by President Hoover, lead to

<sup>14</sup> FRIEDMAN, *op. cit.* (note 8).

world-wide retaliation and a depression of major magnitude<sup>15</sup>. Occam's razor suggests a simpler theory that stock-market speculation, financed by brokers' loans had overshot reasonable values, and that the realization that prices were too high led to a panicky rush to sell. Overshooting that implies destabilizing speculation has also proved to be a feature of flexible exchange rates since 1973.

Not all monetarists believe in flexible-exchange rates, however. A somewhat schismatic group led by Mundell, Laffer and Wanniski has built a particular theory on optimum taxation — the so-called Laffer curve — and followed it with a doctrine of world monetarism, that calls for a return to the gold standard with its system of fixed exchange rates<sup>16</sup>. For their domestic policies, the group has appropriated the designation of « supply-side » economics in contrast to Keynesianism and monetarism which focus on the demand side. This is a little presumptuous since many economic theories of the postwar period have paid attention to supply: Svennilson's stress on transformation, my own discussion of the terms of trade of developing countries, and, at the peak of Keynesianism, the economists who believed that European recovery after World War II required positive reconstruction of the infrastructure and reconstitution of inventories, not merely suppression of excess demand<sup>17</sup>. The Laffer curve, moreover, is a geometric version of an old and not highly regarded opinion expressed some years back by the Australian economist and statistician, Colin Clark, that national economies would break down when a country's level of taxes rose above 25 percent of national income<sup>18</sup>.

There would be something to the external aspect of supply-side economics if the domestic part were to work. If lowering taxes were to increase investment, productivity and domestic economic growth, it might well improve the balance of payments in Schumpeterian fashion, developing new goods and new

<sup>15</sup> JUDE WANNISKI, *The Way the World Works* (New York: Basic Books, 1977), pp. 133-6.

<sup>16</sup> JUDE WANNISKI, «The Mundell-Laffer Hypothesis — A New View of the World Economy», *The Public Interest*, Spring 1975.

<sup>17</sup> INGVAR SVENNILSON, *Growth and Stagnation in the European Economy* (Geneva: United Nations Economic Commission for Europe, 1954; C.P. KINDLEBERGER, *The Terms of Trade: A European Case Study* (New York: The Technology Press of M.I.T. and JOHN WILEY, 1956), on the Marshall Plan, see HOWARD S. ELLIS, *The Economics of Freedom*, (New York: Harpers, 1950).

<sup>18</sup> This reference eludes me but I believe it is in an issue of *Lloyds Bank Review* in the 1960s.

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methods of producing old goods, thus expanding exports and displacing imports. But the first part of the formula — from lower taxes to positive growth — has been characterized by one Republican as « voodoo economics », and intellectually abandoned as unworkable by President Reagan's budget director, David Stockman.

World monetarism and a return to the gold standard seem unlikely to gain converts beyond the limited number of early disciples. The former has an intellectual foundation in the article by McCloskey and Zecher who claim to prove that world income and prices fluctuated with world holdings, and that central-bank policy in all countries before World War I was an exercise in futility as it merely redistributed gold from one country to another<sup>19</sup>. An important strand in the thought of today's proponents of the gold standard comes from rational expectations. They believe that a credible decision to return to the gold standard would correct inflationary expectations that now dominate financial markets everywhere, and especially in the United States, this despite the fact that the Reagan election and program, and the Federal Reserve monetary targets, have failed to alter market expectations.

Monetarists and supply-side world monetarism are engaged in a bitter intellectual struggle in the Commission on Gold appointed by President Reagan in June 1981 with instructions to produce a report within a year. Monetarists want the Commission to support a « monetary rule » under which the Federal Reserve would be instructed to make the money stock — somehow defined — grow at a fixed rate, and are unwilling to submit either to the arbitrary pace of accretions to the national monetary stock from the United States' share of world gold production not taken for industrial or decorative uses, or to fixed exchange rates. That the proponents of gold are becoming discouraged is indicated by the fact that Lewis Lehrman, a devoted follower of Jacques Rueff's views on gold and a member of the Commission, has recently decided to run for governor of the state of New York, declaring that he could help President Reagan more by this course of action than by focussing on the work of the commission.

<sup>19</sup> DONALD N. McCLOSKEY and J. RICHARD ZECHER, « How the Gold Standard Worked, 1880-1913 », in J.A. FRENKEL and H.G. JOHNSON, eds., *The Monetary Approach to the Balance of Payments* (Toronto: University of Toronto Press, 1976).

*Structural Inflation and Deflation*

A sterile debate has been in progress for some years between Keynesians and monetarists over the causes of the 1929 great depression. Mark Blaug called it «one of the most frustrating and irritating controversies in the entire history of economic thought, frequently resembling medieval disputations at their worst»<sup>20</sup>. Keynesians don't believe in the importance of price changes — their theories assume prices constant, and monetarists ascribe no macro-economic importance to changes in overall prices: to believe such changes important is «money illusion» in their eyes, confusing nominal with real income. When the price level changes, for example declines, some lose but others gain, and the net effect is zero. Such a view, however, ignores differences in propensities to spend and save among groups, lags, dynamic effects, and ratchets. When the price of oil rises, for example, there is world recession because the low-absorbing OPEC members increase their saving more than the oil-coming countries reduce theirs. Lags were important in the world depression, when losers lost rapidly, and gainers were slow to become aware of increases in real income, resulting in a net decline in spending. Dynamic effects follow from lags. Banks of losers can fail, whereas gains of others do not lead to formation of new banks. For ratchets, note that in structural deflation, with fluctuating exchange rates that vary in sinusoidal fashion, depreciation leaves prices unchanged and appreciation forces them down. When an exchange rate has completed a full cycle, national prices have been forced downward. Contrariwise, in a world of inflation, appreciation leaves prices unchanged and depreciation raises them, so that a full cycle with the exchange rate back where it started results in price increases. The appreciation of the dollar from \$4.86 to the pound to \$3.25 between September and December 1931 put enormous deflationary pressure on U.S. prices. In the 1970s and '80s, with the dollar rising and falling 10 percent through five or six rotations, the ratchet raises prices both in the United States and abroad. In particular, OPEC raised the price of oil each time the dollar depreciated, but failed to lower it when the dollar rose again.

<sup>20</sup> MARK BLAUG, *The Methodology of Economics* (Cambridge, Eng. and New York: Cambridge University Press, 1980, p. 221).

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Exploration of structural inflation is proceeding, and there are some who believe that the major oil price increases of 1973 and 1979 will be found responsible not only for the inflation and the recessions of 1974-75 and 1981-82 but also for the slowdown in productivity in the United States. The essence of structural inflation is that society is faced with a burden and various groups within the totality seek to make sure that none of it falls on them. When 100 percent of the population wants 110 of national income, there is likely to be 10 percent inflation, a deficit in the balance of payments as spending (absorption) exceeds output, or some combination of inflation and deficit. The same occurs when income is cut by 10 percent. In an earlier time, such as after World War I, the burden of shortfalls of income would lie on a few sections of the economy unable to protect themselves — rentiers, pensioners, civil servants (with their infrequently adjusted contracts). Today, with experience, this sort of lid on inflation is unavailable: social security pensions are indexed to the cost of living — too generously as it happens in the United States, — and interest rates rise to protect the rentier.

### *Incomes Policy*

A few economists cling to a belief in incomes policy, a euphemism for wage and price controls. Among the most notable is J.K. Galbraith who served with great success in the U.S. Office of Price Administration during World War II. But price and wage control in that war, when the patriotic motive was strong, was very different from controls in peacetime or during an unpopular war. Moreover when inflation has been continuous over an extended period of time, it gets built into long-term wage contracts with different terminal dates, and there never is a time that is suitable to eliminate escalator clauses all at once. Whereas all would gain by stabilizing wages, or limiting increases to average productivity gains, the fallacy of composition that holds that the whole is less than the sum of the parts has some group say at every stage: « We will be happy to stabilize wages just as soon as we have caught up ». Leapfrogging in such a situation is inescapable.

The economy is thus thoroughly politicized. Inflation is no longer a purely economic question that can be cured by getting the money supply right — assuming that it were easy to choose

the right money concept, — or the right money supply and the right national budget surplus, balance or deficit. Assar Lindbeck has discovered a political business cycle: politicians seek to stabilize the economy just after being elected. As the next election approaches, they ease up to expand income and employment so as to gain votes. But inflation in most countries is preferred to unemployment, on trend as well as cyclically<sup>21</sup>.

One aspect of the politicization of economics is the collective good. A distinction has been made, going back as far as Adam Smith, between private goods, consumption of which by one person excludes consumption by all others, and public goods, such as roads, national defense, sound money, macro-economic stability and the like, consumption of which by one person — short of some level of congestion in the case of city streets — does not affect consumption by others. Political scientists believe that public goods are underproduced, not for the reasons underlined by Galbraith, the advertizing of private goods, but because of the « free rider ». Why should I contribute to the cost of providing public goods if I am going to obtain my share anyhow? Public goods thus require the application of force, as in taxes, or occasionally potential consumers are induced to pay their share through inspired leadership. In some instances, as in a military alliance, the leader will bear a disproportionate share of the cost, being paid off in glory. Between private and public goods lie collective goods, available without extra cost for everyone within the club, but from which outsiders are excluded<sup>22</sup>.

Olson's theory of collective action makes the point that competing collective groups may block each other and inhibit the forward progress of the totality<sup>23</sup>. Tariffs which benefit some groups as they leave the total worse off fit this analysis, and so does inflation, with farm, industrial, governmental and labor sectors, each looking after its own collective interest at the expense of the general interest. Olson hypothesizes that Germany and Japan did so well in economic growth after World War II because the war had destroyed the various interest groups. Britain and the

<sup>21</sup> ASSAR LINDBECK, « Stabilization Policy in Open Economies with Endogenous Politicians », in *American Economic Review*, vol. 66, May 1976, pp. 1-19.

<sup>22</sup> N. FROELICH, J.A. OPPENHEIMER and J. YOUNG, *Political Leadership and Collective Goods*, (Princeton: Princeton University Press, 1971).

<sup>23</sup> MANCUR OLSON Jr., *The Logic of Collective Action: Public Goods and the Theory of Groups* (Cambridge, Mass.: Harvard University Press, 1965).

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United States where collective interests survived did less well<sup>24</sup>. There is a striking contrast between the German monetary reform of 1948, with its sharing of war burdens (*Lastungsausgleich*) and the 1923 inflation in the Weimar republic when industrialists in cartels, Junkers in agriculture, and labor organized in strong unions and political parties all survived as powerful forces. Some had interests of their own, such as getting back into world markets (German iron and steel) or not paying reparations, but each was determined not to let the burden of reconstruction and reparations fall on it in a major way. The slowdown in Germany and Japan today after 35 years of peace may be related to the rebuilding of collective groups, equipped with power, beginning to block one another.

In a world of collective groups with shifting interests no simple monetary rule — let money grow at  $x$  percent per year no matter what, or adopt the gold standard, clean floating of exchange rates, or reduce taxes 10 percent a year for three years *à la* Kemp-Roth, no simple rule of any kind can serve to manage the economy. Interventionist management will make mistakes; given reasonable economic intuition, however, it is likely to be less disastrous than a policy of adopting a simple rule and forswearing all touching of the controls. It is doubtless correct that when the average economy is going along well enough, less intervention is better than more. Like the human body, the market has great resilience. But just as bodies occasionally fall sick, so markets occasionally fail, and on those occasions, perhaps rare, medicine may be needed.

#### *Mathematical Theory and Econometrics*

It is widely thought in the economics profession that escape from a complex world in which mutual relationships change over time and any simple rule will break down in the long run lies in more sophisticated theory and measurement. The analogy is sometimes drawn with the powerful theoretical advances and applied studies that led to the fission and fusion of the atom in physics, or to recombinant DNA in biology. Having received my

<sup>24</sup> MANCUR OLSON Jr., « The Political Economy of Comparative Growth Rates », in JAMES GAPINSKI and CHARLES ROCKWOOD, eds., *Essays in Post-Keynesian Inflation*, (Cambridge, Mass.: Harvard University Press, 1979).

economic formation in the 1930s and served 12 years thereafter in government with no opportunity to catch up, I am qualified to pontificate on the prospect for breakthroughs neither in mathematical economics nor econometrics. There are, however, reasons to be sceptical. Some mathematical theory comes across as obvious: Arrow's impossibility theorem, for example, has overtones of the impossibility of squaring the circle and Tinbergen's theory of economic policy — that one must have as many instruments as targets —, seems close to the rural platitude that one can't kill two birds with one stone, or to grade-school algebra which teaches that one must have as many equations as unknowns. The 1981 Nobel prize winner in economics, James Tobin, disarmingly describes the Tobin-Markowitz model as proof of the undesirability of putting all one's egg in one basket.

Some mathematical theory would appear to have become art for art's sake. A young instructor at M.I.T. asked a colleague in my overhearing: « I have just developed an interesting new model: could you help me find a use for it? » More and more higher and higher powered mathematics would seem to be applied to smaller and smaller problems, like shooting sparrows with big guns. It may not be true, as Schumpeter claimed, that there is no place you can go by train that you cannot get by walking — the metaphor does not apply to airplanes, for example — but mathematics without economic intuition is empty.

The same may or may not be true of econometrics. Raymond Goldsmith said to me privately that if something cannot be measured it does not exist, adapting the Latin tag about *actis* to read « *Quid non est in numero, non est in mondo* ». To this I replied, « I love my wife .83 ». Lionel Robbin's footnotes is worth recalling to the effect that the only change the Great Depression made on the National Bureau of Economic Research with its quantitative apparatus was to require it to change its trend adjustments<sup>25</sup>. To match the quotation from the young theorist above, I recall a young man at the U.S. Treasury at a consultants' meeting saying that the Treasury did not know what to do about the dollar exchange rate because the R-squares on their latest regressions had turned out to be low.

<sup>25</sup> LIONEL ROBBINS, *The Nature and Significance of Economic Science*, 2nd. ed., 1935 (reprinted New York: St. Martin's Press, 1962).

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It took econometrics some time to recognize that if the numbers produced a nonsense result which flew in the face of *a priori* knowledge it was necessary to tread warily. Number-crunching — running and rerunning regressions with slightly altered variables and relationships, and finally adopting the theory with the best fit as valid — has finally gone out of style. In cliometrics — the application of econometric models to economic history —, elaborate manipulation designed to disprove the conventional wisdom on a subject often draws out of the work only the assumption already put in: if canals and railroads are assumed each to have constant-cost supply curves over the entire relevant range and both are in use at a given time, the expansion of railroads — or of canals for that matter — contributes nothing to economic development. And I find myself uneasy when econometricians discard outlying observations which disturb the fit, cut off and throw away some of the data, disaggregate, and throw in dummy variables.

One can hope for a revolutionary breakthrough, and it may come from mathematical economics and/or econometrics despite core theory, growth theory, Granger series, and other fads that have faded. I hope so. I am not confident.

### *Economic History*

Among the overstatements of which I have been guilty is « Economic history, like all history, is absorbing, beguiling, great fun. But for scientific purposes, can it be taken seriously? »<sup>26</sup> I now tend to agree rather with Donald McCloskey who has asserted that economic history develops « more facts, better facts, better economic theory, better economic policy, and better economists », adding to the list, however, although perhaps subsumed within better economists, « better economic intuition ».

The great fun part of economic history is to take a conventional view of some matter, build a model and test it econometrically to « prove » that what was universally believed to have been the case is wrong. The improvement in economic analysis comes when *a priori* notions favoring monetarism, flexible exchange rates, world monetarism, supply-side economics, interna-

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<sup>26</sup> C.P. KINDLEBERGER, *Economic Growth in France and Britain, 1851-1950*, (Cambridge, Mass.: Harvard University Press, 1974), p. 332.

tional financial intermediation, and the like are tested against historical episodes. But it must be remembered that history may or may not repeat itself because of either changes in initial conditions, or the Heisenberg principle which means that people have learned.

The key question is what is general and what is episodic. It may be that economists are best at partial-equilibrium analysis: if this, then that, holding the rest of the system unchanged. History on the other hand, is largely a general-equilibrium problem in which repercussions echo and reverberate through the system. The experience of the 1970s and early 1980s seems to me to go some distance to raise questions about the market value of some of the intellectual assets in the balance sheet of international economics.

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## RESUME

Dans cet article est examinée la validité de l'affirmation que dans l'économie internationale les rigides formulations théoriques et les prescriptions politiques qui proviennent d'elle dans les années récentes se sont montrées inefficaces. Cela pour ce qui concerne, par exemple, le multiplicateur du commerce étranger, de dérivation keynésienne, les taux de change flexibles, les théories monétaires de la balance des payments etc. On exprime un certain scepticisme sur les capacités des formulations mathématiques et des vérifications économétriques de produire des théorèmes de valeur explicative durable. Les difficultés proviennent du fait que les opérateurs économiques, les entreprises et les marchés apprennent grâce à l'expérience et réagissent à ces stimulants d'une façon différente dans des diverses occasions.

Quelques considérations positives sont exprimées en ce qui concerne les théories sur l'inflation et sur la déflation structurelles et l'intermédiation financière nationale. On suggère aussi que l'histoire économique peut être d'aide pour mettre en évidence la façon où les opérateurs apprennent et varient leurs réponses aux sollicitations extérieures.

## ZUSAMMENFASSUNG

Es wird die Meinung geäußert, dass strikte theoretische Formulierungen auf dem Gebiete der Weltwirtschaft und die wirtschaftspolitischen Vorschriften, die von diesen abgeleitet worden sind, in den vergangenen Jahren zusammengebrochen sind. Diese Meinung bezieht sich auf den Multiplikatorprozess nach Keynes, auf die flexiblen Wechselkurse, die monetären Theorien über die Handelsbilanz und dergleichen. Skepsis wird darüber geäußert, dass mathematische Formulierungen oder ökonomische Tests Theoremen von bleibendem erklärendem Werte liefern können. Die Schwierigkeit besteht darin, dass Individuen, Firmen und Märkte durch Erfahrung lernen und auf derartige Anregungen auf verschiedene Art und Weise und bei den folgenden Gelegenheiten reagieren. Etwas Positives findet man in der strukturellen Inflation und Deflation und in der internationalen Vermittlung. Es wird vorgeschlagen, sich der Geschichte der Wirtschaft als Hilfe zu bedienen, um zu erfahren, wie die Akteure der Wirtschaft lernen und ihr Verhalten ändern.

## RIASSUNTO

In questo articolo viene esaminata la validità dell'affermazione che in economia internazionale le rigide formulazioni teoriche e le prescrizioni politiche che da essa provengono negli anni recenti si sono dimostrate inefficaci. Questo per quanto riguarda, ad esempio, il moltiplicatore del commercio estero, di derivazione keynesiana, i tassi di cambio flessibili, le teorie monetarie della bilancia dei pagamenti e così via. Viene espresso un certo scetticismo sulle capacità delle formulazioni matematiche e delle verifiche econometriche di produrre teoremi di valore esplicativo durevole. Le difficoltà provengono dal fatto che gli operatori economici, le imprese ed i mercati assumono insegnamento dall'esperienza e reagiscono a tali stimoli in modo differente nelle varie occasioni. Qualche considerazione positiva viene espressa per quanto riguarda le teorie sulla inflazione e deflazione strutturali e l'intermediazione finanziaria internazionale. Viene anche suggerito che la storia economica può essere di ausilio nel mettere in evidenza il modo in cui gli operatori economici apprendono e variano le loro risposte alle sollecitazioni esterne.

## SUMMARY

The proposition is put forward that tight theoretical formulations in international economics, and the policy prescriptions derived from them, have broken down in recent years. This applies to the foreign-trade multiplier of Keynesian derivation, to flexible exchange rates, monetary theories of the balance of payments, and the like. Scepticism is expressed that mathematical formulations or econometric testing can produce theorems of lasting explanatory value. The difficulty lies in the fact that individuals, firms and markets learn from experience and react to similar stimuli in different ways on successive occasions. Some value is found in structural inflation and deflation, and in international financial intermediation. It is suggested that economic history can be helpful in pointing out how economic actors learn and alter their responses.

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