A Post Keynesian Explanation of the Causes of the Current World Slump

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SUMMARY: This paper argues that the current global recession may be interpreted as the widely anticipated post-war continuation of the Great Depression some 40 years late. It suggests that those factors which prevented the resumption of slump conditions in the 1950's had all been eliminated by the 1980's. The major cause of this change in conditions was the inability of the Bretton Woods conference to find a suitable solution to the problem of assymetric adjustment of debtor and creditor countries. Once the US became a major debtor country this lacuna created difficulties which eventually eliminated those factors responsible for the post-war recovery.

> "Keynes was worried from the standpoint of the world, and more specifically from the standpoint of Britain, that there would be too much bias toward economic restraint. ... Ironically ... Keynes's concerns in 1944 became American concerns thirty years later when Germany and Japan built up huge surpluses, but the problem has never been satisfactorily resolved." (Volker, p. 10)

I. Introduction: Back to the Future[1]

Let's pretend it's 1946 and we are trying to write a description of conditions in the world economy:

> In a recently liberated Europe, production is stagnant; unemployment is endemic. The elimination of State controls in Central and Eastern Europe has produced economic chaos and pockets of famine and disease. The defense industries, faced with the necessity of conversion to peacetime production, are laying off workers and closing facilities. Workers seeking employment find their skills outdated at both blue and white collar levels. Fighting is still going on in the Balkans, and there are fears of uncontrolled immigration and return to non-democratic rule. In the US, unemployment is rising with stable prices and low interest rates, but government indebtedness is at historic levels; bank balance sheets contain more government securities than loans to private businesses.

The point of this exercise is to show the similarity between post-war economic conditions and those of today. If you were an economic forecaster in 1946, you probably would have extrapolated from the relevant past. The world economy had only managed to emerge from what seemed to be conditions of permanent Depression by the increase in defence expenditures and mobilisation which the outbreak of war transformed into full employment at maximum potential growth. Post-war demobilisation and closure of the defence industries implied that the Great Slump would resume more or less as it had been left in 1939. There would be no jobs for the returning troops and Rosie the riveter of the munitions plants would exit the labour force. Impoverished Europeans, unable to provide the savings required to rebuild European industry rapidly, would be condemned to permanent economic stagnation. The American proposal to return Germany to a pastoral economy had an air of necessity as well as political strategy about it.

Unless you were a Russian economist with unbending faith in the efficiency and vibrancy of capitalism, your forecast would have been for a resumption of the 1930s depression. Although your forecast would have been the same in 1947 as in 1937, your explanation would likely have changed from a pre-war emphasis on deficient profits due to high wages, or excessive government involvement

[1] Revised draft of a paper prepared for the 11th Biennial Keynes Seminar, University of Kent, Canterbury, November 1993. The author has benefitted from suggestions by W. Milberg and L.R. Wray on an initial draft, but they bear no further responsibility. Unless otherwise noted, the references to factual events are based on Martin Mayer's (1974) invaluable insights on the US banking system and on Volcker and Gyohten's (1992) retrospective assessment of international conditions in the period.

in the economy reducing private savings available for investment, grounded in the "Treasury view", to an explanation based on the new "Keynesian" theory based on a deficiency of private expenditures. The end result, however, would have been much the same. As a forecaster, you would have been proven wrong. But, only in the short run.

The slightly provocative answer that will be given to the title of this paper is that the current slump is the result of a time warp: the global economy is currently experiencing the post-war slump that was confidently expected in 1946 because the particular factors which prevented it from occurring at that time had all been eliminated by the beginning of the 1980s. The explanation of the current slump is thus also an explanation of the disappearance of the factors which produced the relative success of the post-war industrialised economies in overcoming the threat of high unemployment and stagnant growth. There are four factors which I would like to highlight.

Four Factors of the Apocalypse

The first, and most obvious of the four, is the prospective decline in military expenditures, expected after the end of the war in 1945, but reversed by the pursuit of the Cold War and the erection of the Iron Curtain which served as the direct impulse for the short-term financing for reconstruction via the Marshall Plan and then for a sustained demand stimulus through the arms and space races. The "Report from Iron Mountain" becomes reality.

The second factor is the reversal of the belief that government budget policy can be used to influence the aggregate behaviour of the economy. This return of the "Treasury view" was initially a theoretical proposition advanced by the New Classical economists, but it appeared to be confirmed in the growing impotence of government fiscal policy to influence aggregate output and aggravate inflation. The substitution of tight monetary policy in conditions of large and growing government expenditure deficits has created an increasing stock of debt as interest rates have exceeded rates of growth of national income. Attempts to slow the growth of public indebtedness have shifted the composition of government expenditures from capital to consumption expenditures, and from public consumption expenditures to transfers and entitlements, in particular interest payments, pensions and health benefits. A given proportion of deficit spending to national income thus has a reduced impact on overall demand and employment.

The third factor is a return to international financial market conditions similar to those of the interwar period as the result of the breakdown of the Bretton Woods Agreements which had used controls of international capital flows and coordination of monetary policies to ensure stable exchange rates. The 1980s were characterised by increasingly volatile international capital flows and increased payments imbalances, leading to large shifts in exchange rates and associated adjustments in trade and capital flows within the industrialised world and in a shift of capital flows away from developing countries towards developed countries.

The fourth factor is the ability of the US banking system to provide financing for US recovery at low and stable interest rates. In the post-war period bank portfolios were flush with government securities, the result of the decision to finance the war effort via borrowing from the public at low interest rates, while in the late 1980s banks are working off massive loan losses and reducing commercial lending to cut their risk-weighted assets to meet the new international minimum capital requirements. The result has been a return to conditions of asset price deflation similar in nature to those of the 1930s.

These four conditions, falling aggregate demand, the necessity of using fiscal policy to reduce outstanding debt rather than initiate recovery, international currency instability exemplified by the use of devaluation to generate export demand and asset price deflation and reduced bank lending to finance business due to financial instability come very close to reproducing the conditions of the Great Depression which were expected to produce the post-war slump. But, they have done so in the 1980s, rather than the 1950s.

The Causa Causans: Asymmetric International Adjustment

The main thesis that will be put forward is that the major cause of the current slump is to be found in the fact that the Bretton Woods Agreements did not resolve the problem of the destabilising nature on global demand of asymmetric adjustments to disequilibrium by creditor and debtor countries. This problem was rediscovered in Triffin's dilemma of a national currency playing the role of international store of value due to its use as the international reserve currency.

It was the failure to resolve the problem of asymmetric international adjustment which led to the elimination of fiscal policy as an active policy tool. This in turn placed excessive emphasis on monetary policy to provide internal and external adjustment. This inappropriate use of monetary policy destabilised the financial system and produced historically high levels of interest rates which further weakened the role of fiscal policy as debt and deficits were bloated by high financing costs. It also induced changes in the financial system which permitted the excesses of merger and acquisitions deals which relied on reductions in expenditure and employment in the acquired firms for their success. Thus the global economy reached the end of the 1980s with the governments of the advanced economies all facing the necessity of cutting expenditures just when international events were causing global demand to fall, with the private sector facing the necessity of reducing costs to eliminate excessive debt burdens just when globalisation was increasing external competition, and with banking systems in conditions which aggravated the decline in expenditures by contracting lending and keeping interest rates excessively high. The events of Eastern and Central Europe simply reinforced these problems by reducing demand and increasing international competitive pressure.

II. The End of the Evil Empire

Detailed explanations for the decline in defence spending lie outside the purview of this paper. Explanations that rely on the success of US economic policy in the 1980s in particular, and the success of the capitalist market-based mode of production in general, as the cause of the collapse of the "evil empire" seem to overlook the extreme weakness and fragility that this "success" has produced in the industrialised economies. Rather, the 1990s seem to be perilously and paradoxically similar to conditions of the second and third decades of the century which produced the Great Slump and the search for alternative forms of organisation of the economy such as those which were experimented without success in Eastern Europe.

Others have sought explanation in the technology gap created by the Strategic Defense Initiative. From this point of view, some have gone so far to suggest that "perestroika" was an extreme form of "detente" (the ultimate communist plot designed to bring about the downfall of Western imperialism), embarked on to convince the West to provide the technology required for the restructuring of the Soviet military which the Soviet economic planners were incapable of producing themselves. This explanation is used to justify refusal of aid to restructure the formerly planned economies and continued vigilance, including maintaining defence spending levels in the West![2]

Not only are the causes of the reduction in defence spending uncertain, so is the likely magnitude of the reductions. For the US it is estimated that the Pentagon procurement budget has fallen from $127 billion in 1985 to $45 billion in 1993, measured in constant 1993 dollars, and is expected to continue to decline by from 5% to 9% per year. The total defence budget has fallen from around $375 billion to $250 billion over the same period, again in constant dollars. Thus, while the size of the cuts is uncertain, the direction is certainly unambiguous.

III. Asymmetric Adjustment: The Tables Turn on the US

As noted above, there is a prior cause acting on the last three factors which economists often tend to overlook because of the tendency to view the performance of each economy individually, as a closed system.[3] The Bretton Woods System was designed to restore multilateral free trade and currency convertibility in the context of stable, but adjustable, par values and controlled capital flows. Yet, in the early period of Bretton Woods, trade discrimination by Marshall Plan beneficiaries against US exports was encouraged, and competitive devaluation of currencies relative to the dollar within the context of the European Payments Union was permitted, in exchange for cooperation and planning of the reconstruction effort within the OEEC.

The main concern of the British delegation to Bretton Woods was to prevent a return to slump conditions due to the reduction in demand that would be caused by the asymmetric adjustment burdens placed on post-war creditor and debtor countries. In the event, this problem was resolved by the willingness of the US to provide financing for the deficit countries within fairly wide limits created

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[2] Punctual as usual, the Wall Street Journal early instantly provided no less than two examples in the issue of 24th August (Gates and Melloan) arguing against disarmament and in favour of preserving SDI.

[3] The common source is usually located in what John Hicks christened the "crisis of Keynesian economics". Here "Keynesian economics" is defined as the system of thought based on the "neoclassical synthesis", itself an outgrowth of the cold-war politics in the McCarthy period. In this view the content of Keynes' theory is reduced to a justification for deficit financed government spending based on impediments to the efficient functioning of markets and totally ignores any impact of monetary and financial factors.

by Marshall lending and other military expenditures and transfers. The amount of restraint required to maintain payments balance was reduced so that asymmetric adjustment did not retard global expansion. Thus the problem which Keynes's proposal for a "Clearing Union" was meant to remedy, and which was dealt with in the final Bretton Woods Treaty via the "scarce currency" clause, seemed of minor practical importance. Indeed, during this period of so-called "dollar shortage" the clause never had to be invoked because a sufficient supply of dollars was available through other channels.

As a result of this practical solution to the problem of asymmetric adjustment the US was running substantial deficits on its overall balance of payments position by 1958, and its gold holdings were falling from the record post-war high of around 60% of total world stocks. As a result of the combination of the sustained dollar expenditures due to cold war commitments, and the rapid recovery of industrial competitivity and equilibrium in the trade accounts of the European countries the "dollar shortage" quickly turned into a "dollar glut". In addition, the creation of the "Common Market" in Europe in tandem with currency convertibility attracted substantial US direct investment in Europe. The excess supply of dollars led in October 1960 to the price of gold rising above its permitted fluctuation band around the official parity of $35 an ounce, to $40. This was not a traditional "balance of payments" crisis, for the trade balance remained in surplus; the deficit was primarily composed of foreign investment and "political" expenditures for foreign aid and military transfers. Nonetheless it signalled that the US was becoming a "debtor" country.

Initially the problem was diagnosed as what came to be known as the "Triffin dilemma", the paradox of a national currency serving as an international means of payments and store of value due to its "reserve currency" status. While overall payments deficits are required to supply foreign users with the international currency they require, the larger the deficits the lower the confidence in the currency, particularly if its value is pegged to gold and the outstanding foreign official balances exceeded the gold stock (as was the case of the US dollar by 1964). There was then an inherent conflict between supplying sufficient liquidity to satisfy the requirements of foreign holders and keeping the credibility of the fixed gold price.

The problem was further complicated by the stagflation of 1958-60, which along with the birth of the "ICBM gap", gave currency to the "GNP gap" and Kennedy's election promise to eliminate it by expansionary economic policy. A series of measures were initiated to try to resolve the Triffin dilemma, starting in 1960 with the concept of "payments offsets" with countries receiving US military aid, the creation of the General Agreements to Borrow and the informal G-10, outside the official structure of the IMF. But, the basic problem was that defending the external value of the dollar would normally require tighter monetary policy which would conflict with the promise of fiscal policy stimulus to the domestic economy.

To resolve this dilemma a series of creative policy measures to de-link the domestic and foreign impact of monetary policy were introduced. The best known is "Operation twist", which attempted to invert the yield curve[4] (something that seems to be much easier nowadays) to render expansive fiscal policy for domestic recovery compatible with reduced capital outflows and an improvement in the payments position. The interest equalization tax was also an attempt to synthetically create the dampening impact of higher long-term interest rates on capital outflows without actually having to tighten domestic monetary policy and produce a dampening effect on the domestic expenditures.

It was the same concern for the conflict between domestic and foreign equilibrium which tipped the balance in favour of tax reductions rather than increased government expenditure as the basis of expansionary fiscal policy. Kennedy's advisers (with the exception of Galbraith, who was promptly banished to India) argued that lower taxes and investment incentives would raise productivity, reduce domestic costs and thus reinforce the external position of the dollar, while increasing government expenditures would have the opposite effect because it would cause the trade balance to deteriorate and increase investment abroad.

With the benefit of hindsight, it is easy to recognise that the cause of these difficulties was not the Triffin dilemma, rather it was the problem that Keynes had originally raised in the Bretton Woods discussions -- asymmetric adjustment. Only now the US was no longer the surplus country, the surpluses were in Europe and Japan. The economic policies which were being put forward to deal with domestic conditions were subject to international constraints. The entire decade of the 1960s may be viewed as one long, agonising attempt to convince these surplus countries to expand their economies more rapidly in order to allow the US to avoid restrictive domestic economic policy in order to defend the gold value of the dollar. Ironically, the US was no more successful in convincing the surplus countries to cede their advantage than Keynes had been in trying to convince the US twenty years earlier when the conditions were reversed.

From this perspective the weakness of the scarce currency clause as a remedy for global demand failure becomes evident, for it was based on the assumption that the country supplying the international currency would also be the surplus and creditor country. It was not intended to apply to a number of individual members' currencies, none of which played a major role in international reserves or as an international means of payment. Consideration was never even given to invoking the scarce currency clause for surplus countries such as Germany in the 1960s! The nearest equivalent,

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[4] After the Fed-Treasury Accord of 1951 the Fed refused to continue to maintain the "pattern of rates" by intervening in the government securities market to peg long and short rates. Under the new Chairman, W. Martin (who had negotiated the Accord as a Treasury official) the Fed operated open market operations in short-term "bills only", on the ground that this only changed the quantity of reserves, leaving free market forces to set interest rates across the maturity spectrum. The introduction of "Operation Twist" thus represented the abandonment of that policy, which many viewed as both theoretically flawed and as limiting on the Fed's freedom of action as the pre Accord situation.

This is also the period in which the Fed allows the CD market to develop (see below). It is interesting to note that one of the benefits that Fieldhouse gives for CDs is their removal of funds from short maturity instruments, driving up short rates and reducing incentives to invest abroad.

the General Agreements to Borrow which gave rise to the Group of Ten, and the semi-official Central Bank swap arrangements, were all informal attempts, outside the official channels of the IMF, to remedy the deficiencies of the scarce currency clause.

By 1965 the French had started to argue for the restoration of a formal gold standard system, which would have greatly aggravated the difficulties due to the absence of a means of offsetting the problem of asymmetric adjustment. With discussion taking place in terms of the US exporting inflation and unemployment, competing views on appropriate economic policy clouded the real source of difficulty in the asymmetry of adjustment burdens as the problem to be resolved. As a result, attention turned to exchange rate adjustment as the only alternative, other than protectionist measures, to expansion in the surplus countries. The US eventually had to force the issue of dollar devaluation by unilaterally suspending the dollar convertibility of gold and introducing the 10% import surcharge in 1971.

The failure to solve the asymmetry problem thus led to the breakdown of exchange rate stability and the acceptance of more or less freely flexible exchange rates as an alternative solution. But the introduction of flexible exchange rates simply converted the problem into one of competitive devaluations. The 1970s and 1980s have been one long repetition of attempts by the US to convince surplus countries to expand under the threat of further dollar devaluation. A relative price adjustment was thus substituted for an aggregate demand adjustment in an attempt to force the latter.

However, by the time the fiscal package of tax reductions was finally approved (under the Johnson administration) in late 1964, the increased expenditures they were supposed to make unnecessary were occurring in the form of the acceleration of defence expenditures in Viet Nam and the introduction of the Great Society spending programmes. The GNP gap quickly disappeared as the government budget moved back towards balance, but the increased government expenditures now argued in favour increased fiscal restraint. In a repeat of the Marriner Eccles debate during the 1950's Korean war experience, fiscal policy turned out to be a one-way street which went up, but not down. The failure to cut expenditures or increase taxes as expansion appeared to run out of control finally led to action by the Federal Reserve to substitute monetary restriction for the absence of fiscal restraint at the end of 1965. Again, this decision was taken against the backdrop of the need to bolster international payments and the decision to strengthen the voluntary restraints on foreign lending by banks and corporations.

The conflict between international political influence and domestic economic stability, and the failure to discern the linkage between domestic economic conditions and international political power marked the end of "Keynesian" government budget measures to control aggregate expenditure; aside from two temporary tax surcharges, active fiscal restraint would never again be used to control an economic expansion. This change in the operation of fiscal policy then also produced a shift in the operation of the Federal Reserve's monetary policy, which was increasingly used as a substitute for fiscal policy.

IV. Economic Policy and the Banking System

As already noted, the banking system emerged from the war with substantial holdings of government securities which served as a virtually unlimited source of reserves for increased lending. After the war, as Marriner Eccles' calls for restrictive fiscal policy were ignored and the Korean war expansion threatened price stability, the Fed became increasingly concerned to control this source of reserves to finance additional lending. This early dispute over the use of fiscal policy as a countercyclical tool cost Eccles his job as Chairman of the Board of Governors in the acrimonious Fed-Treasury Accord of 1951 which returned control of interest rates to the monetary authority.

The ability to influence rates was important since the Fed could only limit banks' sales of their Treasury securities to raise reserves by driving down the price of securities sufficiently to cause the capital loss on the banks' security portfolio to exceed the interest margin from increased lending. In the immediate post-war period this was not difficult, considering that most securities had been purchased at interest rates of less than 2% (the "pattern of rates" used during the war pegged the long rate at 2.5%). The Accord thus gave the Fed the ability to control bank lending by influencing security prices.

However, the Fed's freedom to increase rates on government securities not only made Treasury refunding of the debt more expensive, it also increased the opportunity cost to large corporations of holding bank deposits with zero interest rates mandated by Regulation Q when the rising rates on Treasury bills and other money market instruments provided attractive alternative methods of holding liquid funds. Smaller depositors where increasingly attracted by savings deposits in savings and loans banks which were not restricted by Regulation Q.

Regulation Q was introduced in the 1935 New Deal Banking legislation and set a maximum rate that could be paid on demand deposits of 0%, with 2.5% limits on banks' savings and time deposits.[5] Given the range of rates that prevailed in the 1930s and during the war, the Regulation was benign: rates on short-term three-month Treasury bills were three-eighths percent and long bonds were pegged at 2.5%. The rate advantage on bills certainly did not offset the inconvenience compared to bank deposits, while savings and time deposits offered no advantage over long Treasuries. However, the regulation had been written to control rate competition for deposits among banks in a period of low government indebtedness and thus presumably without consideration of the possibility of rate competition from non-bank borrowers of short-term funds.

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[5] It is tempting to view the zero rate on demand deposits as the money market equivalent of fixed commissions in the stock market. Large depositors ended up paying a disproportionate cost for their banking services, just as large institutions ended up paying a disproportionate price for their stock trades. The stock market managed to extricate itself from the difficulties of outside competition by abolishing fixed commissions and introducing the National Market System. While this was not an inspired solution to the problem, it certainly showed more thought and intelligence that the way the Regulation Q restrictions were treated. When the equivalent of Mayday for commercial banks finally occurred in the 1980s it nearly ruined the entire industry, while the investment banks have survived to become the major competitors for banks.

It was thus in conditions[6] that the regulators had not foreseen that the Fed raised short rates after the war and banks for the first time felt competition for their large corporate deposits as funds were shifted into Treasuries to take advantage of short rates which had risen above 1%. The only possible response available to banks was to try to attract business in time deposits where rates were still competitive. But, this put them in competition with savings and loan banks whose shares were not subject to Regulation Q limits and were thus competing for individual deposits.

It was the Korean conflict which produced expansionary conditions which encouraged the Fed to break free from the final remnant of the "pattern of rates" policy and completely withdraw support from long Treasuries. The rise in rates above 2.5% thus eliminated the possibility of banks offsetting the loss in demand deposits through shifting to time and savings deposits whose maxima were now also below comparable non-bank rates. The Fed felt that it was necessary to use monetary policy for other purposes than supporting an orderly government securities market and the stability of financial markets, and acted to counterbalance the excessively expansionary impact of fiscal policy. This represented a shift from conditions in which monetary and fiscal policy are coordinated to achieve a common goal to one in which the absence of appropriate fiscal policy required offsetting monetary policy. In these conditions monetary and fiscal policy work at cross purposes and tend to reinforce each other as the increase in interest rates which would be caused by increased economic activity is reinforced by monetary restraint. Thus, the use of monetary policy as a substitute for fiscal policy due to international conditions had a direct impact in initiating the movements of funds out of the banking system and the use of financial "innovations" by banks to attempt to reverse the decline.[7]

Innovations to Protect the Corporate Deposit Base

The drain of funds from bank deposits was reversed during the 1958-60 recession as short-term treasury bill rates fell below the 3% Regulation Q maximum (it had been increased in 1957 from 2.5 to 3%) permitted on time and savings deposits with maturities of greater than 180 days. Walter Wriston made his future career at First National City Bank of New York by creating a "treasury bill" for banks, recommending the sale of time deposits to large corporate borrowers in amounts of $1

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[6] There are two ways of looking at the matter. The first is that the memory of the crash and the depression was so dominant that it never occurred to those responsible that a zero limit on demand deposits would eventually create difficulties as rate conditions returned to "normal". The other is that the authors of the legislation had in mind as the future of commercial banks something similar to what is now called a "core bank", dealing only in transactions deposits and safe assets such as government securities, an idea that could have been the result of the Fisher-Simons proposals for 100% reserve requirements. The only problem was that this intention was never made clear to the commercial bankers.

[7] Sproul (p. 139) commented on this inappropriate use of Reg Q as follows: "Originally introduced to try to protect commercial banks from their presumed folly, the authority to fix such ceilings has been stretched to serve as a handmaiden to general monetary policy in bringing pressure to bear on commercial banks to restrict their lending, and as a yo-yo device to shift funds from one type of thrift institution to another in accordance with the ideas of the authorities as to who should get what."

million[8] and side-stepped the illiquidity of the 180-day maturity by making them tradeable in a secondary market in which other government securities dealers and other banks interested in recovering their large depositors would join as market makers (and make money "riding the yield curve" see Fieldhouse, p. 46 and Mayer, p. 201). Thus the "negotiable" Certificate of Deposit (CD) was born on the basis of providing a 50 basis point premium over short-term Treasury bills and with the same liquidity provided by the same market makers.

The stability of CD funding depended on the permanence of the positive differential between the Regulation Q limit on time deposits and money market interest rates; any sharp rise in market rates which eliminated this differential would not only cause sales of CDs to fall off, it would produce capital losses on the banks' securities portfolios making it more costly to replace the funds. The creation of the CD thus made it clear that the use of monetary policy to offset the lack of timely and appropriate fiscal policy could only be achieved by driving banks towards insolvency (fortunately security portfolios, like loans, were not marked to market so that this was not evident from looking at annual reports) and making the banking system more illiquid. It was presumably to prevent this double hit on bank profits caused by monetary restriction that during the first half of the 1960s the Fed allowed the CD's to survive by adjusting the Regulation Q rates upward in step with changes in money market rates, so as to preserve the positive rate differential.

As noted above thrifts were not initially subject to Regulation Q and thus offered competition for commercial banks small household depositors. The thrifts used this freedom through aggressive marketing of their shares (in particular through print ads in which California thrifts offered premium rates for postal accounts) as an alternative to bank deposits which offered rates in late 1962 which were higher than long-term government securities and roughly equivalent to new corporate issues.

Until 1962 Regulation Q limits applied equally to both savings and time deposits in commercial banks, but after that date they were set separately; the time deposit maximum rose above savings rate limit and in 1965 special regulations unified rates on CDs for all maturities over 30 days. By the end of 1965 CD maximum rates were 150 basis points above equivalent rates on savings deposits. At this time savings deposits could only be held by individuals, not corporations, so there was an asymmetry between savings and time deposits which could be offered to both corporate and individual clients. Franklin National Bank of Long Island took advantage of this anomaly by offering its individual savings depositors "time certificates of deposit", based on the higher CD time interest rate maximum, in $1,000 minimum denominations. This not only caused a shift from savings to time certificates held in commercial banks, but more importantly it caused a massive shift from savings associations to commercial bank time deposits and a concomitant decline in funds available to finance housing.

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[8] The large size of the certificates was not originally intended to exclude small savers, but rather imposed by the banks to try to make it difficult for corporate depositors to convert demand deposits on which the banks paid nothing to more costly time deposits.

The introduction of these "consumer" time certificates of deposit was the beginning of the S&L crisis, for the banks had found an effective counter to the drain of funds to savings and loans which had resulted from their exemption from Regulation Q. The difficulties which were caused in the construction industry (particularly in California) did not go unnoticed in Congress and in an attempt to shield the thrifts from bank competition the Fed introduced a special maximum Regulation Q rate for "consumer" time deposits, below the rate on negotiable CDs, and extended these limits to savings and loans banks by making them subject to Regulation Q limits, but with a 25 basis point premium over the rates permitted to banks. This was meant to restore their competitive advantage relative to banks, but it did nothing to shield them from competition from non-bank money market instruments when market rates exceeded the maximum Regulation Q limits. To complete the attempt to seal off the negotiable CD market from individuals, the Fed introduced a $100,000 minimum size on negotiable CDs at the end of the year.

This attempt to restore relative competitive advantage between commercial banks and S&L's was overshadowed by the fact that again in 1966 the Fed decided to offset insufficient fiscal restraint with monetary contraction. It thus decided not to adjust CD rates in line with changes in market rates. This produced the double hit on banks', reducing the value of their treasury securities and making their CDs uncompetitive and reducing deposits. The result was the first modern credit crunch which brought lending to a sharp halt as banks were forced to take massive losses on the sale of securities in order to meet lending commitments to regular borrowers as their sales of CDs virtually ceased. Although this is called a "credit crunch", it is the equivalent of a "policy induced" bank run and nearly spilled over to produce a capital market break.[9]

At the time this process was described as "disintermediation", with the implication that it would be followed by a process of "re-intermediation" when conditions returned to normal and depositors returned their funds to banks and S&Ls. However, bankers considered the event a "near death" experience not to be repeated by a return to the status quo ante. There was thus a reassessment of bank operations (note that the impact on funding occurred in both commercial banks and savings and loans) which led to the shift from asset to liability management as the banks sought refuge from the possibility of another double whammy and the S&Ls sought other methods of competing with banks and the market, in particular the introduction of Negotiated Orders of Withdrawal by the end of the decade. The implication was that all efforts had to be directed towards finding sources of funds which fell outside Regulation Q.

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[9] The crunch started in the Spring when the increase in market interest rates exceeded those of the savings associations just as they were meeting increased competition from the new time deposits offered by commercial banks and in April 1966 outflows of funds exceeded inflows. The crunch on the commercial banks did not occur until late August. The run risked spilling over into a securities market crisis as well due to the impact of the forced sales of municipal and government securities by banks on the prices of the inventory holdings of government securities dealers just when banks were reducing their lending to them. Indeed, investment bankers and stock brokers were as concerned about the impending financial crisis as the bankers. See the account given by Alfred Hayes, 1970.

This decision joined the incentive to shift lending outside of the US caused by the decision to make the voluntary lending restraints obligatory and the introduction of the interest equalisation tax which resulted from the difficulties of resolving the problem of international adjustment. Banks thus shifted to offshore non-deposit sources of funding in the Eurodollar markets and the presence of US banks in the London dollar market dates from the 1966 crunch.

At the same time as banks sought new liabilities, they also moved to rationalise the management of reserves and an active interbank market for the purchase and sale of reserves, in which banks with excess reserves deposited their funds overnight with banks which were short of reserves, which had reappeared in the 1950s now became a primary source of reserves for money centre banks. Initially classified as "loans", similar to those made to retail customers, these deposits were eventually reclassified as the sale and repurchase of assets[10], which exempted them from limitations on the proportion of bank capital that could be committed to a single borrower. This is what is now known as the "federal funds" market. The Fed initially viewed this development as undermining its policy authority, but eventually supported the market on the grounds that it would make the system more fully loaned up and thus more responsive to changes in reserves.[11]

Although the credit crunch was short and the economy slowed quickly and rates fell back, the 1966 episode aggravated the underlying problems for the banks. The constraints on banks' ability to lend had made it more necessary for their corporate clients to find non-bank sources of funds, and in this period many corporations started to issue corporate paper when the credit crunch made it impossible for banks to meet their needs. Obviously this was only possible for the best credits. Banks thus continued to lose their best corporate borrowers as well as remaining subject to competition from money market instruments for their large corporate depositors and S&Ls for their individual depositors.

Some banks followed the example of their corporate clients and formed holding companies which issued commercial paper. The proceeds could then be used to purchase loans from the holding company bank. This had the effect of converting commercial paper into reserves. The Fed quickly ruled that these were in fact "deposits" and thus subject to Regulation Q. Aside from the Federal Funds market which the Fed supported, the period from 1966 onwards became a cat and mouse game in which banks sought "non-deposit" sources of funds which the Fed would quickly classify as deposits subject to Regulation Q. The S&Ls continued to make their regulated time and savings

[10] As Minsky (1957) points out, this period also saw the development of the overnight securities repurchase agreements initially based on the purchase and resale by corporations of government bonds from government securities dealers providing a market interest rate in substitution for zero rate demand deposits. The practice has also come to dominate Fed open market dealings in the money market.

[11] Minsky (1957, p.173), on the other hand, notes that it also has the effect of making the system as a whole less liquid, and thus more prone to instability, while provoking changes in funding sources which may offset the intention of policy.

deposits more attractive by making them more liquid. The result was an increased reliance on the federal funds market and other money market instruments for bank reserves, slowly raising the cost base of reserves to market levels.

Thus when the Fed was forced to substitute for fiscal restraint again in 1969, the banks fell back on an alternative first experimented in 1966, the Eurodollar markets, and raised over $13 billion from their overseas subsidiaries. It has been suggested that on this occasion the Fed encouraged the foreign borrowing in order to produce a capital inflow which would improve the payments balance and strengthen the dollar. If this was indeed the case it represents a remarkable lack of communication between the Fed and the Nixon administration. When the Fed finally introduced (retroactive) reserve requirements on Eurodollar funding in excess of funds booked before March 1969 it occurred in conjunction with a fall in rates as the economy slowed and banks moved rapidly to repay the Eurodollar lending, producing a rapid deterioration in the payments balance in 1970 and 1971.[12] This was interpreted by the Nixon Administration as a clearly unsustainable permanent outflow and the final argument for the August 15 decision to abandon gold convertibility which effectively ended the Bretton Woods System.

Thus the weakness of the S&Ls, the difficulties caused by the erosion of both the deposit and client base of the larger commercial banks, the shift from asset to liability management of bank balance sheets and the increased movements of international funds in the Eurodollar markets to offset the attempts of the Fed to influence economic activity through control of the money supply all can be traced to the difficulties caused by asymmetric adjustment and the substitution of monetary restraint for Keynesian fiscal policy restraint to dampen the expansion of the mid-1960s. It also set the stage for what was considered to be the answer to both problems --the introduction of flexible exchange rates which would free domestic fiscal policy from the necessity of external adjustment by eliminating the problem of asymmetric adjustment and make it unnecessary to substitute monetary for fiscal policy. But it was not fixed exchange rates that were the cause of the problem.

The Search for Alternative Depositors and Borrowers

When the oil crisis produced the problem of "recycling" the "petrodollars" of the petroleum producing countries, commercial banks were thus already established and active in the Euromarkets and eager for the additional source of deposit funds, as well as for the developing country "sovereign" credits to replace their eroding base of traditional corporate borrowers. It also provided an easy way for governments to avoid the tricky politics of international institutions accepting risk and

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[12] The default of Penn Central in 1970 also forced a change in policy for it placed the entire commercial paper market in difficulty as corporations found they could no longer roll over their commercial paper commitments and had to seek bank lending. In the face of widespread default the Fed eliminated Regulation Q limits on time deposits over $100,000 to allow banks to fund the required increase in lending to pay off maturing commercial paper. When the commercial paper market returned to normal this new freedom to compete for funds set the stage for increased rollover lending to LDC's and real estate investment trusts (REITs), both of which went bad when the Fed contracted in 1973-4 and rates went to unprecedented levels.

responsibility. Much as during the second world war when the government would print bonds which the banks could buy through the creation of deposits, the necessary reserves being produced by the repurchase by the Fed of bonds from the banks, now it was the international buyers of petroleum who provided the funds which the petroleum producing countries provided to the banks as reserves to allow the banks to fund the loans to individual developing countries. Instead of the Fed keeping a low, stable "pattern of rates", the Euromarkets used rollover credits to eliminate interest rate risk. However, bank balance sheets were hit in virtually the same way as in 1966 when in 1979 the Fed shifted operating procedure again to control monetary aggregates and allowed interest rates to fluctuate freely. With exchange rates now flexible, the rise in rates caused a sustained recovery of the dollar. Although the banks were protected from the interest rate and exchange rate risks, this time the double whammy hit their sovereign country borrowers who saw their interest payments increase with every rollover and the dollar amounts of their interest and principal repayments rise with the appreciation of the dollar. And the banks discovered that they were not protected from interest rate and exchange rate risk after all; credit risk had replaced interest rate risk and defaults brought about the same collapse in the value of their loan portfolios as the rise in interest rates in 1966 had produced on their security portfolios. Once again historical value accounting of loans prevented visible insolvency, but once again the attempt to use monetary policy had operated by reducing the value of bank assets and sharply reducing profitability, producing near insolvency. This time the Fed had to intervene to prevent its own policy induced bank run. And once again, the banks faced the problem of finding alternative sources of funding and lending.

In difference from the 1966 and 1969 contractions, in the early 1980s there was little impact on the volume of lending of the banking system which simply increased the rates it paid for non-deposit reserves and rollover credits were introduced domestically. It finally required credit controls to bring the expansion in lending to a stop, for increasing market rates no longer appeared to have any impact. The Fed's attempt to stop inflation by control of monetary aggregates eventually came to an end when first Poland and then Mexico threatened default on their international loans and concerns were raised over the solvency of the banking system. Under the Fed's new operating procedures monetary policy only worked when it made the borrowers, and thus also the banks, insolvent. In the process, interest rates had been pushed to historically high levels in a period of recession.

V. The Attempted Revival of Fiscal Policy

When the Reagan administration, seeking to replicate the "success" of the 1966 tax cut sought to reduce individual and corporate taxes in the 1981 tax bill, it was for different reasons and more importantly, in far different internal and external financial conditions. Rather than using fiscal policy positively, the reduction in tax rates was meant to threaten an increase in the deficit sufficient to insure a reduction in Congressional appropriations for spending.[13] Thus a short-term deficit was expressly engineered in order to force Congress into reducing the role of government in the economy. Second, the reduction in tax rates was supposed to increase individual work incentives, not to increase aggregate spending by producing higher disposable incomes. This was supposed to result in incomes rising in greater proportion than the decrease in tax rates, leading to higher incomes and increased tax yields, as well as increased savings to finance investment. Together with the fall in expenditures this was to produce a balanced budget by the end of the first term. None of these anticipated results materialised and it was the reduction in corporate tax rates to negligible levels in tandem with the relaxation of monetary policy caused by the outbreak of the LDC debt crisis which produced the sharp expansion in output and income in the course of 1983, but it also produced a sharp expansion in the deficit.

The more important difference from the Kennedy-Johnson tax cut of the 1960s may be found in internal and external financial conditions: the dollar was now floating and the attempt to control monetary aggregates had produced double digit, highly variable, interest rates. And not only were rates high historically, they were high relative to rates abroad. Thus while the brief expansion attracted imports of goods and services and a deterioration in the current account, it was accompanied by capital imports and much of the growth stimulus was thus drained off abroad. The high rates also attracted portfolio investment from abroad which softened monetary restraint, made control of aggregates more difficult and caused an appreciation of the dollar which offset any possible gain in productivity that might have arisen from the supply side incentive effects of tax reductions. The output expansion due to the reduced corporate tax rates soon petered out without producing the expected rise in fiscal revenues, while the increase in the deficit had little effect in forcing Congress to cut expenditures. There was thus no other possible result save an increase in the deficit and in government indebtedness. Both increased more rapidly than in previous expansions based on deficit financing because of the historically high interest rates which had to be paid on the debt. Thus, the composition of government expenditures shifted towards current account spending, and the share of interest and other transfers rose, reducing the impact of a given ratio of "deficit" spending to GNP on aggregate demand. Far from Keynes's "Euthanasia of the Rentier", there was a "Resurrection of the Rentier" in the 1980s.

While the increase in the deficit did little to reduce government spending, the Reagan

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[13] That this was the intent is made clear in Moynihan (1986) p. 154. It is interesting to note that the support for the Kennedy tax reduction bill, in particular by Wilbur Mills, was also based on the belief that by reducing the funds available to Congress spending could be reduced. See Stein (1969) p. 426-7. Indeed, Johnson only got the bill through by producing a reduction in spending (Stein, 1969) p. 453.) Paradoxically it also explains why Congress could logically refuse to vote a tax increase when it was discussed and proposed in 1966-8, because it would increase it would increase the funds under government control (Stein, p. 456). Stein concludes "The experience of 1966-68 confirmed the evidence of 1962-64 that fiscal decisions would not be dominated by considerations of compensatory finance exclusively" (p. 457).

administration acted more directly in other areas to reduce the role of government in the regulatory process, in particular in the area of banking and finance. Just as the Federal Reserve was attempting to reduce the ability of banks to offset the impact of its restrictive policies on their profitability through obligatory Federal Reserve membership, the government offered to exchange this extension in the Fed's monetary control for a reduction in prudential regulations.

Monetary Control versus Prudential Control

Thus the Fed agreed to exchange regulations to insure the stability and integrity of the banking system for regulations to increase its ability to influence economic activity. The Depositary Institutions Deregulation and Monetary Control Act of 1980 provided for the elimination of Regulation Q interest rate controls by 1986, provided for more uniform regulations with reserve requirements to apply to all financial institutions acting as deposit takers, preempted state usury laws on certain types of lending such as mortgages (removing a major obstacle to domestic adjustable interest rate rollover lending) and increased Federal deposit insurance protection from $40,000 for deposits up to **and including** $100,000 for all deposit-taking institutions.[14] In order to reduce expenditures, budgets of the supervisory agencies, in particular the FSLIC were cut, sharply reducing the number of examiners.[15]

However, the "more level" playing field introduced by allowing thrifts freedom to offer demand deposits, and use interest rates to attract them, did not apply to their assets which remained composed of long-term mortgage loans at low interest rates. Even if they succeeded in defending their deposits through the use of brokers' deposits, the difference between short-term deposit rates and the earnings on outstanding mortgages meant that most were soon technically insolvent. The asset side of balance sheets was "levelled" in the 1982 Depositary Institutions Act (which brought forward the elimination of Regulation Q by two years) allowed thrifts to engage in certain types of commercial lending and acquire securities which had previously been prohibited. The idea was that access to investment opportunities with higher interest rates would offset the low rates on their outstanding mortgages, giving overall earnings sufficient to cover the increased costs of deposit funds. It was the 1982 Act which led to investments in commercial real estate, and in non-investment grade assets (junk bonds) linked to such ventures, which has been the cause of most of the fraud and losses in the thrifts. Thus, although most were already insolvent as a result of the "level playing field" of the early 1980s,

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[14] This was particularly important since at that time Regulation Q interest rate controls had been abolished for deposits of $100,000 and up, so that deposits of this amount were exempt from interest rate controls but qualified for federal guarantee. As a result, a brokered market grew up in which investment banks distributed these deposits to the highest bidder without any reference to the risk conditions of the S&L's which purchased them.

[15] It is interesting to note that originally FSLIC did not guarantee immediate payment of thrift liabilities which were either time deposits or shares. In the latter case it would have been conceivable that a shareholder in a thrift would have had the FSLIC guarantee satisfied if the monies were repaid after the final installment of the thirty-year mortgage was received by the bank or its liquidator!

savings banks were allowed to continue to operate, raising funds through the use of brokered, but government insured, $100,000 deposits and investing in assets with the highest, and thus riskiest, returns available in order to avoid insolvency.

Commercial banks did not need special legislation to permit such activity (it had already been granted, in particular in the 1927 Pepper-McFadden Act); instead, as they worked their way out of their ill-fated LDC loans, they again sought alternative lending possibilities. The new freedom to attract funds with higher interest rates meant that they also had to seek higher yields on their investments. First banks lent to oil and gas producers in the early 1980s, just in time for the collapse of the OPEC cartel and of the price of oil, and then they moved into commercial real estate, just in time for the tax exemptions on such projects to be withdrawn in the tax reform bill of 1986, and finally into highly leveraged transactions via bridge lending for mergers and acquisitions, just in time for the collapse of the junk bond market in 1989. All the while the banks' traditional borrowers continued to increase their borrowing directly in the money and capital markets.

It is not necessary to tell the story of the decline and fall of the US financial system to make the point that the attempt to salvage the S&L industry and the search by commercial banks for a new client base played a large part in creating output for which there was no real final demand which prolonged the Reagan boom of 1983 into the second longest continuous expansion in history. It was a drugged expansion in which supply created its own demand as the banks and thrifts provided both the financing and the demand for the production of the oil and gas supply industry, the construction industry, the financial services industry, the real estate developers, the architects, the lawyers etc., which were involved in the gas exploration boom, the commercial real estate boom, the merger and acquisition boom and so forth. The financial experts had decided that the Thrifts would "grow" their way out of insolvency, so they set about making their assets grow. The result was a case of suppliers creating their own demand since many of the projects, managed by developers who also owned the financial institutions, often had three years profits front loaded into them for both the developer and the lending thrift, whether or not the projects were ever completed or sold. One by one these sectors collapsed for lack of final buyers and had to be carried on the books of the financial institutions that had funded them.

Once again it was the Fed that started the attack on the value of bank portfolios when, fearing an outbreak of inflation which it had been expecting since 1987 (the rate in 1986 was slightly over 1% and jumped in 1987 to 4%, slightly higher than the 1982-5 average), it returned to the tight monetary policy it had initiated in 1987 after the mini-break in the stock market in 1989, reinforcing the fall in asset values. The asset portfolios of banks were thus subject to declines in value due to both the increase in interest rates and to the decline in asset quality. The invasion of Kuwait simply confirmed the recession which had been held in abeyance for a decade by the smoke and mirrors of the supply side revolution. The cut in defence spending and the attempts to cut expenditures to reduce the deficit have done the rest, while banks contributed by reducing lending and producing the so called credit crunch.

In the same period, bank regulators moved to counter the difficulties that they believed to have been caused by the widespread use of variable interest rate lending. As noted above, since rollover lending reduces the interest rate risk it also removes the impact of monetary policy on the value of bank investments which had been the centre of the operation of policy in the 1960s. Higher interest rates no longer necessarily reduce the capital values of assets if both funding and lending rates are automatically adjusted. The risk of rising interest rates is thus transformed into changes in the carrying cost of the borrower's lending and thus in his ability of repay the loan. This is an increase in credit (or default) risk. The increased capital requirement was to have created a larger cushion against these greater credit risks, and to increase the cost of making more risky loans by forcing the banks to raise reserves at market interest rates in the capital market rather than at subsidised rates through deposits. The more capital a bank borrowed the higher the risk premium the market would charge until its funding would be finally cut off.

But, since all of a bank's traditional commercial and industrial lending was given the same 100% risk weighting, this system created the perverse incentive of reducing business lending and of driving banks towards the most risky lending possible within this risk weighting. It thus did nothing to impede the problems faced by the banks in finding replacement lending for the first class credits that were now borrowing directly through the issue of commercial paper in the money markets. At the same time, it aggravated the conditions of the credit crunch, for as a bank's high risk loans went bad it either had to go back to the market for more funds, or reduce its risk-weighted asset portfolio. This it could do by reducing its 100% weighted C&I (commercial and industrial) lending, usually through the securitisation of the assets and their sale in the capital market, and increasing its holdings of government securities carrying a zero risk weighting. Thus, just at the time when conditions faced by borrowers were becoming more difficult, bank lending was contracting as a consequence of the introduction of the new risk-weighted capital requirements. The result has been a rapid accumulation of government securities in bank portfolios and a return to bank balance sheets similar to those of the immediate post-war period.

The Global Market, the Dollar and the Trade Balance

Halfway through the Reagan revolution the impact of high interest rates and dollar appreciation convinced the administration that perhaps the market operating on flexible exchange rates would not eliminate the rising trade deficit. The policy introduced in September 1985 at the Plaza was intended to bring about a controlled 10-12% depreciation of the dollar which, in an abrupt change of direction, the administration suddenly considered to be overvalued. In little over a year the dollar had depreciated by four times that much, while the trade balance continued to deteriorate. The Louvre conference was called to attempt to put a coordinated effort to try to stem the fall of the dollar in place. Eight years after Plaza, with the Yen periodically threatening to break 100 to the $, the basic problem still has not changed, the US is still trying to convince its trading partners to take measures to increase their domestic growth rates and of threatening savage depreciation of the dollar if they don't. This is, of course, the problem of asymmetric international adjustment which plagued the original Bretton Woods negotiations.

VI. Europe and Japan Follow the US into the Global Slump

Much as the US Marshall Plan overcame the problem in the 1940s, in the second half of the 1980s the decision to create a single European market, and then the decision to proceed to rapid German unification, provided a boost to European demand which created both domestic expansion and an increase in US exports. Thus, European expansion produced an offset to the flagging US economy from 1987-1988 through 1990. But, Britain had already entered a downturn by the end of that period and the investment and modernisation generated by the expectation of the unified European market in January 1993 had started to wane by 1990, when it was replaced by the strong expansion in Germany associated with unification. The German economy expanded by more than 3% per annum from 1988-91, falling to 1.5% in 1992 and an estimated -2% this year (1993). As German government expenditures rose and inflation rates moved over 4%, the Bundesbank moved rapidly to offset the expansionary fiscal policy and sharply tightened interest rates. The fixed exchange rate system transmitted the higher rates to the other members of the European Monetary System and pushed the rest of Europe into recession and eliminated the positive external impact of European expansion on US demand.

In addition, the decision to proceed to Monetary Union in Europe via the provision of the Maastricht treaty implied convergence of various economic indicators such as government deficits, outstanding government indebtedness as a proportion of GDP, inflation and interest rates. Since a majority of countries did not meet the minimum requirements for deficits and debt and others, such as Germany, the UK and France which had met the conditions when the Treaty was drafted, found their positions deteriorating rapidly for reasons of domestic weakness or exceptional factors such as German integration, the result was a widespread introduction of contractionary fiscal policies to meet the Maastricht requirements. Fiscal contraction was thus linked to restrictive monetary policies to keep currencies within permitted fluctuation bands relative to the German Mark which was buoyed by high German interest rates.[16]

The European banks, with the exception of Germany, followed the lead of US banks into real estate lending just at the time when Europe was expanding under the expectation of the Single Market and German unification. When the recession set in, real estate prices were the first to fall, producing substantial increases in non-performing loans. The first to be hit were British banks as the recession started there first, but Scandinavian and then French banks all subsequently reported substantial losses. German banks are now starting to report charge offs on their regular lending due to the

[16] It is interesting to note that this is the first time that the Bundesbank has been forced to use monetary policy as a substitute for insufficiently restrictive fiscal policy on the part of the government. The major fallout has not been on the banks, but on their European partners.

severity of the slump. European banks are thus also restricted in their ability to lend to finance recovery.

Japan had also exercised a positive impact on the US external position after 1985 due to a policy of extremely low interest rates which produced a substantial increase in asset prices which was eventually reversed by extremely tight monetary policy which has caused a decline in asset prices since 1990 and substantially eliminated growth in the Japanese economy for the current year. As a result Japanese financial institutions who underwrote, directly and indirectly, much of the asset price bubble found themselves in conditions similar to their counterparts in the US, with substantial holdings of loans secured by real estate with current values substantially below the face value of the loans.

Much of the disappointing growth performance in 1993 is due to the collapse of foreign demand as Europe and Japan enter recession and the expansion of exports to developing countries which was due to trade liberalisation comes to an end. The US is counting on expansion in Europe and Japan to bring about recovery while Europe is counting on the US recovery to bring it out of recession. It is not surprising that efforts at economic policy coordination have again broken down as fiscal policies in all countries are directed to reducing government debt and expenditures, while monetary policies are being used to counteract what is considered to be insufficient domestic fiscal retrenchment. It thus becomes impossible for monetary policy to be coordinated internationally; indeed, international coordination becomes impossible, as the conditions in the foreign exchange markets have demonstrated during in the summer of 1993.

The global economy thus faces the impact of the postponed postwar reduction in defence spending in conditions of falling demand in all industrial countries and the return to "Treasury view" policies to reduce government indebtedness through reductions in current deficits produced by increasing taxation and decreasing domestic expenditures. In difference from the 1930's, monetary policies remain excessively tight in many countries as central banks anticipate inflation from the economic recovery which does not arrive, while asset prices continue to fall and inflation rates are within historical minima. Banks remain unwilling to lend as they restore their balance sheets. Thus the Global Slump of the 1990s was the result of the absence of stability in international financial markets, of expansionary fiscal policy and of robust bank balance sheets and low interest rates which prevented the continuation of the Great Depression after the war. At the present time, only a reduction of short-term interest rates has been introduced in the US and the UK, as monetary policy has been substituted for expansive fiscal policy.