

The Risks Facing the World Economy

A Study Group Report

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Preface

This report is based on the deliberations of a small Study Group set up by the Group of Thirty after its September 1990 plenary meeting.

At that time, it seemed that the world economy faced several international difficulties. While it was generally acknowledged that these difficulties created a risk of a long and severe recession — or accelerating inflation — it did not seem that they were receiving the systematic attention they deserved. A month before our September meeting, oil prices had spiked upward as a result of the invasion of Kuwait by Iraq. The risk of a worldwide surge in inflation suddenly seemed imminent and the economic and financial condition of the Organization for Economic Cooperation and Development (OECD) nations looked a good deal more fragile than it had a few weeks earlier. It seemed possible that the luck of the industrial countries might have run out and that their neglect of certain fundamental problems during the 1980s might shortly come home to roost.

Sure enough, soon afterwards, the economic outlook of the industrial countries did deteriorate, although perhaps not quite in the way that we had feared. For, while the threat of a recession in the United States became a reality, the threat of a third major oil crisis receded soon after the start of the Gulf Crisis. Now, in the early spring of 1991, there are some initial signs of improvement. Still, significant risks remain.

The focus of this report is deliberately on these downside risks as they now appear, but that is not meant to reflect any particular gloom on the part of the Study Group. The paper is an exercise in contingency analysis for the world economy, an attempt to consider in a coherent way

what might go wrong and what can be done to prevent or ameliorate it. If events turn out favorably, the fundamental problems that underlie the risks discussed here will still have to be addressed in due course. If, however, the world economic outlook deteriorates once more, the policy challenge could become urgent.

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With the exception of Charles Taylor, all the members participated in the Study Group in their personal capacity. The views and judgments expressed here do not reflect the policies of their institutions in any way.

Introduction

The purpose of this report is to review the macroeconomic risks facing the industrial economies over the next eighteen months and to discuss the associated policy challenges. These risks, as always, are of less economic activity or more inflation than expected. In the present circumstances, "less activity" translates into a risk of a deep and protracted recession in the industrial countries if recent initial signs of a US recovery turn out to be misleading or if the upturn is so weak that, after a pause, it is aborted.

The risk of "more inflation" translates into a return to stagflation after a shallow recession. It is conceivable that core inflation might accelerate quite quickly in one or more of the major industrial countries — to, say, over 8% a year as it did in the late 1970s. Perhaps commodity prices will pick up sharply and monetary policy be consistently accommodating. But such high inflation seems unlikely now and a scenario of relatively little growth and inflation that resumes its disconcerting upward drift from 5% to, say, 6 or 6.5% over the next two years or so seems more probable.

The rest of this report is divided into four sections. The next section gives due consideration to the positive aspects of the current world economic situation, with reference to earlier periods of economic difficulty. The following section reviews in some detail the risk of a long and severe recession, after which the risks of stagflation are discussed. The final section lays out the broad considerations we believe should underlie policy at this time.

Positive Aspects of the Current Situation

Quite aside from the tentative, initial signs of recovery in the United States, there are basic aspects of the current situation that are encouraging — or potentially encouraging — and they need to be acknowledged.

Inflation Expectations

First and foremost, inflationary expectations seem not to have risen greatly. As far as one can tell, there was little upward shift in inflationary expectations when oil prices doubled in the late summer of 1990. This is in marked contrast to what happened during the last two oil shocks in 1973-74 and 1979-80.

Inflationary expectations cannot be measured directly — there is no way to measure or aggregate the states of mind of innumerable individuals — but indirect evidence strongly supports this view, considering what happened to nominal interest rates on bonds.

Excluding the effects of taxes, these nominal rates are made up of the real rate of return that investors demand and borrowers expect to pay and the inflation rate both expect over the life of a bond. In the United States, for example, the yield on long-term government bonds peaked in September 1990 at 8.9%, up only 0.5% over the trough for the year of 8.4% in July. It then fell back below that level early in 1991. Of course, this reflected the downturn in economic activity there — investors were prepared to accept a lower real return under the circumstances. But it also suggests there was very little expectation that the surge in oil prices would ratchet overall inflation rates upward.

Compare this with the experience during the 1978-80 oil crisis when average oil import prices rose about 130%. That did drive up general inflation rates and forced the interest rate on US Treasury bonds up from 8.5% to over 14% — roughly a 6% increase — before it peaked in 1981. By that time, expectations must have been that inflation would stay at around 10% for the next ten years or so, which turned out to be wildly pessimistic: inflation actually fell below 4% only two years later and stayed there for most of the 1980s.

Of course, the rate of inflation as measured by consumer prices has moved upward in the past six months in the major industrial countries. But the core rate, which is adjusted to exclude the volatile food and energy components, has eased, at least in the United States.

The bottom line is that inflationary expectations remain modest. This contrast to the 1979-81 experience is strong testimony to the credibility that the central banks have built up during the 1980s as guardians against inflationary shocks.

Market Flexibility

Over the past decade, one of the remarkable changes in the industrial countries has been the increase in market flexibility — in labor and capital markets and the markets for goods and services.

- Organized labor lost some of its appeal as the political spectrum shifted to the right in many industrial countries. In response, it adapted by accepting more flexible working rules. And, in Europe and North America, high rates of unemployment throughout most of the decade have strengthened the hand of management against labor.
- The deregulation and globalization of financial services facilitated extraordinary international capital movements. Volatility is evidence of capital market flexibility — its responsiveness to events — as well as of periodic speculative excesses.
- The increased international competition in goods markets has made it more difficult for national cartels to insulate themselves from technological and market changes, sudden or gradual. Many industries have introduced flexible manufacturing techniques and lowered break-even points, increasing their ability to respond quickly to good and bad developments alike.

Still, labor markets and the markets for many goods and services are not as flexible as they might be. In several European countries, laws and regulations that protect jobs and inhibit new hiring contribute to high

levels of structural unemployment. In the United States, many of the unskilled have found neither work nor training for long periods of time. And, throughout the industrial countries, unemployment still rises when a recession starts, which is evidence in and of itself that real wages are still downwardly sticky.

Equally, many products, including those subject to international competition, are produced and sold by oligopolies. Some industries, where there are major economies of scale in essential research and development, are quite concentrated even at a global level. Government procurement practices support national and local oligopolies in many countries. This effectively limits the responsiveness of prices to changes in demand. And, in services — within government and in the medical services sector in particular — competitive pressures continue to be muted in most industrial countries, with similar results.

But, even with these qualifications, the general point still stands that markets are more flexible today than they were 10 years ago.

What does this imply? Most importantly in the current situation, it means that shocks — such as the summer oil price increase — flow out through the international economy without meeting too many obstacles, until their force is dissipated. The recent sudden threat of oil scarcity was translated into a large rise in crude oil prices, then a significant rise in gasoline prices, then a moderate rise in transportation prices and then finally into a small rise in the cost of most consumer goods. And, equally important, as oil prices then fell, gasoline prices fell too and there is a good chance that the decline will restrain price increases for consumer goods and services in general.

Still, the threat of sustained higher oil prices last summer led consumers to expect their real incomes to fall. No doubt it lowered consumer spending in several industrial countries in the second half of 1990. But, because of the flexibility of markets, consumer expectations about income must have improved marginally when oil prices subsequently fell.

Policy Improvements

The third of our positive circumstances is not an exogenous factor in the situation facing policymakers. It is an observation about some of the policymakers themselves. Still, it belongs here for one good reason: several disaster scenarios are predicated implicitly on the idea that the monetary authorities in one of the major industrial countries will make a major mistake. And this seems unlikely on the face of it.

Important lessons of the past have been well learnt. The policy

response to the oil shock in 1990 and to the subsequent downturn has been firm and balanced. This time, there was no attempt to restrain the flow of higher energy costs into the economy. The shock was met, not with gasoline quotas or subsidies but with a somewhat more restrictive monetary policy and a promise, which was credible throughout most industrial countries, of tighter monetary policy if indeed the core rate of inflation had picked up as a result of the oil price shock. The two actions stopped inflation rising in the short term.

Looking back to the 1987 stock market crash, the central banks were alert and responsive. Not only did they intervene in the capital markets to prevent any disruptive failures that could have posed a systemic risk but they also offset the potential negative effects of a decline in wealth on aggregate demand by promptly loosening monetary policy. While, with hindsight, it seems that they overshoot the mark in lowering interest rates and stimulating demand rather too much, that can fairly be attributed to the considerable inherent uncertainties in the situation at that time, rather than any error of judgment. This is in marked contrast to the part that they played in the 1930s in exacerbating the 1929 Crash. At that time, the Federal Reserve did not offset the decline in the money multiplier as innumerable commercial bank failures reduced the ratio of base money to credit extended to the economy at large.

Finally on this score of central bank competence, it is a comfort in the present situation to note that they work together closely in many ways. There is a free exchange of information on policy and strong coordination at the technical level in market operations and supervision and regulation. While differences continue to arise about the substance of monetary and exchange rate policies, the G-7 central banks — that is, the central banks of Canada, France, Germany, Italy, Japan, the United Kingdom and the United States — and the other major industrial country central banks, share the common central objectives of establishing and then maintaining price stability, and maintaining the safety and soundness of the international financial system. They speak the same language.

Asynchronicity

A fourth blessing in the current situation has more recent roots than the preceding three, which have all evolved gradually over the past several years. It is the asynchronicity of this downturn. That is to say, the recession is concentrated in the Anglo-Saxon economies. Elsewhere, generally, demand is holding up.

Statistics for the final quarter of 1990 show that GNP is clearly falling

in the United Kingdom, the United States, Australia and Canada; and more recent reports of industrial production and unemployment confirm that the contraction has continued into the new year. In most of continental Europe outside Germany, recent industrial production numbers also show output falling. But there is every sign that domestic demand and output in the western part of Germany, in Japan — and in much of East Asia for that matter — continue to expand.

It is too early to say if asynchronicity will see the industrial countries through their current difficulties. Earlier, when it was clear only that demand in the Anglo-Saxon economies was turning down, it looked as though continental Europe might be stronger. German imports may have surged as a result of the reconstruction effort in the east. But, because of the initial strategy, now reversed, of financing public sector support for the reconstruction with borrowing, higher interest rates emanated from Germany until March of this year. Demand and output faltered in France and Italy.

In 1979, when demand was weakening dramatically in the United States, Germany and Japan remained buoyant; the rest of the industrial countries stood somewhere in between. But that did not prevent the subsequent general recession. Still, Germany and Japan are a larger share of total industrial-country GNP now than they were 10 years ago and, although growth forecasts have been revised downward recently, the engine of domestic growth looks difficult to derail in the near term, at least in Germany.

For the United States, net exports should stimulate demand soon. The dollar's March rally has been too short to negate the effect of its steady decline over the previous 18 months. As the lagged effects of that larger decline take hold, US exports should become increasingly price competitive while the price of imports relative to domestically produced goods should be less appealing. Likewise, currency depreciation should stimulate net external demand for Australia and New Zealand and, to a lesser extent, for Canada.

The United Kingdom, however, is now tied to the deutsche mark through the Exchange Rate Mechanism of the European Monetary System (EMS). British producers will face tougher competition from the United States and other countries that have devalued. Once inflation has stabilized, they should benefit from a drop in real interest rates — short rates have already fallen — but it will take time for the relatively new British exchange rate policy to establish credibility in the markets and, until then, a risk premium will keep UK interest rates higher than they otherwise would be.

In sum, Germany and Japan have confounded many observers by becoming important engines of demand for the world economy in the early 1990s. Their expansion may yet offset the current contraction in the Anglo-Saxon economies. But it is hard to believe that their relative buoyancy will be such a potent force for recovery as was hoped just a few months ago. Asynchronicity may turn out to be a significant blessing, but it is far from being a sure one.

Inventories

The last of the blessings to be counted in the current situation is a mixed one: the low level of inventories at the outset of the recessions in the Anglo-Saxon economies.

At the start of past recessions, firms typically found that they overestimated demand for their products. Orders were cut and inventories built up. As a result, soon after the recession began, these firms and their suppliers cut output more than the decline in demand, leading to lower income for the industrial workforce. These workers spent less, demand fell further and the downturn was reinforced.

In this recession, however, firms have been very careful in managing their inventories. Better inventory management techniques introduced over the past 10 years have kept stocks low. There was relatively little excess inventory accumulation before or after the peak in this cycle. The dip in activity and, hence, in demand is likely to be less severe than it otherwise would have been.

However, there is a dark side to this phenomenon. In past recessions, anticipatory inventory restocking soon after the trough in economic activity contributed to the recovery as it increased income and demand. This will not happen in the present cycle because more responsive firms can trust their quick reflexes to meet orders when they materialize and do not need to anticipate the trend by producing ahead of demand. So, while the absence of a traditional inventory cycle may mitigate against the depth of the current recession, it is also likely to work against the strength of the ultimate recovery.

A Major Recession

What would constitute a major recession and what might cause one to come about?

There is something fundamentally arbitrary about a definition of a "major" recession, especially when it involves thinking about economic performance in several countries. So any precise formulation should be taken with a pinch of salt. But, on the other hand, some degree of specificity is needed to understand clearly the risks at hand.

A reasonable standard would seem to be a recession that was more severe than the previous two — in 1974-75 and in 1980-82. Both times, it took several years for the combined GNP of the G-7 countries to recover to the trend that could have been sustained at full capacity. Measured as this difference between actual GNP and the trend, the "cost" of the 1974-75 recession was equivalent to a 10% loss of G-7 GNP in 1973, the year before the recession began. The 1980-82 recession was about twice as serious, "costing" 20% of GNP. In both cases, the number and depth of actual down-quarters was small, adding up to about a 2% absolute drop in total G-7 GNP. But the consequent shift below trend and several other quarters of low growth were enough to lead to these large costs as measured in terms of GNP below capacity.

At first glance, this might not seem so severe a standard for the current economic outlook, but if GNP in Germany and Japan continue to grow at all, such a downturn would only happen if GNP elsewhere in the G-7 falls by about 3% over the next few quarters and stays well below capacity for some years to produce a 10% total loss of G-7 GNP relative to trend. If the German and Japanese economies, which now account for over a third of G-7 GNP, continue to expand steadily at an annual rate in

excess of, say, 2%, the decline elsewhere would have to exceed 4% of GNP.

What, then, might bring about such a major, if uneven, contraction? Several factors could play a part. We can weave them, for expositional purposes, into a single gloomy scenario:

- As a result of the high levels of personal and corporate debt, consumer and business confidence, and hence demand, do not sustain their rebound after the end of the Gulf War. Equally, the real estate recovery in the United States — and the United Kingdom — falters and real estate prices in Japan drop sharply, depressing confidence there.
- At the same time, the US banking sector continues to perform poorly, which keeps the cost of capital high for most banks and makes them freshly cautious about lending. The credit crunch intensifies. Then the Federal Reserve fails to increase liquidity and lower short-term rates — or it does so, but excess reserves accumulate in the banking system as banks remain guarded about lending, and creditworthy households and businesses refuse to borrow — a liquidity trap.
- The restraining effect on the recession of normal fiscal stabilizers in the United States is muted by the federal fiscal deficit and associated fiscal problems.
- At the same time in the EMS, high real interest rates prevent the United Kingdom from recovering and generally depress demand there. The possibility of a realignment within the EMS results in an interest rate premium for the weaker currencies, exacerbating this effect.
- The Federal Reserve tries to break out of a liquidity trap by easing short-term rates, but this causes the dollar to fall back below its recent lows. Or, for fear of a dollar fall, the Federal Reserve forebears, and short-term interest rates remain too high to stimulate demand. Thus, market uncertainties about international financial arrangements constrain the Federal Reserve, contributing to a deeper recession.

Although problems in one area could easily reinforce problems in another, this litany of woes is plainly unlikely to be realized in every respect. Nonetheless, it is worth considering how the component problems could develop and contribute to a severe recession to understand what kinds of preventive measures may be needed in the near future.

Confidence

The Gulf Crisis has been widely cited as a proximate cause of the recession. It is argued that the prospect of conflict contributed to the sharp decline in consumer and business confidence in the second half of 1990 and thus to the decline in spending and, ultimately, income.

This may be true, but it cannot be the whole story — or even the half of it. Families with soldiers involved in the conflict may have had a reason to be very cautious about their financial future. But there was no concrete reason why the majority of businesses or consumers would have lost much confidence once the price of oil returned to the \$20s per barrel, even in the period when war seemed likely and the cost to the allies in terms of human lives was most uncertain.

As we noted before, when oil prices initially rose, it was reasonable for households and businesses to expect real incomes to fall and to adjust their spending plans accordingly. As measured by the US business organization, the Conference Board, confidence did fall sharply in Italy, France and Germany in August and September last year, after Iraq invaded Kuwait. In Canada and the United States, however, a steep decline was evident earlier in the year; it continued. In Japan, confidence had peaked in late 1989 and, while it remained high, it ebbed through the third and fourth quarters of 1990. In the United Kingdom, confidence has been on an uptrend since April 1990, although the absolute level was still depressed at the end of the year.

This pattern of generally weak and declining confidence in advance of the Gulf Crisis, which is also evident in surveys of business investment intentions internationally, suggests that the crisis reinforced an existing trend rather than started one. Now the war is over, some confidence may have been restored, as current US survey data suggests. But, sharp as the recovery in measured confidence has been in the United States, it remains lower than it has been at any time since 1983, and it is quite possible that the uptick will be limited in scale and duration.

Why was confidence ebbing beforehand? In the United States and Europe, profits and income had already started to fall before the Gulf Crisis broke in the summer of 1990. Plans for cutting white collar as well as blue collar jobs were widely announced, so that income expectations had become a good deal less certain.

What made these developments so threatening was the high level of debt built up in the last 10 years. The vague unease caused by debt from time to time during the expansion changed to alarm at the prospect that asset prices were beginning a major decline and that income might fall

below the level necessary to cover debt service. The natural reaction — to raise precautionary savings sharply — unfortunately implies a further reduction in consumption and aggregate demand. Can these concerns about debt and recession be allayed, now that the war is over?

Debt

The accumulation of corporate and household debt in the 1980s, not just in the United States but in many industrial countries, makes this an unusual period in recent economic history. In the United States, private debt as a share of GNP was fairly stable from the early 1940s to the early 1980s; and with public debt included as well the relationship to GNP was extremely stable. The last time public and private debt was at current levels — about 1.9 times GNP — was in prelude to the Great Depression.

How did the accumulation of debt come about this time? So far as the United States is concerned, at the start of the last decade high actual and expected rates of inflation combined with preferential tax treatment of interest expenses over other capital costs to encourage increased use of debt financing by corporations. Subsequently, the rise in the value of real and financial assets relative to corporate income sustained the trend. Then the wave of merger and acquisition activity in the second half of the decade had the effect of raising debt levels, when debt was used either to help finance acquisitions or to repel them.

US business debt rose from 53% to 65% of GNP between 1980 and 1989. Moreover, during the expansion, the rate of bankruptcy was high in the business sector — at least twice the post-World War II average, measured by the liabilities of failing businesses as a percent of GNP. It is reasonable to expect, therefore, an unusually large number of work-outs and bankruptcies in this recession. What is not clear, however, is the extent to which extensive financial distress in the business sector will have an impact on the real economy.

The evidence of the 1980s and recent analysis suggests that work-outs and bankruptcies do create additional inefficiencies in medium-scale and large firms that have public debt in their balance sheets, because it is difficult to renegotiate. But the inefficiencies are probably too small to have a discernible direct impact in the macroeconomic context. The operations of medium-scale and large companies that depend on bank debt are even less likely to be affected by the threat, or the actual fact of a work-out or a bankruptcy. They simply continue to operate.

However, the increased chance of bankruptcy that accompanies heavy debt and the start of a recession has dramatically increased the cost of debt to many companies. The spread between junk and treasury bonds doubled in the third quarter of 1990 from 6% to 12%. That of itself can discourage production and investment and contribute to the downturn.

Moreover, bankruptcies have knock-on effects, especially where a large financially distressed firm is an important customer for smaller companies. Small trade creditors, having delivered goods or services and while awaiting payment, may be forced into liquidation if a settlement awards them a fraction of the face value of their claims.

How could this be so? These smaller firms will generally have debts only to banks and individual creditors such as their own suppliers. Sometimes these creditors may have a long-term working relationship with the business. Other times, the business itself is a new start-up. Either way, these smaller firms may find that their assessments of future business prospects diverges from that of their creditors: once bitten, twice shy. With imperfect information about what business prospects really are, there will be times when the creditors make the wrong decision and force a firm into liquidation when it could have continued to operate profitably after a work-out. These times may well be more frequent in this recession, where the business sector is more heavily indebted than it has been in the past.

While the corporate sector was taking on more debt during the 1980s, so was the household sector of many industrial countries. US data shows household debt rose 15% as a share of GNP, from 52% to 67% between 1980 and 1989. Some preliminary work by the Federal Reserve suggests that US households that incurred above average debt had above average assets in the late 1980s. But their asset values may have declined since then and, in any case, households that were heavily indebted relative to income may have grown relatively more numerous during the 1980s: young families, borrowing to buy homes, may have incurred more debt than earlier cadres of homebuyers to finance higher-priced homes because they — and their creditors — expected these homes to continue to rise in value. In other words, within the household sector, there may be relatively few older creditor households in healthy financial condition and relatively many younger debtor households in serious financial straits compared with previous recessions.

The same general trends have been observed in the United Kingdom and Japan. There is some evidence that the balance sheet of the household sector in all three countries deteriorated in 1990, mainly because of the

decline in the stock market in Japan and in real estate in the United Kingdom and the United States. In the United States, home prices and sales volumes of single family homes have declined while the number of homes available to be sold rose nationwide in the second half of 1990. The median sales price of single family homes peaked in July and had dropped 7% by November.

The plight of debtor households may exacerbate the downturn, because relatively small falls in house values can make it financially very difficult to sell a home with a large mortgage and relocate, thereby curtailing future income opportunities. It would be surprising if the confidence of households in that situation rebounds quickly. For households, the costs of bankruptcy are high.

So it is quite possible that if the recession lasts the high level of corporate and household debt will keep confidence depressed and borrowing costs high, resulting in costly disruptions especially for smaller businesses. These effects may in turn deepen the recession.

Financial Fragility

Two domestic financial systems seem particularly frail for the moment — those of the United States and Japan. Of the two, the situation in the United States appears to be more threatening and can be delineated much more clearly.

US Banks. The 1980s were difficult years for US banks. Most money center banks began the decade with significant third world debt problems. While they were provisioning for these, they were losing large corporate business as the nonfinancial firms discovered they could often raise capital and credit more cheaply by going directly to the markets than they could through a bank. In the inflationary late 1970s, commercial banks large and small were losing household depositors to money market mutual funds that were free to offer high interest rates. To compete, banks were then allowed by their regulators to offer products at the retail level that had much narrower spreads.

While the commercial banks worked hard to cut costs and improve the attractiveness of their products, they also responded to competition by pursuing new, more risky lines of business to maintain profits. Early in the decade, several invested in the energy sector, and later on, others invested more heavily and directly in real estate, which grew as a share of bank assets from 30% to over 40%. Some became heavily involved in financing highly leveraged mergers and acquisitions. And many became dependent on fee income, which, although not risky, is unstable.

As a result, it is not surprising that the industry faced difficulties as these sectors declined one after another during the second half of the 1980s. As the expansion slowed and then stopped in 1990, asset quality deteriorated, affecting more banks throughout the country. Provisioning increased and, recently, dividend payments were cut. Stock prices were severely hurt and credit ratings reduced. It became increasingly difficult and expensive for the banks to raise capital — precisely when they most needed to do so for prudential reasons and to meet the international capital adequacy standards that are currently being phased in.

The rate of bank failures is likely to remain quite high for the next few years. It is virtually certain that the Bank Insurance Fund, which underpins the federal system of bank deposit insurance, will have to be recapitalized within the next few months. Congressional action on this score has just been proposed by the US Treasury in the context of wider reforms. This and a series of other proposals put forward by industry groups, individual government agencies and various members of Congress would affect the powers of banks, the division between banking and commerce, the extent of deposit insurance and the US regulatory structure.

The precise nature of most of these proposals is unimportant so far as the near term macroeconomic outlook is concerned. What may matter is that, while these structural issues are being addressed, there is limited public confidence in the federal government's process and institutions.

Evidence of this is the number of small retail runs on banks in the past few months. The public debate about the recapitalization of the Bank Insurance Fund is only vaguely understood. Depositors realize that the fund is near to going bust itself and, unfortunately and erroneously, they infer that they should withdraw their funds from weak institutions, "just to make sure."

Nonetheless, it is unlikely that even a series of major retail bank runs would cause the US banking system to unwind. Any bank facing a liquidity problem can use the discount window to receive cash or its near equivalents from its Federal Reserve Bank. The logistical considerations of distributing a large number of bank notes throughout the branch network of a large bank would cause only minor inconvenience. There is no obvious reason why several such operations should not be carried out at once. Also, the money would probably be redeposited in the banking system almost immediately since the alternatives — holding large quantities of banknotes, or investing in other intermediaries or in securities directly — are riskier than putting money in a bank.

Nevertheless, the fact remains that such a series of retail bank runs might still hurt consumer confidence.

Concern about the US banking system also centers on the wholesale markets for bank paper, the commercial paper markets and the interbank market. If a major bank were to fail now, there is a risk that its debt to institutional investors — banks and nonbanks alike — would become illiquid and decline sharply in value. Of course, the Federal Reserve would intervene as it has in the past to provide liquidity in the interbank market. If necessary, it would absorb a part of the ultimate costs of price falls in both markets, in effect converting private illiquidity into public debt. But because it might not absorb all of the ultimate costs, institutional investors have good reason to be alert to bad news about specific banks' prospects. Institutional investors, who are relatively well informed and able to precipitate a crisis, are more likely than retail depositors to cause a major failure.

This general threat must increase borrowing costs in the interbank and commercial paper markets slightly. Were a major failure actually to occur, the cost of borrowing for banks, whether for short or long term, would be likely to rise substantially. Institutional investors would worry that the bank creditors of the original failing bank might fail also and would therefore cut back their claims on other similar banks.

This scenario has been a substantial concern of every US bank that has a below-average credit rating. To improve capital adequacy and to provision generously against future losses have, therefore, been especially high priorities going into the current recession.

Before the Basle agreement, US banks were permitted to add back their loan loss reserves in computing core capital. Although banks have had some years over which to phase in the new standards, the deduction of loan loss reserves from core capital has itself proven difficult for banks with troubled assets.

Given that the cost of capital has been high, banks have had little alternative but to curtail expansion and in some cases actually to shrink their loan portfolios. They may have had to turn away creditworthy businesses to prevent a further decline in their capital ratios. Hence, concerns about a credit crunch.

There are two reasons to doubt whether a credit crunch has in fact started. First, surveys of small business do not rank restricted access to credit as a particularly serious problem. Second, there was about \$200 billion of Tier I capital in the US banking system at the end of the third quarter of 1990, whereas only \$160 billion would have been needed to