huge losses on loans to developing countries, with the US Congress making arrangements to borrow \$500,000 million to rescue the savings and loan industry and with the prospect that the rate of failure among smaller banks would continue apace. The rot has been stopped, but at considerable cost. Banks have become cautious in their lending policies (and have earned brickbats from the White House for what previously would have been regarded as admirable prudence), while borrowers have similarly been made shy of debt by the abounding tales of how tough are banks when bent on the repossession of people's houses and motor-cars.

Hidden in this is the evaporation of much wealth. Banks that have lent funds to property developers for the construction of empty office blocks may comfort themselves that the buildings on which they have a lien may one day become the 'performing assets' they were intended to be, but that is by no means certain. In any case, in the interval, the funds used in their construction are sterilized, and will be out of economic action for many years. The assets of the many companies that have spectacularly gone bust in recent months have often similarly been taken out of action, as will be much past investment in the 21 manufacturing plants General Motors intends to close in the next few years.

Hungry for capital

The pity — and another reason why the recession appears so resistant to treatment — is that all this has happened when the world as a whole is hungry for capital. Estimates vary, but putting the ex-Soviet republics on their feet may require the investment of some \$200,000 million a year for 20 years or so, the eastern part of Germany is absorbing investment at about a tenth of that rate (but will probably be self-sustaining sooner) — and there remains the whole of the developing world, now almost forgotten again. It is no wonder that there is what Western politicians call a 'credit crunch'. On present form, it could last for years, even decades. The obvious danger, for countries such as the United States and Britain, is that their capacity to compete with investment funds in what has become a global market will be permanently diminished. So much is simple arithmetic.

Is there an escape? The best hope, perhaps the only immediate hope, is that the revision of the General Agreement on Tariffs and Trade (GATT), under negotiation for the past five years, will eventually come to something. In circumstances as serious as the present, it is an assault on common sense that the only device in sight for increasing the volume of the world's economic activity should be stalled because of the attachment of Europe, the United States and Japan (in descending order of culpability) to systems of agricultural subsidy that are ruinous for their own taxpayers and harmful to everybody else. That is also a matter of arithmetic, too often disguised as national strategic interest and too often forgotten because farmers appear exempt from the old rule of one man (or woman), one vote.

Paying for research

The real question is whether the US government should bear the full costs of academic research.

The US government's heart-searching about the overhead costs of university research continues. Unavoidably, much attention has been focused on the details of accounting systems. Should Stanford University, the hapless fall-guy in the past year's scandal, have organized its bookkeeping so that certain indirect costs — those for its president's house, for example — were automatically excluded from the pool of costs charged to research budgets? Obviously, the answer is 'Yes'.

A more important question, raised by the government's current attempt to renege on special agreements with Stanford and other research universities (see p. 97), is whether federal officials are being fair when they seek to recover costs already legally allocated to the indirect-cost pool. The answer here has two parts. First, it is not fair for the government to change the rules retrospectively and, second, it is damaging to the interests of research in general that university research budgets once agreed should then be put in jeopardy.

But the real issue arising from the indirect-costs scandal is the extent to which the US government should fund university research. Is the objective full reimbursement? Or just part of the whole cost? There is no doubt but that universities, even when large and well endowed, lose money on research grants. The government, contrary to general belief, has not been providing full reimbursement of indirect costs even under the old rules. It is therefore understandable that universities such as Stanford and the Massachusetts Institute of Technology (MIT) have aggressively set about charging everything they legally might to the indirect-costs pool.

So what degree of reimbursement is proper? One argument for parsimony is that it is perfectly appropriate for universities to pay a share of the costs of academic endeavours that enrich their intellectual life and also bring a good deal of prestige. But where should the unrequited costs of research then be charged? Against undergraduate teaching, thus increasing tuition fees at a time when the recruitment of young people to science studies is generally acknowledged to be an urgent need? Or against the generosity of alumni and other benefactors, and at the cost of the general development of an institution? And what, then, would happen to predominantly research institutions, of which the Rockefeller University is a prime example?

The truth is that research is in the national interest. That is why the full cost of research is the proper responsibility of the federal government. That this question has not been resolved, and is not even being discussed openly, is one reason why the system for research support in the United States is under needless stress. The more tantalizing issue of which items are charged to the cost pool may excite the interest of bystanders and the indignation of congressmen, but is by comparison unimportant.