

EARTHQUAKE AND BUSINESS INTERRUPTION: A POLICY FOR SURVIVAL?

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'Civilisation exists', wrote the historian Will Durant, 'by geological consent, subject to change without notice. Though short perhaps in scientific perception, the quotation nevertheless conjures up the essential uncertainty of Nature's most capricious and powerful whim - the earthquake.'

It is late summer in England as I prepare this paper, and as I gaze from my study window over the North Essex countryside I can be reasonably confident that when summer returns there will be no measurable change (at least to the human eye) in the configuration of this familiar landscape. Any small change that might be detected will have been at the hand of the urban developer rather than as a consequence of Nature's caprice.

As a country, England is little given to geophysical activity, and indeed is rarely affected by the climatic excesses experienced elsewhere. It is ironic, therefore, that the hurricane-force winds which cut a swathe across the face of southern England in October 1987 should have given rise to one of the largest insurance payouts ever. An estimated 15 million trees were lost in one unforgettable night, but the property damage has long since been made good and, with a return cycle of 300 years anticipated, there is little risk of any one of us experiencing its like again in our lifetimes.

It is difficult for those of us, living under such relatively stable geophysical conditions, to envisage a more hostile and less predictable environment; an environment so unstable and potentially violent as to be capable within an instant of laying waste entire cities and of changing the face of the landscape with such unstoppable and cataclysmic force.

Those who live in the shadow of such inexorable forces will choose largely to disregard the menacing threat, for not to do so would deny all purpose to their daily lives. Unless the scientific evidence is to go unheeded, however, the message is all too clear. The sands of seismic time are running out, and somewhere, quite soon, a massive earthquake of catastrophic proportions is to be expected. Of those nations with the more advanced and sophisticated economies, the United States, Japan and New Zealand are perceived as the front runners in a race which no one wishes to win.

The Christchurch convention, therefore, is not concerned with the if, but with the where and the when that the disaster will occur in New Zealand and, having occurred, how well will the community respond and the economy withstand the pressures?

My focus is on the rupture of business consequent upon earthquake, the curative properties of Business Interruption Insurance and some, less desirable, side effects.

I find no evidence to indicate that major business and population centres enjoy any immunity from earthquake and from several perspectives Wellington has long been known to be vulnerable and indeed seriously at risk. As the capital city it is the pivot of government activity and has developed as the major centre of the financial, insurance and telecommunications sectors. With today's high dependence upon technology, Wellington may be likened to the electronic flagship of the nation's economic armada, were its signals to fail, the fleet would be in disarray.

I believe therefore that the impact of a major earthquake in Wellington on the business community would not merely create a ripple effect across New Zealand, it could have the force of tsunami.

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First however, we need a point of reference from which to steer the discussion on relevant and workable lines. Seismologically, there must surely be a trigger point (could it be the world's first Richter 9?) beyond which, to all intents and purposes, the disaster is of such a magnitude and so complete, as to effectively close New Zealand, at least in the economic sense, if in none other.

If, as economists are now claiming, Wall Street would be brought to its knees by a major earthquake in Tokyo, such an awesome consequence for New Zealand may not be as fanciful as some may imagine. The nature of earthquakes has not changed, but the world's vulnerability to damage by them has accelerated by quantum leaps. The disaster scenario from the perspective of the economist was colourfully and powerfully treated by Barbara Stewart in her paper to the CPCU Earthquake Conference in Honolulu earlier this year, and although principally concerned with the situation in the United States, the points she makes are no less relevant to this discussion.

Ms. Stewart advances the view that the economy is far more vulnerable now (compared to the position at the time of the 1906 San Francisco earthquake) and identifies a number of contributory factors which I take the liberty of paraphrasing and developing for my purpose :

- * Urbanization and technological development have created a vastly increased concentration of asset value - buildings, plant, machinery, equipment and stocks - at risk.

- * Unaffected sectors of the community will have a higher dependence for essential goods and services on the victims of the earthquake who are denied the means to produce and supply them.

- * Advanced and sophisticated financial systems have locked us in on a world scale.

- * No compensation scheme can sensibly provide for the once-in-a-century major catastrophe.

As Ms. Stewart concludes 'the uncertainties are enormous. We do not know and we cannot know how bad it could be.' Perhaps this is just as well!

Of this much, however, we may be certain. In human and economic terms, a severe earthquake striking Wellington would have disastrous consequences. If a disastrous earthquake (a Richter 8, or perhaps greater) were to strike Wellington, with or without any accompanying firestorm, the consequences in terms of loss of life, human suffering and deprivation, property damage and business terminations could defy description.

The net uninsured and unrecoverable costs would overwhelm the Government and burden the nation with an intolerable debt for generations to come. On current estimates, inclusive of Business Interruption liabilities, the net shortfall could be a

massive NZ\$24 billion. To this there might need to be added unrecovered insured losses resulting from insurance insolvencies.

In reality, there can be no such thing as total protection; countries with severe exposure to earthquake have long recognised this. Unlike the United States of America and Japan, however, which seek to restrict insured liabilities, New Zealand appears to have imposed few restrictions on catastrophe coverage. Apart from the proposed compulsory insurance of residential properties, the business community is free to set its own priorities and insure within its own coverage criteria through the private sector.

Received wisdom indicates that this laissez-faire strategy may, in the event of a major earthquake, give rise to some additional shocks, albeit of a severe financial nature, more particularly in connection with Business Interruption covers.

More especially, but by no means exclusively, such policies may have latent loss potentials of a magnitude and of a nature not immediately apparent to the untrained eye. Even those who are accustomed to handling B.I. claims can on occasions be surprised. I know, for instance, of a petrochemical refinery which suffered a 14 day shutdown as a result of operator error (an error, I may say, of mind-boggling simplicity). The B.I. exposure in this case was a financial loss potential of up to seven and a half million pound for each day the refinery was closed down.

In another claim with which I was concerned - a relatively simple fire within a somewhat sophisticated steel-coating machine in a plant in Italy - put a significant segment of the European car industry at risk of a shutdown. Had it been impossible to locate an alternative source of supply in another country before the buffer stocks of steel panels ran out, the loss (in Italian lira) would have been beyond the capacity of an office calculator to determine.

In arriving at the shortfall of NZ\$24 billion, I adopted a modest ratio of 1:1 between the cost of B.I. and property damage. Many experienced risk managers, when estimating the B.I. exposure of the businesses for which they are responsible, do not consider a factor of 10 for B.I. unrealistic. The loss of a key item of plant with a long lead time for replacement can have severe repercussions. In an earthquake situation, where the likelihood is that many of the manufacturers and suppliers are themselves in dire straits (if not totally disabled) it is not difficult to see how such problems could be multiplied tenfold.

Relatively few businesses, it has to be conceded, have the capacity to generate losses on the scale of the cases I refer to above. It will also be the case that no every business operating within New Zealand's economy will have effected

Business Interruption insurance. Let us see, however, what might be the dimension at issue.

I suspect, for instance, that every large manufacturer or supplier in New Zealand with an international division, and certainly all companies with parent bodies domiciled elsewhere, will have retained the services of a professional and skilled insurance broker to advise them. We may be assured, therefore, that this multinational broker will have set up a sophisticated and far-sighted programme for the client. So far as the B.I. earthquake coverage is concerned (I must ignore offshore arrangements here) we may expect to see at least the following features :

1. All locations from which the insured carry on business will have been specifically mentioned, or included within some form of blanket coverage.
2. The sums insured will be full ones, to avoid the operation of the Average Condition to which all B.I. policies are subject.
3. The selected indemnity period (known as the Maximum Indemnity Period) will be 36 months, which is the longest period the market generally offers under B.I. covers. This means that so long as the business continues to be affected by the earthquake the insured will be compensated under the policy.
4. The policy will also make provision for four other very important features of B.I. coverage :

(a) Denial of Access

If the insured premises are undamaged yet cannot be entered or properly utilised because of damage to neighbouring properties, insurers will meet B.I. claims at the undamaged premises with this Extension in place.

(b) Supplier's Extension

If, because of damage elsewhere, the insured are deprived of their raw materials, insurers will pay for the loss of profits arising in consequence of the deprivation, or meet any additional costs incurred in obtaining supplies from alternative sources.

(c) Customers' Extension

This clause provides compensation in a similar way to the supply situation, but in this case compensation arises because the insured are denied an important sales outlet or distribution centre.

(d) Failure of Public Utilities Clause

This covers disruption of electricity, gas and water supplies. In the event of an earthquake the disruption of these vital supplies is likely to be a prime source of loss, the scale of which may not always be fully appreciated before the event.

The symbolic relationship between commerce and industry is often far-reaching and complex. From the point of view of the underwriter it can generate some unhappy surprises. Each side of the equation (the supplier-customer relationship or vice versa) is a victim, and each will have a claim to make for its own financial loss as it impacts on each business.

The possible dimensions of the dependency element are well illustrated by Denis Riley in his book 'Consequential Loss Insurance and Claims'. Although arising from fire, the case might just as easily have been the outcome of a classic earthquake situation.

A fire destroyed the pre-cooling sheds in the Duncan and Victoria Docks in Cape Town. Western province fruit growers, who in 1957 exported 9.5 million pound worth of fruit from the docks, depended on the pre-cooling stores for their livelihood. Accordingly, the loss of these export facilities was a disaster for the economy of the whole province. At the time the port authorities estimated that it would take at least three years to restore the damaged cold stores; and meanwhile, the export fruit industry of the Western province, having no alternative facilities went out of business.

Given an earthquake and with ports shut-in, airports closed, roads impassable, bridges down, buildings in a state of collapse and public utilities non-operational it takes little imagination to envisage the sheer volume of claims that would arise from this complex web of business dependencies.

Furthermore, it should not be overlooked that in addition, a very substantial volume of claims would be reported from businesses hundreds of miles from the devastated area. Such firms, dependent on earthquake victims for raw materials or finished goods, or for major sales outlets for their own commodities, are as much at economic risk as are the victims themselves. These claims will all require to be met out of the common pool of insurance premiums. Ranking pari passu, dollar for dollar, they are all part of the financial cost of a disaster of which, in physical terms at least, they have no part.

As an adjuster involved to a considerable degree in handling substantial B.I. claims, it is my experience that these inter-business dependencies - the upstream/downstream flow of business - can have some highly-convoluted financial consequences. Tracing the effect of the fire (in this context, the earthquake) upon the business can be difficult enough after the event has occurred. How much more difficult, then, for the underwriter, who before the event, has to underwrite the business and charge a proper premium rate with so many unknown factors?

It is my guess that the insurance industry has scant grasp of the true potential of its exposure on Business Interruption policies. That exposure, I venture, is greater than is perhaps commonly supposed.

In the United States and Japan, Business Interruption is either not available for

earthquake risks or is rigidly monitored and controlled. The mechanisms of control are by co-insurance, severely restricted coverages, substantial deductibles, higher rated premiums - and so forth. It is my conviction, such is New Zealand's exposure and such the country's dependence on reinsurance, that the time will come when Business Interruption policies will not be issued with quite the same unfettered freedom as seems to be the practice today. The horse may, of course, have first to bolt before insurers lock this particular stable door.

The multi-national giants with their more substantial buying power will, as I have suggested, opt for the fullest possible cover. The added element of uncertainty in an already unstable geophysical environment unnerves the business community, and within the limits of affordability it will look to protect both its revenues and its capital assets in the earthquake situation.

What then of those other companies that make up the vast bulk of the industrial and commercial sectors? Some will choose the prudent course and seek adequate protection for their businesses. Others will exercise their judgement based on their perception of the risk involved. Their perception may be flawed, of course, so that the amount recoverable in the event of a loss may prove to be well below their level of expectation. The rest, for their own reasons, will not see any need for this form of cover. Many in this last category will stoically shoulder the risk themselves - right up to the very moment of the earthquake, at which point the risk will just as suddenly become a function of government to underwrite their survival.

After adjusting losses for over 30 years a touch of cynicism is as healthy as a sense of humour to see one safely through other people's catastrophes!

At the risk of trespassing on Derek Quigley's topic, I need to make at least a passing reference to the role of central government in catastrophe situations.

My title is "Earthquake and Business Interruption: A Policy for Survival?" The second part, with its modest play on 'policy' embodies a rhetorical question. One side of the survival equation is the need perceived by the business community for reasonable protection through insurance of profits and cover for fixed and continuing overheads. The other side is the need of central government to maintain solvency levels and yet ensure that the economy does not collapse for want of investment by a severely demoralised business sector in recession, if not in terminal decline.

Whilst the safety and welfare of people are central to all disaster planning, it is the business community in the end which generates the wealth to support these critical services. It is this same business community which has the prime responsibility for keeping the population in gainful employment.

I am not persuaded, as seem so many others, that it is unreasonable for the business sector to look to government for at least a measure of qualified financial support at such time.

In California, so I understand, the insurance industry is currently lobbying the Federal Government to build a US\$50 billion reserve fund to back up insurers in the event of a catastrophic earthquake. Industry officials there are saying that "a devastating earthquake would bankrupt the insurance industry so quickly that writing new policies would be impossible for several decades".

The May 1989 Government White Paper ('Disaster Insurance Policy') and the restructured Earthquake Commission suggest that New Zealand is moving away from a strategy upon which others may be just embarking. Which of these opposing strategies, I wonder, holds the key to survival?

Having dealt with a number of strategic and philosophical concepts I will now turn to issues more immediately relevant to my professional discipline; that of investigating and - if there is liability - settling claims.

A Chartered Loss Adjuster, acting out his or independent role, must at all times preserve impartiality as between the insurer and the insured. The adjuster, operating strictly within the terms of the contract (the policy) arranged between the parties, has the responsibility of arranging a settlement that is seemingly just to both sides. The adjusting function may loosely be defined as a responsibility to:

- (1) establish what happened and why
- (2) determine that the loss or damage was caused by an insured peril
- (3) confirm that the insured peril was the proximate cause of the loss or damage
- (4) ascertain the indemnity payable under the policy by measurement and valuation
- (5) negotiate a settlement with the claimant and carry the recommendation with the insurer.

Dependent upon the nature of the claim and the extent of the damage these basic duties may be discharged at first visit or only after the passage of several years. Longer tail claims are almost invariably funded by 'on account' payments.

In an earthquake situation, as with hurricane - and inundation-type catastrophes, the sheer volume of claims to be handled calls for a radical appraisal of all normal procedures on an industry basis. I have no doubt that the Insurance Council of New Zealand and the two Loss Adjusting Institutes have addressed all such issues in their own emergency response strategies.

Experience of disasters suggests that claimants are divided into two quite specific categories. The first, and happily by far the majority, consider themselves lucky to be alive. Perceiving others to be worse off than themselves, they adopt a strictly pragmatic and reasonable approach to settlement. Claimants in the second, and very much smaller category are generally altogether more rigid in their approach towards settlements. Not wanting a dollar more than they are entitled to (so they invariably tell us) they proceed with total dedication to ensure that they do not receive a dollar less either.

Whatever the personality of the claimant, and indeed that of the adjuster - for this is an exercise in human relationships at a most sensitive level - there will always be a hard core of complex and difficult claims. In the context of the Business Interruption policies we should perhaps now examine a few of the reasons how and why such difficulties may arise.

In broad terms, Material Damage policies indemnify insureds against the loss of the capital assets invested in the business. Business Interruption policies (also contracts of indemnity) are designed to protect the financial stability of the business by covering the earnings generated by the capital assets. By indemnifying the insured for loss of profits (as defined in the contract) together with provision for increases in cost of working expenditure, it gives protection for the fixed or standing charges of the business. Likewise, it provides for those costs and expenses which do not diminish proportionately to lower sales during a period of partial interruption.

With strictly limited exceptions, all B.I. policies will contain a Material Damage Warranty which requires the insured to have coverage on the physical assets of the business as a pre-requisite to payment of a claim for business interruption. This provision is to ensure that the policyholder is in a financial position to rebuild the premises and restore the physical assets with the minimum of delay.

B.I. covers can be obtained for almost every activity pursued for gain, but common to all policies, in the context of the present discussion, will be the need for coverage against earthquake shock and fire following earthquake.

Business Interruption policies will have a maximum sum insured (subject to the Average Condition) and will provide an indemnity, within the maximum period stated in the policy, in respect of losses arising at the premises of the insured. For the reasons already examined, we would also expect losses at suppliers' and customers' premises to be included by policy endorsement.

The rate of gross profit and the revenues earned by the business are the basic yardsticks for measuring the loss. If, at the time of the damage, there is good reason to vary either, then provision is

made for these adjustments under the Special Circumstances Clause. Adjustments, which may be in either direction, require both a sound grasp of the business profile and an ability to read a crystal ball. Such matters often generate lively discussion between claimant and adjuster whose views on market trends and the future status of the business under consideration may not always correspond.

Determining the moment at which the business ceases to be affected by the earthquake (or other insured peril) is another area of possible conflict. Whilst the policy affords an indemnity over the Maximum Indemnity Period, the trigger point for cessation of that protection is when the status quo has been restored.

In reality, and perhaps more especially so in an earthquake situation, the status quo is rarely achieved. Very few insureds forgo the opportunity to up-date buildings, upgrade equipment and possibly restructure their marketing strategy. It is changes of this nature which result in settlement delays, give rise at times to serious differences of opinion, and prolong the recovery period beyond the indemnity envisaged under the B.I. policy.

It is imperative for the B.I. adjuster to become involved from the very outset. In this way, not only will he (or she) be able to monitor the business recovery throughout, but will also be able to influence decisions arising from the emergency measures and temporary expedients, areas in which the experienced adjuster will have developed valuable expertise. Although I will return to the point later I would stress here that the value of experience must not be underestimated in connection with B.I. claims. They do require a different kind of expertise to the property adjuster and whilst experienced adjusters are skillfully adaptable they should not be seen as universally interchangeable.

Earlier in this paper I touched on the latent potential of the B.I. claim. Let me now, to restore some balance, summarise what is not covered by the policy, although some insureds would at times like to persuade the adjuster otherwise. B.I. insurance is designed to protect the business in a specific way and these policies are not 'wrap-arounds' or reservoirs for any loss that does not sit comfortably within the framework of other covers.

The B.I. policy, for instance, does not pick up any shortfall through underinsurance under the material damage policy; it does not meet the difference between the cost of reinstatement and an indemnity settlement; it does not compensate for depreciation of undamaged stock after damage has occurred; it does not pay litigation costs, fines, damages and penalties arising out of breach of contract in consequence of the damage and, apart from certain professional accountancy charges, the policy makes no provision for claims-handling costs - except that is, in the New Zealand market where cover for

assessors' fees is available.

It is not my intention in this paper to trespass on the province of those, far more capable and qualified than I am, who have already published papers on the 'what it will be like' scenario. Equally, it is not for me to controvert the emergency disaster plans and procedures prepared by the Government, Government-sponsored bodies (Civil Defence and others), the Earthquake Commission, the Insurance Council of New Zealand and the Loss Adjusting Institutes (ILANZ and CILA, of which latter body I have long been a member).

As to what might befall Wellington in the event of a major earthquake, I found the Government Discussion Paper ('A Review of Earthquake Insurance') and the prize winning paper by Mr Derek Scott entitled "What Happens when the Worst Happens", descriptive, informative and disturbing. Ironically, we cannot gear our strategies to the worst that could happen for to do so would be to dilute finite resources to the point of ineffectiveness. Any strategy which purports to cater for an emergency of no finite dimension will, in extremis, be found wanting. The uncertainties, as we have recognised, are enormous; we do not know how bad things could be. We can only trust that when it does happen there will be resources sufficient to contain its impact.

In full knowledge of such monumental uncertainty it is all the more strange that we should continue to compound our problems with so many monumental blunders. I have just read that scientists have found a plate fault beneath the nuclear weapons plant in South Carolina. Japan, as we know, is particularly earthquake-conscious, (Tokyo's gas mains and bullet trains are programmed to cease working at the first suggestion of seismic activity) and yet, the city the most critical to the stability of the financial world is sitting on a ticking bomb.

Mexico City sits astride the soft, water-saturated sediments of a former lake, and so mounts up our catalogue of human and avoidable follies.

The Japanese National Land Agency estimates that a major earthquake in the South Kanto area would destroy 810,000 buildings and the ensuing conflagration possibly a further 2,600,000. With a population density of 36,000 people to the square mile in Tokyo city area the consequences of a major disaster there in human and economic terms is all too alarmingly evident.

Of course, nuclear-free New Zealand would never suffer the planning disaster (if not indeed a criminally negligent one) of South Carolina- incidentally, one of the massive but hidden costs of the next major earthquake in the United States is expected to be the attorneys' fees! It is thought that the Federal and State courts will be deluged with actions brought on behalf of the estates of the deceased, the injured, the homeless and by those whose businesses have failed, all of whom may perceive that their rights have somehow been violated.

It is not inconceivable that governments will need to rescind or suspend some of these rights under special emergency powers.

Returning to my theme, of course Wellington is less claustrophobic than Tokyo; across Wellington's catchment area there is a healthier square mile available for each nineteen hundred of its citizens, not thirty six thousand to the square mile as in the Japanese capital. Notwithstanding, 340,000 people, one tenth of New Zealand's population, pass their days in an environment that is known for its earthquake-vulnerability with a risk factor twenty times greater than that of Auckland.

Was it lack of appreciation of the facts of geophysical life that caused those in authority at the time to rebuild Wellington on the same fault that was the cause of more than half of the city being destroyed in 1848, so that seven years later, the 1855 earthquake left the city without a single brick building standing? Today Wellington has many buildings constructed to the highest standards of earthquake resistance, but to what avail? Experts well know that the major part of Wellington's commercial and financial sector, central government and civil administration buildings, the central telephone exchange and other key structures are in Zone 3. As the Department of Scientific and Industrial Research has indicated, this is 'an area of high porosity sediment and significant amplification of incident vibration may be expected'. In the language of the layman, the ground on which these buildings stand is inherently unstable and is expected to fail.

Earthquakes are to do with people, their welfare and their livelihood, in which the business community plays a central role. We should not lose sight of these basic truths. Whilst quantitatively the disaster for Wellington may not be on the same scale as that of Tokyo, for the victims and sufferers the outcome will be no different.

As the record shows, death and injury are not unknown in windstorm and inundation catastrophes. Tragic though this is at any level, the reality is that with few exceptions deaths from these disasters are numbered at most in hundreds. In the event of a severe earthquake, the toll would run into tens of thousands. Death on this scale, the attendant injuries and suffering add yet another, and an extremely sensitive dimension to the unprecedented problems facing those charged with the responsibility of handling complex claims in such volumes. No crises response programme can afford to underestimate the scale of these difficulties.

Adjusting, in my view, owes more to art than science. Those who see claim settlements only from the perspective of the mechanical function of discharging a contractual liability, are in danger of falling victim of their own myopia.

After any disaster, people's lives are in dsarray, many will face ruin. Victims cry

out for constructive and effective help and it is part of the insurance industry's social task to give the public the assurance and confidence they have a right to expect at such times. This calls for an inordinately high level of diverse technical skills and depth of adjusting experience - in great numbers. I do not believe that the adjusting profession, even on a world scale, has the resources at its disposal to mobilise teams of the calibre and experience, and in the numbers required, to handle an earthquake disaster on the scale envisaged.

One experienced New Zealand adjuster has ventured the courageous prediction that a major earthquake striking Wellington would result in more than 250,000 claims. By any standards, this is a daunting prospect. The prospect is made no more comfortable by an examination of the historical evidence, for which purpose I have extracted just three catastrophe situations from Munich Re's table of greatest natural disasters in the period 1960-1979. These will serve to put a Wellington earthquake with some 250,000 claims in some perspective :

With regard to the earthquake in Managua, and not altogether surprising in this area of the world, Munich Re later commented, 'as the number of local adjusters was greatly inadequate help had to be employed who were assisted by experts from neighbouring countries, the U.S.A. and Europe.' This was for insured damage of only US\$100 million spread across no more than 10,000 claims.

Cyclone 'Tracy' left 45,000 people homeless and the insured damage of US\$300 million produced 15,000 claims concerning which Munich Re had this to say : 'the local adjusters and assistant personnel of insurance companies were quite unable to cope'.

Munich Re are more adjuster-friendly in connection with the 100,000 claims from Hurricane 'Frederic' with an insured aggregate of US\$750 million. Reinsurers now had this to say. "Thanks to a sophisticated loss registration system, the insurance industry was able to obtain an exact idea of the probable extent of damage within 36 hours. On the basis of a model loss adjustment system it was possible to settle about 80 percent of the at least 100,000 individual losses within three weeks."

Interestingly, one of the reasons advanced for this superior performance was the help given by the media in informing the victims of all the measures required to determine, advise and minimise losses. The likelihood in an earthquake situation is that all forms of communication will be rendered totally inoperative.

Speed is the essence of the claims' operation, but not at the expense of professionalism. The public expect the industry to respond positively and effectively even against overwhelming odds. Viewed from the adjusters' standpoint, they know that delays compound the problems, making settlements not only more difficult

to achieve, but markedly more costly. From what we have seen, therefore, a claims' volume of 250,000 would set an impossible precedent, far outnumbering anything the industry has seen before. Compare the record of claims handled by the old War Damage and Earthquake Commission which between 1984 and 1988 never peaked above 6,000 claims in any one year - from all causes. Are the adjusters in New Zealand prepared?

A particular worry from the B.I. adjusters' perspective is that delays in handling property damage claims can exacerbate the cost of the business interruption settlements, most of which are complex enough already. On B.I., it will be recalled, insurers are risk (within the maximum indemnity period) for such period as the results of the business continue to be affected in consequence of the damage.

In the course of preparing this paper I have been struck, and at times disconcerted, by the poverty of hard information on both B.I. earthquake insurance coverage and claims. To a degree this is not difficult to understand for, compared with the long-established tradition of fire insurance, B.I. is a relative newcomer. Having its origins in the UK its relevance to other financial systems would not have been immediately apparent. In a shrinking world, however, financial accounting has a distinctly more international character and B.I. covers, which are flexible and adaptable vehicles of financial protection, are now regarded as an indispensable part of the insurance portfolio of every self-respecting business.

By way of drawing the threads together we return to the central question, what is the policy for business survival? Can New Zealand afford to stand back and distance itself from the community that creates its wealth and gives its people employment? Should the private sector accept that it is part of its social task to ensure that commerce and industry is offered full protection against the crippling effects of a major earthquake?

Either way, reinsurers are seen as the key players, but it is not overlooked that they too are no less committed to survival. Like New Zealand's business community, reinsurers are concerned with balancing their books. If a reinsurer goes to the wall the market it serves will suffer. If a business community goes into a terminal decline the nation it supports will suffer irreversibly.

I strongly suspect that this is not only New Zealand's problem for the world has changed so much since the massive disasters of 1906 and 1923. We have yet to discover the full impact of these changes.

Disaster, it is said, is the catalyst of change, but do we need to await the next mega-quake within a major business and population centre before we know at least some of the answers?

If such is the price of knowledge then, for my part, I am content to remain in ignorance.