

# 14 Managing risk

*Worst infection-disease catastrophe in recorded history. (ROSEN ET AL., 2003: 81, talking of AIDS)*

## Learning objectives

After reading this chapter you will be able to:

- recognize the omnipresence of risk of various kinds
- identify the main strategic responses to the existence of risk
- understand when avoidance is the best form of risk management
- distinguish between the management and mitigation of risk
- understand how diversification is one way of managing risk
- consider how, using scenario building and planning, risk management can be made part of the overall strategic orientation of those making strategy

## Key strategic challenge

How do I respond to the existence of risk?

## Strategic dangers

That the enterprise will expose itself to risks which can destroy or seriously weaken it. This damage can result from a failure to either assess properly the risk environment or control the enterprise's exposure by appropriate strategies of avoidance, management and mitigation.

## Case Study Scenario Africa – AIDS and civil wars

'Africa has never known anything like this in its history. It is the worst nightmare that we can imagine. It is worse than a nuclear bomb.'

*Bummi Makinwa, head of UNAIDS  
in eastern and southern Africa*

'We are all engaged in a fight to the death. We are faced with extinction.'

*Joy Phumaphi, Botswana's health minister*

Each year Africa receives less than one per cent of the world's foreign direct investment (FDI). The only countries in Africa receiving a significant level of FDI are those with obvious opportunities for a return to offset the risk. Usually this means the existence of natural resources of some kind. These would include countries such as Nigeria and the Sudan which have significant oilfields or those with other natural resources such as diamonds, for example Botswana.

The multinationals which invest at an already high level in China and on an ever-increasing level in India do not do so in Africa. Why is this the case?

Economies displaying poor rates of economic growth offer fewer opportunities of a good return for investment than countries which have high rates of growth. Most of sub-Saharan Africa has seen a contraction in its economy over the last 15 years. Growth is negative. Returns for most types of investment in Africa are not good. It is tempting to assert that it is because the risk environment is so bad that no investor is willing to take the risk of conducting business transactions in Africa. The problems are particularly threatening in sub-Saharan Africa, but by no means limited to that region. Only where the prospective returns are very high is it worth investing.

There is a vicious circle in which the high frequency of risk-creating events helps keep income levels down and those same low income levels make the continent vulnerable to risk, unable to respond in a way which effectively mitigates or manages that risk. There is a general perception of Africa as highly risky, which helps to keep out investment. The perception of Africa is such that the news coming out of Africa usually relates to disasters, threats and risk.

Africa has the full range of risk-generating events, from natural events to social sources of risk, from drought and disease to warfare. These include all sorts of human and animal diseases in an environment which, because of its climate, encourages their proliferation, much of it debilitating as well as potentially lethal, including bilharzia and sleeping sickness. AIDS is a new

but potentially extremely destructive problem. Drought is another problem. Much of the pain from the latter is self-inflicted, as with its common consequence famine. There is a progressive desertification of many areas because of the agricultural practices pursued and an inability to raise agricultural productivity. There is a failure to distribute efficiently what is produced.

The negative impact of such risk-generating events results partly from the inability of governments to respond effectively and handle that response in a way which attracts approval. Governments in Africa tend to be unstable, and poorly supported by a public service which is itself often highly politicized and riven with corruption. Again the perception may be worse than the fact and unfair to many governments which are doing their best in difficult circumstances.

Political risk, in the sense of frequent changes of government and policy or general civil commotion, is at a high level. Political stability is hard to find. Tribal divisions often make very difficult the development of national states to which all the population can be loyal. In nearly all cases, decolonization has left a legacy of division between the tribes of different areas. Often the tribal situation is complex but in some cases the divisions are only too obvious. In some cases this has boiled over into genocide, as with the Tutsis and Hutus of Rwanda. In the Sudan there is a continuing civil war between the Christians of the south and the Muslims of the north. Elsewhere divisions have burst out into civil war, as in Biafra in Nigeria back in the 1960s, but now smoulder below the surface. The list of countries suffering from civil war is endless: Nigeria, Ethiopia, Somalia, the Sudan, Angola, Mozambique, Liberia, the Congo, Sierra Leone and the Ivory Coast. Only a handful of countries seem to be exempt – Kenya, Tanzania and Ghana.

The concept of a modern state with an efficient and detached civil service is an alien concept. In both politics and economics there is a winner-takes-all attitude, with the spoils of government enjoyed in lavish and ostentatious but unproductive expenditures and rewards for key groups of supporters, particularly the army or police. A tendency to a winner-takes-all politics, even in stable polities, often translates into corruption at all levels of government from the top downwards. Entering African states and encountering the immigration and customs controls can be the first, but not the last, encounter with corruption.

Decolonization has left an indelible mark on Africa. The colonizing powers redrew the boundaries in Africa according to the fortunes of particular colonizing

powers in the competition for colonies. Language and outside links still reflect the influence of the former dominant powers. The creation of independent states came much later to this continent than to the Americas and even Asia, in many cases as late as the 1960s. Settler populations in various parts of Africa have made the problem more, not less, complicated.

The business environment in Africa is seen as very hostile. The usual response to that environment is an avoidance response, which explains both the low level of foreign investment in African countries and the low level of interest in Africa revealed in the business press of the developed world. How should such risk be factored into business decision making?

Whatever kind of business decision is made, and wherever it is made, it is always made in conditions of risk and uncertainty. All strategic situations are characterized by at least some risk, although the exact nature and level of the risk will never be the same in two different situations. As a consequence, whatever decision is made must be made with an eye to the risk exposure created and the likely impact on the risk position for any organization.

## The universality of risk management

There is no business decision which does not involve risk management of some kind. Any decision involving future performance comprises some measure of uncertainty and therefore risk. This means that risk management must be a universal phenomenon and an essential part of strategy making.

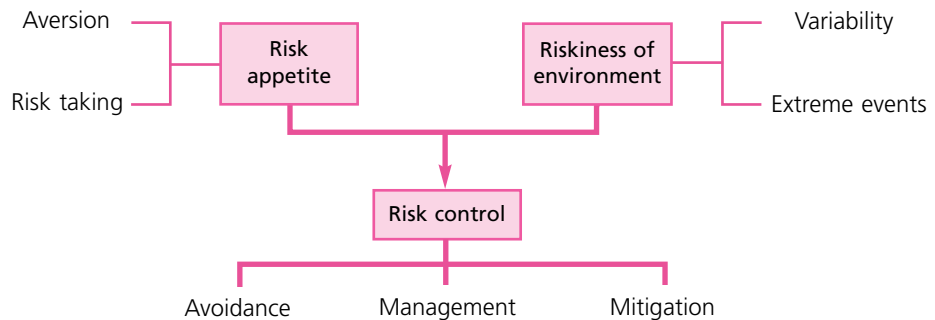


Figure 14.1 Risk control

### The risk appetite

Effective risk management requires the taking of an explicit attitude to risk and careful consideration of the actual riskiness of possible outcomes.

What should be an appropriate attitude to risk? There are four major elements determining such a **risk appetite**:

1. The *economic health of the enterprise*, partly its general profitability but notably its immediate liquidity position. Only a cashed-up enterprise, fully used to operating in an environment of high returns, high risk and rapid change, and faced with a project offering fairly certain revenue and cost streams, can afford to totally ignore risk. There are not many enterprises and projects around and not many situations in which these conditions hold.

The more vulnerable the enterprise in which the decisions are made, the greater the reluctance to accept risk. Vulnerability may be a matter of:

- chronically low profits, as with the airlines
- persistent loss making, as with many dot-com companies, such as Amazon.com
- low financial reserves and poor borrowing ability.

An enterprise which has few reserves to tide it over unexpected bad times is bound to be more sensitive to risk than one with ample reserves which can tide it over anything but the most extreme events. There are various such reserves, stretching from cash held to assets which can be easily realized on the market or used as collateral for a loan. Some valuable assets, such as aircraft or a car fleet, can be sold and leased back.

2. The *personality and motivation of the strategists themselves*. The perception of performance outcomes is coloured by the position of the observer and reflects the confidence with which expectations of the future are held by that observer. There is no doubt that some individuals are more risk-averse than others. **Risk aversion** often reflects the past history of the individual. Recent catastrophic events tend to reduce the appetite for risk and increase risk aversion.

Confidence is a key issue, particularly the confidence with which views concerning the future are held. A single dominant personality can be the key figure and the critical input in the willing acceptance of risky projects. Without a champion with a belief in a successful outcome, the project would never be undertaken or completed. It is often the role of the leader or entrepreneur to provide such confidence.

Entrepreneurs by definition have a greater appetite for risk than the average. In reality few strategists can afford to be deliberate risk takers. Even the most adventurous of entrepreneurs seek to manage risk as much as they can. They will make every effort to reduce the risk level or pass the risk on to others. Some are stimulated by the challenge of overcoming risk but they always seek to control the level of risk to which they are exposed. This can be done by proper organization. Teams of staff can massage markets, anticipate technical problems and ensure access to sufficient finance.

3. The *culture of the enterprise*, whether it encourages or discourages risk taking. Corporate culture almost invariably involves an attitude to risk and risk taking. The culture of an enterprise is partly the result of past behaviour and its outcomes – what succeeded in the past and what failed – and partly the result of the attitude and influence of leaders, past and present. A corporate, just as a national, culture can encourage or discourage risk taking. Whatever the views of a single powerful CEO, such a person needs support; an appropriate corporate culture helps.
4. The *'political' interaction between key decision makers*, including the level of conflict within the enterprise. Conflict can prevent decisive action and encourage risk-

averse behaviour. How far do the decision makers pull together? Fear of a mistake can increase in a context of conflict. Different interest groups can clash and prevent decisive action. As a result the whole decision-making process may become much slower. To be successful, risky projects usually require a careful alignment of stakeholder groups and integration of all functional areas.

Reactions to the requirements of a particular situation are therefore based on the interaction between this attitude to risk and the actual riskiness of a particular project, that is, between the appetite for risk and the amount of risk involved in any particular project.

### The riskiness of the environment

What about the riskiness of the environment? How is this to be measured?

Outcomes for any particular project are expressed in the movement of chosen performance indicators, such as the level of profit. The measurement of risk depends on the selection of an appropriate key performance indicator which expresses by its possible movements the existence of risk. Often there is an assumption that past behaviour indicates future risk. There are two ways of measuring risk:

1. The **variance** in a key performance indicator. This approach dwells on the general tendency in some sectors of the economy to variation.
2. The size of possible extreme fluctuations occurring with a defined probability. The approach focuses on the shock of the occasional extreme event.

Risk management entails either reducing the variance or taking action to guard against the extreme event; two different responses. Extreme events can have a dramatic effect on performance indicators such as profit. There is always the chance of an extreme event occurring which would take down even the best prepared organizations. They come with a varying degree of probability, in some cases with a complete uncertainty. Some projects offer the prospect of huge losses, if they fail.

How does the observer compare the possibility of an extreme event, an event which might, for example, reduce net income to a tenth of its anticipated level, with a variance which is 25% of the average value? Which represents more of a threat?

### Risk-generating events

Risk can arise from a multitude of particular kinds of threats. **Risk-generating events** take many different forms. The more turbulent the environment in which such decisions are made, the greater the level of risk. In particular, the waves of 'creative destruction' which define a capitalist economy have always been characterized by high levels of risk. Unforeseen fluctuations of the market economy, such as the Asian economic crisis of 1997 or the Argentinian financial crisis of 2001, are inherent in any market economy. The frequent overshooting and undershooting of demand relative to supply means that prices rise and fall in cumulative movements. This is not surprising, given that within any market system confidence waxes and wanes. Such crises have been happening as long as the market itself has been in existence. Some industries, particularly those in the new economy, are more volatile and more risky than others. They are more subject to violent fluctuations, both upwards and downwards. So-called bubbles are common in these new sectors.

### Risk management strategy

Given the risk environment in which there are risk takers with a given appetite for risk and projects offering the opportunity of different and varying returns, there are two strategic decisions which are necessary preliminaries to managing risk – the extent of the **risk assessment** and who should implement it.

### Risk assessment

The first decision is how far decision makers, including strategists, should go in making a risk assessment, that is, what level of resources is it desirable to commit to such an exercise.

Part of risk management is a thorough assessment of the level and nature of risk. Ignorance in the market can never be fully removed, but it is always possible to get access to more information than is currently available. This requires the commitment of more resources, in particular the time and effort of staff members. It is always costly to make a full risk assessment for a particular project, whether country risk or any other kind of risk.

Assessment of risk involves the identification of risk-generating events and the estimation of their incidence. Such an assessment can take a variety of different forms. There are a variety of approaches, including sensitivity analysis and scenario creation, which identify and determine the possibility of a certain sequence of negative events unfolding in the future. Assessment depends on the collection of information about such events and their impact. Any measure can be an exact quantitative measure, sometimes deceptively exact, or it can be a qualitative rating, ordinal rather than cardinal.

In theory, the expenditure on risk assessment should be taken to the point at which the marginal return on the investment made is equal to the marginal cost. Because of ignorance and uncertainty there is no way of knowing in advance what the marginal return will be from making such a commitment of resources. This simple rule is of little operational value. Much cruder and simpler rules must be adopted on the level of commitment. Usually there is a process of trial and error which establishes an acceptable level.

Since the risk situation in a particular country or industry reflects the specifics of the environment in that country or industry, a proper risk assessment requires considerable expertise and knowledge of the country or industry. This includes knowledge of both prior history and current conditions. An in-depth study of country or industry risk, carried out to test the viability of an investment, may take months to complete. It cannot be repeated very often, for example every year, although it might be updated in order to evaluate a rapidly changing risk environment. Any risk assessment is a matter of a careful analysis which must guide action over a significant period of time.

### The risk managers

The second strategic decision is whether to do it 'in-house' or use the services of specialists. The outcome of such a decision depends partly on the size of the organization, its capacity to carry out an effective risk assessment and the relative costs of doing it in-house or outsourcing the service.

On the one hand, there are many consulting firms willing to carry out this function for an enterprise. There are many people who set themselves up as experts in risk assessment and sell their expertise as consultants in risk assessment.

On the other hand, many organizations today have their own risk management officers and carry out regular risk audits. In particular, financial institutions have their own risk officers and risk departments.

An enterprise always gains by knowing exactly what the worst is and the consequences if it happens. However, it is not sensible to allow the negative side of a project to completely dominate decision making. A risk assessment is just one among a number of inputs into the decision-making process. The positive side must not be relegated to a secondary place in this decision making.

A sensible approach to any decision making is to consider simultaneously opportunities and threats, to build risk management into the process of evaluation from the very start, rather than apply it as an 'add-on' after a decision is made. It is not a matter of undertaking risk management as an afterthought or a final check on whether a policy is sensible.

All managers must, at least implicitly, manage risk, even if they do not do so explicitly. As with many other aspects of strategy, it is better that it is made explicit.

There may be problems of measurement, whether it is of the actual incidence of the risk-generating events, the degree of the threat, or the strength of its likely impact, but it is advisable to try to assess the approximate level of risk in a systematic manner. This might be a matter of estimating the frequency of events, and evaluating the severity of exposure and impact, that is, how many lives or how much capital is actually at risk. Each decision maker needs to understand exactly what it is which, under the heading of risk, actually threatens him or her.

The first response to the existence of risk is therefore to articulate clearly the nature and level of risk. Only then is it possible to work out what other responses might be necessary. Obviously too little was spent on risk management in the past, with negative results. The debt crisis of the early 1980s led to a significant debate about country risk, mainly by financial institutions which had made large non-performing loans. It was concluded that no significant investment should be made without a proper risk assessment. However, this requires taking a whole series of strategic decisions. This conclusion, reached largely with respect to portfolio investment, applies equally to foreign direct investment (FDI).

An alternative is to consider the country risk rating of *Euromoney* and *Institutional Investor*. These come out once or twice a year. They purport to measure country risk, which typically includes political as well as economic risk. They score each country out of 100, with the highest scores indicating lowest risk. Other assessments, such as those by Moody's or Standard & Poor's, are of creditworthiness.

The first issue is how these ratings are determined. The formula used by *Euro-money* includes ten different elements and is shown in Table 14.2.

As can be seen, there is a strong influence of the factors relevant to creditworthiness in this formula, amounting to 50%. However, both political risk and economic performance play an important role, each 25%.

The ideal may be to see a steady improvement in the risk rating, both for a corporation and a country, but the reality for undeveloped and particularly developing countries or corporations is to see significant fluctuations in the level of sovereign and corporate risk. Sometimes these fluctuations are the result of events elsewhere in the



### Focus on Theory

#### Risk evaluation

There are many different risk rating systems available, some public and others only available on payment. Mostly they apply to financial assets, that is, **portfolio investment** rather than direct investment in productive facilities, investment in bonds or bills rather than in shares or physical facilities. The most common are ratings of creditworthiness. Moody's, Standard & Poor's and Fitches use letter systems to assess the creditworthiness of both companies and governments. The listing runs typically from the lowest risk AAA rating to the highest risk rating D. The key dividing line is between investment

Table 14.1 **Standard & Poor's risk rating scale**

Rating	Comments	Numerical equivalent
AAA	Excellent	91-100
AA		81-90
A		71-80
BBB	Satisfactory quality, average risk	61-70
BB		51-60
B		41-50
CCC	Low quality, high risk	31-40
CC		21-30
C		11-20
D	Excessive risk	0-10

Source: Adapted from Madura, 2001: 558.

grade and that deemed less than investment grade. The downgrading of a company or country to a non-investment grade not only increases the cost of capital for the recipient, but often has seriously negative effects on share prices.

All countries are assessed for their sovereign credit rating, that is, the likelihood that the government will be able to continue to service its bond or bill issues. All large companies are rated for their corporate risk. Table 14.1 illustrates the method.

world, so-called risk-generating events. In other words, broad groups of countries move together in a systematic way.

A good example of this was the Asian economic crisis, which led to the downgrading of the risk rating of many countries in Latin America and Eastern Europe not directly affected by the crisis. Almost all countries in the developing world were affected.

How much importance do decision makers attach to these ratings? For some countries or corporations, a downgrading is accompanied by the reduction in the inflow of FDI or higher borrowing costs.

An interesting case involves Japan. In 2002, Moody's reduced the credit rating of Japan's sovereign debt to A2, which is five ratings below a triple A rating and rates Japan as a higher risk than Botswana. It is not difficult to make fun of such a rating. The revenues from Japan's annual automobile sales alone exceed Botswana's total GDP. In Botswana, despite a good record of growth during the 1990s, 47% of the population live below the poverty line, compared with just 5% in Japan. A major social problem is that Botswana has one of the highest HIV infection rates in the world. As

Table 14.2 **The components of Euromoney's risk ratings**

	%
Political risk	25
Economic performance	25
Debt indicators	10
Debt in default or rescheduled	10
Credit ratings	10
Access to bank finance	5
Access to short-term finance	5
Access to capital markets	5
Discount on forfeiting (the rate of interest on export finance)	5



Powell (2002) noted, Japan's main social problem is to prevent her best baseball players from defecting to the USA. How does this compare with an HIV infection rate of above 38%? Certainly Botswana has some mineral riches, notably diamonds. But why is the comparative rating at the level it is? It is probably because Botswana's banks are solvent and the suspicion is that Japan's are not, but currently there are similar suspicions about the banks in China and Germany but they are not so badly rated.

## Strategic responses to risk

There are three main generic strategies which are valid techniques of **risk control**. They can be summarized under the broad headings of avoidance, management and mitigation.

### Risk avoidance

There is no doubt that there are projects too risky to contemplate, markets too volatile to enter and countries where the risk of political instability and detrimental policy change is too great to tolerate. If this is the case, the obvious response is one of **risk avoidance**. There must be thousands of projects which never get off the ground because they are considered too risky even to contemplate. There are probably many which are never properly analysed; they are dismissed after a cursory examination of their riskiness. What exactly does such avoidance mean?

- Does it mean that you wish to invest in a particular industry but avoid investing in a particular country, investing elsewhere?
- Or does it mean that you wish to invest in a particular country, but avoid investing in this industry rather than that one?
- In other words, does it mean that you reject one project in favour of another? In so doing you make a choice based on relative riskiness and relative return.
- Or does it mean simply that entry into a particular industry or country is far too risky, so that there is no entry at all?

A common-sense approach suggests that there is a potential cost to avoidance, which is the opportunity cost of avoidance or the return which might have been received had the project been undertaken and gone well. An enterprise may refrain from entering a particular market or making a particular investment if the risk level is considered too high, but it has to do this in the context of the return offered. As seen already, there are various ways in which the risk can appear in the figures of any estimate of whether a project is profitable enough.

This mode of proceeding might be modified to take account of the role of the particular project under study in the overall portfolio of business units. The strategy may involve a number of projects of varying risk level. In combination the projects yield an acceptable risk level. Together the portfolio of assets created by these projects does not seem to entail a prohibitively high level of risk, whereas in an extreme case individually they may all seem too risky. This may simply be a consequence of diversification, or it might be a reflection of the way in which various markets or facilities link together or fail to link together.

There may not be a simple one-to-one relationship between risk and avoidance. Many opportunities may be rejected because the expected return is too low – the risk premium demanded is too great for the level of return associated with the project. The higher the level of risk, the greater the likelihood of avoidance. There will be a significant number of projects rejected, not because the return is too low, but because the risk is too high, or rather because the combination of risk and return is unacceptable.

Enron's Dabhol project shows how an enterprise might factor a premium for country risk into the terms of the contract.

### Strategy in Action Enron and the Dabhol project

Enron International, before the demise of its parent Enron, had in train an important project to build a power plant at Dabhol in Maharashtra state in India, important in that it would help meet the infrastructural needs of India and prevent intermittent power cuts. This project was associated with a plan for Enron to become a major player in the distribution of liquefied natural gas in India and to be one of the major consumers of that gas. The gas was to come from a project in the Gulf state of Qatar, partially financed by Enron's parent company. The power project was very large, involving a US\$2 billion contract with the state government, up to that date the largest single foreign investment in India and the largest independent power project in the world.

Unfortunately, even after careful but long drawn-out and ultimately successful negotiations with the Congress Party, which was in power at the national and state levels, the project became a victim of India's democratic politics, with opposition to the project a major plank in the policies of non-government parties in the provincial election of 1995. The political ploy, based on anti-outsider nationalism, was highly successful in winning the attention and support of the electorate; the opposition won the election and immediately instituted an inquiry into the project by a government committee. The report of

the committee was never published but its findings of deception and cost padding were leaked. In response to the cost padding, Rebecca Mark, who was CEO of Enron International and responsible for the original negotiations, argued: 'In India you are supposed to have a 20 percent import duty on equipment. But when it comes right down to it, very common in a project is that it doesn't end up being 20 percent but whatever the customs inspector wants it to be on the day you get there. So you have to price that risk in' (quoted in Hill, 2003).

In other words there was a risk premium built into Enron's contract with the state of Maharashtra. The risk premium might or might not be associated with additional costs but there was a danger of that turning out to be the case. In many situations, a risk premium might raise the price of the electricity beyond what would justify the project. In this case it did not. Clearly, shifting political circumstances, universal bureaucratic rules and the crosscurrents between national and state governments in a federal system make India a difficult place in which to invest. There is a high level of political risk and therefore country risk, which up to now has kept down the level of FDI. One reason that the project did not fail was that the law courts in India would not have accepted a deliberate breach of such contract. To this degree the risk was limited.

Of course the choice may not be between different investment projects with differing levels of risk. It may be between investing in a project and using those funds to repurchase the shares of the company or pay additional dividends. One argument is that the latter allows the shareholders or ex-shareholders themselves to make investments outside the area strictly relevant to the enterprise. In theory, the shareholder has a much wider range of choice than the enterprise, which is constrained in its target investment by the nature of its own resources and competencies.

**Risk  
management**

The second kind of generic strategy or response can be called risk management, defined in a rather narrower sense than that often used. In this sense, management of risk does not affect in any way the overall risk level, which remains the same, but rather consists in attempts to redistribute the incidence of existing risk to others outside the enterprise, thereby reducing its potential impact on the enterprise and its performance indicators. This requires those at risk to persuade others to bear some of the risk. There are three principal ways in which this can be done.

**Insurance**

Risk management can be part of a commercial arrangement. Those at risk pay for others to take on all or some part of the risk. The enterprise takes out an insurance policy which covers a specific type of risk. It pays a premium to receive this kind of cover. Unfortunately, the cost of insurance behaves in a cyclical fashion, partly reflecting the return which insurance companies themselves earn in the capital market on the investment of their reserves. Since the cost fluctuates, the strategy may be to continuously adjust the amount and nature of its insurance cover.

The insurance may have a minimum threshold, below which level the company self-insures. In an extreme case, this may mean simply placing in a separate account what the company would otherwise have paid an insurance company for this cover.

Conversely, the insurance may have an upper cap, either because the insurance company does not wish to bear this kind of extreme risk or the cost is too high for the company. In the latter case, the company will either have to avoid or mitigate risk, if it is averse to the incidence of such extreme events, however unlikely they are to occur. At least it can limit the exposure to the amount above the cap.

Is it always possible to take out insurance? For many types of risk, possibly an increasing number of different types, it is possible to take out insurance. Lloyd's of London prides itself on the fact that it is willing to insure anything. However, realistically insurance can only be available where the affected population is large enough and the probability of the particular event occurring is low enough to ensure the setting of premiums which are within the means of the insured. Otherwise the premiums to be paid will be prohibitively large. There might also be an excessively high risk for the insurer, which can be covered by either sharing the insurance with other insurers or **reinsurance**, although reinsurance has itself proved to be very risky for insurance companies.

Insurance can never be the answer where the risk level is too high, partly because of its high cost and partly because of what is called **adverse selection**. If the cost of insurance is relatively high, only those most at risk will tend to insure. Those for whom the risk is low will consider it better to save the premium costs and even to self-insure, that is, bear the risk themselves, since it involves the occurrence of an unlikely event. This may create an unstable situation, one which might quickly get much worse. High premiums cause those least at risk to withdraw from taking insurance. This raises the probability of claims being made by those with insurance cover and further increases the level of premiums. The cycle is repeated. This can be a highly unstable situation in which the provision of insurance may break down completely.

**Focus on Theory**  
**Insurance**

One industry in which it is necessary to have an accurate view of future events is the insurance industry. It is possible to insure against the negative consequences of almost any type of future event by taking out an insurance policy and paying the associated premiums on this policy. The degree of risk aversion, as well as the probability of occurrence, determines whether an individual or organization actually takes out cover against damage from a particular class of risk-generating events, for example a road accident or plane crash. The insurer tries to ensure a profit by setting premiums at an appropriate level so they will more than cover the claims made on policies. This requires an accurate forecast of the number of claims.

The viability of the commercial insurance industry, or indeed a particular insurance company, reflects two factors.

The first is the existence of a large number of potential insurees at risk and willing to cover that risk at a feasible price. If the premium is high and the risk for certain groups is low, 'adverse selection' may occur, threatening the viability of insurance. Those least likely to claim do not insure. This may push the premiums up to a non-viable level.

Secondly, that sufficient information, readily converted into knowledge, exists for premiums to be accurately calculated. This information consists of past statistics on the frequency of occurrence of potentially negative events. Traditionally, the probability of such events occurring could be calculated with some accuracy. This applies to marine, fire, motor and life insurance. In principle, the calculations assume that this frequency does not change and also that the cover is for a fixed amount. The insurance company can then fix an appropriate level of premiums and carry reserves adequate to meet a possible bunching of claims. Clearly, since claims will occur at some time in the future, premiums can be invested to yield a return which is added to reserves.

For much of its history, the industry dealt with what it calls 'normal' events but what most of us would call abnormal events, events which cause a determinate amount of damage or a fixed loss of income. These events would include storms, fires, shipwrecks, earthquakes, accidents, illnesses and theft. The law of large numbers meant that the industry had no difficulty with the two factors above. Insurance companies could specialize in different kinds of risks, for example marine, life, medical or automobile insurance.

The same principles were applied to the more costly satellites, oil rigs and airliners of the modern world. With the extension of insurance to a broader class of valuable assets and therefore possible damaging events, the risk is more difficult to calculate, partly because it is difficult to anticipate the frequency of extreme events. The size of the cover and therefore possible losses has become much greater, so that the sharing of insurance, or reinsurance, becomes more important.

The risk of insurance companies can be reduced in two ways. It can be done horizontally, by a number of companies taking a proportion of the total risk. Or it can be done vertically, by one company taking all the initial risk but passing on some of that risk by reinsurance and by further retrocession achieving the same result for the reinsurers. One problem that emerges is that with each layer of reinsurance, knowledge of the underlying risk becomes more uncertain.

Insurance has been extended to many new areas. It can cover an actress's legs, political risk, professional indemnity of various types or exposure to harmful materials

**Focus on Theory**  
cont'd

or polluting agents. Many of these new areas involve 'long-tailed' risks, that is, risks which only manifest themselves long after the policy has been written, for example diseases which have a long gestation period, such as asbestos-related diseases which take 20, 30 or even 40 years to show themselves. In these cases, it is often difficult to assess the real risk. There is a strong possibility of an underestimation of the risk and the appropriate level of premiums.

In the insurance industry there are institutions which specialize in modelling risk, predicting both the frequency and severity of risk-creating events, institutions such as Applied Insurance Research, Equicut or Risk Management Solutions. This is a highly specialized task. The forecasting has worked quite well for assessing severity which reflects both the possible size of the shock and the value of the capital at risk. Depending on the nature of the event, it is much more difficult to get the frequency right, particularly if it is a rare event. For events such as terrorist attacks, it is very difficult indeed. The insurance cost of the terrorist attacks on September 11, 2002 is something like \$35 billion, much of which falls into the lap of Lloyd's.

The problem of assessing frequency and severity is compounded if the law courts, in awarding damages, change their policy, both extending the definitions of negligence and malpractice, and awarding much larger sums than was previously the case. The inclination and practice of law courts may differ from country to country. With the increasingly global reach of insurance companies, the pattern of decision making by courts abroad must be considered. All this has to be allowed for – the amount of knowledge required has become much larger. A core competency of insurance companies is the actuarial expertise to make an accurate estimate of probabilities, which involves having specialist knowledge of a particular area of risk.

**Strategy in Action** Lloyd's of London and 'long-tailed' risk

Lloyd's is probably the most famous insurance company in the world, claiming to be able to underwrite any kind of insurance. It is the reinsurer par excellence. Lloyd's is a market rather than a single corporation. It is like a franchise, in which the managing agencies writing policies are the franchisees. Each syndicate in the market is acting as an independent insurance company, competing for insurance and cooperating in providing reinsurance.

Lloyd's is an unmatched brand name, with an unparalleled reputation. Lloyd's has existed for over three hundred years and boasts that it has never dishonoured an insurance claim, deliberately erring on the side of generosity in meeting such claims. The market needed enough knowledge of the risks to set premiums at appropriate levels and enough capital to deal with any bunching of losses.

Before 1969, the individual providers of capital to the syndicates were all British, who knew each other and knew and were known by the brokers, the underwriters and the agents. The latter had a known expertise and could be trusted. Most syndicates made very healthy and attractive profits.

The role of capital provision was dealt with in an unusual way. Each individual providing capital pledged assets or later put up a letter of credit from a bank, backed by shares or bonds. These assets were backing for the underwriting of insurance risks. The money worked twice, in giving a return from the initial investment and another from the insurance. For any agency, the aggregate of pledges defined the 'stamp capacity', which fixed the maximum permissible level of premiums, and for individuals their share in profits or losses. Those putting up the capital

were individuals, not corporations, and until 1970 a relatively small group of well under 3,000 very rich and carefully elected, as the terminology has it, names (originally they put their names on the back of a policy).

The insuring syndicates were reconstituted at the end of each year, so that individuals could withdraw and be replaced by different individuals. Normally there was immense competition to become a name, so that withdrawals were uncommon. The closing of a syndicate was always done for the year falling three years before to allow most outstanding claims to be settled. This process was called 'reinsurance to close', since a reinsurance premium was paid to cover any outstanding claims. The year was closed if this happened. If it did not, because the outstanding claims were too uncertain, the year remained open. When it became desirable for names to withdraw, few could, because the syndicates remained open.

The underwriters of an agency considered any insurance proposal made by brokers, and put together a syndicate to back a particular policy. Those putting up the money for the syndicates had unlimited liability. Under this system it was impossible for the syndicates to fail to honour a claim unless the individuals putting up the money all became bankrupt simultaneously, an extremely unlikely event. Whereas on the stock market for a typical limited liability company there were potentially unlimited returns but limited risk, here the case was the opposite, unlimited risk and limited returns, albeit very generous, since they reflected the permitted total of the premiums.

A number of critical changes occurred during the 1970s and 80s culminating in a serious crisis at the end of the 1980s. The changes were:

- The range of insured events expanded enormously. Reinsurance rose greatly in importance. At the same time competition in the industry became intense.
- The proportion of insurance abroad increased; the share of the American market rose to 40%.
- To secure an expanded supply of capital, there was a major effort to attract new names and increase the number of syndicates. The number of names expanded to well over 30,000, with the result that entrants were less wealthy. New names were deliberately brought in for fear of

losses. These names were increasingly found in North America. They inevitably had less knowledge of what they were doing. There were over 400 syndicates.

The following were the main inputs into the crisis:

- The new names, blinded by the reputation of Lloyd's, lacked an understanding of their commitment. It was no longer possible for the names to know whether the underwriters had the desired expertise or the managing agents to know whether the names had the necessary wealth to cover claims in an emergency.
- Expansion into new areas meant underwriters were much less expert than they had been. There was a loss of proper risk assessment, certainly the charging of premiums well below what was reasonable, given the real risks. This was complicated by an element of outright fraud and a failure to realize the level of risk.
- In London, the so-called 'spiral' of reinsurance got completely out of control. For some syndicates, a majority of premiums disappeared into a foreign insurance company doing the reinsurance. In some cases the reinsurance involved the same syndicate in reinsuring different tranches of the risk.
- A few syndicates remained conservative, and insiders, aware of the relative riskiness of policies, allegedly kept to these syndicates. By contrast new names often landed up in the highest risk syndicates.
- There was a delayed reaction to the greater riskiness. This was not completely irrational since there were enormous delays in the claims made, the time taken for the court to make a judgement and reclaiming money along the chain of insurers and reinsurers (this alone could take up to ten years). At a time of high returns, premiums could compound to sums way above the initial value. The problem was the persistence of practices out of step with the claims coming in.

In 1991 the first loss was reported, for 1988. The losses quickly escalated to over US\$15 billion. Lloyd's was forced to increase contributions to the central fund covering the position of those names who either could not or would not meet their obligations. Names, who found themselves required to find large sums of money to meet losses, began to take legal action against Lloyd's on the grounds that they had not been given adequate information to make



informed decisions, and particularly that Lloyd's had not reacted quickly enough to new information on the asbestos claims. For the most part these actions failed.

There has been a major attempt to reform the Lloyd's system. The preference of successive leaders

has been to exclude the names completely and attract new capital from corporate investors without limited liability. The names have resisted this, successfully insofar as they have been allowed to survive. While a significant share of Lloyd's capital comes from corporate sources, the old system has not disappeared.

### Hedging

An alternative commercial arrangement, similar in some ways to insurance, involves **hedging**. This requires putting together, in the general market for risk, offsetting risks, whether directly or through a specialist enterprise or specialized financial instrument. It assumes that risk exists for different individuals or enterprises in ways which can be set against each other, that is, in ways which are compensating. For example, the original development of a futures market for pigs was based on the different needs of farmers and butchers. The supply of pigs reflected weather conditions in any given year. The farmers feared a glut and the resulting fall in price which would reduce their income. They wanted to ensure that the price at which they sold in a year's time was not too low. The butchers feared a dearth and the resulting rise in price which would reduce demand for their product and hence their income. They did not want the price to rise.

A futures or forward market allowed them to hedge their risk by entering into a transaction which managed risks for both parties to the transaction. What is risk for one party is opportunity for another; in this case a low price for farmers and a high price for butchers. The key is to find a way of bringing the parties together, either in a market transaction or another type of arrangement. Specialist institutions, because of the high volume of their transactions, can provide the service at a low level of transaction costs. Alternatively the enterprise can put together its own hedges, thereby lowering cost.

The range of derivatives, involving options and swaps as well as futures or operations in the futures market, which make hedging possible, has expanded enormously recently. The principle is exactly as above, the matching of risks. The use of some derivatives is similar to insurance, for example purchasing an option which is not exercised involves covering a risk at a cost which is equivalent to the payment of an insurance premium.

One limitation on hedging is that it usually has a limited time horizon. For example, German car manufacturers have hedged against the decline in the value of the dollar, but to a significantly different degree – at one extreme, Volkswagen for one year and at the other extreme Porsche for above five years. BMW, at above three years, and DaimlerChrysler, at above two years, lie in an intermediate position (Mackintosh, 2003: 23). Hedging can be applied to the near future but usually only two or three years into the future. This is not the case with insurance, although uncertainty about the future shows itself in the flexibility of premiums. The level of premiums may change quite dramatically from year to year to reflect the incidence and size of claims.



*Strategic alliances and risk sharing*

The second management mechanism is for risk to be shared with other related enterprises by voluntary agreement. Many strategic alliances are focused on risk management and involve a sharing of the risk associated with particular projects. The greater the commitment of resources, the greater the likelihood of such a strategic alliance. In a global world, the size of projects has increased enormously, leading to a situation where one single failure can destroy a multinational enterprise, say the abortive development of a new generation of civil airliners or the introduction of a new model of motorcar. Where the commitment of resources is such that a failure will threaten the very existence of the enterprise, alliances are highly desirable. They represent a way of redistributing the risk, but the cost is obviously the simultaneous redistribution of some of the return. There has to be an incentive for a partner to enter such an arrangement; the gain must be mutual.

*Government guarantee*

The third way in which risk management can be implemented involves action by the government. The government has the advantage of access, through the tax system and its own borrowing capacity, to much greater resources than any enterprise. The government might be ready to compensate an enterprise for excessive losses arising because of extreme events. This is not uncommon. Whatever the protestation of government, it often finds itself in a position in which it feels compelled to act as the backer of last resort, sometimes to a single enterprise such as Rolls-Royce in the UK, sometimes to a group such as the savings and loans companies in the USA or to farmers just about everywhere in the world.

The government can give a firm commitment to rescue those in difficulty but this is unlikely to be the approach adopted, because of the negative consequences of flagging such an intervention and guaranteeing rescue from the consequences of behaviour freely and voluntarily entered into. It is more likely that the government will indirectly insure businesses against the risk of unexpected events by simply doing so without any prior commitment, if they deem that the situation merits such a response. It is rather similar to its role as lender of last resort. This is often done after rather than before the event, but a continuing pattern of similar interventions may create an expectation of intervention in the future and may be equivalent to the guarantee described above.

The intervention of the government may therefore create another problem, rather curiously described as **moral hazard**. In the event of a government being willing to intervene whenever an untoward event occurred, there would be no need for enterprises or individuals to take action to manage or mitigate the associated risk. This could encourage a reckless disregard for risk. Intervention would therefore encourage an excessively high level of risk taking, an outcome probably not in anyone's interest. This outcome, potentially very expensive, would eventually restrict the ability of government to use its position as it should to promote the good health of the economy at large.

An enterprise operating in a foreign country can often negotiate with the government of that country to share risk, provided that the enterprise brings to that country something the government wants. Arrangements can be put in place which have the effect of reducing the risk to which the enterprise is exposed.

Sometimes the risk environment in a country changes. For a number of countries, the Asian economic crisis in 1997 illustrates this point.

**Strategy in Action Responses to the Asian economic crisis**

How does an enterprise respond in a crisis which is international, involving business activity in a country which is not the country of origin of the affected enterprise? Many foreign companies were already operating within the Asian countries concerned in the crisis of 1997. Others were considering the possibility of entry. It might be assumed that there would be two immediate reactions.

Firstly, the natural reaction to such a crisis is the avoidance response, that is, to try to exit from the economy with as little loss as possible, or refrain from entry in the first place. The inflow of direct investment might suddenly cease. Those already in have a more complex problem since they have considerable sunk costs, which cannot be retrieved. The desire for exit creates the kind of situation described in Chapter 13 on the prisoner's dilemma, the fourth business example which refers to the strategy to be adopted when a financial institution is in trouble, whether to call in a loan or not. The same situation applies to foreign investment in countries.

Secondly, the crisis might change the perspective of the company, inducing a strong degree of short-termism. Such a crisis might be expected to focus attention on operational rather than strategic issues, and short-term rather than long-term matters. These would include the need to get costs down as prices fall in a declining market. Any company could be

forced to react in this way, but it is a mistake, if there really is any choice.

What is clear is that such a crisis creates opportunities as well as threats. Figure 14.2 sets out the broad range of possible responses.

**THE LESSONS OF SUCH A CRISIS**

As already indicated, the most common reaction was to seek ways of reducing short-term costs, taking advantage of a favourable situation to do so. For example, it is always tempting in such a situation to reduce labour costs, laying off workers and reducing wages. However, this may lay up problems for the future, making the foreign companies very unpopular. Crisis management is an incomplete response to such a crisis, largely because it ignores the strategic dimension. The crisis constituted a major strategic challenge for all involved.

This is not to say that it is not essential for companies to alter, or even question, their basic strategic position during crises. Such strategies should have taken account of the possibility of such a crisis. It is necessary to take a strategic approach, perhaps to adjust or fine-tune the strategy, because the environment has changed. It is certainly better to avoid actions which offer some short-term advantage but at a severe long-term cost, notably to the reputation of the company.

There was no such thing as a common experience in the regional crisis. The general crisis manifested itself in specific ways in the different countries. Each particular crisis emerged from the interaction of as many as eight different subcrises, which interacted in their own special way. These subcrises occurred in the areas of banking, politi-

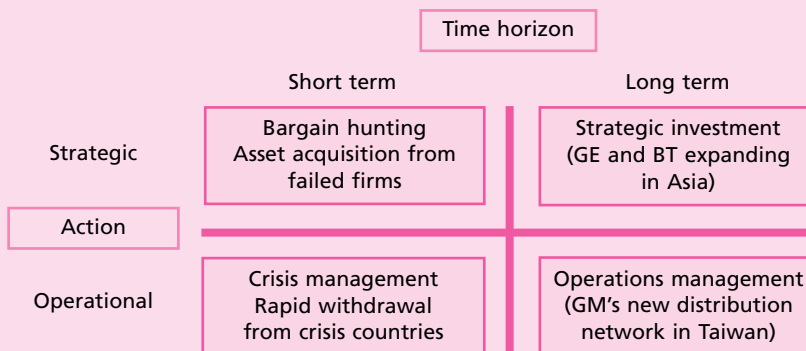


Figure 14.2 Strategic responses to an economic crisis

cal alignments and realignments, government strategy or policy change, confidence in both government and the economy, currency valuation, demand levels, supply capacity and enterprise viability. Each country experienced these subcrises in a different mix.

The immediate impact of the crisis on the multinationals was to deprive them of markets, as income levels fell and unemployment rose. For example, the sales of many products contracted, including motorcars and computers for which demand fell dramatically. Supplier and buyer chains were disrupted as enterprises within the chain went bankrupt, cutting off the supply of key components or making distribution difficult. Local partners collapsed. Enterprises relying on imports were often faced with significant price rises, caused by the decline in currency value. Cost structures were disrupted. There were increased financial risks, as the cost of capital rose and loans became unavailable.

Initially, there was more political risk since governments changed and changed their policies in unpredictable ways. These changes could have an impact on foreign companies directly or indirectly.

Opportunities exist in every crisis, taking a number of different forms. One involves the availability of bargains for purchase, assets or even companies which are on the market without many prospective purchasers. Potential purchasers must be careful not to seem to be too exploitative.

There are many opportunities for strategic investment. These can take the form of acquisitions of existing enterprises or new alliances, sometimes with enterprises which need support in order to survive, but not always.

It may even be possible to expand or restructure existing operations, for example to take advantage of low exchange rates in order to generate an export boom. The decline in the exchange rate may make many products highly competitive on international markets. It may be much easier to enter new markets on the basis of a cost minimization strategy. Such action must be guided by strategic considerations, that is, it must embrace the whole enterprise, enhance the ability to execute the chosen strategy, be sensitive to competitors and focused on customers and look to the long-term opportunities and threats.

### Risk mitigation

The third generic strategy is **risk mitigation** in which strategic action is taken to reduce the risk level to which the enterprise is exposed. There are various ways of doing this, including building flexibility or diversification into the enterprise's strategy.

Within each of these general responses there is a range of particular policies which can be pursued. The risk management of an enterprise may consist of a combination of policies which fall within each of these different types. Such policies and their mix are highly specific to industries and enterprises. They can be selected only as part of the broad strategy. Indeed their choice is an intrinsic part of the strategy-making process. The adoption of a particular risk management strategy reflects the level of risk relating to all the projects which are part of that strategy.

### A risk premium

The simplest way of conceptualizing and therefore understanding the problem of risk is to assume a **risk premium** which has to be added to the target rate of return to take account of the particular risk environment. All risk can be expressed as a risk premium, which can be factored into price levels, for example the interest rate charged by financial institutions on a loan. Those providing the capital for a project will in any event build this into what they charge. This is a cost which will be passed on. Clearly, if the risk premium is too high, it either increases the cost to an unacceptable level or makes it difficult to generate sufficient operating profit to justify the project.

Financial commentators make frequent reference to this premium. In general equity

is supposed to offer holders a risk premium of varying size over fixed interest bonds. Risky countries have to offer a risk premium on government paper over the allegedly risk-free New York treasury bills, again one of varying size. The greater the risk level, the higher the risk premium and more unlikely that the project will achieve the target return. There are various ways of building a risk premium into the calculations.

Acquisition of an enterprise in a particular country will reflect the risk level in that country. The higher the risk, the lower the acceptable acquisition price. The greater the risk level, the lower the price the acquirer will be willing to pay, since the rate of discount applied to future net revenue streams will be higher.

The threshold qualifying criterion for a new project is rather different from an existing one. With an existing project, previous investment is a sunk cost, unless of course there is a market and a value for the facility. Even if there is, the price is likely to be much lower than the original cost of creating the facility. Any impact of risk is concentrated on the operating revenue or cost streams. Risk is built into the rate of time discount employed. Only where the application of such a rate leads to a negative net result will there be a withdrawal, or a closure of the enterprise. One issue is the ease of exit. The fact that the investment usually cannot be undone gives a natural advantage to those already operating in a particular market over those who wish to enter. This asymmetry in the bearing of investment costs is itself a barrier to new entry into existing markets.

The possibility of exact quantification does not solve the problem of integrating risk into any decision-making process, since it is often unclear what the choice of risk premium should be. The analysis has simply pointed out their universality, not how they are derived or how their future level is to be predicted. The previous discussion begs this question. The problem is that the use of a risk premium presupposes a level of precision which in reality does not exist. Risk may suggest a precise level of probability attached to different outcomes. The more general situation is one of uncertainty rather than risk, one in which there are no probabilities attached to possible outcomes. Quantification lends the analysis a spurious degree of precision.

It may be tempting to take a conservative approach and choose a high risk premium. However, this is not sensible since it may rule out many projects which offer a potentially high return. The obvious loss resulting from avoidance is the return which could have been made on rejected projects. While it pays to be cautious, a continuing emphasis on negative factors will prevent the enterprise from renewing itself, investing in new products or new markets. The investment funds which are not committed to this project may be invested elsewhere at a lower rate of return.

### Strategy in Action Disney and the redistribution of risk

There is sense in the argument that Disney sees its main business as selling videos, movies, television programmes and consumer products, not running theme parks. The theme parks simply highlight these other products. Theme parks are seen as a gateway

for accessing new markets for these other products, such as the Japanese, European and Chinese markets. For this reason, Disney wishes to minimize its risk, even if this means reducing the possible return. It stands to make only about US\$80–100 million in

annual licensing and attendance fees from its new Hong Kong park, compared with overall revenue of US\$25.3 billion in 2002. Disney has been adept at managing its risk in opening new theme parks by sharing the risk with others, particularly in its foreign ventures which have taken full advantage of well-negotiated deals with governments, whether French, Chinese or Hong Kong.

The financial arrangements for the Euro Disney project were complex, but amounted to a large amount of debt supported by very little equity. This was highly risky for all concerned in the provision of the debt in the event of the project failing to deliver the target rate of return. Disney had put in place financial arrangements which in theory protected the company from the full effects of failure but rewarded them handsomely for success, if they kept their partners to the letter of the agreements. Euro Disney was a subsidiary in which the Walt Disney Corporation held only a 49% stake. It paid just Fr10 for its shares, whereas the other 51% were sold at Fr72 a share. While the shares did open at Fr165, they quickly fell back to 68, much to the chagrin of the investors.

The parent company also contracted to manage the park for hefty management fees. Royalty payments were also considerable. On the assumption that the planned targets were met, 57% of Euro Disney's operating profit would go to the parent company. In the event of losses, Euro Disney would still have to pay the management fees and royalties, if it could. It could not, so that in the event it proved impossible for Disney to collect such payments.

In Euro Disney they also managed to negotiate partnerships with high-flying allies, such as American

Express, Coca-Cola, Esso, IBM, Kodak, Mattel, Nestlé, Philips and Renault, to build or finance many of the attractions and state-of-the-art systems in return for favourable sales and/or promotion opportunities within the resort.

In the end, Disney found itself in a difficult position. Losses from Euro Disney amounted to US\$36 million in 1992 and more than US\$900 million in 1993. Attendance was down 15% in 1993 compared with 1992. The share price continued to slide throughout 1992 and 1993. Eventually in 1994 a rescue package was put together which raised more money and provided much needed liquidity. It had the goal of halving Euro Disney debt, in practice significantly reducing it but not quite halving it. The creditor banks were persuaded to accept the waiving of a significant interest debt and to postpone repayments of the principal. Disney retained a controlling interest but saw its share of the project decline to 39%, a sign that it did not think that the theme park was going to be a major generator of profits. Euro Disney was renamed Disneyland Paris.

Disney also agreed to waive management fees and royalties for five years and only reintroduce them gently at half the previous level for a further five years. Losses in 1994 still amounted to well over US\$300 million. In 1995 there was only a very small profit despite the temporary but significant reduction of costs. The key success indicators, particularly attendance levels, continued to deteriorate.

The arrangements for the Hong Kong project are even more striking. Disney is laying out only US\$314 million for a 43% ownership stake. By contrast, the Hong Kong government is putting in as much as US\$2.8 billion.

There is a vital distinction between risk management and risk mitigation, based upon certain assumptions about how far an enterprise can control its own environment, including its risk environment.

Risk management assumes that it cannot control the environment, at least in respect to removing risk from that environment; the level of risk is a given. Insofar as it is an unavoidable companion of a high return, its existence is simply a challenge. Provided that the return is high enough to compensate for the higher risk and that the risk not prohibitively high, that is, it falls at what might be regarded as an intermediate level, risk management is the appropriate approach. However, sharing the risk necessarily implies sharing the return. There is a cost to this strategy.

Where risk can be reduced, the approach changes. At the cost of the commitment of significant resources to various methods of risk mitigation, risk can be reduced,

preferably to a manageable level as indicated above. Risk mitigation assumes that the enterprise can remove a significant amount of risk, that there are methods of reducing risk which are open to any enterprise. These include:

- Negotiating with government officials or other major players to reduce strategic risk
- Building a level of flexibility into a project to allow for unexpected events and possible setbacks
- Putting together a balanced portfolio of assets or projects.

It is also possible to combine risk management and risk mitigation. Mitigation might reduce the risk to a level at which management becomes possible, or it might reduce it to a level where management is unnecessary. There is no doubt that strategic risk, that is, competitive and country risk, can be both managed and mitigated. It is necessary to look at the different elements of strategic risk and how the enterprise can manage them.

It is also impossible to remove all risk. Removal of even some risk is costly. What are the costs of such risk management or mitigation measures? There are direct costs incurred and revenue foregone, which must be taken into account in assessing the viability of any project. The direct costs can be high. They may be the costs of:

- gaining exact information about the risk to which the enterprise is exposed
- negotiating an alliance or government support
- insurance or hedging techniques.

Indirect costs include revenue sacrificed and revenue shared:

- A loss in revenue may result from sharing risk with a strategic ally
- Flexibility usually has a cost in lost revenue.

One strategy which is not helpful and does not qualify as a valid generic strategy is to hide the risk exposure. There are a number of techniques which are frequently used and have received significant attention when their use has been revealed as distorting the performance of an enterprise. The most common problems of concealment arise with:

- the employment of operating leases for the assets used in key operations
- the securitization of benefit streams, that is, bringing forward future revenue streams
- the use of special-purpose entities to take on obligations, that is, taking liabilities off the balance sheet
- the creation of captives, that is, setting up insurance companies to insure against the risks carried by one company only.

Any enterprise should avoid simply hiding and, by implication, ignoring the risks. The best and most effective policy is to integrate risk management and mitigation into the overall strategy in a completely open and transparent way.



## Risk and diversification

There is one risk mitigation device which has been widely applied and recommended – **diversification**, that is, the deliberate holding of a wide range of different assets, subject to different levels of risk. The recommendation of diversification is based on the so-called portfolio approach.

### The portfolio approach to risk

The portfolio approach to risk is borrowed from financial markets where a number of conditions mean that risk can be reduced to a negligible, if not zero, level. The conditions are:

- the existence of something analogous to perfect competition, in which there are a large numbers of buyers and sellers exchanging a wide range of homogeneous products
- the availability of good access to information
- the ease of adjustment of the portfolio composition
- a large data bank, built up from past behaviour, making it possible to calculate the exact level of risk in different asset markets
- independence of price movements and risk from individual assets.

The last condition means that it is possible to divide risk into two types, *systematic*, when the prices of assets move together, and *unsystematic*, when prices do not move together. Price movements vary from asset to asset and may or may not be independent of each other.

The portfolio approach argues that if there is a sufficiently large range of projects or assets in which to invest and if the returns on these assets are independent of each other, that is, risk is unsystematic, then the simplest risk management device is to diversify, that is, to hold a portfolio of assets sufficiently large for the possibilities of gain to offset the possibilities of loss. If one asset falls in value, this is countered by a rise in the price of another. The *law of large numbers* ensures that the risk of the whole portfolio is markedly lower than the risk of individual assets.

In normal times, when markets are stable and change is marginal, the model of risk management used in the financial markets works well. In times of dramatic change, for example when risk becomes systematic, it works much less well. If there is systematic risk of any kind, then the conclusions do not hold. For example, if all markets move together, particularly in a downturn, then this approach does not help to manage risk. If the number of projects is insufficiently large, even if the risk is unsystematic, the mechanism does not fully remove risk.

The argument can be applied to any portfolio of assets. Developing a portfolio is a key strategic aim. In theory it could be applied to domestic investments or FDI. Risk could be reduced by putting together a portfolio of assets spread throughout the world, in countries in which the level of country risk varies greatly. This approach was used as the justification for the acquisition by enterprises of a wide range of non-core businesses and entry into a wide range of foreign markets. On this argument, in theory it is possible to remove all risk by having enough business units



and/or entering enough markets. The assumption is that the larger the number, the lower the risk.

There is an additional problem if the focus is on FDI. Most companies do not hold a sufficiently large range of different facilities, different in country or even industry location, for this assumption of unsystematic behaviour to hold. This could be a powerful argument for adopting maximum growth as a strategic aim, if that growth makes possible a significant diversification of the business units and markets. According to the logic of this argument, a typical corporation ought to contain a wide range of separate strategic business units. Even a risk-averse enterprise could choose to produce a wide range of products in unrelated areas and sell those products in a wide range of unconnected markets.

In the 1980s, many enterprises followed a diversification strategy, deliberately acquiring in various ways business units not associated with their core activities. This led to disaster for some enterprises. Many enterprises entered areas in which they had no core competence, perhaps few resources and little market knowledge. For this reason, they found they could not run the disparate range of business units efficiently and at a profit. Since the businesses were usually acquired by purchase, the problem materialized into one of successfully absorbing the new businesses. This often proved too difficult to achieve. Consequently, and not surprisingly, the notion of diversification became unfashionable.

An enterprise which concentrates on its core area may have assets in a variety of countries and markets but they may all be linked in the value-creating chain. They are operated within the framework of an overarching strategic plan. They are not assets whose prices move independently. Poor performance in one area will have an impact on all areas – they are interrelated rather than independent. In this situation, all risk is systematic.

It is not easy to move from one asset to another. There is a pronounced stickiness of investment which prevents a continuous readjustment of the portfolio.

This is not to reject the risk-reducing role of diversification completely. The case study on BHP Billiton in Chapter 11 shows how this strategy is still relevant to large companies, in this case within the limited area of minerals and resources. The basic principle on which diversification is based is sound, but it is necessary to accept the limitations of the approach. There must be a different rationale for acquiring assets which are outside the core area of activity. Risk management is not sufficient justification. In certain conditions it might be quite appropriate to pursue a strategy which involves some measure of diversification, but it should be limited and each step well justified.

### Strategic risk, scenario building and strategy making

Stressing the point that risk management is not a science, Michael Chaney, CEO of Wesfarmers, is reputed to have said: 'you have to use your best guess about what's going to happen in the future' (Hannen and Way, 2002: 50). This could not be more true than in the case of China.

### Strategy in Action Three different reform scenarios in China

For some enterprises, a major source of risk is what will happen to China in the future. What is likely to be the speed of economic reform? Will China implement its obligations on entry into the WTO?

Chapter 4 discussed the procedure for scenario building, giving as an example an exercise in forecasting the price of oil. In the case of the future of China, it is necessary to identify the main driving forces, the predetermined elements and the critical uncertainties relevant to Chinese reform.

The main driving force for the Chinese government is to maintain its internal power and extend that power externally by the build-up of economic strength. The latter will give the government the legitimacy which makes the former easier to achieve. Economic success combined with an increasingly influential international role will give the present regime significant legitimacy.

The second driving force is the economic ambition of the ordinary Chinese citizens, already released by rising income levels. There is the growing expectation by the rising managerial middle class and others that they will enjoy the fruits of rising consumption levels. Education stimulates a desire for a change in the standard and style of living. The desired package includes foreign travel and private housing, even automobiles.

For the outside world, the main driving force is globalization, or some aspects of that globalization such as the integration of international markets. The outside world sees China as participating actively in this process.

There are a number of predetermined elements:

- The present national boundaries and strength of internal integration
- The existing network of party connections
- The Chinese diaspora in the outside world, amplified by family connections, both inside and outside China.

The critical uncertainties are:

- The level of social unrest generated by the workers who become unemployed as a result of the restructuring of the economy. There is a race between the creation of a new economy, largely foreign and private, which absorbs workers, and the destruction of jobs in the old economy.

- The spread of HIV/AIDS within China and more recently the spread of SARS. However, China has a well-developed medical infrastructure which is being tested but is likely to emerge stronger from present stresses.
- The role of a significant Muslim minority in China, notably in Sinkiang.
- The nature of relationships within Asia, particularly those revolving around Taiwan.

Three possible scenarios could be described in the following way.

#### 1. *The conservative backlash*

Under this scenario, outside competition and the social unrest resulting from the opening up and associated reform threatens the very existence of the regime and discredits the reform process. The main problem of the economic reforms is the uneven distribution of their benefits and costs. Already there is considerable labour unrest from those who have become unemployed. There are two main groups who are in distress:

- those in the countryside without means of support who, as the system of attachment to a particular location weakens, often move to the cities to look for work, but do not find it, or find work with a very low reward
- those who lose their position in the restructuring of state enterprises in the cities.

As many as 200 million people could comprise these two groups, or constitute those most at risk. In these circumstances, the conservatives gain the upper hand on the basis of the fear of losing any control of the situation.

#### 2. *Steady as she goes*

This is really a recreation of the experience of the last quarter century. Reform is phased in steadily despite an acceleration in the opening of the economy as a result of entry into the WTO. Under this scenario the economy remains competitive and attractive enough to foreign investment to sustain a growth rate of the overall economy similar to past rates, that is, 7% or above. This is high enough to assist in containing the level of social unrest by keeping the number of unemployed down to an acceptable level. The growth rate needs to be sufficiently high to absorb the new entrants to the labour

force who may number as many as 10–15 million each year. The emergence of the new economy does compensate in general terms for the contraction of the old, but it is a delicate balance. There is a consistent level of unrest but it never spirals out of control; it is manageable without a threat to the regime.

### 3. Shock therapy

This could occur in two possible situations. Reform is so successful that it might as well be accelerated – an unlikely outcome. The more realistic situation is that the reformers decide to make a desperate pitch to accelerate growth in order to deal with a worsening situation. This might be prompted by a number of different situations:

- A generational change among the leaders of the Communist Party which favours a younger reform group.
- Entry into the WTO might make accelerated reform critical to attaining competitiveness at the international level.
- Pressure from outside may prevent the government from slowing the process of restructuring. Outside powers, including the USA, may pressure the Chinese government into accelerating the process of opening up.
- Conflict in China may lead to the temporary dominance of a group with an interest in accelerated reform, probably the entrepreneurial group.

It is necessary to identify signals through which it is possible to monitor the pace of reform. Those investing in China must know which of these scenarios is likely to prove correct. At present, the second scenario seems the most likely to hold.

### Integrating risk control into strategy making

Managing risk is not a strategic process separate from other processes. It must be integrated into the main strategy making. This may require consideration of a notional balance sheet broader than that normally employed, one which includes all economic resources, some of which are difficult to value, and all economic obligations of whatever kind. In the words of Ayres and Logue (2002: 50): 'In short, risk management is simply high-quality management with no readily available, economically relevant information *overlooked*.' Information on threats or different kinds of risks is simply one input into the general process of strategy making.

There are five general principles in an overall risk management policy which help to integrate the control of risk into strategy making in general:

1. The enterprise should concentrate on providing an incentive to strategists and operating managers to undertake any value-adding activities which promise a competitive advantage, particularly for more than the short term. Risk is considered simultaneously with the returns which might be made.
2. The enterprise must not treat the main control functions, relevant to the implementation of a strategy, such as accounting, quality control or even strategy making itself, as profit centres, in which the staff are given an interest in maximizing profit, either by increasing revenues or reducing costs. Clearly defined objectives which require and reflect accurate monitoring are needed but they should not put an emphasis on linking the controllers with the success of the strategy. There needs to be a separation.
3. The enterprise must appoint high-quality external and internal audit committees, independent of the CEO. An accounting audit should be conducted at arm's length from the strategists and operational managers.
4. The enterprise must read the environment carefully, notably for possible threats,

and understand all the implications of that changing environment and those possible threats for the core business activities. Scenario building should be internalized as a way of considering the future.

5. Evaluate all incoming information critically, whatever its source.

### Country risk and competitive risk

The way in which global business transactions are organized has to take particular account of differences in the level of country risk and competitive risk, which together constitute strategic risk.

The level of country risk is highly correlated with the level of GDP per head in a country:

- The rich developed countries, which have representative democracies in which the legitimacy of government is confirmed by regular elections, have a low level of country risk, whatever index or rating agency is consulted.
- Undeveloped economies, especially those with governments subject to rapid change or whose legitimacy is doubtful, have high levels of country risk.
- Developing countries have an intermediate level, which also tends to be unstable. For some countries, the level of country risk can change dramatically from period to period (see the Strategy in Action on Argentina in Chapter 5). This may be due to political instability which may be linked to economic instability. The interaction between the two is complex.

The same is true for some industries. The level of competitive risk inherent in the structure of different industrial markets may differ markedly. The level of competition can quickly change.

### Strategic risk and scenario planning

Anticipating the onset of instability, of whatever kind, is not easy. Few have anticipated the major changes of government which have occurred in recent years. Few have worked through the implications of significant technical change. Such accurate forecasts may require in-depth qualitative studies of a particular country or a particular industry. Scenario building is the technique which should be used. Most commentators, including the country risk rating agencies, have a poor record in predicting such sudden turns of fortune. Where strategy making is based on scenario building, it is sometimes called scenario planning. Scenario building becomes an integral part of the strategy-making process itself. It is highly desirable to develop both in combination.

However, country risk encapsulates a set of factors which have a powerful influence on patterns of direct investment, acting as a major deterrent where the level of country risk is high. It is a critical aspect of the home country bias discussed in Chapter 3. Once attention is directed to a direct investment in productive facilities which has been made for the medium or long term, the focus also necessarily moves away from strictly economic or financial factors to emphasize political factors.

**Focus on Theory**  
The principles of  
risk management

The following is a sensible set of principles which can be applied in taking account of risk:

1. Pay attention to all kinds of risk, including both quantifiable and non-quantifiable risk. For example, the risk of pursuing certain practices, notably those which are illegal, is a loss of reputation. This loss can have catastrophic results.
2. Wherever possible, the risk should be quantified. Even if it cannot be quantified, it should be made as precise as possible.
3. Every member of an organization should be made aware of the importance of risk.
4. It should be made clear that every member has a responsibility to control risk.
5. Those who are specifically designated as risk managers should have the ability to take any necessary action to limit the exposure to risk.
6. Any enterprise should avoid businesses in which they have no real knowledge or the relevant core competencies.
7. Strategists should always accept the universality of uncertainty about the future and engage in scenario-building exercises to explore possible future outcomes.
8. The risk managers must be subject to the same kind of monitoring as any other staff. This might take the form of a regular risk audit.
9. Successful risk management creates value by increasing the chance of a good business performance.
10. It is necessary to understand how willing an enterprise is to take risk, its so-called risk appetite. This is part of its culture.

*Source:* Hannen and Way, 2002: 51. The principles are loosely based on those developed by PricewaterhouseCoopers.

**Focus on Theory**  
Political risk

On Friday, July 26, 2002, the South African government released the first draft of a new ministerial charter, which can be described as a 'black empowerment policy'. On Wednesday, October 9, a second draft was released, described in a memorable phrase, which captured the uncertainty created by the policy, as 'fog turning into mist'. The first draft had the following main points:

1. In an existing operation, an applicant for a mining licence should have a black economic empowerment partner with at least 30% equity.
2. In a new operation, an applicant for a mining licence should have a black empowerment partner with at least 51% equity.
3. In the event that a suitable partner is not found by the applicant, the South African government, through its associated investment vehicle, the IDC and the Development Bank, will warehouse the relevant equity until a partner is found.

The clear aim seems to be to ensure that within ten years all mining is in the hands of black organizations. The second draft appears to have watered this down somewhat, in that it talks of a 26% black ownership in ten years. It also talks of enormous transfer costs to be borne by the South African mining industry, 40% of all managers to be black within five years and all mine workers literate. The policy imposes significant costs on the mining companies.

This represents a major change of policy which has been interpreted by the resource companies, or rather the shareholders in those companies, as a threat, since the companies are circumspect in their public reaction. The mining company Anglo American,

### Focus on Theory cont'd

which generates about 70% of its operating profits from South Africa, saw its share price fall by 11% over the weekend following the announcement.

Who is vulnerable? The position of BHP Billiton is that it has 6% of its assets in South Africa – notably the Ingwe coal mining operation, its 60% share of Semancor manganese and chrome business and parts of its half-owned Richards Bay mineral sands joint venture with Rio Tinto – but these are mature businesses unlikely to be expanded in the near future. It has 11% of its profits generated there, compared with 5% of Rio Tinto's. BHP Billiton is more vulnerable than Rio Tinto (see the case study on BHP Billiton in Chapter 11).

The resource companies are hoping to get major concessions before the charter becomes law. However, the very threat of such political action is a major source of risk and a major deterrent to foreign direct investment in such countries, even if it is not carried out and even if it is easy to understand the reasons for such an action. The sovereign risk premium demanded for foreign investment in South Africa has risen and is likely to stay high for a significant period of time, whatever happens.

Sources: Fitzgerald, 2002; Hextall, 2002: 58; Oldfield, 2002.

## Case Study Africa – AIDS and civil wars

The present study focuses on Botswana, because this country, while small, has been represented as a model of what might be achieved in Africa. It is a notable exception to the story of negative growth in the southern cone of Africa. Botswana is a land-locked but large country, two-thirds of which is covered by the Kalahari Desert. It became independent from Britain in 1966. It has a well-organized government. It is blessed with a number of natural resources which make it attractive for foreign business. It is using the income generated by these resources to support good and, even more important, free education and health systems.

Since 1966, the growth rate of GDP in Botswana has averaged 7% a year, much the highest rate of any African country. This has already raised per capita income from \$80 to \$6,600, a major achievement. According to the Cato Institute, a Washington-based think-tank, it is Africa's freest economy, that is, the one least regulated by government. Taxes are low, but budget surpluses the norm. Property rights are respected and so far the government has not nationalized any business. It has the highest per capital foreign exchange reserves in Africa. There is so little poaching in its world-famous game reserves that it has had to cull its elephant herds.

However, there are two major challenges facing Botswana:

- The rising size of government, which has gone from absorbing 21% of GDP in 1971 to about 50% today.
- The catastrophe of HIV/AIDS. Botswana has the highest rate of HIV infection in the world, which has already had a dramatic impact.

Botswana has been proactive in trying to tackle the latter problem, which partly explains the first challenge. If Botswana cannot deal with AIDS, despite its obvious advantages, the problem elsewhere in Africa and beyond looks even more unassailable. Despite the problems, the rate of economic growth in 2002 is likely to remain as high as 5%.

### HIV/AIDS

Because of its low level of income per head and the previous success in reducing mortality rates, although, as we shall see, this may be temporary, Africa has seen a rapid rate of population growth. Fortunately, until recently, population densities were low compared with the main population areas of the world, including densely populated parts of Europe and Asia. Fertility rates are still high and have recently offset relatively high and rising mortality rates. Initially, these mortality rates declined with improving medical facilities, but they have been increasing again. As a result of rapid population growth, some African countries, such as Nigeria, have become very populous.

It is almost certainly the case that AIDS had its origins in Africa, where it seems to have leapt the species barrier between monkeys and people about 70 years



Table 14.3 HIV prevalence worldwide

North America	950,000	W Europe	550,000	East Europe and Central Asia	1m
Caribbean	430,000	N Africa and Middle East	500,000	S and SE Asia	5.6m
Latin America	1.5m	Sub-Saharan Africa	28.5m	E Asia and Pacific	1m
				Australia and New Zealand	15,000

Source: Rosen et al., 2003: 83.

ago. The first publicity in the West related to the onset of AIDS in the gay community on the west coast of the USA. Table 14.3 gives an indication of the prevalence of HIV worldwide.

Many of these figures are only approximations. Already AIDS has killed more than 20 million people worldwide, with more than 40 million people currently HIV positive. There are many different strains of the AIDS retrovirus active in different parts of the world, including Africa. The developed world has type B, East Africa mostly types A and B. Type C is the most virulent and most resistant to the drugs being used today. It is the type common in the south of the African continent. In any event the AIDS retrovirus mutates very rapidly. Poor and incomplete treatment with the new drugs only encourages and accelerates this process.

Type C is prevalent in Botswana and threatens to sweep India and China. Already as many as 51 different strains of type C have been identified in Botswana alone. In much of Africa, the retrovirus therefore has a different nature, being much more susceptible to heterosexual transmission. In the developed world, the most vulnerable groups are the gay community and the drug users who reuse needles. It has been relatively easy to re-educate these groups to adopt safe practices. In Africa this is not the case. One of the most common methods of transmission there is through contact between highly promiscuous men and the prostitutes they infected, either by not allowing them to use condoms, or a lack of them in the first place. A culture of widespread sexual promiscuity only accelerates the spread of the disease. Unfortunately, education of the population on methods of avoiding transmission is almost non-existent in most places.

AIDS is already a major problem in Africa. It is a potential problem in a number of other regions of the world, notably Asia. The Chinese government has admitted that one million of its people are HIV positive. This is almost certainly a serious underestimate. There are already four million infected in India. The number is growing rapidly. Both Indonesia and Russia have serious problems which are growing dramatically. There are three million dying each year, 15,000 new infections each day and the rate is still increasing. Those infected and dying tend to be in the

prime working ages. The impact on the economy of protracted sickness and eventual death is dramatic, particularly as the sick have to be cared for.

Of the 40 million cases of infection in

the world, as Table 14.3 shows, sub-Saharan Africa has 28.5 million, including about 2.5 million under the age of 15. In sixteen African countries south of the Sahara, more than one in ten adults aged 15–49 are infected. This is the most important part of the potential labour force of any country. The number of infected is growing rapidly. Last year there were 3.4 million newly infected, of which 700,000 were children under the age of 15. In Africa every minute four people die of AIDS. Last year AIDS killed 2.3 million Africans, including 500,000 children (global deaths from AIDS were 3.0 million).

South Africa has the highest number of people in the world with HIV/AIDS, 4.74 million, or one in nine of the population. Since South Africa is potentially the economic powerhouse of sub-Saharan Africa, this is particularly unfortunate. Nigeria, another African giant in economic and demographic terms with 120 million people, already has 3.5 million people infected.

Botswana, a country with only 1.6 million people, has the highest proportion of its population infected, 38.8%, up from 35.5% in 2001. The disease is spreading rapidly. This has caused the average life expectancy to fall from a peak of 69 to a minimum of 39 today, and it may be moving still lower. Some have anticipated an expectancy as low as 27. Another of the southern cone countries, Zimbabwe, with 2.3 million people, has an infection rate of 33.7%, not far behind Botswana. In some local areas of Africa the proportion of the population infected is much higher than even these figures suggest.

Table 14.4 Living with HIV/AIDS in Africa

	% of adult population
Botswana	35.80
Swaziland	25.25
Zimbabwe	25.06
Lesotho	23.57
Zambia	19.95
South Africa	19.94
Namibia	19.54
Malawi	15.96



Fortunately, Botswana has a number of clear advantages over other African countries in the fight with HIV/AIDS. It has the resources to fight the battle and a government structure which helps it to do so. It also has a government leadership which sees this fight as its first priority. Festus Mogae, Botswana's Oxford-educated president, has called for an all-out war on AIDS. He has appealed to the international community to assist.

The international community is beginning to take up the problem. There is a biennial international AIDS conference, which was held in Durban in 2000 and Barcelona in 2002. At Durban the emphasis was very much on prevention, for a number of reasons, some good, including the costs of treatment, some not so good. At Barcelona the emphasis shifted to a combined prevention and cure approach. The focus for the approach to AIDS is UNAIDS and its fund, the Global Fund for AIDS, Tuberculosis and Malaria. In 2002, its first year, the fund already had US\$2.1 billion, not enough but a good start. To be really effective it probably needs something like US\$7–10 billion. In reality the cost of not doing anything is likely to be horrendous.

Brazil is often held up as the model of how to deal with AIDS. There a well-organized campaign has kept the number infected to about half of what was predicted earlier. The number of people dying is actually declining. The core of the campaign is free treatment and an attempt to cure through highly active anti-retrovirus therapy (HAART). There are now 140 approved variants of HAART. This therapy is expensive to administer, particularly since the virus is mutable. However, the annual cost of treatment has come down from about \$12,000 per person in 1998 to \$500 in 2002. This is still too high for most people in the world. In Brazil the support for free treatment is allied with an active programme of education in safe behaviour and how to administer systematic drug treatment. The reduction in the number of infected is now generating savings which are greater than the cost of the campaign, at least this became true from 2001 onwards. The cost of treatment has been brought down to about one dollar a day, through the generosity of the pharmaceutical companies and the intelligent use of international agreements such as TRIPS which allows the waiving, in an emergency, of the defence of normal intellectual property rights.

Even one dollar a day is beyond the means of most Africans. In Africa, however, some countries are moving to use the Brazilian model, although at a slow pace. Botswana is a test case for Africa.

For Africa the main response from abroad has been the establishment of the Gates and Merck Foundation, jointly called ACHAP (African Comprehensive HIV-AIDS Partnerships), in the capital of Botswana,

Gaborone, into which Bill Gates has pledged to pour US\$50 million over a five-year period, matched by another US\$50 million from the pharmaceutical company Merck. The Harvard AIDS Institute is providing expert medical treatment, helping to set up the first anti-retroviral clinic at the Princess Marina Hospital in Gaborone, and organizing state-of-the-art research into the type C virus, including the mode of transmission from mother to child and the development of a suitable vaccine. A second clinic is just starting in Francistown, the second largest city, with help from London's Chelsea and Westminster Hospital. The effort is very much dependent on foreign participation.

At the moment HIV/AIDS is, strictly speaking, incurable, but its onset can be postponed and the disease controlled. This needs to be done, while simultaneously the spread of the disease is checked by the adoption of safe behaviour – the use of condoms, abstinence or the reduction of promiscuity. The main problems are gaining access to drugs at a reasonable price and educating the people in safe sex and using the drugs properly. Botswana is the first country to offer free anti-retroviral drugs to everyone who needs them. The danger is that improper use of the drugs will only encourage the development of resistance. The drugs regime is complex and difficult for a relatively unsophisticated population with a rudimentary healthcare system to understand and sustain.

There are a number of cultural problems, which stand in the way of an effective solution to the problem in a society which is largely rural and patriarchal. There is a reluctance of those vulnerable to be tested for the disease. Prevention is a matter of breaking down ingrained attitudes to intergenerational sexual relations and women adopting a much more independent role, such as getting a job. The government favours using the local community and the family to change attitudes and behaviour. The process is labour-intensive in social workers and the medical staff required.

Even in Botswana the problem has only been confronted in a marginal way. It still has only 19,000 patients receiving anti-retroviral treatment, compared with the 110,000 people who should be taking the drugs.

### The implications for international business

'Not only is AIDS our business; fighting it also makes good business sense.'

*Rosen et al., 2003: 86*

'Very simply, AIDS is destroying the twin rationales of globalization strategy: cheap labour and fast-growing markets.'

*Rosen et al., 2003: 82*

Table 14.5 **The cost of AIDS to an employer**

	Direct costs	Indirect costs
Individual costs (for one employee with HIV/AIDS)	Medical costs	Reduced on-the-job productivity
	Benefit payments	Reduced productivity due to employee's absence
	Recruitment and training of replacement	Supervisor's time in dealing with worker productivity losses Vacancy rate while replacement is hired Reduced productivity while replacement worker learns the job
Organizational costs (for many employees with HIV/AIDS)	Insurance premiums	Senior management time
	Accidents due to sick workers	Production disruption
	Cost of litigation over benefits and other issues	Depressed morale
		Loss of experienced workers Deterioration of labour relations

Source: Rosen et al., 2003: 84.

It therefore deters foreign investment in countries with high levels of infection. Sub-Saharan Africa is such a region. Clearly AIDS is another serious constraint on the ability of African nations to develop economically, as if there were not enough constraints already. It has imposed a massive cost on the communities and also on the corporations which employ the infected workers.

The capacity of the community to work and reproduce is seriously threatened by the epidemic. AIDS kills primarily the young and middle-aged adults in their most productive years as both employees and customers. For individuals there are many years of impaired productivity, followed by impoverishment of the family after death of the breadwinner and orphanhood for the children if both parents die; for enterprises serious absenteeism, high employee turnover, a pressing need to hire replacement workers and various legal, social and political complications add to their costs. Time horizons for all concerned are shortened by the diminished life expectancy. It is difficult to look ahead. It is difficult for the key decision makers in the societies to even consider, let alone take, those decisions which would accelerate the rate of economic development.

Two of the large resource companies working in the area, the diamond company Debswana, in which De Beers is joined with the Botswana government, and Anglo American have begun to offer free AIDS drug treatment. In Botswana, 80% of the cost of the drugs is born by the government although the pharmaceutical companies are providing the drugs at cost, the pharmaceutical company Merck free of charge. The

medical and educational systems have diverted significant resources to meeting the crisis, resources which are badly needed to build an infrastructure to support rapid economic development.

There are strong reasons, apart from the obvious humanitarian ones and the problem of corporate image, why international business should get involved. The epidemic is already imposing a cost on every ounce of gold or platinum produced. Anglo Gold estimates the additional cost

to be \$6 on a total cost of about \$170–180, Anglo American platinum \$3. All companies suffer from the costs indicated above. A study of six companies operating in South Africa and Botswana (Rosen et al. 2003), showed annual direct costs ranging from 0.4% to 5.9% of the wage bill, with between 7.9% and 29% of workers infected. Previously the companies simply bore the cost, which might take the form of the employment of two workers where one is needed, on the expectation that one will become sick. Until recently the most that was done was to assist in a programme of education and encouragement to use condoms. Now it is thought that the cost of drugs has fallen sufficiently to justify the expenditure. Not all infected workers take up the offer. Most companies think that the cost of treatment and education is cheaper than the cost of doing nothing, that is, not treating the disease. Even properly discounting the future, the costs of infection prevention and treatment provision are less than the savings which can be made in future costs. This applies to those already operating. For potential newcomers there is an additional cost, higher where the incidence of the disease is higher.

Table 14.6 **The typical time frame for costs**

Year 0	Infection	No costs
Years 0–7	Employee productivity unaffected	No costs
Years 7–9	Sickness begins	Sickness-related costs
Years 9–10	Death or disability	End-of-service costs
Year 10 +	Replacement	Turnover costs

Source: Rosen et al., 2003: 85.

Avoidance of high incidence areas is still an option for potential investors.

The example of Botswana can act as a model for the rest of Africa. As the head of the Gates and Merck Foundation, Dr Donald de Korte, formerly head of Merck in South Africa, has said: 'If you're looking for a self-interested motive, it is that if this model works, it will be repeated throughout Africa and increase the pharmaceuticals' markets.' If it does not work in Botswana, it cannot work elsewhere.

A major debate has taken place in South Africa relating to the cost of the drugs, which was way above what could be afforded either by those suffering from the disease or their governments. The South African government encouraged both parallel importation of cheap drugs and an abuse of patents with generic production of the drugs within South Africa. The drug companies took them to court. The reputation of the pharmaceutical companies became a real issue, which persuaded them to capitulate. Elsewhere in Africa, for the enormous effort required in coping with the disease to be effective, it must combine the commercial with the humanitarian. The model which might work for a small country like Botswana, that is, small in population, will not work in the more populous countries like Nigeria, Kenya or South Africa.

Although there is no formal obligation, there is an increase in the number of companies listed on the South African stock exchange which publicize their anti-AIDS policies, spelling out how AIDS is affecting their business, markets and workers and how they are fighting it. Already about half the largest companies have a formal HIV/AIDS policy, for example Anglo American, Anglo Gold and De Beers give infected workers free anti-retroviral drugs.

### The future

It is untrue that Africa has not seen the like of the current AIDS epidemic before. It is easy to liken it, in its potential impact, to the loss of slaves from Africa from the sixteenth to the nineteenth centuries, with the major impact in the seventeenth and eighteenth centuries. In terms of relative numbers there is likely to be a similar impact, certainly in the region of the southern cone, but the impact of AIDS will be packed into a much shorter time period. Like AIDS, slavery took those predominantly in the age group which provided the bulk of the labour force and the ability of the community to reproduce. The Botswana Institute of Development Analysis has estimated that AIDS could reduce growth rates in several African countries by amounts ranging from 0.5% to 2.6%, an impact which is doubly significant since the growth rate for most African countries is already low.

Other comparisons are also apposite. The Black Death

in the fourteenth century took about one-quarter to one-third of the population of Europe, with dramatic effects on the nature of the economic system which was left. The influenza epidemic after World War I also took about 20 million people, with less overall impact than the Black Death, but a reinforcement of the negative shock of World War I. It is possible to trace the effects of these events and build possible scenarios of what will happen in Africa. AIDS is by no means the last epidemic disease to strike; the advent of severe acute respiratory syndrome (SARS) has shown that. Epidemic disease has also been a problem for livestock. Fast-mutating fungal and other plant diseases become resistant to treatment and further treatments need to be developed. There are other societies at risk from AIDS. What is happening in Africa is only the tip of an iceberg which might prove to be very large indeed.

### Case Study Questions

1. What are the main features of the risk environment in Africa? How important is the political environment for international business?
2. Indicate what future scenarios are likely for Africa given different assumptions about the trajectory of the AIDS epidemic. Indicate carefully what are i. the forces of change, ii. the predetermined elements, and iii. the most important critical uncertainties.
3. What are the implications of the AIDS epidemic for the making of strategy by i. enterprises wishing to invest in Africa, ii. African enterprises, and iii. the governments of African countries?
4. What is the likely future for economic development in Botswana?
5. How should those coming to a foreign country deal with the existence of what are commonly regarded by those outside as corrupt practices? Is there a consistent strategy which should be applied?

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**Focus on Humour**  
**The naked power**  
**of the Niger**  
**Delta 'mamas'**

The 'mamas' are the mothers and grandmothers of the Itsekiri tribe who live in the oil-rich Niger Delta in Nigeria. They have discovered a new weapon to use against the giant oil company, Chevron Texaco, to persuade it to recognize the legitimacy of their demands. This is 'the curse of nakedness'. They have threatened to strip off all their clothes, using their nakedness to shame the oil company into submitting to their demands. Such an act is culturally a potentially very potent one.

The central government in Nigeria is strongly in favour of the oil companies exploiting the oil of the Niger Delta, and is prepared to use the army and police against locals who, up to now, have seen only damage to their local communities from the intrusion. Nigeria is the sixth largest oil exporter in the world, almost all of which comes from the Niger Delta. The whole Nigerian economy has become dependent on the revenue generated by the oil. However, local communities are poor and have seen their local farms and fisheries badly damaged by the environmental impact of the oil drilling.

Most locals do not wish the oil company to go away. Rather they wish for a more equitable distribution of the gains from the oil. In order to achieve this they apply pressure to the company in order to persuade it to pay what amounts to an unofficial local community tax. The wish list consists of a number of possible actions – the creation of jobs for locals, the provision of credit to create local businesses, such as chicken or fish farms, and the establishment of infrastructure, such as improvements in sanitation, the electrification of villages and the building of schools, clinics and town halls.

Local action is not new. Traditional action to try to divert some of the benefits to the local communities has not met with much success. This action has taken the form of local self-determination movements, kidnappings, seizure of cars and helicopters, occupation of facilities and sabotage. Sometimes there is the exaction of overt protection money, sometimes simply compensation for damage to the environment. Such action has failed to achieve very much, only provoking repressive action by the government, worsening the plight of the local communities. The present movement is by contrast a peaceful one, although it means an interruption to oil supply as the women occupy oil pipeline stations.

A historic agreement has been signed which ended the 'mamas' action. Perhaps this is a precedent. The deal will create jobs for 10 people from villages near the flow stations, upgrade 20 contract workers to full-time positions and create 30 new contract positions. Chevron Texaco has also agreed to set up a A\$294,000 micro-credit scheme to help the women create businesses. All this has been achieved without them having to shed a single garment; the threat was enough.

*Source: Branigan and Vidal, 2002: 22; Financial Times, 2003.*

### Key strategic lessons

- Risk is universally present in the business world in the form of strategic risk, comprising competitive and country risk.
- The appetite for risk reflects the liquidity of an enterprise, the personality and attitudes of strategists, the nature of the corporate culture and the 'political' interactions.

## Key strategic lessons cont'd

- Risk can be viewed as either the variance in a performance indicator or the possibility of an extreme event occurring.
- A risk management strategy should be an integral and explicit part of strategy making and formulated at the same time as the main strategy. The risk attached to any project should be considered jointly with the return.
- A first step in reducing risk is to reduce ignorance, which requires a decision on the resources to be committed to generating the required information. This is part of an information strategy. A decision must also be made on whether to do the risk assessment in-house or outsource it.
- Generic risk control strategies can include avoidance, mitigation or management strategies. Any strategy based on concealment is to be discouraged.
- Avoidance is a common strategy since many projects are not considered at a preliminary stage. It is a last resort and should be adopted only after careful consideration. Its cost is the return lost from the rejected project.
- Risk management is the sharing of a fixed risk by a commercial arrangement such as insurance or hedging, a strategic alliance with a partner who shares both risk and return, or the backing of a government.
- Risk mitigation reduces the level of risk by methods such as negotiation, building flexibility into any arrangements or diversification.
- Risk avoidance should be adopted where the level of risk is high, risk mitigation where the risk level is intermediate and risk management where risk is low. The strategies can be combined. Each of these strategies involves the incurring of costs, both direct and indirect, such as the loss of revenue.
- Diversification is an acceptable device for reducing risk under certain conditions which hold most strongly in the world of financial portfolio choice.
- Scenario building and planning is part of good strategy making which assists in effective risk management.

## Applying the lessons

- 1 Define the following terms; a risk-generating event, risk avoidance, risk mitigation, risk management, adverse selection and moral hazard.
- 2 From your own experience, or the experience of an organization with which you are familiar, give examples of business policies which fall under the headings risk avoidance, risk management and risk mitigation. If there are no such specific policies, in what other ways are policies shaped by the need to manage risk?
- 3 Distinguish risk-generating events which occur at different levels – the global, the national, the industrial and the enterprise levels. In your view which of these levels is characterized by the highest risk? Does the answer to this question differ according to the economic sector under analysis?
- 4 Imagine that you are considering an investment project in a particular industry in a particular country. You choose both the industry and the country. How would you deal with the issue of country risk? Do you carry out an assessment yourself? If you do, how would you do this?
- 5 Consider the *Euromoney* formula for assessing country risk. Answer the following questions:
  - The use of a formula assumes the usefulness of a synthetic index. What are the advantages and disadvantages of using such an index?
  - How might you adapt this formula for FDI rather than portfolio investment?
  - What components and subcomponents should be included in such an index? How should different components be weighted?
- 6 In the process of scenario building, risk arises from

## Applying the lessons cont'd

the existence of critical uncertainties. What are the critical uncertainties which are likely to be important in the following industries over the next five years?

Airlines  
Wine  
Pharmaceutical  
Automobile

Computer software  
Banking  
Share broking  
Insurance  
Tertiary education  
Managing shopping malls

## Strategic project

**1** You are considering undertaking a new investment project to be implemented in a particular industry and a particular country with which you are familiar. First choose the industry and the country, and the exact nature of the investment.

**2** What are the likely returns from this project? What are the likely sources of risk? What sort of events are

likely to generate risk? Analyse the nature and levels of industry and country risk. Evaluate the level of risk attaching to this kind of investment.

**3** Consider what kind of risk management strategy should be adopted. What specific measures need to be taken according to this strategy? What is the usual practice in investments of a similar kind?

## Exploring further

There is an excellent introductory text on the treatment and management of risk which is an easy read: Bernstein, 1998. For an excellent text on new methods of risk management, but one very difficult to read, see Dow, 1998. A basic but comprehensive text on country risk is Coplin, 1994.

Risk management is often relegated to a minor role in texts on strategy making. There are exceptions, for example Chapter 10 in Daniels et al., 2001. For a specialist article see Aaker and Jacobson, 1990: 137–60.

The early work on risk dates back to the 1980s: see Calverley, 1985 or Kravenbuehl, 1985. An excellent review article which considers not only the nature of country risk but possible responses to that risk is Miller, 1992: 311–31. Another article which stresses the importance of the issue, but also the particular way in which it shows itself, is Reeb et al., 1998: 263–79.

Two evaluations of the type of diversification which is desirable are Lubatkin and Chatterjee, 1994: 109–36 and Goold and Luchs, 1993: 7–25. On the risks in strategic alliances see Das and Bing-Sheng Teng, 1988: 34–41.

For much of the reading on scenario building and its relationship to reducing uncertainty or risk, see the bibliographical review to Chapter 4. These works can be supplemented by Linneman and Klein, 1985: 64–74.