

Risk and Enterprise

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I believe that an understanding of risk is fundamental to living in a modern society. I also believe that a series of factors have given many people a distorted sense of personal risk. This is having a damaging effect on the government of our society and on our personal attitudes to risk and enterprise.

Chance of an Incident

In fact in 2003 there were only four fatal passenger incidents on the railways, a chance of 1 in 10 million for those traveling in the United Kingdom. There was a chance of 1 in a million for those traveling by air, and they were all lost in private aircraft. Even the latest terrorist outrage in London was only a chance of 1 in 1 million for the English population, although about 1 in 160,000 for those actually in London. The likelihood of a child being run over in any year is about 1 in a quarter of a million.

An understanding of risk is fundamental to living in a modern society.

However we accept many other risks because of the benefits they bring. It is part of our human makeup that what we see repeatedly we begin to accept as normal. We use stairs and steps even though we have a 1 in 75,000 annual chance of dying on them. We have many drugs and household potions but there is a 1 in 64,000 chance of being poisoned accidentally. Driving in a car has a 1 in 40,000 risk every year. Being a motorcycle user increases that risk to 1 in 2,500. This is 4,000 times more dangerous than being a train passenger, but those using motorcycles seem to think it acceptable for the benefits it brings. This analysis shows that humans are not particularly good at estimating risk. Research shows that we have a tendency to underestimate risk over which we have some control, and to overrate risk over which we have no control.

It is important for the public to understand that there is a level of risk in any activity. Government and others may do everything they can to mitigate that risk but it is not going to go away past a certain point. There are no perfect systems. There is always going to be an irreducible residue of risk that cannot be removed. Life is safer than it has ever been but we seem less prepared to accept risk in anything we do. We need to make sensible decisions about what really is dangerous, formed on the basis of weighing up the facts, rather than on public hysteria. By making everything appear lifethreatening, we are in danger of crying wolf once too often.

Media

Nowadays we get our news from the increasingly fragmented and competitive broadcast, print and electronic media. I believe that any serious media channel should have a sub-editor who is numerate as well as one who is literate to make sure that any numbers presented are factually correct and provide a balanced view of the subject.

For instance, aircraft accidents are prominently covered in the media. You do not often read, as a balancing factor, for instance, that more than three million people around the world fly on commercial aircraft every day. There are about 25,000 commercial aircraft worldwide and they each spend about a third of their time in the air. This means that at any time there are about 8,000 planes flying around. However it is the small number of planes that crash which reach the front page and give people their concern about flying.

In another scare a headline said that there was an increased risk of a heart attack in those taking Ibuprofen, a pain killer, for arthritis. The risk was described as rising by a quarter. As a result many older people were worried about continuing their medication. In fact the increase in risk was about one additional heart attack in every 1,000 patients, a very small difference compared with the better quality of life that could be enjoyed. However this detail was buried in the article. Equally with road accidents or murders, the facts, the pictures and the grief are displayed but rarely is the incident put into any sort of context.

Front pages, and the top slot on the television news, can be reached by a huge range of Warhol's 15 minute celebrities. From a drunken sportsman to searing photos of a young murder victim, our sense of proportion is constantly challenged. The result can be seen in the way in which the 3% of those who die from external causes seem to dominate our thoughts. The compensation culture further exaggerates this. There is a real possibility that a necessary interest in safety may degenerate into a damaging and restrictive panoply of fear.

Even the dying do not get equal billing. In 1993, 53 people died in their bath but none of those tragedies appeared on the front page of the national press. I suppose we should be grateful that nobody has yet started a campaign to inspect all of our baths and how we approach them to make sure that they are safe and that we are properly trained for the task of using them.

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Law of Unintended Consequences

However in the same year, 1993, four children were drowned in a boating accident at Lyme Bay. This had extensive front page coverage for days and it led to calls that "something must be done" about adventure centres. I was involved with this as I was a ministerial adviser at the Cabinet Office responsible for the main areas of regulation. The result of the uproar was a classic case of the Law of Unintended Consequences which is that actions of people—and especially of government—always have effects that are unanticipated or "unintended."

Sometimes we need to pause for a moment and think whether we will not do more damage with a hasty response than was done by the problem itself. We cannot respond to every accident by trying to guarantee ever more tiny margins of safety. We cannot eliminate risk. We have to live with it and manage it.

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There is usually a seductive logic to any new regulation. There is almost always a case that can be made for each specific instrument. The problem can however be cumulative. All of these good intentions can bring unintended restrictions with suffocating effects.

What is Risk?

Risk can be caused by humans, by nature and by physical and biological agents. Risks can occur to individuals, to public and private organizations, and to society in various geographies. As well as the risk to life and limb there are of course other forms of risk such as economic risk and reputation risk.

The consideration of risk is a personal matter. The dictionary defines risk as being exposed to hazard or danger. Every decision that we make from the most trivial to the most important is attended by some sort of evaluation of the costs and the benefits, and the likelihood of a

successful outcome. To accept any risk is to accept a possible loss. Risk taking is inherently failure-prone. Otherwise, it would be called "sure-thing-taking."

Mathematically risk is seen as the variability in the distribution of the possible outcomes. There is a whole literature showing that the higher the risk you take the greater the most likely return but also the greater variability in what you will achieve in any one attempt.

With hindsight it is apparent when tragedies occur what was the level of risk that was accepted but not responded to effectively. However understanding what the benefits might have been often gets lost. We must understand this as well if we are to have a sensible debate.

Risk is rarely given a balanced review. It is not just negative. It is a balance of potential outcomes in terms of both the positive and the negative. Whether to stay in and avoid the dangers of the night, or to go out and enjoy company? To test one's skills, either succeeding or failing, or to never know? To try the untried and invent something, or to accept what has gone before?

Risk and Learning

Why then do we take risks? The key reason is to expand our level of experience. This may be taking a journey to see other places or people, it may be an exploration to discover new mountains, oceans or planets, it may be to give ourselves a thrill or it may be a risk of spending time or money on pursuing an idea to see whether it is valid. Taking more risk means that one samples from a larger pool. While there is an increased chance of there being a problem, there is also a probability of finding something new and innovative.

Risk taking increases the probability that one will find something of value despite the search cost. It creates the possibility of a large gain in experience, capacity or knowledge. Those who do not take a risk cannot expect such benefits. Over the course of human history every major advance has occurred because of the temerity on the part of human beings in trying to understand more and to do something that has not been tried.

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Art and Uncertainty

This works similarly in artistic endeavours where architect Norman Foster has said: "Creativity and arts are troubled by aversion to uncertainty."

Thousands of artists have historically explored their medium. They took great time and often lived in poor conditions as they tried to find a truly step change in creativity. We know that only a handful of those thousands have actually left a lasting impression but of course their validity can only become clear with hindsight, often after they are dead. However when artists stop experimenting then their work becomes repetitive.

Picasso said "success is dangerous, one begins to copy oneself. It is more dangerous than to copy others, it leads to sterility". The human spirit and its evolution require risk taking. The greatest risk may be not to explore at all. As Theodore Roosevelt once said: "The only man who never makes a mistake is the man who never does anything."

Risk of No Risk

Similarly Mark Twain opined: "Twenty years from now you will be more disappointed by the things you didn't do than by the ones that you did do. So throw off the bowlines, sail away from the safe harbour. Catch the trade winds in your sails. Explore. Dream. Discover."

I believe that life is best approached in a spirit of exploration and enterprise. People need to recognize that bad luck and unforeseen circumstances are inescapable aspects of life and that absolute safety is unachievable. They also have to understand that without taking some level of risk our society would stultify and cease to advance. We need sensible education and balanced information to allow people to strike their own appropriate balance between risk and safety and between achievement and opportunity.

Corporate World

Even the largest companies must find a way to move forward or otherwise they disappear. We sometimes see large corporations as being dominant and eternal but the corporate womb is actually very risky. Of the top 25 corporations in the US in 1900, only two were in the same league by 1960, a 92% dropout rate. 3% compound per year. In 1960, Forbes magazine selected the ten best run and most profitable businesses in America. By 1985 one was bankrupt, two had disappeared and four were in serious trouble, leaving only 30% successful. 5% compound per year.

Probably the most influential management book of the 1980's was *In Search of Excellence*, published in 1982. In 1984, *Business Week* magazine did a cover story entitled "Oops". The verdict from *Business Week* was that "at least 14 out of 43 companies highlighted by Peters and Waterman just two years ago have lost their lustre". That's a 32% fall-out rate in two years. 15% compound per year.

Premier Brands

Back in 1985 I led the buy-out of the food companies of Cadbury Schweppes to form a company called Premier Brands. I remember one incident when we were phoned by a newspaper and told that they had a report that there was dioxin, a cancer agent, in our tea bags. New evidence had come to light as the power of analysis had increased. When we investigated we found that the concentration was one part in a thousand million. We pointed out that this is about the same as the number of feet between here and the moon and that dioxin is found in many other situations at that intensity. There were however some anxious hours when our tea bag business could have been decimated by such a news story.

We were hit by an actual safety scare when the *That's Life* television programme broadcast a feature about a promotion for Cadbury's Drinking Chocolate and asked if it was safe. It had all been approved by the relevant authorities and nobody was hurt at any stage but the mere mention on the programme caused the retailers to require us to remove all of the product from their shelves. This cost us over £200,000.

Darwin and Entrepreneurship

The basics of business and competition have not changed. The fittest survive. In evolutionary terms, risk-taking could be said to have arisen as a response to the harsh environment. Species that took risks survived to propagate. In his famous book *The Naked Ape* which compares humans to animals the author Desmond Morris demonstrates the importance of our evolutionary origins. He describes how for millions of years life was really tough as we were living in caves. He says that "we needed to stay alert, to look out for the main chance and to seize upon any opportunity we could find". This is unwittingly a remarkably good description of a creative entrepreneur.

Entrepreneurship requires taking a view of the future, generating a vision around an idea, and

then mobilising resources to achieve it. Entrepreneurs think the unthinkable. The thing which differentiates them from other people is that they actually then go out and do it. We should remember that most of the major advances have been made by small entrepreneurial companies, not the existing giants. The railway companies did not invent the aircraft industry and IBM did not invent the Internet.

Entrepreneurship is exciting. There is the potential for huge emotional and financial rewards. The future is however uncertain. None of us can know whether an idea will succeed. Any new venture requires a whole series of elements to come right: the idea itself, the marketing strategy, the management team, the finances, sales and distribution, and the ability to stay ahead when competitors try to follow. Each of these has to be right so the chance of being successful is what is known as a multiplicative probability.

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Witnessing companies growing quickly is like watching a rocket blast off. There are those that blow up on launch, others make it part of the way before being destroyed, but some do make it to their destination. Venture capitalists are the most sophisticated reviewers of new business ideas. There was a major US study of 17,000 transactions in 8,000 companies, representing \$114 billion between 1987 and 2000. This found that only about 15 percent of companies achieve large returns but a third achieve returns below 35 percent, and 15 percent of the companies deliver negative returns. This means that even with the best due diligence, half of the



companies produce small returns or lose money. It is the few successful ones which pay for all the others. Despite all of the expertise available, nobody has yet come up with a certain way of spotting the winners.

To take a very simple example, who here would invest in this management team? They have all the bravado of being the leaders of tomorrow. In fact they are the leaders of today. This is the Microsoft team photo of 1978 with a young guy called Gates in the bottom left hand corner. If you had been on the spot at the time with £1,000, you would now be a billionaire.

Risk and Enterprise

It is clear that nobody can easily predict likely success. Who would have backed a company that wanted to sell mobile phone ringtones, now a multi-million pound business, or to sell coffee retail at £1.50 a cup. As with artists it is only because thousands of people will keep taking the risk to try out new ideas that a few of them will become great successes. Many are called but few are very successful.

Enterprise is like exploration in that we cannot know at the start whether it will be successful. We may do all of the things we can to make it work but only time will tell if all of the ingredients are right.

This does not only apply to new companies and to entrepreneurs. We need to apply the same objectives in all of our activities. New ventures and exploration are as much needed in the charitable and social sector as they are in business. There are multiple good ideas for starting charities and seeing which ones will find a viable model of success. If we are all to push forward the frontiers of knowledge then risk must be taken and resources allocated even if there is no certainty of success.

The importance of enterprise was vividly described 95 years ago by Theodore Roosevelt: “It is not the critic who counts; not the man who points out how the strong man stumbles, or where the doer of deeds could have done them better. The credit belongs to the man who is actually in the arena, whose face is marred by dust and sweat and blood, who strives valiantly; who errs and comes short again and again; because there is not effort without error and shortcomings; but who does actually strive to do the deed; who knows the great enthusiasm, the great devotion, who spends himself in a worthy cause, who at the best knows in the end the triumph of high achievement and who at the worst, if he fails, at least he fails while daring greatly. So that his place shall never be with those cold and timid souls who know neither victory nor defeat. “

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