Top Class Competitors

How nations, firms, and individuals succeed in the new world of competitiveness

Stephane Garelli

John Wiley & Sons, Ltd

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To my son Stéphane:
he makes me set ambitious goals . . .

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Credits

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Prologue

It's hard to believe that the term "competitiveness" was barely recognised only three decades ago! Today, it is one of the most profusely used – and abused – economic terms. Typing *competitiveness* in the Google search engine produces more than 35 000 000 entries. So, although the concept is publicised widely, its definition remains vague. *The New Shorter Oxford English Dictionary on Historical Principles* describes a competitive person as one "with a strong urge to compete . . ." [1]. The verb *compete* implies to "be a rival" or to "bear comparison (*with* another or *in* a quality)", and ultimately to "strive for superiority."

Today, the existence of the term *competitiveness* is generally widely acknowledged, but rarely defined. In this book we will consider competitiveness as a multifaceted concept: touching not only upon quantifiable, economic issues, such as growth rates, but also upon softer, more qualitative considerations, such as the impact of education and value systems.

The ultimate goal of competitiveness is to raise the overall level of prosperity of a nation and its people. Clearly, a nation's primary source of competitiveness is to be found in its enterprises, since that is where economic added value takes place. In turn, the role of government is to ensure a smooth and sustainable flow of economic wealth from enterprises – creation of added value – to citizens, who receive direct revenues or benefit from State services and infrastructure. A nation's overall level of prosperity, as shown in Figure 1, results from the interaction of three forces:

- competitiveness of firms: focused on profitability;
- competitiveness of people: focused on personal wellbeing;
- competitiveness of nations: focused on sustainable prosperity.

The model is systemic – the relationships between the parts of the model are just as important as the parts themselves. When enterprises change

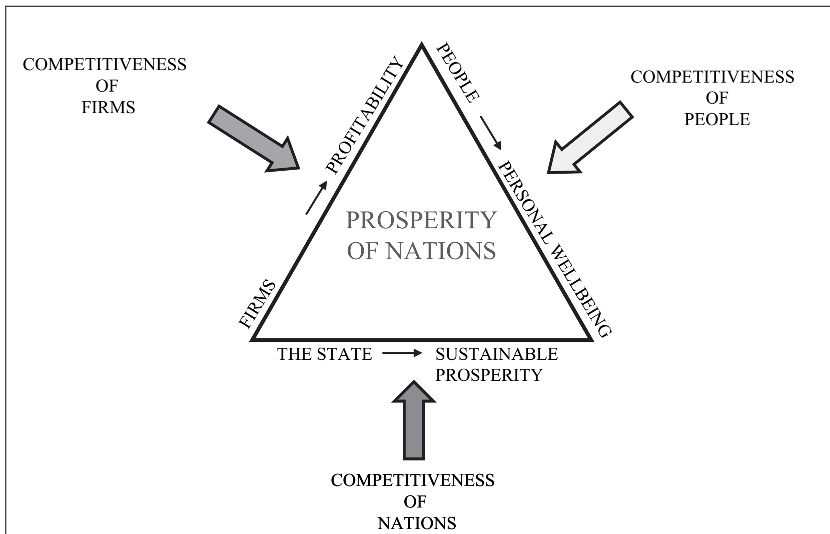

Figure 1 – Competitiveness drives prosperity.

their business models, for example through outsourcing or globalisation, or when people modify their value systems, for example to include greater environmental or ethical sensitivity, the consequences of these actions have an impact throughout the entire system.

At IMD, the World Competitiveness Centre has, for the past two decades, pioneered the study of competitiveness, monitoring developments in the field closely. The Centre publishes the *World Competitiveness Yearbook* [2], a comprehensive analysis, more than 700 pages long, that reports on developments relating to competitiveness in more than 60 nations and economic regions of the world (Figure 2). Some of the findings of the research undertaken by the Centre have shaped the views exposed in this book. My teaching at the University of Lausanne, focused, in particular, on the relationship between the competitiveness of firms and that of nations, has complemented this research significantly.

This book is composed of four sections:

- The first two chapters – *Competitiveness: Changing the Mindset* and *The Long and Winding Road to Competitiveness* – define the concept, and retrace its origins in economic history.
- The next chapter – *Working out National Competitiveness: the Cube Theory* – addresses the notion of competitiveness of nations in particular, and how national competitiveness strategies are designed.

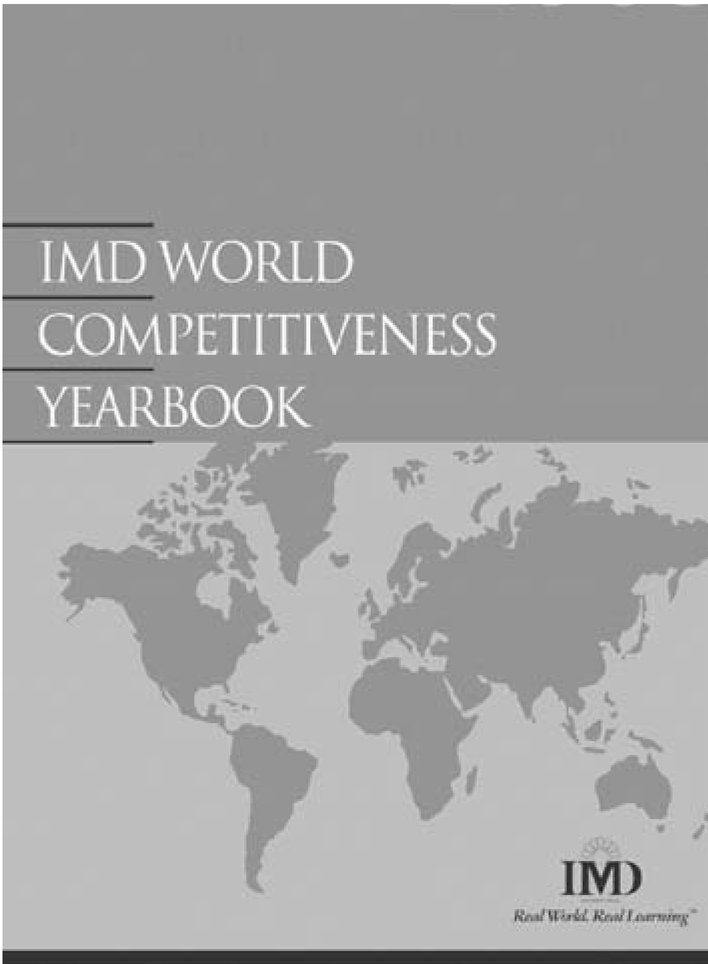

Figure 2 – IMD's *World Competitiveness Yearbook* profiles and ranks the competitiveness of some 60 countries and regions around the world, using more than 300 criteria. The data are accumulated by a worldwide network of 58 partner institutes. The Yearbook has become the most often quoted authoritative source on competitiveness. (Reproduced by permission of IMD.)

- Chapters 4 and 5 – *The Extended Enterprise* and *Competitiveness and Work: A Love–Hate Relationship* – concentrate on the firm at the core of competitiveness, the new business model, and its consequences for company structures.

- Finally, Chapters 6 and 7 – *Competitiveness and Value Systems* and *Competent People and Competitive People: They Are Not The Same* – focus on the competitiveness of individuals.

A very simple observation is at the origin of this book: today, we live in a world where there is ever greater pressure to be competitive. Globalisation and an open world mean that nations, firms, and people confront more competitors than ever before. In addition, technology has redefined the meaning of speed – we now all operate in a real time world.

Competitiveness, like gravity, affects everybody and everything. Some are more affected than others because of their size or position, but competitiveness cannot be avoided – there is no place to hide in this brave new world. Thus, the only alternative is to understand and adapt to competitiveness: what does it mean, how does it work, how does it affect nations, companies, and people? In short, how does competitiveness define the rules for success? The purpose of this book is to address these questions and to provide some answers.

1 Competitiveness: Changing the Mindset

"We must all hang together,
or we shall all hang separately!"

Benjamin Franklin, as quoted by Franklin Delano Roosevelt,
State of the Union Address,
11 January 1944.

The winter of 1619 was indeed very cold in Bavaria. On November 10th, a young French soldier serving in the army of the Dutch Prince Maurice of Nassau sought refuge in a house that had a large stove, and stayed there meditating all day. René Descartes claimed that when he came out of that house, he had developed half of his philosophical theory. In 1637, Descartes published his *Discourse on Method*, whose second principle reads: "The second [principle] was to divide up each of the difficulties which I examined into as many parts as possible, and as seemed requisite in order that it might be resolved in the best manner possible." [1]

The Cartesian method – splitting mind and matter, subject and object, observer and observed – has become, at least in the West, integral to the way we look at the world. Most of the time we are not even aware of how much the Cartesian method still drives our current modes of thinking. Since Descartes, the fundamental approach employed in understanding any problem relies on one operation: *division*.

Economics and management follow the same logic of dividing things up. Economics itself, as a field of knowledge, is divided into macroeconomics – national income, employment, inflation, money, and trade; microeconomics – the behaviour and decision-making processes of households and firms; and econometrics – measuring economic phenomena. Economists also distinguish between what they can quantify exactly, such as GDP, and what they can only assess, such as the probability of a decision.

Management of a firm follows the same principle of division; a firm can be divided in many ways: business units, functions, and, yes, even divisions. Groups of countries are categorised into divisions of the world called "regions": the Americas, Europe, Middle East, Africa, and Asia.

Markets are split into segments: old and young, rich and poor, status conscious, environmentally concerned, etc. Employees are also divided into groups: line managers, with profit and loss responsibilities, and staff managers, with supporting responsibilities. Finally, strategies also have their own divisions, such as cost leadership, and differentiation. Dividing things up seems to be the preferred pastime in a firm.

The Cartesian method of dividing everything up has thus permeated every field of knowledge, ultimately producing that marvel of modern societies: the expert!

Dividing an issue into smaller parts can be a very effective tool to advance knowledge. However, action requires, at some point, the reconciliation of objectives into a cohesive strategy. This task is mainly the responsibility of senior management in firms, and government leaders in nations. Yet, most of the time, these individuals lack the experience to do so. During a large part of their professional careers, they have been conditioned to succeed in a paradigm of division – not one of integration. For those who find themselves in a position of leadership, the biggest challenge is to integrate multiple layers of objectives into a coherent strategy.

1.1 Managing the totality of competencies

A collection of seemingly divided units and people cannot be managed as a firm. Thus, a firm must build alignment through a shared purpose and value system. The situation with nations is analogous – a nation cannot be run as a simple collection of citizens and institutions. National leadership must convince individuals to join, and rally around, a common cause: the old Roman *res publica* – the public thing.

Prior to the rise of prosperity as a common goal for a nation, leaders were the only unifying factor. These leaders were more inclined to focus on the conquest of lands, the development of power, the increase of their personal wealth, or simply survival, than on the overall prosperity and welfare of all individuals. When the common purpose became *increasing* overall national "prosperity," a new era began. Leaders realised they needed to know which forces were driving the prosperity of their country, and also of their businesses. Those scholars who took it upon themselves to analyse prosperity, determine its drivers, and articulate policies, were thus the original founders of economics – slightly more than two centuries ago.

Economics relies on Cartesian logic. Since its creation, it has remained focused on how a nation develops prosperity by separately analysing trade flows, monetary, fiscal, and budget policies, as well as the de-

cisions made by households and firms. Within their management, firms have adopted a slightly more comprehensive approach to understanding the mechanisms of prosperity. While firms focus on measuring things like market share and financial objectives, management has not been reluctant to include "soft" areas, such as human resources, corporate culture, or patterns in consumer behaviour.

Competitiveness is thus a field of economics that *reconciles* and *integrates* several concepts and theories from economics and management into a series of guiding principles driving the prosperity of a nation or an enterprise. However, the models provided by either economics or management theories rarely touch upon many of the factors that influence prosperity. Such theories often fail to link various elements – such as education, infrastructure, or value systems – with prosperity, even in the presence of evidence that they do make a difference.

The following definition underlines the importance of integrating all the drivers of prosperity, and can thus provide a good starting point for a preliminary understanding of competitiveness:

> *Competitiveness analyses how nations and firms manage the* totality of their competencies *to achieve prosperity or profit.*

In competitiveness, firms play the central role – they generate economic added value. Nations provide the appropriate framework to maximise economic added value. Their responsibility is also to ensure that the results of firms' activities are transformed into tangible signs of prosperity for people. The fate of firms, nations, and people is thus intertwined, and cannot be managed separately.

Competitiveness takes an integrative, holistic approach. Holism is the tendency in nature to produce organised wholes, which are more than the mere sum of the component units. Thus, understanding a firm's, or a nation's, competitiveness requires one to move above and beyond some misconceptions.

1.1.1 Competitiveness is more than productivity

For a firm, productivity is the amount of good produced, or service rendered, divided by a unit of input – money, raw material, or labour – used. The ratio between the sales – or even better, added value – of a firm, and the number of employees is a common approximation of its productivity. For a firm, an increase in productivity is perceived as a sign of increased competitiveness, as it shows that the company has become more efficient. In the case of nations, the indicators used are different,

but the measurement of productivity is similar. Economists generally use the ratio of GDP to the number of people employed to track productivity, and refine it by incorporating hours worked per year. Labour-hour productivity serves as a proxy for evaluating the overall efficiency of a nation.

The question arises as to whether competitiveness can be reduced merely to the management of productivity across firms or within a country. Paul Krugman, Professor of Economics at Princeton, expressed that viewpoint in a 1994 *Foreign Affairs* article [2]. Krugman argued: "the doctrine of competitiveness [of nations] is flatly wrong." He stressed that focusing on the competitiveness of a nation could lead to misallocation of resources, trade frictions, and even poor domestic economic policies. He then proceeded to develop the position that competitiveness is just another name for national productivity.

Nobody questions the fact that productivity is a key determinant in competitiveness. Productivity is especially important at the level of the firm. Since the firm is at the core of our description of competitiveness, the overall productivity of a nation's firms greatly determines competitiveness. And, while a government can set its own productivity objectives, such as increasing the efficiency of its administration or public spending, their overall impact on national economic output is rather limited. Some scholars, taking the argument one step further, have even denied the existence of such a concept as national competitiveness. In their view, nations do not compete with one another, only firms do!

Statements that attempt to deny competition between nations oversimplify reality. In fact, both firms and nations compete in international markets. Nations compete in attracting investments or highly skilled labour, in scientific research, and even in educational standards. A highly productive firm operating in a highly inefficient, or even hostile, national business environment cannot be expected to sustain its competitive edge easily.

Productivity is thus a key aspect of competitiveness, because it is an indicator of efficiency: it conveys how much firms or nations produce with limited resources – the more produced with less, the better. Yet, there is a lot more to competitiveness than just productivity.

1.1.2 Competitiveness is more than what you can measure

Competitiveness thrives increasingly on intangible assets that are difficult to value, to account for, to create, and to recover. A nation's economic success depends more and more on the excellence of its

education system, the quality of infrastructure, the dynamism of research, and even the quality of its administration. Although these factors have a huge impact on competitiveness, they are not measured easily, and, of course, are not included in the national accounts. Such omission can have pernicious effects.

A country can let its education or research system deteriorate for years before observing an impact on its competitiveness. By the time the problem becomes evident, leaders are confronted with a long uphill battle – sometimes lasting a generation – to correct these wrongs. Economic data produced by governments does not account for the depreciation in the intangible assets of a nation, thus failing to provide an early warning system of national competitiveness deterioration.

The time it takes to reverse trends is a very important consequence of the shift from tangible to increasingly intangible assets as key drivers of competitiveness. In Figure 1.1, it takes a nation one to five years to address a "standard" economic challenge, such as a surge in inflation. A thornier political issue, such as the reform of the pension system, might take longer – perhaps five to ten years. However, deteriorating trends, such as falling standards in education or research, might take significantly longer to be reversed – 10 to 30 years!

The more an issue relates to intangibles, the more time it will take to alter its course – both for governments and companies. Challenges in

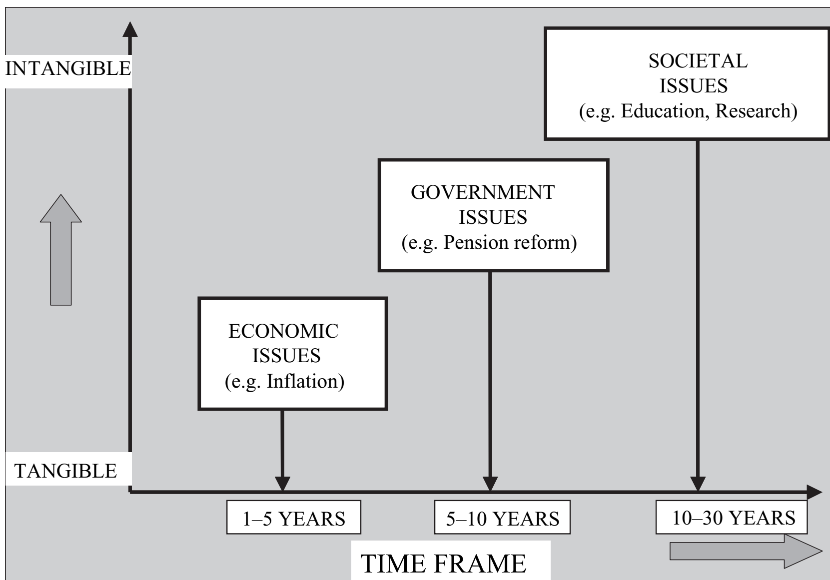

Figure 1.1 – Time to reverse trends.

brand recognition, customer loyalty, innovation, or people skills take much longer to reverse than a problem of excessive costs. The lesson to be learned: pay careful attention to the less tangible factors of competitiveness. In general, by the time the problem becomes apparent, it is too late for a quick fix.

The competitiveness of firms is highly dependent on intangible assets, such as brands, customer loyalty, image, skills, and processes, which are generally not accounted for in the firm's books. The value of brands and other market assets are only accounted for under "goodwill" if there has been a transaction – merger, sale, or acquisition – through which these intangible assets can be valued. Increasingly, companies attempt to incorporate the value of their intangible assets in their annual reporting. For example, Philip Morris (today, Altria), was one of the first companies to list the value of its many brands in its accounts.

Nations also have a "brand" – the image of the country abroad, and all the preconceptions going with it. For a nation, brand management is crucial to its competitiveness. Ireland enjoys an image of attractiveness for foreign investments; Singapore of efficiency in the administration. Other perceptions can be negative: Colombia for insecurity, Italy for strikes, The Philippines for poor infrastructure, the former Soviet Union for corruption. All of these perceptions – whether based on actual facts or not – strongly influence business and competitiveness. Perceptions are powerful, but also highly emotional, from a competitiveness point of view; they should never be overlooked.

If the value of brands (see Table 1.1 for the world's biggest) is still elusive in accounting standards, the financial value of a customer base, or of the competence of a firm's employees, is even more difficult to calculate. Accounting standards state that assets cannot appear in a firm's financial statements if the firm does not have full ownership of them. Obviously, no firms fully "own" their customers, and even less their employees.

Peter Drucker rightly underlined that "the purpose of a company is to create a customer" [4] and, one could add, to retain them. Managers know a loyal customer base is one of the most important assets of a company, and that it deserves utmost attention. For example, Rolex or Apple customers display impressive loyalty. Rolex customers are willing to wait many months for the delivery of a watch worth several thousand dollars – time and cost do not discourage such motivated clients. Apple customers wait stoically for the launch of breakthrough products, stubbornly refusing to switch to Windows, even when the competing machines are at a lower cost and of equal, or better, quality. Steve Jobs capitalised on such loyalty when he took over the reins of the company, and relaunched Apple's fortunes with the iPod series. It seems obvious

Table 1.1 – The world's most valuable brands

RANK 2005	RANK 2004		BRAND VALUE 2005 $MN	BRAND VALUE 2004 $MN
1	1	COCA-COLA	67 525	67 394
2	2	MICROSOFT	59 941	61 372
3	3	IBM	53 376	53 791
4	4	GE	46 996	44 111
5	5	INTEL	35 588	33 499
6	8	NOKIA	26 452	24 041
7	6	DISNEY	26 441	27 113
8	7	McDONALD'S	26 041	25 001
9	9	TOYOTA	24 837	22 673
10	10	MARLBORO	21 189	22 128
11	11	MERCEDES-BENZ	20 006	21 331
12	13	CITI	19 967	19 971
13	12	HEWLETT-PACKARD	18 886	20 978
14	14	AMERICAN EXPRESS	18 559	17 683
15	15	GILLETTE	17 534	16 723

Source: [3]

that such unique customer dedication has a value – yet it is not accounted for anywhere.

A similar argument can be made for employees: they are the cornerstones of any firm. It is a well-known fact that many CEOs end their speeches to the troops by reiterating the cliché: "In our company, people are our most important asset." The problem is that this "most important asset" is accounted as a "cost." Whether a firm employs 1000 geniuses, or 1000 "idiots," their value basically appears to be the same – the cost of their salaries. A firm that invests significantly in the training and education of its workforce does not see an increase in its accounting value. No trace will be kept of this laudable effort of training and education, except, of course, as a line item cost in the books – despite the fact that the *competitiveness* of the firm is certainly improved.

Although accounting standards don't allow a valuation of intangible assets, financial markets are bolder in their valuations and do include figures for the intangibles. Stock markets reflect intuitively how companies such as Microsoft and Nokia are also valuable because of the quality of their intangible assets: brand, customer loyalty, innovation, intellectual property, and even the skills of their staff. The staggering market capitalisation of Microsoft and Nokia (share price multiplied by

the number of outstanding shares) demonstrates the importance financial markets attach to intangible assets. The ratio between market capitalisation and revenues illustrates this point. On average, in 2004, Microsoft displayed a ratio between market capitalisation and revenues in the order of 10 to 1 (i.e. $30 bn in revenues for an average market capitalisation of $300 bn). In the case of General Motors, the ratio was exactly the inverse – 1 to 10 – revenues being ten times larger than market capitalisation.

Financial markets have stepped in and are compensating actively for the shortcomings of accounting standards. The valuations they give to a firm include an approximation of the value of the intangible assets. This role has, however, been assumed by default, and the "standards" used by financial markets to assess the intangibles are sometimes questionable. Thus, in the absence of reliable valuation methodologies, financial markets develop a tendency to become easily exuberant. The so-called Internet bubble between 1998 and 2001 and, more recently, the Google IPO, serve to illustrate how financial markets' valuation of companies can sometimes defy gravity.

As we shall see later, key determinants for competitiveness can be intangible assets like science, technology, education, skills, infrastructure, brand, and even image. Competitiveness draws attention to intangible assets in a firm's or country's strategy, even if they are difficult to value.

1.1.3 Competitiveness is more than wealth

Although the purpose of competitiveness remains prosperity, wealth alone does not determine the success of a nation, a firm, or even an individual. Nations can be wealthy and not competitive. Living in Switzerland – a wealthy nation by many standards – I have often been at odds with the authorities and the business community when trying to alert them to the falling competitiveness of the nation. One of the typical reactions I encountered was: "What do you mean we are losing our competitive edge? Look how wealthy we are: the roads, the education, the technology, the money . . ."

True, Switzerland is extremely wealthy, but is it competitive? People who inherit $100 mn and decide to spend the rest of their days lying on a tropical beach, are definitely wealthy, most probably happy. But from a competitiveness point of view they are useless – they do not, through their own efforts, create any economic added value and, thus, do not contribute to the prosperity of any nation.

Wealth is largely the result of past competitiveness – the accumulated economic and business achievements of past generations. Wealth is also

a function of *chance* – such as having natural resources for a nation, or being born into a rich family for an individual – yet such wealth is not sufficient to determine future competitiveness. Wealth helps – it gives nations, firms, and people a head start in economic development – but it does not guarantee that the prosperity of today will be perpetuated tomorrow.

Natural resources: a blessing or a curse?

Abundant natural resources are generally considered a blessing for a country. Saudi Arabia and Norway are wealthy countries in their own right, because they are world leaders in oil and gas production. Because their populations are wealthy, both nations give the impression of being competitive: Saudi Arabia has a per capita Gross Domestic Product (GDP) of $10 486 (purchasing power parity adjusted for 2001), while for the same year, Norway had a GDP per capita of $30 142. A regular flow of money from natural resources helps an economy, or rather provides a sense of security. Natural resources continue to play an important role in industrialised nations: the US and France are world-leading exporters of agricultural goods, while oil remains, with the automobile industry, one of the top exports of Britain. In a similar way, considerable exports of North Sea gas have sustained the competitiveness of The Netherlands.

However, natural resources don't necessarily lead to competitiveness. Iraq has huge reserves of oil but, unfortunately, cannot yet capitalise on this asset. Russia has the largest amount and diversity of natural resources of any nation in the world, yet it is only barely emerging as a competitive power. There is a long list of nations that seem to follow a similar pattern – South Africa, Brazil, India, Indonesia – immensely rich nations, endowed with considerable natural resources, but lagging in the development of their competitiveness. They have over-relied on the extraction of natural resources for their wealth, yet if they were to focus more on processing those resources into other products, they would increase their competitiveness.

Is it a "curse" to have natural resources? In contrast to nations richly endowed in natural resources, "poorer" nations in that sense – Singapore, Japan, Switzerland, and Ireland – have indeed thrived in competitiveness. These nations focused on the transformation of imported natural resources into manufactured products, and now dedicate themselves mostly to the provision of services.

Whether it is renewable or not determines the impact that a natural resource has on competitiveness. Forests are managed as renewable resources in many countries, and timber harvesting is highly regulated. Trees cannot be cut before a certain age, and new plantations are

compulsory. In Europe, 31.1 % of the surface area is now covered by forest, a proportion that is increasing every year – partly because oil has replaced wood as a significant source of energy. As a consequence, and contrary to conventional wisdom, there are probably more trees in Europe today than one hundred years ago.

Unfortunately, such enlightened forestry policy is not applied everywhere. Brazil and Indonesia, for example, suffer the effects of severe deforestation because of unregulated, intensive timber exploitation, without appropriate replanting schemes. The former East Germany had one of the highest growth rates in the former Communist world. However, after German reunification, it became evident that East Germany had achieved its success at considerable environmental cost. The eastern part of a unified Germany was a land exhausted by pollution, careless exploitation of resources, and poorly planned urbanisation. The East German "economic miracle" depended on the abuse and depletion of nonrenewable assets. East Germany only performed, or rather boasted, at the expense of future generations – "selling the family silver to buy lunch."

Sustainable development

In 1987, the World Commission on Environment and Development, under the chairmanship of Dr Gro Harlem Brundtland from Norway, articulated a widely-accepted definition of sustainable development. The definition states that sustainable development "meets the needs of the present without compromising the ability of future generations to meet their own needs." The work of the Commission is considered a landmark, highlighting the long-term relationship between the exploitation of natural resources and prosperity [5].

Unless they are used to develop other activities, nonrenewable natural resources – oil, gas, or minerals – are not assets for competitiveness. If the proceeds from their exploitation and extraction are not invested for building future competitiveness, the depletion of nonrenewable assets represents a net loss of wealth for future generations. Although exports of nonrenewable natural resources can contribute significantly to the Gross Domestic Product of a nation, they cannot, as such, be considered drivers of future competitiveness, unless used wisely.

Nonrenewable natural resources can, nevertheless, provide a window of opportunity to develop future competitiveness if the wealth derived from their exploitation is invested in means of future production, such as human capital, plant, and equipment. Dubai, one of the United Arab Emirates, unlike its wealthy neighbour Abu Dhabi, only has a limited amount of oil left – perhaps 20 more years of production. The leadership of Dubai has thus decided to use current oil revenues to diversify its economy, promoting the development of technology-based activities, such as the Internet and multimedia, together with an offshore financial centre and a booming tourist industry [6]. Norway is following a slightly different strategy, although the purpose is similar. The Norwegian government has created a special fund – financed mainly by the country's considerable oil revenues – with the objective of preparing for when oil revenues dry up.

The experiment of Dubai

Dubai is conducting an impressive experiment in shifting its competitiveness away from oil, to a diversified economy. Dubai's GDP, estimated at $16.4 bn in 2000, has been growing at 8 % over the past ten years. Today, only 10 % of the GDP is derived from the oil sector – manufacturing, trade, finance, real estate, tourism, and transportation have all become more important than oil. The non-oil sector is now growing by almost 10 % per year. Dubai is a remarkable example of the strategic decision to use nonrenewable natural resources (oil and gas) to finance the transition toward a more sustainable and advanced competitiveness model, thriving on skills and knowledge.

Although clearly a source of wealth, natural resources should be perceived as an *enabler* of competitiveness. The true value of natural resources for competitiveness exists only if such resources are made renewable, or if the nation uses the revenues generated by natural resources to diversify the economy into added-value activities that can last into the future.

It is mainly nations that need to have natural resources policies but very similar basic underlying principles apply to firms. In 2004, oil giant Shell got into deep trouble because it had misstated its proven oil reserves and mismanaged oil exploration efforts, jeopardising the future