SKANSKA (1887-2007):

THE ASCENT OF A SWEDISH MULTINATIONAL COMPANY

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The large multinational companies of construction are at the origins of important flows of services which are, themselves, generator of many exchanges of goods and informations. This is the case of Skanska, one of the European and even worldwide majors of the construction sector¹. In 2005, this group was placing itself to the fourth European rank behind two French groups and one German:

Table 1

The five European main groups of the sector of the construction in 2005.

	Consolidated net sales	Share of the exportations	Total number	
	(10° €)	(in % of the net sales)	(in thousands of persons)	
1- Vinci (F)	21.5	38	142	
2- Bouygues (F)	17.1	39	87	
3- Hochtief (D)	14.9	92	41	
4- Skanska (SW	13.5	80	54	
5- ACS (E)	12.1	17	113	

Source: Annual Reports of the concerned groups

One year after, the group passed to the fifth European rank, because the rapid growth of the Spanish ACS group:

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¹ Barjot (Dominique), La trace des bâtisseurs : histoire du Groupe Vinci, Vinci, 2003; La Grande Entreprise Française de Travaux Publics (1883-1974), Paris, Economica, 2006.

 ${\bf Table~2}$ Comparative performances of the European Major listed construction companies in 2006

capitalization in billions of € (1) financial items in billions of € (2) financial items in billions of € (4) (%)			Market	Gross sales	Income after	(3)/(1)	(3)/(2)
(1) (3) 1 Bouygues (F) 20.5 26.,4 2.0 9.8 7.6 2 Vinci (F) 25.3 25.6 2.7 6.7 6.6 3 Hochtief (D) 6.5 15.5 0.3 4.6 1.9 4 ACS (E) 14.6 14.1 1.6 11.0 11.3 5 Skanska (SW) 5.5 13.6 0.5 9.0 3.7 6 Ferrovial (E) 6.9 12.2 0.7 10.1 5.7 7 Eiffage (F) 5.7 10.7 1.1 19.3 10.3 8 FCC (E) 6.9 9.5 0.9 13.0 9.5 9 BAM (NL) 2,1 8.6 0.2 9.5 2.7 10 Bilfinger Berger (D) 2.0 7.5 0.2 10.0 2.7			capitalization	in billions of €	financial items	(%)	(%)
1 Bouygues (F) 20.5 26.,4 2.0 9.8 7.6 2 Vinci (F) 25.3 25.6 2.7 6.7 6.6 3 Hochtief (D) 6.5 15.5 0.3 4.6 1.9 4 ACS (E) 14.6 14.1 1.6 11.0 11.3 5 Skanska (SW) 5.5 13.6 0.5 9.0 3.7 6 Ferrovial (E) 6.9 12.2 0.7 10.1 5.7 7 Eiffage (F) 5.7 10.7 1.1 19.3 10.3 8 FCC (E) 6.9 9.5 0.9 13.0 9.5 9 BAM (NL) 2,1 8.6 0.2 9.5 2.7 10 Bilfinger Berger (D) 2.0 7.5 0.2 10.0 2.7			in billions of €	(2)	in billions of €	(4)	(5)
2 Vinci (F) 25.3 25.6 2.7 6.7 6.6 3 Hochtief (D) 6.5 15.5 0.3 4.6 1.9 4 ACS (E) 14.6 14.1 1.6 11.0 11.3 5 Skanska (SW) 5.5 13.6 0.5 9.0 3.7 6 Ferrovial (E) 6.9 12.2 0.7 10.1 5.7 7 Eiffage (F) 5.7 10.7 1.1 19.3 10.3 8 FCC (E) 6.9 9.5 0.9 13.0 9.5 9 BAM (NL) 2,1 8.6 0.2 9.5 2.7 10 Bilfinger Berger (D) 2.0 7.5 0.2 10.0 2.7			(1)		(3)		
3 Hochtief (D) 6.5 15.5 0.3 4.6 1.9 4 ACS (E) 14.6 14.1 1.6 11.0 11.3 5 Skanska (SW) 5.5 13.6 0.5 9.0 3.7 6 Ferrovial (E) 6.9 12.2 0.7 10.1 5.7 7 Eiffage (F) 5.7 10.7 1.1 19.3 10.3 8 FCC (E) 6.9 9.5 0.9 13.0 9.5 9 BAM (NL) 2,1 8.6 0.2 9.5 2.7 10 Bilfinger Berger (D) 2.0 7.5 0.2 10.0 2.7	1	Bouygues (F)	20.5	26.,4	2.0	9.8	7.6
4 ACS (E) 14.6 14.1 1.6 11.0 11.3 5 Skanska (SW) 5.5 13.6 0.5 9.0 3.7 6 Ferrovial (E) 6.9 12.2 0.7 10.1 5.7 7 Eiffage (F) 5.7 10.7 1.1 19.3 10.3 8 FCC (E) 6.9 9.5 0.9 13.0 9.5 9 BAM (NL) 2,1 8.6 0.2 9.5 2.7 10 Bilfinger Berger (D) 2.0 7.5 0.2 10.0 2.7	2	Vinci (F)	25.3	25.6	2.7	6.7	6.6
5 Skanska (SW) 5.5 13.6 0.5 9.0 3.7 6 Ferrovial (E) 6.9 12.2 0.7 10.1 5.7 7 Eiffage (F) 5.7 10.7 1.1 19.3 10.3 8 FCC (E) 6.9 9.5 0.9 13.0 9.5 9 BAM (NL) 2,1 8.6 0.2 9.5 2.7 10 Bilfinger Berger (D) 2.0 7.5 0.2 10.0 2.7	3	Hochtief (D)	6.5	15.5	0.3	4.6	1.9
6 Ferrovial (E) 6.9 12.2 0.7 10.1 5.7 7 Eiffage (F) 5.7 10.7 1.1 19.3 10.3 8 FCC (E) 6.9 9.5 0.9 13.0 9.5 9 BAM (NL) 2,1 8.6 0.2 9.5 2.7 10 Bilfinger Berger (D) 2.0 7.5 0.2 10.0 2.7	4	ACS (E)	14.6	14.1	1.6	11.0	11.3
7 Eiffage (F) 5.7 10.7 1.1 19.3 10.3 8 FCC (E) 6.9 9.5 0.9 13.0 9.5 9 BAM (NL) 2,1 8.6 0.2 9.5 2.7 10 Bilfinger Berger (D) 2.0 7.5 0.2 10.0 2.7	5	Skanska (SW)	5.5	13.6	0.5	9.0	3.7
8 FCC (E) 6.9 9.5 0.9 13.0 9.5 9 BAM (NL) 2,1 8.6 0.2 9.5 2.7 10 Bilfinger Berger (D) 2.0 7.5 0.2 10.0 2.7	6	Ferrovial (E)	6.9	12.2	0.7	10.1	5.7
9 BAM (NL) 2,1 8.6 0.2 9.5 2.7 10 Bilfinger Berger 2.0 7.5 0.2 10.0 2.7 (D)	7	Eiffage (F)	5.7	10.7	1.1	19.3	10.3
10 Bilfinger Berger 2.0 7.5 0.2 10.0 2.7 (D)	8	FCC (E)	6.9	9.5	0.,9	13.0	9.5
(D)	9	BAM (NL)	2,1	8.6	0.2	9.5	2.7
	10	Bilfinger Berger	2.0	7.5	0.2	10.0	2.7
11 Balfour Beatty 1.8 6.6 0.2 11.1 3.0		(D)					
	11	Balfour Beatty	1.8	6.6	0.2	11.1	3.0
(UK)		(UK)					
12 NCC (SW) 1.6 6.0 0.2 12.5 3.3	12	NCC (SW)	1.6	6.0	0.2	12.5	3.3

Source: Reuters Company Views.

The French or Spanish groups were stronger in terms of market capitalization, but also of operating margin. On the contrary, Skanska surpassed all the British, Dutch, German or Nordic firms, including Hochtief. It was the result of a regular ascent, based on an early internationalization that is so characteristic of the Swedish economy.

1/ 1887-1987. A REGULAR ASCENT, BASED ON AN EARLY INTERNATIONALIZATION

In 1871, Otto Torell and Otto Fanehjelm founded the first Swedish company of production of Aktiebolag (Scanian Cement Inc.)². On the spur of a young engineer, Rudolf Fredrik Berg, the firm developed a various production of cement products. But it can not

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² Kayfetz (Victor), *Skanska. The first century, 1887-1987*, San Francisco, Sean Edit, 1987. See also: *Aktiebrolaget Skånska Cementgjuteriet 1887-1937, Utgiven av Skanska AB inför 100-årsjubileet 1987*, Danderyd (Sweden), Skanska A.B., 1987.

satisfy demand. It was the reason of the constitution, in 1887, by the same shareholders, of a new company, Aktiebolaget Skanska Cementgjuteriet (Scanian Pre-Cast Concrete Inc.).

1.1/1887-1937. The Breakthrough

Specialized in concrete products and works, it emancipated immediately of its holding company. The Scanian Pre-Cast Concrete Inc. assured with success the repair of the facade of Uppsala Cathedral. It was the beginning of a quick growth. The firm migrated from Malmö to Stockholm and imposed itself into the installations of hydroelectric power station in Sweden, Norway and Finland. Thanks the acquisition of the Hennebique patents of reinforced concrete, Skanska became a national leader in the civil engineering sector and established in Russia from 1902 to 1910.

The Aktiebolaget Skanska Cementgjuteriet began a strong growth: from 1887 to 1917, its net sales increased to + 5.4% in average by year. Explainable by the war prosperity, the 1917 peak was not surpassed before the middle of the thirties. During the interwar period, the firm had known, however, some difficulties, above all from the setting of the big world economic crisis. But, a part from 1920 and 1924, it remained the beneficiary thanks to its diversification into the civil engineering, building construction and building materials. In 1936, it employed more than 3000 persons, but from 1917 to 1937, the growth of the firm was slowed: during the period, its net sales increased only from + 0.6% in annual average.

Nevertheless, the company showed profits throughout the depression of the 1930s. The main reason was that, at this time, operations were spread among a large number of technical fields and responded by flexibility to changes in the Market³. Another favourable factor was that the technical advances were creating heavier demand for concrete and other building materials manufactured by the firm. Technical progress in the production of waterproof concrete led to a greater use of this material in marine construction. The growing number of cars and trucks in Sweden and the development of Swedish industry led to increase construction and renovation of highways and railroads bridges (Stocksund Bridge at Stockholm, 1934-1936). The introduction of longer lasting reinforcement was pushing the construction of concrete buildings. Improved insulation and fire proofing methods, the

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³ Skanska. The first century 1887-1987, op. cit., p. 15

development of better concrete powering techniques and the increasing use of specialized construction machineries, particularly for highway and excavation works, led to rapid increases in productivity.

During the interwar period, Skanska constructed many public building (Helsingborg Concert Hall, 1931-1932), grain elevators and, more generally windowless structures such as silos, chimneys and bridge columns⁴. The period before 1937 also saw an increase in the number of industrial and commercial buildings erected by Skanska. In 1927, Skanska built Sweden's first asphalt-paved road in Borlänge, a city in the north central Sweden. During the 1930s, the firm realized the world's most northerly concrete roads, extending to Luleay near the top of the Gulf of Bothnia. Another contract in Arctic Sweden involved the construction of concrete reinforcement columns and concrete-lined caverns inside the LKAB iron mines at Kiruna: it preluded to the company's leading role in developing new tunnelling and rock cavern technology after World War II. In 1936, Skanska completed its first airport project: the paving of the runway at the new Bromma airport in Stockholm, thanks use of a new vibrator in order to ensure that the concrete would be as compact as possible. By 1936 Skanska was Sweden's largest construction company and a well-established and financially sound-enterprise.

1.2/1937-1987: The Ascent into Power: a successful process of diversification

The years 1937 to 1987 saw the international breakthrough of the Skanska group⁵. Its activity developed first of all in the large works. Skanska group acquired a worldwide appraisal into reinforced concrete bridges domain (Sändo Bridge, studied by the French engineer Eugène Freyssinet, built in 1938-1943 and worldwide record for the range into the 1960s) and into prestressed concrete, thanks to the adoption of Dywidag system⁶. Indeed, in the early 1950s, the West German firm Dyckerhoff & Widmann first showed Skanska engineers the use of the Dywidag cantilever system in the construction of a bridge over the Rhine at Worms⁷. Since then, Skanska had further refined the technique and can build bridges

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⁴ *Ibidem*, p. 16

⁵ Kayfetz (Victor), *Skanska. The first century, 1887-1987*, San Francisco, Sean Edit, 1987. See also: *Skånska Cementgjuteriet * Skanska 1937-1987*, *Utgiven av Skanska AB inför 100-årsjubileet 1987*, Danderyd (Sweden), Skanska A.B. 1987.

⁶ Skanska. The first century 1887-1987, op. cit., p. 17-20.

⁷ Klass (Gert von), Weit spannt sich der Bogen. 1865-1965. Die Geschichte der Bauunternehmung Dyckerhoff & Widmann, Wiesbaden, Verlag für Wirtschaftspublizistik H. Bartels K. G., 1965.

with individual spans of up to 200 meters in length. Of the many bridges where Skanska has used the cantilever and prestressed Dywidag system, the best known is the 6,072 meter long Öland Bridge. Completed in 1972, it connects the south-eastern Swedish mainland with the large Baltic island of Öland. Since 1958, Skanska has been involved in several small concrete bridge projects abroad in Iraq, Sudan, Abu Dhabi and Sri Lanka. In 1982, the company bought 49 % of Karl Koch Erecting Co., a New Jersey based steel structure specialist famous for its role in building the World Trade Center in New York. After, Koch has done major repair work in Philadelphia and several New York highway bridges.

But the Skanska's activities extended also to the harbours⁸. One early maritime project was the construction in 1940-1941 of a 1,700 meters long canal across the Falsterbo peninsula at Sweden's South-western to provide neutral Sweden's ships with a safe shortcut between the Öresund straits and the Baltic Sea during World War II. Since 1937, Skanska worked many times to such Swedish harbours as Malmö, Helsingborg, Gothenburg or Uddevalla. For instance, in 1973-1975, Skanska built a large project for the Götaverken shipyard in Gothenburg using prefabricated cross-beans as a one component, particularly to reinforce and extend the wharfs of the harbour. Thanks to innovative methods (Lindö or overburden drilling –OD- in order to blast away underwater obstacles, introduced in 1957), Skanska opened itself important foreign contacts: in Finland or Italy (Genoa), but also in Middle-East. In the mid-1960s, Skanska worked in Iraq (port of Basra), in Iran (Khorramschar), in Kuwait (Shuwaikh harbour, 1969). But the company's largest maritime projects came from Saudi Arabia, with Port of Jeddah (4,300 meters quay in all, 1976). Another very important project was the largest shipyard constructed at Malmö (405 by 75 meters in 1966-68) and Gdynia in Poland (380 by 70 meters).

Skanska was also interested by roads and airports⁹. In 1937, Skanska built a highway between Falun and Borlänge, in north central Sweden: it was the first time that Skanska used Caterpillar tractors and other heavy construction equipments. Before the close of the war, Skanska's board of directors authorized large investments in new US-made Caterpillar tractors. Indeed, after the War, Sweden entered in an era of unprecedented prosperity. It was the beginning of a rapid development of the number of cars and trucks. Consequently, the Swedish government launched a number of important projects of highways, for example the

⁸ Skanska. The first century 1887-1987, op. cit., p. 21-25.

⁹ *Ibidem*, p. 27-30.

Long term plan of 1958. From 1952-1954, Skanska was become a leader in this sector (17 km of motorway Malmö-Mund in 1952-1954), working generally in consortium with other Swedish firms: between 1952 and 1986, Skanska has built 190km of Sweden's 900 km of divided freeways. Since 1959, Skanska has built roads and highway tunnels in various countries of Europe, Africa and Asia. Because some of the financing came from the World Bank, Skanska won numerous contracts. It was the case in Norway (civil engineering consultant for a 3 km highway tunnel on the route leading to North Cape, 1965) and Finland (1966), but also in Zaire (1959¹⁰), in Ethiopia (1000 km of roads between 1963 and 1976), Saudi Arabia (around 1980), Libya (in the mid 1980s), in Lesotho (110 km of highways around Maseru) and Hong Kong (Aberdeen Tunnel 2 km long linking the south side of mountainous Victoria Island with downtown Hong Kong, 1977-82).

Having gained its first airport construction contracts in 1936, Skanska was wellqualified for the rush of military and civilian airfield construction jobs which began in Sweden during World War II¹¹. The company built military airfields and, after the War, constructed an airport pour SAAB (cars, trucks, but also aircrafts). But in airport construction, the most important was not military but civil aviation. Skanska worked at Gothenburg, Malmö and above all at Stockholm, with the new international airport of Arlanda, realized in 18 months only (1958-1959). Skanska was now ready to compete for airport projects from home. Between 1961 and 1964, the company became technical consultant and co-constructor for a Danish-American consortium building airports at Bole (Addis Ababa), Asmara, Diredawa and Jima in Ethiopia. The projects marked Skanska's first contacts with Grove International, an American contractor which later became an important partner in the US market. Consequently, the Ethiopian government turned to Skanska again for the construction of Gode Airport in 1964-1966 and for further works at the Addis Ababa and Amara airports during 1970-1971. In Scandinavia, Skanska build a completely new Gothenburg airport at Landvetter (1971-1973), Arlanda (1982-1983), become the fourth-busiest airport in Europe in 1986, and Godthab (Nuuk) on the South-western coast of Greenland (1977-1979).

The firm developed an important activity into the hydroelectric fitting out sector, first of all in Sweden and in Norway, but also numerous countries of the world 12: Langhag

¹⁰ Realized by Sentab, before acquired by Skanska. ¹¹ *Ibid.*, p. 31-34.

¹² *Ibid.*, p. 35-46.

hydroelectric power station on the Dalälven River Sweden, 1936-39) or Höljes (1957-62) on the upper Klarälven river near the Norwegian border. Höljes was, at this time, the largest single construction job that Skanska had ever received. During the 1960s and 1970s, the company received numerous contracts for new Swedish hydroelectric power plants. Skanska then studied the potential for exporting its know-how in hydroelectric power construction: it was the case in the Faroe Islands (1951-54), then in Sri Lanka (1961-64).

With a financing of the World Bank, Skanska worked in the newly independent Tanzania. With the Kidatu project, Skanska realized its first major hydroelectric power job outside Scandinavia. In 1977-1980, Skanska built, in joint venture, the Gitara hydroelectric project in Kenya. Aside from construction centred at the dam site, the contract included substation works in Kanbura and in Nairobi. While Skanska was finishing Kidatu, the company negotiated a contract for the La Estrella -Los Valles project in Panama, involving a number of Swedish subcontractors and financed largely by Swedish banks. Construction took place from 1976 to 1979 with a strong cooperation between ASEA and Skanska.

In 1974, a five company consortium led by Skanska received a much larger contract from the Peruvian Ministry of Agriculture; the Majes project including a 230 km long system of natural river channels, concreted lined tunnels and reinforced, prestressed concrete canals to the arid Pampas de Majes near the Pacific. In 1978, Skanska formed another consortium in order to realize the Sidi Saad project, located on the Zeroud River in Central Tunisia. The project consisted of two dams, and the first stage of an irrigation system. But Skanska worked also in Thailand (Pattani Multipurepose project, 1977), in Iceland (Hrauneyss generating station, 1978), in Madagascar (Andekaleka hydroelectric power project, 1979-82), in Sri Lanka (Kotmale power and irrigation project 1979-1985, financed by Swedish International Development Authority (SIDA) at 60 % of the total coast), in Indonesia, in Kenya (Kiambere project, 1984-88) and in Spain (40 % of a joint venture with two Spanish firms, 1986-1989).

Skanska developed its early expertise in underground construction technology¹³. Since World War II, the company has also become a leader in the design and construction of large underground caverns. Stabilator, a Skanska subsidiary, has exported in underground reinforcement work to many countries. The division of Skanska known as the Raise Boring

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¹³ *Ibid.*, p. 47-54. See also: West (Graham), *Innovation and the rise of the tunnelling industry*, Cambridge, Cambridge University Press, 1988.

Team has applied its specialized drilling technique to projects around the world. Skanska has won contracts abroad for subsurface construction in district beating and mass transit system. The Company has also developed advanced construction works at nuclear power plants offshore oil installations and other energy production units: a good example was the Basebäck nuclear power plant near Malmö, built in 1971-1976 and equipped with the BWR-type reactors (ASEA-ATOM) or the Ilkiluoto nuclear power plant in Finland (1980-1987). In the mid-1970s, several Skanska companies constructed the MCP-01, the only stationary oil rig ever built in Sweden. The Company constructed a lot of paper mills (Bravilen news-print plant, 1974-77), cement factories, silos or water towers and industrial facilities (Ericsson's functional telephone factory complex, 1938-40, Saab-Scania Combitech electronics plant in Jönköping, 1986). It broke through into Alaska and Canada, in Nigeria and even in China.

At the same time Skanska maintained as general contractor for building construction in place in Sweden as well as in Europe (Denmark, Netherlands, United Kingdom) and out of Europe (Hong Kong, then China, United States, Argentina)¹⁴. It was present into the building construction industry for commercial and cultural purposes, accommodation, sports and leisure's equipments as well as renovation. The company received more and more contracts for hotels, hospitals, schools and other institutional buildings in Sweden or abroad:

Table 3

Most important functional buildings constructed by Skanska in Sweden or abroad

Hotels	Hospitals	Schools and others
Hotel St. Jörgen Malmö	District hospital in Sköode	Boarding school Muscat
(1961-1964)	(Sweden, 1969-1975)	(Oman, 1976-1977)
Forum Hotel Warsaw	Hudding University Hospital	12 technical training colleges
(Poland, 1972-1974)	Stockholm (Sweden, 1967-1986)	(Algeria, 1983-1985)
Prihatiyskaya Hotel Saint	General Hospital Benghazi	
Petersburg (Russia, 1976-1978)	(Libya, 1976-1978)	
Hotel Al Kabir Tripoli		
(Libya, 1979-1982)		
Hotel al Rasheed Baghdad		
(Iraq, 1978-1982)		

Source: Skanska.

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¹⁴ Skanska. The first century 1887-1987, op. cit., p. 63-71.

Skanska constructed also a number of office buildings for government agencies, industrial firms and other companies in Sweden (Municipal House of Culture in Stockholm 1971-1983) or abroad: Swedish and other Scandinavian embassies, IKEA's emporium in Hamburg and other West German cities, commercial buildings in Warsaw, Hong Kong and Beijing, Atlanta, Seattle or Washington 15. Housing construction accounted for a sizeable proportion of Skanska's operations. In the late 1960s and early 1970s, the company produced more than 10000 dwellings a year, mainly in apartment building 16. In the mid-1970s the emphasis shifted towards single family home construction (3000-4000 such units by year) and the number of new housing starts in Sweden began a decade long decline. Using the prefabricated construction methods, Skanska adapted itself to this evolution, in developing individual homes in Sweden and residential projects abroad: firstly in Oman (1975), in Saudi Arabia (1978-1982), Libya (mid-1980s) and Qatar (1986); secondly in Europe (Netherlands, Algeria) and above all in United States (New York, Boston). Another solution was the development of renovation, in order to preserving and renovation old structures, in Sweden (old Parliament Building 1980-83), in Libya (National Museum de Tripoli 1982-85)¹⁷. It was the result of a know how since the mid-1960s in an international consortium including Hochtief, Grands Travaux de Marseille and Impregilo for to save the Abu Simbel temples in Egypt¹⁸. At last, Skanska was one of the largest builders of sports and recreational facilities, in Europe, working both in Sweden and abroad.

1.3/ In 1987: one of Europe's leading construction enterprises

In 1987, Skanska celebrated its 100th anniversary. At this time, the group was one of Europe's leading construction enterprises, not only in size, but in skills and technological and financial resources. Indeed, from 1937 to 1986, the group knew a strong but regular growth:

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¹⁵ *Ibidem*, p. 73-77.

¹⁶ *Ibid.*, p. 78-82.

¹⁷ *Ibid.*, p. 83-87.

¹⁸ Barjot (D.), « La percée internationale du génie civil italien : l'exemple d'Impresit (1929-1973) », in Barjot (D.), Lefeuvre (D.), Berthonnet (A.), Coeuré (S.) (sous la dir. de), *L'électrification outre-mer de la fin du XIXe siècle aux premières décolonisations*, Publications de la Société française d'histoire d'outre-mer, EDF, 2002, p. 251-276.

 $\label{eq:Table 4} \mbox{Average annual growth rates of gross sales of Skanska Group (in \%)}$

1936-1956	+ 6.3 %
1956-1966	+ 4.4 %
1966-1986	+ 6.0 %

Source: Skanska

In 1986, Skanska employed 28,000 salaried employees against only 8,500 in 1956. Although the fact that it was present at the international scale, through numerous subsidiaries, the group remained still based on its national market (28 % of its gross sales abroad in 1986 against 5 % only in 1972). Nevertheless, at this time, Skanska group had worked during the past 30 years in more than 70 countries on six continents. In 1986 alone, the group worked in 30 countries or territories outside Sweden. Consequently Skanska was a decentralized corporate group including various offices and subsidiaries. But Skanska AB, the parent company accounted for some 80 % of Group revenues.

In 1986, the Skanska's share of the Swedish construction market was more than 20 %. In Sweden, the firm had some 80 regional, divisional and local offices throughout the country. Given Skanska's decentralized structure, these districts provided resources and equipments for both domestic and international projects. Each unit had access to resources: planning, design, engineering and construction management division; plants that supply concrete, wood and steel components, rock crushers and asphalt plants; administrative legal and financial divisions. Like the parent company, Skanska AB, most of the Swedish-based subsidiaries were involved in both domestic and international activities: it was the case of Sentab (civil engineering construction), Myresjö group (prefabricated wooden houses) or Skanska Prefab. Skanska had systematically built up its own stock of long term investment and development properties. The growth was become at this time the second of Sweden's largest private real estate owners. Most of Skanska's real estate holdings consisted of offices and retail spaces and residential properties. The shares of Skanska itself had been listed on the Stockholm Stock Exchange since 1965. Of Skanska's 30000 shareholders, primarily Swedish, the largest were Opus, Protorp and Industrivärden investment companies, various pension funds and other institutions. But, largely as a result of a policy favourable to employees over the past dozen years, half of all group employees were shareholders. In this way, the percentage of employees owning company stock was much higher at Skanska than in most Swedish corporations. *Affärsvärlden* (Sweden's oldest business magazine) put Skanska in first place by its performances on the Stockholm Stock Exchange, with the most heavily traded shares during the 1970-1984 years, in front of 16 Swedish companies including Astra, ASEA, Volvo, Saab-Scania and Electrolux.

Aside from the resources and services supplied by Skanska AB, the group drew on the manpower and expertise of subsidiaries in some 10 countries as well as associated companies in these and several other countries. Among Skanska's major foreign subsidiaries were CG Jensen, Denmark's seventh-largest construction company, which had operations in Denmark proper, in Greenland and in Tanzania; Sepco CA in France; a number of subsidiaries with the Skanska and Myresjö names in Saudi Arabia, West Germany, Norway, the Netherlands, United Kingdom and the United States. Skanska's major associated companies abroad included Karl Koch in the USA (Skanska's stake: 49 %), Foundation Company of Canada (48 %), Grove Equity (USA, 48 %), Pollard Construction Co. (Hong Kong, 10 %), Yemen Construction & Development Co. (North Yemen, 3 %). Although Skanska had been involved in projects outside Sweden since 1897, the volume of its international contracts remained small until the 1950s, when overseas works began a period of rapid growth. Revenues from foreign contracts rose from 5 % of Group's gross sales in 1972 to a peak of 27 % during the late 1970s, and then declined, since 1984 to 1986, to 15 %. Consequently the number of employees abroad peaked at nearly 10,000 or about a third of the total in 1980 (and again in 1984), but dropped to 28 % in 1986. Nevertheless, from the beginning of the 1980s, Skanska had built a few foreign projects for its own investment purposes, often in cooperation with other firms which provide additional expertise: it was the case in West Germany, in Austria (hotels in Koblenz and Vienna), then in U.S.A. (residential and office buildings projects).

2/1986-2006. ACCESS TO THE WORLDWIDE FIRM

From the middle of 1980's thanks to a strained growth, Skanska changed its scale:

Table 5

Performances of the Skanska Group from 1986 to 2007

(Average annual growth rates)

	Net sales	Income before allocations und
		taxes
1976-1986	+ 4.5 %	+ 5.1 %
1986-1998	+ 4.9 %	+ 5.2 %
1998-2007	+ 3.9 %	+ 1.2 %

Source: Skanska.

But the profitability of the group was relatively declining from 1998, because an stronger international competition (Spanish, French or German firms in particular).

Table 6

A changing trend from 1998: from growing tot declining profitability

measured by the ratio income before allocations und taxes/revenues (Average annual rates in %)

1976	5.6 %
1986	6.4 %
1998	7.0 %
2007	4.1 %

Source: Skanska.

The world breakthrough was effectively obtained during the period 1986-1999.

2-1/ Skanska in 1999: a strong multinational firm

In 1999, Skanska Group employed 45,000 salaries and worked in 50 countries¹⁹. Its main markets were in United States, in Sweden, in other Scandinavian countries, in Argentina, Germany and Russia.

Markets	% Employees	% Net sales
Main markets United States	18.8	38.2
Sweden	35.6	2.1
Denmark	5.9	5.6
Finland	6.9	7.7
Other European countries	13.7	11.4
including: -Germany	4.3	3.0
-Russia	3.3	1.9
South America	12.1	7.4
including Argentina	9.3	3.3
Africa	4.3	0.7
East & Central Asia	2.0	0.7
Others	0.7	0.2

Source: Skanska.

At this period, the Group controlled 10.5 % of the Swedish market, but only 0.5 % of the American market. Nevertheless, Skanska was the fifth group on the US market:

 $Table\ 8$ The fifth more important groups on the US market in 1997 and 1998 (billions of USD)

	1997	1998
Fluor Daniel Inc.	5.9	4.3
Bechtel Group Inc.	3.3	3.7
Centex	3.3	3.7
Turner Corp.	3.1	3.6
Skanska	2.3	3.0

¹⁹ Skanska Annual Report 1999.

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Sources: Engineering News Record, United States.

Skanska was leader in Sweden (before NCC), second in Finland (behind YIT) and in Denmark (behind NCC).

In term of sales, Skanska was the seventh largest construction company in the world not counting Japanese companies, that all had the lion's share of their business in Japan:

Table 9

The largest construction companies in the world* (total sales in billions of USD)

Company	Country	1998	
Bouygues SA	France	12.5	1
Bechtel Group Inc.	USA	9.8	2
Fluor Daniel Inc.	USA	9.6	3
SGE	France	9.4	4
Groupe GTM	France	7.4	5
Philipp Holzmann AG	Germany	7.2	6
Skanska AB	Sweden	6.9	7
Hochtief AG	Germany	6.9	8
Kellogg Brown & Root	USA	6.8	9
Eiffage	France	6.0	10

Sources: Engineering News Record, United States.

The Skanska Group showed any substantial operational margin of 8.7%. It was the result of on efficient strategy founded on three principles: commitment, competence and reliability. Skanska continued firstly to beet on the quality of its technology. In July 2000, Öresund link between Sweden and Denmark was inaugurated. Now the Skanska-led consortium Sundlink Contractors built the Öresund Bridge, the longest portion of the link. Secondly, Skanska gave an absolute priority to the client's choices. Its international network of construction related service business enabled the group to follow international clients from one local market to another, with the added this entailed. The consequence was a change in the model of external growth. In 1999 and 2000, Skanska sold its shareholding in the building materials group Skancem, then the bearing and steel group SKF. By establishing Skanska's operations in new geography markets, the Skanska Group created the prerequisites for growth,

^{*:} Excluding Japanese construction companies.

while strengthening position as a global partner to large multinational clients. During 1999, Skanska acquired the leading Argentina construction company SADE, which operated in a number of Latin American countries, and the US building construction company Alex. J. Etkin Inc., based in Detroit, Michigan and with operation in Colorado as well.

Thirdly, Skanska chose new sectors of development. During the autumn of 1999, the group formed an alliance with Mactee, the leading U.S. supplier of "end to end" solutions for data and telecommunications: this alliance led to several assignments related to expansion of a broadband optic network and to an important service and maintenance market. Skanska was becoming an international specialist of facilities management. With acquisition of the operations of Ericsson Real Estate & Services, from March 2000, facilities management constituted a new, separate business area for a new subsidiary, Skanska Service. At the same time, the Skanska's divestment of its shareholding in commercial real estate company firm strengthened the Group's capital basis. All in all, earnings from construction operation, commercial and residential reel estate projects or property management improved significantly in largest markets.

2.2/ To adapt itself at changing markets (2000-2006)

During 2000, Skanska's development was characterized by a strong growth and sharply improved earnings in its core business²⁰. With the acquisition of Exbund, Selmer, IPS and Kvaerner Construction, Skanska established leading market positions in Poland, Norway, Czech Republic, Great Britain and Hong Kong, while further strengthening its position in the United States through acquisitions of companies. Skanska's operation was characterized by profitable growth. Business developed favourably in terms of order, bookings, net sales and earnings. Skanska exceeded its financial targets for growth, operating income and return on equity. Kvaerner Construction, now Skanska U.K., also brought to Skanska substantial interests in business in Hong Kong and India. Aside from broadening its geographic bases through acquisition of companies, Skanska possessed the advantage of strong position in many markets with robust growth. In addition the Group had built up strong relationships with large clients in fast-growing industries, for example pharmaceuticals and IT/telecoms sector. Because a strong expansion, the rulers introduced a new, flatter structure, based on

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²⁰ Skanska Annual Report 2000: review of operations. Annual Report, part 1; financials. Annual Report, Part 2.

relatively large number of business units reporting directly to a Senior Executive Team at the Skanska Group level. More, its certified environmental management system was now helping to strengthen the Skanska's international competitiveness.

After the tragic events of September 11, 2001, Skanska and its employees showed great generosity²¹. Skanska encountered losses in its Danish and Polish operations, but most of its business unit showed stable earnings. It was especially the case concerning the newly acquired companies IPS Skanska in Czech Republic and Skanska U.K. in Great Britain. The new flat Group structure improved significantly communication and transparency, leading to a smoother and better decision-making process. In December 2001, the Financial Times ranked Skanska as the most respected company in its industry – it was the result of the Group's efforts in the environmental and corporate social responsibility areas, as well as the Group's client focus and long term profitability. Above all, the Skanska's business worldwide operated in accordance with the highest ethical standards. During 2002, earnings in Skanska's construction operations improved: at year-end, construction and services accounted for 51 % of capital employed²². The star performers in construction were Skanska Cz (Czech Republic) and Skanska U.S.A. Civil. But residential project development accounted for 13 % of capital employed, commercial project development for 33 % and BOT (Build Operate Transfer) for 3 %²³.

In 2003, Skanska strengthened a stronger financial position, better focus and control²⁴. The most important accomplishment was the strengthening of the Group's balance sheet. Margins in construction and services were impacted by lower earnings in the U.S.A. and disappointing results in the U.K. and in Russia. But construction operations in the Nordic region led by the Sweden business unit, improved. In Central Europe, Skanska Cz (Czech Republic) continued to earn high margins. Skanska Poland showed a profit. Once again operation in Latin America showed good result in a very challenging environment. In 2003, Skanska created a business stream for residential development. Sales and results were strong in the Czech Republic and Finland. In Sweden the slowdown in the high-end market hampered results and in Poland the market was still depressed. All in all, results in the

²¹ Skanska Annual Report 2001: review of operations. Annual Report, part 1; financials. Annual Report, Part 2.

²² Skanska Annual Report 2002.

²³ Build Operate Transfer refers to infrastructure projects that are financed privately, instead of via public funds or taxes. BOT projects may include everything from pure infrastructure such as roads and bridges to school, hospital and prison properties.

²⁴ Skanska Annual Report 2003.

commercial development business stream were very strong. This validated the Skanska's ability to create value in the development of commercial property. The BOT business continued to expand in 2003. During the year, Skanska began two new PFI²⁵ hospital projects in the U. K. Henceforth Skanska was one of few companies in the world with the combination of skills and financial strength to take on BOT projects.

2004 was the second year of implementation of the strategy established in late 2002²⁶. The divestment of non-core businesses was almost complete. The business streams-Construction, Residential Project Development, Commercial Project Development and BOT, focused strategies. The Skanska Value Added concept introduced a few years ago had greatly improved the capital efficiency of all Group's businesses. Despite diverting of operations in Hong Kong, India, South Africa and exiting international project exports, Skanska was still the third largest construction company in the World and among the largest developers in Europe. The Group had over 12,000 project sites and 54,000 wages-earnings, of which 95 % are engaged in construction. The results in residential project development were quite good in 2004. The BOT business stream continued to build value by winning new contracts, particularly in the United Kingdom. Skanska was the leading PFI hospital builder in the UK. In late 2004, began the first phase of the Autopista Central highway in Santiago. It was a good long-term value-creating business for Skanska.

In 2005, Skanska began to realize its potential²⁷. Some, but all, business units achieved improvement in margins and return in line with the year 2007 targets. The benefit of organizing operations in four distinct business streams was evident. In all businesses, Skanska targeted the Skanska Four Zeros (zero loss-making projects, zero work place accidents, zero environmental incidents and zero ethical beaches) aimed at further strengthening the Group's brand among employees, customers and the public. Skanska's strategy applied to sustainable development. In construction the greatest opportunity was in higher margins, eliminating loss-making projects and maintaining a strong cash flow, more than revenue growth. The residential development business stream showed marked improvement in 2005. At the end of 2005, Skanska established its presence in the Danish residential development business, with focus on the market in Copenhagen. In commercial development, the Group reached a 17 %

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²⁵ Private Finance Initiative (privately financed infrastructure projects, used in U.K.).

²⁶ Skanska Annual Report 2004.

²⁷ Skanska Annual Report 2005.

return on capital employed over the definite nine-year business cycle. The infrastructure development business was growing.

In 2006, all of Skanska's business streams performed well, with the three development streams – Residential, Commercial and Infrastructure – hitting their targets²⁸. In construction, it was only the loss in Denmark that kept this business stream from achieving outstanding results. The Skanska Sweden business unit exceeded its target, with a margin of 4.6 %. Norway, Poland, the U.K. and Latin America met or exceeded their targets as well. The U.S. businesses improved substantially. A very strong market in the Nordic region provided the impetus for Skanska's residential developers to improve performance. Operation margins increased to 12.6 % and return on capital employed to 27.5 %. Commercial development again contributed significant earnings. The market for private infrastructure development continued to expand globally. At Group level, Skanska achieved a 19.3 % return on equity, exceeding the target of 18 %. At the same time, Skanska planed a more proactive approach to its environmental strategy: the construction industry, with Skanska as a leading company, can do more to reduce carbon dioxide emissions and conserve energy.

3/1997-2007. CHANGE IN THE GROWTH MODEL

From 1997 to 2007, Skanska Group knew a deep change of its growth model. There was a succession of two periods (table 10):

Table 10. **A growth in two contrasted periods** (annual average growth rates in %)

	1997-2002	2002-2007	1997-2007
Revenue (Net Sales)	+ 9.1	- 0.2	+ 4.5
Operating income	+ 1.9	+ 14.7	+ 8.3

Source: Skanska.

The first was characterized by a strong growth of its net sales, but a weak progress of its operating income. During the second period, the net sales decreased, but operating income grew very quicker. It was firstly the result of a most efficient contracting strategy.

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²⁸ Skanska Annual Report 2006.

3-1/ A most efficient contracting strategy

Skanska Group reoriented itself into most profitable activities: stagnation and even withdrawal of the construction sector, from 2002-2003, but growth of real estate development and, most belatedly, infrastructure development (table 11).

Table 11. **Growth by business streams** (1) (annual average growth rates in %)

	1998-2002	2002-2007	1998-2007
Construction	+ 9.8	- 0.3	+ 4.2
Residential development	+ 19.6	+ 0.5	+ 9.0
Commercial development	+ 4.4	+ 3.0	+ 3.4
(2)			
Infrastructure		+ 8.8	+ 8.8
development (3)			

- (1) Or branches of activity.
- (2) Since 2000
- (3) Since 2005

Source: Skanska.

Residential development was the most dynamic sector during the period 1998-2002, because this sector was also the most profitable (table 12).

 $\label{eq:table 12} Table \ 12.$ Relative weight of different business streams (in % of total)

	1998-2002		2003-	-2007	1998-2007	
	Net sales	Operating	Net sales	Operating	Net sales	Operating
		income		income		income
Construction	96.4	40.6	91.5	50	93.6	49.1
Residential development	2.6	50.4	4.7	12	3.8	25.3
Commercial development	1.0	9.0	3.8	34	2.6	25.3
Infrastructure development	0	0	0	0.4	0	0.3

Source: Skanska.

Indeed, during the years 2003-2007, there was a change: commercial development became most financially interesting that residential development and construction secured a best level of profits.

It was the direct consequence of a most selective contracting policy. From 1997 to 2007, the respective growths of net sales and order backlog were strictly parallel (table 13).

Table 13.

A growth drove by the market: revenue, order bookings and order backlog

(annual average growth rates in %)

	1997-2002	2002-2007	1997-2007
Revenue (Net sales)	+ 9.1	- 0.2	+ 4.5
Order bookings *	+ 7.3	+ 0.5	+ 3.9
Order backlog**	+ 8.5	+ 0.1	+ 4.5

Order bookings: partly executingOrder backlog: not executed

Source: Skanska.

Nevertheless, the ratio order backlog/ net sales was becoming more favourable: during the period 1997-2002, order backlogs were ahead in average of 40 % the level of net sales. It was completely different from 2003, because net sales became most important (table 14).

Table 14. Ratio order backlog/net sales (in %)

1997-2002	2003-2007	1997-2007
139.8	99.5	116.3

Source: Skanska.

In the same time, Skanska Group was concentrating on the Europe and United States market, thanks to a breakthrough in other European countries, in Hong Kong, in Argentina and above all, in other European countries (United Kingdom, Czech Republic, Poland, etc., table 15).

Table 15. **Growth by geographic areas** (annual average rates in %)

	1998-2002	2002-2007	1998-2007
Sweden	+ 2.9	+ 1.6	+ 2.2
Other Nordic countries	+ 90	+ 2.8	+ 5.6
Other European countries	+ 12.6	+ 3.3	+ 7.4
USA	+ 9.4	- 3.6	+ 2.2
Other markets	+ 24.4	- 9.4	+ 5.6

Source: Skanska.

There was a change from 2002-2003. Before, the most spectacular was obtained on the emerging market parts in Europe, particularly in Scandinavia, in U. K. or Central Europe. U.S.A. remained a very dynamic market. After this period, was opening a second, characterized (table 16) by a weak growth in Sweden and other Nordic countries market, a recession on the U.S. market and a breaking down on the emerging markets (Argentine excluded).

 $\label{eq:Table 16} Table \ 16.$ Relative weight of different geographic areas (in % of total)

	1998-	-2002	2003-	-2007	1998-	-2007
	Net sales	Operating	Net sales	Operating	Net sales	Operating
		income		income		income
Sweden	22.4	12.6	16.2	30.2	20.9	22.,3
Other Nordic	15.5	4.0	18.7	22.6	16.6	14.1
countries						
Other	14.0	4.0	21.8	26.0	1.7	16.0
European						
countries						
USA	41.7	80.0	38.6	17.0	39.7	45.8
Other	6.4	- 0.6	4.7	4.2	5.1	1.8
markets						

Source: Skanska.

The U.S. market was always important (almost 40 % of net sales), but becoming less profitable. Now, the Group gave more and more the priority to profits on growth.

3-2/ A less efficient, but most profitable growth

Indeed, since 2002-2003, Skanska growth was rapidly growing, particularly from 1998 to 2002, the gross profit growth was weaker that of this of net sales (tableau 17).

	1998-2002	2002-2007	1998-2007
Net sales	+ 8.9	- 0.2	+ 3.9
Cost of Purchases	+ 9.4	- 0.3	+ 4.0
Gross profit	+ 7.8	0	+ 3.4
Personnel expenses	+ 7.9	- 0.6	+ 3.2
Operating EBITDA	+ 9.4	+ 1.0	+ 4.7

Source: Skanska.

The consequence was the stability of the level of gross profit (or value added) rate (table 18).

 $\label{eq:Table 18}$ The structure of the operating account (in % of total)

1. structure of net sales						
	Net sales	Costs of purchases	Gross profit			
1998-2002	100	73.8	26.2			
2003-2007	100	73.7	26.3			
1998-2007	100	73,7	26.3			
	2. structure o	of gross profit				
	Gross profit Personnel expenses Operating EBITDA					
1998-2002	100	66.6	33.4			
2003-2007	100	65.6	34.4			
1998-2007	100	66.1	33.9			

Source: Skanska.

On the contrary, the operating margin was in progress from the first period to the second, thanks to a quicker growth of the operating EBITDA that personnel expenses. It was the necessary condition if Skanska wanted to continue a more and more capitalistic growth.

Indeed Skanska Group was characterized, during the years 1998-2007, by a more and more capital extensive growth (table 19).

Table 19.

The growth of the gross profit and production factors (annual average growth rates in %)

	1998-2002	2002-2007	1998-2002
Gross profit	+ 7.8	0	+ 3.4
Employees	+ 7.2	- 0.2	+ 2.1
Productive fixed assets	+ 15.4	+ 5.7	+ 9.4

Source: Skanska.

The gross profit growth was higher than this of employees, but very inferior to the productive fixed assets growth. During the first period (1998-2002), the productive capital growth was twice more rapid that the gross profit or employees' growths. The second, from 2002 to 2007, was characterized by a sustained capital growth, but a stagnation of gross profit growth and a decline of the number of employed workers.

The consequence was a rapid process of capital to labour substitution and a trend of global productivity decline (table 20).

Table 20.

The growth of the gross profit and three productivity indicators

(annual average growth rates in %)

	1998-2002	2002-2007	1998-2007
Gross profit annual	+ 7.8	0	+ 3.4
Labour productivity	+ 0.6	+ 2.0	+ 1.3
Productivity pf	- 7.6	- 5.7	- 6.0
productive fixed asset			
Global productivity of	- 2.1	- 0.6	- 1.2
production factors			

Source: Skanska.

During the years 1998-2002, the fall of capital productivity brought about a clear slowing down of the global productivity, but masked by the gross profit rapid growth. Since 2002-

2003, in spite of the labour productivity gains, the slowing down was becoming less important, but always effective.

From 1998 to 2007, the productive fixed capital (measured by the productive fixed assets of the balance sheet) was characterized by a rapid growth, but three times more important before 2003 that after (table 21).

Table 21. **The capital growth** (annual average growth rates in %)

	1998-2002	2002-2007	1998-2007
Productive fixed assets	+ 15.4	+ 5.7	+ 9.4
(1)			
Financial assets (2)	+ 3.0	- 10.7	- 5.5
Fixed assets (3)	+ 5.9	- 1.7	+ 1.1
(3)=(1)+(2)			

Source: Skanska.

This growing effort of productive investment contrasted with the slowing down of financial assets. Before 2002, Skanska Group was reorienting its external growth. After selling of important shareholding in the building materials group Skancem, in 1999, and the steel group SKF, in 2000, most of non-core financial assets had been divested. But, for instance, during 1999, Skanska acquired the leading Argentine construction company SADE, which operates in a number of Latin American countries and the U.S. building company Alex. J. Etkin Inc., based in Detroit, Michigan and with operations in Colorado as well. Interested by the facility management, Skanska bought out, always in 2002, the operations of Ericsson Real Estate & Services. It was the reason of the progress of financial assets to 2002. But, from 2003, financial assets were rapidly decreasing and, in less degree, total fixed assets.

Progressively, Skanska Group preferred internal growth to external growth (table 22).

Table 22. **Evolution of the share of the productive fixed assets within fixed assets** (in % of total fixed assets)

	1998-2002	2003-2007	1998-2007
Productive fixed assets	32.2	60.6	46.9
Financial assets	67.8	39.4	53.1
Total fixed assets	100	100	100

Source: Skanska.

Indeed, between 1998 and 2002, financial assets constituted two thirds of total fixed assets and the productive fixed assets, one third. But, from 2003 to 2007, the ratio was inverted, in favour of productive fixed assets.

Consequently, Skanska Group was seeking a new equilibrium of its policy of profits sharing out. It was possible because the sustained growth of the cash flow from operating activities (table 23).

 $\label{eq:table 23} Table \ 23.$ Annual average growth rates of the cash flow from operating activities (in %)

1998-2002	+ 3.4
2002-2007	+ 7.8
1998-2007	+ 6.6

Source: Skanska.

The cash flow grew more rapidly from 2002 than before. In the same time, net sales was decreasing.

Thanks to the progress of its cash flow, Skanska Group was inverting its priorities on behalf of self-financing (table 24)

Table~24. Evolution of the sharing of cash flow from operating activities between earrings and self financing (in %)

	Self-financing	earnings	Cash flow from operating
			activities
1998-2002	45.9	54.1	100
2002-2007	62.5	37.5	100
1998-2007	58.1	41.9	100

Source: Skanska.

From 1998 to 2002, earnings were more important (54 % of the cash flow). But, after, self-financing dominated (nearly two thirds).

In average, during the years 1998-2007, the self-financing rate reached more than 60 %, but almost 85 % from 2003 to 2007 (table 25).

Table 25. **Self-financing rate of Skanska Group** (% of total by period)

1998-2002	31.2
2003-2007	84.4
1998-2007	63.0

Source: Skanska.

It was the direct consequence of a more rigorous financial management.

3-3/ A more rigorous financial management

From 2002-2003, Skanska Group was introducing a more rigorous financial management. The first step consisted to restablish an excess cash. In fact, the firm reached to this objective: to obtain a positive net working capital (table 26).

Table 26. **Evolution of the working capital from 1999 to 2007**

(Equity-Fixed Assets, in billions of SEK and in % of total assets)

	Billions of SEK	% of total assets
1999	+ 5.6	+ 1.0 %
2000	+ 0.3	+ 0.4 %
2001	- 2.9	- 3.2 %
2002	- 3.7	- 4.8 %
2003	- 2.0	- 3.0 %
2004	+ 3.1	+ 4.9 %
2005	+ 3.2	+ 4.5 %
2006	+ 3.3	+ 4.6 %
2007	+ 5.9	+ 7.5 %

Source: Skanska.

Skanska knew some serious difficulties during the years 2000-2003: in 2002, the cash deficit reached almost 5 % of total assets. On the contrary, the excess cash grew rapidly since 2004.

But the financial position of the Group remained fragile, because the high level of the gearing ratio (table 27).

Table 27. **Evolution of the gearing** (1) **of Skanska Group from 1999 to 2**007 (in %)

1999	217.6	2004	284.8
2000	320.,0	2005	283.3
2001	486.8	2006	267.5
2002	477.4	2007	281.2
2003	363.2		

(1) Ratio net financial debt/total shareholders equity (minority interests included)

Source: Skanska.

Indeed, except in 1999, the ratio net financial debt/ total shareholders equity was always higher than 2.7.

In a second step, Skanska Group reinforced its financial structure (table 28).

 $\label{eq:table 28} Table~28.$ Evolution of the financial structure of the Skanska Group from 1999 to 2007 (in % by period)

	1999-2002 (4)	2003-2007 (5)	1999-2007 (9)
R5= <u>Shareholders equity</u> (1)	29,7	34,2	32,1
Liabilities			
R6=Long term liabilities	30,4	14,6	22,1
Liabilities			
R7= <u>Cash flow</u>	4,7	14,2	9,7
Liabilities			
R8= <u>Cash flow</u>	15,4	97,1	43,8
Long term liabilities			

⁽¹⁾ Minority interest included.

Source: Skanska.

The Group strengthened its financial independence (R5 ratio), reduced the relative weight of its medium and long term liabilities (R6 ratio) and improved strongly the ratio of covering of liabilities (R7 ratio) or long and medium liabilities (R8 ratio).

The result was a net re-establishment of the Skanska's profitability (table 29).

Table 29. Evolution of the indicators of profitability of the Skanska Group between 1999 and 2007 (% by period)

	1999-2002 (4)	2003-2007 (5)	1999-2007 (9)
R1=Operating EBITDA	190.7	126.5	147.7
Productive assets			
R2= <u>Cash flow</u>	15.7	41.5	30.2
Shareholders equity (1)			
R3= <u>Net income</u>	-1.6	19.8	10.4
Shareholders equity (1)			
R4= <u>Net income</u>	- 0.5	6.8	3.3
Liabilities			

⁽¹⁾ Minority interest included.

Source: Skanska.

Even decreasing, the productive capital remained very high (R1 ratio). In the same time, from 2003, the financial profitability became strongest (R2 and R3 ratios). Above all, the Group reached to a more reasonable cover of liabilities by the net income (R4 ratio). But, if this policy was succeeding, it was the immediate consequence of the strong support of both the board of directors and a very stable shareholding.

3-4/ A stable shareholding for a more rational organisation to the benefit of sustained development

The Skanska Group profited by a stable shareholding. This one was dominated by the Swedish capital (table 30)

Table 30. **Share capital by shareholder category** (in % of capital stock)

	Swedish mutual	Swedish companies	Swedish private	Shareholders
	funds	and institutions*	individuals	abroad
1999	34	37	17	12
2000	23	47	16	14
2001	17.5	45.4	22.9	14.2
2002	16	54	16	14
2003	15	44	24	17
2004	15	36	22	27
2005	9	39	18	27
2006	9	41	16	30
2007	9	42	16	27

^{*} Insurance companies included.

Source: VPC, Skanska.

In spite of the decline of the interest of the Swedish mutual funds, passed from one third of the capital stock to less 10 %, Skanska constituted a very attractive investment for Swedish companies and institutions (about 40 % with a maximum of 54 % in 2002, during the most difficult year for the Group). More, Skanska interested also a large number of Swedish private individuals (16 % to 24 % along the years). At the close of 2007, the number of the shareholders totalled 75,815 (59,160 in 1998).

The Skanska's capital stock was controlled by ten major shareholders (table 31).

Table 31.

The largest shareholders in Skanska AB
(Shareholders, excluding Skanska's own holdings)

	1999	2000	2001	2002	2003	2004	2005	2006	2007
		1. % of	capital s	tock	•		•		
10 largest shareholders in Sweden	48.7	38.5	39	39.6	38.1	28.5	31	27.4	30.2
of which:									
- Industrivärden	7.1	6.7	6.7	8.0	8.0	7.8	7.7	7.7	8.0
(investment company)									
- AMF Pension (Funds)	6.1	5.8	7.7	9.6	8.1	6.0	7.8	6.2	6.4
- Swedbank Robur Funds	14.0	11.4	6.7	4.0	2.7	2.6	3.2	3.6	3.4
- IKEA Investment AB	2.5	2.5	2.7	2.7	2.7	No	No	No	No
Other shareholders in Sweden	39.1	47.3	46.8	4.6	46.8	56.4	43.7	42.7	43.4
Shareholders abroad	12.2	14.2	14.2	14.4	15.1	15.1	25.3	29.9	26.4
		2. % of	voting po	ower					
10 largest shareholders in Sweden	63.2	56.7	58.2	58.7	57.7	49.4	45.5	45.4	47.3
of which:									
- Industrivärden	29.8	29.5	30.8	31.6	27.2	27.9	26.9	27.0	27.1
(investment company)									
- AMF Pension (Funds)	3.5	3.4	4.3	5.4	4.9	3.7	5.3	4.2	4.3
- Swedbank Robur Funds	8.2	6.6	3.8	2.3	1.6	1.6	2.3	2.4	2.3
- IKEA Investment AB	10.1	10.1	10.7	10.7	11.4	No	No	No	No
Other shareholders in Sweden	29.6	34.9	33.6	33.1	33.1	47.4	37.3	30.9	31.4
Shareholders abroad	7.2	8.4	8.2	8.2	9.2	9.2	17.2	23.6	21.3

Source: VPC, Skanska.

This ten largest shareholders, all Swedish, owned almost 50 % of shares in 1997-1999, 40 % in 2000-200" and, from 2004, around 28-31 %. But, they controlled a larger part of voting powers: a strong absolute majority to 2003 (between 57 and 63 %), a very important relative majority after (more than 47 % in 2007). The strongest shareholder was Industrivärden, an investment company, which owned only 7-8 % of the capital stock, but a strongest part of votes (30-32 % during the period 1997-2002, around 27 % from 2003). In spite of the retreat of the IKEA Group in 2004 (10-11 % of votes), almost all of the historical investors (Swedbank Robur Funds, AMF pension Funds). At the same time, the non-Swedish shareholders were progressing from around 12 % of capital stock in 1999 to almost 30 % in

2006). It was the result of a growing Skanska's internationalisation, but limited through voting power (around 21 % in 2007, instead of 7 % in 1999).

Thanks to the shareholding trust, the senior executive team could impose successive reorganisations of management structure. The first, in 1997, introduced a classical staff and line, associating four operational department and three functional services. The four departments corresponded to a geographical organisation (Skanska Sweden, Skanska Europe, Skanska U.S.A.), completed by a specialized department (Project Development and Real Estate). The three services were Skanska IT Solution, Skanska Teknik and Skanska Financial Service. The second, in 2000, reinforced the staff functions round a Senior Executive Team. Skanska Teknik and Skanska Financial Service remained, but the top managers created also a Group staff units. At the same time, they reduced to three the number of departments (Project Development, Construction Services and New Business), according to an operational logic.

The third reorganisation was decisive. With the stepping down ²⁹ of Claes Björk, President and Chief Executive Officer (CEO), in September 2002, Stuart Graham, of American nationality, succeeded him. Henceforth, the consequence was the separation between the Senior Executive Team, constituted round the new CEO, and the Board of Directors. His Swedish Chairman, Sverker Martin-Löf, was elected in 2002. Another innovation was the temporary suppression of the Group staff units and the strengthening of the operational logic, round four divisions: Construction and Services, Residential Project Development, Commercial Project Development, Build Own: Operate Transfer (BOT ³⁰). A fourth reorganisation, in 2005, marked partly a return to the 2000 organisation, with a new Group staff units and the substitution of Skanska Project Support to Skanska Teknik. But the structure remained operational, with four divisions: Construction, Residential Development, Commercial Development, and Infrastructure Development.

This new organisation favoured an ambitious strategy of sustainable development. At the beginning, the purpose was only focused on environment, with the goal of having ISO 14001 certified systems in place of all units of the Skanska Group by the end of 2000. In 2002, with S. Graham, the Group chose logic of sustainable development, with the adoption of Skanska Code of Conduct, a platform for the Group's performance in the fields of the

²⁹ Or resignation.

³⁰ Build Own/Operate Transfer (privately financed infrastructure products).

environment, business ethics, human rights, employee's relations and stakeholder relation. The client's first choice remained a priority goal, but also research and development. In order to encourage and support internal knowledge transfers, Skanska built up Networks for Excellence. For example, Cementation Skanska (U.K.) together with NASA Engineering developed Rockvision 3 DTM, a system using seismic energy to produce three dimensional images of underground structures and bed rock. The Group promoted projects with higher environmental standards: so, the modernisation of St. George Ferry Terminal on Staten Island at New York, the first Leadership in Energy and Environmental (LEE)-certified intermodal transit center, featuring energy-saving and other "green technologies".

CONCLUSION: IN 2007, ONE OF THE WORLD'S LARGEST CONSTRUCTION COMPANIES

In 2007, Skanska remained one of the world's largest construction companies, with a leading position in a number of home markets in Europe the United States and Latin America:

Table 32.

The five major construction companies in Europe in 2007

	Turnover 2007 (in	Income after financial items	Ratio (2)/(1)
	billions of Euros)	(in billions of Euros)	or turnover margin (in %)
	(1)	(2)	
Vinci (F)	30.4	4.5	14.8 (1)
Bouygues (F)	29.6	3.5	11.8 (2)
ACS (E)	21.3	2.6	12.2 (3)
Hochtief (D)	18.7	0.5	2.7 (4)
Skanska (SW)	15.0	0.6	4.0 (5)

Source: Annual Reports 2007.

If the turnover margin of French or Spanish group was better, Skanska remained as one of the most profitable in terms of return on capital employed:

Table 33.

Return on capital of the five European major construction companies in 2006

	(A)	(B)
	Return on equity, %	Return on capital employed
ACS	40,1 (1)	7,1 (4)
Bouygues	23,3 (2)	12,1 (2)
Hochtief	4,9 (5)	6,7 (5)
Skanska	20,5 (3)	22,5 (1)
Vinci	16,3 (4)	9,4 (3)

Source: Reuters Company Views.

In 2007, the Group employed 60,000 salaried employees and worked into numerous countries:

Table 34. Revenue by geographic area

Sweden	22 %
Other Nordic countries	20 %
Other European countries	27 %
United States	28 %
Other markets	3 %

Source: Skanska.

The activity remained mainly centred on construction, but it was real estate development which offered profits:

 $\label{eq:table 35} Table \ 35.$ The profitability of the four business steams (in % of total)

	Revenue by	Operating income	Operating margin	Return on capital
	business stream (%)	by business stream		employed
		(%)		
Construction	93	73	3.4	
Residential	5	12	9.4	14.9
development				
Commercial	2	15		15.9
development				
Infrastructure	0	0		58.0
development				

Source: Skanska.

The building and civil construction business stream operated through nine business units in selected home markets – Sweden, Norway, Finland and Estonia, Poland, the Czech Republic and Slovakia, the United Kingdom, the United States and Latin America. In spite of the lower-margin construction management business in USA building, particularly strong performances were turned in Sweden (4.7 % operating margin), Norway (4.3 %), Finland (4.1 %), Poland (4.7 %), USA Civil (5 %) and Skanska Latin America (5 %). The group was particularly performing in United States civil engineering, with a lot of very important projects in New York (replacing of the steel and concrete decks of Triborough Bridge), near Atlanta (South Central Waste Water Treatment Plant of Douglasville, Georgia), Portland (Providence Newberg Medical Center, first US hospital to receive leadership in Energy and Environmental Design Gold Certification³¹). In fact, by virtue of its size and leading position, Skanska could undertake the largest, most complex assignments for the most demanding-customers. Construction business units also performed contraction assignments for Skanska's other business streams, which developed commercial space, residential projects and public-private partnerships (PPP) related to infrastructure.

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³¹ Leadership in Energy and Environmental Design (LEED) is an energy and environmental rating system for building design, construction and operation. The LEEED review and certification process are performed by the U. S. Green Building Council, an independent non profit coalition of construction-industry leaders that advocates for environmentally responsible, profitable and healthy workplaces.

The residential development business streams initiated and developed residential projects. Skanska was one of the leading residential developers in the Nordic countries and had a sizeable presence in the Czech Republic and in Slovakia. Tenants and investors were attracted by the Skanska brand. Despite of the severe market downturn in Denmark and Norway, the residential development business realized an operating margin of 9.4 % in 2007. At the same time, commercial development initiated, developed leased and divested commercial property projects with a focus on office buildings, shopping centres and logistic properties. The business stream worked through business units: Development Nordic and Skanska Commercial Development Europe.

Infrastructure development developed, managed and divested privately financed infrastructure projects such as roads, hospitals, schools and power generating plants. This business stream focused on creating new potential for projects in markets where Skanska had construction business unit. It worked through the Skanska Infrastructure Development business unit. The Group was engaged in a lot of important projects, for instance the Ponte de Pedra hydropower station in Brazil and interested by some very large road concession projects in North America. One important factor in the company's profitability was improving construction productivity. By increasing the degree of industrialization in the construction process, an ever-larger proportion of each project was built using standardized and prefabricated components. In return, it was a reason of the 75,815 shareholders trust:

Table 36. Share capital by shareholders category at the end of 2007 (in % of total)

Swedish companies and institutions	42 %
Shareholders abroad	27 %
Private individuals in Sweden	16 %
Public sector	5 %
Other shareholders in Sweden	6 %
Relief and interest organizations	4 %

Source: Skanska.

But another advantage of Skanska Group was its commitment to sustainable development and its environmental, social and economic performance. Skanska had made significant progress since its first Environment report for 1996. During 2007, Skanska expanded its qualitative targets, the Four Zeros, by adding a new target: "Zero defects". In

addition, Skanska wished to work actively to minimize climate change. Through a new "Green Construction" initiative, Skanska intended to become a leader in environmentally friendly and energy efficient construction. This initiative was aimed both internally and externally. Its focus was on creating both energy-efficient buildings and reduced carbon dioxide emissions. According to the Skanska Group's Code of Conduct, Skanska was qualified for the Dow Jones Sustainability Index since 1999 and listed as the sole construction sector representative member of the Global 100 Most Sustainable Corporations, launched at the world Economic Forum in 2005. In front of its Europeans competitors, the Group appeared as one of the most profitable in terms of return on capital used. It was due, namely, an effective strategy of sustainable development combined to the European development of its activities of commercial space projects, residential projects and public-private partnerships related to infrastructure.

In 2007, Skanska was become the World leading group in the construction sector concerning sustainable development. The same year, Skanska achieved two exemplary projects: the Providence Newberg Medical Center near Portland (Oregon), the first US hospital to receive Leadership in Energy and Environmental Design (LEED) Gold Certification; the first Czech LEED office building, the Czech Bank CSOB in Prague. At the same time, Skanska continued to promote his economical Boklok unit, a joint low-cost apartment concept devised from 2003 by Skanska and IKEA, or Unique, an economical housing concept for individual families. In 2007, Skanska was selected for the prestigious assignment of serving as construction managers for the renovation of the United nations headquarters in New York City. This very important contract symbolised the Skanska's world success. In fact, the key of Skanska's success remained the absolute priority to the client's choices.