

The logo for SDA Bocconi School of Management, featuring the text "SDA Bocconi" in a large, bold, serif font, with "School of Management" in a smaller, sans-serif font below it, all in white text on a dark blue square background.

SDA **Bocconi**
School of Management

Astaldi Case

Alberto Dell'Acqua

Astaldi Case

Introduction

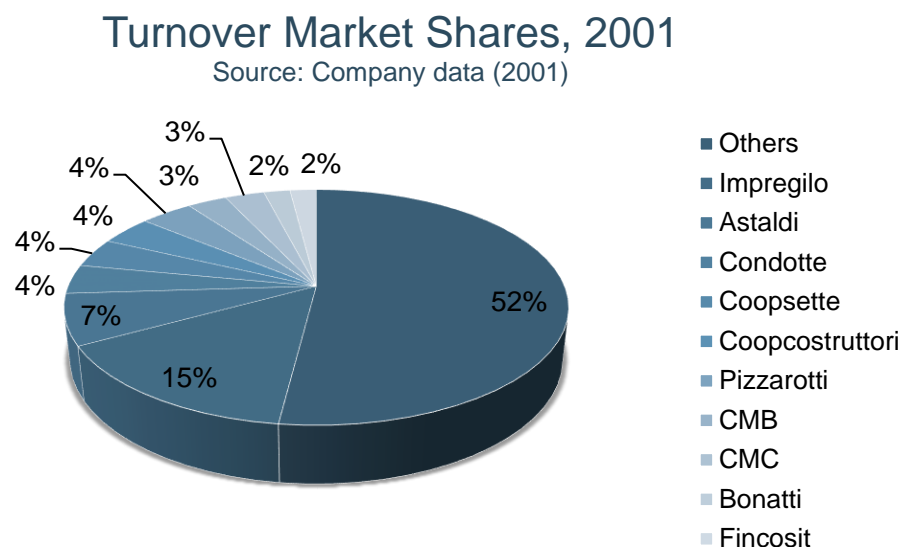
Astaldi is the second largest construction company in Italy and is currently in the best position to further develop its business of designing and building large, complex projects. This healthy situation is the result also of the benefits offered by the Law ("Legge Obiettivo") of December 2001, which fostered future infrastructural investments through favorable regulations (therefore trying to fill the gap existing between Italy and other big European countries), and of the know how concerning the technical and financial management of orders, which allows Astaldi to successfully work in the main foreign markets. Given the above mentioned situation, Astaldi needs more than ever the financial resources that come only from a listing on the Stock Exchange, to strengthen its image and activity in the Italian scene and increase the company's business volume abroad to reach levels comparable to its main competitors.

In light of these considerations, the company's advisors are called to value the company to fix the offer price range for the placement of shares to be offered to the market investors.

Astaldi SPA

History of the Group

Astaldi SPA, as can be seen in the graph below, is currently the second largest construction company in Italy:



The company was founded in 1926 as an individual firm “Ing. Sante Astaldi”, and it was only in 1929 that the company’s name and legal status were changed in “Impresa Astaldi Costruzioni e Lavori Pubblici SPA”, a joint stock company. Over the years the group became one of the main players in the sector of public works in its home-country as well as abroad, thanks to the acquisition of specific expertise in the designing and creation of large projects in the transport, infrastructure, energy and construction sector (civil and industrial). In particular, following the consolidation of its position in the national market (in the 30s and 40s), Astaldi began an intense internationalization process (in the 50s and 70s) through the establishment of “Impresa Astaldi Estero SPA” in 1950. It became one of the most important Italian companies abroad and gained a great deal of experience by building important public projects in various geographical, economic and political conditions. In 1985, “Impresa Astaldi Costruzioni e Lavori Pubblici” and “Impresa Astaldi Estero” merged to create the present Astaldi S.p.A. Starting from 1998 the Group broadened its business by extending its operations to the sector of concession management, especially through the creation and management of parking lots and hospitals in some Italian metropolitan areas. The acquisition of Italstrade S.p.A. (IRI Group) and Gruppo Dipenta Costruzioni S.p.A., completed between 1997 and 1998, represented a fundamental step for the group’s expansion process. The two companies, which were engaged in the design and creation of large works, guaranteed the consolidation and further strengthening of Astaldi’s business in Italy and abroad. The two acquired companies were merged by incorporation into Astaldi in June 1999 and January 2001 respectively, within the framework of a process meant at reorganizing its stakes to rationalize the group’s operating structure.¹

Company structure

The situation as of December 31, 2001 states that Astaldi holds, directly and indirectly, stakes in 215 companies:

- 171 associative structures (72 operational, 51 in liquidation and 48 non-operational);
- 44 other companies, of which 17 are operational.

The high number of stakes reflects the operational structure of the sector which involves the establishment of companies for the period necessary to complete the projects and their subsequent liquidation at the end of the transaction.

Areas of activity

The Astaldi Group mainly operates in the design and construction of:

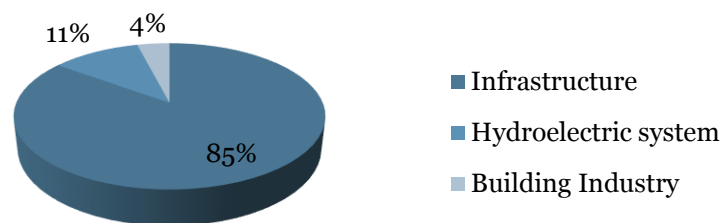
- Transport infrastructure (railways, subways, roads, motorways, airports and ports);
- Hydraulic work and power plants (dams, hydroelectric plants, waterworks, depuration systems, pipelines and gas pipelines)
- Civil and industrial construction (hospitals, universities, courthouses, parking areas and nuclear power stations)

¹ At the same time, the company name of the subsidiary Place Moulin S.p.A. was also changed into Italstrade S.p.A., so as to ensure the continuity of the brand at an international level.

Only recently Astaldi has started to be engaged in a new business in the concessions sector, which relates to the activity of construction and the subsequent management (or only management) of works and plants in the reference sectors. Over the years, the company has undertaken an internationalization process and assumed an important role among the main world operators of the sector, thereby establishing a network of consolidated relationships worldwide. Astaldi is presently active in North America (Florida), Central America (Honduras, Dominican Republic, El Salvador, Nicaragua, Venezuela and Bolivia), Europe (Denmark, Greece, Romania and Turkey), Africa (Morocco, Algeria, Tunisia, Libya, Congo Brazzaville, Tanzania and Guinea), the Middle East (Saudi Arabia) and Asia (China). When making a suitable analysis of Astaldi's business volume, it should be noticed that a volume of 733.9 million euro was reached in 2001, with a significant recovery compared to the previous year (719.3 million euro), which had been marked by a slight reduction in comparison to 760.3 million euro in 1999. The graphs below highlight the distribution of business volumes per activity and geographical area:

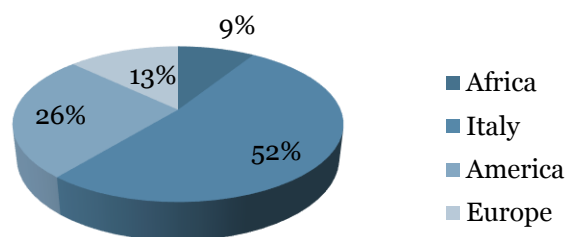
Breakdown net sales by business segment, 2001

Source: Astaldi Balance Sheet (2001)



Geographic Area Net Sales, 2001

Source: Astaldi Balance Sheet (2001)



The order portfolio of the group as of December 31, 2001 consists of 90 orders (60 in Italy) for a total value of 2,665 million euro. In the early months of 2002 the order portfolio has further benefited from the signing of two important contracts in Venezuela and one in Italy for a total order flow estimated at about 880 million euro (not included in the order portfolio as of December 31, 2001).

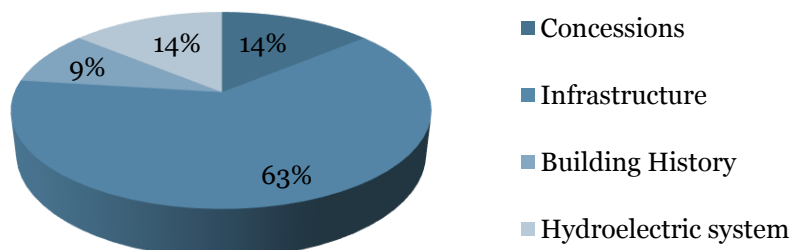
For an order to be listed in the order portfolio, it is necessary that:

- a formal commitment from the client exists;
- the financial coverage for the work is defined.

The graph below shows the break-down of the order portfolio by activity and geographical areas:

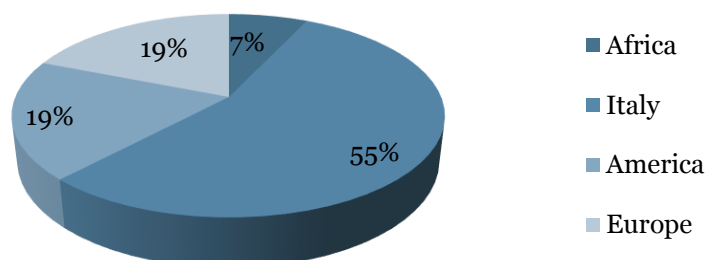
Portfolio breakdown at 31st Dec. 2001

Source: Astaldi Balance Sheet (2001)



Portfolio breakdown by continent at 31st Dec. 2001

Source: Astaldi Balance Sheet (2001)



Reported below is the description of the three main business areas in which the group operates:

Astaldi's core business is **transport infrastructure**, representing about 85% of the total business volume for 2001, with a turnover equal to 622 million euro. The annual average increase over the three-year period 1999-2001 for this business was equal to 1.8%; as far as the geographical distribution is concerned, the predominant position in the Italian market, with a share in 2001 equal to 48% of the total business volume, and the simultaneous increase in the importance for the American area (Europe, 15%; America, 28%; Africa, 9%) should be underlined.

The order portfolio concerning transport infrastructure as of December 31st 2001, on the other hand, amounted to 1,687 million euro with an incidence of 63.3% on the total.²

² The most important projects under way concern the Italian market while others relate to the American market. Some of them are listed here below:

- The ultramodern Rome-Naples High Speed Line;
- The development of Turin railway hub;

The second business area where Astaldi is well known for its skill, technological know-how and vast experience is in the **hydraulic works and power plant segment**. All these characteristics make the group one of the major operators in the sector of design and creation of hydroelectric plants (dams, pumping system and power stations, etc.). In 2001 this segment reached 11% of the total business volume, generating revenues of 82 million euro, in any case lower than 1999 (118 million euro). Italy remains the best outlet market for the business of hydraulic works and energy production, with 64% of the total business volume in 2001 (America, 16%; Africa, 10%). As already mentioned above, the orders as of December 31st, 2001 in this business sector accounted for 14% of the total order portfolio, for a value equal to about 362 million euro.³

Civil and industrial construction represents a residual business segment for the group, characterized by a more limited need for investments and lower profit margins connected to some types of work (hospitals, universities, courthouses). In the long run, the creation of civil and industrial works is nevertheless fundamental to the management, in concession regime, of services concerning the projects created and is therefore necessary for implementing the group's strategy. The turnover for this segment in 2001 was 30 million euro, therefore accounting for 4% of total revenues. According to a geographical break-down of this amount, 90% is attributable to the Italian market, 7% to the African market and the remaining 3% to the European market.

To these projects it is necessary to add those in progress and contained in the order portfolio: as of December 31st, 2001 those had a value of a 238 million euro, equal to 9% of the total orders.

The last segment to deserve special attention within all the various activities performed by the group is concession management as it represents, within the framework of Astaldi's strategies, an opportunity of diversification and increase earnings thanks also to the synergies within the traditional construction sector. It was because of these reasons that, starting in 1998, Astaldi entered into some contracts for the construction and subsequent management (or only management) of parking areas, hospitals and drainage systems. The order portfolio as of December 31st, 2001 amounted to 337 million euro, equal to about 14% of the total portfolio.

The strategic intentions

As already explained, Astaldi's main strategy for the coming year is to consolidate its presence in the construction and concession management markets with the role of General Contractor

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- Milan railway loop;
 - The Venezuelan Caracas-Tuy Medio railway line.

For a more thorough picture of Astaldi's order portfolio, one should also consider the awarding of contracts, in the early months of 2002, related to the construction of the Brescia subway, the bid on a tender call for the construction and thirty-year management of the Brescia-Bergamo-Milan motorway and finally the attempt to be entrusted with the construction of the bridge over the Strait of Messina.

³ Some of the major works, presently under construction, include:

- The hydroelectric plant of Pont Ventoux (Piedmont), the most important hydroelectric project presently under construction in Europe;
- The aqueduct of Nacaome in Honduras.

through the creation of important infrastructure in terms of size and operational complexity. Other strategic drivers can be added to this fundamental objective, as identified by Astaldi's management:

- Growth of internal lines, seeing that the company can benefit both from the Law ("Legge Obiettivo") of December 2001 and the good growth forecasts in the reference markets.
- Growth of external lines – Astaldi has the objective of implementing a program of acquisitions of companies operating in similar and complementary sectors with positive prospects of integration with the Group, in terms of competitive position, geographical presence, order portfolio and technological know-how.
- Rationalization of the presence in foreign markets taking into account the risk profile and the growth potential of the various reference scenarios.
- Alliances with primary partners at an international level to participate in tenders leading to complex projects.
- Improvement of the financial structure, since the financial and equity soundness represents a competitive advantage for the development of the business in the sector of projects created through structured finance techniques, a key element of the Law of December 2001.
- Rationalization of costs, through the optimization of supply and logistic systems complemented by the use of information systems integrated at group level.

The construction sector and the international contractors sub-segment in Italy

The construction sector holds a primary role in Italian macroeconomics, in terms of:

- Added value (18% of the total added value produced by the industry in 2000);
- Contribution to the GDP (7.8% in 2000)
- Employment (about 7% of employees at national level in 2000 for the construction sector only; this percentage doubles when considering the induced effect).

The Italian construction market is characterized by a high level of fragmentation; there are about 200,000 companies operating in Italy, mainly focusing on residential and private non-residential building, all divisions featuring very low entrance barriers. Fragmentation is accompanied by a significant asymmetry in the average size of companies in this segment: the top ten companies in the sector hold a market share of 38%, in terms of turnover.

The sector is in a process of consolidation which, over the last decade, has caused a progressive decrease in the number of companies and has led to successful performance of those operators able to use technology, technical-organizational skills and larger financing sources. In the long run only large-sized operators will be able to play an important role in the infrastructural re-launching process in Italy. The business volume generated by the companies in the sector is estimated for 2001 to be about 150 billion euro at current prices (+ 7.4% compared to 2000), of which about 90 billion euro for ordinary and extraordinary maintenance and 60 billion euro for new investments.

Astaldi is involved in the international contractor sector, a sub-segment of the construction sector including the big construction companies operating at an international level for the acquisition of important building orders.

The commissioned projects are both public and private and concern all construction sectors:

- civil engineering and public works (roads, bridges, hydraulic works, airports, etc.);
- no residential buildings (commercial and industrial);
- residential buildings.

In contrast to the highly fragmented constructions sectors, the international contractors segment is on the other hand quite concentrated, with the top five companies engaged in 56.4% of the national production. 28 companies operate in the segment with a turnover greater than 2 billion euro and 332 micro-enterprises. There are 17 companies with a turnover greater than 50 million euro.⁴ The high level of bureaucracy in this segment makes access for foreign operators to the national market very difficult, without agreements with Italian operators.

The most important Italian contractors are (Revenue ranking in FY 2001):⁵

1. Impregilo
2. Astaldi
3. Società Italiane Condotte d'Acqua
4. Pizzarotti
5. Cooperativa Muratori Cementisti (CMC)

⁴ Source: Prometeia, 2001.

⁵ Source: Prometeia, 2001.

Within this sub-segment Astaldi is the second Italian operator in terms of turnover, with a share greater than 10%. Furthermore, it is one of the few Italian operators able to compete for the awarding of contracts for public works worth more than 25 million euro.

Currently the sector features the following elements:

- A substantial recovery in company revenues after the crisis in the 90s;
- Financial needs are on average high and almost entirely related to the financing of the working capital: average terms of payment by the clients (in many cases the Public Administration) and long average stock storage terms;
- The indebtedness level is on average high, highly unbalanced with regards to debt rather than equity;
- Low interest rates, growth in GDP forecasted for the coming years and the economic policy pursued by the government are all factors which can contribute heavily to the growth of a cyclic sector such as construction.

The crisis of 90s, associated to corruption and the reduction in public spending to comply with the limitations on the public deficit imposed by the Maastricht Treaty, caused an abrupt change in the competitive scenario with many companies leaving the market and an important process of concentration.⁶ Therefore, the competitive scene was populated by a lower number of players to share the new positive phase of the cycle. There is a reduced number of operators who can plausibly take on the role of general contractor. For the larger companies the biggest threat could come from foreign operators.

⁶ Impregilo, the top operator of the sector, is the result of a merger of four companies; Astaldi, the second, performed two important acquisitions at the end of the 90s.

Law 443 of December 2001

Law no. 443 of December 21st, 2001 (so-called “Legge Obiettivo”) is a regulative instrument through which the Italian Government intends to fill the Italian infrastructural gap that separates it from other large European countries (in 1999 this gap was equal to 44% compared to France and 46% compared to Germany). Law 443 provides for the identification of strategic projects through an annually updated Program to become part of the DPEF (Economic and Financial Planning Document). The first Strategic Infrastructure Program includes 115 infrastructures, some of which are subdivided into several actions, for a total of about 200 projects. The value established in the same deliberation is about 7.7 billion euro for the work to be started in 2002, about 13.8 billion euro for 2003 and about 24.2 billion euro for 2004.

Law 443 delegates the Government to define a regulative framework to accelerate the completion of the infrastructural works considered to be strategic. The instruments identified by the regulation are:

- the introduction of innovative elements in the bureaucratic course for the approval of the projects by concentrating the authority in the hands of the CIPE (Inter-ministerial Committee for Economic Planning) and the regional board in charge;
- the promotion of the use of private capital for the creation of projects through the instrument of project financing by mitigating the obligations set down by the “Merloni Law” (payment of the price after testing, 50% limit for the public contribution and 30 year concessions);
- the simplification of the process for the implementation of the projects through the centralization of responsibilities with one single operator (the General Contractor).

The General Contractor is the subject which, following a public tender for the contracting of the work, assumes full responsibility of the proper performance of the work, given certain terms and costs. This is a different figure from constructor-contractor provided by the “Merloni Law” since the General Contractor:

- follows the entire procedure and executive course of the work commissioned. The administration only identifies the needs, while it is the General Contractor who is in charge of planning the project and implementing all the actions necessary for its creation;
- entirely or partly finances the work in advance. To this end, the Law provides for a Project Company to be established (also with credit institutes or insurance companies) or for other financial instruments to be used;
- arranges the definitive and executive project;
- can carry out the work through contracting with third parties, chosen under its technical and economic responsibility;
- is in charge of the correct and timely execution of the work.

The general contractor is therefore required to have technical skills as well as strong managerial expertise.

The competitors

Impregilo S.p.A.

Impregilo S.p.A. is a leading company in the construction sector in Italy and Astaldi's most direct competitor. Impregilo is one of the main international companies for the construction of dams and hydroelectric plants, motorways and infrastructure for transportation, waterworks. The company also has a great deal of expertise in building airports, ports, power stations, hydraulic engineering, railways, sport facilities, as well as commercial, industrial and residential buildings.

Divisional Distribution of the Revenues

Division (€M, 2000 A)	Revenues		EBIT	EBIT margin
Construction	675	31%	33	4.90%
Work building	437	20%	-11	-2.50%
Railways and high velocity	452	21%	27	6.00%
Concessions & BOT (Built, Operate, Transfer)	152	7%	81	53.30%
Environmental services	220	10%	12	5.50%
Maintenance services	20	1%	n.a.	n.a.
Specialist assets	50	2%	1	2.00%
Other assets	146	7%	39	26.70%
Total	2,152			

Acciona S.A.

Acciona is among the largest Spanish companies with 16,921 employees, reporting revenues of about 2,900 million euro and an EBIT of 161.2 million euro. In 2000 its "Infrastructure" division includes activities in the fields of engineering, construction, concessions, real estate (parking areas, water treatment) and energy (wind farms). Furthermore, Acciona has diversified in the TMT sector (telecommunications, media, technology) with a 6.21% stake in Airtel Movie S.A. and 0.48% stake in Vodafone Group plc.

Divisional Distribution of the Revenues

Division (€M, 2000 A)	Revenues		EBIT	EBIT margin
Construction	2,330	80%	76.9	3.3%
TMT	170.8	6%	45.6	26.7%
Logistic Airport	361.1	12%	24.9	6.9%
Corporate services	66.4	2%	10.6	15.9%
Total	2,928.3			

ACS

ACS is the result of the merger between OCP Construcciones S.A. and Ginés Navarro Construcciones S.A. which occurred in 1997. Today ACS is among the five largest construction companies in Spain with a business volume of about 3.4 billion euro in 2000 and an EBIT equal to 214.3 million euro. ACS has a high level of expertise in the construction of dams. The company is active in 4 business areas: construction (roads, ports and airports, railways, subway infrastructure), services (applied engineering, control system), concessions and telecommunications.

Divisional Distribution of the Revenues

Division (€M, 2000 A)	Revenues		EBIT	EBIT margin
Construction	1,678.6	49%	83	3.8%
Services	1,777.6	2%	137.7	7.7%
Total	3,456.2			

Balfour Beatty plc.

Balfour Beatty is an English company operating in the construction sector and consists of 4 divisions: management of real estate, engineering services, engineering and railway services, investments and development. The company operates mainly in Europe and North America. Balfour Beatty is also engaged in asset management and the financing of projects for the construction of hospitals, power stations, roads and motorways.

Divisional Distribution of the Revenues

Division (€M, 2000 A)	Revenues		EBIT	EBIT margin
Building management	1,017	40%	39	3.8%
Civil and specialist engineering	1,011	39%	27	2.7%
Railways	439	17%	6	1.4%
Investments and development	99	4%	41	41.4%
Total	2,566			

Bilfinger & Berger AG

Bilfinger & Berger, with 40,653 employees around the world, is the third operator in the German construction sector, after HOCHTIEF and Philipp Hozmann. The company is active at a global level in engineering projects and commercial and industrial building. 25% of the company is owned by Dresdner Bank AG.

Divisional Distribution of the Revenues

Division (€M, 2000 A)	Revenues		EBIT	EBIT margin
Domestic constructions	1,383.8	35%	-14.9	-1.1%
International construction	1,959.4	50%	-29.1	1.5%
Real estate	196.1	5%	8.3	4.3%
Development and BOT	172.9	4%	-2.5	-1.5%
Environmental services	457.5	6%	2.7	0.6%
Total	4,169.7			

Grupo Dragados

Grupo Dragados is a Spanish group of construction and engineering companies with 50,042 employees. The companies of the group supply a wide range of civil and industrial services, infrastructure management and creation of works in concession. ACS, its major competitor, is the biggest shareholder of the group, with a 24% stake and announced the intention of purchasing a further 23.5%.

Divisional Distribution of the Revenues

Division (€M, 2000 A)	Revenues		EBIT	EBIT margin
Constructions	2,506	54%	n.a.	n.a.
Services	1,039	22%	n.a.	n.a.
Industrial works	782	17%	n.a.	n.a.
Construction and concessions	180	4%	n.a.	n.a.
Real estate	121	3%	n.a.	n.a.
Total	4,628			

Ferrovial's Group S.A.

The Grupo Ferrovial is among the largest Spanish engineering and construction companies. The company is active in many areas: parking areas management, real estate development, environmental services and telecommunications. In 2000 its turnover was equal to 3,579 million euro with an EBIT of 271.2 million euro. Ferrovial Agroman, its division active in construction, contributes for 80% of the group's turnover. The projects of the division concern residential and commercial building, road construction, bridges, railways and the development of airport infrastructure. The Cintra division develops the business of concessions including the design, development and maintenance of roads, parking areas and airports. The company is controlled by the founder Rafael del Pino y Moreno and his family.

Divisional Distribution of the Revenues

Division (€M, 2000 A)	Revenues		EBIT	EBIT margin
Construction	1,969.5	79.7%	96	3.3%
Real estate	305.3	8.2%	75	25.4%
Concessions	257	6.9%	103.6	41.7%
Services	194.2	5.2%	7	3.7%
Total	2,726			

Eiffage S.A.

Eiffage is a French group active in the construction and public works sector. The group has more than 500 branches which supply civil engineering services, building services, construction of roads and power plants, development of real estate. Eiffage generates more than 85% of its turnover in France.

Divisional Distribution of the Revenues

Division (€M, 2000 A)	Revenues		EBIT	EBIT margin
Construction	1,731	36.1%	n.a.	n.a.
Services	2,055	42.8%	n.a.	n.a.
Cement	673	14%	n.a.	n.a.
Real estate	78	1.6%	n.a.	n.a.
Other	263	5.5%	n.a.	n.a.
Total	2,726			

Skanska AB

Skanska AB, the largest group of construction and real estate development from Scandinavia, has branches which operate in more than 60 nations globally with a total turnover of 108,052 million SEK (11,720 million euro) and an EBIT of 7,109 million SEK (771,7 million euro) in 2000; its main areas of operation include construction, facility management and real estate. Furthermore, Skanska supplies its clients with financial services, maintains a technical research area and supplies information & communication technology services for the construction and real estate sector.

Divisional Distribution of the Revenues

Division (€M, 2000 A)	Revenues		EBIT	EBIT margin
Work buildings	75,400	68.2%	1500	2%
Civil building	28,800	26.1%	900	3.1%
Services	0.00	1.7%	100	5.4%
Real projects development & Real estate	1,387	1.3%	n.a.	n.a.
Other no-core assets	3,050	2.8%	2,774	90.9%
Total	108,637			

Vinci

Previously known as Société Générale d'Enterprises (SGE), it has made a name for itself at international level through its construction unit. After the acquisition of GTM, it became one of the top contractors globally. The company is active in the building sector, civil engineering, hydraulic work and maintenance services. The energy & information unit is the leader in the French electrical engineering and information technology market. Vinci is among the largest companies engaged in the designing and construction of roads at a European level. It is also a major company in the world for concessions business.

Divisional Distribution of the Revenues

Division (€M, 2000 A)	Revenues		EBIT	EBIT margin
Buildings	7,119	41.1%	150	2.1%
Railroads	5,316	30.7%	156	2.9%
Energy & Information	3,063	17.7%	118	3.9%
Concessions	1,339	7.7%	568	42.4%
Other	494	2.9%	-25	-5.1%
Total	17,331			

Forecasts for the evolution of the sector

The construction sector and particularly the segment of public works in Italy are expected to grow substantially over the coming years. According to the estimates made by CRESME, a leading Italian research company, the construction sector's growth rate for the period 2001-2003 is 7%. The prospects offered by the "Legge Obiettivo", which provides for the creation of about 200 "Large projects" in the domestic market, will give an extra push to the sector in the coming years. 22% of the total works approved (7.6 billion euro) will be connected to the creation of transportation infrastructure. The Law will produce visible effects over the next 2-3 years. The resumption of public investments in Italy also seems to confirm the forecasts concerning the value of production: orders for a value exceeding 50 billion euro were greater than 44% compared to the previous year.

Financial and economic data

The tables below report the income statement and consolidated balance sheet of the Astaldi Group for the period 1999-2001.

Income Statement			
Astaldi (mln €)	Years		
	1999	2000	2001
Services revenues and contracts	760.8	719.3	733.9
Var. %		-5.45%	2.03%
Concessions	0	0	0
Var. %		0%	0%
Other revenues and income	120.3	112.8	109.1
Var. %		-6.2%	-3.3%
Value of production	881.1	832.1	843
Costs of production	-635	-586.3	-538.8
Var. %		-7.7%	-8.1%
Added Value	246.1	245.8	304.2
Labor costs	-96	-98.2	-93.5
Var. %		2.3%	-4.8%
Other changes	-37.7	-37.1	-33.2
Var. %		-1.6%	-10.5%
EBITDA	112.4	110.5	177.5
Amortization and depreciation	-39.8	-38.2	-48.6
Provisions	-31.8	-11.9	-45.9
EBIT	40.8	60.4	83
Var. %		48%	37.4%
Net financial income	-25.6	-18.6	-26
Revaluation (depreciation) – Securities and participation	-0.8	-17.5	-21.8
Extraordinary income (charges)	3.4	-1.8	-6.3
Earnings before taxation	17.8	22.5	28.9
Var. %		26.4%	28.4%
Taxes	-6.8	-11.1	1.6
Earnings (loss) to minorities	0	0.1	0.4
Net earnings	11	11.4	30.5
Var. %		4.5%	168.7%

Balance sheet

Astaldi (mln €)	Years		
	1999	2000	2001
Fixed assets	157.4	175.8	148.7
Net working capital	196.1	251.5	231.7
Total amortization and depreciation funds	-132	-107.8	-123.3
Net invested capital	221.5	319.5	257.1
Equity	103.5	129.2	148.1
Net financial position	118.01	154.2	72.9
Convertible bonds	0	36.2	36.2
Total sources	221.5	319.5	257.1

Remarks to the balance sheet

Regarding the value of production, the main item is transport infrastructure, characterized by an increasing incidence owing to the assignment of new orders.

Since these orders usually develop in more than one year, their listing in the order portfolio protracts also for the following years. In the last 3 years, following important acquisitions, Astaldi has focused on the consolidation of its stakes and the structural reorganization. This has resulted in a very stable turnover amounting to 843 million euro in 2001.

The projects under way, such as the Caracas Tuy Medio railway system in Venezuela and the Rome-Naples high speed line, have allowed the value of production to be maintained despite reductions recorded mainly in 2000 following delays in the construction of the motorways in Turkey and Croatia. The order portfolio has remained stable, reaching 2,665 million euro in 2001.

The EBIT margin went from 5% in 1999 to 7% in 2000. In 2001 the EBIT reached 10%, thanks to both structural and extraordinary events. As regards structural effects it is specified that:

- the company benefited from the important synergies obtained from its integration with Italstrade and Dipenta. These synergies originate from economies of scale in the management of orders for High Speed railway system as well as from savings of administrative and general costs owing to the integration of the structures;
- operating costs (raw materials and services) decreased by 15% between 1999 and 2001 and so did the labor costs after personnel cuts. Most of the operating personnel are hired for the time necessary to complete the project. Astaldi makes great use of independent workers or subcontracting formulas. The former approach results in higher costs for raw materials and labor while the latter causes higher costs for services.

Extraordinary events include:

- the fact that the company benefited from high contractual remunerations for the Rome-Naples High Speed line, as a refund for the higher costs incurred to complete the job. This refund had an impact on the relevant share of 42 million euro in terms of production value and 14 million euro in terms of EBIT;
- the sale of a building in Via Po in Rome for 16 million euro, listed under the item "other revenue" of the Profit and Loss account.

The net financial charges as of December 31, 2001 were equal to 26 million euro and concerned:

- financial income relating to interests on receivable from banks;
- interest expense, costs of performance bonds and guarantees and other financial charges for interests on short and medium-long term bank loans, discounts and bank commissions, interests on other financial debt and currency exchange-losses.

The net profit for 2001 was equal to 30 million euro (11.5 million euro in 2000) and was affected by the entry in the accounts of pre-paid taxes for Italstrade, after its consolidation with Astaldi. This operation allowed 20 million euro to be regained from Italstrade's taxes.

In terms of the equity structure throughout 2001, an accurate program for the management of the group's financial position was devised in order to align the funding sources to the average life duration of the orders by means of financial transactions dedicated to each specific project. The debt to net equity ratio is lower than the market average and also than the ratio of the main operator in the domestic market. In the course of the last quarter of 2001 the following financial transactions were accomplished, which significantly contributed to reducing the net financial position:

- transfer with recourse ("pro-solvendo") of a portfolio of claims worth about 71 million euro for which about 58 million euro were paid in advance;
- transfer with recourse ("pro-solvendo") of credits related to the progress status of the works for the Caracas-Tuy Medio railway connection (Venezuela) for an amount of 74 million euro of which 64 million euro were paid on account;
- transfer with recourse ("pro-solvendo") of commercial credits to a series of banks for an amount of 40 million euro.

The net financial position at the end of 2001 was as follows:

ASTALDI			
	Million Euro		
	1999	2000	2001
Marketable securities	-77.371	-86.563	-40.861
Liquid assets	-36.855	-68.497	-135.580
Total	-114.226	-155.060	-176.441
Financial credits due within one year		-7.785	-23.718
Bond loan	3.615	3.615	-
Debt from banks within one year	117.972	138.220	154.180
Debt from other financial institutions due within one year	22.069	16.460	3.464
Total financial debt due within one year	143.656	158.295	157.644
Debt from banks due after one year	88.661	140.291	98.637
Debt from other financial institutions due after one year		18.504	16.767
Debt from securities	21	16.460	3.464
Total financial debt due after one year	88.682	158.795	115.404
Net financial position	118.112	154.245	72.889

The securities listed are Venezuelan certificates received as payment for the work and cashed today. The short-term financial credits refer to the part of not pre-paid financial credits transferred to the factor. A 3-years debenture loan was issued in January 2002 for a value of 150 million euro with a 6.5% interest rate. Before the listing, the Astaldi's financial shareholders will convert a debenture loan of 36 million euro. The net financial position of 72.8 million euro at the end of 2001 was calculated without including the convertible debenture loan.

Multiples of the sector (2001)

Company	Average Price	Earnings	P/E (trailing)
Impregilo	0.55	0.04	14
Acciona	20.455	2.03	19.9
Acs	28.889	2.34	12.3
Grupo Ferrovial	18.556	1.46	12.7
Dragados	13.958	1.33	10.5
Skanska	9.579	-	-
Vinci	62.54	6.1	10.3
Bilfinger	19.291	1.41	13.7
Eiffage	67.782	10.93	6.2
Balfour Beatty	174.345	14.2	12.3
			12.4

Beta of the sector

Company	Unlevered Beta
Impregilo	1.2
Acciona	0.5
Acs	1
Grupo Ferrovial	0.5
Dragados	0.6
Skanska	1
Vinci	0.6
Bilfinger	0.4
Eiffage	0.3
Balfour Beatty	1.2
Average	0.73