

Retail Policies in the Global Gasoline Market

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Abstract

The global motor fuel market is dominated by the oil companies (NOC – National Oil Companies and IOC – International Oil Companies) which control the raw material and manage stable alliances designed to monitor the various stages of the fuel supply chain. Where distribution is concerned, the large oil companies are being threatened by the expansion of large retailers which, particularly in certain European countries, now occupy important positions.

Keywords: Oil Companies; Global Competition; Scarcity of Supply; Gasoline Retail

1. Motor Fuel Industry and Competition in Global Markets

The motor fuel market (petrol, diesel and LPG)¹ is one aspect of the vast oil products market, an area of activity populated by global companies that compete in conditions of scarcity of supply².

On scarcity supply markets demand is a long way from saturation point, with a supply system structured to maximise market demand and to regulate available supply. As a result, we have unsatisfied overall demand with a high propensity to purchase on one hand, and a heterogeneous, concentrated supply system on the other, in which both the large oil companies (IOC - international oil companies and NOC - national oil companies) and a small number of minor companies, in terms of their output and results (for example pure-play refineries, niche refineries and independent distributors) operate successfully.

The large oil companies control the competition system by regulating the raw material (by rights of ownership in the territory or by extraction concessions), and by fixing the quantity of crude oil to be refined and put on the consumer market.

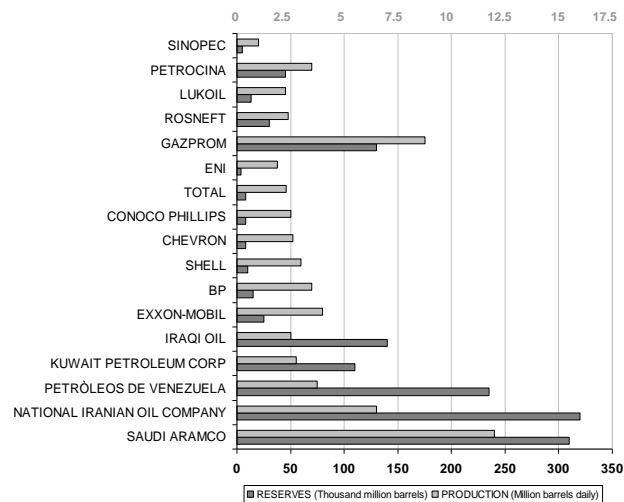
Oil companies also market a small number of alternative products, which are homogeneous within each category (petrol, diesel, LPG), not easily replaced by other products, so that there is a low price elasticity (demand is characterised by stable and repetitive buying behaviour).

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Competition is therefore focused on acquiring access to the resources and on achieving efficiency in the extraction, transportation, refining and distribution stages.

2. Oil Companies, Scarcity of Supply and Global Markets

Figure 1: *World's Largest Oil Companies – 2009*³



Source: Petroleum Economist – Unione Petrolifera

Figure 1 lists the world's largest oil companies by reserves and oil production. The supermajors⁴ (the most efficient companies with the highest level of capitalisation) compete with national oil companies from different oil producing countries with large reserves of oil and gas; the main characteristics shared by most of the large oil companies are:

- large size and global economies of scale. Mergers and acquisitions (for example, BP acquired Lear Petroleum, Britoil and Burmah Oil; Getty Oil was bought out by Texaco; Chevron purchased Gulf Oil) have always been an important part of the growth of the main oil companies. The goals behind these strategies are basically growth and a global presence, access to reserves, and the exploitation of scale and scope economies at the refining, transportation and distribution stages, to defend and consolidate the competitive positions achieved;
- the creation of value for shareholders. Company strategies envisage rigorous financial analysis of returns on capital and they are often dictated by the prime objective of creating value for shareholders;
- search for oil reserves. Exploration is the goal that draws together the main companies in the field; for example, most of the production of the Western Majors comes from oil deposits in North America and the North Sea, which are diminishing. What is more, even OPEC⁵ and non OPEC countries are becoming less accessible to the oil companies themselves; as a result the companies are looking for other sources of supply, in the deep waters of Brazil, Russia, the Caspian Sea and off West Africa;

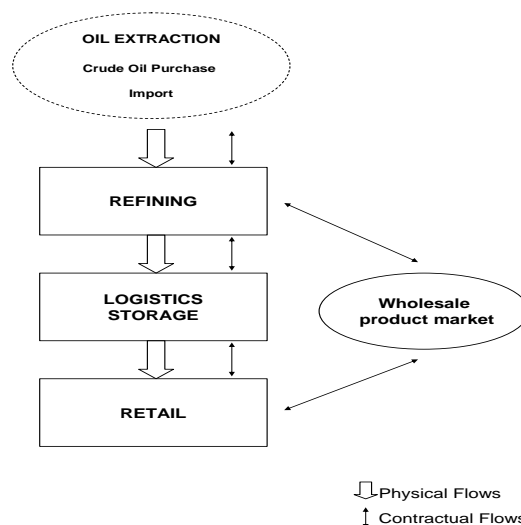
- vertical integration. Many large oil companies extend their activities along the various stages of the fuel supply chain, undertaking not only the extraction but also the refining, logistics/storage and distribution of the finished products;
- competitive strategic alliances. Some large oil companies have forged stable relations with each other (regarding the different activities that make up the supply chain) in order to control production agreements.

□ *Saudi Aramco, the world's leading oil company in terms of reserves, has expanded its upstream and downstream activities⁶, entering into numerous competitive strategic alliances. Upstream, the company has developed partnerships with Royal Dutch Shell (South Rub'Alkhali Company), Lukoil (Luksar Energy), Sinopec (Sino Saudi Gas), Eni and Repsol (EniRepSa Gas). In the refining sector, the oil company has started two joint ventures, one with ExxonMobil and the other with Shell, to develop two refineries (Saudi Aramco Mobil Refinery Company Ltd and Saudi Aramco Shell Refinery Company) located respectively in Yanbu and Jubail. The company is also developing projects to expand its refining capability by establishing partnerships with ExxonMobil and Sinopec (for the plant located in Fujian), with S-Oil (for the plant in Seosan), with ConocoPhillips (for the plant that will be built in Yanbu), with Total (for the plant planned in Jubail) and with Sinopec (for the plant that will be developed in Qingdao)⁷.*

3. Motor Fuel Supply Chain: Refinery and Logistics/Storage

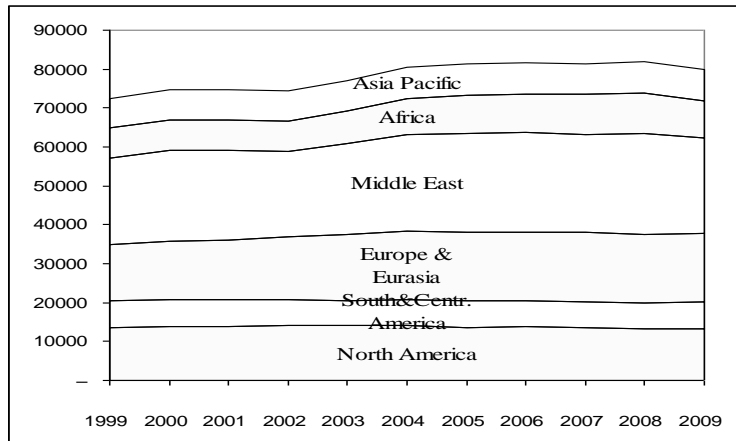
The main stages of the motor fuel supply chain are: refining, logistics/storage, retail (Figure 2).

Figure 2: Motor Fuel Supply Chain



After it has been extracted⁸ (Figure 3), the crude is taken to a refinery; there are a large number of refineries all over the world, which together have a total daily output capacity of 90,662 thousand barrels (British Petroleum 2010).

Figure 3: World Oil Production (Thousand Barrels Daily) – 2009



Source: BP Statistical Review of World Energy

There are 103 refineries in Europe (Figure 4), which have a refinement capacity of 24,920 thousand barrels a day (British Petroleum 2010).

Figure 4: European Refineries by Area – 2009

AREA	NUMBER OF REFINERIES
North West Europe	49
Mediterranean	37
Eastern Europe	17
TOTAL	103

Source: PÖYRY Energy Consulting

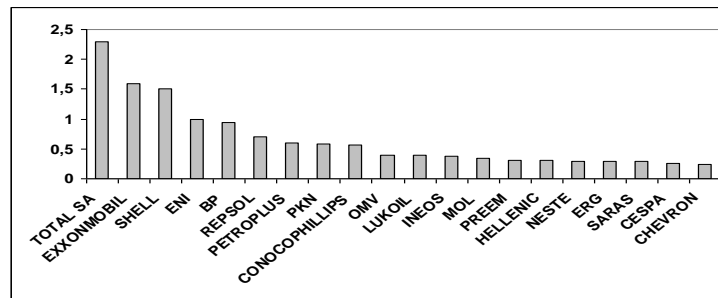
The European plants with the highest output capacity are located in the West Europe and most of them are controlled by the world's large oil companies (in Eastern Europe and in Mediterranean countries, national oil companies dominate; ENI and Repsol are the largest players) (see Figure 5).

Although they dominate the refinement market, the large oil companies are not the only players in the worldwide petroleum industry; in fact, there are several important players at the second level of the motor fuel supply chain in addition to the large vertically integrated companies:

- national oil companies. These are companies that were originally State-owned and operated primarily on their domestic markets. Some have been transformed into State-owned listed companies, for example PKN (Poland) and MOL (Hungary);

- pure-play refineries. Companies that refine crude oil for other operators in the supply chain, which are often linked by contract to wholesale operators (for example, Ineos and Petroplus);
- niche Refineries. Companies specialising in certain stages of the refining process (for example, Nynas in Sweden).

Figure 5: Refinery Players in Europe by Refinery Capacity (mb/cd)⁹ – 2009



Source: Oil & Gas Journal, PÖYRY Energy Consulting

In global terms, the static nature of competition on the markets makes it feasible to build refineries that are very costly in terms of size¹⁰ and investment¹¹, designed to achieve high levels of output, generating progressive economies (of scale, scope and experience).

Plant localisation is also characterized by long term stability and proximity of infrastructure to access the raw material (in order to guarantee the continuity of the production process¹²) and to ship the refined product¹³.

Control of the competitive system (the main companies that possess the raw material also own or control refineries, and tend to forge stable alliances with each other) allows the companies to concentrate on maximising the performance of the production processes, guaranteeing the business economics by determining the quantity of demand to be met, thus maintaining the scarcity of supply.

The refining market has changed in recent years¹⁴ (particularly in Europe). However, although a number of companies have begun to rationalise their plants, modifying their range of action, the overall refining capacity has remained very much the same¹⁵ (some examples: ENI has expanded its operation in Portugal by acquiring a third of Galp; Total SA has developed its activities in Spain by increasing its share in Cespa; Ineos and Petroplus have entered the French, German and British markets; PKN now operates in Lithuania and the Czech Republic; MOL has developed its activities in the Slovak Republic; Lukoil has entered the Italian and German markets).

When it has been refined the oil is transferred to the distribution structures. The first stage of this transport is the transfer of the fuels from the refineries or coastal depots to internal depots; the secondary stage is to transfer the products from the internal depots to the service stations located all over the territory. The refined products are transported mainly by ship and by oil pipeline¹⁶ (pipelines exceed a total length of 1.2 million kilometres around the world), but also by barges, tank cars and road tankers.

Around the world, most of the storage and distribution infrastructure belongs to the large oil companies. However, this stage also involves companies operating in other sectors with their own logistic infrastructure (for example, Enel, Snam and Trenitalia in Italy), logistic operators that work with the oil companies on the basis of rental, transit and deposit contracts, and finally independent retailers with the infrastructure to supply their own points of sale.

Logistics and storage play a key role in the motor fuel supply chain; in under-supplied markets, all the output produced by the companies is absorbed by the market (Brondoni 2009a). As well as making up for the lack of synchronisation in the supply chain, the depots are a competitive opportunity because they permit the programmed release of the end product to sustain demand and to control local profitability with selling prices.

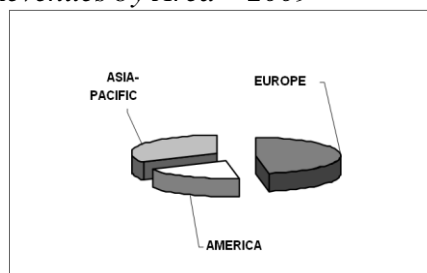
Any decisions that regard logistics/storage are therefore designed to foster the competitive development of production activities, in order to guarantee control of the market, and to maintain overall scarcity of supply.

Agreements between production companies to monitor output and the quantities to release on the market therefore help to establish the selling price on the world's major marketplaces and guarantee significant operating results for the production system.

4. Motor Fuel Retail Policies

The motor fuel retail sector includes all the distributors whose primary activity is to sell petrol, diesel fuel and LPG. These retailers operate with different formats and organisational models and in 2009 (www.datamonitor.com) they generated global revenues of \$ 1,202.1 billion (petrol sales accounted for 57% of the total, those of vehicle diesel fuel for 40% and LPG for 2%). Figure 6 shows that Europe is the continent with the largest revenues (48% of the total), followed by Asia-Pacific countries and America.

Figure 6: *Motor Fuel Revenues by Area – 2009*



Source: www.datamonitor.com

In Europe, a total of 113,108 service stations (PÖYRY Energy Consulting, 2009) reveal an intensive distribution¹⁷ with a suitable number of retail structures, mostly controlled by the world's large oil companies (see Figure 7).

The main players in the fuel distribution market are often subject to the direct control that producers exercise on the distribution channels and they therefore play

a passive role, configuring local retail markets planned with global production, marketing and logistic logics (Brondoni 2005a).

The functions performed by distributors can therefore be described simply as one of proximity, contact (Artle and Berglund 1959) and service, because most of the other distribution functions¹⁸ are controlled and planned by the large production companies.

The passive role of the distributors is underlined by the fact that they cannot even differentiate supply by introducing assortment (Alderson 1958)¹⁹, because the marketable alternatives are limited and judged by a clientele with homogeneous consumption habits.

Figure 7 shows that the distribution of motor fuels involves not only the world's large oil companies, but also, to varying degrees (depending on the different countries), other actors such as national oil companies, independent distributors and retail chains.

Figure 7: *Largest Players in the Motor Fuel Retail Market – 2009*

COUNTRY	MARKET SHARE OF LARGEST PLAYER	MARKET SHARE OF 3 LARGEST PLAYERS	NAMES OF THREE LARGEST PLAYERS
AUSTRIA	22%	58%	OMV, BP, SHELL
BELGIUM	18%	44%	TOTAL SA, Q8, ESSO
DENMARK	23%	61%	STATOIL, SHELL, OK
FINLAND	35%	73%	NESTE OIL, TEBOIL, ABC
FRANCE	32%	56%	TOTAL SA, INTERMARCHE', CARREFOUR
GERMANY	23%	56%	ARAL, SHELL, CONOCOPHILLIPS
IRELAND	17%	48%	TEXACO, ESSO, TOPAS/STATOIL
ITALY	27%	55%	AGIP, ESSO, API
LUXEMBOURG	19%	54%	SHELL, TOTAL SA, ARAL
NETHERLANDS	20%	44%	SHELL, TEXACO, TOTAL SA
PORTUGAL	37%	66%	GALP, REPSOL, BP
SPAIN	40%	69%	REPSOL, CESPA, BP
SWEDEN	41%	81%	OKQ8, STATOILHYDRO, PREEM
UK	16%	41%	BP, TESCO, SHELL

Source: Experian Catalyst, Energie Informationsdienst, PÖYRY Energy Consulting

□ *There are a number of unspecialised retail chains among the first three fuel distribution companies (by sales) of several European countries: Carrefour and Intermarché in France, and Tesco in the United Kingdom. ABC, the third fuel distributor on the Finnish market, is a chain of service stations that belongs to the SOK group (the second retail chain in Finland, with sales of Euro 8.9 billion).*

The ownership of service stations can therefore be broken down into (Borenstein and Bushnell 2005):

- oil companies. Service stations owned by the oil companies and managed by employees of the companies themselves;
- oil companies managed by third parties. The oil companies own the service stations but entrust the management to third parties (with various types of contracts);
- independent operators. Service stations that are owned and managed by independent entities (individual stations, small chains that specialise in selling fuels and retail companies) which usually purchase from the oil companies or the wholesale market²⁰.

Service stations operate in the territory with structures that are similar in terms of size, assortment policy and layout, regardless of who owns or runs the stations. We can identify the following distribution formats²¹:

- filling stations. Small units, with a low average level of sales, selling petrol, diesel fuel, lubricants and car accessories. In some cases the station will have night-time and holiday self-service pumps, and will be located in a facility that includes other services, such as small maintenance jobs or an automatic car wash;
- medium sized service stations. Stations located along main roads that offer a comprehensive range of fuels, with a high average level of sales, supplying technical service, a car wash, and self-service pumps;
- large service stations. Stations with an assortment policy and supply of service similar to the previous type, but which are located close to the motorway network or in areas of heavy traffic; these service stations also offer non-oil activities.

In recent years, the motor fuel distribution system has undergone some changes, such as:

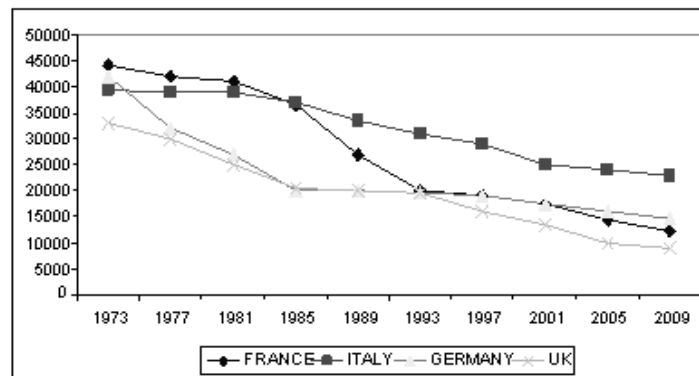
- the consolidation and rationalisation of the fuel network. In order to achieve more effective/efficient development, many large oil companies have forged competitive alliances (for example, on the Italian market, the joint venture between Total and Erg²²; on the Chinese market, the Total-Sinochem joint venture²³; on the Ukrainian market the joint venture between Shell and the OJSC Alliance Group²⁴) and they have closed numerous service stations (see Figure 8), particularly the smaller ones, supporting the growth of medium/large structures, with positive effects in terms of costs and profitability;
- expansion of non-oil activities. In order to maximise the profitability of the points of sale, oil companies are developing their ranges of non-oil products (selling food and non-food products, and supplying various types of services).

In Europe, sales of non-oil products at service stations (see Figure 9) account for about 30% of the stations' revenues.

Sales of products other than fuel enable distribution operators to 'create traffic' and, consequently, to increase the overall sales of the service station. Non-oil products may be sold at points of sale under the oil company's brand name (examples include AgipCafè on the Italian market; Bonjour (Total) in

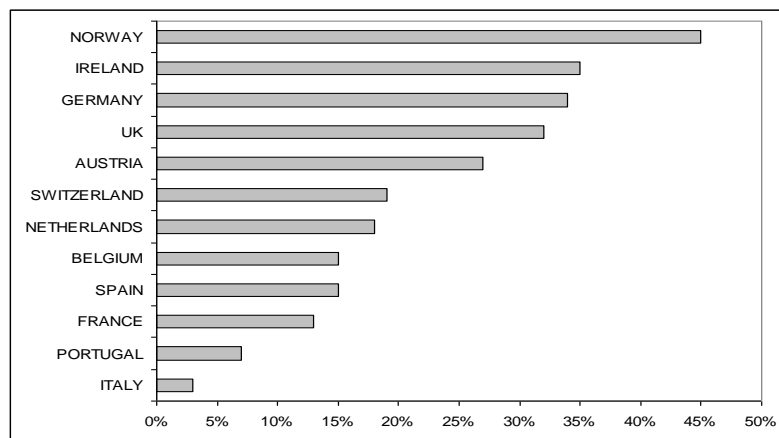
France, the United Kingdom, Germany, Portugal and Luxembourg), or through competitive alliances with retail operators or specialist catering companies (for example, the BP/Safeway and Q8/Budgens alliances in the UK, and the alliance between Repsol and El Corte Inglés in Spain);

Figure 8: Number of Fuel Retail Sites in Selected European Countries – 2009



Source: Nomisma Energia

Figure 9: Non-Oil Revenues over Total Revenues – 2009

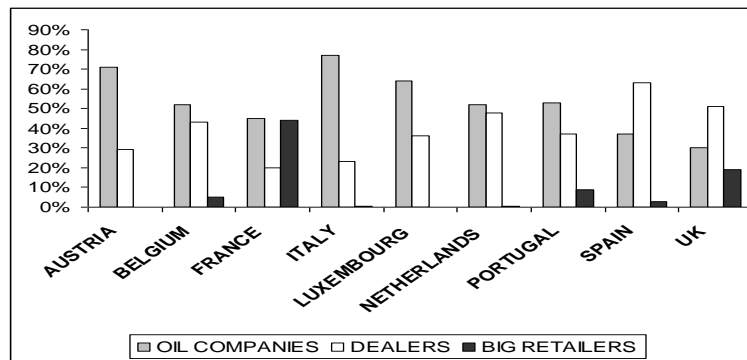


Source: Nomisma Energia

- increased market share of independent operators, and large retailers in particular. The number of petrol stations owned by large retail companies has grown in several countries in recent years (see Figure 10).

In order to grow, non-specialist large retail chains are constantly on the lookout for innovative intersections between supply vacuums and unsatisfied demand needs (Brondoni 2002); the continuous search for new and original frontiers of value (Riboldazzi 2005), stimulated by market-driven management (Brondoni 2008b), has induced large retail companies to consider new activities, including the sale of motor fuels.

Figure 10: Ownership of Fuel Retail Sites in Selected European Countries – 2009



Source: Experian Catalist, PÖYRY Energy Consulting

In the United States, fuel sales through retail chains now account for 16% of the total volume, and seven brands (Wal-Mart, Sam's Club, Costco, Kroger, Mejer, Albertsons and Safeway) account for 77% of the overall sales of large retail chains (Energy Analyst International 2003).

In Europe, the countries with the highest number of retail operators in the fuel business are France and the United Kingdom (the main brands selling fuel are Carrefour, Intermarché, Tesco and Sainsbury's). In France, in particular, the large non-specialist retail chains purchase their fuel almost exclusively from subsidiaries of their own groups [Carfuel (Carrefour), Distridyn (Casino, Cora), Pétroles et Dérivés (Intermarché), Petrovex (Auchan), Siplec (Leclerc)], the only exception being certain independent centres which, like most of the distribution organisations operating in other countries, purchase from wholesalers or directly from importers (DGEMP – DIDEME 2003).

□ *Carrefour (the second largest retail chain in the world, by sales, and the largest in Europe) is the third fuel distributor on the French market. The Carrefour Group has 1204 service stations in France: 206 are located close to Carrefour superstores, 794 close to Champion and Market supermarkets, 108 close to neighbouring supermarkets (8 à Huit and Shopi) and 24 on the French motorways. In Italy there are 26 Carrefour petrol stations (under the Carrefour brand or in co-branding with the oil companies): 10 are in Piedmont, 7 in Lombardy, 3 in Tuscany, 2 in Veneto and 1 each in Valle d'Aosta, Friuli Venezia Giulia, Marche and Sardinia.*

Service stations in which large retail chains have an interest generally operate under the brand of the retail chain, but in some countries, primarily those where fuel distribution through retail chains is not developed, the service stations operate under the co-brand of the retail group and the oil company (in Italia there are 60 service stations under the brand of a large retail store,

and 16 that display the retailer's sign while the remainder are in co-branding with the production company) (Federdistribuzione 2009).

5. Emerging Issues

Scarcity economies (D>S) are characterized by monopolistic market conditions, management economics focus on price competition, global agreements and sales managed on a local basis (Brondoni 2009a). In fact, in economies where competition is less intense (scarcity of supply), offering companies regulate supplies which are kept below total demand by controlling the quantities that are produced and marketed.

The motor fuel market is a typical example of scarcity economics; although demand is far from saturation point, a concentrated supply system is in place in which both the large oil companies and a small number of minor companies, in terms of output and results (for example pure-play refineries, niche refineries and independent distributors) operate successfully.

A small number of suppliers (national oil companies - NOC and international oil companies - IOC) therefore control the raw material and manage stable alliances to control the different stages of the supply chain.

In the distribution field, the dominance of the global oil companies is threatened by a growing number of large retailers that are entering the motor fuel market, increasing the local competitive relationships.

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Notes

¹ Petrol is a blend of hydrocarbons obtained by refining crude oil and used mainly as a fuel in internal combustion engines. Diesel fuel is the product of the primary distillation of crude oil; it is

composed of various hydrocarbons (paraffins, naphthenics, aromatics, etc.) and is used both as a fuel for diesel engines and heating systems, and as a raw material for the chemical industry. Liquefied petroleum gas is composed by mixture of propane, and is obtained by 'cracking' crude oil; the mixture is a blend of butane and propane and may also be used for industrial combustion as well as in dual-fuel engines; propane is also used in heating plants.

² Global managerial economics interacts with numerous competition spaces where the intensity of competition varies, and market-driven management therefore refers to a complex system of different environments, each with specific competitive conditions that may typically be broken down into scarcity of supply, demand and supply in dynamic balance, and oversupply. On markets where supply is scarce overall demand tends to be unsatisfied, because manufacturing capacity is maintained below total demand (Brondoni 2009a).

³ Middle Eastern national oil companies (Saudi Aramco, National Iranian Oil Company, Petróleos de Venezuela, Kuwait Petroleum Corp, Iraqi Oil); Western Majors (Exxon-Mobil, BP, Shell, Chevron, ConocoPhillips, Total, Eni); Russian Majors (Gazprom, Rosneft, Lukoil); Asia-Pacific Majors (PetroChina, Sinopec).

⁴ In the past the petroleum industry was dominated by the Seven Sisters (the term was coined by Enrico Mattei who founded the Italian energy company ENI in 1953): Exxon, Mobil, Chevron, Texaco and Gulf Oil (American), Royal Dutch Shell Group and British Petroleum (European). In 2004 the Seven Sisters became four (ExxonMobil, Royal Dutch Shell Group, BP and Chevron) and with ConocoPhillips and Total they created a leading group of six 'supermajors'.

⁵ OPEC (*Organisation of the Petroleum Exporting Countries*) is a permanent inter-governmental organisation that currently comprises twelve oil producing and exporting countries (Algeria, Angola, Ecuador, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates and Venezuela). OPEC's goals are set out in art. 2 of the Organisation's Statute (www.opec.org): to coordinate and unify the petroleum policies of member countries and to determine the best means for safeguarding their interests, individually and collectively; to devise ways and means of ensuring the stabilisation of prices in international oil markets, with a view to eliminating harmful and unnecessary fluctuations; to guarantee an efficient, economic and regular supply of petroleum to consuming nations and a fair return on their capital to those investing in the petroleum industry.

⁶ *Upstream* refers to oil exploration and production activities; *downstream* to the refining and marketing of oil products.

⁷ The Fujian plant was built in 2008-2009; the Seosan plant was approved in 2010; the Yanbu and Jubail plants are envisaged for 2011 and the Qingdao plant was planned for 2012 (Kobayashi 2007).

⁸ A barrel of oil is made up as follows: petrol 30%, diesel fuel 28%, LPG/Naphtha 16%, aircraft fuels 8%, fuel oils 8%, other 10%. (Unione Petrolifera 2010).

⁹ Million barrels of crude oil per day.

¹⁰ Refineries generally have the following infrastructure: a processing plant where the crude oil is separated into heavier fractions (some of which are upgraded) and lighter fractions; auxiliary plants, i.e. structures that produce the energy necessary for the refining processes (fuel, electricity, steam, etc.), storage tanks, reception and distribution infrastructure, and mixing units.

¹¹ On a stable market, a company may adopt and sustain production formulae that immobilise a large part of company equity, and are very important in economic and financial terms (Garbelli 2002).

¹² The main stages of the refining process are: separation of the crude into various fractions; improvement of the quality of some fractions; transformation of the heavier fractions into lighter fractions (conversion); final preparation of finished products by blending.

¹³ A coastal location allows oil tankers to berth, and simplifies both access to the raw material and the shipment of refined material.

¹⁴ The industry has excess global production capacity and a plant rationalisation process is now underway, particularly in Europe. Here, refineries work at an average 85% to 90% capacity, but in spite of this, there has been considerable resistance to any reduction in production capacity because of the high cost of shutting down a refinery. In the United States, on the other hand, there has already been extensive downsizing: between 1985 and 1995, capacity fell and the number of refineries dropped from 315 to 165.

¹⁵ In Europe, refining capacity decreased from 25,497 thousand barrels a day in 1999 to 24,920 in 2009. Globally, refining capacity has increased (+ 2.2% from 2008 to 2009) (British Petroleum 2010).

¹⁶ Oil pipelines are usually used to transport crude oil, and to a lesser extent to transport refined products. The main pipelines are: in the United States, the Trans-Alaska pipeline connects the Prudhoe Bay oil fields on the Pacific coast while the Capline pipeline follows the East bank of the Mississippi. The Plantation, Colonial and Explorer pipelines transport refined products. In Eastern Europe, crude oil pipelines connect the Urals in Central and Eastern Europe to Novorossiysk on the Black Sea and Primorsk on the Baltic. There is also a network that extends from Eastern Europe to Russia and the pipeline of the Caspian Sea Oil Consortium, linking Kazakhstan to Novorossiysk via Russia. The main oil pipelines for crude oil in Western Europe connect the North Sea ports with Germany and Belgium, and the Mediterranean ports with central Europe. Refined oil pipelines include the Trapil system (in France), the Mediterranean-Rhone pipeline, the Spanish network and the Rotterdam-Venlo-Ludwigshafen pipeline. The most important crude oil pipelines in the Middle East are: the Tapline that connects Abqaiq and Sidon, the Sumed pipeline and the Abqaiq-Yanbu pipeline in Saudi Arabia.

¹⁷ Distribution intensity reflects the high number of points of sale where a given product can be purchased (degree of coverage of market). With intensive distribution, the product can be purchased from a large number of points of sale; the goal is to cover the market as well as possible. With selective distribution, the number of points of sale where a given product can be purchased is more limited than with intensive distribution. With exclusive distribution, the product can only be purchased from a very small number of points of sale.

¹⁸ The following is a possible classification of the functions that retail companies may perform: - logistics: procurement, conservation, qualitative-quantitative adaptation of consignments, transportation; - assortment: combination of supplies from different companies within the same assortment; the role of the retailers is to create assortments that enable customers to purchase a wide variety of products in a single operation, thus helping to reduce the time and effort necessary to find the products they need; - contacts: any activity that simplifies access to large groups of customers who are physically distant from each other; - information: activities that make it possible to improve understanding of the market's needs and competitive trading conditions; - communications: activities that regard the release of communications by the company to the various publics addressed; - services: activities that regard pre-sales, sales and after-sales services; economic-financial functions: the activities covered by this function include the definition of prices and forms of financing with reference to production and consumption; - production: this refers to all activities connected to the production of private labels (Riboldazzi 2005).

¹⁹ The Author is one of the first scholars to have identified 'matching of demand and supply' among the functions performed by intermediaries; the distribution company reduces the technological gap between supply and consumption, by combining the supplies of several industrial corporations in its own assortment.

²⁰ The main players selling motor fuel to independent operators are: in North West Europe, all the major international oil companies, a large number of national oil companies and a few independent players such as traders, brokers and banks; in the Mediterranean area, the two most important players are ENI and Repsol, followed by two international oil companies and a few independents; in Eastern Europe, PKN is the largest player, followed by a number of national oil companies and a few independents. (PÖYRY Energy Consulting 2009).

²¹ The commercial service can be defined as a collection of attributes combined in different proportions; the combination of the attributes that make up the marketing service produces the distribution format (product of the distribution companies).

²² Total and Erg have created TotalErg, a refining and marketing joint venture in Italy; Total Erg thus becomes one of the major operators in Italy in the distribution of petroleum products, with a market share of approximately 13% and over 3400 service stations.

²³ Total and Sinochem have received approval from the Chinese authorities for the Total-Sinochem joint venture, which will develop a network of 200 service stations in Beijing, Tianjin, Hebei and Liaoning.

²⁴ Shell and the OJSC Alliance Group have signed an agreement to establish approximately 150 service stations in Ukraine.