CBI MARKET SURVEY

THE SANITARY WARE AND CERAMIC TILES MARKET IN THE EU

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Report summary

This CBI market survey 'The Sanitary Ware and Ceramic Tiles market in the EU' gives an overview of the opportunities and threats that potential exporters from developing countries (DC) should analyse before making a decision to export to the European Union (EU). The survey reviews the topics below.

Consumption
Between 2002 and 2006 EU consumption of sanitary ware and ceramic tiles increased by 20% in value and reached € 16 billion. Italy, followed by Spain, is the highest consumer of sanitary ware and ceramic tiles. The EU market as a whole is among the biggest markets globally and has one of the highest per capita consumption on sanitary ware and ceramic tiles worldwide. Most EU countries have had a growing demand in the recent years. This trend should persist given the positive outlook of the economy and the construction sector. While some EU countries face difficulties, others offer very good perspectives—both the traditionally big countries and the smaller up and coming nations. Some consumption trends are especially interesting to take into account:

- Bathrooms are becoming increasingly luxurious and subject to the latest interior design trends affecting any other part of the house
- The preoccupations of EU consumers towards environmental and social issues also has impacted the sanitary ware and ceramic tiles market, leading to specific product requirements
- Ceramic tiles are more widely utilized in and around the house
- The sanitary ware market remains quite stable

Production
Between 2002 and 2005 EU production of sanitary ware and ceramic tiles grew by 14% in value and reached € 19 billion. Italy, followed by Spain, is the highest producer of sanitary ware and ceramic tiles. While the EU production has stagnated (or decreased as in the case of sanitary ware), global production has increased in recent years. New players are now contributing to production, most of them originating in DC in Asia, Africa and Latin America. Outsourcing and consolidation is a recurring trend among European manufacturers who are fighting against increased competition from low-wage countries. European manufacturers are also focusing on niche markets in order to maintain market share. In a context of increasing global competition, sufficient investment in modern technologies is crucial to maintain long term profitability when exporting to the EU.

Trade channels and price structure
Wholesalers, importers, distributors and retailers offer different opportunities for exporters from DC to do business with the EU. However, at the moment the retail channel and specifically the Do-It-Yourself (DIY) outlets provide the best opportunities for exporters from DC. When considering the best trade channel to approach, it is important to remember that the trade channels in the sanitary ware and ceramic tiles market are currently undergoing a transformation. DIY are increasingly focusing on multiple segments while speciality stores are more and more targeting the higher-end of the market. Producers from DC should therefore assess the existing opportunities and base their competitiveness either on value-added products, playing on aspects such as exclusivity and quality, or on low-cost products that can generate profit through high volume.

Imports to the EU
Between 2002 and 2006 the average growth in imports of sanitary ware and ceramic tiles was 9% annually, reaching a total value of € 7.3 billion. Germany, followed by France, is the largest importer of sanitary ware and ceramics. At the EU level, imports of sanitary ware and ceramic tiles are on the rise. Imports of sanitary ware from DC have expanded even more. Although the traditional markets in the EU can be quite protective, figures show that even these markets import products from DC. The increase in consumption and a relocation of

production to low-cost countries has had a positive influence on imports and is expected to continue into the future.
While DC can take advantage of lower costs, it is also important to notice that successful exports to the EU goes hand in hand with a strong producing and trading capacity, associated with permanent pro-active commercial efforts. One should also keep in mind that the increasing global production and competition are dragging the prices down and challenging margins. As a result, a focus on quality is increasingly important.

Opportunities and threats

- \+ Consumers are expected to continue remodelling of bathrooms and kitchens in the near future.
- \+ The greater focus on quality provides opportunities for DC that can compete in terms of quality.
- \+ The growing demand for products from sustainable sources gives DC manufacturers who can prove that their production complies with environmental and social norms a competitive advantage.
- \+ EU stagnating production is not meeting the increased domestic demands; therefore it offers market openings for exporters from DC.
- \+ Technologies are becoming more accessible to DC and enabling them to improve the quality of their production.
- \+ Outsourcing of production from the EU to low-wage countries may open up opportunities for DC.
- \+ Because of competitive prices and improved quality, the market share of DC has increased in each product group even in some of the big EU importing countries.
- \+ The growth in imports exceeds the growth in production implying that imports are surpassing the gaps which production is leaving due to relocation to low-cost countries. A growth in consumption will therefore continue to benefit DC exporters.
- \+ The market share of DC has expanded explosively over the years.
- \- Trends are evolving fast. For exporters, this requires the ability to spot those trends by pro-actively approaching those markets and to respond to them adequately.
- \- European consumers of ceramic tiles prefer European products. Therefore an EU legislation proposal is being drafted on implementing country of origin marking for tiles.
- \- The EU market is characterized by a high level of sophistication and therefore quality expectations and standards are high.
- \- The capital-demanding industry can challenge the development opportunities of smaller producers, as exporters may not have the financial means to produce competitively.
- \- The emergence of new producers abroad is increasing the competition on the international market.
- \- Price is not necessarily the most important factor for EU consumers. DC exporters often are not able to meet important demands (e.g. delivery) or the after sales service.
- \- The average price of imported products has dropped significantly. This development is expected to continue as the lower segment of the market will become more saturated in coming years.
- \- It remains hard for DC exporters to offer products that can compete in the higher-end of the market.

Introduction

This CBI market survey profiles the sanitary ware market and ceramic tiles market in the EU. The emphasis of this survey lies on those products, which are of importance to developing country (DC) suppliers. The role of and opportunities for DC are highlighted.

This market survey discusses the following product groups:

Title market survey	Product category	Product group	Products
Sanitary ware and ceramic tiles	Sanitary ware	Plastic sanitary ware	Plastic baths, shower and washbasins
			Plastic lavatory seats and covers
			Plastic bidets, lavatory pans, flushing cisterns and similar sanitary ware
		Ceramic sanitary Ware	Ceramic sanitary of porcelain and china
			Other ceramic sanitary
		Iron/Steel sanitary ware	Sinks and wash basins, of stainless steel
			Baths of cast iron, whether or not enamelled
			Baths of steel sheet
			Other sanitary ware, incl. parts thereof
	Ceramic tiles	Unglazed ceramic tiles	Unglazed ceramic tiles, cubes and similar articles, for mosaics
			Unglazed ceramic flags and paving, hearth or wall tiles
		Glazed ceramic tiles	Glazed ceramic tiles, cubes and similar articles, for mosaics
			Glazed ceramic flags and paving, hearth or wall tiles

For detailed information on the selected product groups please consult appendix A. More information about the EU can be found in appendix B.

CBI market surveys covering the market in specific EU Member States, specific product (group)s or documents on market access requirements can be downloaded from the CBI website. For information on how to make optimal use of the CBI market surveys and other CBI market information, please consult 'From survey to success - export guidelines'. All information can be downloaded from http://www.cbi.eu/marketinfo Go to 'Search CBI database' and select your market sector and the EU.

1 Consumption

In this chapter, data from Eurostat Prodcom database is used to indicate apparent consumption. Apparent consumption is the sum of production and imports minus exports. Variations in inventory are not taken into account. Two problems occur: sometimes negative consumption is calculated, this is the case when exports are higher than production and imports combined, in that case figures are treated as not available. Furthermore, the figures sometimes show a discrepancy between years, e.g. a large fall or extraordinary growth. For decision making these figures are therefore not accurate enough and they should be used in conjunction to further market research.

1.1 Market size

Sanitary Ware

- In 2005, the EU consumption of sanitary ware represented 504 thousand tonnes with a total worth € 6.6 billion. Between 2002 and 2006 EU consumption increased by 20% in value.
- Accounting for 14% of total EU consumption, the 10 new EU Member States[1] (EU10) in 2004 have expanded the EU market significantly. When looking strictly at the EU15 countries, consumed value showed a marginal growth of 3% while volume increased by 11%.
- The most important consumer countries of in the EU are Germany (18%), the UK (14%), Italy (11%), France (11%) and Spain (10%). Between 2002 and 2005 the ranking and individual market shares have virtually remained the same, except for Germany and the UK. The former saw its market share drop by 7% which can be accredited to the negative growth in the construction industry and the recession in the German economy. The UK had a difficult year in 2005 because of a declining housing market and expenditure dropped in all product groups, nonetheless, its overall market share increased by 6% between 2002 and 2005. Britons spend the most in all Europe on remodelling the homes, especially in the last five years.
- Increasing competition in the upper and lower segments has resulted in a declining middle segment. Average real prices have come down in upper/upper-middle segment (except luxury) partly due to a cheap supply of products from DC exporters.
- The USA was the largest sanitary ware market by value (25%) in 2004, followed by China, Japan, Germany and Italy, which overall accounted for a further 37%. The top 5 countries totalled 61% of worldwide sanitary ware sales.
- The market share of the EU10 countries increased by 4% in 2005 and is expected to grow even further in the coming years due to a booming construction industry and increasing standard of living. Poland (6%), the Czech Republic (2%) and Slovakia (2%), Hungary (1%) and Slovenia (1%) are the biggest consumers among these countries at the moment. Especially the Eastern European countries (including Poland, Hungary and Bulgaria) show a huge potential for low-priced products. This sort of products is increasingly being imported to fulfil local demand, while European manufacturers focus on the higher-priced products often destined for export to the European market.
- In 2005, EU consumption consisted of plastic sanitary ware (40%), ceramic sanitary ware (43%) and iron/steel sanitary ware (17%). Between 2002 and 2005 sanitary ware made of plastic and ceramic have increased slightly in market share at the expense of iron/steel products. The market for iron and steel products is more dependent on fashion as opposed to the more standard materials i.e. ceramic and plastic.
- At the European level, the consumption of sanitary ware should persist, supported by a continuous growth in the construction sector, which, together with the economic growth, are the main drivers and indicators of the sanitary ware sector fluctuations. According to

[1] The new EU Member States are: Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia, and Slovenia. Bulgaria and Romania have not yet been included in this market survey because they just entered the EU in 2007 and are therefore considered to be Extra-EU countries.

Euroconstruct's European growth forecasts the European construction industry - despite a weak period between 2001 and 2003 - increased by €200 billion to €1,300 billion in the year 2005. Over 2003 to 2005, several countries experienced considerable growth in residential construction, both in new residential construction and in renovation and modernisation. Over 2006 – 2009, the European construction market is expected to increase by around 2% per year. In Western Europe the highest growth rates are expected in the residential renovation and maintenance market, and in the new non-residential market. In the EU10 countries, the performance of the construction sector should be stronger than the average forecasted growth. Growth here will mainly be realized in the residential sector not only in new construction but also in renovation and maintenance.

Ceramic tiles

- In 2005, the EU consumed approximately € 10 billion worth of ceramic tiles (note that volume data is less reliable for ceramic tiles). Between 2002 and 2005 the consumption of ceramic tiles increased by 35%. The EU10 countries which accounted for 17% of total consumption have had a large impact on the growth of the ceramic tile market in the EU. The consumption of the EU15 countries grew significantly in 2003 after which the market stabilized, leading to a total growth of 13% between 2002 and 2005.
- The most important consumers of ceramic tiles in the EU are Italy (18%), Spain (14%), France (10%), The Netherlands (8%) and Germany (7%). In the reviewed period no major changes have taken place except for the fact that the Italian and German market shares decreased by 4% and 2% respectively. The decline of the Italian market can be accredited to the poor performance of the Italian economy and the saturation of the internal market. The German market suffered from a decline in the domestic construction market.
- The market share of the EU10 countries surprisingly decreased by 1% between 2004 and 2005. An exact reason for this development cannot be given. The Czech Republic (5%) and Poland (4%) are the biggest consumers of the EU10 countries followed by Slovakia (2%) and Hungary (2%).
- In 2005 consumption consisted of unglazed ceramic tiles (21%) and glazed ceramic tiles (79%). Between 2002 and 2005 this ratio between the two product groups has stayed the same.
- Globally, in 2005, consumption of ceramic tiles was 6,557 million square metres. Asia is the most important consumer (50%) on a worldwide level. China alone accounts for 31% of global consumption. The EU is the second biggest consuming region with 20% of global consumption. Both the EU and Asia are the main drivers in this market and lead market in terms of global consuming trends. North America is a relatively small market that accounts for just 7% of total consumption.
- Consumption of ceramic floor and wall tiles is primarily driven by demand for hard surface flooring. Hard surface flooring demand patterns are, in turn, closely related to the highly cyclical building construction sector. Overall demand for ceramic tiles is less sensitive to economic cycles than many other construction-related industries because of the wide utilization of ceramic tile in repair and improvement, rather than new, construction projects. Furthermore, ceramic tiles are utilized more widely in and around the house partly due to the fact that it is becoming an affordable alternative for other materials like hard wood and natural stone. Technical advances also played a part in increasing the scope of use for tiles (i.e. the anti-slip tile) and their design features (unusual shapes, resembling natural materials and prints) making them more suitable for decorative purposes and enabling consumers to create a more unique style in their living space.
- The growth of the ceramic tile market in the EU is expected to continue to grow. The ongoing growth in the EU construction market and the wider utilisation of ceramic tiles in and around the house/buildings will push the market forward for the next couple of years.

1.2 Market segmentation

The market for sanitary ware and ceramic tiles can be sub-divided into the professional and private markets. A further useful division within the market segment can be made by classifying products according to three price ranges: high-, mid- and low-range products. Mid-range and low-range products have accounted for an increasingly large share of sales in the sanitary ware and ceramic tile sector in recent years.

Professional market
The professional market consists mainly of (large) construction companies and different types of contractors. Their main activities are building new buildings and restoring and modernising older buildings. The professional market tends to strive for efficiency, while respecting official quality standards. Low (purchasing) price is an important factor determining demand. Therefore, the professional market is a large buyer of low and mid-range products that comply with the official quality standards. In other cases, however, brands are considered important, as it is the case in more prestigious projects in the professional market where price is less relevant than design or quality.

The professional market is largely supplied by importers/wholesalers. The smaller construction companies and contractors and installers in the professional market however are also supplied by Do-It-Yourself (DIY) outlets.

The professional market can be divided into three main segments which derive from 3 types of construction:

- Non-residential (31%)
- Residential (48%)
- Renovation (36%; composed by 23% residential and 13% non-residential)

The key decision makers in the professional *non-residential* markets are architects and controllers on major building projects. In order to minimise risk, they tend to demand products that comply with certain national or international quality standards. In the public area of non-residential buildings, higher quality products are used, while in non-public areas more basic products are used. The products used in these non-public areas need to allow for easy cleaning (like hanging toilets) to reduce cleaning costs.

In the *residential* market, although the influence of architects is still large, the influence of the buyer or tenant on the product choice is growing. The quality of products in the residential market is generally higher than that of the ones used in the non-residential market.

An important feature within the professional building industry is the difference in attitude towards the latest trends in fashion. In the *renovation* segment for non-residential and rental residential buildings, there is a tendency to use the more basic construction materials, with white as the leading colour. In contrast, private house-owners renovating their own homes are more likely to demand luxury goods with specific characteristics which reflecting trends in fashion as opposed to basic sanitary ware.

Private market
The private market is made up of contractors, installers, retailers, different kind of boutiques (bathroom, tiles, kitchen or combined) and handy consumers. The products in the private market are mainly destined for the renovation of houses, more specifically bathrooms, kitchens, flooring and cladding. The decision makers in the private market are usually the end-consumers. Architects, contractors and other players certainly have influence on the consumer but the decision is usually up to him/her.

The size of orders is generally smaller than in the professional market. Individuals purchase directly from the retail channel or otherwise installers and contractors will do this for them. Installers and contractors will also buy from importers and wholesalers.

The low and mid price ranges of products are covered to a large extent by sales through Do-It-Yourself (DIY) outlets. Over recent years the volume of sales through the DIY channel has increased and continued growth is expected in the future. This growth will be at the cost of trade through other channels. In the past, DIY centres focused primarily on cheaper bathroom products and tiles. Currently, more emphasis is placed on upgrading the range of products. In addition, the increasing consumer interest in bathrooms has led to larger bathroom and tile departments. An increasing number of DIY centres without a showroom are creating space for one. The present market share of the DIY outlets is estimated at about 75 percent, while the boutiques and installers have a share of about 25 percent.

In the private market (except for the boutiques) there is also a tendency to use more basic construction materials. In the DIY segment, brands do not generally play a major role, whereas price and aesthetics are generally regarded to be the most important attributes influencing the purchase of the goods. As individuals seldom demand national or international quality standards, compliance with these standards is not a pre-condition for selling in this market. This fact has influenced enterprise strategies, as some manufacturers have concentrated only on the private market. In Europe the DIY segment is largest in Western Europe (i.e. Germany, France, United Kingdom, Netherlands and Belgium). The DIY segment is expected to become even more important in the future, due to a shift from project developers towards the private market.

1.3 Trends

The existing differences in national consumption trends in Europe can be explained by factors such as historical and cultural traditions of a country, and climate (a warm climate is better suited for natural stone). Still, some general trends can be spotted at an EU level. Refer to country (regular and compact) surveys for specific trends pertaining to the countries.

Population composition
Birth rates within the EU are generally low, and to a certain extent population growth in Europe depends on the outcome of immigration policies. Nonetheless, the increasing dissolution of marriages, while causing a reduction in the average number of inhabitants per house, has an influence on the total demand for the number of housing units. The number of house owners in the EU is increasing (approximately 60 percent of the families own the house they are living in), but remains relatively low in Germany and the Netherlands (approximately 50 percent).

Furthermore the EU is faced with an ageing population. The increase in the number of wealthy senior citizens has had an effect on the housing market. Although they might move to smaller housing units, they are generally inclined to spend a lot on interior design including bathroom, kitchen and other parts of the house where sanitary ware and ceramic tiles are used.

Increased luxury
In the EU the bathroom is becoming a more integrated part of the house. People are spending more time in the bathroom as it is more and more becoming a place for relaxation. As a result bathrooms are becoming increasingly luxurious as can be seen from the growing demand for wellness products. The bathroom-toilet area is now being given as much attention and taken into consideration when discussing the interior decor of the house. With affordability no longer being a major constraint, people are keen to pursue the 'magazine bathroom look' for their apartments. As a result, the bathroom area will increasingly become subject to the latest design trends.

Colours, design and materials
Nowadays the consumer wants everything: practicality and aesthetics, utility and pleasure, style and function. Decor is more and more personalised: the consumer wants to indulge his desires by creating a particular ambience to reflect his own personal tastes and his or her world. Technical innovation and new materials play a part in this need for an individually-tailored environment. And optimising the use of space, often lacking in the bathroom is a major challenge.

For several years now two co-existing trends are noticeable in bathroom design. On the one hand there is minimalist design, which is characterized by simple and sober design features giving bathrooms a clean and spacious look. The number of colours used is limited and forms are usually sharp; e.g. square or rectangular. As a result wall hung toilets with concealed water basins and large rectangular sinks are popular in this market. The ceramic tiles used are usually large in size and can be either dark or light.

On the other hand there is a strong tendency towards bolder and more outspoken bathroom design. Sanitary ware with unusual shapes like round and oval can be used to create the desired effect. Ceramic tiles with unusual colours like green, red and yellow can be used for creating unique patterns and a more personal atmosphere. Because of the increasing possibilities of computer-aided design and printing techniques more and more graphical representations, formed by a series of tiles (geometrical forms, texts, graphs, pictures, etc.) are on the market. E.g. entire walls decorated with cartoons using tiny ceramic squares, either black and white or coloured. In Italy experiments in texture and sculpting have been taken to new levels - raised waves, circles, squares, triangles and other geometric patterns in bold relief.

It is difficult to formulate a general trend on fashion colours and shapes. There are currently many types of trends circulating that can satisfy many different tastes. Since trends in colours and design are evolving faster and faster, it is recommended to any exporter to regularly visit trade shows in order to keep track of the current consumption trends.

Diversity of tiles

Consumers with higher disposable incomes or more sophisticated tastes are beginning to consider that tiled floors add value to their homes. This is being reflected not just in an overall rise in tile sales but in a greater diversity of styles and colours on offer together with bolder decors: for instance imitation natural stone for floors and larger formats in general for both walls and floors. Tiles are also being used frequently to create patios and conservatory floors, where imitation terracotta is very popular. Other ceramic tiles imitating natural materials such as marble, wood and even textiles are also in demand.

In the market for ceramic tiles there are noticeable variations in colours depending on the European geographical location: Northern European countries largely prefer “warm” colours or “darker colours”, and Southern European countries prefer “light” colours. However, across Europe there does seem to be a pulling demand for brown tones stone in addition to cream and beige.

Furthermore, a trend for bigger-sized tiles is noticeable. Large tiles are those with a surface area of over 59 square inches. Larger formats highlight the materials’ natural elegance better than smaller formats. Moreover, bigger tiles are easier to clean, look cleaner and are more hygienic than smaller tiles. They are therefore also being used increasingly on walls, decks, tub and shower surrounds and other less traditional applications. It is important to note, though, that the predilection for large formats is greater in the south of the EU than in the north. In the north and in the east the more traditional 20x25cm format for wall tiles and 30x30cm for floor tiles are preferred. The trend in floor tiles however is towards larger formats: 40x40cm, even 60x60cm in modern, sophisticated interiors; 40x60cm and other rectangular sizes are coming into fashion.

Another important development is that architects and designers are using mosaics for a range of applications — from floor to wall installations to cost-effective inserts and borders. The variety of colours, textures, shapes and sizes available in today’s market enable architects and designers to create something unique and reflective to their individual clients’ personalities and hobbies.

Toilet standards
Concerning toilet cisterns it should be noted that the UK uses the siphonic (valve-less) flush whereas the valve-flush is used throughout continental Europe. As for bidets, these are virtually non-existent in northern Europe and are more common in southern European countries.

The main types of toilet pan used in Europe are:

Product	Description
The floor toilet / closed coupled toilet suite	The cistern sits onto the rear platform of the bowl and provides a wash down flush to the toilet pan
The single floor standing	The cistern and bowl are separate
Wall-hung cisterns	The cistern and bowl are attached to the wall

Particularly in the UK market, there is still a considerable market for two sub-types of the single floor standing type:

Product	Description
The low level toilet	Traditional pan with a separate wall cistern mounted about 20 cm above the pan, connected together with a flush pipe
The high level toilet	Similar to the above but the cistern is wall mounted about 2m above floor level and has a chain pull.

Sustainable products
The EU market is becoming more and more sensitive to environmental and social issues related to production, sourcing, recycling and use of products. Consumers are turning to their suppliers for more transparency and their purchase decisions will increasingly be affected by the way those issues are addressed. Governments of various EU member states are setting the right example by taking a pro-active approach. For example, the Dutch government is currently setting up sustainable product criteria and by 2010 will only purchase products from sustainable sources. In the UK and Belgium similar initiatives are under development. The increased focus on sustainability by governments will also lead to an expansion of renovations in European construction. It costs more energy and material to tear down and build new buildings as it would to renovate existing structures.

DC exporters can address environmental and social issues by attaining certifications, labels or setting up codes of conduct. One such example is the Ecolabel for hard floor coverings, which looks at various aspects of the life cycle of products in order to determine its environmental impact. This life cycle considers all the product phases "from cradle to grave", that is from the extraction and production of the raw materials to the final disposal of wastes after demolition. The environmental impact of the quarries can, on one hand lead to the alteration of the landscape, and on the other hand to the consumption of resources, the emission of dusts, and waste production. For ceramic products the production phase represents the most important part of the life cycle. The main environmental factors associated with tile manufacturing are:

- gaseous emission
- water consumption and waste water discharges
- energy consumption
- waste/residues
- noise

Due to innovations in technology, plant and production techniques ceramic tiles can now be produced with a much lower impact on the environment compared to other materials.

The sanitary ware sector is responding by producing products with emphasis given to "water conservation". For example, Roca has launched products that consume less water - ones with strategically located water jets and a dual flush system.

Social issues are equally important and harder to address because of the lack of transparency in the sector and monitoring difficulties. One certification scheme that is widely accepted is SA8000 which deals with the most important issues like child labour, occupational health and safety, equal wages and discrimination.

Certifications and labels cost a lot time and money to attain so therefore it is important to ensure that it adds value to your product and/or is demanded by your buyer. Buyers in the EU will however appreciate a pro-active approach towards social and environmental issues.

Sales of total concepts
Both in the private and professional market, the trend of manufacturers and wholesalers to sell total concepts instead of just their products is important. For the private market, this trend is fuelled by an increasing demand for information and service from consumers. It is common for DIY stores to have a range of total concept packages for different jobs that include materials, manuals and hints on how to solve problems. An example of such a total package is the total bathroom formula, presented in an integrated design and includes tiles, baths, adhesives, toilets, taps, services etc. For the professional market the total concept trend is fuelled by the growing demand for personal housing (i.e. building directly for consumers), which requires developers as well as contractors (often the same company) to adapt to specific consumer requirements.

The developers and contractors generally have contracts with suppliers of total concepts and will use suppliers' showrooms in order to be able to communicate with the customer. The phenomenon of virtual showrooms on the Internet can provide a means of assisting customers to make choices by providing inspiring examples (e.g. www.absolutebathrooms.ie or www.creativebathrooms.co.uk). Total concepts are created by so-called intermediate companies. Their function is to develop selling formulas (i.e. concepts from a coherent set of products including tools, instructions, fasteners etc.) in order to solve the problems of the consumer. Sometimes this role is being explored by the main producer, contractor or the distribution company. The DIY shop or bathroom boutique offers space to present and sell the product and receives a percentage of the sales price in return for offering shelf space.

1.4 Opportunities and threats

- \+ Consumption of sanitary ware and ceramic tiles both grew significantly providing market opportunities for DC exporters.
- \+ With high levels of discretionary spending and easy access to capital, consumers in the EU are expected to continue their remodelling of bathrooms and kitchens in the near future. Especially consumers in Eastern European countries are expected to start spending more on construction and bathrooms.
- \+ In all markets but the DIY market, there has been a greater focus on quality with the aim of positioning products in a more profitable segment of the market. DC exporters that can compete in terms of quality will find increased competition but also increased rewards.
- \+ The growth of consumer awareness has lead to an increased interest in products from sustainable sources. DC manufacturers who can prove that their production complies with environmental and social norms will have a competitive advantage.
- \- Trends are evolving fast. For exporters, this requires the ability to spot those trends by pro-actively approaching the markets and to respond to them adequately.
- \- A recent EU commission inquiry has shown that European consumers of ceramic tiles prefer European products. Therefore an EU legislation proposal is being drafted on

implementing country of origin marking for tiles. This should put an end to misleading information given by third country producers or distributors on the origin of their products. It is also taking action against the counterfeiting of European designs, which is very frequent in China and other Asian countries.
- It can be hard to meet quality expectations and standards in the EU.

1.5 Useful sources

Trade fairs
- International exhibition of ceramic tiles and bathroom furnishings - http://www.cersaie.it
- British construction expo - http://www.interbuild.com

Trade press
- Ceramic World Web Online Magazine - http://www.ceramicworldweb.it
- DIY in Europe Magazine - http://www.diyonline.de/
- Ceramic Forum International - http://www.cfi-web.com/

2 Production

2.1 Size of production

Sanitary ware

- EU production in 2005 represented 283 thousand tonnes of ceramic tiles totalling € 6.7 billion. Between 2002 and 2005 production in terms of value grew by 14%. The expansion of production in the EU as a whole can be solely accredited to the accession of the EU10 countries that together account for 14% of EU production.
- The total produced value of the EU15 countries over the same period decreased by 2% while volume increased by 24%. The slow growth of domestic markets and increased competition from DC has negatively influenced production in the EU15 countries.
- European manufacturers that still have a strong hold on their internal market have been under increased pressure from cheap products from countries outside of the EU. As a result European manufacturers are increasingly focusing on the higher-end of the market (e.g. “wellness” products like jaccuzzies and shower/steam cabines).
- The most important producing countries in the EU are Germany (23%) and Italy (15%) followed by the UK (10%), Spain (9%) and France (8%). Combined these countries have a market share of 74%. In general Southern European countries (including Italy, Spain and Portugal) increased their share of production as opposed to the negative growth realized by most Western and Northern European countries (i.e. the UK by as much as -5%). All Eastern European countries (except for Lithuania) saw their market share increase in 2005 as local and international demand is increasing for their competitively priced products.
- The production of sanitary ware in 2005 consisted of plastic sanitary ware (52%), ceramic sanitary ware (24%) and iron/steel sanitary ware (23%). Sanitary ware of plastic increased by 14% between 2002- 2005 while production of ceramic products dropped (-15%). Ceramic sanitary ware is increasingly being imported from DC.
- At the European level, the production of sanitary ware is forecast to continue the course it has taken in recent years. Manufacturers in most EU countries will continue to struggle to maintain their market position and will keep innovating in the niche market. Manufacturers in Eastern European countries are expected to increase significantly, not only because of increased local demand but also because of a shift from West European sanitary ware manufacturers to Eastern Europe. Several large producers including Roca and Sanitec are opening new factories in Eastern Europe. By setting up joint companies with local manufacturers, they are trying to reduce production costs and enter new markets with locally known brands.

Ceramic tiles

- In 2005, the worldwide production of ceramic tiles reached 7 billion square metres. Worldwide production increased by 21% between 2002 and 2005. The increase can be attributed to the picking up of Asian markets and wider use of ceramic tiles. Ceramic tiles are used not only for interior design purposes but also for external cladding and in civil engineering projects (e.g. tunnels). Asia is the largest producer and contributes 53% to the total world production of ceramic tiles in 2005. China alone accounts for approximately 36% of global production. North America (America and Canada) accounted for 4%. The EU, with its long tradition in the production of ceramic tiles, accounts for 23%. The Chinese tiles industry was 2.8 times that of Spain in 2001 and the figure has increased to almost 3.4 times in 2005.
- EU production in 2005 represented 1,920 thousand tonnes of ceramic tiles worth € 12.7 billion. Between 2002 and 2005 production in terms of value grew by 19%. By the expansion of the EU with EU10 countries the market alone grew by 11%. When looking strictly at the EU15 countries over the period 2002 to 2005, total production increased by 9%. The average price of ceramic tiles went up slightly due to increased focus on quality and service.
- The most important ceramic tile producers in the EU are Italy (40%) and Spain (26%). Both countries have a long tradition of producing ceramic tiles and are important suppliers to the EU market. Other large producers are The Netherlands and Germany with a market

share of 5% and 4% respectively. Between 2002 and 2005 Italy and The Netherlands saw their market share decrease by 4% and 1%, while Spain and Germany remained at the same level.
- Established Western European manufacturers are seeking competitiveness in higher added value products. The ceramic tile industry is continuously innovating to maintain market share. Plans include designing a tile that would be the better option for integrated constructive solutions: reducing installation time, costs and environmental impact and improvement of final results.
- The EU manufacturers remain to have a strong hold within the EU because of the healthy interaction between ceramic tile and machinery producers, raw materials suppliers, designers and scientists. Moreover, EU buyers prefer local suppliers for various reasons, the most important being: the short delivery time, after-sales service, out-of-stock delivery for an extensive period of time, trustworthy quality and in some cases brand. As a result EU production will keep benefiting from the growth in the construction industry and expand at a steady pace.

2.2 Trends

New direction for European manufacturers
Traditionally European manufacturers have had a stable position in their domestic markets. However, as a result of the lower cost of workers or less strict environmental laws the European manufacturers face increased competition from Asian manufacturers that specifically focus on the lower-price segment. As a result European manufacturers have started to focus on the higher-end of the market by producing better quality and novelty products. Although countries like China and India are among the world largest producers of sanitary ware and ceramic tiles, they are lagging behind in research and development innovation. The response of their European counterparts is coming up with innovative ideas for sanitary ware and ceramic tiles. This will lead to a reduction of execution time, installation time, and provide final results improvements, reduction of costs in general, and its environmental impact.

Shift of production within the European market
In recent years production has increasingly shifted away from Western European countries to low-wage countries. Some large European manufactures including Sanitec and Roca are moving production facilities to Eastern European countries which combine low-wage with proximity. Roca has also recently invested in new production facilities in India. By doing so it hopes to cut costs but also to better penetrate the Indian market. The increased cooperation between Western producers and manufacturers in low-wage countries can take different forms: outsourcing, contract manufacturing and joint ventures. European manufacturers are also increasingly working together to protect their piece of the market. Advantages of working together include: bringing down production costs, offering a larger variety of products, sharing knowledge and networks hence forming clusters against which DC suppliers will have a hard time competing. It is likely that there will be further consolidations, mergers and acquisitions on a global scale over the next few years.

Environmental policies constraining EU production
Producers are increasingly incorporating materials from sustainable sources and implementing environmental management systems in their production process. The main objective for manufacturers of ceramic products is to decrease the average amount of energy use in production processes. Ceramic producers carry enormous financial burdens because of increasing energy costs, which account for over 30% of total production costs. Moreover, they are under politically driven pressures to decrease CO_2 emissions.

2.3 Opportunities and threats

+ EU stagnating production is not meeting its increased domestic demand, therefore it offers market openings for exporters from DC.
+ Technologies are becoming more accessible to DC and enabling them to improve the quality of their production.
+ Outsourcing of production from the UK to low-wage countries may open up opportunities for DC. Competition can still be felt from Eastern Europe, including the new member states, and the products from DC must be able to compete with these countries.
- The capital-demanding industry can challenge the development opportunities of smaller producers
- The emergence of new producers abroad is increasing the competition on the international market.
- Price is not necessarily the most important factor for the EU consumers. Being able to deliver out of stock and delivering the same product for a long period of time is important for the replacement market in the professional segment. DC exporters often are not able to meet these demands as well as the after sales service important for this segment.
- It remains hard for DC exporters to offer products that can compete in the higher-end of the market. Quality as well branding here are the main issues.

2.4 Useful sources

Below is a list of internet site with information on the EU consumption and production. The name of major players are listed in the in the CBI market surveys covering the sanitary ware and ceramics in individual countries.

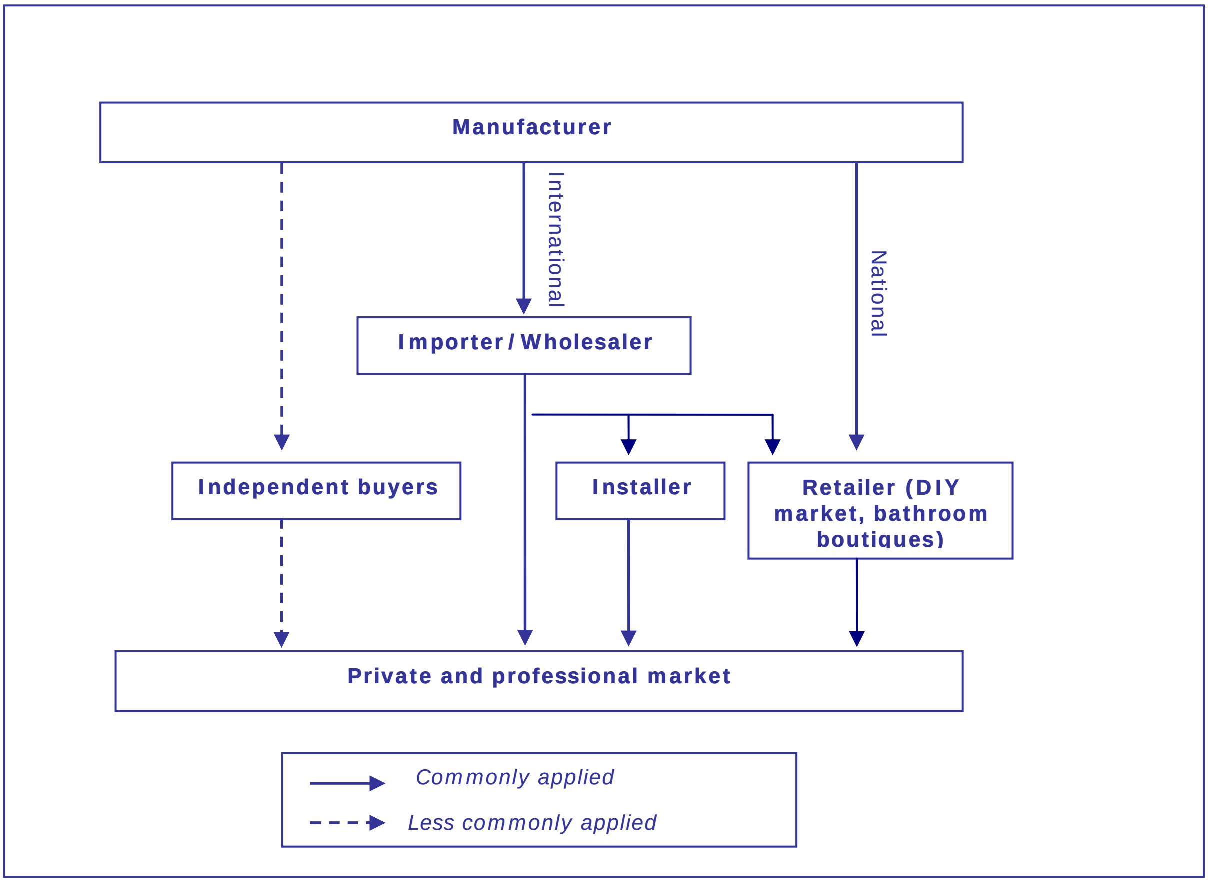
- European Ceramic Tile Producers Federation (Cerame Unie) - http://www.cerameunie.net/
- European Construction Technology Platform (ECTP) - http://www.ectp.org/
- British Bathroom Manufacturers Association - http://www.bathroom-association.org/
- Association of traders in buiding materials in The Netherlands – www.hibin.nl
- International Exhibition of Ceramic Tile and Bathroom Furnishings (Italy) - http://www.cersaie.it/index.php?langCode=en
- International Exhibition of Ceramics, Surface and Facings for the Building Industry (Spain) - http://horizontal.feriavalencia.com/

3 Trade channels for market entry

3.1 Trade channels

Figure 3.1 below presents an overview of the product flows from producer to consumer for the different kind of product groups set out in chapter 1.

Figure 3.1 Trade structure within EU countries



- **Manufacturers**

In general, the European manufacturers have strong brands on their home market, in particular in Italy and Spain. In most cases, these brands are still under development in other countries. As cultural characteristics form a serious barrier to success, most manufacturers do not easily explore other markets on their own initiative. It is more likely for them to enter into contract with local companies on an exclusive basis (exclusivity for a country or region) in exchange for attractive turn-over targets per annum. The contract partners are in most cases import organisations, agents and sometimes also wholesale organisations. These companies will then take care of the local distribution.

- **Importer / Wholesalers**

Both sanitary ware and ceramic tiles are mainly sold through the wholesale channel, through which products are subsequently sold to installers. The percentage of sales through this channel accounts for up to 90 percent of sales in some European countries including Portugal and Switzerland. In France, 70 percent of sales are made through the wholesale channel. Importers and wholesalers supply the professional market directly and also supply all other trade channels that supply the private market.

The increase in import of recent years also has to do with importers of sanitary ware and ceramic tiles increasingly branding imported goods with their own brand name. One example is the Dutch importer Pflieger which is currently selling imported sanitary ware under its own name.

In general, importers and other trade partners expect a flexible and service oriented contact with the manufacturer in order to limit their stock and to reduce the delivery time to their customers (also for small projects) simultaneously. Reliability is therefore the most important requirement, in particular in the UK, the Netherlands, Germany and France. This is also why most of the importers strive for a reduction of the number of manufacturers.

Retailer
The retail market can be roughly divided into two segments; the low and the high segment. The low segment is mainly serviced by the Do-It-Yourself (DIY) outlets. The DIY outlets mostly sell sanitary ware and ceramic tiles in the low and middle segments. DIY markets are visited by various types of small contractors and semi-professionals, and handy consumers installing their bathrooms and kitchens themselves. Sales of sanitary ware and ceramic tiles through this channel vary across Europe with the largest markets in Germany, France and the UK. The sales of sanitary ware and ceramic tiles have increased over the past years. Although growth in the DIY market is declining in some important EU15 countries like Germany and the UK, sales of sanitary ware and ceramic tiles through this channel is generally increasing. Consolidation across a number of DIY markets in the EU appears inevitable over the next years. The German market has seen some large mergers in recent years. DIY markets can be best targeted through importers/wholesalers, manufacturers and trade associations.

The high segment is serviced by the boutiques; either specialized in bathroom, kitchen or tiles. These boutiques are particularly popular in the UK. This channel accounts for a maximum of five percent of total sales. Boutiques sell and install bathroom suites as ‘fashion goods’, and specialise mostly in up-market brands. They present their products in the frame of a total concept by showing total bathrooms, kitchens and toilets in their own showrooms. Service and after-sales care encompass a very important aspect of the bathroom boutiques. This requires a close relationship between manufacturers and national and local distributors, which makes it more difficult for foreign manufacturers to enter the market.

Installer
Another channel to be mentioned is the installer. Installers install and repair bathrooms, kitchens and tiles in houses and buildings. In most cases, installers buy directly from the manufacturers or importers/wholesalers. Some installers have their own showroom or shop. Others send their customers to the wholesale showroom where they are able to choose particular products. Installers only have a small piece of the market and can be targeted through importers/wholesalers and trade associations.

Independent buyers
These are usually large construction companies or governmental organisations importing directly from DC. Although few parties have the expertise to do so, orders are generally large. Therefore, estimations are that 5% of the imported sanitary ware and ceramic tiles is purchased by these independent buyers. Agents or well-established manufacturers in the country of export are most likely to be selected by independent buyers to handle the orders. Since they buy sanitary ware and ceramic tiles in bulk, independent buyers will demand large discounts.

The close relationship between manufacturers and national and local trade channels distributors makes it difficult for foreign manufacturers to enter the market. The professional building sector tends to make exclusive agreements with suppliers, through discounts and credit arrangements. It is also common for installers (e.g. plumbers) to deal principally with a limited number of suppliers with a strong brand. Some of them have a shop on their own and wish to compete on a price basis and are also willing to buy and sell unknown brands. In that case they prefer to purchase at an import organisation. This seems to be the case for most of the European countries, although the phenomenon of small shops in Italy and France is relatively strong.

In all distribution channels the communication with the manufacturer is of great importance. In order to consolidate the relationship of the importer, agent or wholesaler with their main customers, frequent personal contact is crucial. The feedback from the market is also an important issue in order to be able to optimise the delivery programme according to market developments.

The Internet is gaining ground as an instrument for communication, but personal contact will always remain of great importance. Especially in the southern European countries, personal contact is crucial. Nevertheless e-commerce is growing rapidly in Western Europe. The UK and Germany are up front, but also in countries like Italy and Spain e-commerce is growing at a fast pace. A lot of trading companies nowadays demand a certain Internet protocol, for example for ordering, specifications, payment, support, etc.

Another aspect of the distribution system is the influence of certain indirect partners in building. Architects, consultants, local authorities, will never purchase products themselves, but they may have a major influence on the material that will be purchased by the general contractor. This influence differs from country to country. In Italy and Spain the influence of the architect is quite strong. The architect is especially interested in colour, structure, form and durability. In Germany, the role of the architect is also strong since he has a responsibility towards the end result. Legal responsibility of the architect causes “no risk” behaviour. The German architect will pay special attention to durability and general quality, rather than form and colour. A wide body of standardisation requirements is further restricting the freedom of choice in Germany.

In The Netherlands and to some extend also in the UK, houses traditionally have been erected on the basis of an initiative of professional project development companies or housing associations. The individual consumer (buyer or tenant) was therefore not able to make his own choices in the field of sanitary ware and tiles. As a consequence, the replacement market for tiles and sanitary ware is rather big in these countries.

Although limited in some countries, the influence of the consumer is rapidly growing in many countries in Europe and nowadays many of the purchases of sanitary ware and ceramic tiles are done and chosen by the consumer or the architect themselves. In the non-residential market (commercial buildings), sanitary ware and ceramic tiles are selected by the architect and purchased by the contractor. Generally in this case, the products are supplied by the wholesaler. In France, the influence of the house-owner is dominating and sanitary ware and ceramic tiles are almost regarded as consumer products.

Distribution channel but suitable for DC exporters
For the manufacturer in DC, there are some very important differences between the various distribution channels. Firstly, the wholesaler channel includes more levels down the distribution chain, sometimes a product going through many distributors before it reaches retail and each of which increases the cost of the product. Products in the DIY market are generally sold at a lower price, sometimes reached directly from manufacturers. Here purchasers are relatively more price conscious.

Secondly and more importantly, there are fewer obstacles to trade in the DIY market than in the wholesale market, because national quality certificates are not essential in the first. Individual buyers do not necessarily demand quality marks, although these might have a marketing advantage. Wholesalers, however, prefer to buy products with a national quality mark, because professional installers demand them, and they are necessary for many public works projects or are specified and required by architects. Also, the confidence in strong brands plays a major role. Apart from this, wholesalers tend to do business with a limited number of suppliers in order to control their overheads.

Another possible channel that may be pursued by DC manufacturers are the European producers. The rationale is that European producers are not capable of producing the full product range themselves but they do want to have a full product range to offer to their clients.

The trend to create certain atmospheres, which can then be sold as total concepts, provides DC manufactures with another opportunity to enter the EU market. Trends for these concepts are in most cases spotted by so-called trend watchers, who are consulted by the industry. It is very well possible that manufacturers from DC are able to fill in a complete programme for trends often indicated by names like colonial, nature, adventure, etc.

In conclusion, the DIY channel is the most important distribution channel for DC exporters. Ways to explore the DIY channel are through an importer, a manufacturer, or through trade associations. An importer may buy a wider variety of products, whereas a manufacturer often uses cheaper products to complete its assortment. Manufacturers might also be interested in specialities completing their programme.

If a DC manufacturer approaches a European manufacturer, it should be kept in mind that the product needs to fit the exact demands of the manufacturer, and that the product will be used in addition to the manufacturer's product range. In this case, the product will probably be presented under their own, European brand. This will be especially attractive for products in which the European manufacturer is unable to produce at a low price or does not have the particular production facilities.

Both Italy and Spain do have a large production capacity. For that reason both markets seem to be somewhat protective and difficult to enter for producers from DC. The same can be said to a certain extent for the UK market. In general, it can be concluded that the other countries are more receptive for new market players. In Italy, Spain and the UK the entrance via local manufacturers is still possible though.

Although trade associations offer a third possibility to approach the DIY market, these often depend on their relationship with importers and manufacturers. It is therefore better to approach the last two initially. It is not expected that exporters from DC can compete with the more expensive products sold via the wholesale channel or bathroom boutiques as traders require high quality goods and a high service level from producers.

This also applies to the distribution channel through installers with an own shop and showroom. Since some of them wish to compete on the basis of price this might provide opportunities. As a supplier, it is however better to do business with importers, who have their established network of shop owners. Taking into consideration the small scale of most installers and shop owners, a direct approach would be too laborious.

Concerning the EU10 countries of Eastern Europe, there will be an increasing influence from their side on the market due to expanding trade, caused by the levelling of trade barriers. Traditionally, this trade was directed to the east. Through their accession to the EU, it is expected that their exports to the west of Europe will increase in the future. Now building products must comply with European standards and this will be a big effort for the coming years.

Wages will also be affected as they will be lower than in the original member states and therefore products will be more interesting for export. It can be expected that they will find their way to DIY shops and wholesale stores. On the other hand, increasing income in these new EU countries will increase the demand for more expensive tiles and sanitary ware, especially luxury brands from mainly Italy and Germany.

In Poland, one of the new member states, Cersanit is a large (market leader) and technically advanced manufacturer of sanitary ware and ceramic tiles. They have for example the integrated quality control system ISO 9001 and 14001.

Poland is interesting as a big market. Ceramic tiles, sanitary ware and bathroom accessories are sold through small speciality shops, mostly located in cities. DIY products are sold primarily through large stores located on the outskirts of cities. These are also sold through factory outlets. They supply distributors, warehouses and individual clients and have competitive prices, usually the lowest on the market. Networks of large stores purchase about 90 percent of their products directly from manufacturers. The rest is bought from warehouses. There are 8 large store networks in Poland that began operations in the mid-nineties and operate through more than 100 storefronts.

3.2 Price structure

Different trade channels mean different export prices and margins for your sanitary ware and ceramic tiles products. The market prices are not set by any (inter)national organisations or institutions. Prices are set in individual deals and contracts between suppliers and buyers. The price the consumer pays generally consists of the following components:

Production cost price, including transport to port (i.e. FOB)
+ Transportation and insurance costs (i.e. CIF)
+ Other costs (storage, banking, marketing)
+ Import duties
Landed Cost price
+ Margin importer, wholesaler, distributor, end-user or retailer
+ Value Added Tax (VAT)
Consumer price

The margin for the exporter and the other intermediaries in the trade channel are difficult to determine, because they are influenced by many factors, including but not limited to:

- The size of the order (the larger the order, the smaller the margin);
- The number of links in the trade channel used to market the product;
- The quality and exclusivity of the product (exclusive products allow high margins);
- Availability of the product;
- Added value deriving from the processing operations such as cutting, sawing, polishing, carving etc… (a custom-made kitchen countertop will have a higher margin than a standard tile)

The value that is added within the trade channels arises from the logistics and services provided in the channel. These functions range from distribution and repackaging to the preparation of total sales formulae and extensive after sales services.
The box below gives an assessment of the ranges of mark-ups per intermediary.

Intermediary	**Low**	**High**
Wholesaler/Importer	10%	40%
Buying co-operative	10%	20%
Retailer	30%	50%
Installer	30%	50%

It is important to note that the increasing international competition presses the prices down and reduces the exporter's margin. In order to ensure the profitability of their businesses, exporters are pushed to offer more selective products (if possible), or more frequently to highly increase the efficiency of their production unit and/or go for more volume. This means that in some countries where companies did not reinvest in becoming bigger, these companies slowly found themselves to be in a situation of low margin-low volume, thus eroding competitiveness and threatening survival.

Margins in the industry have decreased in recent years due to rising raw material and energy costs and intense price competition. Raw material prices are likely to remain high over the next year or two, driven by supply shortages, which will continue to add pressure to margins. These factors are likely to maintain pressure on price levels in the market. The rising energy costs have especially had a negative impact of the margins in the ceramics industry.

3.3 Useful sources

Some useful sources are listed below. For more information please refer to the CBI country surveys covering the market in individual EU countries for names and websites of interesting players active in the sanitary ware and ceramic tiles market.

- Leroy-Merlin - www.leroymarlin.com - DIY store active throughout Europe
- Vinci - http://www.vinci.com – large construction company and independent buyer.
- ATB Import - http://www.mexicotto.com/ - importer of terracotta tiles
- China Source and Supply - http://www.chinasourceandsupply.com/ - importer of a large variety of products from China including sanitary ware and ceramic tiles
- Camilu - http://www.camilu.com/ - importer of a wide range of ceramic tiles
- WRCO - www.wrco.it – imports and exports sanitary ware

4 Trade: imports and exports

4.1 Total EU imports

Table 4.1 EU Imports of sanitary ware and ceramic tiles 2002-2006, € million / 1,000 tonnes

	2002		2004		2006		Average annual % change in value
	volume	value	volume	value	volume	value	
Total EU, of which from	6,205	5,270	8,430	6,532	6,453	7,365	9
Intra-EU	5,212	4,440	6,802	5,307	4,395	5,875	7
Extra-EU ex. DC*	206	310	240	329	193	254	-5
DC*	786	519	1,387	895	1,865	1,234	24

* Developing countries
Source: Eurostat (2007)

- In 2006, the EU imported € 7.3 billion of sanitary ware and ceramic tiles, which represents 6,453 thousand tonnes. The imported goods consisted of sanitary ware (49%) and ceramic tiles (51%).
- The average annual growth rate of 9% between 2002 and 2004 was not only the result of growing exports of the EU15 countries but also because of the accession of the EU10 countries. The EU10 countries registered a 61% growth rate, leading to a 13% growth between 2004 and 2006 for the whole of the EU (no Eurostat figures were available for the EU10 countries before 2004). This illustrates the dynamism of the sanitary ware and ceramic tile sector in those countries where the construction sector is strongly pulling in demand.
- In 2008, the sanitary ware and ceramics market is expected to reach around € 7.9 billion. This calculation does not include the countries Romania and Bulgaria that entered the EU in 2007.
- Intra-EU countries were the biggest suppliers to the EU accounting for 80% of the total imported value. Intra-EU countries imported 87% of ceramic tiles and 72% of the sanitary ware. Intra-EU imports have increased since 2002 with 34%, however, market share decreased with 3%.
- The European top 5 importers in terms of value are France (19%), Germany (14%), the UK (14%), Spain (7%), Belgium (6%), Italy (5%), The Netherlands (4%). Those countries represent 69% of the total value of sanitary ware and ceramic tile imports into the EU. The next five importers are Poland, the UK, the Czech Republic, the Netherlands and Sweden with a market share of 2% each. These 10 largest importers account for about 71% of the imports to the EU.
- Imports from DC account for 17%. The market share of DC increased by 138% between 2002 and 2006, which is more than the growth of imports in the total EU market (40%). This has been at the expense of intra- as well as extra-EU countries.
- Besides the increase in consumption, outsourcing and relocation of production have had a positive impact on import levels. Although DC, as a source of EU imports, still have a minor share in the total import value, their exports into the EU have been growing significantly in the last several years.
- Among the DC, China, followed by Turkey, has seen a significant increase in its exports of sanitary ware and ceramics to the EU with a growth of 610% and 40% respectively.
- The main geographical zones competing for the EU market of sanitary ware and ceramic tiles are DC and intra-EU countries. The most important intra-EU suppliers are (in value 2006):
    - Italy (28%: sanitary ware 6%; ceramic tiles 22%)
    - Germany (12%: sanitary ware 10%; ceramic tiles 2%)
    - Portugal (4%: sanitary ware 2%; ceramic tiles 2%)
    - France (3%: sanitary ware 2%; ceramic tiles 1%)
    - Poland (2%: sanitary ware 1%; ceramic tiles 1%)

The share of DC of EU imported value is the following (in value 2006):

- China (9%: sanitary ware 6%; ceramic tiles 3%)
- Turkey (4%: sanitary ware 2%; ceramic tiles 2%)
- Egypt (1.3%: sanitary ware 1%; ceramic tiles 0.3%)
- Brazil (0.5%: sanitary ware 0.2%; ceramic tiles 0.3%)
- Morocco (0.3%: sanitary ware 0.3%; ceramic tiles 0.03%)

4.2 EU imports per product group

Since 2000, China has registered a significant growth of its imports to the EU and has thereby outpaced Turkey. The success of China in trading finished products is symptomatic of the growing importance of the price competitiveness: to this end, DC have an undeniable cost advantage over their direct competitors approaching the EU markets. Although there have been some concerns about the quality of sanitary ware and ceramic tiles imported from DC (especially from China), the adequate technology is becoming more and more available to anyone, allowing exporting quality and capacity to find significant market openings.

Table 4.2.1 EU imports and leading suppliers for sanitary ware and ceramic tiles 2002 - 2006, share in % of value

	2002 € mln	2004 € mln	2006 € mln	Leading suppliers to EU in 2006 Share in %	Share (%)
Total sanitary ware and ceramic tiles	5,271	6,533	7,365		
Intra EU	4,440	5,308	5,760	Italy (29%), Spain (14%), Germany (12%), Portugal (4%), France (3%)	78%
Extra EU	311	330	370	Switzerland (1%), Bulgaria (1%), U.A.E (0.9%), Romania (0.5%), USA (0.3%)	5%
DC*	520	895	1,235	China (10%), Turkey (4%), Egypt (1%), Brazil (0.5%), Morocco (0.3%), Thailand (0.3%), South Africa (0.3%), Tunisia (0.2%), Croatia (0.2%), Malaysia (0.2%)	17%
Plastic sanitary ware	921	1,245	1,438		
Intra EU	723	925	1,045	Germany (25%), Italy (10%), UK (6%), France (5%), The Netherlands (5%)	72%
Extra EU	99	105	99	Switzerland (3%), USA (1%), Bulgaria (0.8%), San Marino (0.5%), Romania (0.4%)	7%
DC*	100	215	295	China (13%), Egypt (4%), Turkey (1%), South Africa (1%), Croatia (1%), Tunisia (0.3%), India (0.2%), South Korea (0.1%), Malaysia (0.1%), Serbia (0.1%)	21%
Ceramic sanitary ware	938	1,170	1,450		
Intra EU	689	797	966	Germany (13%), Italy (10%), Portugal (8%), France (7%), Spain (7%)	61%
Extra EU	80	97	114	Bulgaria (3%), Romania (2%), U.A.E. (1%), Switzerland (1%), Norway (0.2%)	8%
DC*	168	276	370	China (10%), Turkey (9%), Egypt (2%), Morocco (2%), Brazil (1%), Thailand (0.6%), Malaysia (0.2%), Indonesia (0.2%), Croatia (0.2%), Tunisia (0.1%)	26%
Iron/Steel sanitary ware	470	594	710		
Intra EU	348	445	497	Germany (23%), Italy (11%), Spain (6%), The Netherlands (4%), Portugal (4%)	70%
Extra EU	81	75	79	Switzerland (6%), Taiwan (3%), USA (1%), Norway (0.6%), Hong Kong (0.3%)	11%

DC*	41	75	134	China (16%), Turkey (2%), Thailand (0.4%), India (0.3%), South Africa (0.2%), Croatia (0.2%), Philippines (0.2%), Vietnam (0.1%), Iran (0.1%), South Korea (0.03%)	19%
Unglazed ceramic tiles	506	663	800		
Intra EU	486	625	730	Italy (61%), Germany (9%), Spain (8%), Portugal (3%), France (3%)	91%
Extra EU	8	7	6	U.A.E. (0.5%), USA (0.1%), Switzerland (0.1%), Bulgaria (0.05%) Norway (0.04%)	1%
DC*	11	31	64	China (6%), Turkey (1%), Indonesia (0.2%), Brazil (0.2%), Malaysia (0.1%), Tunisia (0.1%), Morocco (0.04%), India (0.03%), Bosnia and Herzegovina (0.02%)	8%
Glazed ceramic tiles	2,436	2,860	2,966		
Intra EU	2,194	2,516	2,540	Italy (42%), Spain (26%), Germany (4%), Portugal (4%), Czech Republic (2%)	84%
Extra EU	43	46	71	U.A.E. (1%), Bulgaria (0.4%), Japan (0.1%), USA (0.1%), Romania (0.1%)	3%
DC*	199	298	160	Turkey (5%), China (5%), Brazil (0.7%), Malaysia (0.4%), Tunisia (0.3%), Thailand (0.3%), Indonesia (0.2%), Egypt (0.2%), Croatia (0.2%), Morocco (0.1%)	13%

Source: Eurostat (2007)
*Developing Countries

- Import of sanitary ware increased by 54% and that of ceramic tiles by 28%.
- Between 2002 and 2006, imports of all product groups showed a significant increase: plastic sanitary ware (56%); ceramic sanitary ware (55%); iron/steel sanitary ware (51%); unglazed ceramic tiles (58%); glazed ceramic tiles (14%).
- The most important products imported in the product category sanitary ware in 2006 were porcelain and china sanitary ware (€ 911 million); plastic baths, shower and washbasins (€ 646 million) plastic bidets, lavatory pans, flushing cisterns and similar sanitary ware (€ 590 million) and other ceramic sanitary ware (€ 539 million). The imports of ceramic tiles consisted for most part of glazed ceramic flags and paving, hearth or wall tiles (€ 2,844 million) and unglazed ceramic flags and paving, hearth or wall tiles (€ 779 million).
- Growth of imports of products from DC was considerably bigger in each product group: plastic sanitary ware (195%); ceramic sanitary ware (120%); iron/steel sanitary ware (227%); unglazed ceramic tiles (464%); glazed ceramic tiles (87%).

Note: imports by individual member states per product group are given in the CBI market surveys covering the sanitary ware and ceramics market in individual countries.

4.3 The role of developing countries

Table 4.3 Imports of sanitary ware and ceramic tiles from developing countries 2002-2006, € million / 1,000 tonnes

	2,002		**2,004**		**2,006**		**Average annual % change in value***
	Value	**Volume**	**Value**	**Volume**	**Value**	**Volume**	
Total EU Imports, of which	520	786	895	1,388	1,235	1,865	24
Italy	38	156	62	182	111	189	30

United Kingdom	131	185	236	361	295	393	23
Germany	121	74	156	132	156	216	7
Spain	46	40	80	88	147	198	34
Belgium	21	48	51	68	77	122	38
The Netherlands	22	30	45	59	48	74	22
France	66	114	114	166	132	188	19
Greece	29	87	52	168	56	169	18
Ireland	7	7	15	14	28	36	43
Denmark	7	10	12	14	19	16	28
Austria	14	8	15	8	20	15	10
Sweden	11	14	19	25	30	36	30
Portugal	2	2	2	3	4	7	20
Finland	6	12	9	20	12	22	18
Luxembourg	0.3	0.06	0.09	0.02	0.9	0.1	32
Malta	n.a.	n.a.	2	4	4	9	51*
Estonia	n.a.	n.a.	1	2	3	6	67*
Latvia	n.a.	n.a.	3	6	7	13	67*
Lithuania	n.a.	n.a.	4	6	6	13	28*
Poland	n.a.	n.a.	13	24	34	67	61*
Czech Republic	n.a.	n.a.	5	5	12	13	53*
Slovakia	n.a.	n.a.	0.7	1	5	8	177*
Hungary	n.a.	n.a.	7	18	10	17	16*
Slovenia	n.a.	n.a.	0.7	3	5	7	177*
Cyprus	n.a.	n.a.	4	11	10	31	64*

* For the 10 new member states, this percentage only represents the change between 2004 and 2006
n.a.: not available
Source: Eurostat (2007)

- In 2006, DC exported € 1.2 billion worth of sanitary ware and ceramic tiles to the EU, (1,865 thousand tonnes) representing 17% of all imports. Imports from DC increased in all 25 Member States every year.
- In value, the products imported from DC consisted for 65% of sanitary ware products; ceramic tiles accounted for 35%.
- Between 2002-2006, the sanitary ware imports from DC increased by 159%; the imports of ceramic tiles by 107%. The market share of sanitary ware products from DC increased from 13% to 22% and that of ceramic tiles from 7% to 12%.
- The most important importers of products from DC are the UK (24% of total UK imports), Germany (13%), Spain (12%), France (11%) and Italy (9%) and to a lesser extent Belgium (6%), Greece (5%) and The Netherlands (4%). The market share of DC taken from the 5 major EU importers increased from 8% to 20% between 2002 and 2006. Notable changes were Spain's increase of imports from DC (220%) which is the highest increase registered by an EU country and Germany's increase (30%) which was the smallest increase in the EU.
- The EU10 countries account for 8% of total EU imports from DC. Poland alone represents 3% and therefore has a place in the EU25 top ten. Generally, imports from DC showed the biggest growth in the EU10 countries. Slovenia and Slovakia registered annual growth rates of 177%.
- The overall increase in imports is due mainly to increases in imports from DC. However, average prices of products from DC have dropped significantly. DC are competing against each other. In contrast, the price of imported goods from intra-EU and extra-EU countries increased.

Note: the imports per product group for each EU Member State are given in the CBI market surveys covering the market in individual countries.

4.4 Exports

In 2006, the EU25 exported 9,928 thousand tonnes of sanitary ware and ceramic tiles, representing a value of € 10.6 billion. Sanitary ware accounted for 35% of total exports and ceramic tiles for 65%. Around 62% of the EU exported value remained within the EU25; 13% was exported to DC and 25% to extra-EU countries. The overall exports from the EU have been increasing significantly with an average annual rate of 5%.
The largest EU exporters are (2006 in value):

- Italy (40%)
- Spain (23%)
- Germany (12%)
- Portugal (4%)
- France (3%)
- Poland (3%)

Compared to 2002, Italy lost 3% market share while Spain gained 2%. No other major changes have taking place in the ranking in recent years.

Table 4.4 EU exports of sanitary ware and ceramic tiles 2002-2006, € million / 1,000 tonnes

	2,002		2,004		2,006		Average Annual % change in value
	Volume	Value	Volume	Value	Volume	Value	
Total EU exports of which	14,412	8,906	15,072	9,539	9,928	10,637	5
Intra EU25	7,084	5,136	7,648	5,776	2,427	6,604	6
Extra EU ex. DC*	4,168	2,518	4,429	2,585	3,855	2,654	1
From DC*	3,103	1,213	2,947	1,143	3,133	1,350	3
To DC* in %	22	14	20	12	32	13	

*Developing countries
Source: Eurostat (2007)

The growth between 2004-2006 (12%) was bigger than the growth between 2002-2004 (7%). The increase of exports (97%) of the EU10 countries in the period 2004-2006 has contributed mostly to the expansion of exports.

The products exported are plastic sanitary ware (14%), ceramic sanitary ware (13%), iron/steel sanitary ware (8%), unglazed ceramic tiles (15%) and glazed ceramic tiles (50%).

4.5 Opportunities and threats

+ Because of competitive prices and improved quality, the market share of DC has increased in each product group. This increase is significant in some of the big EU importing countries like Germany and France.
+ Total imports, between the years 2002-2006, of sanitary ware increased by 159% and ceramic tiles by 107%. This shows a fast growing market for DC exporters to tap into.
+ The market share of sanitary ware products from DC increased from 13% to 22%; that of ceramic tiles from 7% to 12%; this shows a significant opportunity for exporters from DC.
+ The growth in imports exceeds the growth in production implying that imports are increasingly important to the EU market. Growth in consumption will therefore mainly benefit the DC exporters.
+ The market share of DC has expanded explosively over the years.
- The average price of imported products has dropped significantly. This development is expected to continue as the lower segment of the market will become more saturated in coming years.

4.6 Useful sources

- EU Expanding Exports Helpdesk
  ➔ http://export-help.cec.eu.int/
  ➔ go to: trade statistics
- Eurostat – official statistical office of the EU
  ➔ http://epp.eurostat.cec.eu.int
  ➔ go to 'themes' on the left side of the home page
  ➔ go to 'external trade'
  ➔ go to 'data – full view'
  ➔ go to 'external trade - detailed data'

5 Price developments

5.1 Price developments

In recent years a number of important changes have taken place throughout the EU greatly affecting the price of sanitary ware and ceramic tiles. At the root of these changes has been the cheap supply of low- and middle-priced products from DC, especially China. This has forced European manufacturers to seek salvation in the higher end of the market and products with a higher added value. Moreover, Western European manufacturers are increasingly moving and outsourcing production of their low- and middle-priced products to Eastern Europe and other parts of the world where wages are relatively low. The increased competition in the upper and lower segments has resulted in a declining middle market segment.

Figures indicate that the growth of imported value (119%) from products from DC into the EU15 countries was slightly larger than that of volume (114%). This implies that the **average** price of products from DC increased slightly. In countries, such as France, the UK, Denmark and Belgium prices went up. The increase of prices might be a result of better quality products coming from DC however increased competition keep pressure on the prices.
Prices went down in The Netherlands, Italy, Spain, Portugal and Ireland. Price developments of the EU10 countries can only be followed from 2004 onwards; however, in general the same trend is noticeable; value increased by 140% and volume by 130%. In Latvia, Slovakia, Slovenia and Hungary prices went up. In Poland, the Czech Republic, Estonia, Cyprus and Malta prices decreased.

An indication of the price-level that prevails in the European market for sanitary ware is presented below. The prices are advised retail prices between 2004-2007 offered by Sphinx, a high-class manufacturer. The selection is made from their standard product line.

	Prices in € (incl. 19% VAT)	
Product	**2004**	**2007**
Universal bathtub, 175x75 cm, incl. legs (Sphinx 340 series)	480	513
Universal shower tray 90x90 cm (Sphinx 340 series)	254	351
Universal bathtub, duo-bath 180x80 cm, incl legs (Sphinx 340 series)	591	632
Washbasin (Sphinx 340 series)	143	165
Toilet combination (Sphinx 340 series)	417	502
Wall toilet (Sphinx 340 series)	222	256
Bidet (Sphinx 340 series)	204	235
Urinal (Sphinx 360 series)	243	280

An indication of the price-level that prevails in the European market for ceramic tiles is presented below. The selection is made from the standard product line of high-end manufacturer Royal Mosa.

	Price in €/m² (incl. 19% VAT)	
Product	**2004**	**2007**
Floor tile (Architectual Whites) 15x15 cm	21	24
Wall tiles (Galactica) 15x20 cm	21	33
Floor tiles (Unisol) 20x20 cm	30	34
Wall tiles (Argentum) 25x33 cm	31	36
Floor tiles (Xtreme) 45x45 cm	53	61
Wall tiles (Piemonte) 30x45 cm	32	37

DIY shops are often characterised by cheaper prices, due to their focus on the low- and middle-end of the market. Goods are often bought in bulk, and prices depend strongly upon the type and quality of tiles. An indication of the price range that prevails in the EU market for ceramic tiles is given in the table below. The selection below is based on the prices of standard tiles.

Product	**Price in €/m² (incl. 19% VAT)**
Floor tiles 10 x 10 cm	55 – 64
Floor tiles 20 x 20 cm	18 – 33
Wall tiles 15 x 20 cm	18 – 42
Floor tiles 30 x 60 cm	50 – 125
Wall tiles 45 x 45 cm	48 – 74

5.2 Useful sources

The best ways of getting price information on sanitary ware and ceramic tiles are directly approaching EU importer or wholesalers and visiting trade fairs. The following site provides an overview of prices:

- Koninklijke Sphinx (Dutch producer of sanitary ware):
  www.sphinx.nl → go to 'Informatie → go to 'Sphinx adviesprijzen'
- Koralle (German producer of sanitary ware)
  http://www.koralle.de/ → 'Produkte' → go to 'Preislisten und Prospekte'
- Royal Mosa (Dutch ceramic tiles producer):
  www.mosa.nl

6 Market access requirements

As a manufacturer in a DC preparing to access EU markets, you should be aware of the market access requirements of your trading partners and the EU governments. Requirements are demanded through legislation and through labels, codes and management systems. These requirements are based on environmental, consumer health and safety and social concerns. You need to comply with EU legislation and have to be aware of the additional non-legislative requirements that your trading partners in the EU might request.

For information on legislative and non-legislative requirements, go to 'Search CBI database' at http://www.cbi.eu/marketinfo, select natural stone and the EU in the category search, click on the search button and click on market access requirements.

Additional information on packaging can be found at the website of ITC on export packaging: http://www.intracen.org/ep/packaging/packit.htm

Information on tariffs and quota can be found at http://export-help.cec.eu.int/

Packaging
There are many ways of packaging sanitary ware and ceramic tiles, depending on the product, the buyer and the legislation. The exporter should reach an agreement with the importer as to which package to use. Intermediate traders sometimes repackage products.
As there are no standards for packaging sanitary ware and ceramic tiles a few general remarks concerning packing the products for shipment are provided. In general the products are stacked on pallets. Each pallet should not weigh more than 1,500 kilograms since forklift truck are often not capable to lift pallets exceeding this amount. The so-called Euro-pallet (120 cm x 80 cm) is commonly used for relatively small products.

The overall trend in Europe is towards facilitating re-use and recycling of packaging through incentives. In order to harmonise the different forms of legislation, the EU has issued a directive for packaging and packaging materials (Directive 94/62/EC) in which minimum standards are regulated. With effect from 30 June 2002, maximum concentrations of lead, cadmium, mercury and hexavalent chromium allowed in packaging are 100 ppm.

It is worth noting that German regulations stipulate products must be packed for transport in reusable Euro pallets. The Euro pallet is a standard size such that two Euro pallets can be put inside a truck sideways and three in longitudinal direction. In this way the number of pallets transported by a truck can be optimised. European manufacturers believe that the product cost for water closets is increased by up to 5 percent due to increases in transportation cost arising from the compulsory use of Euro pallets for exports to Germany. This estimate depends on the type of product, and assumes pallets cannot be stacked one on top of another. Further, the need for packaging that uses recyclable material can be a source of additional transport costs to Germany. Austria has come the closest to copying Germany in its "manufacturers' responsibility" system for packaging. Industry is solely responsible for ensuring collection of used packaging.

Marking and labelling
CE-marking system with regard to construction products (incl. sanitary ware and ceramic tiles) is being regulated by Directives 89/106/EEC and 93/68/EC and by decision 93/465/EC concerning the modules for the various phases of the conformity assessment procedures and the rules for the affixing and use of the CE conformity marking. The CE marking is neither a mark of origin, nor a quality mark, and producers from third countries are enabled to label their products with CE mark. The CE-marked product may also bear different marks arising from other systems, such as a voluntary quality mark or a voluntary standardization mark concerning non-harmonized aspects.

Green Dot
The Green Dot label is increasingly essential for marketing products in the EU countries due to growth of waste and disposal problem concerns. The license fees to use the symbol finance the separate collection, sorting and – in the case of plastics – recycling of sales packaging.
Next to Germany, the initiator, to date 19 countries are already using the Green Dot as financing mark for the collection, sorting and recycling of sales packaging. EU15 countries Austria, Belgium, France, Germany, Greece, Ireland, Luxembourg, Portugal, Spain and Sweden have set up private systems for this purpose, but also the EU10 countries Czech Republic, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia have followed suit.
According to Green Dot classification, sanitary appliances and ceramic tiles fall under "Do-it-yourself articles, paints, tools, etc" product group. Exporters from third countries cannot apply for a license by Dual System and they should have recourse to the importer from the European economic area, the latter being enabled to apply. More information on Green Dot can be found at http://www.greendot.ie/specs.html.

Firms entering the EU market are strongly advised to examine EU as well as national law. Each European country is integrating the rulings of the EU into its national legislation. For example, in most of the EU countries labels must be written in the national language. As much as the legislation regarding labelling is still in the development stage, EU labelling regulations and standards need to be carefully monitored.

7 Opportunity or threat?

In the last years, global growth of the sanitary ware and ceramic tile industry, both in terms of production and demand, has played in favour of DC. Some of them have indeed gained significant market shares thanks to their increased price competitiveness and the improvement of their products.

The current developments in the global and more specifically in the European industry are expected to continue and encourage exporters of DC to increase their presence in the EU markets. As the sanitary ware and ceramic tile industry is facing fundamental problems of rising costs, DC producers can take advantage of the continuing globalisation of and consolidation in the industry.

DC have actually already gained significant ground in Europe in both the sanitary ware as well the ceramic tile market. Such success stories have been recorded in recent years and confirm the increasing penetrability of the EU market for DC exporters which are now able to offer a wider range of products. The increasing share of DC imports within EU is indicative of this.

Still, globalisation is transforming the sanitary ware and ceramic tile industry at a high speed. As a result, advanced technology is broadly available to most of the players, producers worldwide are in direct competition, prices and margins are decreasing. Also, the traditional roles within the trade chain are changing towards more complexity: wholesalers and other major players are moving backwards the supply chain and increasing their control on the production level.

In this context, DC that have increased their presence in the EU demonstrated:

- competitive prices
- a bigger investment capacity in production, processing technology
- an increased product quality
- the potential to meet fast-moving requirements of the market in terms of product nature, colour, shapes and forms
- a real pro-activity in finding and maintaining business relationships with EU partners and serious investment in commercial efforts
- a constant professionalism demonstrating the ability to fulfil quality, packaging, and delivery criteria.

Given the current trends in the EU sanitary ware and ceramic tile market, such prerequisites are increasingly important for exporters who want to access the EU markets. Therefore, if the usual terms of the international competition (price, timing and supplying methods) still operate, newcomers into the EU market should also be ready to fit in with a high risk scene, which demands a scale size, an operating efficiency and the ability to float in conditions that are much more unstable and unsettled than in the past.

This overview of the ideal conditions that exporters from DC should gather in order to ensure long term profitability when trading with the EU should of course be put into perspective, looking at individual specific situations: the same development or trend can be an opportunity for one exporter and a threat for another. Exporters should therefore analyse whether the developments and trends discussed provide opportunities or threats and make the decision of whether to export to the EU.

Appendix A Product characteristics

- **Sanitary ware**

The segmentation of the sanitary ware market in this survey is based on the type of material used. Within the product group type of use is the criteria to further categorize the products. The product groups are:

- o Plastic sanitary ware; baths, sinks and lavatory products made from plastic
- o Ceramic sanitary ware; baths, sinks and lavatory products made from porcelain, china and other ceramic material
- o Iron or steel sanitary; baths, sinks and other sanitary ware made from (enamelled) cast iron, stainless steel and other types of iron

Sanitary ware products that falls outside the scope of this survey are:

- o Ceramic and plastic soap dishes, sponge holders, tooth-brush holders, towel hooks and toilet paper handles
- o Various steel and iron parts of sanitary ware; cans, boxes and other containers of heading 7310, small wall cabinets for medical supplies or toiletries and other furniture of chapter 94, and fittings

- **Ceramic tiles**

The ceramic tile market has been divided using type of finishing and more specifically type of use. The ceramic tile market is made up of two product groups, namely:

- o Unglazed ceramic flags and paving, hearth or wall tiles; made from earthenware, stoneware and other ceramics
- o Glazed ceramic flags and paving, hearth or wall tiles: made from earthenware, stoneware and other ceramics

This segmentation covers all ceramic tiles excluding:

- o Refractory tiles
- o Technical tiles
- o Ornamental tiles
- o Roofing tiles
- o Tiles made into stands
- o Tiles made of siliceous fossils meals and similar other siliceous earths

- **Product codes**

Different codes have been used in the different sections of the survey: Prodcom codes (consumption/production) and HS codes (import/export). The segmentations with different codes are almost identical. Nonetheless there are some differences. The segmentation of ceramic tiles is more elaborate in the Prodcom code segmentation than in the one using HS codes. On the other hand product definitions in the HS code segmentation are more detailed. Therefore, two tables have been included in this Appendix; one for HS codes and one for Prodcom and HS codes.
Important to keep in mind is that the products defined in the tables below are mostly aggregates. An analysis of the data provided based on these definitions will only lead to a partial overview of the sanitary ware and ceramic tile market. Therefore, in order to learn more about the market of a specific product additional research is advisable.

The table below describes the segmentation used in the Import/Export section.

Product category	Products group	Products	Products definition	HS codes
Sanitary ware	Plastic sanitary ware	Plastic baths, shower and washbasins	Baths, shower-baths, sinks and wash-basins, of plastics	HS 392210

		Plastic lavatory seats and covers	Lavatory seats And covers, of plastics	HS 392220
		Plastic bidets, lavatory pans, flushing cisterns and similar sanitary ware	Bidets, lavatory pans, flushing cisterns and similar sanitary ware, of plastics (excl. baths, shower-Baths, sinks, wash-basins, lavatory seats And covers)	HS 392290
	Ceramic sanitary ware	Ceramic sanitary of porcelain and china	Ceramic sinks, wash basins, wash basin pedestals, baths, bidets, water closet pans, flushing cisterns, urinals and similar sanitary fixtures of porcelain or china (excl. soap dishes, sponge holders, tooth-brush holders, towel hooks and toilet paper handles)	HS 691010
		Other ceramic sanitary	Ceramic sinks, wash basins, wash basin pedestals, baths, bidets, water closet pans, flushing cisterns, urinals and similar sanitary fixtures (excl. of porcelain or china, soap dishes, sponge holders, tooth-brush holders, towel hooks and toilet paper handles)	HS 691090
	Iron or steel sanitary ware	Stainless steel sinks and wash basins	Sinks and wash basins, of stainless steel	Hs 732410
		Cast iron baths	Baths of cast iron, whether or not enamelled	HS 732421
		Baths of steel sheet	Baths of steel sheet	HS 732429
		Other sanitary ware of iron and steel including parts	Sanitary ware, incl. parts thereof (excl. cans, boxes and similar containers of heading 7310, small wall cabinets for medical supplies or toiletries and other furniture of chapter 94, and fittings, complete sinks and wash Basins, of stainless steel)	HS 732490
Ceramic tiles	Unglazed ceramic flags and paving, hearth or wall tiles	Unglazed ceramic mosaic tiles	Unglazed ceramic tiles, cubes and similar articles, for mosaics, whether or not square or rectangular, the largest surface area of which is capable of being enclosed in a square of side of < 7 cm, whether or not on a backing	HS 690710
		Unglazed ceramic flags and paving, hearth or wall tiles	Unglazed ceramic flags and paving, hearth or wall tiles (excl. of siliceous fossil meals or similar siliceous earths, refractory ceramic Goods, tiles made into stands, ornamental articles and tiles specifically manufactured for stoves)	HS 690790
	Glazed ceramic flags and paving, hearth or wall tiles	Glazed ceramic tiles, cubes and similar articles, for mosaics	Glazed ceramic tiles, cubes and similar articles, for mosaics, whether or not square or rectangular, the largest surface area of which is capable of being enclosed in a square of side of < 7 Cm, whether or not on a backing	HS 690810
		Glazed ceramic flags and paving,	Glazed ceramic flags and paving, hearth or wall tiles (excl. of siliceous fossil	HS 690890

		hearth or wall tiles	meals or similar siliceous earths, refractory ceramic goods, tiles made into stands, ornamental articles and tiles specifically manufactured for stoves)	

Please find in the table below the product segmentation used in the consumption/production section. In this table the HS codes are provided together with their corresponding Prodcom codes. As mentioned before, product definitions are less detailed. However, where HS code segmentation uses only one code to define certain ceramic tile products, Prodcom code segmentation further divides the aggregate products.

Product category	Products group	Products	Products definition	HS codes	Prodcom codes
Sanitary Ware	Plastic sanitary ware	Plastic baths, shower and washbasins	Plastic baths; shower-baths, sinks and wash-basins	HS 392210	25231250
		Plastic lavatory seats and covers	Lavatory Seats And Covers, Of Plastics	HS 392220	25231270
		Plastic bidets, lavatory pans, flushing cisterns and others	Plastic bidets; lavatory pans; flushing cisterns and similar sanitary ware (excluding baths; showers-baths, sinks and wash-basins, lavatory seats and covers)	HS 392290	25231290
	Ceramic sanitary ware	Ceramic sanitary of porcelain and china	Ceramic sinks and other sanitary fixtures, of porcelain of china	HS 691010	26221030
		Ceramic sanitary	Ceramic sinks, wash basins, baths and other sanitary fixtures	HS 691090	26221050
	Iron or steel sanitary ware	Stainless steel sinks and wash basins	Stainless steel sinks and wash basins	HS 732410	28751110
		Cast iron baths	Cast iron baths (incl. enamelled)	HS 732421	28751121
		Baths of steel sheet	Baths of iron or steel	HS 732429	28751127
		Other sanitary ware of iron and steel including parts	Sanitary ware and parts of sanitary ware of iron or steel	HS 732490	28751131
Ceramic tiles	Unglazed ceramic flags and paving, hearth or wall tiles	Unglazed ceramic mosaic tiles	Unglazed ceramic mosaic tiles; cubes and similar articles; with a surface area < 49 cm²	HS 690710	26301010
		Unglazed ceramic spaltplatten tiles	Unglazed ceramic double tiles of the Spaltplatten type	HS 690790	26301030

		Unglazed ceramic stoneware tiles	Unglazed stoneware flags and paving; hearth or wall tiles (excluding double tiles of the Spaltplatten type)		26301053
		Unglazed ceramic earthenware tiles	Unglazed earthenware or fine pottery flags and paving; hearth or wall tiles (excluding double tiles of the Spaltplatten type)		26301055
		Unglazed ceramic flags and paving, hearth or wall tiles	Unglazed ceramic flags and paving; hearth or wall tiles (excluding stoneware, earthenware or fine pottery, double tiles of the Spaltplatten type)		26301059
	Glazed ceramic flags and paving, hearth or wall tiles	Glazed ceramic tiles, cubes and similar articles, for mosaics	Glazed ceramic mosaic tiles; cubes and similar articles; with a surface area < 49 m²	HS 690810	26301020
		Glazed ceramic splatplatten tiles	Glazed ceramic double tiles of the Spaltplatten type		26301071
		Glazed ceramic stoneware tiles	Glazed stoneware flags and paving; hearth or wall tiles; with a face of <= 90 cm²		26301073
		Glazed ceramic earthenware tiles	Glazed earthenware or fine pottery ceramic flags and paving; hearth or wall tiles; with a face of <= 90 cm²	HS 690890	26301075
		Glazed ceramic flags and paving, hearth or wall tiles	Glazed ceramic flags and paving, hearth or wall tiles excluding double tiles of the Spaltplatten type, stoneware, earthenware or fine pottery flags, paving or tiles with a face of not > 90 cm²		26301079

- **Statistical Product Classification**

Statistical product classification

Prodcom and Combined nomenclature (CN)
In this survey two different sets of statistical data are used. Both sets have been provided by Eurostat, the statistical body of the EU.

The first set is derived from Prodcom. The term Prodcom is derived from PRODucts of the European COMmunity. This is a survey based on products whose definitions are standardised across the EU to allow comparability between the member countries' data. Prodcom covers some 4,800 products which are assigned to some 250 industries (subclasses) as defined by the Standard Industrial Classification (SIC). Prodcom data contain production, imports and exports. Based on these data apparent consumption can be calculated as follows: apparent consumption = production + imports -/- exports.

The second set is the trade data based on the Combined Nomenclature. The abbreviation CN stands for Combined Nomenclature. This Combined Nomenclature contains the goods classification prescribed by the EU for international trade statistics. The CN is an 8-digit classification consisting of a further specification of the 6-digit Harmonised System (HS). HS was developed by the World Customs Organisation (WCO). The system covers about 5,000 commodity groups, each identified by a six-digit code. More than 179 countries and economies use the system.

Statistical data: limitations

Trade figures quoted in CBI market surveys must be interpreted and used with extreme caution.

The Prodcom data used in Chapter 1 and 2, are less reliable than the import and export statistics used in Chapter 4, as they are not part of official data collection for Customs. Companies only have to send in their data on an annual or quarterly basis. The figures sometimes show a discrepancy between years, e.g., a large fall or extraordinary growth. These problems are caused by inaccurate, inconsistent and untimely reporting by companies. However, Prodcom data are the only official source for production and apparent consumption data, displaying numbers at product group level and describing the different EU markets in detail. Therefore they are useful to get an indication of size and trends within those markets. For decision making, however, these figures are not accurate enough and should be used in conjunction to further market research.

In the case of intra-EU trade, statistical surveying is only compulsory for exporting and importing firms whose trade exceeds a certain annual value. The threshold varies considerably from country to country, but it is typically about € 100,000. As a consequence, although figures for trade between the EU and the rest of the world are accurately represented, trade within the EU is generally underestimated.

Furthermore, the information used in CBI market surveys is obtained from a variety of sources. Therefore, extreme care must be taken in the qualitative use and interpretation of quantitative data, it puts limitations to in-depth interpretation of relations between consumption, production and trade figures within one country and between different countries.

Appendix B Introduction to the EU market

The European Union (EU) is the current name for the former European Community. Since January 1995 the EU has consisted of 15 Member States. Ten new countries joined the EU in May 2004. In January 2007 two more countries – Bulgaria and Romania - joined the EU. Negotiations are in progress with a number of other candidate Member States. In this survey, the EU is referred to as the EU25 since most data are missing for those two countries.

Cultural awareness is a critical skill in securing success as an exporter. The enlargement of the EU has increased the size of the EU, and also significantly increased its complexity. With more people from culturally diverse backgrounds, effective communication is necessary. Be aware of differences in respect of meeting and greeting people (use of names, body language etc.) and of building relationships. There are also differences in dealings with hierarchy, presentations, negotiating, decision making and handling conflicts. More information on cultural differences can be found in chapter 3 of CBI's export manual 'Exporting to the EU (2006)'.

General information on the EU can also be found at the official EU website http://europa.eu/abc/governments/index_en.htm or the free encyclopaedia Wikipedia http://en.wikipedia.org/wiki/Portal:Europe.

Monetary unit: Euro
On 1 January 1999, the Euro became the legal currency within twelve EU Member States: Austria, Belgium, Finland, France, Germany, Italy, Ireland, Luxembourg, The Netherlands, Spain, and Portugal. Greece became the 12th Member State to adopt the Euro on January 1, 2001. Slovenia adopted the Euro in 2007. Since 2002 Euro coins and banknotes replaced national currency in these countries. Denmark, United Kingdom and Sweden have decided not to participate in the Euro.

In CBI market surveys, the Euro (€) is the basic currency unit used to indicate value.

Table 1 Exchange rates of EU currencies in €, average yearly interbank rate

Country	Name	Code	2006	December 2007
Bulgaria	Lev	BGN	0.51387	0.50923
Cyprus	Pound	CYP	1.74133	1.70990
Czech Republic	Crown	CZK	0.03532	0.03776
Denmark	Crown	DKK	0.13407	0.13399
Estonia	Crown	EEK	0.06390	0.06390
Hungary	Forint	HUF	0.00380	0.00391
Latvia	Lats	LVL	1.44130	1.41499
Lithuania	Litas	LTL	0.28962	0.28962
Malta	Lira	MTL	2.33703	2.32306
Poland	Zloty	PLN	0.25748	0.27476
Romania	Lei	ROL	0.00003	0.00003
Slovakia	Crown	SKK	0.02694	0.02967
Sweden	Crown	SEK	0.10812	0.10622
United Kingdom	Pound	GBP	1.46725	1.39727

Source: Oanda http://www.oanda.com/ (December 2007)

Appendix C List of developing countries

OECD DAC list - January 2006
When referred to developing countries in the CBI market surveys, reference is made to the group of countries on this OECD DAC list of January 2006.

Afghanistan	Gabon	Nepal	Uruguay
Albania	Gambia	Nicaragua	Uzbekistan
Algeria	Georgia	Niger	Vanuatu
Angola	Ghana	Nigeria	Venezuela
Anguilla	Grenada	Niue	Vietnam
Antigua and Barbuda	Guatemala	Oman	Wallis & Futuna
Argentina	Guinea	Pakistan	Yemen
Armenia	Guinea-Bissau	Palau	Zambia
Azerbaijan	Guyana	Palestinian Admin. Areas	Zimbabwe
Bangladesh	Haiti	Panama	
Barbados	Honduras	Papua New Guinea	
Belarus	India	Paraguay	
Belize	Indonesia	Peru	
Benin	Iran	Philippines	
Bhutan	Iraq	Rwanda	
Bolivia	Jamaica	Samoa	
Bosnia & Herzegovina	Jordan	Sao Tome & Principe	
Botswana	Kazakhstan	Saudi Arabia	
Brazil	Kenya	Senegal	
Burkina Faso	Kiribati	Serbia	
Burundi	Korea Rep. of	Seychelles	
Cambodia	Kyrgyz Rep.	Sierra Leone	
Cameroon	Laos	Solomon Islands	
Cape Verde	Lebanon	Somalia	
Central African Rep.	Liberia	South Africa	
Chad	Libya	Sri Lanka	
Chile	Macedonia	St. Helena	
China	Madagascar	St. Kitts Nevis	
Colombia	Malawi	St. Lucia	
Comoros	Malaysia	St. Vincent & Grenadines	
Congo Democratic Rep.	Maldives	Sudan	
Congo Rep.	Mali	Suriname	
Cook Islands	Marshall Islands	Swaziland	
Costa Rica	Mauritania	Syria	
Cote d'Ivoire	Mauritius	Tajikistan	
Croatia	Mayotte	Tanzania	
Cuba	Mexico	Thailand	
Djibouti	Micronesia, Fed. States	Timor-Leste	
Dominica	Moldova	Togo	
Dominican Republic	Mongolia	Trinidad & Tobago	
Ecuador	Montenegro	Tunisia	
Egypt	Montserrat	Turkey	
El Salvador	Morocco	Turkmenistan	
Equatorial Guinea	Mozambique	Turks & Caicos Islands	
Eritrea	Myanmar	Tuvalu	
Ethiopia	Namibia	Uganda	
Fiji	Nauru	Ukraine	

CBI countries – January 2007:

CBI supports exporters in the following Asian, African, Latin American and European (Balkan) countries:

Albania
Armenia
Bangladesh
Benin
Bolivia
Bosnia-Herzegovina
Burkina Faso
Colombia
Ecuador
Egypt
El Salvador
Ethiopia
Georgia
Ghana
Guatemala
Honduras
India
Indonesia
Jordan
Kenya
Macedonia
Madagascar
Mali
Moldavia
Montenegro
Morocco
Mozambique
Nepal
Nicaragua
Pakistan
Peru
Philippines
Rwanda
Senegal
Serbia
South Africa
Sri Lanka
Suriname
Tanzania
Thailand
Tunisia
Uganda
Vietnam
Zambia

Appendix D References

- **Statistical sources**

Eurostat/Comext CN Trade statistics 2007 (DVD)
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- **Publications**

'Sanitary Ware and Ceramic Tiles' EU market survey, CBI, 2004

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