



## Information note of Vice-President Verheugen

### Impact of the economic crisis on key industrial sectors of the EU – the case of the manufacturing and construction industries

#### 1. IMPACT OF THE ECONOMIC CRISIS ON MANUFACTURING AND CONSTRUCTION

Output in many manufacturing sectors and construction has been especially hard hit by the financial crisis and has experienced the sharpest decline in decades. Latest data for November 2008 showed **manufacturing output** 8.2% lower and **construction output** 4.2% lower than a year earlier. Taking both sectors together, this is equivalent to an overall loss in output of some €150 billion in full-year terms. EU exports in manufacturing to non-EU countries were 11% down in value terms in November 2008 from the previous year. Automotive demand together with the construction sector is highly cyclical and often leads the cycle at times of slowdown and this pattern has been confirmed by the current downturn.

The ECFIN **Business Climate Index** (BCI) for EU manufacturing stands now at its lowest level since the current series was launched in January 1985. The index has fallen steeply since September. In January it fell again, but more slowly. The wider Economic Sentiment Indicator covering all sectors including consumer confidence has also fallen rapidly. The industrial confidence indicator dropped by 1.8 points and consumer sentiment dropped by 2.3 points, whilst services (-4.9 points) and construction (-4.0 points) declined the most.

Reliable official data on **employment** at the sector level become available only with a time lag of about 6 months. However, figures from the European Monitoring Centre on Change show that since the beginning of the 4<sup>th</sup> quarter of 2008 (including January 2009) planned job reductions have increased significantly to 158.000 whereas planned job creation has fallen to 25.000, giving a net expected job loss of 130.000. In contrast, in the first 3 quarters of 2008 planned job reductions of 130.000 were marginally outweighed by planned job creations of 132.000, giving a small positive balance. In addition, it is worth noting that companies in many sectors appear to be relying at the moment mainly on short time working and temporary plant closures in order to retain skilled staff.

While **access of businesses to finance** significantly differs across Member States and economic sectors, data available up to now do not show an overall reduction of credit to the small business sector, partly thanks to the policy efforts undertaken to stabilise the banking sector. However, the situation of large businesses is worse notably as regards long term credits. Sectors that are particularly affected are automotive and construction, but other capital-intensive sectors are also likely to be strongly affected. The access of larger firms to the financial markets will be tested in 2009 as corporate bonds need to be refinanced or rolled over. Even with SMEs there is a need for extreme vigilance and continuous monitoring of the situation amid more recent signals of a possible deterioration of financing conditions as the economic crisis unfolds.

The lack of access to **affordable export financing** is another direct consequence of the financial crisis. It is estimated that as much as 90% of international trade used to be financed by credits. Under normal conditions, the private market – notably the commercial banks – dominate the trade financing scene, particularly for export sold on short term credit to low risk countries. The official Export Credit Agencies (ECAs) play an important role in covering large transactions on medium-long credit terms and/or for export to countries with high political risk. ECAs tend to act counter-cyclical; i.e. naturally pick up business at times when private banks become, for various reasons, more risk averse. The problem is a severe lack of funding for trade transactions, caused by a lack of confidence in the private financial market and increased risk aversion. Furthermore, as the financial crisis spreads into the real economy, this affects credit risks which in turn further reduce the willingness of the private market to finance. However, it becomes more and more clear that is also a question of internal allocation of funds within banks. For a reason not yet fully clear, trade finance - though considered one of the safest forms of finance - does not seem to have the necessary priority of bank-treasurers. Various measures to increase access to trade finance for European exporters have already been taken or are contemplated on a national, EU and international level. The Commission monitors the actions at national level and is directly involved in negotiating temporary changes to the OECD rules on export credits with a view to get export finance flowing.

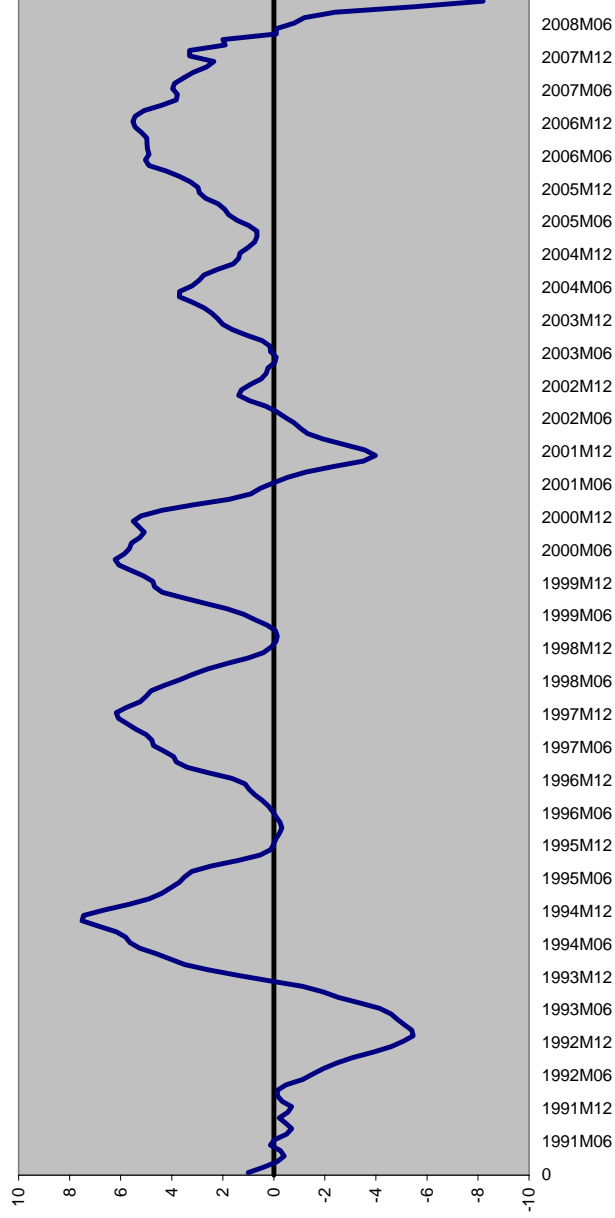
As the economic crisis deepens there is a **severe risk of a revival of protectionism**, which would hurt EU manufacturing hard. Annex I provides for examples of recently adopted protectionist measures that pose additional challenges to some of the sectors analysed in the document.

## **2. SITUATION IN SPECIFIC MANUFACTURING SECTORS AND SUBSECTORS**

### **2.1. Situation in manufacturing industries**

Manufacturing industry made up some 20.2% of GDP (over €1630 billion in value added at factor cost). Nearly 2.3 million enterprises, most of them SMEs provide some **35 million jobs** in the EU. Germany alone accounts for 26.3% of the total value added, around twice the individual shares of France, the UK and Italy. Motor vehicles are by far the top EU manufacturing product. Manufacturing goods also form the lion's share of EU's exports (€1.06 billion of exports in 2006), equal to around 15 percent of the total turnover generated by the sector. While economic development has always been a bumpy ride, manufacturing is hit hard by the financial crisis and experience the sharpest decline in decades. Latest data for November 2008 showed output 8.2% lower than a year earlier (see graph 1). This is equivalent to a loss in output of some €130 billion in full-year terms. EU exports to non-EU countries were 11% down in value terms in November 2008 from the previous year.

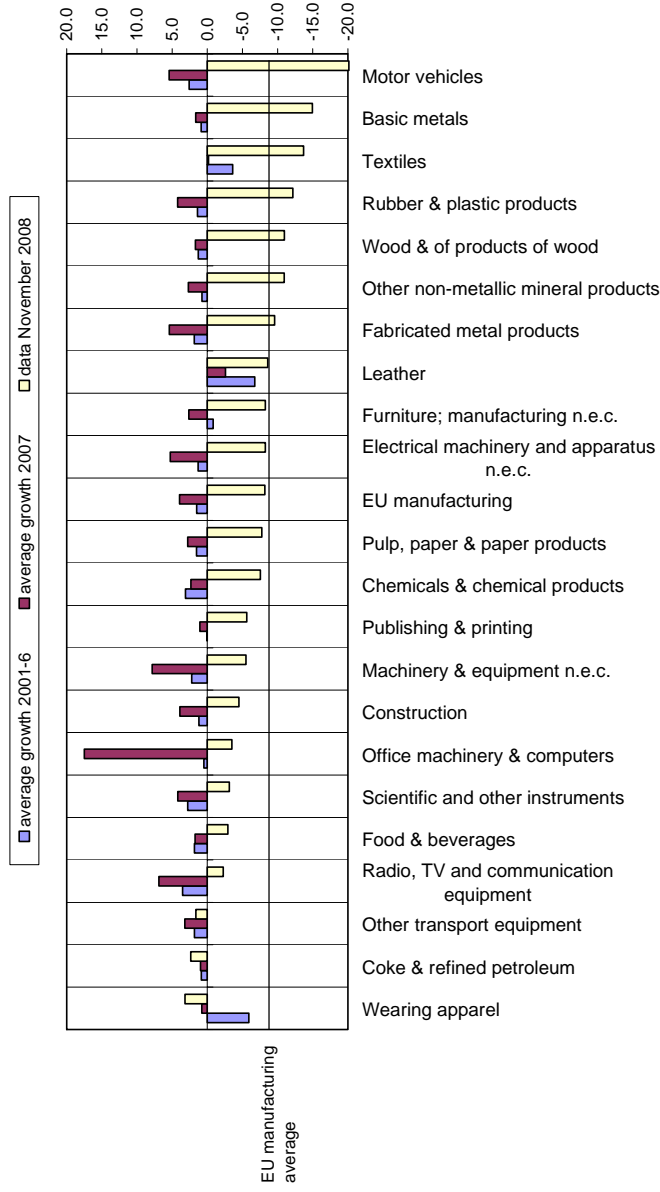
**Graph 1: Manufacturing production growth rate 1991-2008**



Source: Eurostat

The crisis has affected all manufacturing sectors, although not evenly across sectors and countries:

**Graph 2: Growth of EU Manufacturing Production Sectors and Construction**



Source: Eurostat

Notably the slowdown has been felt somewhat later in the new Member States. Therefore the EU might be faced with further dramatic developments in 2009, in a situation already severe by historical standards. Output in different sectors has been affected differentially with the

largest reductions occurring in motor vehicles and basic metals, with output in the former industry falling by over 20% (graph 2). Data on orders show that the engineering, non-transport equipment, office machinery, and radio/TV and communications equipment sectors have been severely affected, although because of production lags this has not shown up yet in production terms (see annex II, graph). It should be pointed out that the decline of some industries such as textiles and semiconductors is not just the result of the current crisis but may be rooted in a longer-term weakness of competitiveness.

**Table 1: EU 27 Exports (extra EU) Growth (%)**

	<b>2007/2006</b>	<b>Nov. 2008 / Nov. 2007</b>
Manufacture of other transport equipment	9,9%	3,1%
Manufacture of machinery and equipment n.e.c.	7,7%	-6,2%
Manufacture of medical, precision and optical instruments, watches and clocks	-0,6%	-6,3%
Manufacture of fabricated metal products, except machinery and equipment	12,5%	-6,8%
Manufacture of food products; beverages and tobacco	5,0%	-7,0%
Manufacture of leather and leather products	5,9%	-7,5%
Manufacture of wearing apparel; dressing; dyeing of fur	7,9%	-7,9%
Manufacture of electrical machinery and apparatus n.e.c.	12,1%	-8,1%
Manufacture of chemicals and chemical products	7,4%	-11,1%
<b>Manufacturing</b>	<b>7,4%</b>	<b>-11,6%</b>
Publishing & Printing	-11,5%	-12,2%
Manufacture of wood and wood products	5,2%	-14,1%
Manufacture of basic metals	13,3%	-14,2%
Manufacture of motor vehicles, trailers and semi-trailers	8,2%	-15,7%
Manufacture of rubber and plastic products	10,0%	-16,1%
Manufacture of other non-metallic mineral products	4,5%	-16,5%
Manufacture of coke, refined petroleum products and nuclear fuel	9,8%	-18,0%
Manufacture of pulp, paper and paper products	2,1%	-19,3%
Manufacturing n.e.c.	6,5%	-20,0%
Manufacture of textiles	2,4%	-20,3%
Manufacture of radio, television and communication equipment and apparatus	-5,3%	-21,6%
Manufacture of office machinery and computers	-21,5%	-24,1%

As can be seen from table 1, the export performance of important manufacturing sectors dramatically deteriorated in 2008 compared to 2007, particularly in November 2008. All sectors are affected by this decline except the manufacture of other transport equipment. It should, however, be noted that 2007 has been an exceptionally good export year, so some deterioration was to be expected. Nonetheless, the negative growth for November 2008 is rather staggering. Severe reductions can be noted in important export sectors such as motor vehicles, and chemicals.

There are also some positive messages. Between 1992 and 2008 most of the sectors have also steadily increased output and productivity and are well positioned to take advantage of the recovery when it comes. Even taking account of the recent fall, manufacturing output is still higher than at the end of 2005 (see graph in annex).

## 2.2. Automotive industry

The automotive industry directly **employs 2.2 million people**. Overall the automotive industry supports around **12 million jobs** in the EU. Automotive industry accounts for 8% of total value added for the EU27. With a share of total industrial exports of about 11% and just over 4% of total imports, the automotive sector makes a positive contribution to the balance of EU trade. It had seen rising output and employment over several years, both peaking in 2007, and despite its slump towards the end of 2008 overall production has not been below the level of earlier years. Total vehicle production is expected to fall in 2009, as both domestic and foreign markets show sharply negative growth rates, before potentially recovering in 2010 and 2011.

In addition the sector is estimated to have built up structural overcapacity in the order of 20%. Additional pressure comes from the uncertainty of the future of the US automotive industry, which will most likely have spill over effects to the EU. There is a significant risk of plant closures in different member States.

New car registrations in the EU declined by 14.5% in October, 25.8% in November and 17.8% in December, leading to a 7.9% year-on-year fall in new car registrations<sup>1</sup>. In absolute terms about 1.2 million fewer vehicles were registered in the EU during 2008 compared to 2007. The situation varies between Member States but the downturn has now reached virtually every market in the EU and all major car manufacturers on the European market are severely affected. Latest market forecasts suggest that European automotive markets will further decline in 2009 with most estimates for passenger cars generally varying between -12% and -18% (i.e. an additional fall of ca. 1.5 to 2.5 million vehicles).

Preliminary analysis does not support the hypothesis that the sequencing of the decline started in the premium segment and then moved to the medium and small segments. Instead the evolution of the European market has rather seen the medium segment being squeezed while at either end demand for both smaller and premium cars has increased.

Initial industry data on the market segment for light and heavy duty vehicles also seem to indicate that the heavy duty sector will even suffer more than the passenger cars. While monthly orders for heavy duty vehicles were in the margin of around 38000 in January 2008, according to industry sources the orders dropped down to 600 in November 2008, and thousands of cancellations occurred. It is worth noting the daily production capacity of one European manufacturer is alone around 900 heavy duty vehicles. The situation is equally dramatic for light duty vehicles. Industry expects a drop in commercial vehicle sales of ca. 30% in 2009..

Demand in Europe is mainly coming from the business sector and private households, public demand is rather negligible. General access to credit plays an important role in the automotive industry as between 60% and 80% of new private cars in Europe are purchased on the basis of credit financing. Financing is also a major issue on the supply side, but there is little publicly available information on this. Currently, companies like Daimler seem to be borrowing at ca. 9-10%, and recent bond issues of both PSA and Renault seem to have attracted no interest.

Due to its downstream character, reducing output in this sector has immediate negative knock on effects on output and employment of suppliers, be they specialised to supply the automotive industry (namely SMEs) or be they belonging to sectors such as steel production,

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<sup>1</sup> Source: European Automobile Manufacturers' Association

chemicals and mechanical and electric engineering. The same holds for enterprises in the sales channels.

### 2.3. Food industry

With about **4.5 million people** the food industry is one of the largest sectors in manufacturing industry in terms of employment. It generates around 12.2 % of EU value added (around 200 Bn. Euro). Germany, France, Italy, Spain and the UK alone account for 70% of the turnover of the industry. This sector has experienced limited but stable growth of about 1.8% p.a. over the last ten years, while its employment trends were negative, especially in new Member States. The EU is a net importer of food and Food exports amount to around 5% of total EU Export. Overall consumption patterns for agro-food products are expected to remain subdued for a considerable period of time given the unprecedented degree of uncertainty facing many consumers as regards job and income prospects. However, relative to the economy as a whole, some relief for the industry should be forthcoming given that real disposable income growth is set to rebound as the inflationary impact of higher agricultural commodity prices fades and food prices are coming down.

The food industry is typically much less affected by ups or downs. However, at times of rising uncertainty and falling consumer confidence customers typically become more price sensitive and shift demand more towards hard discounters (e.g. Aldi, Lidl) as compared to the rest of supermarket chains (e.g. Carrefour, Delhaize). Moreover, people are less prepared to pay premiums for high-quality and bio food. As regards food retailing, there is no evidence as yet of any generalised crisis for supermarkets. As regards general evolution on food and agricultural international prices, after the recent food crisis it is recognised that prices of agricultural products have been falling steadily since their peaks in February and March 2008, however, the prices of processed food products have not already follow a parallel trend but it could be in the future if the demand is more hardly affected by the general economic situation. The financial crisis will obviously have implications for international agricultural markets and the agricultural sectors but the final impact of the crisis on commodity prices is, at this stage, difficult to assess. This will be the result of the demand and supply side effects.

However, even more critical is likely to be the impact of the financial crisis on the availability of credit, which is widely recognized as one of the major constraints to agriculture development in the developing countries. The combination of falling agricultural prices and reduced access to credit may have a negative impact on agricultural production in the poorest areas, with very serious implications for the global food security and could exacerbate again the commodity price volatility.

### 2.4. Mechanical and electrical engineering

Mechanical (ME) and Electrical Engineering (EE) Industries together are **employing more than 4 million people** in Europe. The sector accounts for some €171 Bn. value added, which is about 3.4% of GDP<sup>2</sup>. The EU is a net exporter of vehicles and mechanical and electrical engineering. Together both sectors represent nearly 34% of all EU exports. ME accounts for some €171 billion, about 3.4% of GDP. It represents €170 billion, about 16% of total exports. EE accounts for around €189.7 bn and about 3.7% of value added in EU27. It represents over 18% of total exports.

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<sup>2</sup> Data from Orgalime, based on Eurostat.

Up to now the sector seems less dramatically affected by the crisis than for example the automotive sector. This might be because this sector is often lagging the cycle, both at times of slowing and of accelerating economic activity. The last five years were quite successful for both sectors (approximately 40% production increase for ME) that currently can build on this growth. In general order books are still sufficiently full and, while first cancellations of orders have occurred, industry still has sufficient orders to execute. One might expect that the negative consequences of the crisis may occur later in the course of 2009.

## **2.5. Chemicals (excluding pharmaceuticals)**

The European chemical industry **employs around 1.2 million** people. In 2007 the EU has been the worlds leading exporter of chemical products. With some 15,9% of the EUs export of industrial products chemicals are the second most important export product group.

The crisis is having very serious consequences for the EU chemicals industry. The sub-sectors most affected are base chemicals, polymers and specialty chemicals. Consumer related chemicals (e.g. detergents, cosmetics) are less affected.

Production cuts in the major chemical companies have been widely reported in the press but also SME's are severely suffering. For the first time since 2003, the EU chemicals industry's output declined in 2008. After a modest growth in the first quarter, output in chemicals has declined in the course of the year; especially since the third quarter the situation got worse and expectations for the fourth quarter are even more depressed indicating a sharp drop in chemicals production for most EU countries. Chemical companies are experiencing a considerable drop in orders in most EU countries or even cancellation of previously confirmed orders. If one looks at the export order book only one sees the same pattern which underlines that all parts of the world are affected. New orders for chemicals in the EU declined within one month by 5.4% with sales in certain cases dropping very sharply as from the latter month. Compared to November 2007 the new orders decreased by 12.1 %. In some cases, due to the increase of inventories, companies had to limit production, resulting in a drop of output volume by 30% to 60% for some products. Some companies, e.g. BASF, have already announced shorter working periods.

In particular the adverse developments in key downstream sectors of the chemicals industry, such as construction and automotive, are adversely affecting the chemicals industry. Consequently any improvement in these customer sectors and in the economic climate in general will help the chemicals industry.

On the external front the most problematic development is the weakening of demand in emerging countries. India and China were expected to be the destinations of huge petrochemical capacities coming on stream the next few years. If this demand increase was not to materialize these products would be redirected to the EU market. This development risks to severely hurting the European petrochemical industry with possible closure of the weaker locations, most of them in Southern and Eastern Europe.

## **2.6. Pharmaceuticals and biotechnology**

The pharmaceuticals industry in Europe **employs about 650.000 people**, with more than 100.000 working on R&D. The industry has experienced steady growth over recent years but at a slower pace than in the US. Value added per employee is very high at over €100.000 exports are around €70 billion per year.

Companies in this sector are likely to be less directly affected by the economic crisis than most other industries as demand for health care is relatively independent of the trends troubling the wider economy. However, the industry can expect – although with some delay – significant pressure from major purchasers, e.g. governments and social security bodies. Within the sector, demand for cheaper generic products might be stepped up by these clients and eligibility criteria for reimbursement might be tightened as well.

However, due to its R&D intensity, long investment periods (in particular in the pharmaceuticals sector) and the risks associated to such investments, smaller speciality pharmaceutical companies in this sector have already had difficulties to get access to affordable equity finance, a trend which is likely to strengthen given the dysfunctional financial markets. Even if this should be less of a problem for the 20 top pharmaceutical companies, some of the largest companies in the sector (GlaxoSmithKline and AstraZeneca) have both recently announced further job cuts of 6000 worldwide (EU figures not quoted).

## 2.7. Textiles and Clothing

The European textile and clothing sector accounts for approximately 4.5% of total EU manufacturing production and 8.0% of manufacturing employment. It **employs about 2.3 million** workers in 208,000 enterprises which generate a turnover of about €11 billion with €5.6 billion of investments. SMEs are predominant in this industry. Textiles account for 3% of EU total exports in manufacturing. Due to restructuring the sector has suffered substantial falls in production between 2000 and 2005 at -5% per year on average. Over the years employment has decreased substantially (-6% p.a.). However, in the last two years and in the beginning of 2008, the sector showed signs of stability and in the clothing subsector has registered a recovery, via the combination of new industrial and retail activities and by delocalising low value added activities to developing countries. It benefited also from increased global economic growth and an upward development in textile products consumption, especially in the new EU countries. This process of stabilisation has stopped in the second half of 2008.

Production and order book indexes have shown a rapid decline. For 2008 as a whole, production decreased by 12% in the textile subsector and by 5% in the clothing subsector. Order books have registered a reduction of 15% for the textile and of 3% for clothing products, especially marked in the second part of the year. Performances vary between EU countries. Countries like Bulgaria, Poland, Greece, Austria and Italy performed well in the past thanks to the clothing subsector while in Germany only the textile subsector has performed well thanks to innovative textiles. On the opposite side countries such as France, UK and Ireland presented the worst performances.

Traditionally, the evolution in the European textile/clothing sector is considered linked to the behaviour of households' consumption. However, the development of a wide number of specialty textile products for a variety of end users in different branches of the economic activity has made the textiles sector more dependent on the general economic cycle as its outputs are mainly used for industrial and services applications. The clothing subsector is much more private consumption oriented. These structural links partly explain the different graduation of the economic crisis impact between the clothing and the textile subsectors at this point in time.

The impacts of the economic and financial crisis are already reflected in a lower demand by some of the developed trade partners such as USA and Japan. In 2008 the export growth of

textile and clothing products has halted and for the year as a whole a slight reduction of -0.6% in value took place. At the same time, imports declined also by 0.6% in value. The cash flow of companies is fragile in general as a result in one hand of payment gaps between the distribution and the industry and on the other hand as a result of short production cycles and the predominance of SMEs. Consequently short term capital availability is crucial. According to the European Industrial Association one of the main problems facing the sector is the sudden stop of acceptance of credit guarantees and export credits allowances by the banks, which is speeding up the credit crunch impact within the sector.

## 2.8. Steel

The steel sector in the EU **employs around 440 000 people**. The EU is the second biggest steel producer in the world after China, with production being stable around 200 million tonnes in the last 5 years and represents around 15% of world production. The share of production value of the sector in GDP of EU27 is about 1.4%.

The steel sector is highly dependent on demand from a few main consumer sectors. Construction and structural steelwork is the most important with a share of approximately 38%, followed by automotive (16%), and mechanical engineering (14%). Apparent consumption is forecast to decline by 30% in quarter one 2009 and by 16% in quarter two. After a relatively favourable 1<sup>st</sup> half of 2008, total production of steel using sectors declined by 1.3% in the 3<sup>rd</sup> quarter 2008 on a year-on-year basis and further deteriorated in the last quarter of 2008 (-7.3%). The European Confederation of Iron and Steel Industries estimates that now production and capacity utilisation is down by 30% generally and by up to 50% in some cases, with 72 000 jobs lost or in short term working, affecting 17% of all employees in the sector.

The steel sector experienced a sharp decline in orders in the last quarter of 2008 (e.g. -57% in orders of flat products used mainly for automotive and domestic appliances and -30% in orders of products used by mechanical engineering). In Germany alone, the incoming orders fell by 43% in the last quarter of last year.

Crude steel production in EU27 fell by 19% on a monthly basis (November/October 2008). The respective figure for world production was -10 %. The outlook foresees further production cuts and significant reduction in capacity utilisation particularly in the 1st half of 2009. Producers of steel tubes and pipes have also been strongly affected. Steel tube production in the EU decreased substantially in the 2<sup>nd</sup> half of 2008 due to declining activity of the main client sectors. Following a decline of 2.6% on a year-on-year basis, production is estimated to have fallen by a further 11.2% in the 4<sup>th</sup> quarter of 2008. Steel prices have fallen by 50%.

EU 27 export of steel to third countries reached 34.1 billion EUR in 2008 (+ 4% compared to 2007), i.e. 2% of extra EU manufacturing exports. In the last quarter of 2008 the EU exports are estimated to have fallen to 7.2 million tonnes compared to 8.8 million tonnes in the last quarter of previous year (almost 20%).

The EU market will probably see increasing import pressure due to the global economic slowdown. Because of the reduction in their domestic demand, third countries will be looking for outlets outside their domestic market. This would lead to significant supply-demand imbalances. As an example imports from China more than doubled in the third quarter of 2008 after a reduction in imports in the first half of 2008. In the meantime, one can observe a

proliferation of measures taken by third countries in the steel sector aiming at restricting access to their market and protecting the domestic industry. Example of countries implementing such measures include: India (import duties, certification requirements), US (proposed "American Steel First" Bill), Russia (import duties), China (import duties, export incentives, Steel industry stimulus package). We are also likely to see an increasing number of trade defence cases lodged by EU companies.

## 2.9. Non-ferrous Metals

The share of the non-ferrous metals sector in manufacturing employment is 1.0 % (**343 900 people**) which has been relatively stable in the last years. Its share in EU manufacturing value added is 1.24% (€20.2billion.); and the share Turnover of the sector was €96 billion. Of the EU 27 basic precious and non-ferrous metals manufacturing, aluminium is the largest activity (representing about 50% of the total) followed by copper and zinc.

Non-ferrous metals serve as an indispensable input for a considerable number of applications in manufacturing industry such as transport and automotive (single biggest market for aluminium), mechanical engineering, aerospace, construction, packaging, etc., so demand depends on the evolution of these downstream sectors.

Primary aluminium production both in the world and EU 27 actually increased in 2008 compared to 2007 (5.1 % and 7.3 % respectively). This happened even in the last quarter of 2008 although at a decelerated rate of growth. In view of the fall in demand this led to an increase in stocks (held by companies or by the London Metal Exchange) which in January 2009 were 2.5 times higher than in August. Copper stocks tripled. However it should be noted that in some cases the level of stocks are as high or even lower than in previous recessions (e.g. copper and zinc) but in the case of aluminium and nickel they reached historical levels. The primary aluminium price is down on the 2002 level, representing a reduction of 50% from the peak in August 2008. A similar price trend applied to other non ferrous metals.

Major aluminium producers have announced substantial production cuts for 2009 both in Europe (around 15% cut back) and all over the world including in China. In many cases, such as aluminium and zinc, it is estimated that almost all European smelters have operating costs that are higher than their selling prices. In the case of aluminium, electricity costs are the main share of the operating costs (40%) and electricity prices have remained high without reflecting the decrease in energy prices. The situation affects particularly these companies whose long-term contracts come to end.

Production cuts will eventually reduce excess capacities and facilitate an upturn in prices. This might avoid the closure of production sites. However, in mid-January, a Polish aluminium smelter has already announced its definite closure in the first half of 2009. Norsk Hydro will cut production by 13% by the end of January or even close Neuss smelter in Germany. Producers of extrusion products (the first transformers of aluminium) are expecting to work at only 50% of their capacity until there is an upturn in the economy. There is an eminent threat to zinc production cuts at Nyrstar smelter in Belgium and the shutdown of Ruhr Zinc in Germany. Boliden has announced a cut in zinc production at its Finnish and Norwegian smelter with a loss of 50 jobs. This might not be enough to remedy the problems to the zinc industry. A prolongation of the overcapacities for lack of demand may trigger the serious risk of closures.

## 2.10. Shipbuilding<sup>3</sup> (including marine equipment industry)

There are about 150 large shipyards in Europe, with around 40 of them active in the global market for large sea-going commercial vessels. **Around 120.000 people** are currently directly employed by shipyards (civil and naval, new building and repair) in the EU. With a market share of around 15% in volume terms, Europe is still vying (with South Korea) for global leadership in terms of the value of civilian ships produced (€15bn in 2007). In addition, the marine equipment industry has an annual turnover of around €26bn<sup>4</sup> of which over 45% is exported. It provides **direct and indirect employment of approximately 300,000 and 450,000** respectively; and possesses a global market share of 35%.

In view of the sudden nature of the current downturn - coming on the back of five years of exceptionally strong growth in sea-borne trade and strong demand for new ships – the shipbuilding industry, with its 2-3 year production cycles - is only beginning to experience its real impact. Most yards still have full order books for this year and next. However, new orders for almost all types of ships have virtually dried up since the last quarter of 2008 and certain functions like marketing, design and research are already running out of work and starting to downsize. This is potentially very damaging as the competitive advantage of European yards depends on their innovative edge and staying ahead of competitors. Meanwhile, shipping freight rates have also collapsed - dropping by more than 90%.

The pending massive global overcapacity in shipbuilding does not come as a surprise; and with the current collapse in demand coinciding with the planned 50% growth in global shipbuilding capacity in the coming years outside the EU, the market outlook is indeed very worrisome. Fortunately however, European shipyards have, in recent years, largely specialized in a range of market niches and have retained only a small market share in the mass markets of tankers, container ships and gas and bulk carriers which will bear the brunt of the crisis.

The problem for many of the European yards though is that Asian “mass market shipyards” will almost certainly try in the future to enter most niche markets by offering unfairly low prices to win whatever few orders are out there. And as the competition in shipbuilding takes place at the time of ordering, the damage could be done before the ships are ever built in 2 or 3 years time. European yards do not have the means to withstand a price war or to operate at below costs for very long. They are much smaller on average than their Asian competitors and state-aid and support policies in these countries are not as strict and transparent as in the EU. It is therefore in the EU's interest to avert a global subsidy race and unfair pricing practices (e.g. in the OECD or negotiations with Korea on a Free Trade Agreement).

The high capital intensity of shipbuilding and its high pre-delivery financing need might jeopardize the economic survival of European shipyards in case financial markets were not soon to return to business as usual and providing access to finance at affordable cost.

## 2.11. Semiconductors

The total direct employment for semiconductor manufacturers in Europe is **over 110 000**. The sector is based significantly on a high-skilled workforce. According to semiconductor material and equipment suppliers SEMI, this sector has an **additional 105 000 employees** in

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<sup>3</sup> Data from sectoral organisation, CESA.

<sup>4</sup> Including naval technology; this figure will be further refined in 2010 when Nace 2.0 figures will become available and allow for better separation from other mechanical equipment.

Europe. The micro/nano-electronics sector is subject to an approximately four-year cycle, reflected by revenue peaks in years 1995, 2000 and 2004. This pattern results from periodic divergence between market demand and capacity of manufacturing companies. When demand is high, most vendors invest in order to increase capacity. This leads to overcapacity, excess inventory and market softening.

As a result of the current crisis future global growth expectations have been lowered from 12.7 % for the period 2002-2007 to 5 % for the period 2007-2011. Similar data shows that Europe is expected to grow some 6% in 2010 and at a rate just under Asia Pacific Region. According to World Semiconductor Trade Statistics (WSTS) the worldwide semiconductors market will grow 2.5 % in 2008 (\$262 billion) and decline -2.2 % in 2009 (\$256 billion) followed by a positive development of 6.5 % in 2010 to \$273 billion.

The European semiconductor industry is in a very difficult situation. Europe has a declining share of worldwide investment in semiconductor production capacity. From the total investments of €28 billion (in 2007) in microelectronics only 10 % has been realised in EU, whereas 48 % in Asia. Associated with the de-location of semiconductor manufacturing to Asia, 75% of new investments (incl. Japan) take place there. There is a risk of further de-localisation which might also have a negative impact on R&D activities in the EU.

The recent insolvency of Quimonda is the culmination of the near bankruptcy of the company even before the beginning of the financial crisis. The financing package involving the Free State of Saxony, parent company Infineon, a leading Portuguese financial institution and additional banks could not be completed in time due to the unwillingness of Infineon to support the rescue.

## 2.12. Aeronautics

The European aeronautics industry with its **450.000 employees** is a high-tech industry which develops and manufactures a broad range of civil and military aircraft, helicopters etc. The aeronautics industry is part of the aerospace industry, which is composed of companies working in the aeronautics, space, defence, and security business. It is a very cyclical business, having seen record orders of around 1,000 new aircraft per year over the last three years, as compared to about 300 to 400 in earlier years. Orders went down considerably in 2008, but deliveries for Airbus are still growing since 2004. However, a sharp decline of deliveries is expected for 2009/2010.

The financial crisis has led to a situation where airlines have increasing difficulties to finance the purchase of new aircraft. Access to bank loans, is getting more and more restrictive. The same is true for aircraft leasing companies, which are very important customers of the aeronautics industry and which find it more difficult to finance purchases of new aircraft.

So far the large aeronautics companies claim that they would not be greatly exposed to the financial crisis due to their significant order backlog. At present production levels remain stable and factories have not seen any significant reductions. However, the ramp up of production has been postponed and airline companies are becoming increasingly careful regarding further acquisitions to preserve their cash. Over the last few months we have seen airlines postpone or even cancel investments in new aircraft, particularly the case for low-cost airlines. The situation is even worsened due to the fact that the economic downturn is global. Shortfalls in one or two regions can therefore not be compensated by increases in other regions. Nevertheless, the aeronautics industry is still able to support air carriers to finance

aircraft purchases and it set up an equity fund in France (Aerofund) to support important suppliers and SMEs in their value chain.

French and German authorities have recently increased the state guarantees available to the aircraft industry customers significantly. This has been done through export credit mechanisms. Airbus, for example, has tried to help customers that could not raise the capital to purchase new aircraft because of the distressed credit markets. These liquidity difficulties could of course have negative consequences in the future, in terms of much lower orders and even difficulties to finalize agreed purchases.

At the moment, companies have no clear view on how many orders might be postponed or cancelled and within which timeframe. It also has to be noted that air carriers have to pay penalties if they cancel orders. Companies would react to a shrinking of the order book by reducing output, but probably not by immediately laying off workers. The skills, competencies and experiences of employees working in the aeronautics sector are not so easy to find on the job market and it can be assumed that companies would try to keep their workforce stable for as long as possible. They would, however, stop recruiting new employments and refrain from extending the contracts of temporary contract staff.

SMEs and even large suppliers in the sector suffer the same as airlines under difficulties to obtain access to bank loans. This could severely limit their capacities to invest in new aircraft programs and research. It should be noted that SMEs in the aeronautics sector are often specialized and have customers in various sectors (machinery, automotive etc.). It can be expected that their overall portfolio will be hit by the crisis, and that an extreme downturn in other sectors like the automotive sector will also have an important impact on aeronautics SMEs. Large companies will only provide additional support to these companies if they supply critical technologies.

Another specificity of the aeronautics sector is that many companies are also active in the defence sector. Hence, they might be able to balance some shortfalls through a stable involvement in multiannual defence programs. But here as well, continuous pressure on budgets can be observed.

It is possible that the credit crisis and the associated lack of funds lead to a further postponements of new aircraft programs. Industry representatives highlighted however, that these programs are vital for the success of the industry and that at the time of an upturn industry must be ready to supply the new technologies they promised to develop to their customers. Therefore, investment in R&D will remain a priority.

### 3. CONSTRUCTION

The construction industry comprising construction, renovation, maintenance and demolition of buildings and infrastructures employs directly around **13.6 million persons** and supports about **26 million jobs in Europe**. It represents 6.2% of GDP (in 2005). Around 2.7 million enterprises operate in this sector, which is characterized by a dominance of small and medium sized enterprises (nearly 80%) many of them being micro enterprises (nearly 30%). Demand in Europe is coming from private households, the business society and the public sector alike, the latter dominating demand for infrastructure building.

Economic projections anticipate a reduction of 4.3% of the total activity in 2009, which will mostly affect EU-15, where the trends are negative or barely positive in all countries. The forecasts are particularly negative for the Spanish and Irish markets. A slight shrinking in construction investment is also expected in 2009 in Germany. In the EU-12 the trends remain overall positive with few exceptions. The projections are favourable in Poland.

The downturn will especially affect the residential sector but to some extent also the non-residential building sector. Renovation works in buildings, also due to efforts to make buildings more energy efficient, will somewhat cushion the impact of the economic downturn. A slow and gradual recovery is expected in 2010-2011.

Financing is of very high concern in this sector, as is public demand. While the first is very sensitive to moves in interest rates, asset prices and – as regards business investment – in economic projections, the latter is more affected by budget constraints.

#### **4. RESPONSES TO THE CRISIS**

Member States fiscal measures<sup>5</sup> against the crisis have targeted particularly two key economic sectors: the automotive and constructions sector.

##### **4.1. Sector specific measures in the automotive sector**

Various Member States have been taking measures vis-à-vis the automotive sector while others are considering such action. Actions proposed thus far appear to follow the general lines proposed in the economic recovery plan and a summary of selected examples of Member State action have been provided below.

- **Austria** has announced a scrapping premium of €1500 for cars elder than 13 years, valid from 1 April to 31 December 2009.
- **France** has announced €400 million government support for R&D over a four-year period and €300 million for the establishment of an investment fund for restructuring in the automotive sector (including a €100 million contribution by the main vehicle manufacturers). The plan also includes a € 1 billion re-financing facility for automotive finance companies and a €1,000 incentive for scrapping a vehicle older than 10 years old (provided they are replaced by new passenger cars emitting 160g/km of CO<sub>2</sub> or less).
- **Germany** announced a scrapping premium of €2500 (for Euro 4 or better), the introduction of a CO<sub>2</sub>-based taxation system and increased mobility research (to be aligned with EIB activities). It has previously announced an exemption from annual circulation tax for new cars purchased before 30 June 2009 (one-year exemption for Euro 4 cars, two-year exemption for Euro 5/6 cars).

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<sup>5</sup> Member States have reported roughly 300 measures to the Commission so far. The focus of sector-specific measures is on automotives and construction, the two most important goods-producing downstream sectors.

- **Portugal** has announced €70 million government support for co-financing training programs for workers during factory down time in 2009 as well as a €200 million credit program which is primarily expected to be taken up by SME suppliers.
- **Romania** has announced a one-year exemption from pollution tax for new cars purchased before 31 December 2009 and a €800 scrapping scheme starting on 1 January 2009.
- The **Spanish** government has announced €800 million support for the automotive sector primarily to be used for investments into production facilities while the new Plan VIVE with an overall budget of 1,2 billion €, including support for the scrapping of vehicles through an interest free loan of up to €5000, and up to €25.000 at libor + 250 basis points until 31<sup>st</sup> July 2010.
- **Sweden** has announced a €2.6 billion package (primarily in the form of guarantees for obtaining EIB financing) as well a clean technology R&D program.
- The **United Kingdom** has announced a £2.3 billion package of loan guarantees to help the British automotive industry to cope with the recession through guarantees for EIB and non-EIB loans. It also foresees increased funding for training of employees.

#### 4.2. Sector specific measures affecting the construction sector

Several Member States have adopted or announced specific programs to promote private and public investment in infrastructure projects.<sup>6</sup> For example, the second fiscal programme of Germany provides for €17 billion in infrastructure investments. The French “plan de relance” provides for €4 billion in public infrastructure investments and €1.9 billion for housing projects. All these programs will benefit the European construction sector, and they will trigger positive knock-on effects for its upstream suppliers.

Moreover, some Member States have also adopted or announced additional measures in direct support of private housing demand and supply:

- **Belgium:** The government has announced the application of reduced VAT rates (6%) for new construction works up to a value of 50.000 € in 2009.
- **Ireland:** Support the housing market - Taxation measures with estimated cost of €180 million or 0.1% of GDP, namely extension of the period of capital allowances for newly constructed building in order to increase attractiveness of commercial building and reduction of stamp duty applicable to non-residential property and increasing mortgage interest relief for first- time homebuyers
- **Latvia:** Lifting of the obligatory 10% down-payment rule when taking a mortgage loan (i.e. the LTV ratio was maximized at 90%) and reversing the fee increase for registering in the landbook

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<sup>6</sup> The response of Member States to the Recovery plan is much diversified and needs a systematic analysis to distinct what is specific to the construction sector from other sectors. A specific assessment concerning financial and fiscal initiatives for the energy efficient renovation of existing building is ongoing within the context of the Lead Market Initiative.

- **Netherlands:** The guarantee fund for council housing "Waarborgfonds Sociale Woningbouw" will be expanded by (temporarily) increasing the maximum level of the guarantee in special circumstances. This enables housing corporations to (partly) take over projects from commercial parties and to let out the houses.
- **Spain:** Draft bill on measures to stimulate the renting market and energy efficiency in buildings. Authorisation will be given to create Real Estate Investment Trusts which will have a favourable tax regime and whose main object will be to invest in property for rental purposes. The objective is to encourage the renting market in Spain. In 2008, through ICO, the State guarantees for securitizing loans to SMEs were increased from 1 to 3 billion euro, in order to promote rentals. Also, the ICO guarantee lines for securitisation of mortgage loans to buy social dwelling homes were increased from 3 to 5 billion euro. VAT and Personal Income Tax. Improved tax treatment of building refurbishment. Refurbishment whose cost is over 25% more than the acquisition price (not including the land). Effective January 2008. The goal is for more projects to be eligible for a more neutral beneficial tax scheme, improving input VAT recovery and stimulating the construction industry. The same applies to the rehabilitation credit allowed for the habitual dwelling under Personal Income Tax.
- **UK:** Homeowners support package - of £1.6 billion (0.13% of GDP), including a new shared equity scheme to support first-time buyers, support to vulnerable homeowners at risk of repossession and a £ 400 million programme to support social housing supply. The government also decided to temporarily raise the tax-free threshold for the UK's residential property transaction tax for one year from £125,000 to £175,000 (estimated to cost around £600 million in foregone revenues).

## **Annex I List of some examples of recent protectionist measures by third countries**

### **Argentina**

Recently imposed non-automatic licensing requirements on products considered as sensitive such as **auto parts, textiles, TVs, toys, shoes, and leather goods.**

### **Brazil**

The Brazilian Ministry of Commerce decided on 26 January to extend to 17 sectors (60% to 70% of Brazilian imports) the system of non-automatic import licensing. The government has not officially released yet a list of the sectors for which the licensing would be required. However, there are reports that the measure is already targeting imports of **wheat, plastic, tyres, synthetic fibres, piece of synthetic textiles, special tissues, clothing, iron and steel, steel pieces, copper, aluminium, machinery, electric goods, vehicles and equipment for railways, automobiles, tractors, optical instruments, photo cameras, medical devices and precision instruments.**

### **China**

Since August VAT rebates on exports of **textiles and clothing, bamboo products, plastic and furniture** were increased.

### **Ecuador**

On 26 November 2008, raised tariffs by between 5 and 20 percentage points, on 940 products, including **butter, turkey, crackers, caramels, blenders, cell phones, eyeglasses, sailboats, building materials, and transport equipment.**

### **India**

Raised tariffs on some **steel products** and issued notifications restricting imports of some steel products in November 2008.

### **Indonesia**

New law from December states that imports on 500 individual tariff lines across **textiles, footwear, toys, electronics and food and beverages** will require special licences.

### **US**

The American Recovery and Reinvestment Act (ARRA) includes a "buy American" provision for steel requiring public work projects to use only US made **iron and steel.**

### **Russia**

1. A Government decree of 9 January 2009 raised for a period of 9 months rates of import duties for some categories of **combine harvesters.**

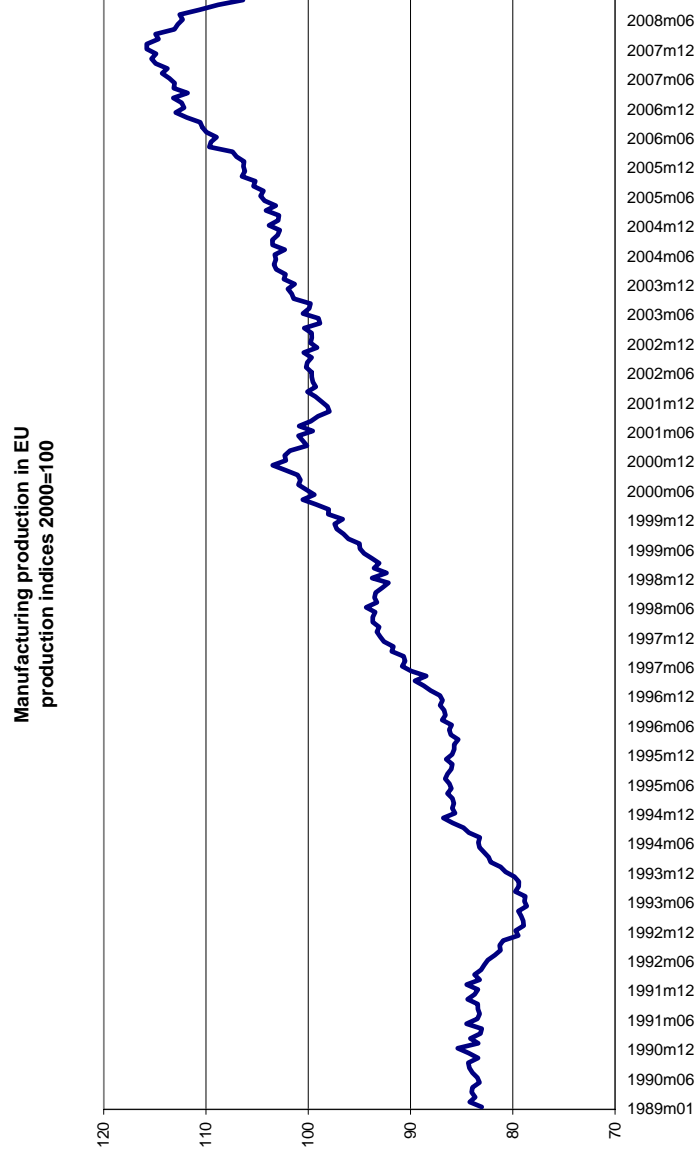
2. In addition there **is a decision that in the future only agricultural machinery produced in Russia will benefit from low-interest credits for farmers.**

3. A Government decree increases for a period of 9 months import duties on some categories of **rolled steel from iron** (from 5% to 15%) and **from alloy-free steel** (from 5% to 20%), and on **pipes from ferrous metal** (from 5% to 15% or 20%).

4. In January it raised import duties on **cars and trucks**. The size of the increases depends on the age of the vehicles and their engine size, but by way of example import duties on cars less than five years of age are increased from 25% to 30% coupled with a specific duty denominated in Roubles per cubic centimetre of engine capacity.

## Annex II Graphs

### EU Manufacturing Production Index



### EU Manufacturing Production and New Orders

