

# International Business Report 2007

Industry focus

Grant Thornton 

# Manufacturing

Interviews

7,200

32

Economies

1

International  
Business  
Report

# Welcome



What is the state of global manufacturing and what does the future hold?

The Grant Thornton International Business Report examines the current situation for manufacturers, identifying existing opportunities and looking ahead to the future of the industry.

Surveying privately held businesses' opinions in 32 economies we address exporting trends, barriers to expansion, energy efficiency, skills shortages and the effects of global expansion. The report offers significant insights for consideration in responding to growing forces of globalisation and capitalising on opportunities.

**Alex MacBeath**

Global leader – privately held business services  
Grant Thornton International

## The changing face of manufacturing

World trade in  
manufactured goods  
expanded by

**8.7%**

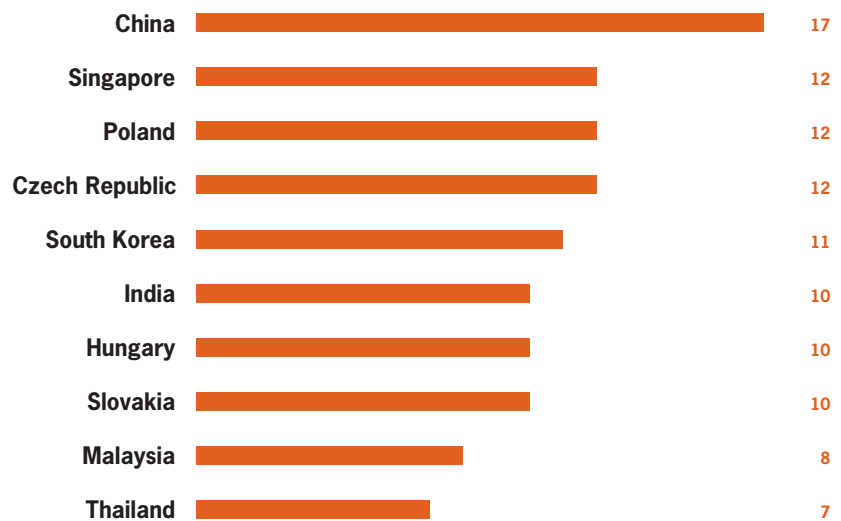
in 2006.

## Demand

Global manufacturing is growing rapidly. It has been boosted by the strength in the world's economy in recent years, which has underpinned strong increases in disposable incomes and consumer demand. Continuing advances in distribution methods and a reduction of trade barriers are also stimulating world trade in manufactured goods, up a healthy 8.7% last year.

The strength of demand is led by the dynamic Asian economies. Demand for goods and consumer durables is surging in Asia's populous countries where rising affluence is creating an ever expanding middle class. In the developing economies of Eastern Europe, the Middle East and Latin America, economic expansion is proceeding more slowly than in Asia, but still at a healthy pace supporting vigorous demand for goods.

Figure 1: Output growth in manufacturing 2006 (%)



Source: Consensus Forecasts

Meanwhile, in the mature economies of North America, Japan and Western Europe, which still account for the bulk of global sales, expansion is proceeding more conservatively. Nevertheless, these are wealthy economies with a high demand for goods, as new technology, fashion and changing tastes ensure continuing growth in sales.

## Output

Manufacturing output is increasing rapidly in emerging economies. Figure one shows Chinese production rates topping the list, growing at 17% last year, followed closely by Asian neighbours Singapore, South Korea and India. Eastern European countries also featured as top producers with Poland, Czech Republic, Hungary and Slovakia all posting double-digit rates of expansion. Many other countries in these regions achieved growth rates at above 5%. Expansion at close to these rates was also typical in Latin America, where manufacturing in Argentina, Brazil and Chile is also expanding strongly.

## Outlook

The long-term outlook for manufacturers remains buoyant, however, recent financial market turmoil, rising oil prices and weakness of the US dollar appear to be dampening global growth prospects in the near term.

Nevertheless, the global economy remains on track for strong growth in the years ahead with global GDP expanding at near 5% per annum. This is only moderately weaker than the exceptional pace of the past few years, signalling that demand for manufactured goods will remain on an upward curve.

Manufacturers have good reason for optimism, given the opportunities that robust growth in domestic and international markets is offering. Strategies underpinning successes in recent years such as shifting operations to low-cost areas, building global supply chains, innovating products and improving processing look set to continue.

### Global economy

Risks are emerging that could undermine further healthy growth. The global credit crunch is increasingly likely to have detrimental effects on the world economy in the near term; inflation is also set to increase, partly as a result of ever increasing energy costs; and demographics are unfavourable. Populations aged 20–64 are set to shrink in many countries especially Germany, China and Japan over the next two decades. Individually, or in combination, these challenges could constrain manufacturing opportunities, dampen demand and increase production difficulties.

### Environment

Environmental debate often focuses on *problems* for manufacturers. However, more recent developments have suggested that *opportunities* also exist in the form of low carbon solutions to help combat climate change. Such innovations have the potential to expose areas which could become huge business for companies willing to risk investment in research and technology to develop such advances.

It is, however, the environmental consequences of rapid economic growth which perhaps poses the greatest test for manufacturing. Oil prices are reaching ever-higher peaks, partly reflecting supply disruptions but fundamentally because of growing demand. Raw material costs are also rising, with the continual depletion of global resources. The threat to the environment through air, water and land pollution, desertification and deforestation is a clear consequence of rapid global economic expansion. All these elements carry serious humanitarian risks and threaten to slow the pace of economic progress seen in recent years.

Closely related is climate change and its consequences. The need for corporate action on global warming and the reduction of carbon dioxide (CO<sub>2</sub>) emissions have become imperative in recent years as public awareness and media attention have intensified. Proper waste management and the reduction of pollution have emerged as fundamental issues in manufacturers' production processes.

Companies need to act more responsibly towards the environment and are increasingly measured by the reputational impact of their actions. In the European Union (EU), manufacturers' emissions are regulated under the EU Emissions Trading Scheme. They have a simple choice – cut their emissions, invest in emission-reduction projects or trade emissions on the EU Emissions Trading Scheme.

### Competition

Consumers and manufacturing as a whole benefit from competition which stimulates product improvement, increased quality standards and process innovation.

However, for individual manufacturers competition is a challenge. In developed markets businesses are confronted by strong competitive pressures from low-cost producers in emerging economies. China is the prime example following its emergence as a powerhouse in world manufacturing, but many other fast-growing emerging economies make significant contributions. Together they account for a rapidly-growing share of global manufacturing. This doesn't signal the end of manufacturing in developed economies, but certainly points to challenges ahead as their share of world output continues to fall and emerging markets realise their economic potential.

Competition among manufacturers in developing economies is fierce and a major concern to businesses involved. As costs rise in well-established centres, manufacturers are looking to maintain their position. This is already evident at the heart of China's modern manufacturing strength where skills shortages and cost pressures have emerged in recent years. In response, there has been a diffusion of manufacturing to more cost-efficient provinces in the interior.

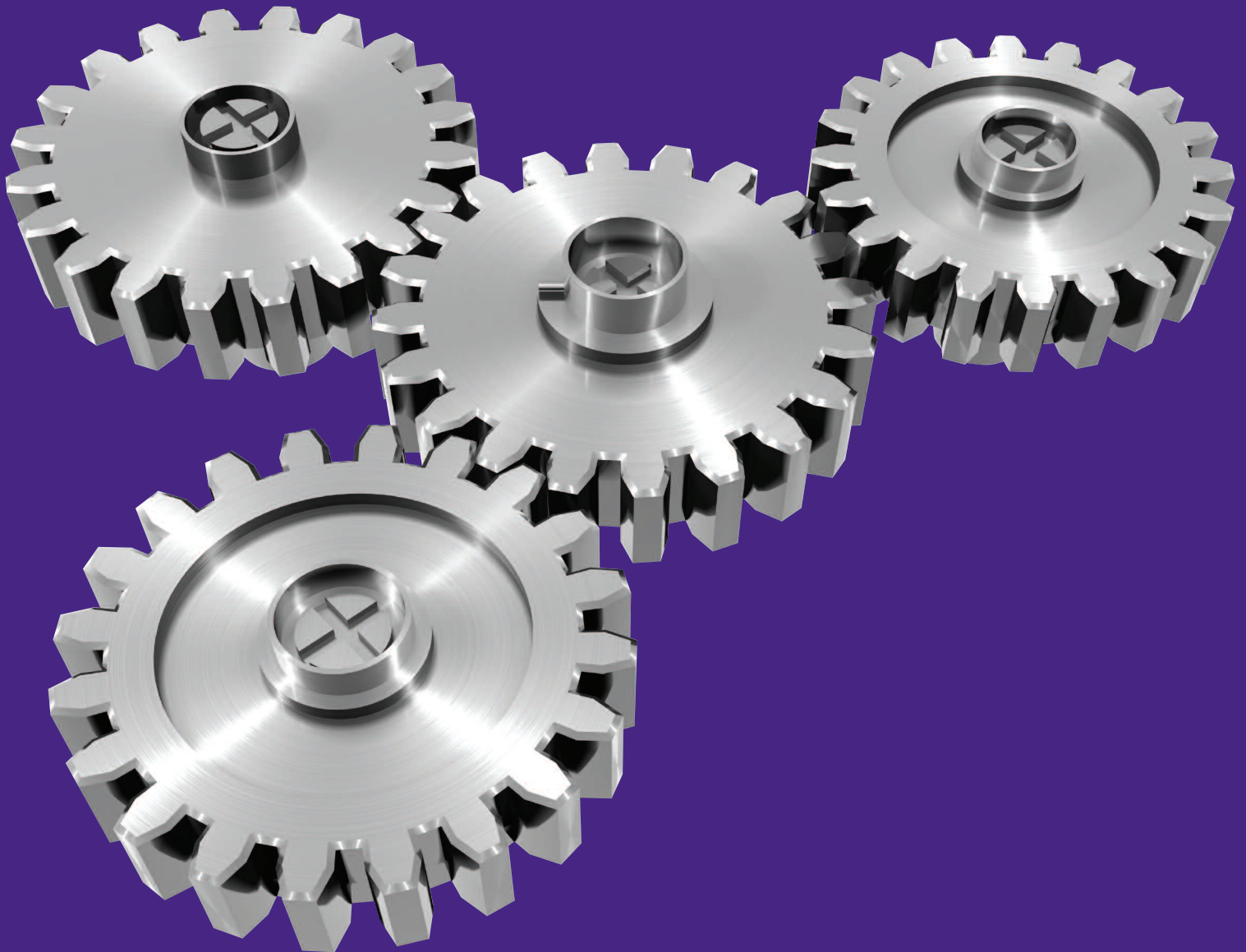
Chinese manufacturers also have issues with product standards and design flaws highlighted by widespread recalls by toymaker Mattel. Restoring confidence among businesses in developed countries is going to be a costly but essential exercise.

### Skills shortages

Manufacturers are suffering from shortages in skilled labour due to a variety of reasons. Strong growth of production in recent years has led to increasing competition for workers in already tight labour markets. The drive for productivity growth, innovation and service orientation has also changed the required skills mix. This is compounded by fewer people pursuing skilled trades and difficulties in replacing the skills of retiring workers.

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IBR results



# Manufacturing

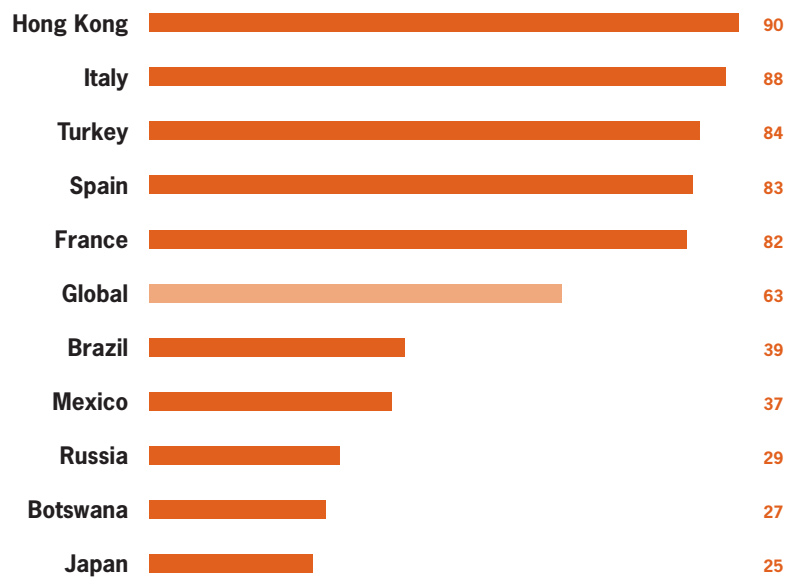
## Exporting

63% of manufacturers export. This is compared to just a third of total businesses exporting, emphasising the importance of the global marketplace to manufacturing businesses. Even in the country with the lowest proportion – Japan – a quarter of manufacturers export. However, it is worth noting that the Japanese figure is depressed by the fact that many enterprises focus on domestic business and provide products to larger companies that do export.

At the other extreme are economies where well over 80% of manufacturing businesses export. Hong Kong leads the way with an impressive 90% – reflecting close association with the rapidly growing mainland Chinese economy.

The importance of the EU as a trading zone is emphasised by the presence of Italy, Spain and France in the top five in figure two. There is a marked contrast with North American Free Trade Agreement (NAFTA) countries, with Mexico featuring in the bottom five and Canada reporting a below average 53% of manufacturers exporting.

**Figure 2: Proportion of manufacturers exporting – top and bottom five (%)**



Source: Grant Thornton International Business Report 2007

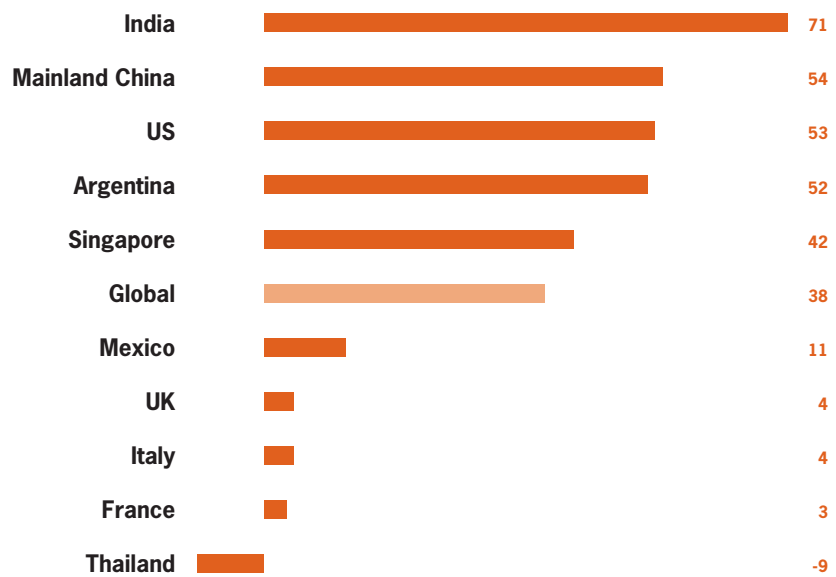
## Employment

The global manufacturing workforce increased markedly last year. This reflects a continuation of the strong production growth and demand for goods over recent years. Only one economy in our survey – Thailand – bucks the trend, with a modest contraction in employment. This may stem largely from political uncertainty and weak consumer spending in the Thai domestic economy last year.

Employment growth was weak in three major western European countries – France, Italy, and the UK. However, in the six other EU countries in the survey, manufacturers increased their labour forces broadly in line with the global average. This increase is perhaps associated with the strong revival in the German economy.

As expected, Asian manufacturing employment growth was very strong. A balance of 71% of Indian manufacturers reported taking on additional labour last year, reflected in manufacturing output growth of 10%. Mainland China and Singapore, who also saw double-digit growth in manufacturing production, feature prominently in the table. Interestingly, the US appears third as manufacturers capitalised on robust domestic demand last year and an increasingly helpful exchange rate.

Figure 3: Manufacturing employment growth 2006 – top and bottom five (% balance\*)



\* The balance is the difference between the proportion of businesses indicating an increase and those indicating a decrease.  
Source: Grant Thornton International Business Report 2007



**Jim Copeland**, Grant Thornton, Canada

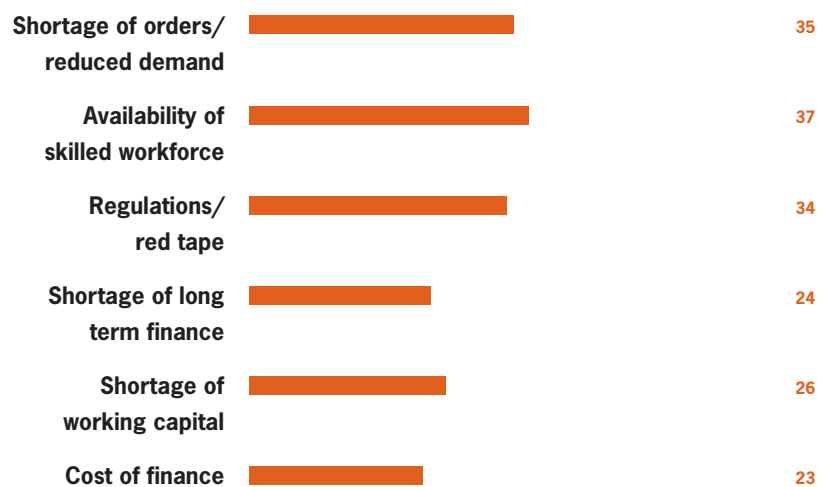
“Global manufacturing is rapidly evolving. Today’s dynamic environment creates opportunities on an unprecedented scale with complex, emerging markets becoming universally accessible. Manufacturers transforming structure and culture to seize these challenges can realise substantial returns.”

### Expansion constraints

Shortage of skilled workers is the greatest constraint on expansion for manufacturers. After four years of vigorous economic growth and the ongoing buoyancy of world demand, it is perhaps unsurprising that this was a greater impediment on growth than shortage of orders.

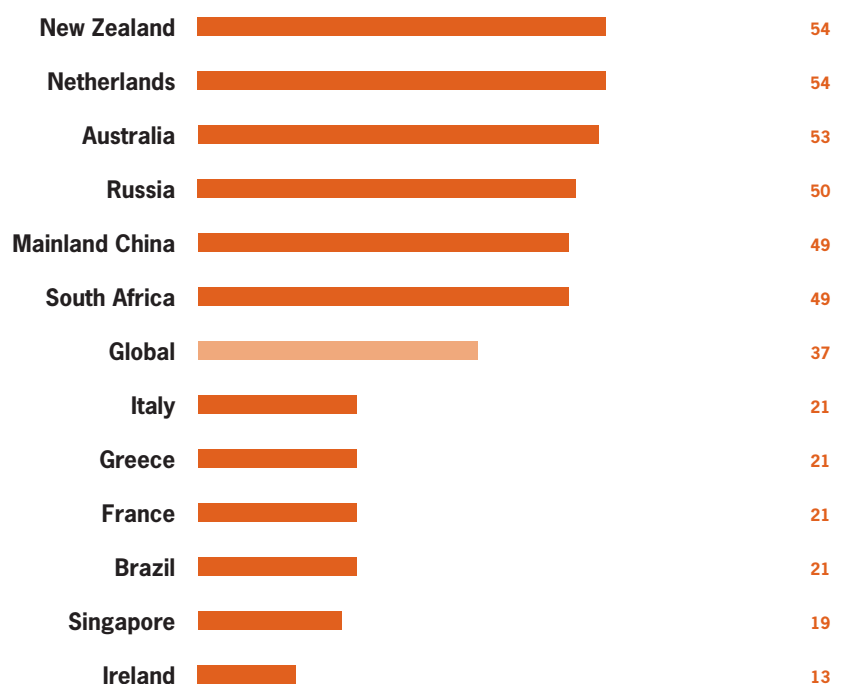
Skills shortages are most evident in the Netherlands, New Zealand and Australia. Recent strong growth seems to have stretched their available labour pools. However, this factor is not regarded as a major constraint in Ireland (whose labour force has been supplemented by strong inward migration), and France, Greece or Italy, where unemployment levels remain high.

Figure 4: Constraints on business expansion (%\*)



\* % of respondents rating constraint 4 or 5 on a scale of 1 to 5, where 1 is a minor constraint and 5 a major constraint.  
Source: Grant Thornton International Business Report 2007

Figure 5: Skills shortages as a constraint – top and bottom six (%)



Source: Grant Thornton International Business Report 2007

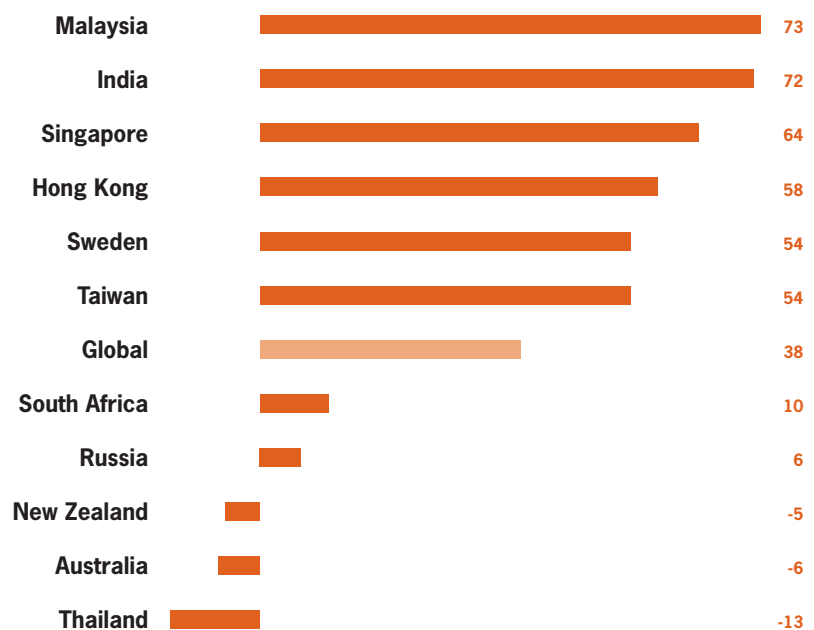
## Globalisation

Manufacturers in Thailand, Australia and New Zealand see globalisation as a threat to their business. The most downbeat are Thai manufacturers with 13% more viewing globalisation as a threat rather than an opportunity. Australian and New Zealand manufacturers are also negative with over 40% of respondents in both countries negative about an increasingly global market. This points to mounting concerns about greater competition from Asian manufacturers – especially those in mainland China. Anxiety was likely to have been reinforced in Thailand by the country's difficult political and economic background at the time of the survey.

Unsurprisingly Asian economies feature prominently as the most positive manufacturers regarding globalisation. Malaysia and India head the list having responded forcefully to the need to compete in the global manufacturing marketplace.

It is interesting to note that while mainland China has established itself as a highly competitive manufacturing base, a significant proportion of mainland Chinese manufacturers regard globalisation as more of a threat than an opportunity. Hence the country's balance of respondents, on which figure six is based, is surprisingly subdued at 50%.

Figure 6: Globalisation as an opportunity or a threat – top and bottom five (% balance\*)



\* The balance is the difference between the proportion of businesses indicating an opportunity and those indicating a threat.  
Source: Grant Thornton International Business Report 2007

**Cost pressures**

Over 60% of manufacturers say raw material costs will have major impacts on their cost pressures, while 45% cite energy costs. These figures are significantly higher than those for all businesses in the survey. Once the service sector is included, the proportion of businesses citing energy and raw material costs declines markedly, while staff costs assume a far greater significance.

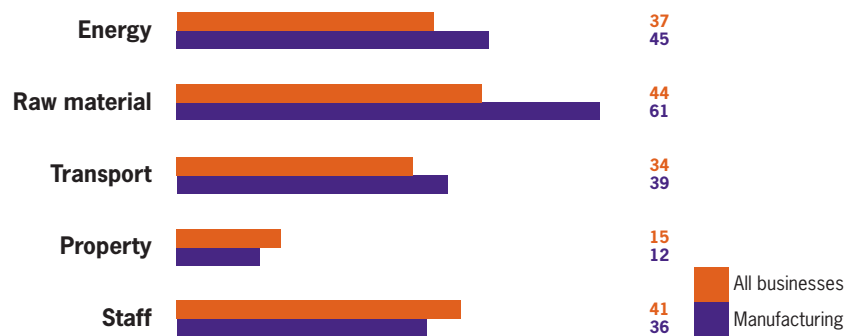
Turkish manufacturers are most concerned about energy costs with 82% rating these as having a major impact on cost pressures, followed by Mexico 61%, despite it being a major oil producer, and Thailand (61%). Least concerned about energy costs are two energy producing countries, Australia (20%) and Brazil (23%).

The management of energy costs, in a wider environmental context, has also emerged as crucial in tackling global warming. We asked manufacturers what methods they have taken to manage energy costs and two-thirds have done one or more of the following:

- undertaken energy reviews to identify where energy is being wasted
- reduced their property energy consumption e.g. installed energy-saving lighting, motion detectors or insulation
- installed measures to ensure all IT and equipment is turned off when unused.

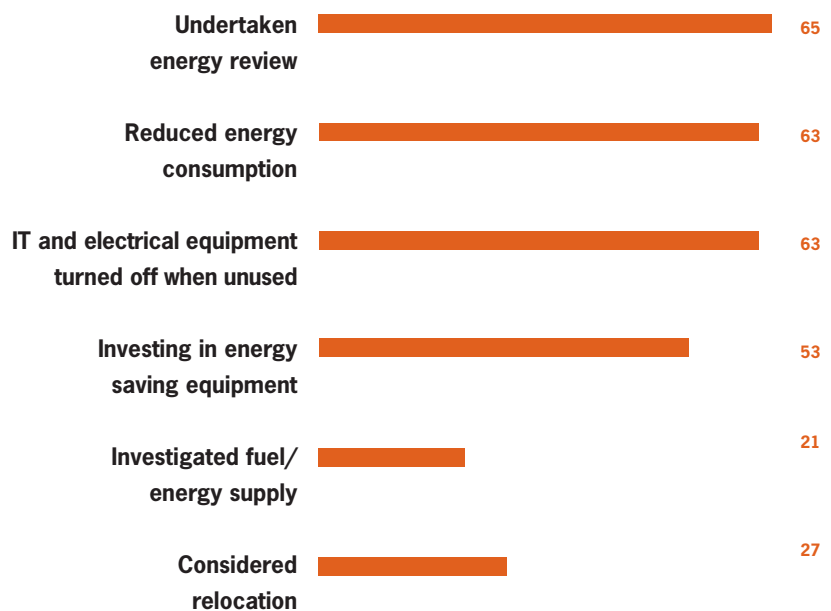
Over half are investing in energy saving plant and machinery.

**Figure 7: Major impact on cost pressures – manufacturing versus all businesses (%)**



Source: Grant Thornton International Business Report 2007

**Figure 8: Methods taken to manage energy costs**



Source: Grant Thornton International Business Report 2007



**Robert Quant**, Grant Thornton, Australia

“Rapid growth in China is proving both a blessing and curse for business in Australia and New Zealand. Increased demand has led to higher production in the Australian resources sector, fuelling the mining boom and strong economic growth. However, Australian manufacturers are having difficulties competing with China’s ability to produce low-cost goods, and are being constrained by shortages in skilled labour and the lowest unemployment levels for decades.”

## Insight into the future

### Exporting

Over one third of manufacturers do not export. Comfortable relationships within established domestic markets may be sufficient in a world where change is slow and trade restricted. However, the world today is a more fiercely competitive, rapidly developing and open environment than it has ever been. It makes companies vulnerable to dynamic competitors. As with companies who already export, those whose sales are restricted to the home market need to constantly seek new markets for their products. This should involve exploiting opportunities in the mature, affluent developed economies, as well as seeking to gain footholds in the vibrant markets of Asia, Eastern Europe and Latin America.

### Employment

Manufacturers are increasing employment levels as a result of strong production growth and demand. As the global economy looks more uncertain, manufacturing employment levels may be hit. The potential slowdown in spending by US consumers, who account for almost 20% of global GDP, could dramatically affect global demand. Manufacturers who have grown the most over recent years will be hit the hardest if the feared slowdown materialises.

### Constraints

Attracting skilled workers is an increasing challenge for manufacturers in today's buoyant global economy. Shortage, actual or potential, poses a huge threat to growth levels especially in emerging economies but also in the more developed economies such as the Netherlands, Australia and New Zealand.

There is a need to focus on retaining and retraining existing workers whilst perhaps developing employees with cross-functional capabilities to fill the gaps. Companies may also pursue outsourcing opportunities to reduce the demand for local workers and improve productivity.

As shown in European countries, migrant workers can also help alleviate the problem and are often cost-effective solutions to high wage demands especially in developed countries. However, this element of the workforce needs to be carefully managed as it often shows high rates of employee turnover, and there are many complex legal and taxation issues to be considered.

### Globalisation

Globalisation is regarded as an opportunity by manufacturers in many rapidly-growing economies. In some developed economies, notably both Australia and New Zealand, globalisation is perceived as a threat to domestic manufacturing. Some emerging economies have the ability to produce goods at lower costs than their counterparts in more developed economies, primarily through the benefits of lower wage costs. The access to more markets creates opportunities for them to exploit with their cheaper goods.

Manufacturers can also benefit from globalisation through the development of global supply chains. These create potential cost savings and increased efficiencies as sourcing, product development, processing and distribution are enhanced. There are many notable examples of manufacturers, dissatisfied with often expensive local suppliers or distributors, who have developed global supply chains of their own and have boosted their market share considerably. However, as we have seen with problems in toy manufacturing, global supply chains must be carefully planned and managed.

### Cost pressures

Manufacturers are reacting to increased cost pressures and are simultaneously working to meet environmental challenges. The Emissions Trading Scheme means that EU manufacturers must consider a complex mix of strategic issues and trading arrangements to keep within strict emission targets. Furthermore, there's political pressure to bring additional industries and greenhouse gases into the Scheme, meaning that manufacturers plans must be tested against a range of possible regulatory and market scenarios.

However, environmental challenges also create opportunities for manufacturers to gain competitive advantage by becoming a 'green' supplier for example. Major retailers, keen to display their concern about the environment, are choosing more environmentally-aware suppliers as part of their wider corporate social responsibility. More environmental products and methods are costly to research and develop, and although the potential rewards appear great, this diversification may prove difficult for smaller manufacturers to embrace.

## Manufacturing: the road ahead

Manufacturers face an exciting and challenging future. Rapid expansion in developing economies such as China and India, and steady growth in mature economies, have greatly expanded demand from consumer markets. However, increased globalisation has challenged individual manufacturers by intensifying competition in both domestic and international markets.

To remain competitive, manufacturers must explore new markets for production and demand for their products. Skills shortages must be addressed through careful retention and recruitment management, whilst coping mechanisms need to be developed to deal with increasing demands for environmentally conscious approaches to operations.

Although businesses are firmly committed to seeking energy-saving solutions, 'greener' production methods, and coping with increased new market competition, look set to be the key challenges for the future of manufacturers around the globe.

## IBR contacts

**This list represents the countries/territories where Grant Thornton International member and correspondent\* firms currently have operations.**

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Australia	Egypt	Italy	Nigeria*	Taiwan
Austria	El Salvador	Jamaica	Norway	Tanzania
Bahamas	Finland	Japan	Oman	Thailand
Bahrain*	France	Jordan	Pakistan	Turkey
Belgium	Gabon*	Kenya	Panama	Turks and Caicos*
Bermuda*	Germany	Korea	Philippines	Uganda
Botswana	Ghana*	Kosovo*	Poland	Ukraine
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\* for a detailed explanation of the differences between correspondent and member firms please visit [www.gti.org](http://www.gti.org)

## About IBR

This manufacturing focus is part of a series of reports produced using data from The Grant Thornton International Business Report (IBR). IBR provides insight into the views and expectations of over 7,200 medium-large privately held businesses across 32 economies. This report provides an thought and analysis into the responses of over 2,700 manufacturers worldwide.

The definition used for manufacturing in this report includes the supply chain for the industry:

- Manufacturing
- Wholesale and distribution.

Four countries included in IBR have been omitted from the IBR manufacturing results section (Armenia, Luxembourg, the Philippines and Poland) as, due to weak manufacturing sample sizes, the data from these countries was considered unreliable. Results for the Netherlands, Thailand and Turkey are included, however should be treated with an element of caution.

For more information on IBR please contact Neil Bird, IBR project manager, on +44 (0) 20 7391 9516, or visit the IBR website at [www.internationalbusinessreport.com](http://www.internationalbusinessreport.com).

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