

## XVI ENCONTRO NACIONAL DE TECNOLOGIA DO AMBIENTE CONSTRUÍDO

Desafios e Perspectivas da Internacionalização da Construção  
São Paulo, 21 a 23 de Setembro de 2016

# INTERNATIONALIZATION AND COMPETITIVENESS FOR BRAZIL'S CONSTRUCTION SECTOR <sup>1</sup>

FLANAGAN, Roger (1)

(1) School of Construction Management and Engineering, University of Reading, Whiteknights,  
Reading RG6 6AW, UK, r.flanagan@reading.ac.uk

### ABSTRACT

Construction companies and construction professional services companies operate in a volatile, uncertain, complex, and fast changing world. Some international organisations are growing, becoming wealthier, better connected, and winning work with improved margins. Whereas, some companies are struggling to win work against more aggressive competition and facing write-downs on projects. Nobody ever envisaged mega construction giants with payrolls of over 100,000 people, or professional services firms with payrolls of 50,000 plus people. The reality in 2016 is that construction has become very fragmented with a gap opening up between the large firms and the small and medium sized firms. So what makes companies successful? This article will focus upon the ingredients for success in the international construction market. Some major issues are:

- What are the emerging trends driving the international construction markets?
- What are the risks for Brazilian enterprises in greater internationalisation?
- Are Brazilian companies big enough and sufficiently technically advanced to win major projects at a decent profit margin?
- What should Brazil's strategy be in the future with its internationalisation policy, and what role can the construction professional service firms play in that strategy?
- Where differentiates the winners?
- Will China be a threat or an opportunity?

**Keywords:** Internationalization. Construction sector. Construction Market. Competitiveness.

### INTRODUCTION

The aim of this paper is to consider why Brazil's construction sector needs to focus on its competitiveness to improve internationalisation in the sector.

The performance of the Brazilian construction industry is crucial to the country's long term economic growth and wellbeing. It is an industry seeking to meet the demands of increasing infrastructure development, but facing many challenges to modernise and improve safety and health standards, to increase productivity on the job site, embrace pre-fabrication and off-site production,

---

<sup>1</sup> FLANAGAN, Roger. Internationalization and competitiveness for Brazil's construction sector. In: ENCONTRO NACIONAL DE TECNOLOGIA DO AMBIENTE CONSTRUÍDO, 16., 2016, São Paulo. **Anais...** Porto Alegre: ANTAC, 2016.

and to use digital techniques that will integrate design and production. The industry must become more international and to seek overseas work in Latin America and beyond.

As a nation, Brazil faces a choice: to drift into the future, or to actively shape it. The future should be based on choice, not chance. The construction industry needs to actively plan for and shape its future, where internationalisation is a core part of the future. Only by doing so can it realise the vision of being an industry of increased opportunity, prosperity and fairness. It must be outward looking, and not be inward and protective.

## **GLOBALISATION AND INTERNATIONALISATION**

Globalisation has created an interconnected and interdependent world with fewer trade barriers, and with labour becoming much more mobile, with goods and services sourced from around the world. It converts the world into a complex and multi-faceted dynamic place with more competition, more trade opportunities, greater financial deregulation, and the growth of exports and imports. The mobility of capital and a communications revolution has brought about time-space compression overcoming national boundaries. In the Brazilian construction industry, the effects are the growth in imported construction components and materials, the rising number of components imported from low-wage economies, and the emergence of Chinese contractors working on projects.

The global construction market is constantly changing in a business environment that increasingly requires greater client focus, better value for money, and construction delivered more safely, on time, and on price.

Globalization is the driver, internationalisation is the response with Brazilian enterprises adapting to the changing world and operating across national boundaries. It involves planning and implementing products and services that can easily be adapted to specific local languages and cultures, a process called localization, and designing products and services that are easily adaptable to different cultures and languages. Globalisation has existed in one form or another for the past two decades. (Etemad, 2004; Fraser and Oppenheim, 1997). The impacts are:

- Greater mobility, integration of capital markets and increased connectivity.
- Expansion of activity, opening up of national boundaries with fewer trade barriers.
- Rapid changes in technology that allow knowledge and human capital to be leveraged worldwide.
- The growth in the acceptance of the World Trade Organisation regulatory framework for the conduct of business.

The construction business has changed, from the old world viewed mostly through an economic lens, to a new world where societal, technological,

environmental and political factors also play an important part. The changes in the construction services market have taken place in waves, each one of a different duration and magnitude. The pace of innovation and project delivery has changed; with greater interdependency and a desire to deliver projects faster using the latest information and communication technology.

## THE GLOBAL CONSTRUCTION MARKET

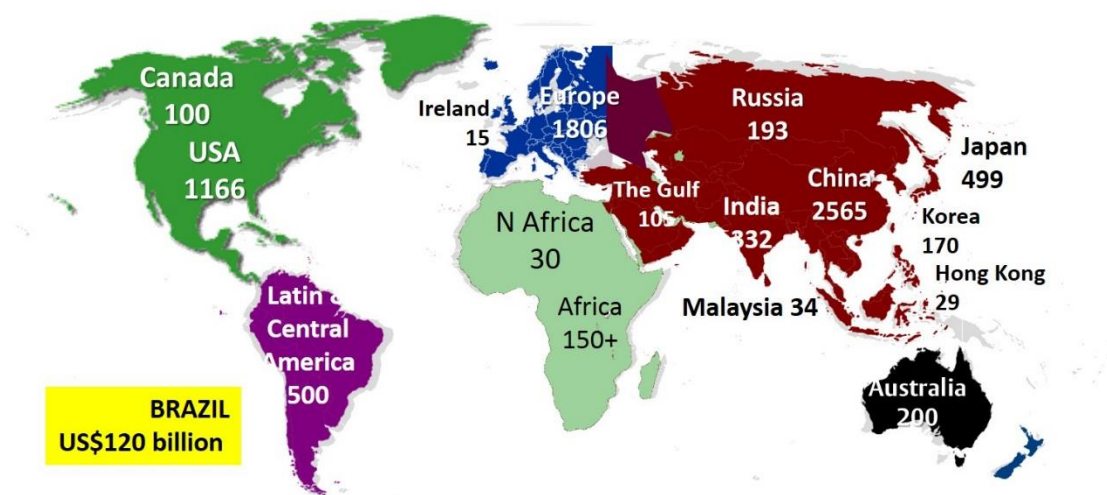
Figure 1 shows the annual output of the global construction sector in 2015. Currency exchange rates have an impact on the output value because the figures are reported in US Dollars. The Brazilian construction market is very important in Latin America because of its size, location, and influence in the region.

Figure 1- The global construction market (US\$ current 2015 figures)

### 2015 Global construction output ≈ US\$7.5 trillion

+ professional services + local taxation + informal sector

+ *serviços profissionais + impostos locais + setor informal*



The diagram shows the published annual outputs for construction work put in place at current prices derived from published figures. It does not include the output of the informal sector, nor local taxes and professional services. The figures must be treated with some caution as countries use different reporting standards, and in some regions of Africa, there is a paucity of reliable data and information.

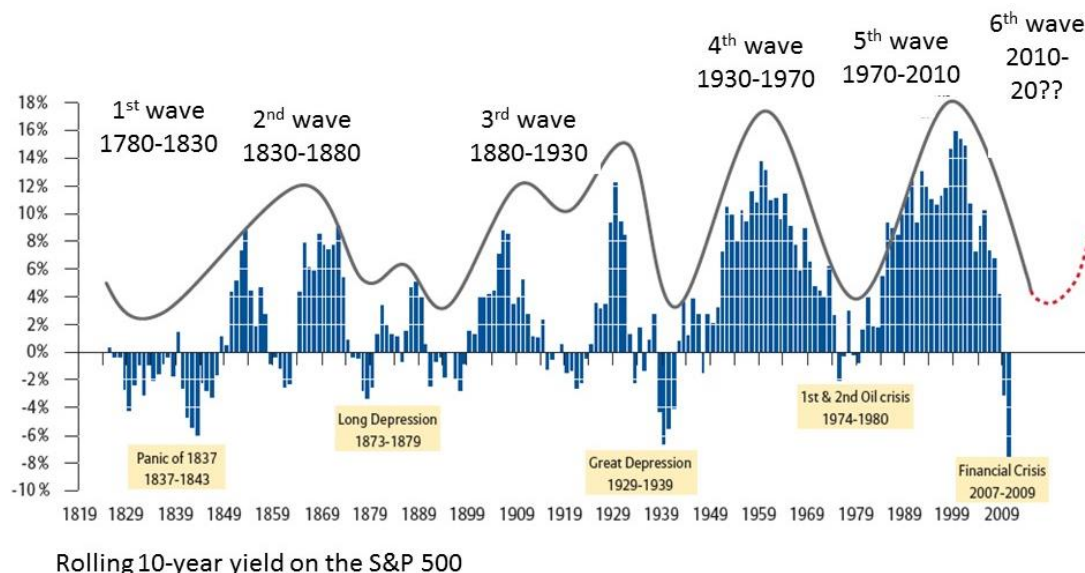
Construction markets are highly cyclical with very different structures, localised, and regiocentric. The global construction market is not a homogeneous market. The barriers to entry for overseas companies are very different. For example, the Japanese construction market is difficult to enter because of mandatory stringent registration requirements, language requirements, and

local laws creating opaque barriers to entry; however, under World Trade Organisation rules the market is open for trade.

### Understanding the cycles

The cyclical nature of the construction sector is an important factor when considering internationalisation. The Soviet economist Nikolai Kondratiev (also written Kondratieff) was the first to identify the cycle-like phenomena in the modern capitalist world economy. The cycles averaged fifty years each and consisted of alternating periods between high sectoral growth – see Figure 2 (waves mapped against the rolling 10-year yield of the S&P 500).

Figure 2 - Kondratieff cycles – long wave of prosperity



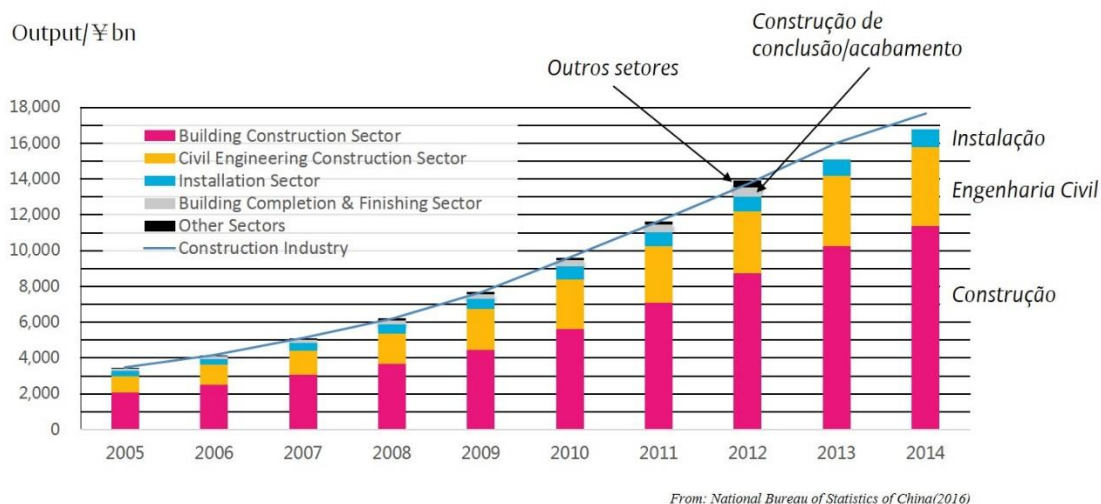
Source: Datastream

He wrote about the cycles and periods of relatively slow growth in his book *The Major Economic Cycles* (1925) alongside other works written in the same decade. Figure 2 shows the Kondratieff cycles and the influences on the cycle. The Kondratieff cycle is one model to explain the impact and reasoning for the cycles.

Some construction markets have grown rapidly. The Chinese construction output in figure 3 shows the relentless rise of China's construction sector from 2005 to 2014. The fundamental reason is that the public sector as a client is responsible for 96% of all construction output; hence, it is possible to manage the construction sector cycle by increasing investment. Chinese companies have been encouraged to internationalise and to seek overseas projects, often with the help of government who provides project finance and overseas aid projects. The Chinese government uses its political influence to help Chinese companies to go overseas by providing project finance, loans, loan guarantees, and plant and equipment. Most large construction enterprises are

state owned enterprises; hence, there is a strong connection between the government and the companies.

Figure 3 - Chinese construction sector output 2005-2014



## GLOBAL DRIVERS IN THE CONSTRUCTION MARKET

Global drivers transcend national boundaries; they have a profound effect on the cycles in construction, albeit sometimes short term. The challenge for all firms is ensuring profitability and maintaining customer satisfaction, whilst at the same time facing, managing and implementing change. Many business leaders are compelled to focus on their short-term profitability and growth, yet many of the global drivers are of a long-term nature; there is a fundamental difference between the time horizon of most firms and the long-term nature of the drivers.

A complex web connects global drivers. Some connections are obvious, such as the links between urbanisation and the need for better transportation, healthcare and education in cities. Other drivers may mutate, changing the nature of the driver. For example, a new technology may solve one issue but create another completely different issue. For example, digital technologies improve the efficiency of industries but cyber-crime is a major threat.

Drivers can be defined as those forces that cannot be changed; they involve social, technological, economic, environmental and political forces. Table 1 shows some of the global drivers.

Table 1 - Global drivers

<i>Increasing speed of change</i>	<i>Digitisation and the increase in digital technologies and systems</i>
<i>Increasing compliance, legislation and heightened regulatory scrutiny resulting in greater bureaucracy – health and safety is high on the list of priorities, social responsibility, ethical responsibility and the elimination of corrupt practices</i>	<i>Demographic changes with many countries facing an ageing population. The disparity in population growth between the developed world countries and the developing world countries</i>
<i>Move from public to private funding of infrastructure projects with new build-operate-transfer, and public private partnership models</i>	<i>Environmental pressures for more sustainable and greener projects</i>
<i>New technologies with lighter and stronger materials</i>	<i>Urbanisation with migration from rural to urban areas</i>
<i>Pressure on water supply and waste water treatment</i>	<i>Communications revolution with faster, more reliable systems</i>
<i>The impact of climate change with drought, flooding, irrigation requirements, and high temperatures</i>	<i>Convergence and consolidation of companies/integration of processes. Convergence of technologies</i>
<i>Client pressure for better value for money from the construction sector</i>	<i>Rise of pandemics</i>

Brazil is not immune from the global drivers. The drivers are a threat and opportunity. Brazilian companies must consider their competitive advantage in the context of the drivers, and the way they can compete and capitalise internationally. Simply being the cheapest on price will not always win projects.

## UNDERSTANDING COMPETITIVENESS

Competitiveness is not a zero-sum game. One country does not improve its competitiveness at the expense of other countries. The competitiveness of any construction sector relates to the productivity of the national construction industry, the intellectual capital, the core competencies, the entrepreneurship, and influence of a nation. The industry challenge is to create the conditions for rapid and sustained productivity growth that will shift competitive advantage from low-cost labour and inefficient work practices, to more efficient process that exploit technology to improve performance, and to leverage the knowledge, intellectual and financial capital, and the innovation of individuals and enterprises.

Competitiveness is poorly understood, there is no common definition or metrics. There are many definitions, including:

*“Competitiveness is the degree to which a country can, under free and fair market conditions, produce goods and services which meet the tests of international markets while simultaneously maintaining and expanding the real incomes of its people over the longer term.” (OECD World Competitiveness report, 1997).*

*“Competitiveness is the capacity of businesses, industries, regions, nations or supranational associations exposed, and remaining exposed, to*

*international competition to secure a relatively high return on the factors of production and relatively high employment levels on a sustainable basis."* (European Commission 1994).

Competitiveness is complex; it may be applied at national, industry and company levels (Momaya, 2004; Lall, 2001). It depends on the values and the focus of the stakeholders of the entity under investigation (Momaya and Selby, 1998; Chaharbaghi and Feurer, 1994), and is influenced by a number of endogenous and exogenous factors. It needs to be considered in a relative sense, either against some maximum ideal level, or against the peers in the sector (Chaharbaghi and Feurer, 1994; Lall, 2001).

### **Competitiveness factors**

The factors that influence competitiveness change with time and context, for example as a national economy moves from a less, to a more developed stage (Momaya, 2004; Cho and Moon, 2000).

Competitiveness implies elements of innovation, competence, productivity, efficiency, and profitability; these change over time and so the sustainability of these elements is important in maintaining competitiveness. Productivity is not the only factor of competitiveness. "Productivity depends on the value of goods and services produced per unit of the nation's human, capital and natural resources, measured by the prices they can command in open markets and the efficiency with which they can be produced" (Porter, 2002, p55). Productivity is about getting the best value from all inputs across the whole value chain. There needs to be sustained improvement in management, products and processes in component, and materials manufacturing, design management and processes, site production and assembly.

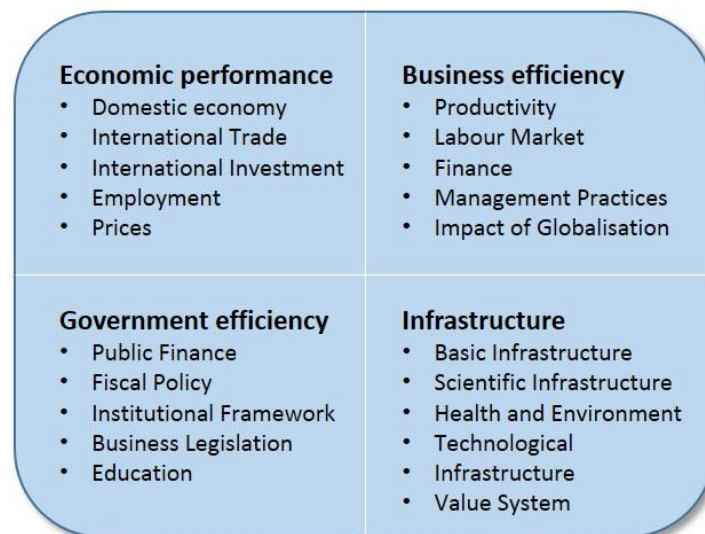
Figure 4 shows a number of factors of national competitiveness suggested by the World Economic Forum.

Construction competitiveness cannot be measured by treating the construction sector as one industry sector. The sector can be classified into three distinct sub-categories because of the different mix of skills, capital and finance, and technology:

- a) Manufacture and assembly of plant, equipment, components and raw materials - requires high capital and technology input and can be manufactured anywhere and exported, as long as they are price competitive and meet the required codes and standards appropriate for the domestic market, and have the facility to support ongoing maintenance and repair.



Figure 4 - Measuring competitiveness



- b) Professional design and consultancy services (knowledge intensive professional services) - mainly dependent on knowledge and intellectual capital and can take place in any country and be exported. The design codes, business and professional registration requirements and the cultural dimension of that country primarily dictate the professional services.
- c) Site assembly/production carried out by contractors and specialist contractors - heavily dependent on organisation and labour skills, plant, equipment, and technology, use local labour (with culture and education and training variables), and experience local conditions (climate and geology variables). They frequently require companies to have a local presence or local partner.

Within the above groups, there are sub-groups. For example, housing contractors have very different organisational and business characteristics to civil engineering contractors. Either housing contractors work in social housing, or they build speculatively for sale, focused upon the needs of the individual customer. They have a land bank, which may stretch many years into the future; frequently this means large amounts of capital locked-up in land. The civil engineering contractor is generally dependent upon public sector organisations for workload.

Therefore, when measuring the competitiveness of the firm, there must be an understanding of the different sets of factors of competitiveness of the business being considered. It is tempting to use the same factors throughout the sector but these will not reveal the special characteristics of a country or a company.

At both the national or firm level there is agreement that competitiveness should be maintained and increased. There are however, a number of points of disagreement when it comes to measuring competitiveness. As concluded by Buckley et al. (1988), some view competitiveness as the ability to perform well, others focus on the ability to generate and maintain competitive

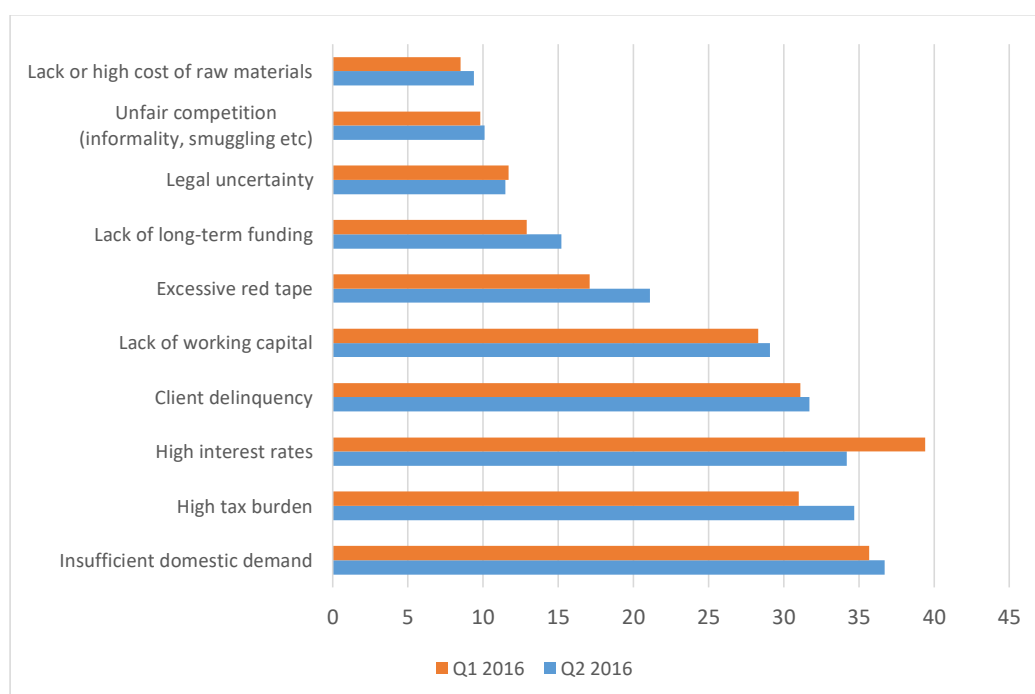


advantages and the rest on the management process. The underlying thinking is that measuring only a potential does not reveal anything about actual performance. A single measure of performance raises the question of the sustainability of that performance. Finally, measuring the management process, investigates the vital link that can turn potential into performance.

## BRAZIL'S CONSTRUCTION INDUSTRY

All construction sectors around the world face the global drivers of change, increasing competition and the effects of globalisation. A recent survey of the construction practitioners revealed some of the challenges the Brazil construction sector faces – see Figure 5.

Figure 5 - The main problems faced by the construction industry in Q1 and Q2 2016 (%)



Source: Construction Industry Survey, 2016. <http://arquivos.portaldaindustria.com.br/>

Note: "Unfair competition" refers to informality, smuggling etc.

Many of the cited problems are financially based and government related. The survey showed that views differ according to the size of but there is a consistency in the top issues voiced by the respondents – see Figure 6.

Figure 6 - Different views according to company size

ITEMS	Construction			Small			Medium			Large		
	I-16 %	II-16 %	Ranking	I-16 %	II-16 %	Ranking	I-16 %	II-16 %	Ranking	I-16 %	II-16 %	Ranking
Insufficient domestic demand	35.7	<b>36.7</b>	<b>1</b>	28.0	<b>31.4</b>	<b>2</b>	33.5	<b>31.3</b>	<b>4</b>	39.8	<b>41.8</b>	<b>1</b>
High tax burden	31.0	<b>34.7</b>	<b>2</b>	33.0	<b>36.6</b>	<b>1</b>	35.4	<b>35.5</b>	<b>1</b>	27.8	<b>33.6</b>	<b>3</b>
High interest rates	39.4	<b>34.2</b>	<b>3</b>	34.1	<b>29.4</b>	<b>3</b>	38.2	<b>33.2</b>	<b>2</b>	42.1	<b>36.6</b>	<b>2</b>
Client delinquency	31.1	<b>31.7</b>	<b>4</b>	26.9	<b>26.8</b>	<b>5</b>	29.1	<b>31.7</b>	<b>3</b>	33.8	<b>33.6</b>	<b>3</b>
Lack of working capital	28.3	<b>29.1</b>	<b>5</b>	25.8	<b>28.4</b>	<b>4</b>	28.0	<b>30.9</b>	<b>5</b>	29.3	<b>28.4</b>	<b>5</b>
Excessive red tape	17.1	<b>21.1</b>	<b>6</b>	22.0	<b>19.6</b>	<b>6</b>	18.9	<b>22.3</b>	<b>6</b>	14.3	<b>20.9</b>	<b>6</b>
Lack of long-term funding	12.9	<b>15.2</b>	<b>7</b>	12.1	<b>11.9</b>	<b>9</b>	12.2	<b>11.3</b>	<b>8</b>	13.5	<b>18.7</b>	<b>7</b>
Legal uncertainty	11.7	<b>11.5</b>	<b>8</b>	5.5	<b>8.2</b>	<b>11</b>	9.8	<b>10.2</b>	<b>10</b>	15.0	<b>13.4</b>	<b>8</b>
Unfair competition (informality, smuggling, etc.)	9.8	<b>10.1</b>	<b>9</b>	14.8	<b>12.4</b>	<b>7</b>	11.8	<b>12.1</b>	<b>7</b>	6.8	<b>8.2</b>	<b>11</b>
Lack or high cost of raw materials	8.5	<b>9.4</b>	<b>10</b>	13.2	<b>10.8</b>	<b>10</b>	8.7	<b>10.6</b>	<b>9</b>	6.8	<b>8.2</b>	<b>11</b>
Other	8.3	<b>7.9</b>	<b>11</b>	8.2	<b>3.6</b>	<b>16</b>	8.3	<b>7.5</b>	<b>12</b>	8.3	<b>9.7</b>	<b>9</b>
Lack or high cost of skilled workers	8.6	<b>7.7</b>	<b>12</b>	11.0	<b>12.4</b>	<b>7</b>	9.1	<b>9.1</b>	<b>11</b>	7.5	<b>5.2</b>	<b>13</b>
Environmental licensing	4.3	<b>7.3</b>	<b>13</b>	2.2	<b>4.6</b>	<b>13</b>	5.1	<b>6.0</b>	<b>13</b>	4.5	<b>9.0</b>	<b>10</b>
Weather conditions	3.3	<b>4.3</b>	<b>14</b>	5.5	<b>4.1</b>	<b>14</b>	5.1	<b>5.3</b>	<b>15</b>	1.5	<b>3.7</b>	<b>14</b>
Lack or high cost of unskilled workers	6.3	<b>3.8</b>	<b>15</b>	4.9	<b>5.2</b>	<b>12</b>	6.3	<b>5.7</b>	<b>14</b>	6.8	<b>2.2</b>	<b>15</b>
Lack or high cost of support equipment	0.9	<b>2.0</b>	<b>16</b>	1.6	<b>3.1</b>	<b>17</b>	0.8	<b>2.3</b>	<b>17</b>	0.8	<b>1.5</b>	<b>16</b>
Lack or high cost of energy	3.8	<b>1.8</b>	<b>17</b>	6.6	<b>2.1</b>	<b>18</b>	4.7	<b>3.4</b>	<b>16</b>	2.3	<b>0.7</b>	<b>17</b>
Difficulties in transportation logistics (roads, etc.)	1.5	<b>1.1</b>	<b>18</b>	2.2	<b>4.1</b>	<b>14</b>	1.2	<b>1.1</b>	<b>18</b>	1.5	-	-
Availability of land	0.8	<b>0.5</b>	<b>19</b>	1.1	<b>1.0</b>	<b>19</b>	0.8	<b>1.1</b>	<b>18</b>	0.8	-	-
None	11.3	<b>8.1</b>		15.4	<b>10.3</b>		8.7	<b>9.1</b>		11.3	<b>6.7</b>	

### Challenges faced by the Brazilian construction sector

- More risk and interdependency between the risks, greater complexity, and higher client expectations for project delivery.
- Fragmentation of the industry with many micro, small and medium sized enterprises and few major contractors with an international focus
- Large, unregulated informal sector with low barriers to entry.
- Consultant design and engineering fees under pressure leading to incomplete design information and more risk placed with the constructors.
- Low profit margins for constructors with an imbalance between the risk and reward.
- Poor safety and health record on job sites because of the lack of training by small and medium sized enterprises.

- More bureaucracy and tighter governance.
- More contract disputes on megaprojects.
- Reputation issues because of corruption; ethical responsibility must be improved.
- Poor government support for exporting construction services.
- Insufficient information, insufficient time, and lack of appreciation about the cost of bidding for work.

Many of the challenges stem from the separation of design and production. The gaps between design and production need to be bridged, with new procurement approaches and a more systemised approach towards winning projects.

The challenges for the construction industry outlined above are identical to many developing countries. Coping with such challenges can mean companies become inward focused. There must be a change from inward looking to outward looking, and to positive thinking. Brazil has some well-regarded construction enterprises who venture overseas. They are respected for their technical competencies, the quality of the workforce, the ability to deliver complex engineering solutions, the hard working culture, and an ability to work in difficult environments, whilst managing a mobile and diverse workforce. Being the cheapest will not win projects; being the best wins projects, which may mean offering a package of design, finance, engineering, construction, and maintenance, and most importantly being innovative and entrepreneurial.

There must be engagement of the small and medium sized enterprises (SMEs). Greater internationalisation would expose Brazilian SMEs to different procurement methods and opportunities for joint ventures. New technologies and processes would help to face the challenges.

## **INTERNATIONALISATION**

Internationalisation is the process through which a firm moves from operating solely in its domestic marketplace to international markets. The effects of globalisation mean that SMEs can no longer afford to ignore/avoid going overseas. The three forces driving the globalisation of business with the biggest impact on SMEs and their need to internationalise (Ruzzier et al. (2006, p. 477) are:

1. The rapid changes in information and communication technologies (ICT) which have connected people and locations.
2. The dismantling of trade barriers and financial deregulation.
3. The expansion and opening of markets.

These three forces have led to increased competition, which has put pressure on companies in many developing and newly developing countries to

internationalise as they face foreign competition on one hand and having outgrown the domestic market on the other. The advances in ICT mean that the SMEs are able to become active players; it is no longer the realm of the large multi-national corporations.

Johanson and Vahlne (1990, p.20) define internationalisation as the “*process of developing networks of business relationships in other countries through extension, penetration, and integration*”. Welch and Luostarinen (1993) saw internationalisation as a gradual and sequential process. The Uppsala Economic School of Thought in the 1970s saw firm internationalisation as a process of gradual increase of commitment to a foreign market, taking incremental steps to gain experience, build management competence, and reduce uncertainty in order to incrementally increase investments in a target market. This was a process model, also known as stage theory. The network approach focused on the premise that firms relied upon, and were governed by an intricate network of relationships that either enable or constrain their performance. Ruzzier *et al.* (2006, p. 477) points out that many countries have encouraged internationalisation to boost economic growth and solve other domestic problems such as high unemployment.

The rapid rise in information and communication technologies and globalisation has removed some of the barriers for internationalisation. This means, for some, remaining in the domestic market is unsustainable (Etemad, 2004, p.1), but all of them cannot afford to ignore foreign competition is even worse (Ruzzier *et al.* (2006, p. 476). Despite their size, many SMEs around the world have successfully internationalised and have become crucial to national economic growth (Gjellerrup, 2000). Successful internationalisation relies upon a strong and productive domestic base.

Enterprises need to decide their intentions (to internationalise or not), identify their abilities and their competitive advantage. They need to recognise both the opportunities and threats and, in doing so, identify their strengths and weaknesses. Firms operating in an industry need to understand (or understand only imperfectly) the link between the firm's resources and its sustainable competitive position (Ainuddin *et al.*, 2007). This is particularly important with professional service firms as their competitive advantage is embodied in their people and knowledge. It is an advantage that is highly perishable as it heavily depends on interpersonal relationships, contacts, and consistent quality – learning and knowledge management is critical.

## **HOW TO INTERNATIONALISE**

Firms internationalise in a number of different ways, depending on the strategy of the firm and its available resources. The modes of entry for a construction-related organisation are:

- Merger with an overseas enterprise
- Acquisition, with a major or minor stake in an overseas business

- Joint venture with a local enterprise for a local market, or with an international construction enterprise entering a market
- Strategic partnership with an enterprise that might be differently positioned in the value chain, for example a construction enterprise having an alliance with a design consultancy or a facilities management enterprise
- Representative office and grow organically working for Brazilian/local/or international clients
- Licensing, franchising, technology transfer
- Sole venture subsidiary
- BOT/PPP and acting as an investor (small equity stake) or a contractor as part of a Special Purpose Vehicle (SPV)
- Long term alliances based upon a technology or a specialist service

Partnerships and Joint ventures (JVs) are common ways to enhance the skill base of two or more parties for specific objectives. JVs are generally established between a local and foreign company when there is a need to combine skill or financial resources with local knowledge. Acquisitions are takeovers (friendly or hostile) of one company over a targeted company, whereas, mergers are more complex and aim to form a bigger company by combining skill bases, financial resources and, more importantly, a shared vision and objectives. These complex dynamics between parties makes mergers harder and more time consuming to establish. The ownership structure of the firm is a crucial issue, as many service firms are privately owned by a principal or small group of owners. The owners must be incentivised to ensure the smooth transition of the acquisition and ensure that the owners do not walk away from the business. The dominant motive behind mergers and acquisitions is financial performance improvement. Ive (1994) states that large firms can spread or pool the risks of many business units under one larger unit of ownership and that they are more attractive to lenders and shareholders, which make them more competitive in a global market.

The choice of entry is dependent on:

- Firm size
- Firms' strengths and weaknesses
- International experience
- Ability to develop differentiated products and services
- Market potential in the target market
- Investment risk
- Contractual risk

## CONCLUSIONS

Brazil's construction industry faces many challenges from both within the sector and from an international perspective. Government support would be an important part of any development of the sector, but, equally, developing the strengths that already exist is crucial. The industry needs to take a more positive view, developing its strengths and identifying opportunities.

It is a race to the future. A race that needs good strategies, and an awareness of the race influencers and the competition. This knowledge will form the ingredients for success. Most importantly, the debate on competitiveness needs expanding to engage the small and medium sized enterprises. Simply assuming that an SME has the financial strength, the inclination and the ability to engage in a risky venture overseas is unrealistic. A new model is required to ensure the SME can engage in overseas expansion is necessary. The government has a role to play to help Brazilian companies internationalise, there are many successful examples from around the world where Brazil can engage in the creative swiping of good ideas.

## ACKNOWLEDGMENT

The author acknowledges and thanks the kind support provided by "FAPESP - The São Paulo Research Foundation".

## REFERENCES AND BIBLIOGRAPHY

- Ainuddin, R. A., Beamish, P. W., Hulland, J. S. & Rouse, M. J. (2007) Resource attributes and firm performance in international joint ventures. *Journal of World Business*, 42, 47-60.
- Blomster, A; Dharma, D.S. (2003). Learning in the internationalisation process of firms. Edward Elgar. pp. 36-53. ISBN 978-1-84064-662-7
- Buckley, P.J, Pass, C.L. and Prescott, K. (1988) Measures of International Competitiveness: A critical Survey. *Journal of Marketing Management*, 4(2), 175-200.
- Chaharbaghi, K. and Feurer, R. (1994). Defining competitiveness: a holistic approach, *Management Decision*, 32(2), 49-58.
- Cho, D.-S. and Moon, C.-H. (2000) From Adam Smith to Michael Porter: Evolution of competitiveness theory, World Scientific Publishing Company Ltd., Singapore.
- Coase, R.H. The Nature of the Firm, *Economica* 4, pp 386-405, 1937
- EC (1994) Growth, Competitiveness, Employment. European Commission White Paper, Luxembourg.
- Etemad, H. (2004) Internationalization of Small and Medium-sized Enterprises: A Grounded Theoretical Framework and an Overview. *Canadian Journal*

- of Administrative Sciences / Revue Canadienne des Sciences de l'Administration*, 21, 1-21.
- Fraser, J. & Oppenheim, J. (1997) What is new about globalization? *McKinsey Quarterly*, 167-79.
- Gjellerup, P. (2000) SME support services in the face of globalisation. *Concerted Action Seminar*. Copenhagen, Danish Agency for Trade and Industry.
- Ive, G. A. (1994) Theory of Ownership types applied to construction majors. *Construction Management and Economics*, 12.
- Johanson, J. & Vahlne, J. E. (1990) The mechanism of internationalization. *International Marketing Review*, 7, 11-24.
- Johanson, J., Vahlne, J-E. (2006). "Commitment and Opportunity Development in the Internationalization Process: A Note on the Uppsala Internationalization Process Model", *Management International Review*, 46 (2), pp. 165-178.
- Johanson, J. & Wiedersheim-Paul, F. (1975), The internationalization of the firm: Four Swedish cases, *Journal of Management Studies*, 12 (3), pp. 305-322.
- Kondratieff, N. (2005) The major economic cycles
- Lall, S (2001) Competitiveness, technology and skills. Edward Elgar Publishing, Cheltenham, UK.
- Momaya, K (2004) Competitiveness of firms: review of theory, frameworks, and models. *Singapore management review*, 26(1), 45-61.
- Momaya, K and Selby, K (1998) International competitiveness of the Canadian construction industry: a comparison with Japan and the United States. *Canadian Journal of Civil Engineering*, 25, 640-652.
- OECD (1997) Industrial Competitiveness: Benchmarking Business Environments. Paris: OECD
- Porter, M E (2002) Building the Microeconomic Foundations of Prosperity: Findings from the Microeconomic Competitiveness Index. In: World Economic Forum (WEF) (2002) The Global Competitiveness Report. Geneva: World Economic Forum.
- Ruzzier, M., Hisrich, R. D. & Antoncic, B. (2006) SME internationalization research: past, present, and future. *Journal of Small Businesses and Enterprise Development*, 13, 476-497.
- Welch, L. & Luostarinen, R. (1993) Internationalization: evolution of a concept IN Buckley, P. J. & Ghauri, P. N. (Eds.) *The Internationalization of the Firm: A Reader*. London, Academic Press.