RETHINKING COMPETITIVENESS FOR THE CONSTRUCTION INDUSTRY

Henricsson, J.P.E, Ericsson, S., Flanagan, F. and Jewell, C.A.

[1]*School of Construction Management and Engineering, University of Reading, PO Box 219, Reading, RG6 6AW, UK*

The concept 'competitiveness' is an important element in the debate on the performance of nations, industries and firms. The purpose of this paper is, firstly, to highlight the need to ask the right questions in order to specify the meaning and measurement of 'competitiveness' and secondly to introduce a new definition of competitiveness for a nation's construction industry. An examination of the extant literature on 'competitiveness' and its associated measures, reveals that there is a vital link between 'competitiveness' and the principal goals, the mission, of a nation and firm respectively, but also that these missions are not completely covered by the measures used today. This observation enables the formulation of a definition of 'competitiveness' for a nation's construction industry. It is concluded that 'competitiveness' for a nation's construction industry must consider the needs and expectations of companies, clients and society respectively and simultaneously and cannot be captured by a single measure.

Keywords: competitiveness, definition, measurement, productivity, profitability.

INTRODUCTION

Competitiveness is a concept that economists, industrialists, politicians, journalists and academics frequently refer to, debate and worry about. The European Union, the US and governments worldwide set up competitiveness councils and produce white papers on 'competitiveness'. The World Economic Forum (WEF) and the International Institute of Management Development (IMD) annually produce competitiveness reports (see section Composite indices) to measure and benchmark nations' 'competitiveness'. Industry bodies and firms are as eager to measure and benchmark their 'competitiveness' against their peers.

Yet, when going beyond the single word 'competitiveness' in search of a more detailed explanation, one finds that the word is the subject of a wide range of definitions, meanings and measures. An observation supported by arguably one of the individuals who has contributed most to the topic, Michael E. Porter (2002); "Competitiveness remains a concept that is not well understood, despite widespread acceptance of its importance". Krugman (1993) reflects on the poor understanding of the concept by stating "Most people who use the term 'competitiveness' do so without a second thought".

These observation and statements could easily be applied to the construction industry, although there are only a few councils, white papers or reports on construction competitiveness. For example, the EU Enterprise Directorate General has a Construction Unit and the UK has a Construction Excellence programme which regularly produces a report on Key Performance Indicators. Arguably, there is great

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interest in ‘competitiveness’ in the construction industry, yet there are no specifically developed definitions or further explanations of the word.

This paper addresses the need for further understanding of the concept ‘competitiveness’ – its definitions and measures. Finally the authors introduce their perspective on ‘competitiveness’ for a nation’s construction industry, they formulate a definition and suggest that further research is needed in order to investigate what factors and measures are appropriate to fully cover this new perspective.

A NEW CONCEPT WAS BORN

A review of the literature on competitiveness reveals that the use of the word is frequent, dramatic and ambivalent. In 1988, the literature provided few definitions of competitiveness and at a national level the absence of definitions was even more marked (Buckley et al 1988). The competitiveness bandwagon seems to have set off from the USA in the early 80s. A number of books on competitiveness theory were produced, the US created a Special Commission for Competitiveness and the concept travelled across the Atlantic Ocean to Europe (Turner 2001). Britain created a Competitiveness Unit in 1993 and produced the first Competitiveness White Paper the following year. The European Union followed the trend by producing its White Paper on *Growth, Competitiveness and Employment* (EU 1994) and the foundation of a Competitiveness Advisory Group (CAG) in 1995. As of today, nations worldwide are equipped with a competitiveness council used as a means of strengthening economic growth.

For construction specifically, the number of competitiveness bodies is smaller. The European Union developed a Construction Unit in 1995, given the mission to “improve the environment for the competitiveness of the construction and construction products industries.” In the UK Constructing Excellence was established, following on from the recommendations of the Latham Report – “Rethinking Construction” (1998).

Despite its youth, the word competitiveness has become, according to Porter (1990), “one of the central preoccupations of government and industry in every nation”. In order to survive, all nations, industries and companies find themselves needing to improve their competitiveness.

AMBIGUITY - DOES IT MATTER?

A review of existing literature yields a range of definitions, measures and notions of the concept, that vary significantly. This was noted also by Porter (1990) who concluded that there was no accepted definition of competitiveness. The ambiguity stems from a number of sources and consequently no two reports on competitiveness investigate, measure and analyse the same factors. This is recognized by Belkacem (2002) who found that almost every paper in this subject (competitiveness) struggles with a sort of definition”.

It could be argued that the logical precision of a word or concept like competitiveness is nothing to worry about as long as the outcome of it is good (Turner 2001). That is, if all the parties involved agree on the way to improve competitiveness and the method is shown to work, then there is no real problem.

A problem occurs, however, when a study presents a ranking of and argues in terms of competitiveness, without specifying what is meant by the word and how it is measured. The consequence may be that a firm, industry or even a whole nation is labeled ‘uncompetitive’ without knowing for what reason, and how bad their ‘score’ is. Porter (1990) notes that many countries have debated whether they have a competitiveness problem at all. This is a sign that the term is neither properly understood nor used, and so runs the risk of polluting debates and confusing decision makers (Turner 2001).

Thus the issue of defining competitiveness does matter, because it determines the contours of the measurement and the nature of the factors influencing it (Belkacem 2002), which in turn is essential to diagnosing any competitiveness problems (Scott and Lodge 1985).

DEFINING COMPETITIVENESS

One dictionary refers to ‘competitiveness’ as “an aggressive willingness to compete” (The Free Dictionary 2004). The use of the word in contemporary debate however, often relates it to economic welfare and prosperity or the factors that are believed to be attached to it (Select Committee on Office of the Deputy Prime Minister 2002). In order to get a deeper understanding of the use of the word, a review of definitions that exist in the literature is needed. Since there is a clear difference in definitions due to different levels of analysis, the definitions are presented categorised under national and firm levels.

Competitiveness on a national level

A pioneering definition of competitiveness on a national level was formulated by Scott and Lodge (1985) as: “a country’s ability to create, produce, distribute and/or service products in international trade while earning rising returns on its resources”. The US commission on Industrial Competitiveness defined competitiveness as “the ability of a country to produce goods and services that meet the test of international markets and simultaneously to maintain and expand the real income” (Tyson 1992). The OECD (1997) adopted this definition, and thereby developed the arguably most frequently cited one, but added the criteria that competitiveness is to be proved “under free trade and fair market conditions” and “over the long-term”.

These definitions all include an international element in the sense that products and services are exposed to international trade, competing with products and services produced by countries with different cost structures and/or more sophisticated features. At the same time, competitiveness of a nation implies rising returns on resources and rising real income for the citizens. This highlights the challenge to meet global market requirements, where cost is often a key factor, and simultaneously achieve rising real incomes. In other words, this challenge questions the ability of high-wage countries to compete in international markets with low-wage countries. The key to simultaneously achieving both low costs and high wages is productivity (Belkacem 2002).

Productivity is crucial also to the WEF, as they define competitiveness as “the ability of a national economy to achieve sustained rates of economic growth as measured by the annual changes in per capita GDP.” (WEF 1996).

Based on the thinking that nations themselves do not produce products or services, Storper (1995) takes a different approach to a nation’s competitiveness by stating; “competitiveness reflects the capability of an economy to attract and maintain firms with stable or rising shares in activity, while maintaining or increasing standards of living for those who participate in it.”

Clearly, a nation's competitiveness may refer to, on the one hand, the relative performance of nations competing in the international market, or on the other hand, a nation's ability to attract global capital (Belkacem 2002). However, there are views that focus on aspects other than productivity. Boltho (1996) argues that the real exchange rate is an indicator of competitiveness, which takes into account both export and import competitiveness.

To summarize, national competitiveness is defined in terms of successful trade performance in the international markets that will in turn lead to sustained and rising standards of living in terms of rising real incomes. This observation is also the core of the definition stated by the National Competitiveness Council (NCC 2003); "competitiveness is the ability to achieve success in markets leading to better standards for all."

Competitiveness on a firm level

In 1988 Buckley, Pass and Prescott found that only a few definitions in the literature were tailored to describe competitiveness at a firm level. Of those which do, the Aldington Report (1985) provided the most complete picture by stating; "a firm is competitive if it can produce products and services of superior quality and lower costs than its domestic and international competitors. Competitiveness is synonymous with a firm's long-term profit performance and its ability to compensate its employees and provide superior returns to its owners."

In the same line of thinking, but without stressing neither long-term nor the ability to compensate employees or owners, the Department of Trade and Industry (DTI 1998) states that; "for a firm, competitiveness is the ability to produce the right goods and services, at the right price, at the right time. It means meeting customers' needs more efficiently and more effectively than other firms."

To summarize, firm competitiveness is related to market performance, with high productivity and low costs being the keys to success. However, little is said about any principal objective for a firm, like the standard of living for a nation. Logically, survival would be the principal objective of a firm, immediately followed by rising returns on its resources and rising returns to its owners.

MEASURING COMPETITIVENESS

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.

Measuring performance

For a certain industry or type of goods, the international market share is a frequently used as a measure of competitiveness (Krugman and Hatsopoulos 1987). This measure, however, reveals nothing about the margin of that market share, thus making profitable market share a more informative measure (Buckley et al. 1988). By including imports as an element for measuring competitiveness, balance of trade figures serve as an established measure of international performance at a national level.

According to the measures above, any domestic market activity does not count as a measure of competitiveness. This domestic activity is however included in the WEF definition of the ultimate measure of competitiveness - the annual per capita GDP growth. However, all these measures, single or taken together, relate to past performance and reveal nothing of the sustainability of such performance (Buckley et al. 1988).

Measuring potential

The theories of Comparative Advantage and the Diamond framework (Scott 1985, Porter 1990), both investigate what factors provide a nation with comparative and competitive advantages. These include basic factors like access to natural resources, skilled labour and capital as well as clusters of supporting industries and the sophistication of business strategies.

Of the wide range of factors, Total Factor Productivity (TFP) appears to be the most important one (Belkacem 2002). Porter (1990) goes even further and considers productivity as the only meaningful concept of competitiveness.

However, productivity serves as a means to achieve a target, the targets being a high standard of living and a high return on resources for a nation and for a firm respectively. It must be underlined that neither productivity, nor any other of the factors of potential, necessarily turn this potential into performance and fulfilment of the principal targets.

Measuring the management process

The management process can enable a potential to be commercialized and turned into improved performance. Measuring the management process is generally qualitative rather than quantitative. Therefore, factors of the management process, e.g. marketing aptitude, internal and external relations and risk, change and knowledge management, create problems in terms of measurement and comparison. Buckley et al. (1988) conclude that “in multi-faceted, dynamic business situations, it is difficult to assess and compare management processes”.

Composite indices

Given this diversity of domains of measures of competitiveness and their apparent interrelationship, it is arguably that single measures of competitiveness do not capture all the elements of the concept. On a national level, this has encouraged the WEF and IMD to use composite indices with a large set of variables in order to assess nations’ competitiveness.

A GAP TO BE FILLED

From the survey of definitions and measures of competitiveness presented in the section above, a number of observations can be made. Firstly, albeit phrased differently, the definitions point to the same principal objective, i.e. the mission, of a nation and a firm respectively. Secondly, the mission for a nation is expressed largely in terms of high, rising standard of living for its citizens and for a firm, high, and rising returns on investment for its owners. Thirdly, competitiveness refers to fulfilling a mission. This is supported by the Ciampi Group (1995) who viewed competitiveness as a tool for achieving targets. Fourthly, there is no consensus on what measurement, single or a set of, that best measures the fulfilment of this mission.

The problem is not that definitions vary in objectives, but that there is no agreement on what measures are used to assess the fulfilment of these objectives. Thus, in order to find the correct measures, the objective, i.e. the mission, for the activity needs to be set and agreed upon. Buckley et al. (1988) argue that competitiveness includes both the ends and the means. In other words; competitiveness consists of both efficiency - reaching the goals in the best way - and effectiveness – setting the right goals.

Objectives and matching measures for nations

"The principal economic goal of a nation is to produce a high and rising standard of living for its citizens" (Porter 1990). Given this mission, and in order to find an appropriate measure, Porter asks a number of questions of what actually characterises a competitive nation.

The answer is that none of these measurements are satisfactory measures of a nation's competitiveness. The ultimate measure of success is not in terms of balance of trade, current accounts or foreign exchange reserves, it is an increase in standard of living (Scott 1985). The Ciampi Group (1995) states that competitiveness does include elements of productivity and profitability. However it is not a target in itself, but a powerful means to achieving rising standards of living and increasing welfare.

As of today, the most established and powerful measurement of a nation's competitiveness, used by the WEF, is GDP per capita, sometimes adjusted to Purchasing Power Parity (Garelli 2002). Also Garelli (2002) argues that "GDP does not include many items that people would generally consider part of their standard of living". Thus, for a nation there is a clear mission, but no clear, overall measurement.

Objectives and matching measures for firms

One of the basic pillars of the founding and future management of each firm, is the formulation of its mission. The mission generally communicates three elements; core values to which the firm is committed, core purpose of the firm and visionary goals that the firm will pursue in order to fulfil its mission (Collins and Poras 1996).

As for firms, given this mission, the question is what measures could fully assess the fulfilment of the mission? As for nations, the question is whether a single measure, e.g. profitability or productivity, could encompass the whole concept.

OBJECTIVES AND MATCHING MEASURES FOR A NATION'S CONSTRUCTION INDUSTRY

This section applies the observations from the section above to the construction industry. Competitiveness is directly related to a set of principal objectives or a mission and so the appropriate measures can only be identified once the mission or the objectives are set.

In order to formulate a definition of competitiveness for a nation's construction industry, we must begin by asking the right question. That is, what is the mission for a nation's construction industry? An important notion is that the starting point for the competitiveness analysis is that in the report US Competitiveness in the World Economy, Scott (1985) argues that any analysis and measurement of competitiveness needs to consider the nation's (firm's or industry's) goals, in other words the mission.

Expectations on a successful construction industry

In order to further investigate what may be included in the mission for the construction industry, let us begin by asking a few relevant questions on what could be expected from a nation's construction industry that has fulfilled its mission. Is a successful construction industry; profitable, one with low unit labour costs, one with high productivity, one satisfying both clients and employees or one associated with a good reputation and image?

We realise that it would be controversial to ignore any of the issues raised above, but also that they imply a wider perspective on competitiveness than is the case today. The question is then whether the expectations of a successful construction industry go beyond measures such as profitability and productivity.

A wider approach is supported by the thinking that competitiveness and competitive success are commonly seen in narrow economic terms (Boddy 2000) and that they need to balance the economic imperatives with the social requirements of a nation as a result of history, value systems and tradition (Garelli 2002).

Who should decide what is a successful construction industry?

What is good for one stakeholder may be bad for another. For instance, to balance between unit labour costs and employee satisfaction is indeed a challenge. Given that a number of matters will raise a conflict of interests between the parties involved in the construction industry, who is then to decide what could be expected by a construction industry that has fulfilled its mission? Is it the industry itself, its clients, the government or someone else? Feurer et al. (1994) argue that competitiveness is not absolute but relative to shareholder and customer values, which then supports the view that not only one but every stakeholder's perspective, expectations and needs should be considered in the formulation of the mission.

Beyond today's perspective

Given the conflicting interests, but mutual interdependency, between the different parties - companies, clients and society - the judgement of an industry's mission and competitiveness cannot be made with only one of the three perspectives in focus; instead it is important is to optimise the relationship between the three.

The principal needs and goals (economic and social), for a nation's construction industry, must be formulated with the three perspectives in mind and appropriate measures of performance established. It appears obvious that the perspectives presented, may not be measured by a single factor, but will require a set of measures for different areas of performance. Although the traditional measures of profitability and productivity are still key determinants, they do not provide a sufficient assessment of how well a nation's construction industry can fulfil its goals and commitments.

Mission for the construction industry – a case from the real world

An example of a definition of a nation's mission for its construction industry comes from the Confederation of Finnish Construction Industries:

"The mission of the construction industry is to supply customers with practical, healthy, secure and cost-efficient buildings, premises and services that meet their needs, as well as providing the necessary supporting infrastructure. The construction industry must act in a socially responsible way to contribute to national wealth, whilst upholding its responsibility for the environment and promoting the well-being of its customers, its employees and other stakeholders." (RT 2004a).

Based on this mission, the expectation on a successful company is formulated as "A successful company should be able to strike a balance between different areas of corporate responsibility. Thus, it should aim for profitability in an ethically sustainable manner, give consideration to the expectations of its customers and stakeholders, act in an environmentally sound manner and take care of the wellbeing of its staff." (RT 2004b).

COMPETITIVENESS IN THE CONSTRUCTION INDUSTRY

Informed by an extensive literature search and information from industrialists, the authors developed their own working definition of competitiveness:

For a construction industry, competitiveness refers to the ability to, in the long-term, satisfy the sophisticated demands of companies, clients and society respectively and simultaneously, while acting under free trade and fair market conditions, exposed to an international market environment.

Several aspects of the definition need to be highlighted. Firstly, one notes that there are three stakeholders of an industry; the companies constituting the industry, represented by shareholders and employees, the clients buying its products or services and the society in which the industry is operating. A truly competitive industry satisfies all three parties. The companies and their shareholders will get sufficient profit on investment and the employees will experience high employee satisfaction. Clients will see their needs fulfilled and for society, a competitive construction industry will contribute, by taxes and job creation, to economic well being and by environmental and social responsibility to societal well being.

Secondly, in a competitive industry, activities are carried out under free-trade and fair market conditions. Thus, phenomena such as cartels or monopolies in either markets or products do not make a positive contribution to an industry's competitiveness. Finally, an industry must stand the test of an international market environment to truly be called competitive.

Moreover, it is important to underline that companies, clients and society together shape their own business environment and the conditions for competitiveness. Thus, a competitive industry requires a competitive business environment. As the definition embraces three perspectives with potentially conflicting interests, no single measures will cover all aspects of the concept.

CONCLUSION

There is no single measure that covers all aspects of the concept. Definitions of competitiveness differ due to the different levels of analysis, the national and firm levels. However, it is important to note that, although there are many different phrasings, the definitions stress the same principal objective. For a nation the mission is a high, rising standard of living for its citizens and for a firm high, rising returns on investment to its owners. Thus competitiveness refers to the fulfilment of a mission - a tool for achieving targets.

However, the review of measures of competitiveness yields the view that, for neither level, is there a consensus on what measurement, single or a set of, that most satisfactory fulfils the missions formulated. These observations reveal that the matter is not that the definitions vary in objectives, but that there is no agreement on what measures are most appropriate to assess the fulfilment of these objectives. Thus, in order to find the correct measures, the objective, i.e. the mission, for the activity needs to be set and agreed upon.

For the construction industry, the mission must be to consider the needs and expectations of companies, clients and society and the challenge is to balance and optimize these perspectives. Mutual understanding and agreement on mission and goals will lead to a win-win-situation, where a competitive construction industry is for the benefit of all three. In other words, it is time to rethink competitiveness for the construction industry.

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