

# ASSESSING SUPPLY AND DEMAND FOR EMERGING CONTRACTOR DEVELOPMENT PROGRAMMES

P.N. Qongqo<sup>1</sup> and R.V. Milford<sup>2</sup>

1. Construction Industry Development Board, [pumeleleq@cidb.org.za](mailto:pumeleleq@cidb.org.za)

2. Construction Industry Development Board, [rodneym@cidb.org.za](mailto:rodneym@cidb.org.za)

## ABSTRACT

**Purpose:** The aim of this paper is to present cidb's "Supply and Demand" Quarterly Monitor which provides an analysis and indication of construction budget spend per province and nationally which can be used to introduce interventions for distribution of projects developed for the NCDP (National Contractor Development Programmes).

The paper outlines the structure of the industry in terms of the distribution of the size (and capability) of construction companies, ownership (and specifically black-ownership), the value of public sector work accessed by the various grades of contractors, and competition within the industry, and investigates how this information can be used to develop targeting strategies for sustainable contractor development.

**Methodology:** The statistical data for the 2007 "supply and demand" Quarterly Monitor was obtained from the South African Reserve Bank's construction spend as per year on year basis (SARB 2007), Industry Insight Project Database (Industry Insight 2007) and the cidb's Register of Contractors. The analysis is conducted per province and nationally on a quarterly basis.

**Results & Value:** Seventy five percent of the national budget for infrastructure development is spent on civil engineering (CE) works of which about 20% of the value of the contracts are awarded to small contractors (Grades 2 to 4). The remaining 25% of the budget is spent on general building (GB) of which 12% of the value of the contracts are awarded to small contractors.

**Keywords:** Analysis, National Budget, Project Distribution, Competition, Targeting strategies.

## 1. Introduction

The National Contractor Development Programme (NCDP) is a sector-specific intervention within the framework of South Africa's Accelerated and Shared Growth Initiative (AsgiSA). Led by the Minister of Public Works and the Provincial MECs, it is committed to the accelerated growth of the construction industry to meet rising national demand.

Specifically, the NCDP is geared to address enhancing capacity and equity ownership across the different contracting categories and grades, as well as improved skills and performance in the delivery of capital works and maintenance across the public sector and advance levels of sustainability in the construction industry.

This cidb Quarterly Monitor has been developed to provide input into developing targeted development intervention strategies in support of the NCDP. The first Quarterly Monitor covers the 1<sup>st</sup> to 4<sup>th</sup> quarters of 2007 and focuses on public sector supply and demand at a provincial level, and only deals with the General Building (GB) and Civil Engineering (CE) cidb Class of Works.

This paper presents some of the results for public sector demand and the available supply, with a strong focus on the competitiveness and sustainability of contractors. The paper also highlights the challenges experienced in the lack of reliable data to support making decisions.

## 2. Background and Assumptions

The background and assumptions used in developing and in interpreting the cidb Quarterly Monitor are highlighted below:

i) **Contracts Awarded:** No reliable source of data exists on infrastructure expenditure at a provincial level, let alone a breakdown of infrastructure spend according to project size. The cidb Quarterly Monitor therefore uses details of contracts awarded obtained from the cidb iTender Register of Projects supported by the Industry Insight Project Database. The Industry Insight Project Database is considered to be about 60% or more accurate (and is constantly being improved). This data has then been scaled up to reflect total construction spend as reflected from Reserve Bank data. (The support of Industry Insight in providing this information is gratefully acknowledged.)

Class of Works	% Public Sector Spend
General Building (GB)	25%
Civil Engineering (CE)	75%

fig. 2.1

ii) **Public vs. Private Sector Demand:** The cidb Quarterly Monitor only presents information on public sector contracts for General Building (GB) and Civil Engineering (CE) cidb Class of Works. Most contractors would however target both public and private sector opportunities. Currently, public sector spend accounts for about 25% of total General Building activity and about 80% of Civil Engineering activity, although lower grade contractors, and in particular emerging contractors, would be more dependent of public sector contracts.

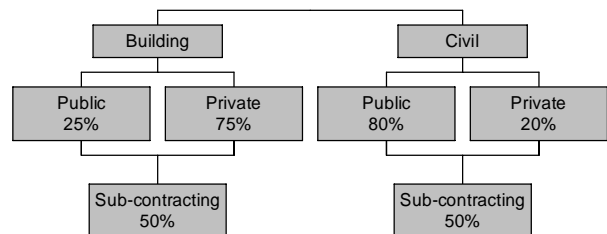


fig. 2.2

iii) **Sub-contracting:** Much of the work of contractors in Grades 2 to 6 is through obtained sub-contracting to higher level contractors, and not as main contractors.

No reliable source of information however exists on the nature and scale of sub-contracting in South Africa, which differs between the building and civil sectors – as well as in fact during economic cycles. As illustrated in the graphic in the preceding section, a broadly held view is that around 50% of the value of main contracts is sub-contracted out, but these estimates need to be improved upon in time.

Class of Works	Public Sector Main Contracts as % of Total
General Building (GB)	10%
Civil Engineering (CE)	20%

fig. 2.3

The impact of sub-contracting is illustrated below, using an assumed distribution of work between the grades. Typically, direct public sector contracts to contractors in Grades 2 to 6 accounts for about 10% of total turnover in General Building and about 20% in Civil Engineering.

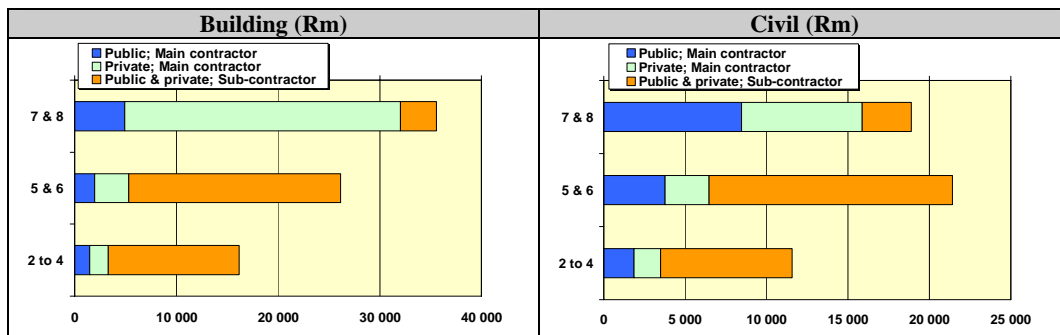


fig.2.4

iv) **Supply:** Contractor information is obtained from the cidb Register of Contractors, and considers only:

- Contractors registered in Grades 2 to 8; and
- General Building (GB) and Civil Engineering (CE) Class of Works.

Grade	Characteristics
7 & 8	Provincial/regional
5 & 6	local / regional
2 to 4	local

fig. 2.5

The data is then aggregated into the following categories:

- Grades 2 to 4; typically established and developing contractors that operate at a local level;
- Grades 5 and 6; typically contractors in transition from operating at a local to a regional / provincial level; and
- Grades 7 and 8; typically contractors that operate a regional / provincial level.
- Grade 9 contractors are excluded from the analysis as these typically operate at a national / international level.

v) **Annual Turnover of Contractor Enterprises:** Although very dependent on the nature of work (e.g. roads, water supply and excavations), an important indicator in

interpreting the **cidb** Quarterly Monitor in order to assess the sustainability of contractors is the ratio of the available work to the turnover per contractor taking into account both public and private sector opportunities and sub-contracting opportunities. The average annual turnover of contractors per Grade is given in fig. 2.6, obtained from the **cidb** Register of Contractors.

Contractor Grade	Average Annual Turnover (Rm pa)
7 & 8	63
5 & 6	11
2 to 4	1.3

fig. 2.6

### 3. Discussion

The information available in the January 2008 **cidb** Quarterly Monitor and the interpretation of this information is given below. Because of the lack of complete information, the interpretation of this information is given in relative terms and not absolute terms, i.e. relative to the national average.

- i) **Demand:** The public sector contracts awarded in South Africa in Grades 2 to 8 is shown in the following table and figure. The distribution in the public sector contracts awarded between the grades clearly reflects the infrastructure requirements of South Africa, but also reflects the distribution of public sector contracts to reflect contractor development priorities. This is illustrated, for example, in the distribution of contracts awarded in KwaZulu Natal and Limpopo in which a higher priority is given to Grades 2 to 4 contractors as compared to the national average on fig. 3.1.

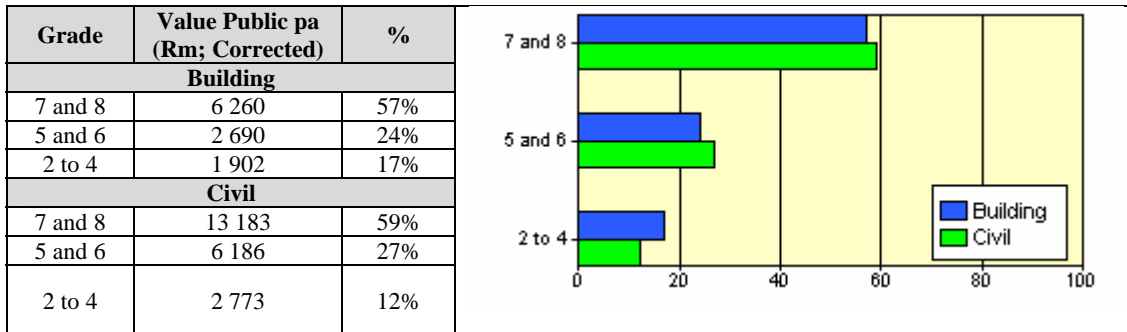
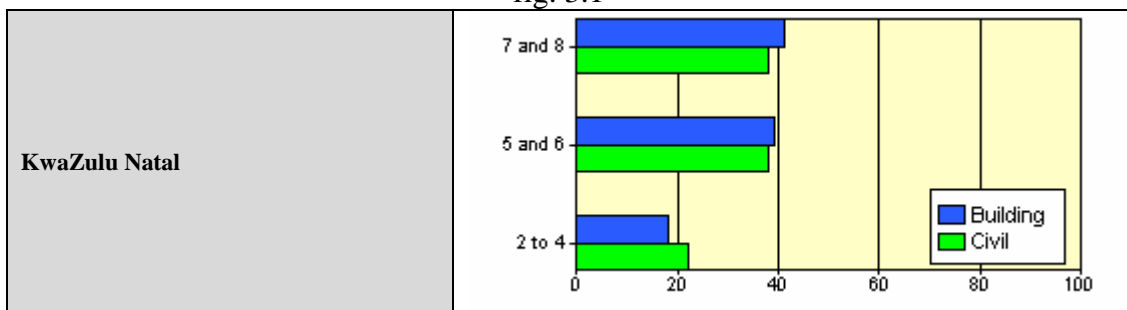


fig. 3.1



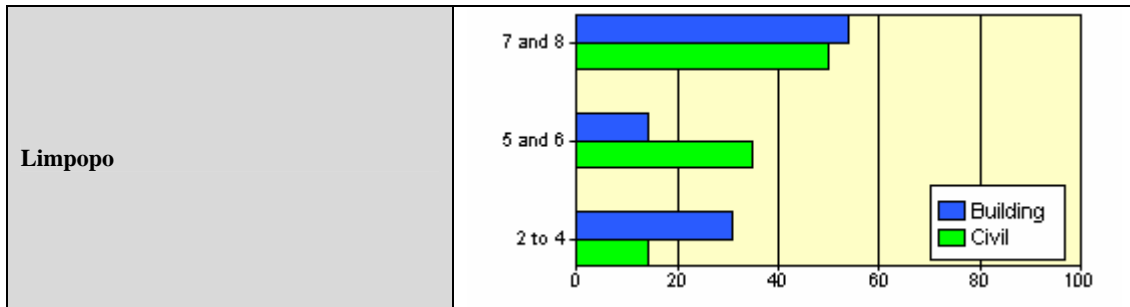


fig. 3.2

ii) **Supply:** Information on the numbers of contractors per province as well as black and women ownership is included in the **cidb** Quarterly Monitor, which can be used for contractor development strategies. For South Africa as a whole (and in fact for every province in South Africa), more than 80% of Grade 2 to 4 building and civil contractors are black owned (defined as more that 51% ownership control). Of interest is that close to 80% of all Grade 5 and 6 building contractors are black owned.

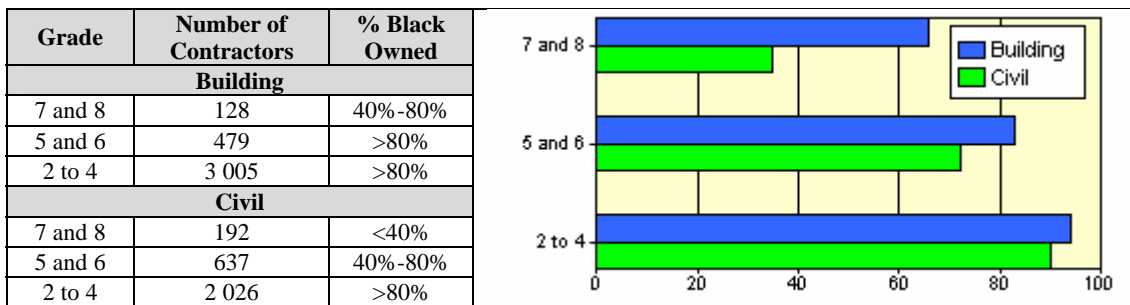
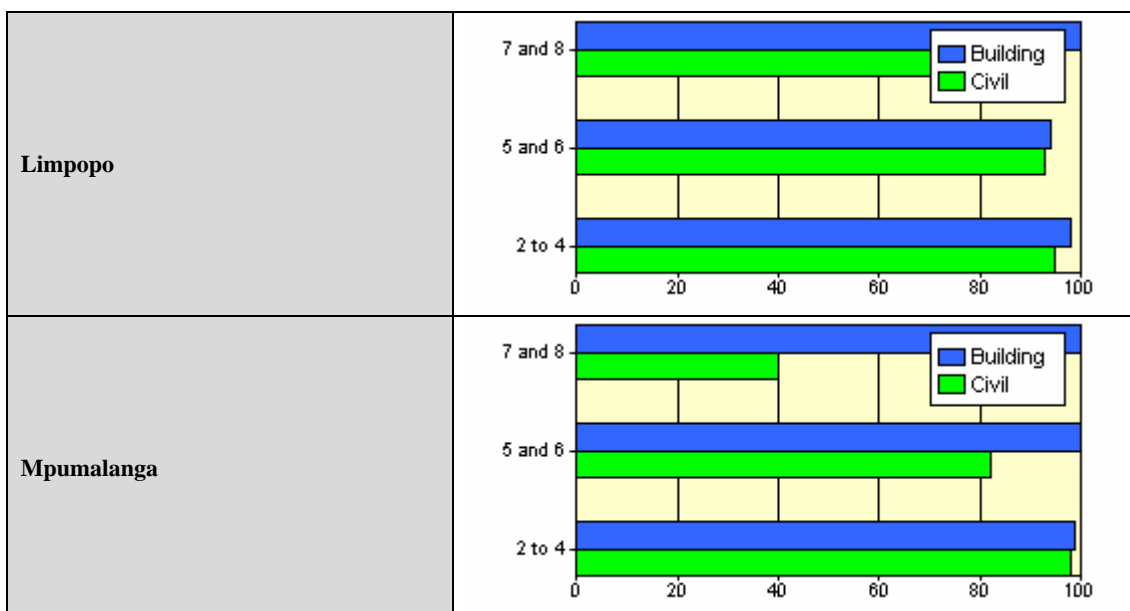


fig. 3.3

The distribution of black ownership for selected provinces is given in the following figures. While the high percentage black ownership in Grades 5 to 8 in several provinces is noted with encouragement, the sustainability of contractors must be the ultimate goal.



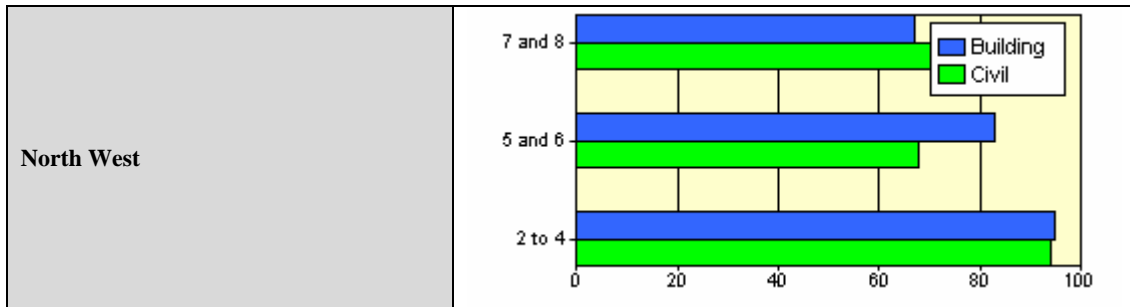


fig. 3.4

iii) **Supply vs. Demand:** The NCDP needs to take cognisance of supply vs. demand when developing targeted intervention strategies, which can be achieved through:

- increasing demand;
- the sustainability of demand with time;
- the distribution of demand between various grades of contractors (which can be influenced through various procurement strategies); and
- the targeting of contractors within and between grades.

Important indicators of the sustainability of contractors is the average public sector contract value per contractor per year and the average turnover of contractors – as is illustrated below for South Africa.

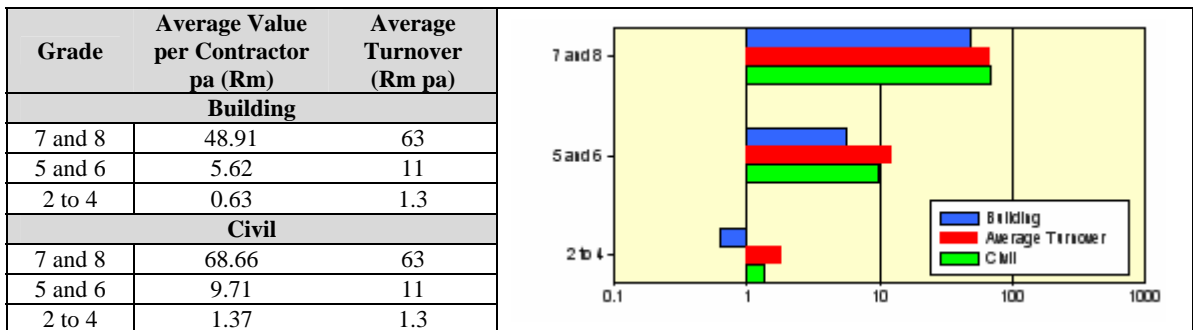


fig. 3.5

While it must be recognised that:

- The public sector only accounts for around 25% of total building activity and around 80% of total civil activity, and that sub-contracting accounts for about 50% of activity, i.e. direct public sector contracts to contractors in Grades 2 to 6 accounts for about 10% of total turnover in General Building and about 20% in Civil Engineering.
- It is clear from the above that Grades 2 to 4 is a highly competitive and non-sustainable environment. In fact, it is estimated that contractors in Grades 2 to 4 can only expect to be awarded on average only one public sector main contract every year or so! This should be taken into account when developing targeting strategies.

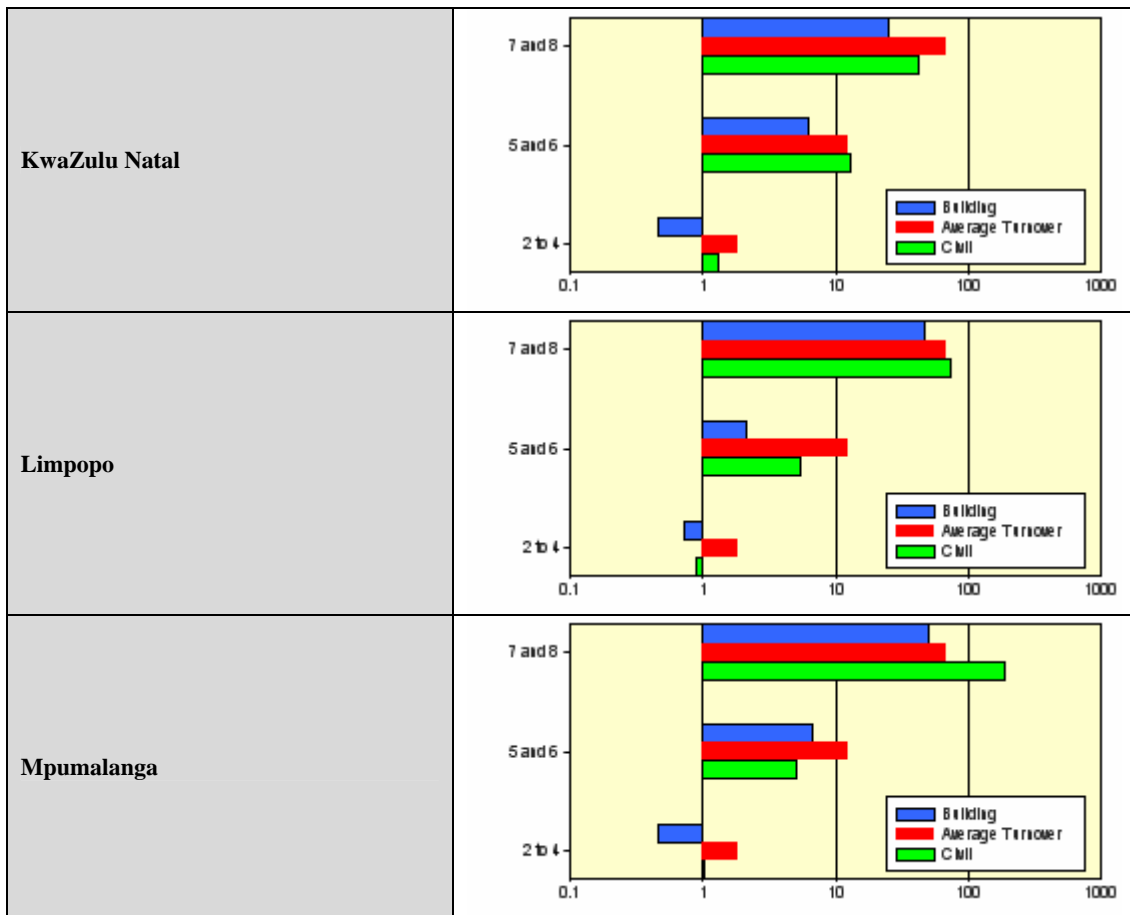


fig. 3.6

(It should be noted however that some degree of caution should be used when interpreting the competitiveness indicator above for provinces with low construction spend and/or small numbers of contractors – and in particular for the Northern Cape.)

The competitiveness within the industry is illustrated further below, in which the average public sector contract value per contractor is shown for Grades 2 to 4 relative to the national average (where yellow denotes competition  $\pm 15\%$  of the national average, orange denotes  $> 15\%$  of the national average and green  $< 15\%$  of the national average). Strategies to increase supply in highly competitive provinces should be done with caution and a more appropriate strategy could be to focus on selected contractors.

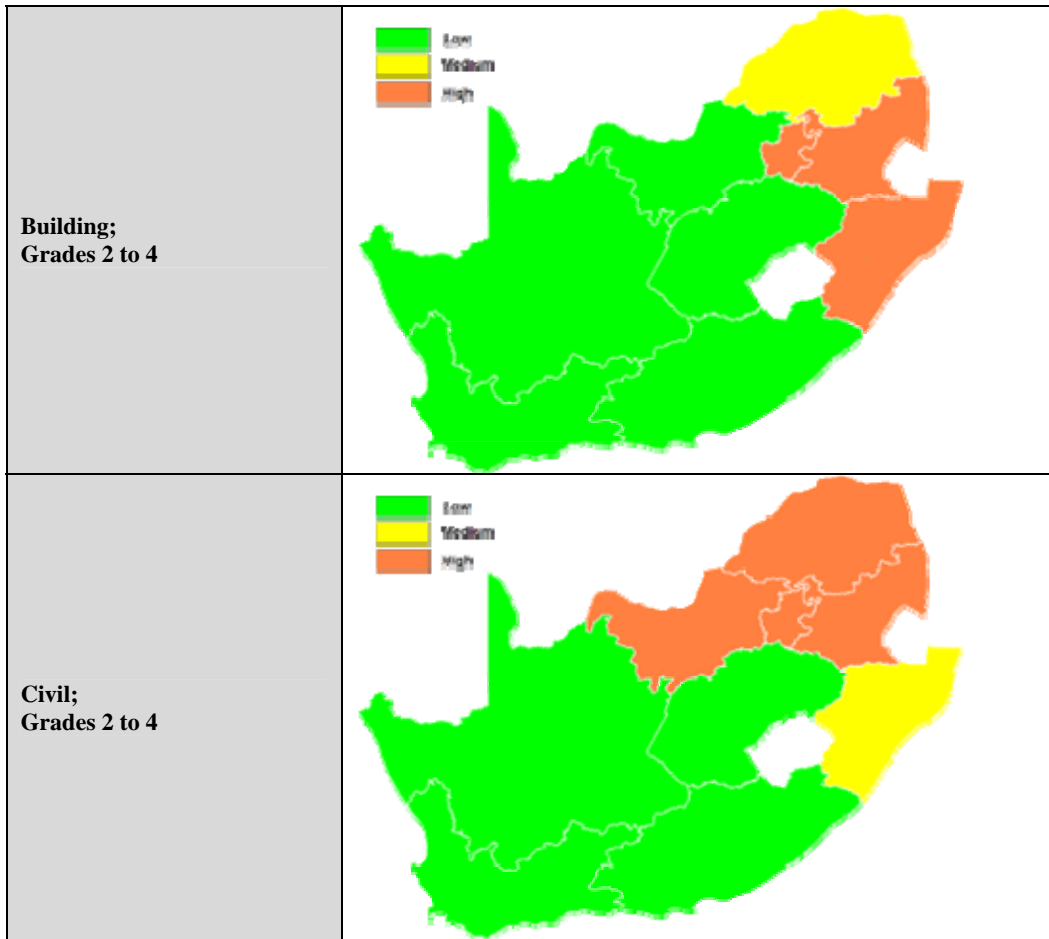
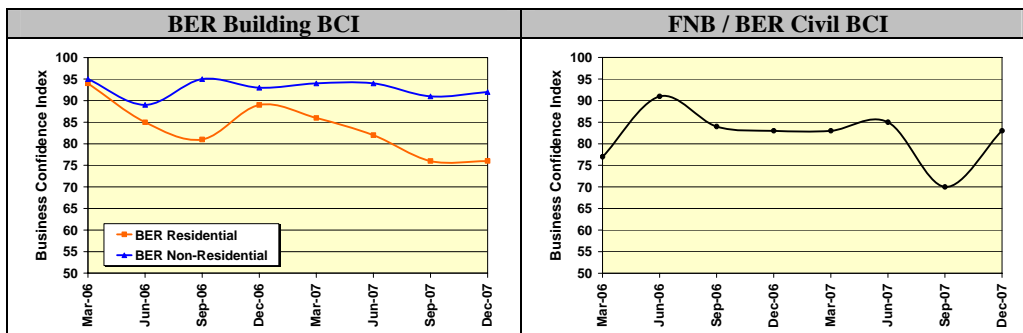


fig. 3.7

iv) **Business Confidence Index:** The public sector competitive index presented above is an index relative to the national average – and does therefore not give an indication of the overall competitiveness. To address this, the *cidb* is presently developing a Business Confidence Index (BCI) per province and contractor grades, which will be published shortly. However, in the interim, the BER Building Confidence Index and the FNB/BER Civil Confidence Index (BER 2008) for the country as a whole and covering public and private sector work is presented below, where the index represents the percentage of respondents rating the business conditions as satisfactory.



Source: Bureau for Economic Research; <http://www.ber.ac.za>

fig. 3.8

It can be seen from the above that business confidence in non-residential sector has remained relatively constant at about 90% to 95%, while business confidence in the residential sector is dropping – and hence competitiveness is increasing. (Note however that the public sector is not a major player in the residential sector.)

Business confidence in the civil sector increased in December 2007, but it can be seen that this is a relatively competitive sector with business confidence as a whole around 80% for the preceding 4 quarters.

#### **4. A Guide to Targeting**

The **cidb** Quarterly Monitor must only be seen as a guide to assist in developing targeted intervention strategies. Specifically, the **cidb** Quarterly Monitor should be seen as a tool for interrogating existing intervention strategies.

#### **5. Conclusions**

The paper has identified key elements supporting the assessment of supply and demand for developing contractors from the public sector in terms of the targets and objectives of the NCDP. For both the General Building Civil Engineering sectors, one can observe that nationally:

- Grade 2 to 4 contractors operate in a highly competitive and probably non-sustainable environment; and
- Grade 5 to 8 contractors operate in a far more sustainable environment.

Various strategies are possible to increase the sustainability of Grade 2 to 4 contractors, and the NCDP promotes targeting contractors who perform satisfactorily, and rewarding performance improvement through continuity of work.

However, the NCDP also recognizes that contractor development should also focus on Grade 5 and above. Specifically, opportunities exist to support the development of Grade 5 and 6 contractors by:

- encouraging procurement strategies that preference best practice contractors for work opportunities;
- adopting procurement strategies that encourage joint venturing with higher Grade contractors; and
- unbundling of large contracts to enable greater participation of Grade 5 and 6 contractors.

In addition to highlighting the competitive nature of the contracting industry (in particular in Grades 2 to 4), this paper has also highlighted the lack of available information on which to make decisions, in particular:

- limited data on infrastructure expenditure at a provincial level;
- limited data on infrastructure spend according to project size;
- limited information on the nature of sub-contracting.

In partnership with other organisations, the **cidb** aims to address these information gaps.

## **6. References**

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