

CLIENT PRACTICE NOTE

RISING STEEL PRICES – ARE FLUCTUATING PRICE CONTRACTS THE PANACEA?

A Client Practice Note

by Eugenie Lip, Contracts Director and Head of KPK Contracts Support Group

INTRODUCTION

“It’s not what you pay a man, but what he costs you that counts” – Will Rogers

Construction contracts already unhelpfully complex tend to stretch for long contract periods. Tendering contractors are expected to make provisions in their bid prices for the rise in cost of labour, materials, plant, equipment, foreign exchange movements and inflation throughout the duration of the contract period.

Of late, prices of materials and most notable, steel, have increased rapidly. Steel is used in a wide range of construction materials and steel reinforcing bars are particularly affected. Unsurprisingly, the catalytic effect of a global economic recovery and a demand-driven market from emerging economies has caused prices to rise and continue rising in tandem with the increasing cost of raw materials. Steelwork manufacturers in Singapore have reported huge jumps in the cost of iron ore and scrap and a sharp rise in steel reinforcing bar prices.

If steel prices continue to surge upwards, the contagion on the prices of any materials containing steel elements from steel sections to steel reinforcing bars will be significant. When contractors are unable to hold out any longer given the difficulties in making provisions for unpredictable and volatile price increases, the case for an equitable risk-sharing regime in the form of fluctuating price contracts becomes more pertinent.

This paper examines the contractual framework for a price adjustment mechanism as set out in the commonly used standard forms published by the Singapore Institute of Architects (SIA Form), Real Estate Developers’ Association of Singapore (REDAS Design and Build Conditions or REDAS D&B) and the Building and Construction Authority (Public Sector Standard Conditions of Contract for Construction Works or PSSCOC) and also discusses the practice watchpoints to be considered when prescribing the adjustment methodology for dealing with fluctuations in material prices.

DISTINGUISHING FIXED-PRICE CONTRACTS, FLUCTUATING PRICE CONTRACTS AND FLUCTUATIONS

On a fixed-price contract, the risk ownership of fluctuations in the prices of labour, materials and plant lies with the Contractor who assumes full responsibility for all input price changes and for inflation. A contract in which adjustments to the contract sum are allowed to take into account price movements during the contract period is known as a fluctuating price contract. The term ‘fluctuations’ refers to the amount of adjustment that can be made to the contract sum arising from changes in the input prices.

The fluctuations clauses in the SIA Form, REDAS D&B and PSSCOC are confined to the rise and fall of prices of materials only in contrast to other building contracts (for example, FIDIC Conditions and JCT 05 Standard Building Contract) where all input price changes are compensated or recoverable.

CONTRACTUAL FRAMEWORK

Recognising that the risk ownership of price fluctuations cannot be allocated solely to the Contractor especially after the 2007 ban on sand exports and to allay concerns that such costs may be far too much for some contracting firms to absorb on a fixed-price contract, the SIA Form and REDAS D&B provide for an optional fluctuations clause which only applies if it is expressly incorporated in the contract. The PSSCOC has a similar regime but this was no longer made an option module in the current Sixth Edition.

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Without a fluctuations clause, the burden of price increases falls on the Contractor who will allow within his tender for the risk (and the Employer paying for it) of the likely rise in prices which may or may not occur in some or all of the specified materials.

SIA Form

Fluctuations are limited to prices of the materials to be specified by the Employer in Appendix to the Conditions. The Contractor is paid by or gives credit to the Employer for the difference between the contracted prices of the specified materials prevailing at the date of their delivery to the site and at the Base Date stipulated in the Appendix. The contracted prices are based on the monthly published data of the 'Relevant Recognised Authority' named in the Appendix which by default is the Building and Construction Authority (BCA) if no other organisation is stated. It is to be noted that in the BCA's monthly Construction Price Update publication, contracted prices are referred as 'market prices'.

The Contractor is not entitled to any upward adjustment of the contract sum for fluctuations during the delay period beyond the Completion Date (or extended Completion Date). The fluctuations clause applies to the specified materials purchased by the sub-contractors of any tier under the Contractor where the Employer has no involvement in the tender documentation and selection as such activities typically come under the purview of the Contractor. In contrast, the applicability of the clause is excluded in designated and nominated sub-contracts which are the subject of a prime cost sum item unless expressly incorporated.

REDAS Design and Build Form

As with the SIA Form, the fluctuations clause provides flexibility for the Employer to specify in Appendix 1 – Specific Contract Information the materials that shall be subject to price adjustments. The current market prices of the specified materials are based on the monthly published data of the 'Recognised Relevant Authority' identified in Appendix 1. By default provision, it is the BCA unless some other organisation is named.

Adjustment of the contract sum for fluctuations is based on the difference between the contracted prices (which assumably are the 'market prices' in the BCA's monthly Construction Price Update publication) at the stipulated Base Date and the current market prices prevailing at the delivery date of the specified materials to the site. There is no entitlement to any upward adjustment of the contract sum for fluctuations during the period of delay after the Date of Completion or as extended. Specified materials purchased by sub-contractors under the Contractor are subject to fluctuations. For named sub-contractors, the clause only applies if it is included in their sub-contracts.

PSSCOC Form

The fluctuations clause is in the current Sixth Edition incorporated as Clause 33 and not as an optional provision. Price adjustments are only allowed for concrete and steel reinforcement as specified in the Appendix.

The Employer pays to or receives credit from the Contractor for the difference between the material price indices published by the BCA (unlike the SIA Form and REDAS D&B which use market prices) based on the methodology for the price adjustments set out in the contract documents. In the event that the Contractor is in delay beyond the Time for Completion or as extended, no upward or downward adjustment of the prices of the materials is permitted. The clause does not apply to nominated sub-contracts unless it is expressly incorporated.

PRACTICE WATCHPOINTS

One of the key matters that must be clearly particularised in the contract is the adjustment methodology on how differences are to be computed between the published market price (or for PSSCOC, material price index) prevailing in the month of the delivery date and at the Base Date stipulated in the Appendix (or the Base Index in the case of PSSCOC).

The Base Date, although not defined in the SIA Form and REDAS D&B, is usually set as the month of the date fixed for the return of tenders or such other month as the parties may agree. For PSSCOC, and depending on the internal operating procedures of individual public procuring agencies, the Base Index can be defined as the material price index prevailing in the month of the date for close of tenders.

Supplementary procedures must also be included in the contract documents to deal with the arrangements for delivery of the specified materials to the site, acknowledgement by the Employer's resident site representatives and for the occasions where the Contractor intends to purchase any of the specified materials and store them off the site. For evidential purposes, delivery orders and invoices declaring the net prices billed by the suppliers of the specified materials to the Contractor and receipts of the actual amount paid should also be submitted. It is important to make clear whether price adjustments are based on the net quantity of the specified materials in which case wastage and additional quantities allowed by the Contractor for making good defective and damaged areas and works, cutting and the like should be excluded from the quantification.

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Where market prices are used, the adjustment methodology should also deal with the occasions when the published data differ from the actual amount or price paid by the Contractor to the supplier. Upon completion of the works, regard must be had to any surplus materials ordered by verifying the quantity of the specified materials against the actual requirements needed for the works.

CONTRACTUAL REGIME SNAPSHOT

A snapshot of the contractual regime under the various contract forms is illustrated in the matrix below:


	SIA Form	REDAS D&B	PSSCOC
Specified materials	▪ Employer to specify	▪ Employer to specify	▪ Concrete ▪ Steel reinforcement
Price datum	▪ Market prices published by relevant recognised authority (which by default is BCA)	▪ Market prices published by relevant recognised authority (which by default is BCA)	▪ Material price indices published by BCA
Adjustment methodology	▪ Difference between contracted prices in month of delivery date and at Base Date	▪ Difference between market price in month of delivery date and contracted price at Base Date	Difference between: ▪ Current index; and ▪ Base index
Contractor in delay	▪ No upward adjustment ▪ Silent on downward adjustment	▪ No upward adjustment ▪ Silent on downward adjustment	▪ No upward or downward adjustment
Sub-contractors	▪ Designated and nominated sub-contracts excluded unless expressly incorporated	▪ Named sub-contracts excluded unless expressly incorporated	▪ Nominated sub-contracts excluded unless expressly incorporated

Current index: Material price index in month of delivery date; Base index: Material price index prevailing in month of tender returns date

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ILLUSTRATED EXAMPLE

An example of the adjustment methodology based on the SIA Form and REDAS D&B is set out below to illustrate the computational principles. Thus, on the assumption that the actual price paid to the supplier is the same as the published market price prevailing at the month of the delivery date, the adjustment to the contract sum for 1,000 tonnes of steel bars delivered to the site in January 2010 where the Base Date stated in the contract documents is November 2009 is calculated as follows:

Market Price (\$ per Tonne)*		Difference	Net Quantity (Tonnes)	Adjustment to Contract Sum
Base Date [Nov 2009]	Delivery Date [Jan 2010]			
737.10	742.40	5.30	1,000	 \$5,300

* Market Price extracted from Construction Price Update (March 2010) published by Building and Construction Authority

CONCLUSION

A fluctuating price contract will not be a panacea for rising steel prices (or any material price increases) but it will go some way in throwing a lifeline to make the risk of unpredictable price changes more equitable and palatable between contracting parties.

With global market demand for raw materials relentlessly driving up prices and contractors requesting for price adjustment clauses to be incorporated, the case for a fluctuating price contract may become more dominant.



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CONSTRUCTION COST SNAPSHOT

by KPK Research and Advisory Group

This Construction Cost Snapshot provides a concise reference guide on the construction cost for a variety of building types based on information current as of 1st Quarter 2010. It is published solely for information purposes and should not be used as a basis for investment strategy decisions or as a substitute to carry out detailed cost estimates and feasibility studies.

		1 st Quarter 2010
		Unit Cost per Gross Floor Area (\$ per m ² GFA)
Retail and Commercial	Offices	Standard
		2,800 - 3,600
	Shopping Centres	Prestige
		3,600 - 4,600
Hotels	Hotels and Service Apartments	Standard
		2,400 - 3,300
		Prestige
		3,300 - 5,200
		3-Star
		3,300 - 4,100
		4-Star
		4,100 - 5,100
		5-Star
		5,100 - 6,500
		Resort Hotels
		4,800 - 6,500
		Service Apartments
		3,300 - 4,100
Industrial	Factories and Warehouses	Standard Factories
		1,700 - 2,200
Institutional	Schools and Tertiary Institutions	Standard Warehouses
		1,500 - 2,200
		Primary
		1,200 - 1,500
Residential		Secondary
		1,500 - 2,000
		Tertiary
		2,200 - 3,000
	Landed Homes	Terraced Homes
		2,800 - 3,300
		Semi-Detached Homes
		3,300 - 4,200
	Condominiums	Bungalows
		4,200 - 5,100
		Cluster Homes
		3,100 - 3,600
		Standard
		2,200 - 2,600
Special Category	Offices Fit-Out	Prime
		2,800 - 3,800
		Prestige
		4,000 - 5,500
		Standard
		(comprising partitions, floor, wall and ceiling finishes and minor adaptations to existing property)
		800 - 1,800

NOTES

The gross floor area (GFA) is the total floor area of a building comprising the functional, circulation, ancillary and other areas counted as GFA under the URA's plot ratio control (maximum allowable GFA) and excludes car parks (above and below ground). The rate per square metre of Gross Floor Area includes preliminaries, piled foundation works, sub-structure works and M&E services.

No allowances have been made for professional, accredited checker's and registered inspectors' fees, developer's site supervision expenses | land costs | financing charges | legal charges and authority fees | development charges | green mark certification and award provisions | furniture, fittings and equipment | infrastructure works | services diversions and connection fees | show units, advertisement and promotion costs | fluctuations in material prices | goods and services tax.

KPK makes no representation on the accuracy and/or completeness of the construction cost information set out herein which is subject to changes.

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KPK Research Pte Ltd undertakes research on a myriad of topics ranging from construction costs, procurement strategy to contract forms and conditions, hybrid procurement approaches, professional practice and contract administration essentials. Some of the research findings are reflected and consolidated in various publications, conference papers and published articles.

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