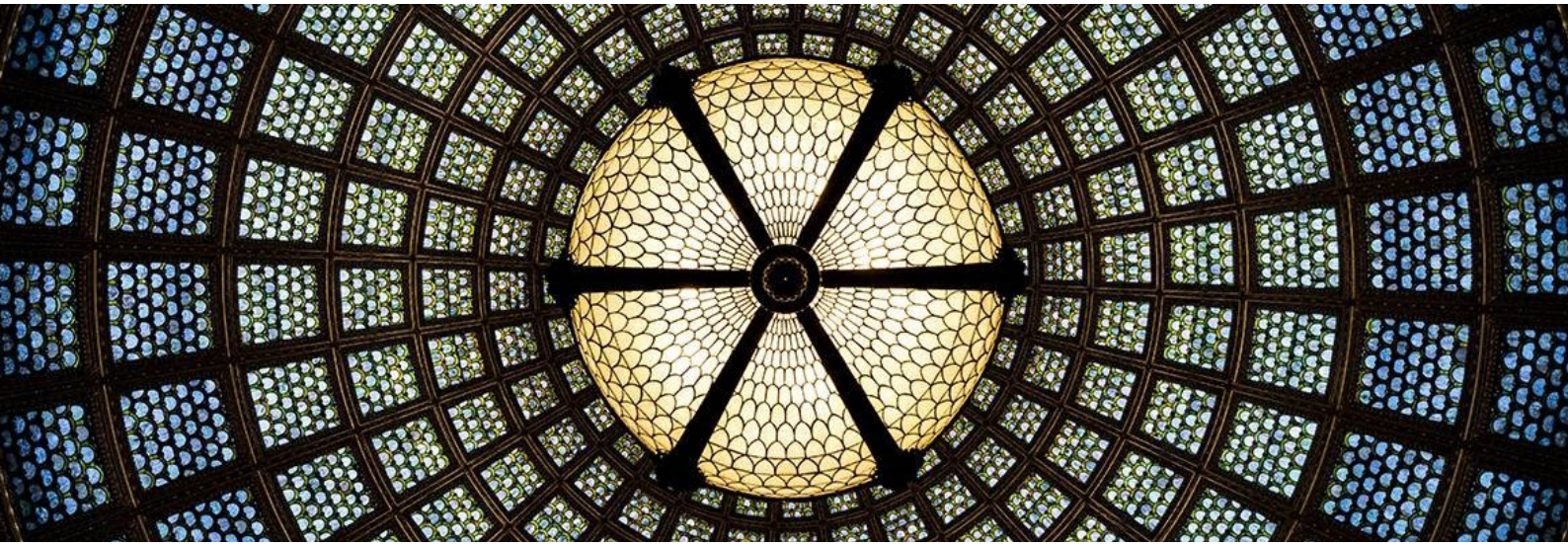

Is there still a role for the *Hudson* formula?

Introduction

In 2010 I ventured a general article on construction contractors' overheads claims ("FM1").[1]

This article[2] briefly revisits a limited area covered in FM1, namely one of the appraisal methods for overheads claims which appears first to have been formally set down in Hudson, *Building and Engineering Contracts*, Sweet & Maxwell, 10th Edition, 1970, at page 599, whose editor Mr. Duncan Wallace described it as the formula *'usually used'* by contractors for the purposes of assessing the loss due to delay in completion, thenceforth labelled "*the Hudson formula"*.[3]

As claimants using the *Hudson* formula often pursue overheads and profit together (sometimes termed 'gross profit') as part of a composite claim, the narrative here can equally apply to the profits component of claims advanced in that way.

A review of the caselaw and literature since 2010 suggests that the debate in this area has not much developed, or been the subject of any significant comment.[4]

The *Hudson* formula: origins

As noted in FM1, the *Hudson* formula was at the time of the 10th Edition the common *ex-ante* form of claim. It relied on the allowance for overheads and profit said to have been made by the contractor in its pricing of the particular project which was the subject of the claim; the claim sought to use that allowance as the basis from

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[1] Mastrandrea, F, *The Evaluation of Contractors' Overheads Claims in Construction*, [2010] The International Construction Law Review, 299.
[2] For a more comprehensive review of this topic, see Mastrandrea, F, *Does the Hudson formula have a future?* , to be published in (2024) Const. L.J. Issue 3.
[3] The formula is:
HO % in Contract Sum/100 x Contract Sum/Contract Period x Period of (Compensable) Delay.
[4] For an exception see The Society of Construction Law Paper 230, September 2021 by Ronan Champion, entitled *The Hudson formula: Death by a Footnote?*, which sought to identify whether the current configuration of that formula had effectively led to its demise.

which to mimic the damage/ loss due to delay for which the other contracting party[5] was allegedly responsible (based, essentially, on the fiction of the contractor being deprived of the opportunity of securing a contract of equivalent price as the original from which to earn a contribution to its overheads costs during the delay period).

Later developments in the formula

I suggested that the formula advanced at the time of the 10th Edition was not in any sense original. It was nevertheless surprising given further developments in the interim for Mr. Duncan Wallace in his subsequent *Construction Contracts: Principles and Policies in Tort and Contract*, Sweet & Maxwell, 1986, paragraph 8-29 to have asserted that no challenge had ever been made to the *Hudson* formula.[6]

The editors of *Hudson* did however move to the position to be found in the 14th Edition, in 2020, as follows:

'The head office overheads and profit percentage applied to the Hudson formula were originally those deducible from the Contractor's tender. A more modern assumption is to use the head office and profit contribution deducible from the Contractor's annual accounts sometime referred to as "a fair annual average"'.[7]

In that form, it has a close resemblance to *Emden's* formula.[8]

Is *Hudson* now dead?

It should be noted first of all, that the original *Hudson* formula had garnered some, albeit limited, judicial support, particularly at first instance.[9] Furthermore, there has been no outright rejection of the *Hudson* formula in other jurisdictions.[10]

There is no doubt that a claim that relies upon an allegation that an allowance was made as a component of the original price prompts the following obvious questions (see FM1):

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[5] The method is not restricted to claims by contractors against employers, but can equally be deployed in analogous circumstances in sub-contract and other claims, whether for or against the relevant sub-contractor or other contracting party.

[6] By that date State of South Australia v. Fricker Carrington Holdings Pty Ltd [1985] SASC 8661, for example, had been decided in which, absent proof of agreement between the parties that it should be used, the formula was discouraged unless its appropriateness was shown by the claimant. Bollen J, for the Supreme Court of South Australia said, at page 23:
'I am sure that parties in dispute frequently use the [Hudson] formula. Often they will agree to its use. But if they do not agree to its use I think that evidence must be called to prove that its use is appropriate. It is not a formula in a statute or in a regulation. One cannot take a formula said by a textbook writer to be usually used and assert that arbitrators must use it.'

[7] Hudson, *Building and Engineering Contracts*, Sweet & Maxwell, 14th Edition, 2020, paragraph 6-071, footnote 494.

[8] The most common *Emden* formulation is as follows:
h ÷ 100 × c ÷ cp × pd
Where h = the head-office percentage (normally arrived at by dividing the actual total overhead costs of the organisation as a whole by the total actual turnover); c = the contract sum; cp = the contract period; and pd = the period of (compensable) delay.

[9] Most notably by O'Leary J in the Supreme Court of Ontario in Ellis-Don Ltd. v. The Parking Authority of Toronto (1978) 28 BLR 98.

[10] See, for example, in India the Supreme Court decision in McDermott International Inc. v. Burn Standard Co. Ltd. and others [2006] 11 SCC 181, in which it was held that there was nothing in Indian law to show that any of the formulae adopted in other countries was prohibited in law or that the same would be inconsistent with the law prevailing in India, albeit noting that the *Hudson* formula had been criticized principally because it adopts the head office overhead percentage

(a) was any such allowance in fact made? and, even if it was;
(b) was the price capable of sustaining such an allowance?

Estimates (including those that go into pricing tenders for construction work) are bound, to varying degrees, to be subjective.

Further, it is important to recognise that the *Emden* formula has its own unique issue. Whilst the unadulterated *Hudson* is internally consistent,[11] *Emden* is not. An equivalent issue would arise with a reconfigured *Hudson*. A further question would emerge where the actual percentage for overhead and profit was different from the percentage allowed in the original contract sum, namely whether the original contract sum could any longer be the appropriate basis for the formula claim.

Finally, there is a consideration, neither clearly articulated nor sufficiently explored to date, which may anyway justify the continued separate existence of an unadulterated *Hudson* formula, and in respect of which use of the organisation's average actual overheads (and, in the case of composite claims, profit) would be inapposite because such an average would either materially overstate or understate the likely loss arising from delay. This would be so, for example, where - at one end of the spectrum - the contract in question is, for the particular contractor, of an unusual type (and could, for example, be serviced only by use of the particular resources and skills deployed to it), or one with an untypically high risk profile, or - at the other end of the spectrum - a contract which is for the particular contractor untypically mundane, or low risk.

Conclusion

Given that overhead and profit claims continue regularly to appear, and often form one of the largest heads of contractors' claims for construction projects in distress, their appropriate evaluation remains a topic of significant importance.

The *Hudson* formula is and remains the single, widely recognised, *ex-ante* measure of overhead and profit damages or loss due to delay in completion.

Introducing a backward-looking component into a reconfigured *Hudson* formula generates material inconsistencies in that - as with *Emden* - this would be to seek in the same breath to use components of a claim which are forward-looking with another component which is backward-looking. It additionally raises the question whether the original contract sum can in such circumstances then appropriately be used in the formula. Such a hybrid cannot properly be regarded a *Hudson* formula claim, which as conceived was wholly forward-looking. It may also fail to take account of the peculiarities of the contract which is the subject of the claim which, as noted, may be especially unusual, risky, or mundane and which may on any such score justify retention of the *Hudson* formula in its unadulterated form.

Boiled down to essentials the *Hudson* formula has two serious drawbacks:

1. in common with its siblings *Emden* and *Eichleay*, it purports to make compensable project time the paramount operative component[12] in the measure of damages/loss, when experience shows that

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from the contract as the factor for calculating the costs, and this may bear little or no relation to the actual head office costs of the contractor.
Cf. Batliboi Environmental Engineers Limited v. Hindustan Petroleum Corporation Limited 2023 INSC 850.
Unibros v. All India Radio 2023 INSC 931.

[11] In that all the component parts are equivalent: thus in *Hudson* all the variables are forward-looking; in *Emden* by contrast they are in part forward-looking and in part backward-looking.

[12] See FM1, from page 313.

overheads for particular projects are not typically priced in that way, and construction organisations' actual overheads are not recorded or allocated by them in that way.

2. uniquely, it seeks to measure damages/loss through contract pricing of overheads. Adopting that approach exposes such claims to two further challenges, namely that:
    a. the overheads allowance contended for as part of the contract sum cannot without more be shown in fact to have been made (resolved by way, most persuasively, of pre-contractual disclosure); and
    b. the contract price was viable in the sense that it would have been able successfully to carry that level of overhead (resolved by way, most persuasively, of the contractor showing that its contract price was capable of sustaining such an allowance).

The real issue with the use of the *Hudson* formula approach is whether, if such a claim is to be entertained at all, and, leaving to one side the abiding shortcoming that it is premised on the basis of project duration (and other matters raised in FM1), overheads damages/loss can properly be measured by reference exclusively to

(a) a forward-looking pre-contractual estimate, alternatively
(b) a cannibalised version of the formula which has regard to actualities, but which introduces its own further shortcomings.

These are matters for courts and tribunals. Until the advantages and shortcomings of the formula are comprehensively considered, and these sorts of issues are definitively resolved, an unadulterated *Hudson* formula may still retain some vitality.

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