



MCA's Comments on FASB Proposal 605

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Let me start by congratulating FASB in taking an active role in helping to improve contracting revenue recognition. This move will help improve our country's construction productivity which, just like automotive industry in the eighties, is under a massive attack from far-east countries. The current method of cost based revenue recognition has caused an unwanted side effect which has impacted construction productivity negatively due to frontloading by the contractors. The practice of frontloading is primarily due to cost-to-cost recognition of revenues. By literary dumping all material on a jobsite at the onset of a project so that they can bill for the material cost, all of the involved contractors try to become cash-flow positive to the detriment of productivity since the labor then has to move all these materials unnecessarily during the project production life span.

Fueled by discovery of the unethical billing practices of a few defense contractors, the United States Government, Financial Account Standards Board (FASB), Internal Revenue Service (IRS), and a few other agencies have tried to develop a better control over the revenue recognition, billing practices, and income tax obligations for contracting companies, which also impact the construction industry since the mid 1980s.

Owing to current tax legislation (starting with Tax Reform Act of 1986) and because the AICPA (1993) advocates the use of the cost-to-cost (CTC) method, most Certified Public Accountants prefer the CTC technique (Pirrong, 1987; Accounting Review Board No. #45). As a result, the percentage-of-complete (POC) method under the CTC technique is the most often applied methodology in the accounting profession when attempting to ascertain gross profits

from a construction contract. In a webinar we led for the Construction Financial Management Association in 2011, polls of 265 participating financial managers showed that 80% of their companies are using the cost-to-cost method for recognizing revenue.

However, there are three methods of revenue recognition available for measurement of POC:

1. **Cost-to-Cost**, which measures POC based on costs expended to date as a portion of estimated total costs at project completion
2. **Effort-Expended**, which is a physical measurement of the work performed (sometimes called “physical completion”)
3. **Units Installed**, which measures POC based on the quantity of material installed to date as a portion of the expected material in place at project completion. (Jensen and Craig, 1998)

Using cost-to-cost measures assumes that a direct and causal correlation exists between the percentage completion of a construction project and its incurred cost (Financial Accounting Standards Board (FASB), 1982). This assumption is the basis of the accounting-based Earned Value Analysis (EVA) as well, which measures completion based on cost. However, there are activities in a project where cost is not representative of the contribution to construction put in place (CPIP). In addition, EVA neglects to account for many activities leading to the final assembly of the project such as:

1. Planning
2. Prefabrication
3. Preassembly
4. Preparation for installation (i.e. layout and benchmarks, gathering tools and equipment)
5. Material handling
6. Modeling (CAD, BIM, GPS), testing, inspection, and commissioning
7. Turnover and training

The construction industry is a major contributor to the U.S. economy. Its contribution to the United States gross domestic product (GDP) can be as high as 10% or as low as 5% (Bureau of Economic Analysis, online). Construction worldwide contributes up to 6.5% to the World Gross Product (Central Intelligence Agency World Factbook, 2009). The United States construction market has contributed from 15 to 25% annually to the entire world’s

construction market during the last three decades. Every percent improvement in productivity in this industry, which equates to more than \$10 billion dollars, will have a major effect on the national wellbeing, economy and resource usage footprint.

Productivity in construction has been shown to lag behind other industries over the last three decades, as shown in **Figure 1** (Huang, et. al, 2009). The productivity in construction cannot be improved to be at par with other industries unless it is correctly measured, and the measurement acted upon for improvement. The lack of reliable measurement method and standard, led the National Institute of Standards and Technology (NIST) to turn to ASTM to develop a standard for job productivity measurement in construction. The ASTM standard practice for Job Productivity Measurement (ASTM E2691) was developed to measure

construction productivity at three levels: task, project, and industry. The standard practice will periodically and continuously inform the stakeholders of productivity changes to allow for corrective action. By measuring productivity and its changes during

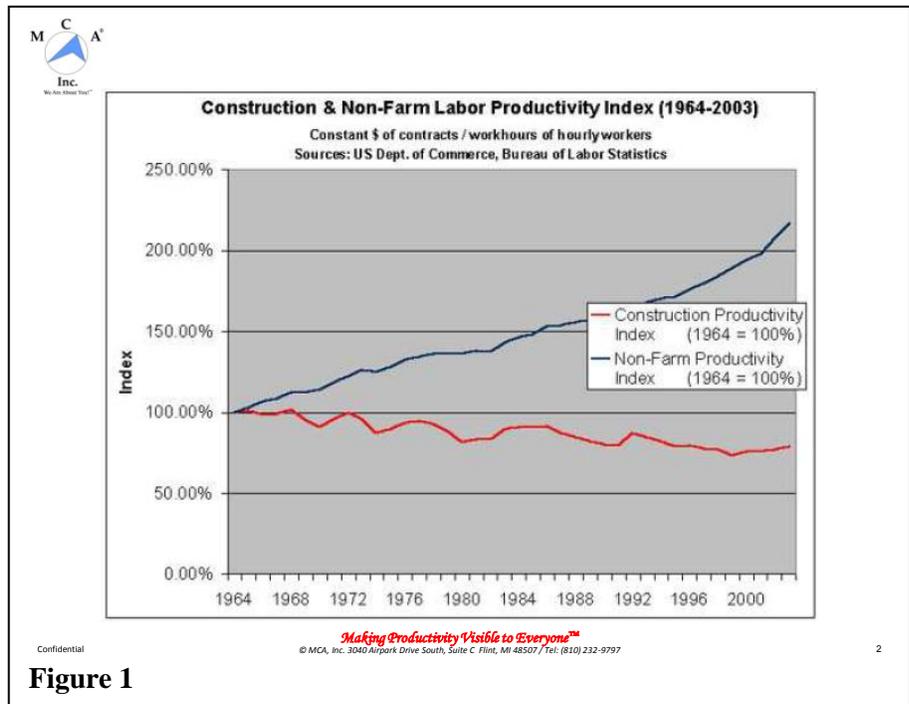


Figure 1

construction project progress, the issues can be resolved instantaneously, leading to waste reduction and error reduction and elevating construction productivity to national levels.

Our questions and request for calcifications are:

1. How will the new proposal identify the intellectual property as performance obligation
2. How will the new proposal account for:
 - a. Prefabrication

- b. Layout
 - c. Engineering
3. How will the offsite activities such as:
- a. Procurement
 - b. Cut-sheets
 - c. Scheduling
- Be accounted for?
4. How can ASTM (or other) voluntary consensus standards be used to aid the implementation of the proposed change in revenue recognition methods?

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