

Response to Productivity Commission Draft Report into Public Infrastructure

Professor Martin Loosemore
Faculty of the Built Environment
UNSW

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Information request 9.1

Information request 9.1 relates to innovation and research suggests that this subject is underplayed in the draft report. Recent research into construction industry reform around the world shows that innovation is the key to unlocking the productivity benefits of the Australian construction sector (see: Loosemore, M (2014) Innovation, Strategy and Risk in Construction, Routledge, London). In helping to explain the lack of capital deepening in the sector, Loosemore (2014) explores the drivers and barriers to innovation in the construction industry and argues that it is not necessarily the level of innovation and the number of ideas that is the problem but the low absorptive capacity of firms in the sector.. which is determined by many cultural, institutional and organisational factors.

The key point here is that all the evidence indicates that we need a multi-dimensional response to the industry's problems. Yes - we must reduce costs in the 'short-term'. But the smart way to build 'long-term' competitive advantage and remain at the top of the international value chain is increase productivity and increase innovation. This will take leadership, vision and a strategy to get the industry to where it needs to be

The Commission's Draft Report also paints too rosy a picture of the Australian Construction Industry's relative performance. While the Australian construction sector is respected by many around the world, recent research provides plenty of evidence that Australia has fallen behind other countries in its reforms. The warnings of this were evident in one of fifteen discussions papers prepared by McGeorge and Loosemore to the Cole Royal Commission (cited in the Draft Report) but were largely ignored. Reform of the industry has been stifled by a continuous focus on IR which is only one part of the problem. Our research shows reform needs to occur across a broad range of fronts and that countries like the UK and Singapore have been successfully reforming their industries for many years. This has created a number of strategic blind spots which have left our industry behind in the reform stakes. The widespread implementation and mandating of BIM in the UK is just one example of many. One senses when one visits other countries a palpable sense of reform engagement which just doesn't exist here. There is a strong sense of collective responsibility that reform is needed and there has been clear leadership to make this happen. The UK for example has a construction minister (of limited impact) but much of this change has been led by clients (private and public) who have become frustrated with the industry's performance and taken the lead in driving reform. While there is clearly some debate about whether clients should have to be involved in the industry's reform agenda, the general consensus is that buying a building or piece of infrastructure is not like buying a consumer good. Clients need to be intimately

involved in the success of complex projects. So it is positive that the report recognises the important role of clients. Our recent research confirms the importance of client leadership and of having a clear strategy which allows people to innovate and their advisors to value it. It also suggests that many clients are overly fixated on price in selecting the team for their project. Perhaps this is a reflection of the current business environment where competition for work is tough and tenders are low. However, the research has reaffirmed the real dangers in being tempted by the rationale that low price equals good value. This is not always true and while the merits of competition are widely lauded, evidence indicates that clients can extract more value by an integrated project strategy that doesn't lock-in solutions too early, that provides scope and time for innovation to happen, which encourages collaboration, early contractor involvement and which distributes risk and opportunity fairly and openly. According to recent research, many clients are unwilling and unable to do this because of internal governance constraints, a lack of tools to value innovation in bids, a poor understanding of how built assets contribute to core business objectives and a narrow understanding of their central role in driving innovation. This is the economic dilemma of innovation in the construction industry. In reality, the potential for investment in innovation is restricted to the relatively few large companies who are lucky enough to deal with sophisticated clients which procure buildings on a frequent basis. The vast majority of the industry are left to work with clients who procure buildings very rarely, who want the lowest possible price for their investment and who do not see them as a key long-term asset in the success of their core business.

Information request 9.2

As your report points out, comparing productivity statistics internationally is highly problematic. In simple terms, the reason is that different countries have very different ways of measuring this and there are no international standards of what to include or not. The boundaries drawn around the industry also vary from country-to-country. So we are not comparing like with like. For example, some include the shadow economy (which in US is estimated to be 20% of the industry) and some don't. And it is also worth noting that national statistics are often based on self-report surveys from a limited sample of firms and this methodology also varies from country-to-country. The data available from Australia (as evidenced in UNSW's previous submission cited in the draft report) shows clearly that the only thing that can be concluded with any certainty is:

- 1)** Construction labour productivity has trended up since 1990s, ahead of all-industry average but has been losing ground.
- 2)** Construction MFP has trended up since 1990s, lagging the all-industry average but pulling ahead recently.
- 3)** Increases in construction MFP have been met with increased wages which have reduced efficiency gains.
- 4)** We 'may' have lost our international competitive advantage over last decade but comparative data is limited and unreliable.
- 5)** Relative MFP gains during the ABCC era should be taken in context of second 'capital-intensive' phase of mining boom.

6) Third 'delivery' phase of mining boom will probably make future relative gains in construction productivity much harder to secure.

The draft report covers the issue of productivity well. There is no productivity crisis as many claim. The creeping crisis is in the imbalance between wages and productivity, which perhaps the report should point out in more detail. Wages have gone up without any commensurate increase in productivity because productivity agreements in EBAs have not been enforced by industry. So we have had year-on-year 4-5% increases without any conditions. This is clearly unsustainable. Its ironic that those who signed up to this and have not enforced it are now the ones that are now the most vocal about having to clamp down, blaming others for the mess. High wages are no problem if they come with productivity increases. No one wants a low wage economy but we have to work for it. That's the lesson everyone has to learn.

The government should insist that any future EBAs are evidenced first by productivity increases. This will make the measurement of productivity something that firms and employees will need to do to justify any future increases. The world of work is changing and people are being paid more by outputs (results) now than by inputs (hours of work). In this regard, new requirements in State Codes of Practice which require firms to submit a workplace relations management plan is a step forward which will provide the reliable data needed to populate the benchmarking system referred to in Recommendation 8.2. Without good data, there is little value in having such a system and currently the industry does not measure it in any systematic way. Most firms measure progress against program. They do not measure productivity. As one moves down the contractual chain, the measurements become more and more crude. So there is a lot of groundwork to be done before a benchmarking system can be established. A number of countries have benchmarking systems already and much can be learnt from their experiences (US, Chile, Brazil, UK, Singapore etc).

But productivity measurement is notoriously difficult and as the Draft report rightly points out, its very difficult to link it to one factor. Research indicates that the major causes of lost productivity in construction are (not in priority order):

- Variability in subby capability/performance (can vary up to 20%)
- Interruptions/poor coordination (waiting for the next trade, waiting for information/instructions, waiting for materials, waiting for plant, weather, IR disputes etc);
- Working continual overtime (exhaustion/burn-out);
- Size of the labour force (relative to size of site);
- Unplanned increases in labour force (flooding the job to make up time);
- Poor site management/supervision;
- Lack of up-front integration in project teams;
- Lack of commitment to, and focus on, productivity and continuous improvement;
- Skills/competencies (productivity training);
- Lack of detailed short-term planning;
- Contractual conflict and poor subcontractor relationships (trust);
- Design (constructability/complexity/uniqueness/prefabrication);

- Design management (timely and accurate information);
- Productivity is not rewarded;
- Lack of information about productivity improvement;
- Not measuring and monitoring productivity.

It's not rocket-science and clearly, these factors vary in influence from state-to-state so one must be careful not to generalise. For example, in WA, there was no doubt that IR is a bigger factor than in other states and that there was a significant impact on costs (through risk premiums added to bids by subcontractors and significantly higher wages being paid to EBA workers compared to non EBA workers). In terms of productivity, although disputes are clearly one of the main factors that affect productivity in the list above, the large number of factors that affect productivity make it difficult to draw any reliable conclusions about links between IR and productivity. So to do so would be unwise in my view since this is easily criticised. And it would be unwise to blame this all on workers since managers also lay the seeds of legitimate disputes through poor management of OHS etc.

Regulation

Finally, I would like to make a voluntary point about regulation and legislation, given the current governments focus on this area. While everyone agrees that there has been a proliferation of regulations and that red tape is bad for business and innovation there is also plenty of evidence that much of the construction industry is compliance-driven and that regulation helps to drive change. It's not an industry that has a good record of changing voluntarily and there is a long tail of underperforming firms that need to be forced to change. This is where regulation is critical. If one looks at the history of construction reform around the world, then successful change has either come from government or major client interventions out of frustration with the industry's intransigence and poor performance. In the UK, the British Property Federation's and Sir Michael Latham's review of the UK industry are good examples. The resistance to change is partly related to a lack of leadership (in Australia particularly), and its culture and instilled ways of working which have been cemented into place over many generations and which are vehemently defended by many interest groups. It is also related to the highly fragmented structure of the industry. Paradoxically, it's also the fragmented structure that makes enforcement of legislation difficult.

There is also of course the counter-argument that legislation doesn't change culture and the under-the-surface informal 'rules-of-the-game' ('institutions' in academic parlance) which really drive the problem behaviour in the construction industry. This is certainly true in the short-term although over time, if kept in place long enough, there may be an affect. As any psychologist will tell you.. 'its easy to change behaviour.. the problem is keeping it changed'. That is the challenge and there is a whole body of literature on how you do this. This shows us that culture cannot be changed over night. Changing an industry culture that has cemented into place generations of traditions and practices that hold back innovation and productivity will depend not only on regulation but on education, leadership, competition, a clear and collective industry vision and strategy for the future and little of this infrastructure is currently in place. The industry is badly in need of visionary leadership.