

THE COMPARTMENTALIZATION OF TRADES IN THE CONSTRUCTION INDUSTRY

In the wake of allegations of corruption in the construction industry, many in the media have asserted that the cost of building a road in Quebec is higher than in Ontario. The cost of building and maintaining certain roads does happen to be higher in Quebec, but a number of factors – in particular, harsher winters here than in other provinces – may explain this discrepancy.¹ Other studies show, in contrast, that construction costs for comparable commercial buildings are lower in Quebec than in Ontario.² The debate about costs is not over, but nothing indicates that construction workers in Quebec have anything to envy their neighbours in the other provinces as regards their talent and the quality of their work.



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Quebec construction workers suffer, however, from one sizable obstacle in comparison to their colleagues in the other provinces: a lack of flexibility that originates in the legislation governing the construction industry. Without this obstacle, Quebec construction workers could raise their productivity, enabling the government and Quebec taxpayers to save on the costs of building various facilities, especially infrastructure.

The construction industry alone accounts for \$41 billion in investment spending, or 13% of the province’s GDP in 2008.³ It is involved in an array of economic sectors: industrial (for building and modernizing plants), commercial, residential and in major infrastructure work that, in Quebec, represents more than 60% of non-residential investment in construction. The efficiency of this industry thus has a major impact on the Quebec economy.

The construction industry has a number of players. At the top are the entities providing work, namely governments and

industrial firms. It is they who issue calls for tenders. The companies that win the contracts to execute projects are general contractors. They then turn to sub-contractors for handling various sorts of specialized work. There are tens of thousands of these specialized sub-contractors in Quebec.

Act R-20 and the compartmentalization of trades



The construction industry in Quebec is the most heavily regulated in North America. The government has intervened in this industry by forcing employers to hire only workers who belong to one of five recognized unions. Since 1968, labour relations in the Quebec construction

industry have been governed by the *Act respecting Labour relations, vocational training and workforce management in the construction industry*, commonly called Act R-20. This act is applied by the Commission de la construction du Québec (CCQ), a public body financed mainly by the industry.

1. Transport Canada, *Estimation of the Representative Annualized Capital and Maintenance Costs of Roads by Functional Class*, 2008. The authors note, however, that the cost differences may be due to a series of factors that are hard to identify.
2. See Louis Delagrave, *Étude comparative des régimes de relations de travail dans la construction au Canada*, Commission de la construction du Québec, March 2006. The studies notes that the cost per square foot of building a Home Depot store averages \$73.58 in Ontario and \$60.80 in Quebec, or 17% less in Quebec. For a Wal-Mart store, it’s \$85.05 in Ontario and \$61.81 in Quebec, or 27% less.
3. Commission de la construction du Québec, *L’industrie en chiffres*, http://www.cq.org/B_IndustrieConstruction/B02_IndustrieChiffres.aspx?sc_lang=fr-CA&profil=GrandPublic.

TABLE 1

The effects of the compartmentalization of trades on the construction industry

- More labour is needed to complete a project, adding to the number of steps and causing substantial time loss.
- Though the construction industry experiences a labour shortage, its workers scarcely manage to get an average of 963 hours of work per year.
- The structure of employers has, over time, become modelled on the union structure. This means a proliferation of small, specialized contractors hiring for only a single trade.
- For trades where there is a shortage, employers holding this captive workforce (which cannot practise another trade) can raise their bids, with true competition lacking.
- The proliferation of subcontracting on the model of the union structure makes worksite and project management much tougher and costlier, and it has an impact on timeliness.
- Contractors working on remote worksites (in the Far North, for instance) must violate the rules and open themselves to large fines because they have difficulty recruiting workers nearby in all the trades required by law.

According to an evaluation by the CCQ, Act R-20 and its regulations govern nearly 60% of construction work on Quebec territory.⁴ In Quebec, as elsewhere, there is no obligation for home renovation to be done by unionized workers. However, unlike the rest of Canada and the United States, 100% of work in the new residential sector, as well as the commercial, institutional and industrial sectors, must be performed only by unionized workers according to the framework of Act R-20. Collective agreements in the sectors subject to this act are negotiated centrally and province-wide, with the law making their scope mandatory.

Under this law, the government regulates the description of trades, and this gets in the way of worker versatility. A regulation adopted under Act R-20⁵ defines the trades and requires employers to hire only workers holding certificates of qualification in each of the trades to perform work. Here

is an example among many: ceramic tiles have to be installed by a “tile setter” and not by a “resilient flooring layer” (who installs carpets). Many workers, however, know the rudiments of several trades.

There are many more regulated trades in Quebec – 26 – than elsewhere in Canada. For example, Ontario has only six compulsory construction trades, with all the others being voluntary.⁶ When a trade is voluntary, certification is not legally required to work in this trade, even if some employers and unions may ask for a certificate. As a general rule, anyone who possesses adequate skills can thus work in voluntary trades. This compartmentalization of trades in Quebec leads to a costly system that produces a rigid division of labour into trade groups, with heavy-handed hiring rules and inflexible operating mechanisms. It prevents any versatility sought by general contractors and work providers in reviewing business practices and improving productivity. For example, a contractor who is caught by a CCQ inspector having a slab of concrete poured by carpenters who are already on the site, rather than by cement finishers, will be prosecuted.

As a result, completing a project requires more workers and subcontractors, leading to a proliferation of steps and causing substantial time loss. Moreover, it is harder to have employees take responsibility for the quality of their work since they perform only a small part of the work and two or three other trade groups must follow them to finish it.

The proliferation of subcontracting also makes worksite and project management tougher and costlier, and it has a substantial impact on timelines. Industry specialists, along

If the compartmentalization of trades were less restrictive, Quebec construction workers could raise their productivity, enabling the government and Quebec taxpayers to save on the costs of building various facilities, especially infrastructure.

4. Quoted in: Pierre Fortin, *Assujettir la machinerie de production à la Loi R-20 de la construction : les conséquences économiques*, UQAM, June 2002, p. 9.

5. *Regulation respecting the vocational training of workforce in the construction industry*, R.Q., c. R-20, r. 6.2.

6. On this subject, see Louis Delagrave, *op. cit.*, footnote 2, pp. 59-60.

TABLE 2

Number of workers and annual hours worked in the 10 main trades (2008)

Trade	Workers	Average annual hours
Carpenter-joiner	38,458	898
Electrician	15,331	1,145
Pipe Fitter	8,010	1,152
Heavy Equipment Operator	6,329	873
Painter	5,465	774
Roofer	5,284	723
Shovel Operator	5,204	961
Bricklayer-mason	4,898	820
Tinsmith	4,124	1,062
Plasterer	3,092	779

Source: Commission de la construction du Québec, *Statistiques historiques*, Table C-24.

with the vast majority of work providers using every type of subcontractor, themselves state that Act R-20 has the effect of extending the duration of construction work. The compartmentalization of trades, because of the rigidity it brings into organizing work in the sector subjected to it, is among the most frequently mentioned causes of project delays.⁷ A survey by accounting and consulting firm Samson Bélair in 2002 came up with an estimate that Act R-20 increases the time required to perform construction work in the production machinery industry by 17%. A CROP survey among work providers found that 91% of work providers dealing with subcontractors who are not governed by Act R-20 would consider the subjection of their sector to Act R-20 as a drawback.⁸

The compartmentalization of trades also has effects on employers, construction contractors especially. Regulations have the effect of shifting the trade-based union model onto contractors' commercial model. A wide array of specialties and subcontractors for each specialty is found there. These companies hire workers who can practise only a single trade,

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reserving themselves a market and restraining competition. When some trades face labour shortages, employers holding this artificially rare labour can raise the price of their bids, with true competition lacking. This, logically, has an impact on the cost of some public works.

Economist Pierre Fortin estimated the total impact of Act R-20 on the higher overall cost of building to be 10.5%. The R-20 framework as a whole may have a negative impact on Quebec's GDP of roughly 1.5%, representing a loss of \$3.4 billion and 52,000 jobs.⁹

The coexistence of unemployment and labour shortages

While the construction industry lacks workers, Act R-20 results in workers subject to the act declaring a number of hours worked well below their potential.

The average number of hours worked by the 119,347 workers practising a trade who declared at least one hour to the CCQ in 2008 was 963.¹⁰ By way of comparison, the average Quebec worker performed about 1,600 hours of work per year.¹¹ The rest of the time, construction workers are unemployed. This low number of hours worked can be explained by several factors (including temporary unemployment in the time between finishing a job on one worksite and finding a job on another site and hours worked in sectors not covered by R-20 regulations such as home renovation), but can also be caused by a lack of work in trades that are too highly specialized. We should note as well that Act R-20 creates obstacles to labour mobility. The Act compartmentalizes the industry into 15 regions. With few exceptions, a worker from one region cannot go and work in another region.

7. Quoted in Pierre Fortin, *op. cit.*, footnote 4, p. 17.

8. *Id.*

9. *Id.*, p. 10. The study relies on data from 2001.

10. Commission de la construction du Québec, *Statistiques historiques*, Table C-24,

http://www.ccq.org/Publications/Stats/StatistiquesHistoriques/StatistiquesHistoriques2008/StatistiquesHistoriques2008.aspx?sc_lang=fr-CA&profil=GrandPublic.

11. Institut de la statistique du Québec, *Durée de travail réelle en heures par année selon diverses caractéristiques, ensemble des employés, Québec, 2009*, February 22, 2010.

Some construction workers may also find work outside the industry or work under the table. In the latter case, they do not contribute to government revenues.¹² It may be assumed that the low number of declared hours results partly from black market work, but this is actually favoured by the compartmentalization of trades.

Solution: grouping trades

These data give reason to believe that the absence of versatility among construction workers is not only a source of higher costs for work providers in Quebec but also creates an obstacle for unionized workers who wish to work more hours. Project delays due to subjection to Act R-20 in no way means that certified construction workers are any less capable than qualified workers in companies that are not subject to it. On the contrary, the expertise of Quebec workers is broadly recognized, and these workers are very much in demand. This relative inefficiency results instead from the rigidity of work organization and the workforce management practices that characterize the construction industry, governed by Act R-20. Above all, it results from the compartmentalization of trades and the ensuing lack of versatility. Despite the major legislative obstacles that slow its productivity, the construction industry in Quebec has come out fairly well, in spite of everything. This said, it could become even more efficient.

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In Quebec, there are currently 26 types of construction trades. To raise productivity, workers must be allowed to become more versatile, and those who wish to work more should be allowed to do so. This is important if the industry wants to continue attracting young people. There is no guarantee that young people today will agree to a job in the construction industry if it can provide them only 963 hours of work per year. With their greater financial needs, they may be tempted to choose work elsewhere. Demography will also come into play, meaning that we will face growing difficulty in recruiting labour.

To deal with these challenges, it would make sense to revise the regulations on the training and qualification of labour in the construction industry with the aim of reducing the number of trades by grouping them.¹³ This reform must also include training young people. Training them for a greater number of tasks would make their work more motivating. It would increase their hours worked and their employability while lowering the level of employment insurance claims to be paid by the government.

For the economy as a whole, the efficiency gains in project management and the opening to innovation and economies of scale in the construction industry would be likely to result in more private investment in Quebec and a reduction in the cost of public infrastructure.



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12. According to data from the Quebec Department of Finance, the black market economy in the construction sector costs the government \$900 million in annual tax losses.

13. For example, it would be possible to group the metals trades (reinforcing steel erectors, boiler makers and structural steel erectors).