FINANCING AND FUNDING APPROACHES FOR ESTABLISHMENT, GOVERNANCE AND REGULATORY OVERSIGHT OF THE CANADIAN NORTHERN CORRIDOR

Anthony E. Boardman, Mark A. Moore and Aidan R. Vining

SUMMARY

The Canadian Northern Corridor (CNC) is a proposed multimodal, multijurisdictional corridor. It is a highly complex, long-term infrastructure project. Such projects often fail to get implemented, but the limited evidence suggests that they can get built when a single entity (a national government or a supranational organization) assembles the rights of way and provides corridor access to various infrastructure providers. This entity, which we refer to as the "assembler," has to (1) assemble the required rights of way from all those currently holding the property rights; and (2) decide on the allocation of, at least, usage property rights to different kinds of infrastructure providers (and ultimately users of that infrastructure). For the CNC, the assembler could be the federal government or a consortium that also includes subnational levels of government. Because First Nations and other Indigenous groups in Canada have constitutional (or at least quasi-constitutional) status, they might also have a role in a consortium.

Financing of the assembler will inevitably come from government(s) through higher taxes, reduced government spending or the sale of government bonds. If the assembler is composed of multiple governments, the division of the financing will need to be negotiated and will have contracting costs.

Once the corridor (or at least some part of it) has been assembled, infrastructure provision of the various modes on a variety of routes may proceed, subject to the availability of infrastructure financing. Ultimately, both the assembler and the infrastructure providers will require funding to pay back the financiers. Funding for the assembler could be raised directly from the infrastructure providers, in the form of fees paid for access to the corridor. It could also be raised through charges to end users. Or, it could be funded from general government revenues. Funding will also come, at least in part, from greater government revenues captured from the increased economic activity, which result from the provision of new infrastructure services. These may be in the form of property taxes, sales taxes, income taxes, or resource royalties, all of which will increase if the infrastructure leads to increased economic activity. Intergovernmental negotiations will probably be required in order to reach an agreement on a revenue sharing formula.

Infrastructure on the corridor could be provided by private, for-profit firms, publicprivate partnerships (PPPs) or state-owned enterprises (SOEs). Private firms, including PPPs, will only be willing to provide infrastructure if they can earn at least a normal rate of return on their equity. They may obtain financing from private sources, from public or private pension funds, or some combination of these. SOEs would be government financed.

The willingness of private sector infrastructure providers to pay access fees for the right to build on the corridor depends on their expected economic profits.* These, inter alia, depend on expected regulation. All of the providers will be natural monopolies and, therefore, providers' prices to end users will likely be regulated. We do, however, consider the possibility that providers' prices will be unregulated and set at profitmaximizing levels. In that case, well-designed auctions may allow the assembler to capture all the potential economic profits as access fees charged to providers. However, the monopoly prices charged to end users may result in inefficiently low levels of infrastructure use. If prices are to be regulated, we argue that existing sectoral regulators can perform this role most effectively. If prices are set such that the providers expect to earn only a normal rate of return on their equity (zero economic profits), then they will not be willing to pay any access fees to the assembler. In this case, funding will have to come from user charges or government, or some combination of both.

Any type of provider may be funded by charges to end users or by government. User charges could vary with infrastructure use or could be per period access fees that must be paid before any consumption of infrastructure service, or both (i.e., two-part pricing). If the social marginal cost of service provision is zero (e.g., uncongested road use), then the usage charge should be set to zero. However, if the social marginal cost is positive (e.g., oil pipelines), then usage charges should reflect these marginal costs.

We argue that PPPs may not be the best providers of infrastructure. Private costs of capital will be higher than the rates on government debt, due to inefficient risk bearing. PPPs also come with very high contracting costs, which in turn can reduce the number of bidders and lead to excess returns that must ultimately be paid by users and governments. There is little evidence that PPPs are more economically efficient than traditional government procurement, especially if the latter uses fixed-price contracting. Nevertheless, they may prove to be the only feasible option.

Our survey of the literature on existing corridor proposals and other large infrastructure projects leads us to conclude that the assembler is almost always a government or a combination of governments. Financing of the assembler is provided by government or

Economic profits differ from accounting profits. Economic profits equal revenues minus all opportunity costs. Opportunity costs include all explicit costs and a normal rate of return on equity (accounting profits divided by equity) for the owners. A normal rate of return is equal to what the owners could expect to earn by investing their equity in alternative projects with similar risk. If owners earn a normal rate of return on equity, then their economic profit is zero.

is obtained from multilateral development banks. There have been many proposals for other assemblers, but only a few seem to be actually progressing. Those few cases are spearheaded by a particular government for geopolitical reasons, such as China's Belt and Road Initiative.