

Economics Without Tears

Over or under? Building connections between destinations

I have an ongoing argument with a client in Kazakhstan. I think that the city of Almaty would be vastly improved by a series of underground passageways to link up all of the different developments that are now under construction. Umut hates that idea. He thinks that pedestrian bridges across Almaty's broad and heavily trafficked streets would be a much better approach.

He would say that. Umut is an architect and there is nothing architecturally inventive about an underground passage. Plus his favourite architect is Calatrava, who is famous for sweeping, iconic bridges. I'm not an architect, but I did grow up in Montreal. Nothing reaffirms one's appreciation for the climate-controlled paradise of an underground shopping mall more than minus-thirty degree weather. If London ever hits minus-thirty, I guarantee that the elegance of Foster's Millennium Bridge will lose much of its appeal, but you would sing Hosannas at the sight of the Underground symbol. Minus-thirty hurts.

But irrespective of who's right about whether to bridge or to burrow, at least we agree on one thing. Almaty – like many cities undergoing rapid change – is far too fragmented and smart connections between different development sites are needed.

Sadly, the way things are unfolding, neither Umut nor I can work out how it's ever going to happen.

The Problem with Public Goods

The crux of the issue is this: bridges and tunnels (and roads and railways and metros and bicycle paths, for that matter) are quintessential examples of "public goods". Despite the benefit that accrues to the private interests that are connected by any new infrastructure, the private sector itself will almost never have an incentive to deliver it.

To be technical, public goods exhibit the following characteristics: they are non-rival and non-excludable in consumption. The first means that consumption of a good by one individual, does not limit consumption by another. In other words, once a bridge is built or a tunnel dug, the marginal cost of allowing each extra person to use it is practically zero. It might still be in a developer's interest to provide it, were it not for the second condition. "Non-excludable in consumption" means that once you provide the infrastructure for one person, you cannot prevent others from using it. Put these two conditions together and you arrive at the dilemma: it is impossible to charge for it.

In the case of connections needed to bridge different development sites in city centres, there are two other conditions that complicate their delivery: free-riding and externalities. Free-riding is a rare economic term that means, exactly what it sounds like: if I am not forced to pay for something that I am likely to get anyway, then I probably won't. In this case, it applies not just to the users of any new infrastructure, but also to the developers that benefit from the connection.



Why should the developer on one side of the street invest in the costly construction of a new connection, if he believes that the developer on the other side of the street will eventually see the infallible logic of it and pay for the whole thing? Because they are both thinking along the same lines, it leads to a stalemate where the most logical outcome is also the most unlikely.

The effect of externalities can sometimes be even more insidious, though its technical definition can sound a bit benign: an externality is the unintended cost or benefit to another party where no compensation is made. The textbook example of a negative externality is pollution. In this case, it is often the unintended benefit to a third party that thwarts the development of new infrastructure by the private sector. Specifically, if I make it easier for people to reach my development through some clever new connection, then by implication, I also make it easier for people to reach the competing development on the other side. Why would I want to do that?

I am routinely amazed at how powerful this argument is as a disincentive for doing something. Sometimes it can reach comical heights. Every developer speaks in hyperbolic terms about how their project is infinitely superior to every other project. Yet faced with the prospect of consumers actually having a choice between two different products, they instinctively assume that consumers will choose the other one.

It is an odd phenomenon and not unique to Eastern Europe. When I described it to a friend in London, he reminded me of Margaret Thatcher's response to critics of the Channel Tunnel, who constantly harped about the folly of making it easier for London's consumers to reach Paris. Thatcher's reaction was typically dry: she was more concerned about Eurostar running out of trains. Evidently, they were only going in one direction.

Where did the Public Sector Go?

So what's the answer? How am I going to get my brilliant new tunnels? How will Umut get his well-meaning (if woefully misguided) bridges? How will other destinations in other cities get the public parks and piazzas that they need to create a sense of place? I can only think of two solutions and the most obvious one is for the public sector to step in.

They are called 'public goods' for a reason. Where the market fails to provide a required good for systemic reasons like those described above (i.e. where there is 'market failure'), then there is a powerful rationale for the public sector to provide them. They need little convincing with basic infrastructure like subways, hospitals, schools and defence. But it is also important for them to recognise that strategic connections can have massive effects.

A few years ago, I was involved in a large public inquiry for a new development on the South Bank. A mountain of evidence was presented about the economic impact of facilities like County Hall, the London Eye, the South Bank Centre, BFI Imax, National Theatre, Tate Modern, Design Museum and Vinopolis. But I am willing to bet the cost of an economic impact study that the rapid development of the South Bank can be traced back to three key projects. The Millennium Bridge, the new Hungerford Bridge and the Jubilee Line: three projects that stitched the South Bank into Central London and completely changed its economic geography. For the cost of a slightly more sophisticated study, you would probably find that the public investment in all of those other facilities actually crowded out private investment that would have taken place anyway.

There are similar examples all over the UK.



How attractive would the waterfront be at Salford Quays if the water was as mucky and pungent as it was in the 1980s? Probably not attractive enough to bring the BBC's Northern Headquarters to Salford. Despite the Baltic and the Sage Concert Hall, how successful would Gateshead be without the "winking eye" bridge?

These are all examples of strategic pieces of infrastructure opening up new development opportunities for the benefit of companies, investors, residents and consumers and the public sector doing what it does best: supplying public goods. Unfortunately, these inspired acts of forward thinking are increasingly rare. Budgets are tighter. The Millennium bonanza is over. The payoff period of a smart piece of infrastructure is longer than a realistic election cycle. And, let's face it – cleaning out a mucky dock or digging a tunnel isn't half as sexy as building a new museum or theatre. Much less a glass pyramid in the Kazakh steppe.

A Better Externality

Where the public sector won't step in, is there any hope for a private sector solution? Possibly, but only when developers recognise the aggregate benefit of interconnectedness and view it as an opportunity and not a threat. That requires self-confidence, a keen eye for strategic linkages, a certain critical mass and the willingness to work collaboratively with competitors.

There is particular type of externality that presents a theoretical solution. A network externality is a benefit that accrues to all participants in a system. For example, one telephone is of no use to anyone. Who would you call? Two telephones are not much better. But when there is a telephone in every home, there is enormous benefit to everyone and a strong rationale for investment in a telecommunications infrastructure.



Likewise, when I think back to Montreal's 'underground city', I am reminded of the tunnel from Scotia Bank to Les Cours Mont-Royal. I was shown that spur of the network by a friend of mine in 1992. We left the rabbit's warren of tunnels underneath McGill University, crossed Sherbrooke Street and walked into Montreal's main branch of Scotia Bank full of purpose, as if we were there for an important meeting. We walked past all of the tellers and receptionists, through the main lobby, to the far end of the building where an escalator took us down into the basement. From there it was a ten-minute walk down a winding tunnel with no shops, no food courts, no cashpoints, no advertising. Nothing. It was fantastic – as if someone had spent millions of dollars to make sure that I could walk from McGill Library to Peel Pub without ever putting on my coat. I actually opened an account at Scotia Bank because I felt guilty about walking through their lobby every day.



“ It’s time to start building bridges. Or, better yet, tunnels. ”

There was simply no economic reason for that tunnel to be there – except to ensure that the Scotia Bank building was linked into the network. By 1992, the underground city had reached a point where the cost of not being connected outweighed the cost of tunnelling through 400 metres of existing city centre infrastructure. It is an amazing subterranean maze extending over 30 kilometres and including over 1,700 shops and restaurants and over 10,000 parking spaces. It now connects 80% of city centre offices and 30% of its retail. Nearly 2,000 housing units have direct access, as well as 7 hotels, 2 conference centres, and 35 cinemas. Half a million people pass through it every day. Taken together, it is easily the world’s largest shopping mall and probably the largest, connected, mixed-use environment outside of Hong Kong.

Admittedly, this system was 40 years in the making and it developed more by accident than design. But it is worth considering that it took just a limited number of catalysts to create it. A short link between Place Ville Marie and Central Station in the 1966 alerted others to the commercial benefit of providing a climate-controlled connection between two key sites. This prompted similar initiatives between neighbouring developments elsewhere in the city. In the 1970s, Complex Desjardins showed that it was possible to create a comfortable multifunctional indoor space, without force-feeding pedestrians along circuitous internal retail streets. In the 1980s, a narrow link between Place Ville Marie and the Eaton Centre connected two of the larger branches in the developing network and created a single, uninterrupted indoor space of critical mass.

Whether or not it is a model that can or should be emulated is debatable. At a minimum, however, it illustrates a number of key points that everyone should bear in mind: (1) competitors can collaborate to their mutual benefit and the benefit of residents, consumers and tenants; (2) a successful destination is more than the sum of its parts – it includes the connectivity between those parts; (3) investment in key pieces of infrastructure can add as much value as fancy buildings and public art – get these right and good design might actually be more affordable.

For the cities of Central and Eastern Europe and the CIS, where a small clutch of developers often control huge swathes of city centre real estate, the model is even more compelling. In those cases – where the public sector has either recoiled completely from intervention in the property market or focused its attention and investment on state-building vanity projects – it is incumbent on the development sector to regulate itself and recognise that their individual success is dependent on the success of the city as a whole.

It’s time to start building bridges. Or, better yet, tunnels.



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