

The New Zealand Asia Institute (NZAI) undertakes research focusing on engagement with Asia, provides a forum for informed debates, and offers a bridge to Asia-related expertise and research within the University of Auckland.

## The dark side of trust in global value chains: Taiwan's electronics and IT hardware industries

As global value chains (GVCs) spread wider and finer, innovation gets distributed: instead of innovating alone, firms repeatedly synergise their in-house R&D using knowledge from other firms. Product innovation feeds off “knowledge” connectivity”: continuous, two-way interactions. Meanwhile, GVCs allocate value hierarchically and are often orchestrated by multinational enterprises (MNEs). MNEs’ local suppliers are increasingly upgrading their own technology and innovation, though, raising their status in the GVC hierarchy.

Taiwan exemplifies this upgrading. Government-sponsored connectivity with Silicon Valley has written a phenomenal success story. Recent research\*\* therefore surveyed 160 Taiwanese manufacturers of hardware and componentry like semi-conductors, CPU cards and circuit boards supplying overseas-based MNEs in the electronics/IT manufacturing GVC.

Most had already upgraded into also designing new products. Half had gone further and were developing and distributing their own brands, too. These progressive stages showed increasing “functional sophistication”. The suppliers also enjoyed differing degrees of inter-firm trust, and specifically “goodwill trust”, with MNEs. This included a good faith relationship, mutual understanding, and feeling they could foresee an MNE’s behaviour.

Complex analysis of the surveys showed different ways pipelines with four combinations of high or low inter-firm trust respectively turned knowledge connectivity into new product innovation capability and GVC status. First, in pipelines where functional sophistication and low inter-firm trust were both low, suppliers’ knowledge connectivity was switched on by “knowledge” acquisition” (focusing on content) and leveraged by “knowledge integration” (diffusing the knowledge acquired across the firm and blending it with other knowledge). Acquisition impacted new product innovation capability more than did integration.

Second, in low sophistication/high trust pipelines, acquisition and integration impacted innovation about equally. Third, in high sophistication/low trust pipelines, only acquisition impacted it. Finally, under high sophistication/high trust,

knowledge connectivity led to new product innovation capability but solely via knowledge integration.

These results provide the first evidence of a “dark side” of trust for suppliers: less trust being better than more. That makes some sense. High-trust suppliers may forgo valuable learning opportunities by shying away from constructive conflict and relying on their lead-firm partners for problem solving. In low-trust relationships buyers guard their knowledge jealously, yet suppliers seemingly learn more despite acquiring less.

The research teaches suppliers that, overall, knowledge connectivity helps acquire and integrate knowledge, which turbocharges innovation, status, and competitive advantage; but that different combinations of functional sophistication and inter-firm trust matter. High-trust suppliers must stay sharp, not over-rely on their MNE partner, and challenge the status quo when necessary rather than fear alienating them.

Buyers must beware their supplier’s strategic intent. Even if the supplier intends strengthening the relationship, buyers, too, should allow constructive conflict. Conversely, if a supplier is strategising to take the learning and run, the buyer has to decide whether to seek a replacement or invest in retaining them. Investment means building goodwill trust, for instance by intensifying knowledge connectivity through geographical proximity, co-location, team building events and gift exchange.

\*\* The full study results are available in an article authored by Noemi Sinkovics, Chia-Ling (Eunice) Liu, Rudolf R. Sinkovics and Ram Mudambi: “The dark side of trust in global value chains: Taiwan’s electronics and IT hardware industries”. *Journal of World Business*, 56,01195, 2021.

