Day 2 - Summary

[JULY 28, 2026]

[Saieh Hall, Room 146]
[5757 S. University Avenue, Chicago, IL 60637]

Lecture Summaries
Week 1, Day 2 Sessions

Session 1 | 9:00 AM – 10:30 AM

Lecture Summary – Building Innovation Ecosystems: Capital, Talent, and Entrepreneurship

In this lecture, Samir Mayekar drew on his experience as a technology entrepreneur, a city government official, and a university leader to examine what it actually takes to build a functioning innovation ecosystem. He argued that there is no single formula, but that successful ecosystems consistently combine the same components: early-stage capital, an industrial base, entrepreneurs and experienced employees, incubators and accelerators, research organizations, government as a partner, and the connectors that link them together. Tracing the trajectory of the company he co-founded as a graduate student—from an early business plan competition and a small federal research grant to national laboratory facilities, university lab space, and eventually industrial and defense customers—he illustrated how each of these components contributed to the survival of a single firm.

The lecture encouraged participants to assess their own cities, regions, and countries dispassionately, identifying not only strengths but, more importantly, weaknesses. Using Chicago and the broader Midwest as a case study, Mr. Mayekar described a region rich in manufacturing capacity, research universities, and corporate headquarters, but short of early-stage capital and of a workforce accustomed to moving between startups. Rather than attempting to recreate Silicon Valley elsewhere, regions should lean into their existing strengths and build deliberate bridges to the places where capital is concentrated. He described a shared office recently opened in San Francisco by eight research universities as one such experiment, noting that venture investment is

driven heavily by proximity and networks, and that cold outreach by founders almost never succeeds.

Turning to the role of government, the lecture distinguished between effective and ineffective intervention. The state of Illinois' decision to commit substantial public funding to a speculative quantum and microelectronics park was presented as an example of a patient, high-risk bet that subsequently attracted federal research agencies and private industry. Mr. Mayekar argued that governments should not attempt to select individual winners, but can seed emerging fund managers and leave investment decisions to professional investors insulated from political interference. Public resources are most valuable where private capital is scarce—science-based innovation such as biotechnology, energy and materials, and quantum computing—rather than in sectors already attracting private enthusiasm. He also identified velocity as the central regulatory problem, noting that compliance systems designed around worst-case misuse impose funding cycles that fast-moving firms cannot survive.

The lecture concluded with advice for emerging economies. Because agglomeration effects are powerful, countries should concentrate on one or two sectors or locations where they have a genuine right to win rather than distributing resources across many regions for political reasons. Cross-border bridge funds led by credible diaspora investors were presented as a practical mechanism for connecting domestic firms to global capital, and universities were encouraged to take small stakes in spinouts so that the system remains sustainable on both sides. Finally, Mr. Mayekar emphasized culture: entrepreneurship expands when leaders publicly acknowledge those who have failed, when successful founders recycle their wealth into early-stage investment, and when policy commitments are sustained across political cycles.

Session 2 | 11:00 AM – 12:30 PM

Lecture Summary – Fertility Decline, Demographic Change, and Public Policy

In this lecture, Nobel Laureate James Heckman examined the global decline in fertility, the quality of the evidence underlying current policy debates, and whether the decline should be a source of concern. He began with measurement, drawing a sharp distinction between period measures and cohort measures. The total fertility rate, which dominates public discussion, is a snapshot of age-specific birth rates in a single year projected across a lifetime, and therefore assumes a stationary economy, stationary policies, and stationary attitudes over a span of more than thirty years. Cohort measures, which record the number of children women actually have over their reproductive lives, are far more informative but require patience. Because fertility is a long-term process, he argued that the timing and spacing of births should be modeled directly rather than inferred from headline statistics.

This distinction matters for policy evaluation. Pronatalist policies in Hungary and France have often been judged successful on the basis of period measures that are highly sensitive to the timing of births, and appear considerably less effective once cohort behavior is examined. A similar caution applies to the widespread belief that China's one-child policy explains its fertility decline: fertility continued to fall after the policy was relaxed, and the Chinese trajectory closely resembles that of Taiwan, Japan, and other East Asian economies that never adopted such a policy. Professor Heckman was also skeptical of survey measures of intended family size, which conflate social expectations, current circumstances, and preferences that change over the life cycle.

The lecture then documented how broad-based the decline has been. Fertility has fallen to unprecedented levels in East Asia, across the European Union, and among migrant populations arriving from high-fertility settings, and it has fallen among less educated women as rapidly as among the highly educated, undermining explanations based solely on the career opportunities of professional women. Fertility rates in several Indian states now resemble those of OECD countries. Across regions, the same patterns recur—a sharp collapse in adolescent childbearing, a marked postponement of the age at first birth, and a substantial rise in childlessness.

On whether the decline should be feared, Professor Heckman distinguished transitional effects from steady-state effects. Drawing on work using stable population theory and adjusted support ratios, he showed that long-run consumption per capita differs only modestly across a wide range of fertility rates, and that an older population saves more, raising the capital stock per worker. The genuine difficulties—pension financing and dependency burdens—belong to the transition rather than to the steady state, and he expressed doubt about claims linking population size directly to productivity growth, arguing that productivity depends far more on research, human capital, and institutions that permit experimentation. Explanations for the decline, he concluded, center on the rising cost of children: the opportunity cost of women's time, the quantity–quality trade-off, and education and housing costs. Fertility is higher in countries where men take a larger share of childcare, and changing norms about the role of women appear to spread rapidly, including through media exposure.

Session 3 | 1:30 PM – 3:00 PM

Lecture Summary – Actionable Evidence, Field Experiments, and the Science of Scaling

In this lecture, Prof. John List argued that every organization—whether a firm, a government, or an NGO—faces the same two questions when it uses evidence to make decisions: is the evidence actionable, and does the idea scale. Drawing on three decades of field experiments conducted with private companies, national governments, and school districts, he argued that most organizations answer the first question incorrectly because causal literacy is rarely taught. The lecture was organized around six "deception traps": three that arise from broken comparisons and can be solved through better design, and three that persist or grow when a program is expanded.

The first three traps are selection, hidden third variables, and simple before-and-after comparisons. Membership and loyalty programs illustrate the first: members typically spend far more than non-

members, but because customers choose to join, the comparison reveals who they already were rather than what the program did, and careful evaluation often shows such programs to be non-incremental. Tobacco packaging regulation illustrates the third: a decline in smoking after the policy took effect looks persuasive until the pre-existing downward trend and simultaneous tax changes are taken into account. Prof. List presented four principles for avoiding these errors, culminating in the search for appropriate statistical twins and, ultimately, in controlling the assignment mechanism directly. He illustrated the approach with work on a ride-sharing platform showing that a poor experience reduced a customer's subsequent revenue substantially, and that apologies recover part of that loss only when they carry a real cost.

The remaining three traps are more difficult because they intensify at scale. The first is Goodhart's law: a variable that predicts an outcome well may cease to do so once it becomes the target, like how incentives may raise children's test scores without actually changing the underlying mechanisms—parents, teachers, schools, and neighborhoods—that made those scores informative. The second is the data deluge, in which the sheer number of possible comparisons, amplified by artificial intelligence and confirmation bias, guarantees the discovery of striking correlations that carry no causal content. The third is survivorship bias, in which inference is drawn only from the cases that survived. Scaling adds two further considerations: whether initial success depended on an exceptional individual or on ingredients available at scale, and whether the supply side can expand without escalating costs. Prof. List described the resulting depreciation of benefit-cost ratios at scale as the "voltage effect," and argued that it is close to a law.

The lecture closed with practical implications for policymakers. Governments face a harder scaling problem than firms because policies, once introduced, are difficult to withdraw and are frequently designed in ways that make evaluation impossible. Prof. List recommended that programs be rolled out in a staggered fashion, so that everyone eventually receives them while learning remains possible, and that policies carry sunset provisions that create incentives for evaluation from the

outset. He pointed to behavioral insights teams in the United Kingdom and the United States, and to work with the Dominican Republic's tax authority that raised roughly one hundred and eighty-five million dollars in additional revenue, close to half a percent of GDP. The frontier, he argued, is designing a single experiment that establishes causality while also generating evidence on mechanisms, on which groups are affected, and on whether the result will generalize, since it is models rather than individual estimates that transfer across settings.

Session 4 | 3:30 PM – 4:30 PM

Session Summary – Participant Country Presentations

The day concluded with two Academy participant presentations. Sebastián González Massardo presented an overview of the Chilean economy, describing a small, highly open economy with an extensive network of trade agreements and a large stock of foreign direct investment.

Isabella Antonaccio followed with a presentation on Uruguay, a small high-income economy distinguished by unusual policy stability. She described current priorities around growth, social conditions, and security, including new legislation aimed at competitiveness.