



Keynote 2: Professor Raj Chetty
Expanding Economic Opportunity – Insights from Big Data

By Faseehudeen

The Ministry of Social and Family Development (MSF) and the Institute of Policy Studies (IPS) held the inaugural International Conference on Societies of Opportunity on 29 and 30 April 2025. The conference is a platform for international policymakers, researchers, and practitioners to exchange ideas on creating access to opportunities and fostering social mobility.

The second keynote speech was delivered by Professor Raj Chetty, Professor of Public Economics at Harvard University and the Director of Opportunity Insights, which uses big data to study the science of economic opportunity. Professor Chetty's work has been widely cited in academia, media outlets and policy discussions in the United States and beyond. Professor Chetty received his PhD from Harvard University in 2003 and has received a MacArthur "Genius" Fellowship, the John Bates Clark medal given to the economist under 40 whose work is judged to have made the most significant contribution to the field, and Harvard's George Ledlie prize awarded for research that made the most valuable contribution to science, or in any way for the benefit of mankind.



Caption for photo: Professor Raj Chetty delivering his keynote speech via Zoom to conference attendees.

National, Regional and Neighbourhood Differences in Social Mobility

In his keynote, Professor Chetty explored how large-scale modern data sets can be used to understand the origins of economic opportunity. To understand the possibility of upward mobility across countries, he compared the probability that children from families in the bottom 20% financially could reach the top 20% as adults in different countries – he referenced this to be essentially the American Dream. The statistic was an impressive 14% in Singapore, given the plausible upper bound being 20%.

He emphasised that there are sharp intra-country and local differences in upward mobility rates, and illustrated this using the results of a study he was a part of from 10 years ago, which analysed the geography of upward mobility in the United States, across 20 million children and 740 different areas. The project investigated upward mobility by calculating the average household income at age 35 for children born to low-income parents. The results showed enormous differences even within the United States. For example, children from the rural Midwest showcased much greater upward mobility than children from Charlotte – where sometimes the children made less than their parents decades ago, which is deeply shocking given the United States' general economic growth.

While it is natural to look at big regional differences, Professor Chetty highlighted that there are variations at the neighbourhood level as well, as identified through his work in Opportunity

Insights, which looked at 70,000 neighbourhoods across the United States. In New York City. For instance, evidence indicates significant differences in areas only miles apart from each other. Thus, he argued that the roots of the differences are at the sub-city level and urged looking into the hyper-local and the sub-city level and its relationship with broad macroeconomic structures.

By comparing children who moved from low to high opportunity neighbourhoods, Professor Chetty showed that the later the child moved, the lower the income the child would make in their 30s. Where one grows up dramatically affects their socioeconomic outcomes, and thus, policy interventions interested in economic opportunities can look at the local levels and replicate the conditions of successful neighbourhoods to help everyone thrive. He particularly pushed for interventions throughout childhood, where the outcomes are the greatest.

Social Capital Contributes to Economic Connectedness

Professor Chetty established 4 strong characteristics of neighbourhoods that tended to lead to higher rates of social mobility: less inequality, more stable family structures, better school quality and greater social capital. Particularly, he focused on the idea of social capital. He elaborated on this concept using his research study, which measured social capital by corroborating a large dataset of individuals' economic connectedness based on Facebook data and comparing it with their social mobility. In the study, he measured subjects' economic connectedness by examining the fraction of one's Facebook friends who earn an above median income, if said individual earns a below median income. His data showed that economic connectedness is strongly correlated to upward social mobility, at national and local levels in the United States. Job referrals are an explanation, but Professor Chetty elaborated on the mechanics of aspiration – if a person has never met anyone who has gone to college, the person may never consider going to college a life goal.

Professor Chetty elaborated on two equal but different determinants to economic connectedness: exposure and friending bias. Physical segregation of individuals by income and interactions stratified by class can lead to economic disconnection. He noted that Singapore has significant efforts that foster physical connection across various class groups, such as our public housing, but this does not guarantee cross-class interaction. He urged that this be looked into for policy ideation.

Policy Interventions

Professor Chetty identified three approaches to increase upward mobility: (1) reducing segregation and helping low-income families move to high-opportunity areas if the origins of economic mobility are hyper-local, (2) revitalise communities through place-based investments to increase upward mobility in low-opportunity areas, and (3) providing and investing in higher education and workforce training programs for young and older adults.

Professor Chetty's team has created statistics on various United States colleges' contribution to economic mobility, measured via a graph of upward mobility rate (the fraction of students from low-income families in the bottom 20% that have risen to the top 20% after graduation)

against its access to low-income students. Universities like Harvard, Stanford and Yale excel at creating upward mobility but are not very accessible. As such, they do not contribute to access to economic mobility at large. Meanwhile, community colleges do not provide great outcomes for upward mobility rate, despite their greater access to low-income students. Thus, the fundamental problem in the tertiary education system in the US is that few colleges are greatly accessible to students from low-income families while also producing significant outcomes for upward mobility.

However, an exception is Vaughn College of Aeronautics and Technology, which is both accessible to a significant percentage of students from low-income families and showcases significant outcomes for upward mobility. This exception illustrates that particular forms of vocational training hold important value for creating upward mobility. In the States, pilots of workforce training, like YearUp, show promising results of changing participants' earnings trajectory, essentially boosting their upward mobility. These new programmes are significantly successful because they do not just provide technical skills training, but also social capital and connections.

Professor Chetty concluded by adding that economic mobility can lead to greater economic growth, by recognising the phenomenon of Lost Einsteins. Data shows that an individual born to parents from the top 1% of the income distribution are ten times more likely to become an inventor of patents than if the individual was born to lower-income parents. He elaborated that if economic opportunity was expanded for discriminated communities like women, minorities, and children from low-income families, they would potentially invent at the same rate as high-income white men and the number of inventors in America would quadruple. Thus, enabling social mobility would bring economic growth, creating a virtuous cycle.

Ultimately, Professor Chetty emphasised that to create economic mobility, policy interventions and societies should focus on the local environment early in the life-course, provide social capital beyond finances, and use big data to target interventions and monitor outcomes in the future.

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