

Measuring Human Capital

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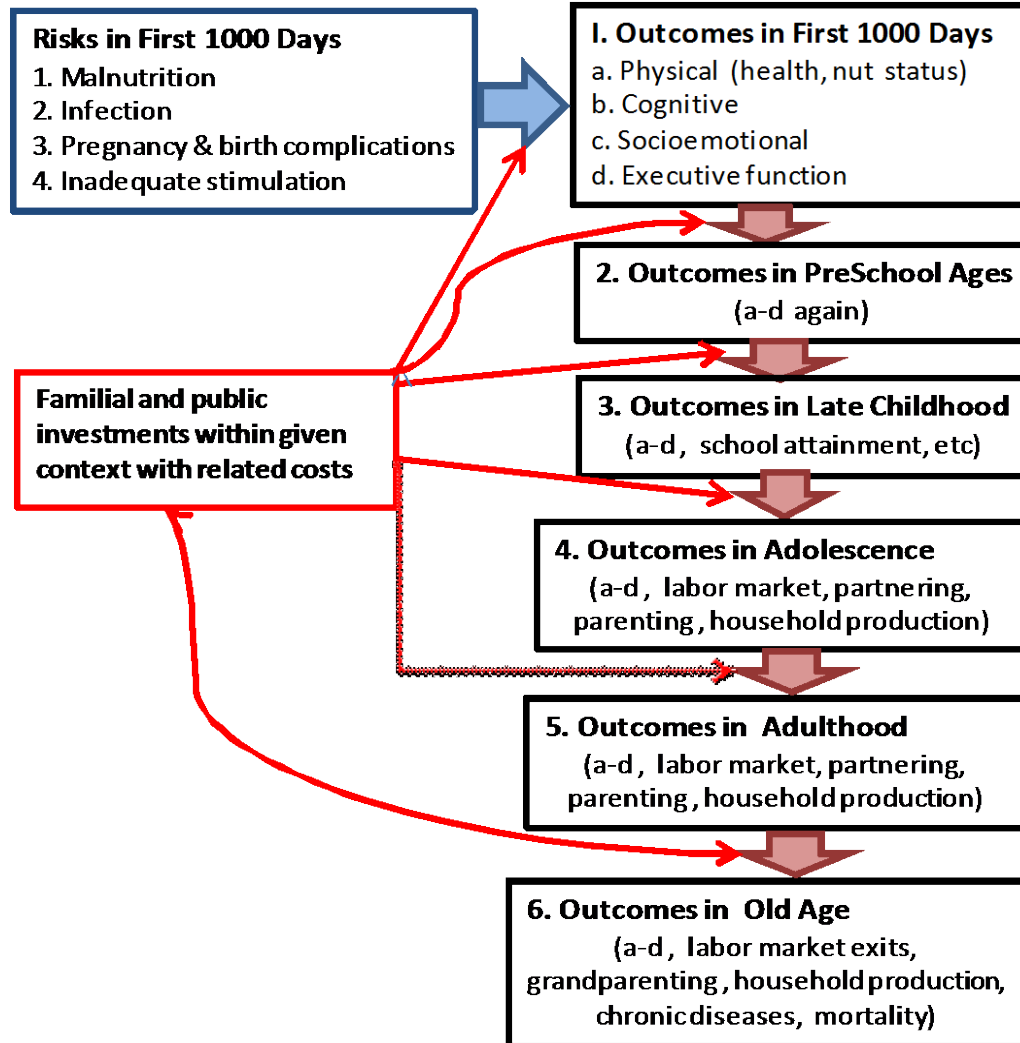
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What is Human Capital?

- “Human Capital” are stocks embedded in a human in which scarce resources can be invested now to increase some desired outcomes in the future
- Human capital is multidimensional: physical, cognitive, socioemotional, executive function
- Each dimension of human capital can be produced by investments (e.g., nutrition, stimulation) given endowments (e.g., genetics) in a human capital production function

- Embedded in a life-cycle framework with possibly interactions among dimensions of human capital contemporaneously and over time (dynamic complementarities)
- Outcomes of interest likely to be multiple (e.g., adult productivity in labor market, adult productivity in raising children, adult happiness) and produced by multiple dimensions of human capital again
- Therefore what is human capital , what are investments in human capital and what are impacts of human capital depend on what outcomes of interest and production processes

Life-Cycle Framework



Schooling and Human Capital

- Schooling NOT human capital, but possibly important investment into some important forms of human capital.
- For example, suppose adult cognitive skills and executive function have considerable impacts on adult outcomes of interest (e.g., adult productivities).

- Adult cognitive skills and executive function both are likely to be produced by various inputs within life-cycle framework above, including time spend in school and quality of school, initial endowments and preschool outcomes.
- Important to distinguish between human capital (e.g., stocks of adult cognitive skills and executive function) and investment choices that determine these stocks (e.g., time in school);
- Human capital and time in school may not be tightly linked depending on motivation for investment, production technology, and other inputs.

- These processes also raise challenges about measuring the impacts of investments in human capital such as time spent in school and to what extent in associations proxying for other inputs such as genetic endowments, preschool outcomes, quality of school
- To determine which investments desirable need know not only impacts but also costs and account for time patterns of each.