A multidimensional typology of contextual resource configurations characterising the first ten years in a child's life using Dutch register data

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Background: Among critical periods throughout the life course, the first years of childhood are maybe the most crucial from a sociodevelopmental and life course perspective. Inequalities in the early years are primarily driven by parental and circumstantial factors. To understand the early years and how (dis)advantage accumulates, contextual understanding is crucial. Accumulation of (di)sadvantage is driven by levels of periodic turbulence, insecurity, and general tendencies of precarity in the child's context. Processes generating and buffering vulnerability unfold mainly in the wealth, income, and family trajectories of the parents and their immediate environment.

Theoretically, the life course framework stresses the relevance of flows, stocks, and buffers of resources in different life domains. Trajectories of wealth, income, or family configurations unfold in an interdependent fashion (Bernardi et al., 2019; Cullati et al., 2018; Reichert et al., 2024). In this study, we propose a holistic, child-centered analysis using population-scale Dutch administrative data, following children and their context up to 0 years after birth. We ask the following **research questions:** What multidomain configurations characterize the first ten years in a child's life in the Netherlands? which children experience which transitions between these configurations over time, and where are the critical points of upward/downward mobility? How do these trajectories differ by maternal education, migration background, or union status at birth?

Objectives: Individual studies exist on a variety of these life course domains, with a focus on children as well as parents. But a holistic picture of how specific life course domains evolve and interact over time from the perspective of a child is missing. The use of Dutch register data allows for unparalleled detail in the description of multiple life domains that characterise the context of a child over the early years.

We will assume a life course perspective and construct **multidomain trajectories** combining: (a) **wealth** (household net wealth; maternal wealth share), (b) **employment and earnings** (maternal earnings; maternal share of household income; paternal earnings), (c) **parity status**, (d) **residential mobility** (home-ownership, move distance, and proximity to grandparents), (e) **household complexity** (household structure, step-family configuration, and multigenerational co-residence), and (f) policy conditioned **contextual resources** (parental leave uptake; formal childcare usage). The research goals are twofold. The first aim

is to generate code and a dataset in which different registers are harmonised. The second goal is to explore, describe, and test interdependencies in the resource domains over time.

Data & Methods: We construct these multi domain trajectories for all children born in the Netherlands in 2014, and their parents. We apply mixture hidden Markov models (MHMM) implemented in seqHMM (Helske & Helske, 2019; Eberlein et al., 2024) to first, derive a typology of latent multidomain states (capturing typical cross-domain configurations) and second, estimate transition probabilities across these latent states over time. This allows us to characterize advantaged and precarious configurations of these key life course dimensions. It also allows us to identify pathways marked by stability, up- and downward mobility, and to shed light on circumstances and processes of cumulative (dis)advantage. Finally, we examine the composition of the identified typical pathways in terms of baseline characteristics, such as maternal education, migration background, and age and union status at birth. While primarily descriptive and explorative in nature, we expect to describe and potentially discover inequality generating interactions of important life course domains and their timing during and after the transition to parenthood in the Dutch context. We draw on Statistic Netherlands' registers capturing the life course domains described above, harmonized to monthly or yearly spells, wherever appropriate. Data sources are a.o. tax registers (including information on individual and household wealth), registers on family relations, and employment registers. Data access is secured for the duration of the study.

Preliminary findings: *At this point, we are in the midst of preparing the various streams of data and cannot report findings just yet. We are committed and positive that first results will be available at the right time for EPC 2026 in Bologna. Thank you for your understanding!*

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