

# National Transfer Accounts: Singapore 2013

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# Potential applications of NTA in Singapore

- **Fiscal:** Evaluate the country's fiscal sustainability in view of the ageing population and changing household structure:
  - Assess the sustainability of public and private finances
  - Assess impact of social policies on intergenerational transfers and public-private expenditure (e.g. impact of new initiatives such as the Silver Support Scheme on private transfers)
- Manpower: Investigate the effects of changing manpower policies, such as extending retirement age or changing LFPRs on the economic life-cycle and economic dependency; education policies and life-long learning.
- **Economic:** Model the effects of different economic/LF growth models on fiscal sustainability and economic dependency





# Methodology

- Income Consumption = Lifecycle deficit
- Lifecycle deficit = Private and public transfers + Private and public asset based reallocations
- Obtain age-specific profiles for income, consumption, transfers and asset based reallocations
  - Consumption and transfers by type (health, education, housing, pensions)
- Map to national aggregates for income
  - Adjust to population subsets (Singapore resident, SCs only)
  - Issues in development: Small, open economy; large GDP contribution from non-indigenous sources





### Data sources

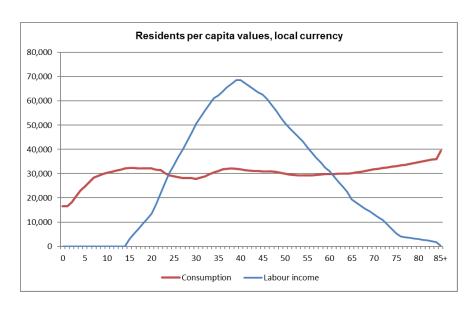
- Data from publicly available sources including MOF Budget websites and Department of Statistics (DOS)
  - E.g. DOS' 2012/2013 Household Expenditure Survey
  - Singapore's System of National Accounts data 2013
- All other data are author's own estimates

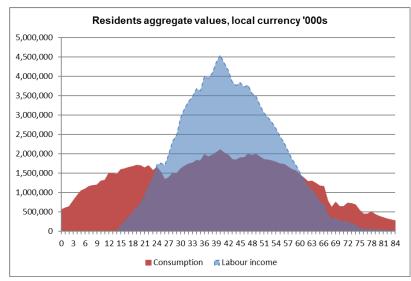


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## Measuring economic flows across age groups

#### **Economic life-cycle of Singapore residents, 2013**





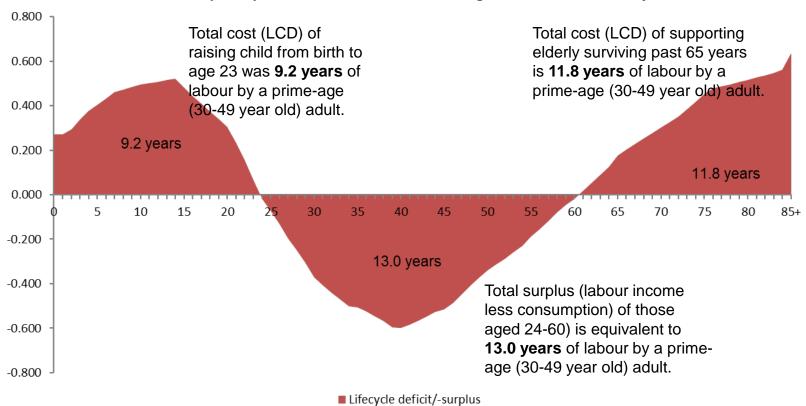




## The lifecycle deficit (LCD)

#### Per capita economic life-cycle by age, Singapore residents, 2013

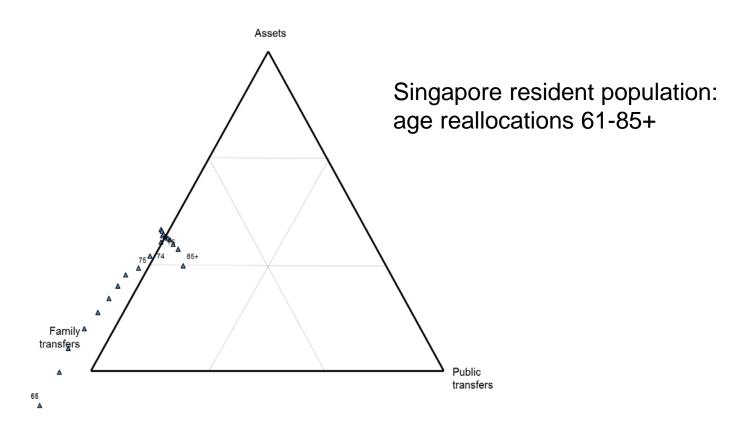
Residents per capita values, normalised to average labour income 30-49 years







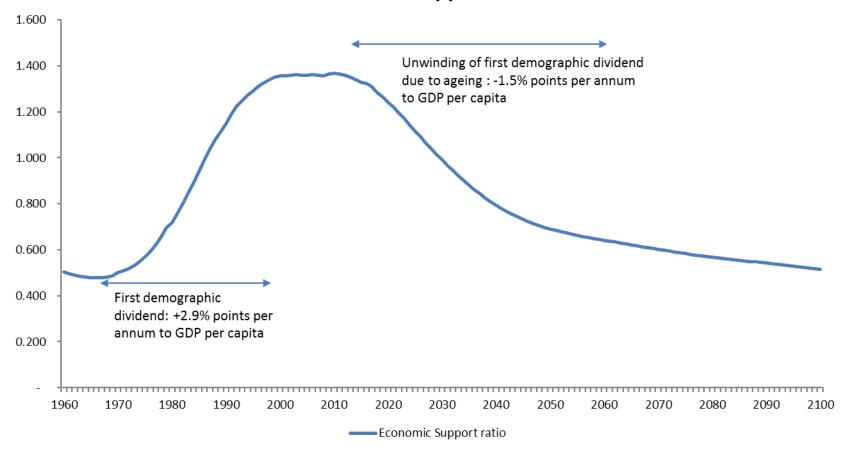
# Age reallocations





## The Demographic Dividend in Singapore

#### **Economic Support ratio**

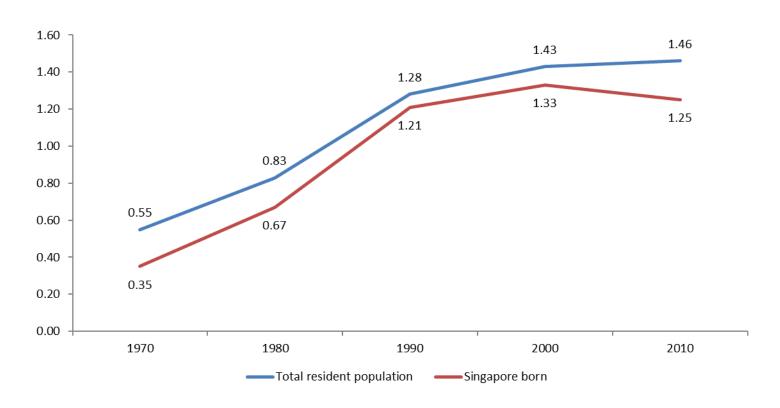






### Demographic dividend decomposition: migration

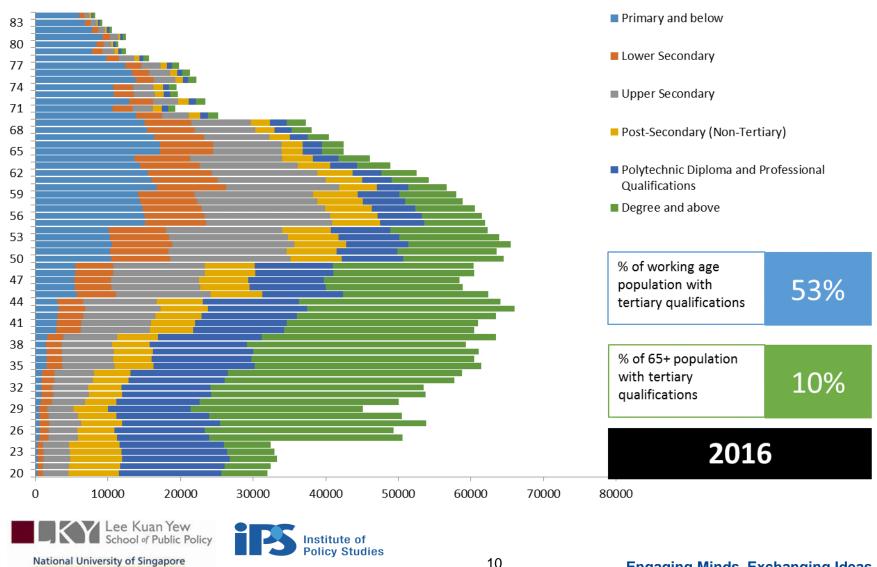
#### **Economic support ratio: by place of birth (1970-2010)**



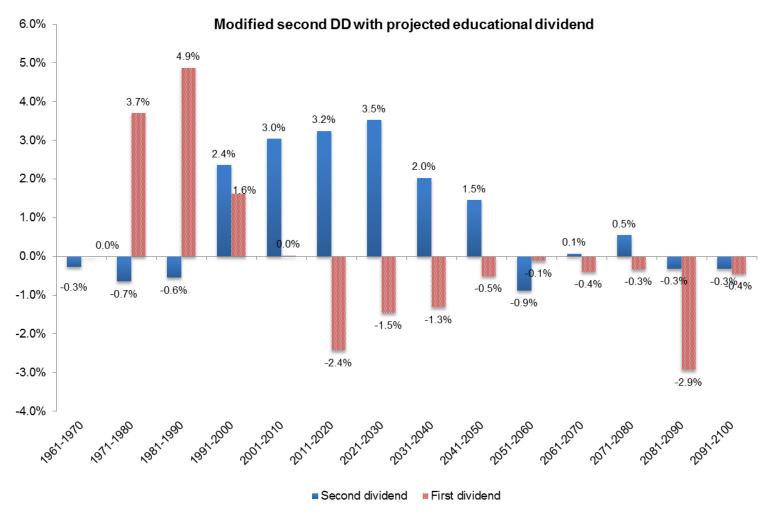




## Singapore's Educational Dividend



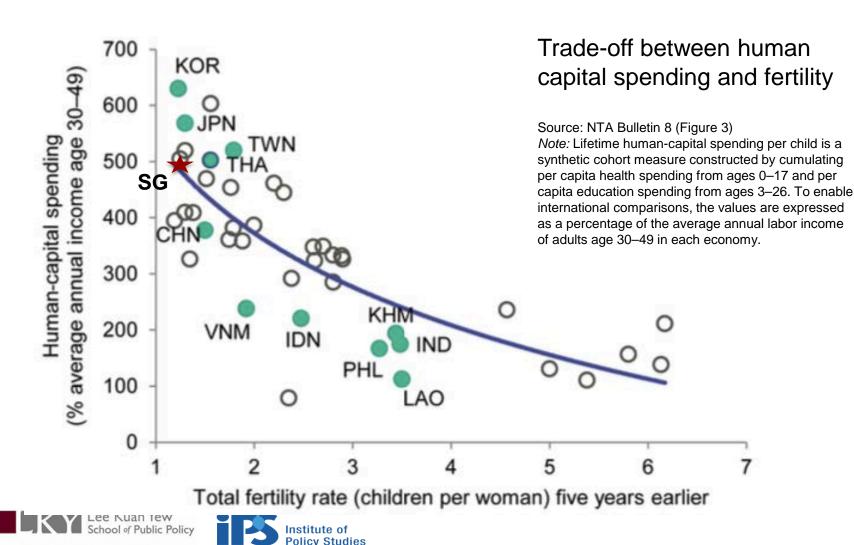
## First and second demographic dividends





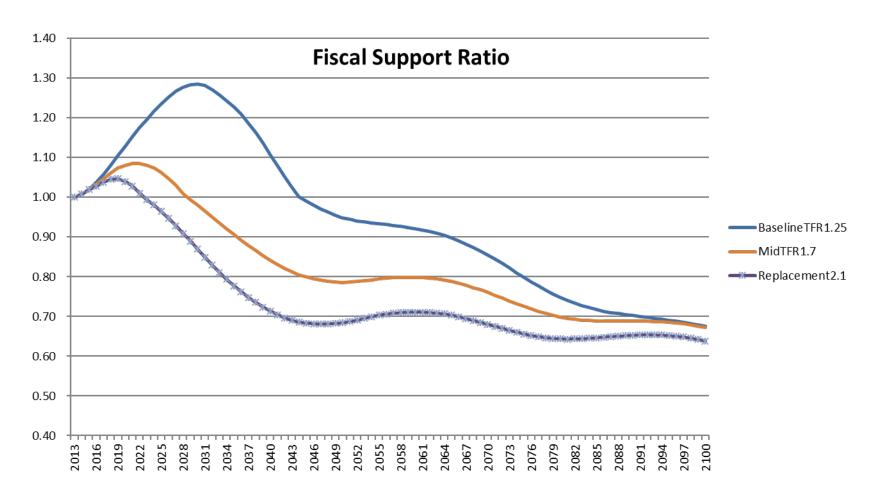


## Human capital investment and TFR



National University of Singapore

# Fiscal sustainability







# Next steps

- Approvals for publication of our NTA 2013 results for Singapore resident population
- Application for NTA Network membership
- Peer-review of SG NTA 2013
- NTA by highest education attained
- NTA by place of birth
- NTA by gender
- NTA for 2017/18
- National Time Transfer Accounts for 2017/18







**ENGAGING MINDS, EXCHANGING IDEAS** 

# **END**

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