New measures of ageing and policy implications

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Doom and gloom

China’s Aging Population Is a Major Threat to Its Future

South Koreans Aren’t Marrying or Even Dating, Report Says

South Korea Aims to Turn Around ‘Extreme’ Birth Rate Crisis
OADRs in EMs

**East/South/SE Asia**
- China
- India
- Indonesia
- Malaysia
- Pakistan
- Philippines
- Thailand

**Latin America**
- Argentina
- Brazil
- Chile
- Colombia
- Mexico
- Peru

**Middle East and North Africa**
- Egypt
- Jordan
- Tunisia
- Turkey

**Other**
- Poland
- Russia
- South Africa
A range of ‘better’ concepts and measures

• **Measurement suites**
  – NTA
  – Pensioner-worker ratio; pension cost dependency ratios
  – Health care cost old-age dependency ratios
  – Economic dependency ratios
  – Prospective measures

• **Paradigms**
  – ‘Demographic metabolism’
  – Compression of morbidity
  – Second Demographic Dividend
Trade-offs

- **Comparative vs specific**
  - Generation of data; protocol?
  - E.g. pension systems?
- **Retrospective/current vs prospective**
  - Assumptions? Consistency?
  - Certainty of population projections by age/place
- **Ease of interpretation (for policymakers)**
  - NTAs?
- **Feedback and dimensions**
  - Pensions, health and welfare
What can you do with them?

• **POADR:**
  – Misinterpreted ‘retire at 75??’ 😱
  – ‘Nice, but too theoretical, hypothetical’

• **NTA**
  – Tells us about now, but what about the future?

• **Pensioner-worker ratios**
  – Hugely complex fiscal econometrics
  – *Economists laugh at demographers!*
Maybe my imagination...

• Between demographers and other stakeholders
  – Measuring and estimating demand
  – Above PLUS broader aspiration for how society should/could be?
A theory of change approach?

1. Define desired impact
2. Draw up Theory of Change
3. Select outcome(s)
4. Select outputs(s)

Results Chain

1. Problem Analysis
2. List & cluster required outcomes
3. Arrange outcomes in a logical order
4. Identify feedback loops
5. Validate it
6. Turn it into a narrative

Review, evaluate, revise, learn
Can we reconcile?

- ‘Silver tsunami’
  - Intuitive, easy to sell
  - Gets research money; sells newspapers
  - Fundamentally inaccurate

- New measures
  - More dynamic and positive; harder to explain

- Theory of change/end point approach
  - Aspirational? Data as baseline and evaluation
  - Universal applicability?
What do actually want of these measures?

- What is the point of a projection/forecast?
- To show the nature of challenge ahead
  - *What we need to ‘manage’*
  - *Passive*
- To elicit a response?
  - Bring a slow-moving issue into sharp focus?
The uni-dimensional, ‘closed loop approach

Demographic ‘Problems’

Demographic ‘Solutions’

Demographic ‘Causes’
An alternative, integrated view

Population

Characteristics

Institutions
Applied to China

Population

- Stagnation and decline; fewer children
- Major reform of systems of childbearing and parenting?
- (Offset thru BRI?)

Characteristics

- Healthier, better educated, able to save more: potential for productivity gains and ‘demographic metabolism’

Institutions

- Tackle consequences: Productivity; pension systems; healthcare; filial piety; etc
- BUT: high un(der)employment; challenges of productivity gains [reform institutions?]
A fundamental problem

- Static, independent measures

- *Dynamic, interdependent issues*
  - POADR more dynamic, but still holds some aspects constant

- Variable outcomes
- Uncertainty; feedback effects
- Almost impossible to model correctly
A possible way forward?

• A two-dimensional approach
  – *We have to do x because that’s what the forecasts say*
  – *We want y, so we have to do x to get there*

• *Multiple prongs*
  – *Different measures for different people*
  – *Integrate different messages*
  – *Need for both REACTIVE and PROACTIVE policies*
Recognising a multi-dimensional future

• Embrace uncertainty and interdependence

• Scenarios
  – SSPs (Shared Socioeconomic Pathways)
  – IPCC, IIASA?

• **Translate** qualitative storyline into quantitative measure or forecast?
  – *Build upon assumption after assumption*

• **Some scenarios more favourable than others**
(Half) conclusions

- Recognise different values of different measures for different people
- Demand – aspiration – uncertainty
- Known knowns, known unknowns etc

- Embrace uncertainty and interdependence
- Scenarios can be helpful mid-way
To be iconoclastic

- Why do we bother with measuring ageing?
- Too many variables, too many differences
- Pensions, dementia, social security…
- Or mainstreaming ageing?
Dealing with uncertainty

- No. of 75-year old Japanese men
  - With heart disease
  - Still driving a car
  - With disposable income of x
- GDP growth; tax receipts;
- Concepts like dependency? Welfare systems
- Danger we craft future according to forecasts; make them come true!
Compression of morbidity

Baseline scenario:
Morbidity onset at age X and death at age Y

Morbidity Compression:
Faster delays in morbidity onset than increases in survival

Morbidity expansion:
No change in morbidity onset but survival increases

Morbidity expansion:
Slower delays in morbidity onset than increases in survival

Morbidity expansion:
Earlier morbidity onset and increases in survival
At a whole population level
Standard critique of ‘age boundary’ based measures

• **Poor specification of ‘problem’**
  – What happens at 65?

• **Poor specification of populations**
  – All >65 dependent?
  – All 18-64 in work?

• **Generalizability**
  – Assumes formal support systems?

• **Ignore dynamic change over time**
  – Health, wellbeing, education, longevity, LE
The uni-dimensional, 'closed loop approach

Demographic ‘Problems’

Demographic ‘Causes’

Demographic ‘Solutions’
The ‘silver tsunami’: Policy paralysis?

Inevitable; overwhelming; slow moving, existential threat
The problem with that…

- Policies are not really working
- Or are impossible to operationalize (replacement migration)
- Children don’t work (and divert resources)
- Uneven cohort
- Cost (political and economic)
- Assumes a ‘optimum’
  - Population size; distribution etc