What is it?

1. Ability to maintain material well-being (spending/consumption) in the face of economic stress or shocks

Or...

2. Ability to recover from economic stress
   - Restore wealth
   - Increase saving
   - Hard to study empirically

This talk:
- #1..... economic shock is unemployment
- Moderator is wealth (quartile)
Impact of unemployment in Singapore at older ages on Income, Spending and Subjective Well-Being

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Singapore Life Panel

- About 11,000 enrolled in Internet panel
- Ages 50-70 in 2015; now 54 to 74
- About 8,000 interviewed monthly
- Now in 51st monthly interview
- Use 34 waves

- Content of SLP: Economics, health, well-being etc.
Percent unemployed among those in labor force, age

Note: unemployed includes “discouraged workers”
Percent unemployed among those in labor force, wealth quartile

- **lowest**
  - Males: 9%
  - Females: 9%

- **2nd**
  - Males: 6%
  - Females: 6%

- **3rd**
  - Males: 8%
  - Females: 8%

- **highest**
  - Males: 4%
  - Females: 4%

Colors:
- **Males** (Blue)
- **Females** (Red)
In 34 monthly interviews

• Among those in labor force participation at least two months

• About 13% were unemployed at least one month.
  – Versus 7% in a month
Number of unemployment spells by length of spell

Total: 1178 spells including 201 of indeterminant length.

39% of spells are one month
Monthly spending and income (pre-tax), wealth quartiles

Spending and income are shown in the graph.

Categories: lowest, 2nd, 3rd, highest.
Impact of unemployment on spending

• Those *ever* unemployed different from those *never* unemployed

• Extends to unmeasured characteristics

• Implication: Effect of unemployment cannot be found from variation across persons
  – Say by comparing spending of unemployed and employed
  – (cross-section)
Monthly income of single persons: never unemployed or prior to unemployment
Method

• Fixed effects regression
• Example: A single person
  – Spending during the employed state
  – Spending during the unemployed state
    • As a function of duration of unemployment
  – Compare spending levels
  – Thus hold constant personal characteristics that are not time varying
• Show difference (%) from employed levels
Single persons, percent of spending and income following unemployment

![Graph showing percent of spending and income following unemployment over different durations. The x-axis represents unemployment duration (1 to 16+), and the y-axis represents percent of spending/income. The blue line represents spending, and the red line represents income. Spending decreases sharply in the first few durations and then stabilizes, while income decreases more gradually with time.](attachment:graph.png)
Married persons, percent of spending and income following unemployment of husband

- **Cons husband unempl**
- **Inc husband unempl**
Spending following unemployment: wealth differences

- Analyze spending path by wealth quartiles
- Fit quartic ($4^{th}$ power) to time path by wealth quartile
  - Due to small sample size
Singles all quartiles

Month

spending
income
Average 12-month percent change in spending and income, singles, wealth quartiles

[Bar chart showing the average 12-month percent change in spending and income for different wealth quartiles.]

- Lowest wealth quartile: Spending down by approximately 20%, Income down by approximately 30%
- Wealth quartile 2: Spending down by approximately 10%, Income down by approximately 20%
- Wealth quartile 3: Spending down by approximately 5%, Income down by approximately 15%
- Highest wealth quartile: Spending down by approximately 0%, Income down by approximately 5%
Couples all quartiles

Husband’s unemployment

Month

spending
income

Husband’s unemployment
Average 12-month change in spending and income, couples, wealth quartiles

Husband’s unemployment
Subjective well-being

Taking all things together, how satisfied are you with your life as a whole these days?

1. Very dissatisfied
2. Dissatisfied
3. Neither satisfied nor dissatisfied
4. Satisfied
5. Very satisfied
Subjective well-being

- Life as a whole
- Social contacts and family life
- Daily activities and job
- Total household income
- Economic situation
- Health

1 to 5 scale: very dissatisfied to very satisfied
Impact of unemployment on well-being

• Those ever unemployed different from those never unemployed
• Extends to unmeasured characteristics
• Implication: Effect of unemployment cannot be found from variation across persons
  – Say by comparing well-being of unemployed and employed
  – (cross-section)
Life satisfaction: single persons never unemployed, and by month prior to unemployment

- Never
- 3 mos prior
- 2 mos prior
- 1 mos prior
Method

• Over same person: Subjective well-being
  – while employed
  – While unemployed by length of unemployment
• Show difference as a function of length of unemployment
• Fixed effects regression
Subjective well-being following unemployment, single persons

Life satisfaction, social/family life, activities, income, economic, health

Graph comparing subjective well-being across different life aspects following unemployment.
Subjective well-being following unemployment, single persons, social/family life and health
Subjective well-being following unemployment, single persons, life satisfaction and activities
Subjective well-being following unemployment, single persons, income and economic scaling:

- Lowest wealth quartile: 3.10
- Highest wealth quartile: 3.63
- Difference: 0.53
Subjective well-being of husband following husband’s unemployment

-0.7 -0.6 -0.5 -0.4 -0.3 -0.2 -0.1 0 1 2 3 4 5 6 7-8 9-10 11-12 13-15 16+

social/family life  health
Subjective well-being of husband following husband’s unemployment

Life satisfaction activities
Subjective well-being of husband following husband’s unemployment

Income satisfaction: highest versus lowest wealth quartile: 0.53
Well-being following unemployment: wealth differences

• Analyze path of well-being by wealth quartiles
• Fit quartic (4\textsuperscript{th} power) to time path by wealth quartile
  – Due to small sample size
• Life satisfaction and income satisfaction
Single persons life and income satisfaction following unemployment

Month

Life satisfaction

Income satisfaction
Average 12-month change in satisfaction, singles, wealth quartiles

Life Satisfaction
Income Satisfaction

Smallest spending decline
Husband’s life and income satisfaction following his unemployment

![Graph showing the decline in life and income satisfaction over months after unemployment.](image-url)
Average 12-month change in satisfaction, husbands, wealth quartiles

Life Satisfaction  Income Satisfaction  Smallest spending decline
Summary

• Over almost three years
  – about 13% had some unemployment (excluding those with no labor force participation)
  – Monthly unemployment rate about 7%

• Consequences of unemployment depend on duration
  – Reduced spending
  – Reduced subjective well-being

• Wealth can buffer effects on spending
  – But not on well-being
Thank you for your attention