

Cohort consumption analysis over a 30-year period, focus on the cohort born in 1955-1959, and comparison to previous and following cohorts

Janika Bachmann

Key points

- Consumption theories
- Economic development
- Data overview
- Analysis result
- Interpretation

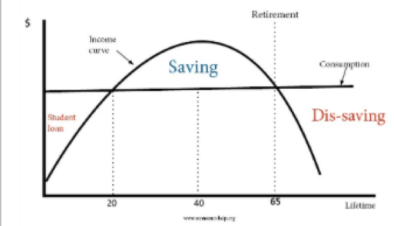
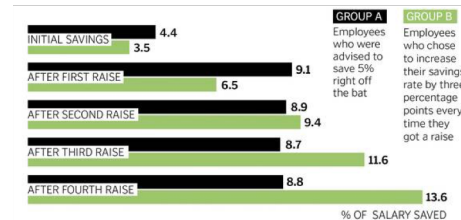
Consumption theories

Life-cycle theory about smoothing consumption over lifetime is still base for majority of the population

Requires planning and knowledge of financial instruments

People tend to dynamically change their decisions based on their situation and preferences at that time, rather than optimize with future perspectives

Consumption behavior research shows that systematic errors in the thinking of normal people influence consumption decisions



What impacts consumption

Consumer life-style related changes	Consumption process related changes	Business model adaption driven changes
Later marriage	Household size	Economic situation
Longer education	Cost of time	Mass media
Employment form	Purchase experience	Social media
Lifestyle	Purchase expectations	Business model
Tax changed
Subsidies		
Value perceptions		
Ageing		
...		

Data Scope

- The Labor Force Survey
- The National Survey of Family Income and Expenditure

AgeGroup	1984	1989	1994	1999	2004	2009	2014
Under25	11	12	13	14	15	16	17
25-29	10	11	12	13	14	15	16
30-34	9	10	11	12	13	14	15
35-39	8	9	10	11	12	13	14
40-44	7	8	9	10	11	12	13
45-49	6	7	8	9	10	11	12
50-54	5	6	7	8	9	10	11
55-59	4	5	6	7	8	9	10
60-64	3	4	5	6	7	8	9
65-69	2	3	4	5	6	7	8
70-74	1	2	3	4	5	6	7

Japan GDP growth

15

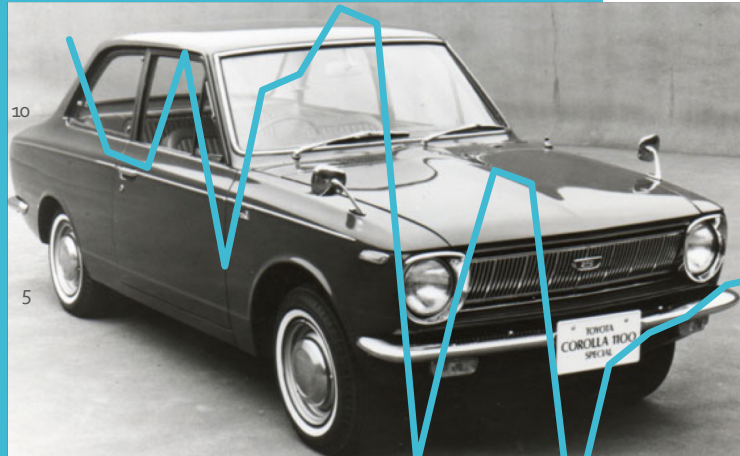
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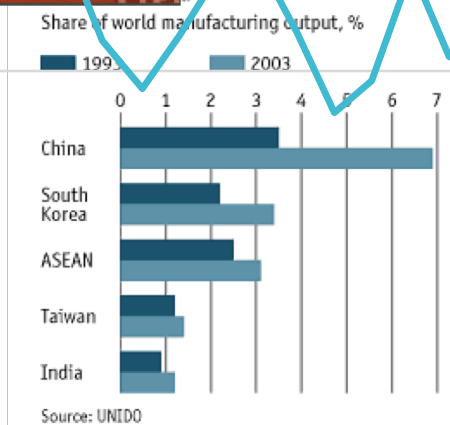
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1985: Nintendo - The Most Popular Christmas ...
livingly.com



「業務委託契約」を装った資金カットに注意しましょう

Economic development

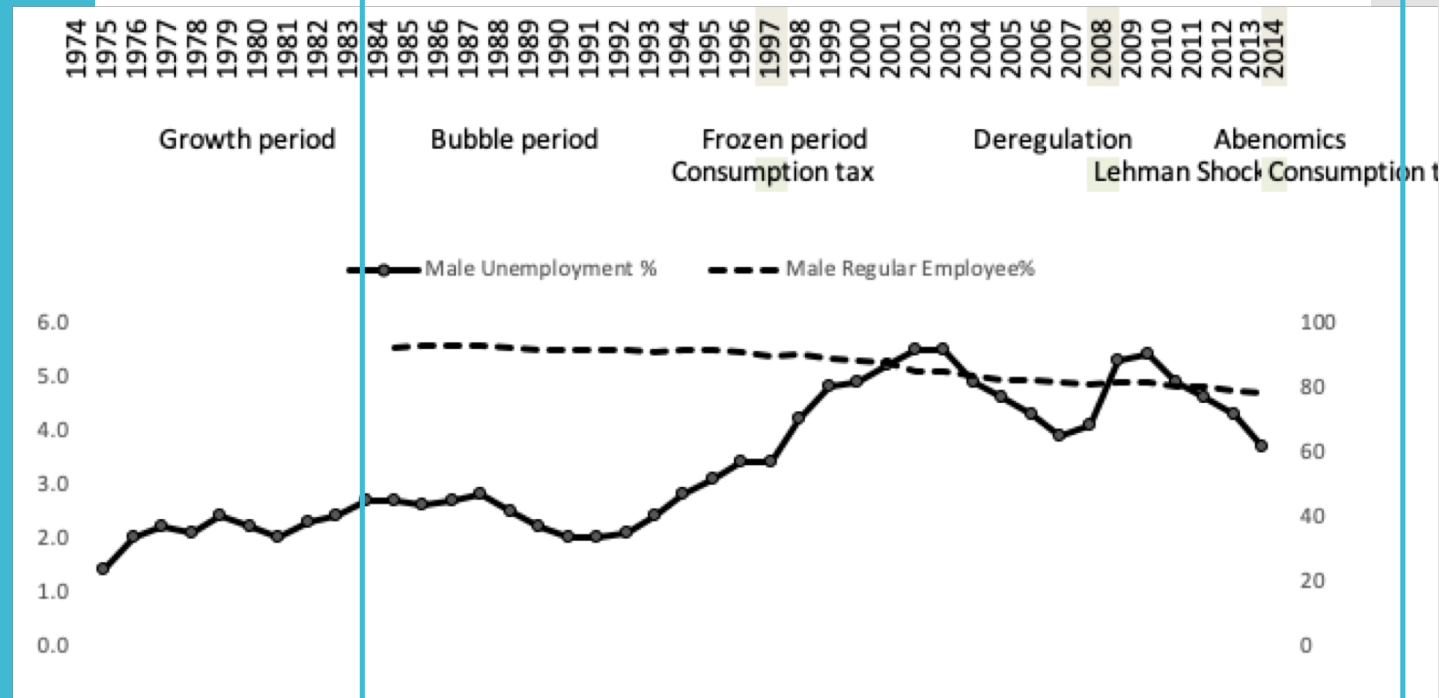
1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014

Analysis objective

Focus on labour market changes and how these may have impacted consumption expenditure changes during a 30-year period

Male unemployment rate doubled from 2% in 1991 to 5% in 2002

Use of non-regular employment formats among male employees increased to 20% by 2014



Cohorts 9, 10, 11

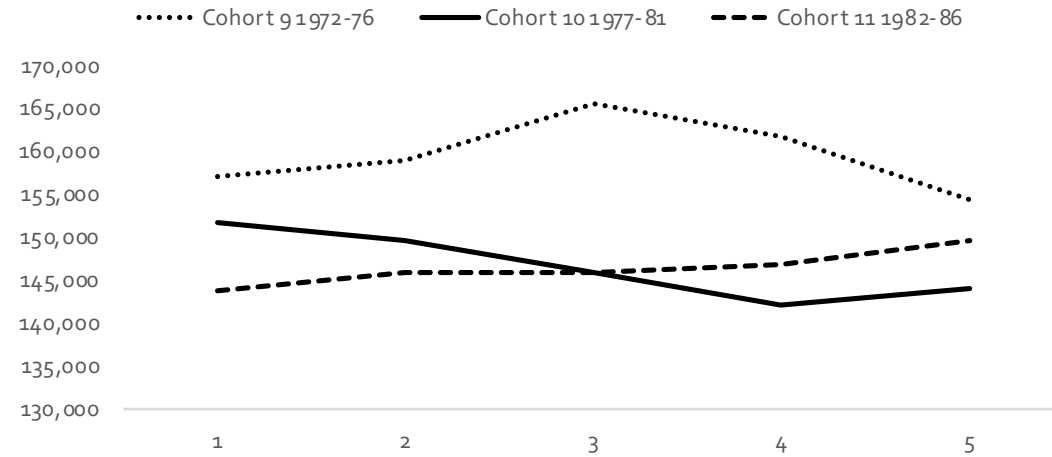
Born during 1950-64
Shirake generation

	Cohort 9 Born first half of 1950s	Cohort 10 Born second half of 1950s	Cohort 11 Born first half of 1960s
At birth	High birthrate	Lower number of births	Births started to grow
School years	Economic growth		Economic slowdown
Join labor market	High economic growth	Stable economic growth	Pre-bubble period
Male Unemployment at working age	Above average when 60-64	Below average at any age	Above average when under 25

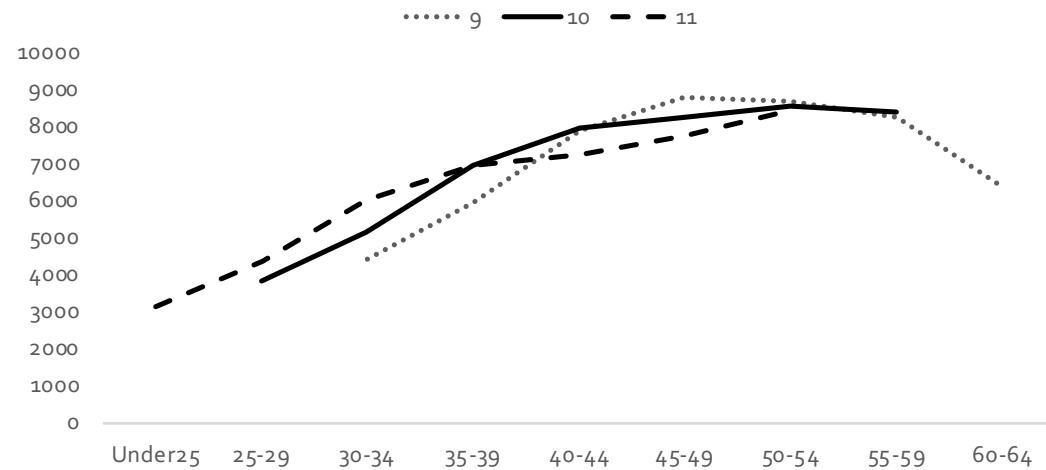
Male unemployment
at age of 22



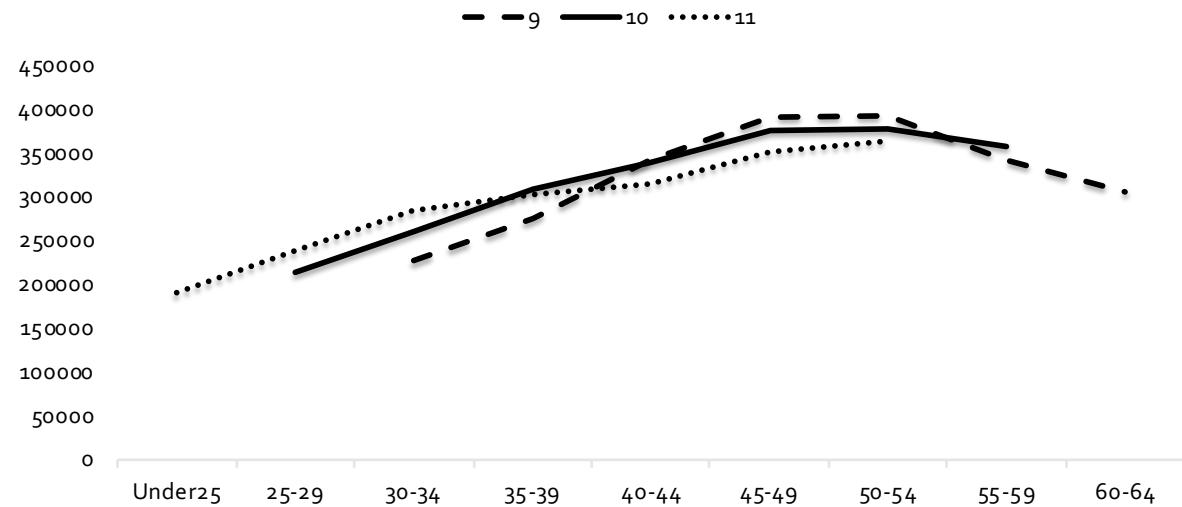
Income development



Annual income
000 Yen



Consumption expenditure changes



2+ household expenditure data by the age of household head. (Japan Statistics Bureau, 2018)

Consumption expenditure changes v previous period	N	Minimum	Maximum	Mean	Standard Deviation
Cohort 9	6	-50934	67278	13098.33	49169.721
Cohort 10	6	-21274	49125	23717.50	28008.151
Cohort 11	6	12439	48101	28818.67	15967.966

Analysis result

- Consumption expenditure changes set as dependent variable, annual income changes, male total unemployment changes and male regular employment rate changes are set as independent variables
- Only for Cohort 10 the model shows acceptable level significance .06

Model summary	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
Cohort 10	.959	.898	8935.030	2.143

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.763E9	3	1.254E9	15.710	.060 ^a
	Residual	1.597E8	2	79834766.96		
	Total	3.922E9	5			

a. Predictors: (Constant), 10annualincomechange, unemployment change, maleregularchange

b. Dependent Variable: 10consumptionchange

Cohort 9

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.973E9	3	3.324E9	3.144	.251 ^a
	Residual	2.115E9	2	1.057E9		
	Total	1.209E10	5			

a. Predictors: (Constant), maleregularchange, unemployment change, 9annualincomechange

b. Dependent Variable: 9consumptionchange

Cohort 11

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.943E8	3	3.314E8	2.362	.311 ^a
	Residual	2.806E8	2	1.403E8		
	Total	1.275E9	5			

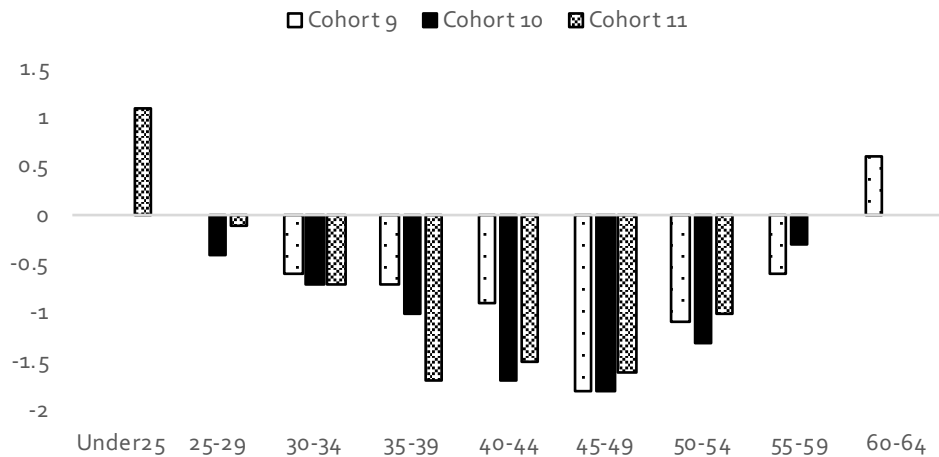
a. Predictors: (Constant), 11annualincomechange, unemployment change, maleregularchange

b. Dependent Variable: 11consumptionchange

Interpreting results

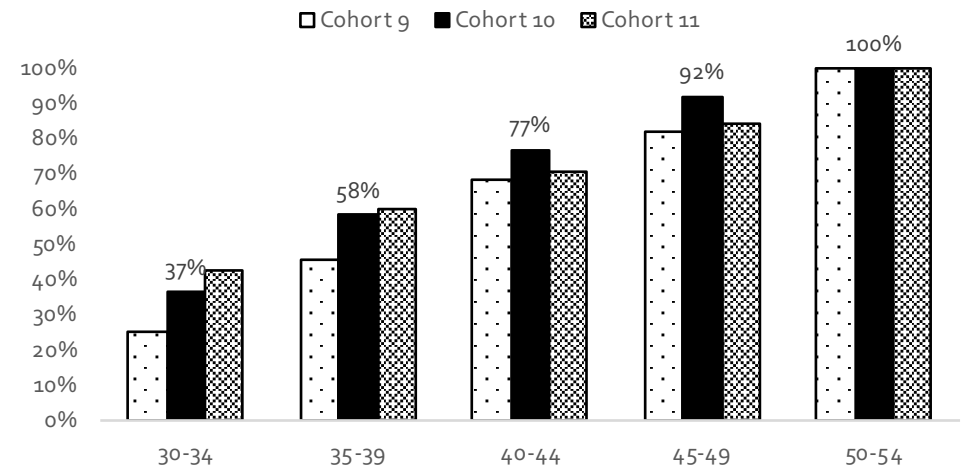
- Cohort 10 is different compared to 9 and 11, and tends to adjust consumption expenditure more according to labor market general trends

Cohort 10 through out their career had lower unemployment in their age group compared to male average



Male unemployment in age group gap to national male unemployment. Negative gap means that age unemployment within age group is lower than national unemployment.

Cohort 10 was eager saver, and by the age of 40-44 had achieved savings 7 ppts ahead of cohort 9 and 11



Cumulative savings per cent for each age group by the age of 50-54.