

Macroeconomics:

Economies fluctuate }
Growth is not steady } why ?

Three paradigms:

- Shocks to fundamentals
- Endogenous fluctuations
- Animal spirits

The challenge:

to find credible propagation mechanisms

One of these mechanisms can be the endogenous adaptation of preferences (tastes).

- Consumer's habits
- Inherited standard-of-living aspirations
- Ideas on what is fair (fair wages)

I. Selected facts on growth and cycles

Growth:

GDP per capita is increasing from one generation to the next in all countries for all periods.

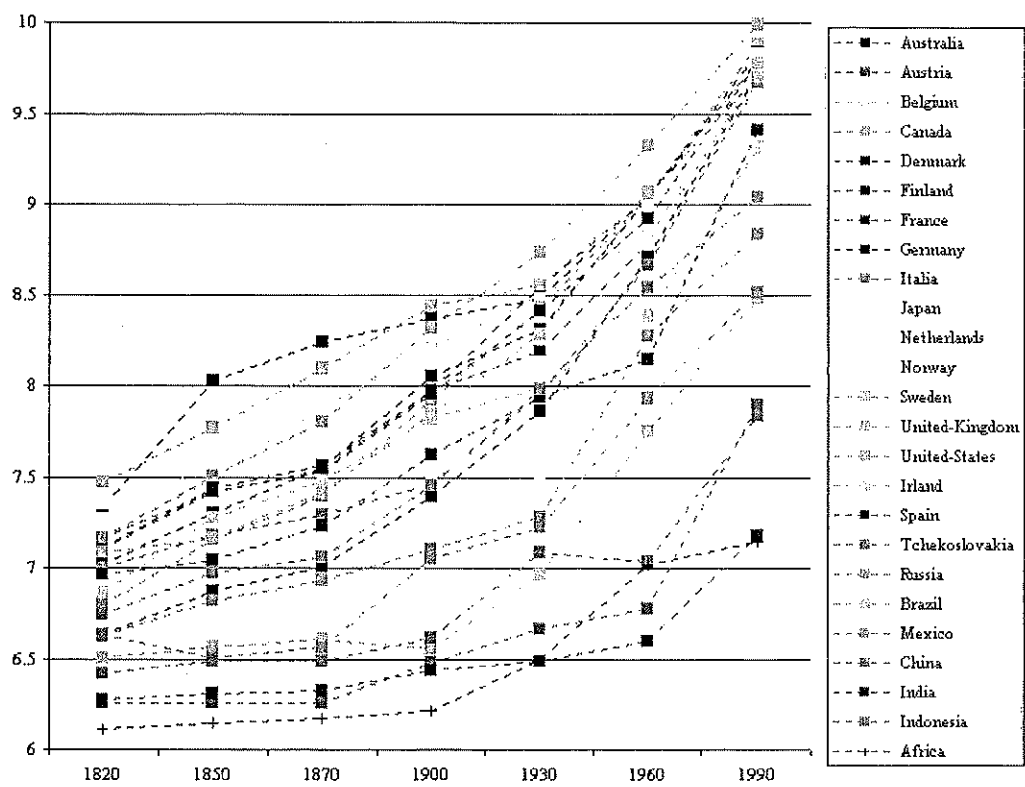


Figure 1: GDP per capita in the world

Long cycles:

There is an infinity of arbitrary ways to decompose a series into a long-term trend and a cycle.

Even if one extracts a very smooth long-term trend, this trend is far from being a line (i.e. having a constant growth rate).

Long-term growth is not steady.

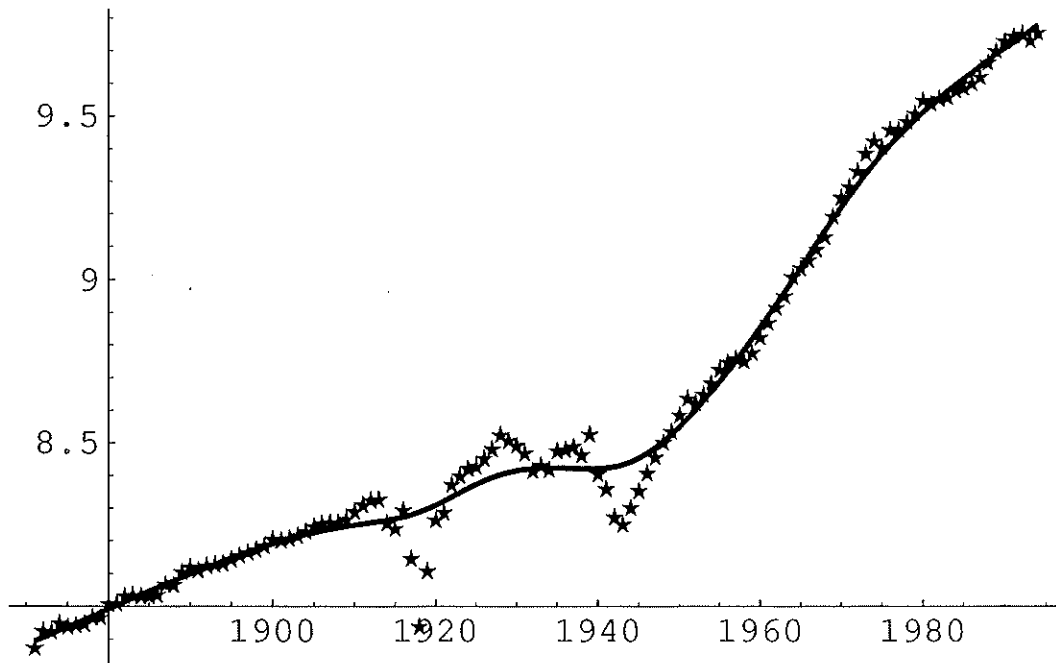


Figure 2: GDP trend - Belgium

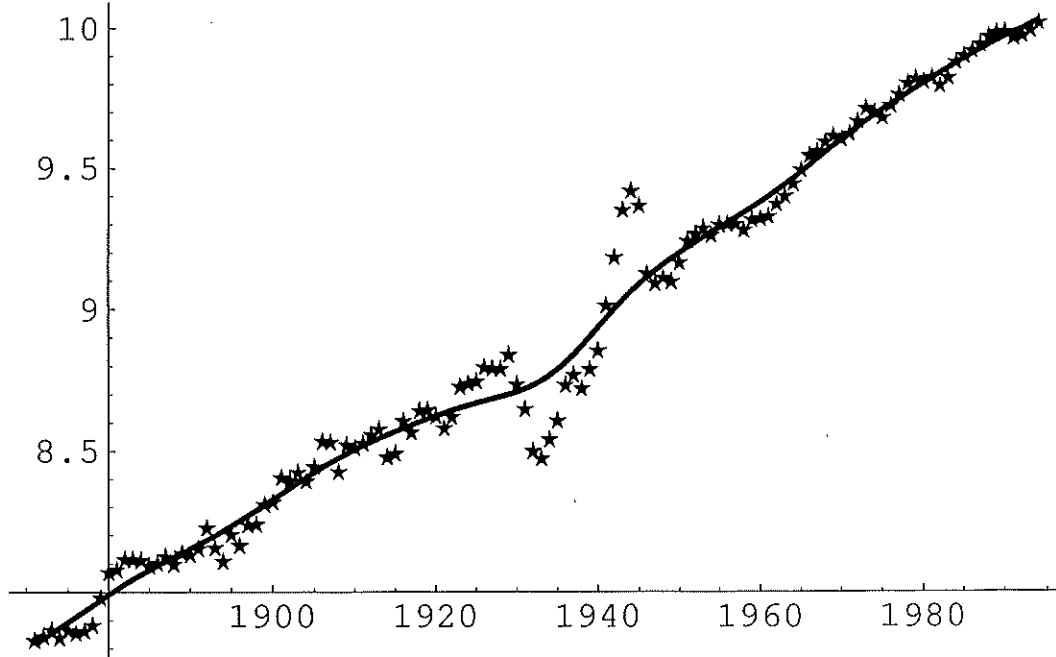


Figure 3: GDP trend - USA

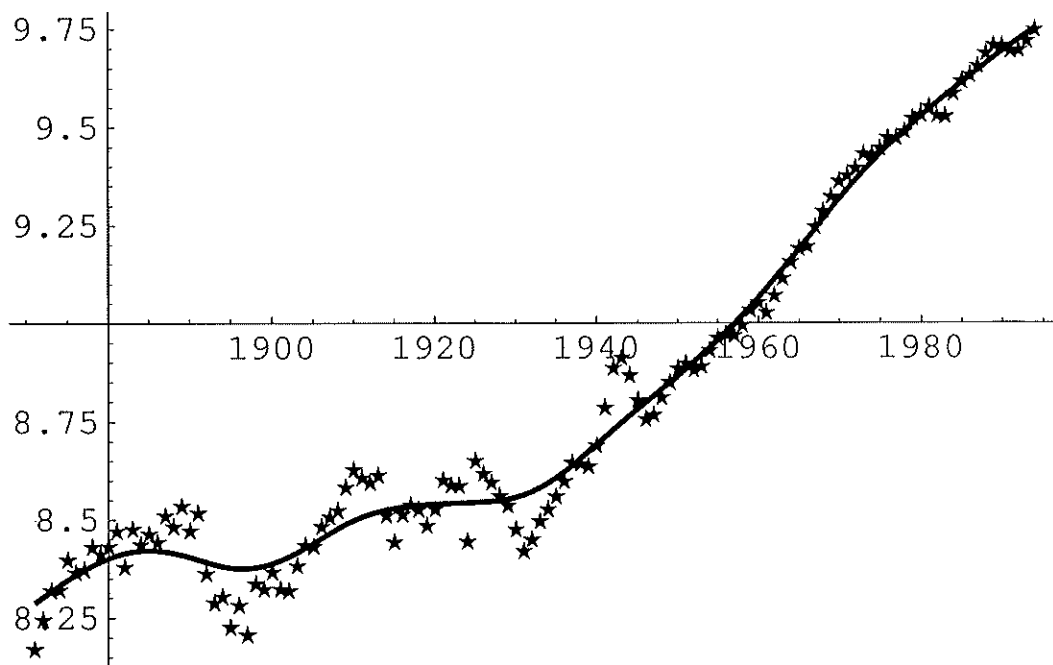


Figure 4: GDP trend - Australia

I. Short cycles:

well-known.

C_{ND}

I.c Satisfaction:

Income \Rightarrow consumption \Rightarrow satisfaction

3 implications

- for a given country, the rich should feel more satisfied than the poor
- reported satisfaction levels should be higher in more developed countries
- satisfaction should grow in line with wealth
over time

Table 1: Percentages "very happy" in different part of the world

country	satisfaction
N. America	40
Australia	37
Latin America	32
Europe	20
Africa	18
Far East	7

Table 2: Personal happiness rating and GDP per head, 14 countries, ca. 1960

country	satisfaction rating	GDP per capita
USA	6.6	2790
Cuba	6.4	516
Egypt	5.5	225
Israel	5.3	1027
West Germany	5.3	1860
Japan	5.2	613
Yugoslavia	5	489
Philippines	4.9	282
Panama	4.8	371
Nigeria	4.8	134
Brazil	4.6	375
Poland	4.4	702
India	3.7	140
Dominican Republic	1.6	313

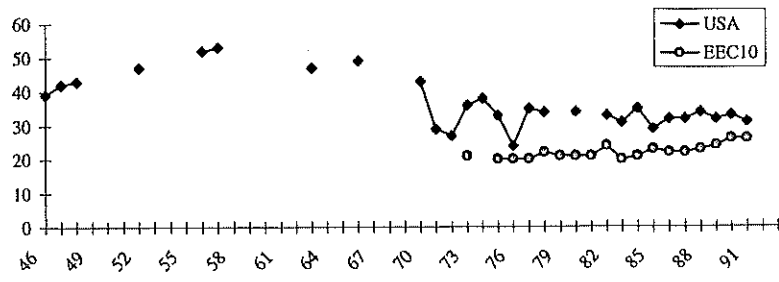


Figure 5: Percentages "very happy" over time.

Ex. 1 Labor market: (for industrialized countries)

- "business cycle puzzle": hours are more volatile than productivity and than wages – wages are sluggish;
- in some countries, high unemployment; unemployment is highly persistent.

II Extended preferences: principle (Becker)

Standard approach to preferences:

$$u(c_t)$$

where the function u does not depend on any state variable.

Useful simplification.

But preferences depend on past decisions, social interactions etc ...

We can extend preferences to include personal habits, peer pressure, parental influences etc ...

$$u(c_t, s_t)$$

Question: Macroeconomic effect of extended preferences.

Personal capital – personal stock of habits

$$s_t(c_{t-1}, c_{t-2}, \dots)$$

Foundations:

biology: adaptation theory

psychology: lottery winners and accident victims

$$s_t \left(\frac{c_t}{s_t} \right)$$

One issue: degree of myopia of the agents.

Macroeconomic consequences:

- the equity premium puzzle
- habits propagate the shocks
- + smoothness of consumption - volatility in investment
- parameters constant.

Special case: best previous experience

Some foundations in psychology

In that case: $s_t(c_{t-1}, c_{t-2}, \dots) = \max\{c_{t-1}, c_{t-2}, \dots\}$

Macroeconomic consequence: Full persistence – hysteresis.

(Other models: endogenous impatience.)

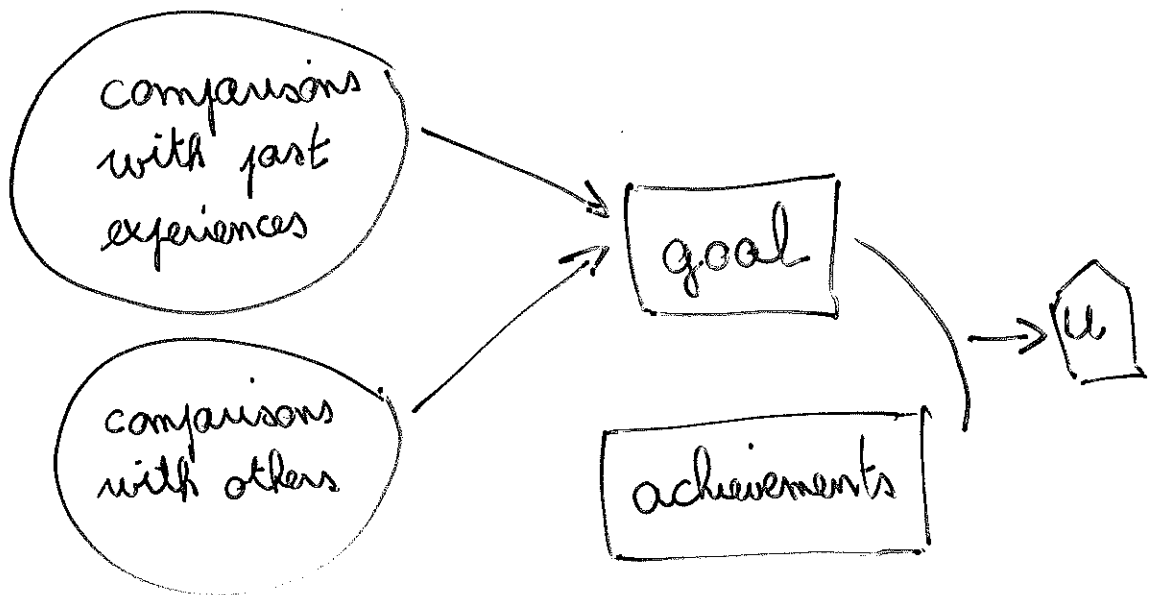
Social capital – collective stock of habits

catching-up with the Joneses.

the norm-achievement gap model.

Macroeconomic consequence: When s_t is “social”, there is an externality and the room for correcting policies.

General model



$$u(c_t, s_t, \bar{s}_t)$$

Optimal policies

- tax on positional goods
- catching-up with the Keynesians
(Ljungqvist and Uhlig)
- pro-cyclical policy.

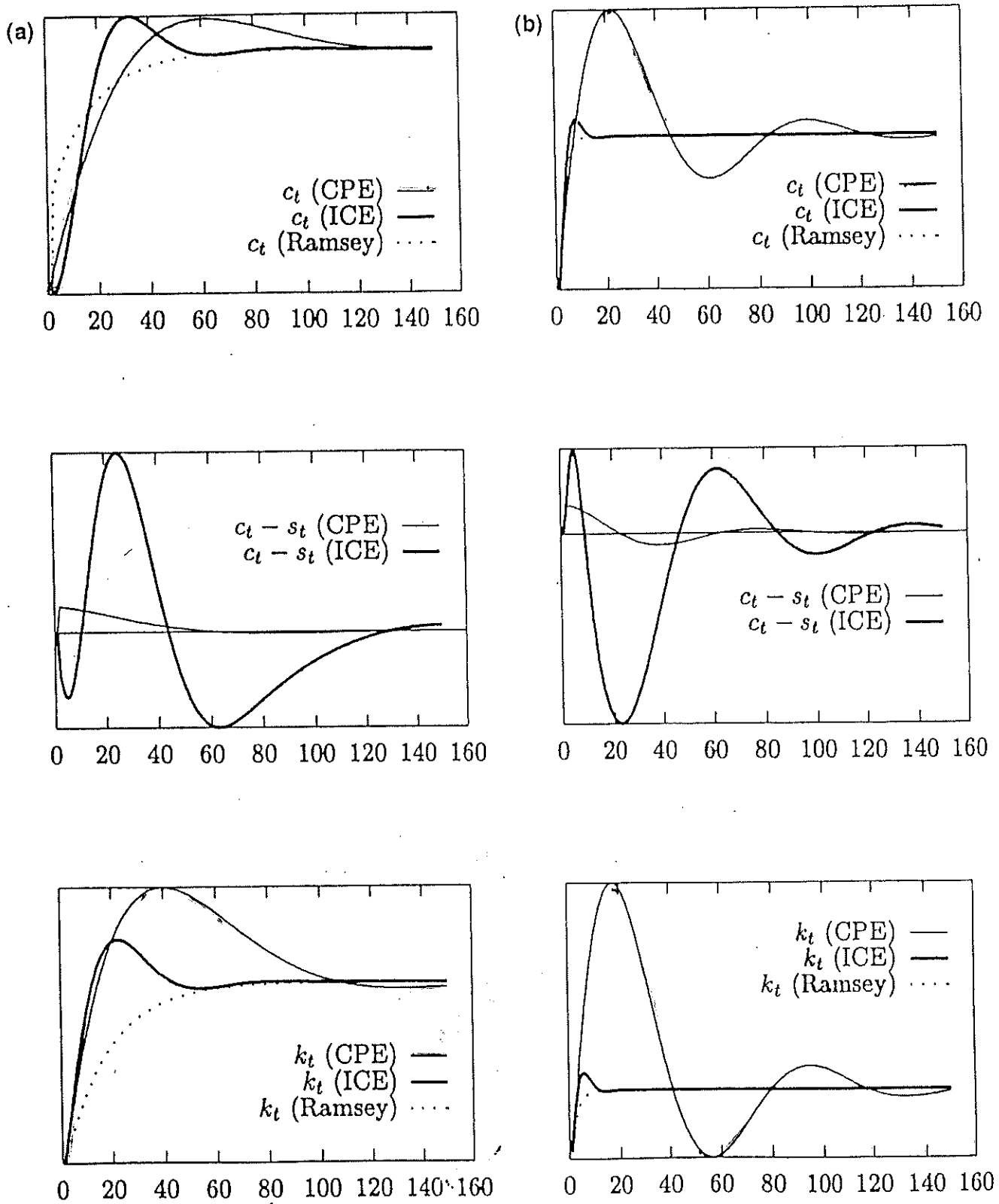


Fig. 4. Permanent rise in productivity. (a) $\rho=5$, $\theta=0.99$; (b) $\rho=100$, $\theta=0.8$.

$$s_{t+1} = \max[s_t, c_t]$$

and is no longer differentiable. However, it is possible to derive an interesting result by using Eq. (19) and by taking its limit when $\rho \rightarrow \infty$. Indeed,

$$\lim_{\rho \rightarrow \infty} (1/2 s_t^\rho + 1/2 c_t^\rho)^{1/\rho} = \max[s_t, c_t]$$

Familial capital

inherited tastes: $s_t =$ standard-of-living of the previous generation

foundations:

sociology: inter-generational cultural transmission.

biology: inheritance of genes, culture and the environment.

modelling inter-generational tastes externalities: $u(c_t, s_t)$

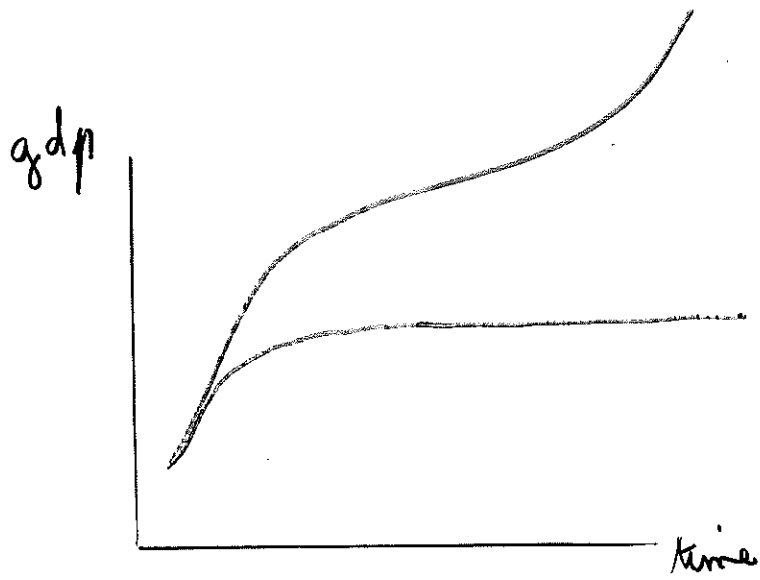
Positive spill-over	$u'_s > 0$ ART-OF-LIVING MODEL $u''_{cs} < 0$ Repletion $u''_{cs} > 0$ Addiction	\implies Indulgence
Negative spill-over	$u'_s < 0$ GOAL-ACHIEVEMENT GAP MODEL $u''_{cs} < 0$ Distaste $u''_{cs} > 0$ Catching-up	\implies Self-refrain

Macroeconomic consequences of the catching-up model:

- long cycles based on the aspirations. Credible mechanism generating endogenous fluctuations.
- can explain why satisfaction does not increase over time.
- implications in terms of inter-generational equity measures (Easterlin criterion).

+ aspirations led poverty traps.

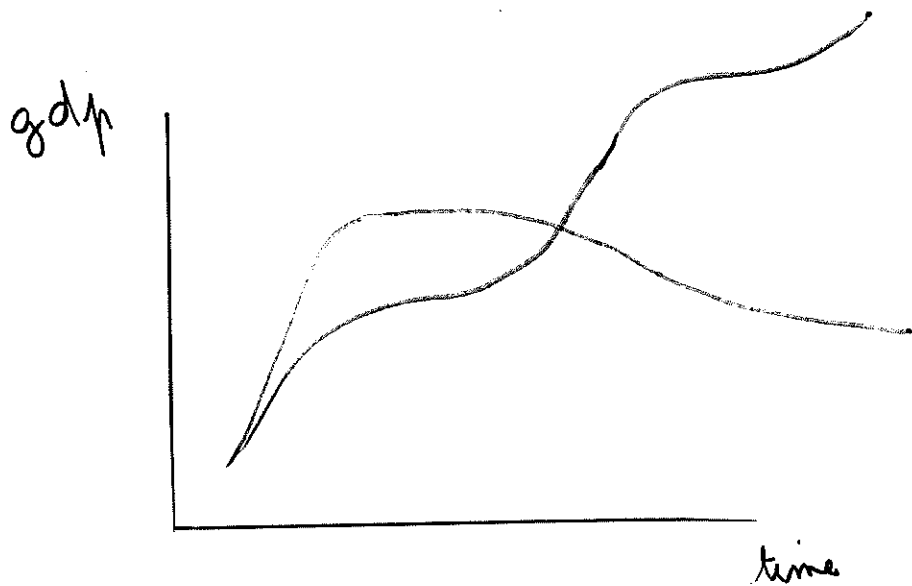
+ decline scenario.



poverty trap.

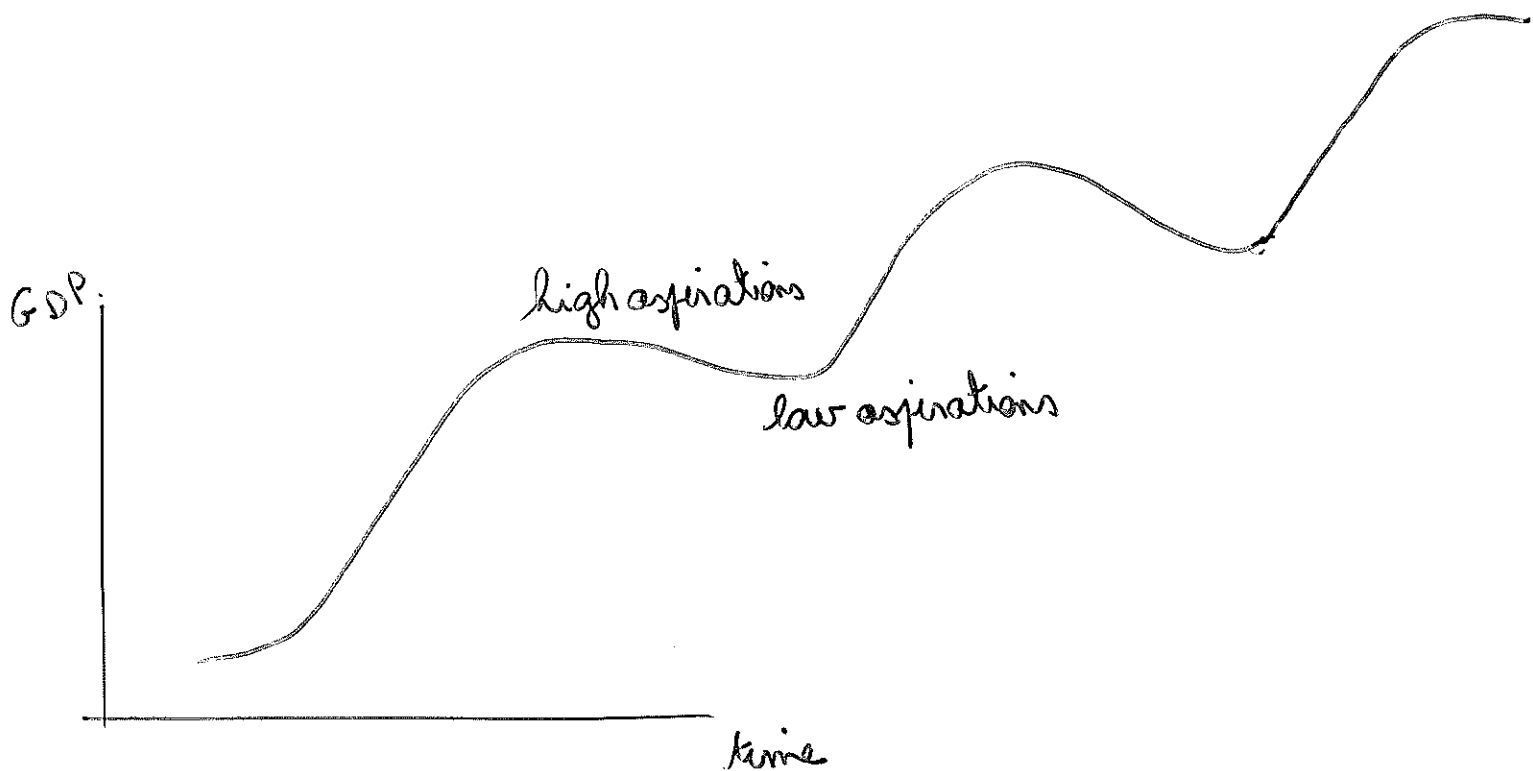
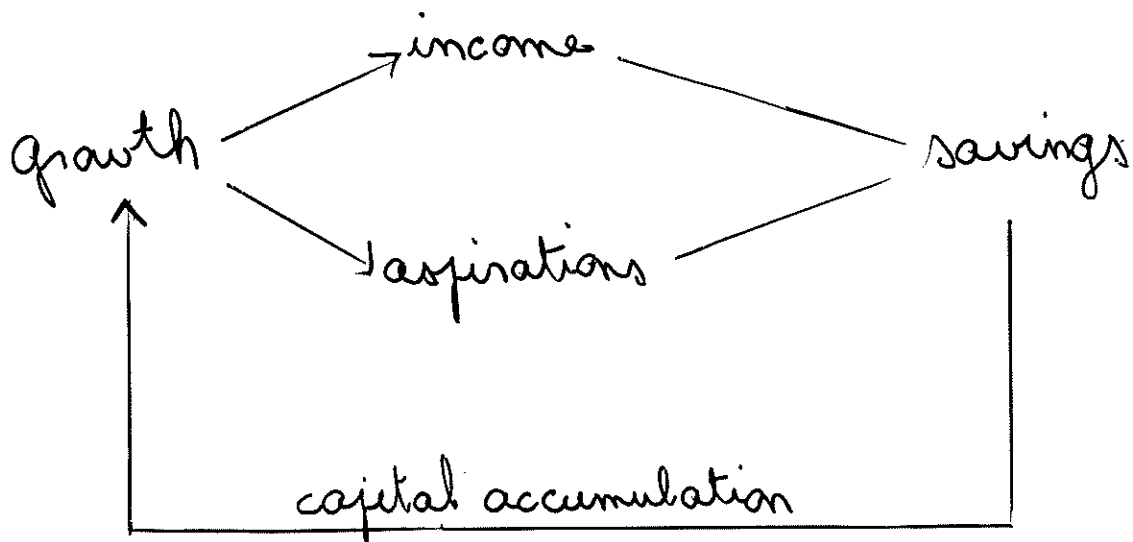
$s_0 > s_0$: only difference.

-> role of history



decline scenario

Growth as a two-edged sword



The fair wage

$$e(w_t, \bar{w}_t, v)$$

Standard efficiency wage model: The effort of the workers depends on a comparison between their wage and a perceived "fair wage"

Akerlof's concept: the "fair wage" includes the wages of the other workers and also the past wage of the worker and of the society.

$$e(w_t, \bar{w}_t, w_{t-1}, \dots)$$

foundations:

psycho-sociology : baseball
surveys on "job satisfaction".

In general equilibrium models, workers' comparison with past wages generates sluggish wages (pay cut are not accepted).

This reduces the variability of wages and increases the one of employment.

Conclusion

The behavior of economic agents depend on norms, social aspirations etc ... which are endogenous.

These mechanisms are interesting per se but also helps to understand the presence of cycles:

- 1) Long cycles based on the inter-generational transmission of standard-of-living norms
- 2) Propagation mechanisms of shocks based on consumers' habit formation
- 3) Low variability of wages based on wage norm effects
cyclical