Relax about growth:

Implications for climate and crisis policies

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Test:

Who thinks economic (GDP) growth contributes structurally to:

1. Environmental pollution
2. Happiness
3. Employment creation
4. Technological progress

Complexity and the transition to sustainability in a nutshell

- Unnecessary to understand full extent of economic complexity – just sufficient insight needed to design policies and remove barriers
- Barriers: (hidden) subsidies, pre-occupation with growth, vested interests, lack of global government, free riding (global warming)
- "Transition policy": essential is global limit GHG emissions & associated higher energy price – *often forgotten!*
  - Avoid risk of ineffective policies: rebound/leakage
  - Provide sufficient competitive space for renewable energy
  - Avoid well intended local & voluntary efforts to be ineffective
  - No alternative for correct (energy) prices as information source: reflect/update embodied energy for all products/services
  - Additional policies: "unlocking", education for preference change

Focus on relevant issues

- GDP fundamental problem, not growth
  - GDP growth good in some periods / countries
  - but growth not generally necessary or sufficient for progress
  - also “dirty de-growth” possible
- Too much political concern about an irrelevant indicator (GDP/capita)
- However, not useful to spend much time on criticizing growth or GDP
  - has proven an ineffective strategy
  - better try to understand the reasons for persistent support of GDP indicator

Shortcomings of GDP as an indicator of social welfare or progress

- GDP measures costs not benefits
- Happiness research: adaptation, rivalry for status is a zero sum game, happy makes rich not reverse, …
- Lexicographic preferences: sublimation, loss of non-substitutable basic goods/services
- Income distribution (worldwide, countries)
- Shift from informal to formal economy
- Environment and natural resources
- …

Criticism of GDP is old, well documented, and supported by famous economists

The GDP paradox

Despite all theoretical and empirical criticism of *GDP (per capita) as a social welfare and progress indicator*,

its role in economics, public policy, politics and society remains influential

Explanation

- Many academic economists accept the criticism of the GDP indicator but im/explicitly deny its relevance

- This denial comes in two forms.
  1. a belief that the impact of GDP information on economic reality is modest
  2. a belief that despite its shortcomings, GDP still provides useful information

1. Impact GDP on economy modest?

- *Private and public channels:* financial markets, central bank, investors, politicians, firms, consumers, international organisations (OECD, IMF, WB)
  - "GDP" delivered 36 million hits on internet (March 18th, 2008)
  - Economics' students subtly indoctrinated with belief that GDP matters, and citizens through the media
  - Current crisis: much emphasis of GDP (absolute, not even per capita)
- *Self-fulfilling prophecy:* procyclic behavior

2. Does GDP convey any useful info?

- Most arguments imply an (implicit) social welfare interpretation of GDP
- Growth needed for stable economy, for full employment? *No study shows that without GDP information the economy becomes unstable*
- Productivity measure?
  - not *GDP/cap* but *GDP/hour*
  - productivity at sector level more useful for policy
  - productivity growth not an ultimate goal

Note: not necessary to remove GDP as explanatory or intermediate variable in macroeconomic models

What about alternative indicators?

- GDP based (*ISEW, GPI*): broad but crude
- *Hueting's DNI* & *genuine savings*: narrow (environment, resources) but theoretically better founded
- Composites (*HDI*): arbitrary components and weights, GDP dominant, quite narrow too
  - HDI doesn't differentiates much between rich countries – but perhaps not a problem – consistent with "threshold" effect

=> Don't wait until a perfect alternative for GDP is available – unlikely to happen!

Against GDP ≠ against growth

- *Abolishing / ignoring GDP ≠ anti-growth*
- Without GDP no measurement of growth => growth irrelevant - *not against & not in favour*
- Goal of <u>unconditional growth</u> is a constraint on search for progress – frustrates good policy (climate, working hours, health, voluntary activities, public utilities)
- With a GDP indicator the goal of (GDP) growth is inevitable - temptation is too large

Cost of climate policy: loss of GDP growth

- Economic climate CBA studies assume that less GDP growth represents a real cost for society
- (Safe) policy cost range of IPCC: 1– 4 % of world GDP
- CBA's of climate policy assume less GDP growth is a cost (DICE/Nordhaus, FUND/Tol, Page/Stern)

Delayed GDP growth

- If GDP growth is 2 % per year, and the cost of climate policy ranges from US$1 to 20 trillion (6 % of total GDP over the period) then the delay time to reach a certain GDP within about a century from now will be no more than 3 years (Azar & Schneider, 2002, *Ecol. Econ.*)
- Stringent climate policy small long term effect on growth
- Will people in 2100 worry whether they have an approximately (1.02)100 = 7 times higher income exactly in 2100 or just a few years later?
- Problem: only looks at end state

Happiness instead of GDP

- Stylized facts
  - Happiness/subjective well-being and corrected GDP (ISEW) delinked from GDP growth: threshold income (‘Easterlin paradox’)
  - 4 important factors: (1) status seeking/relative welfare (zero sum rivalry game), (2) adaptation, (3) other happiness factors than income, (4) large fixed component (personality)

- Less GDP growth due to stringent climate policy translates into a smaller loss in happiness terms
- GDP effect of climate change (no climate policy) underestimates happiness impact because of non-market effects, especially in poor countries

- Provision
  - People may also adapt to a changed climate: after some initial fall in happiness they may slowly recuperate. However, adaptation to extreme climate change scenarios and events likely to be partial: water and food scarcity, conflicts, migration, heat waves, etc.

“Crisis policy”

- Two focal points:
  - Main concern of crisis should be unemployment as it has tremendous happiness effects (bad start for young people entering labour market; old people ending in permanent unemployment)
  - Restoring confidence of consumers, producers and investors (incl. banks)
- Generally assumed that economic growth is needed to solve both these problems

Unemployment

- Is ultimately not the focal point as governments assume it to be completely correlated with growth and then focus instead on the latter:
  - associated with many ineffective unemployment policies (e.g., education) as there is no willingness to trade-off more work against (risk of) less growth
- However, no theory or definite empirical support for this view. More an ideology.
  - Economics should study the tough problem how to have full employment without constraint of always growth
- More work and employment may increase GDP, but this does not imply the reverse causality

Confidence and GDP info

- Growth preoccupation acts as a barrier to escape crisis (paradox)
- Repeated messages in media and politics about disappointing GDP growth merely reinforce a negative confidence spiral
- Role of GDP in self-fulfilling prophecy / procyclic behavior not well understood – also fundamental to origin of current crisis, but not part of agents' behaviour in macroeconomic models

Recommendations

- Convince economists – *ask attention for the GDP paradox.* Getting support from a critical number of economists might change the tide
- *Subtle message:* Not against growth but against GDP & unconditional/always growth
  - Stiglitz: "GDP fetishism" (*The Economist's Voice*)
- Replace some macroeconomic policy advisors by psychologists (happiness experts)

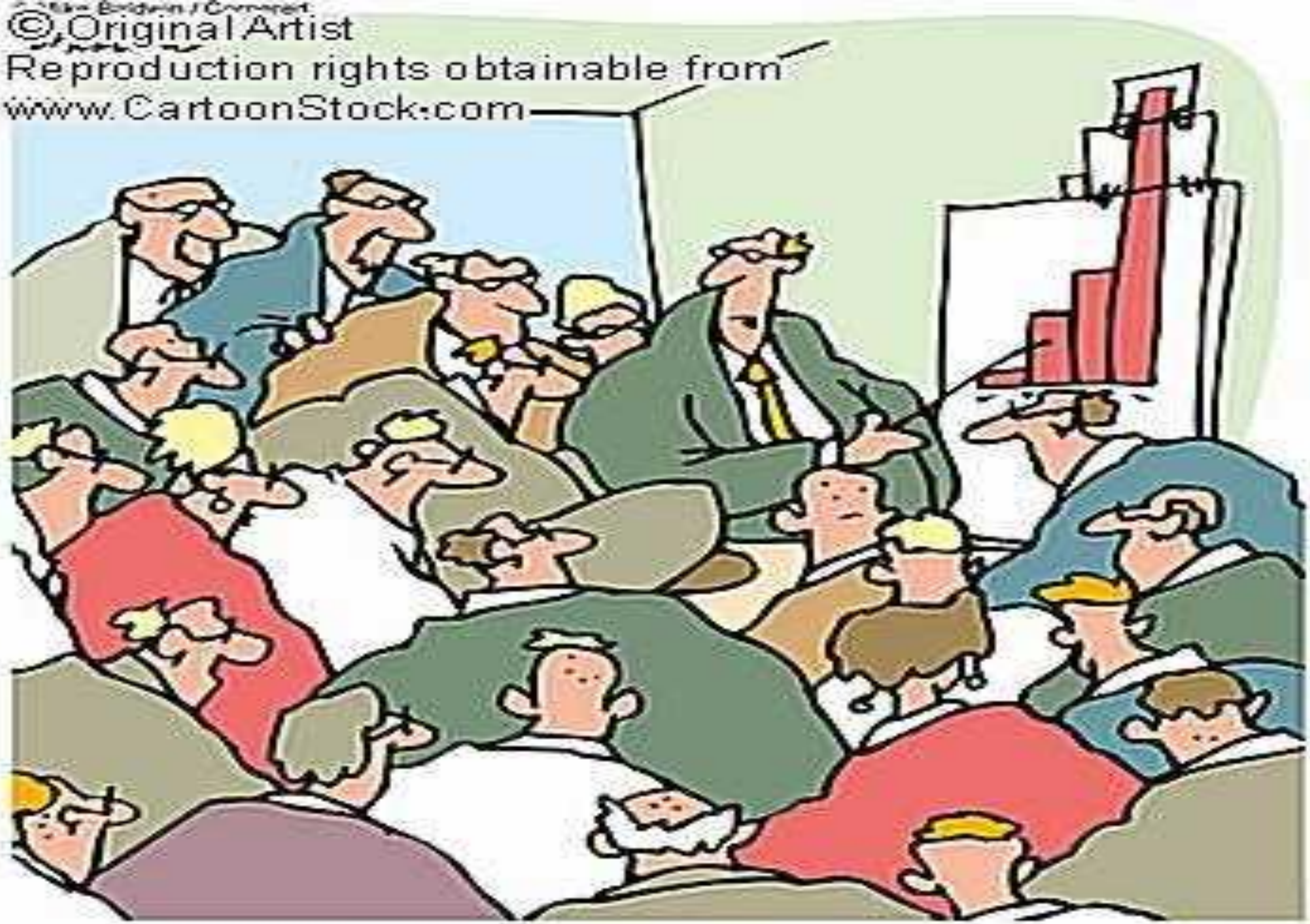
… climate & crisis

- Will less focus on GDP solve the climate problem?
  – No, but it may help to lessen worries that safe climate policy will be extremely costly for our society; it may thus make an effective climate agreement more likely

- More emphasis on happiness in “crisis policy” means a willingness to trade-off employment versus income growth
  – However, count on resistance not only from economists and politicians but also from labour unions

More info

- J.C.J.M. van den Bergh (2009). The GDP Paradox. *Journal of Economic Psychology* 30(2): 117–135.
- J.C.J.M. van den Bergh (2009). Relax about GDP Growth: Implications for climate and crisis policies. *Journal of Cleaner Production*, forthcoming, doi:10.1016/j.jclepro.2009.08.011
- J.C.J.M. van den Bergh (2009). Safe climate policy is affordable – 12 reasons. *Climatic Change*, forthcoming, doi:10.1007/s10584-009-9719-7



"And this chart shows our rate of growth."