

# **Towards Sustainable Economy and Society Under Current Globalization Trends and Within Planetary Boundaries: A Tribute to Hirofumi Uzawa**

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Tokyo

March 2016

# Harsh reality: We are living beyond our planetary boundaries

- Paris meeting failed to achieve an agreement that would limit greenhouse gas emissions to anything near the 2 degree C level around which there is a global consensus
  - Major obstruction: US, its Congress, and its climate change denies
- But it may have achieved an important victory
  - Creating momentum
  - Belief that there eventually will be a carbon price
  - Which induces more firms to take actions to reduce emissions
  - Which helps create a stronger constituency for climate change policies

# The real challenge: can we address climate change in a globally equitable way and can we continue to grow within our planetary boundaries?

- We can address climate change in a globally equitable way
  - But whether current global politics will allow this is another matter
- There is a need for *some* continued growth to bring bottom half of global population—just emerging from poverty—up to basic living standard
- There is no need for *ever lasting* growth
  - And what growth occurs can have a much smaller environmental footprint
  - Can have fundamentally different structure
- What matters is quality of life

# Meaningful growth

- GDP is not a good measure of well-being
  - Central message of international Commission on the Measurement of Economic Performance and Social Progress
- Does not address how output is shared
- Most people can be worse off, yet GDP can be increasing
- GDP metric says nothing about whether growth is sustainable
  - Economically, socially, politically, *or environmentally*
  - America's growth before the crisis was not economically sustainable
  - World's growth today is not socially sustainable: inequities are too large
  - World's growth today is environmentally unsustainable
- GDP leaves out many aspects of well-being or does not measure them well
  - Meaningful work, insecurity, leisure, connectedness
- One can have the excitement of creativity and the comfort of a decent standard of living even without ever increasing levels of GDP as conventionally measured
- Still want to continue research to increase productivity, to improve health, etc

# But this *Sustainable Growth Society* would be a very different society than the one we live in

- It would be a *learning* society, with even the potential for *mass flourishing* (in the words of Edmund Phelps)
- But today incentives for innovation/learning do not focus on preserving the environment
  - Incentives are to persuade people to want to consume more and more—an increase in material spending, not in “quality of life”
- Marked differences in how Europeans and Americans have “spent” the productivity dividend
- New approaches in economics emphasize *the endogeneity of preferences*
  - We are shaped
  - We are shaped by our society of which we are ourselves a part
  - But we can shape how we are shaped

# Endogeneity of preferences poses deep welfare problems

- Standard economics tried to avoid these
- Maximizing well-being (Pareto optimality) of a set of individuals with fixed preferences
- With profound implications for our society
- Prioritization of material well-being over everything else
  - Talking about the “cost” of saving the planet, of living within our planetary boundaries
- Bankers—our best students—exhibiting unimaginable moral turpitude
  - Fraud, market manipulation, discrimination, exploitation of poor

# Population is also endogenous

- Living within our planetary boundaries will require limiting population
- But in advanced countries, this is already happening
  - Population actually declining
  - People making different choices today than in the past
  - Partly affected by economic conditions that they face
- No reason to believe that this wouldn't be true as benefits of economic and social advances are extended more broadly

# The perversion of modern economics

- Friedman: maximizing stock market value maximizes societal well being
  - Conclusion is actually wrong in general: only true under highly restrictive conditions
  - The adoption of this view has led to short-termism, lower economic performance, more inequality
- Smith: pursuit of self-interest leads to society well being
  - Conclusion only true under highly restrictive conditions
- Smith meant “enlightened self-interest” —understood the limitations of his theorem
  - Friedman did not

# Perverse economics—bad ideas—have real consequences

- They have had an important role in shaping economic policies, our society, globalization, and even individuals—*ourselves*
- We need to think of what kind of society—what kind of individuals—do we want to be
  - Do we really want to cultivate the selfish *homo economicus* of economic theory?
  - Self-reinforcing process: more selfish individuals encourage policies which create conditions for the flourishing of more selfish individuals
- Globalization is the field in which many of these battles are being played out
  - TPP (Transpacific Partnership) would make it more difficult to protect the environment, to provide access to drugs for all, to protect individuals' health and safety, and even to ensure the stability of the economy
  - It is a bad trade agreement, driven by the worst *selfish* motives of the corporations who had large role in shaping it, in a process that undermines basic democratic values
  - Europe has realized it, refused to agree to provisions of the investment agreement
    - Japan will be left with a “second class” deal, with a rigged investment agreement, enforced in a rigged and biased manner

# Addressing Climate Change in an Equitable Manner

- Basic economic problem: the atmosphere is a global public good—everybody wants to receive benefits, nobody wants to pay costs
  - Key issue: how to share the burden
- Making matters worse: rich countries have contributed most of emissions in the past (and on a per capita basis continue to contribute more); but adverse consequences are likely to be felt in developing countries

# Externalities

- In principle, with externalities, every country could be made better off by controlling externalities
- Two problems
  - Without adequate transfers from the rich countries to the poor, burden would fall unduly on developing countries
    - It is unacceptable both because it was the developed countries that have contributed most to the increase in atmospheric concentration
    - and it seems morally wrong to ask poor to sacrifice their development while the rich continue in luxury
    - Such a solution will be politically unviable
  - Distributional burdens within countries have to be dealt with

# Current approaches failing

- Standard cap-and-trade (Kyoto) approach entails allocating rights to emit worth trillions of dollars
  - Inevitably contentious
- We are even having trouble getting and implementing a global agreement not to *subsidize* fossil fuels

# There is an ethical way forward

- Clear ethical principles—give more to poor countries (per capita), taking into account past contributions of each to atmospheric concentrations of greenhouse gases
  - But the US will not subscribe
  - Even unwilling to agree to on equal per capita emission permits
  - Let alone division of “carbon space” on an equal per capita basis
  - Let alone a basis taking into account past contributions
  - With so much money on the table, ethics are put aside

# Inherent problems with caps

- Suppose the US were willing to transfer large amounts of “caps” to poor countries. That would mean high (non-binding) caps, so they could sell the excess permits.
  - This would be seen as paying them to do nothing. US taxpayers would revolt at this.
- And often, just as Russia did nothing, with permits to spare, they would do little or nothing (in spite of the price of permits).

# Further problems with Caps

- Alleged advantage: could grant emission rights to firms within country as a way of compensating them for costs of reducing emissions
  - Getting political support for cap and trade system
- Has turned into a problem: granting emission rights highly political—effectively giving away money
  - Presented difficulties in best performing countries, with good governance
  - Would be source of enormous corruption in others

# Unacceptable levels of risk

- If China had accepted a non-binding cap in 2000, based on best prediction it would have ended up paying other countries at least \$100B a year for pollution rights in 2010 (predicted 1.5Bt turned into 7Bt actual)

# Voluntary approach unlikely to work

- Basic principle of a global public good: voluntary solutions don't work
- Evidence is that it has not been working
- No enforcement even of “offers” made

# Alternative—carbon price

- Most economists agree: creating a carbon price best way to curb emissions
- A low-carbon economy could be achieved through the imposition of a moderate carbon price, which would raise substantial revenue and allow a reduction in other taxes, thereby keeping the overall deadweight loss small (or even negative).
- Basic economic principle: better to tax bad things than good things
  - Cost to many countries negative
  - Costs to others close to zero

# With a Price: Keep Your Money

- Unlike international carbon permit trading.
- With a price, a country keeps all the carbon revenue it collects.
- This looks much cheaper.
- The real cost is far less than the revenue collected
- With a price, a country keeps all the carbon revenue it collects.

# Enforcement

- Even a voluntary agreement needs to be enforced—need to impose cross-border taxes
  - Such taxes are WTO legal
  - Such taxes change the political economy: provides incentives to join agreement
  - Real danger today: TPP may make imposition of carbon regulations, or even carbon pricing, difficult if not impossible

# Need for A Green Fund for global equity

- Both to finance mitigation and adaption
- Costs of climate change may be especially great for developing countries; least able to bear costs
- A green fund financed by allocating say 20% of carbon revenues collected in developed countries could be used to implement “differentiated responsibilities”
- And rich countries would only pay if the poor country joined the coalition and priced carbon the same as all others

# Green fund: Living within our planetary boundaries

- Creating a “green economy” is not only consistent with economic growth, it can promote economic growth—
- Especially when there is a lack of aggregate demand, as in the aftermath of the financial crisis
  - Even more so if we measure growth correctly (as suggested by the Commission on the Measurement of Economic Performance and Social Progress)
- An agreement about an *enforceable* carbon price among a “coalition of the willing,” enforced through cross-border carbon taxes, holds out the best promise for a way forward

# Globalization and technology: opportunities and risks

- As currently managed, GDP growth and globalization are leading to unprecedented devastation of the environment, to our living well beyond our planetary boundaries
  - Trade agreements, especially new TPP, will make this worse, limiting ability to protect the environment
- But globalization and technology hold out the promise of a new world
  - In which we could live within our planetary boundaries
  - In which shared aspirations across the world ensure that we do
- It won't happen on its own
- It will only happen if we understand what has been going on and that there are alternatives
  - Critical role for academics
- It will only happen if we all work to create this new world

**Hirofumi Uzawa's life was testimony to how this could be done**

- Providing a role model for me and for generations to come