

Macroeconomic Forces, the Environment and International Security



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GLOBALIZATION: in the beginning...

The Time: Late Sixties

The Setting: OECD countries

The microeconomic problem:
profit rates in most activities
show downward trends

The macroeconomic problem:
US economy suffers external
imbalances and fiscal deficit

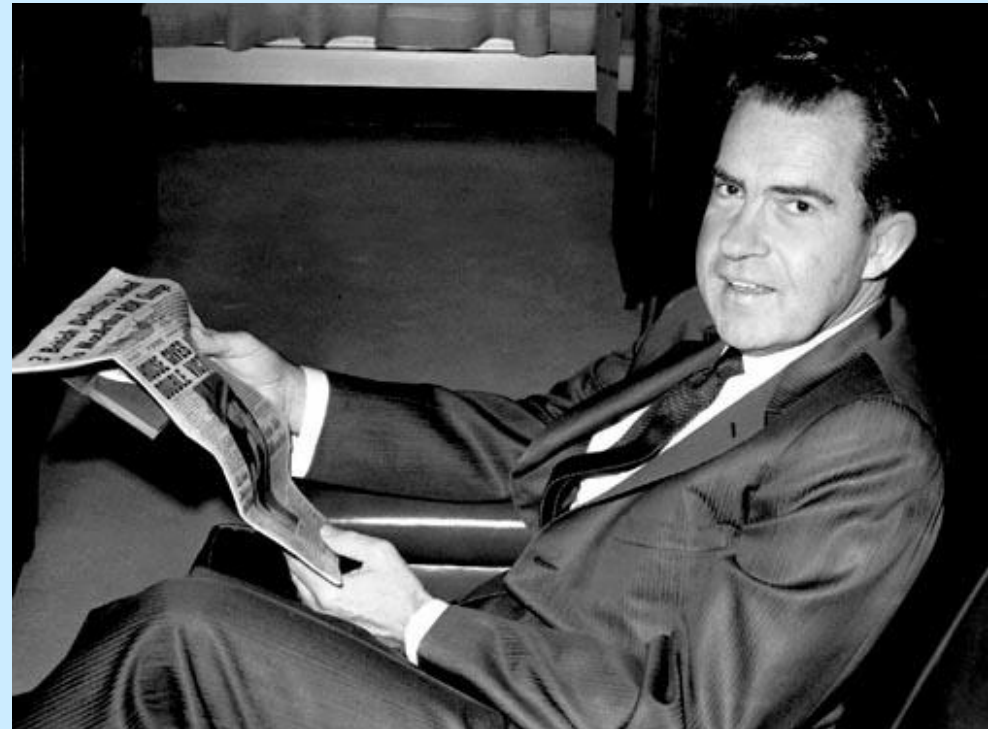
By 1968 the drain reaches crisis
levels: foreign central banks fear
US deficits would make dollars
worthless and prefer real gold
instead
US gold reserves are drained to
crisis levels



GLOBALIZATION: the end of Bretton Woods

August 15, 1971:
President Nixon
instructs US
Treasury to
suspend sales and
purchases of gold

This was the end of
the Bretton Woods
regime and the
“golden period” of
capitalist
economies



That day world finance changed forever

The Collapse of Bretton Woods: its consequences

- End of fixed exchange rate system
- New risks and opportunities for financial capital
- This created pressures to deregulate the financial sector worldwide...
- ...leading to the expansion of the global financial sector



Expansion of International Financial System



Daily forex trading in the world

- 1973: 20 billion US dollars: ratio of forex trading to world trade did not exceed 2:1
- 2005: 1,400 billion US dollars: ratio of forex trading to world trade is 72:1

ONE IMPORTANT CONSEQUENCE: monetary and fiscal policies geared to the needs of global financial sector

Globalization: Some Results

Between 1975-2005:

- **Less overall growth**
- **Trade and investment flows heavily concentrated**
- **Global wage inequality and poverty rise**
- **More instability**
- **Crisis (boom and bust cycles)**
- **Gross international imbalances**
- **Environmental degradation**
 - **Millenium Ecosystem Assessment**



A Closer Look: Macroeconomic Forces and Natural Resources

Typical Story:

- **Current accounts' imbalances** caused by indebtedness (historic domestic and external public and private debt) and **trade liberalization** increase pressure on balance of payments
- Natural resources exports need to be increased
- This leads to further deregulation in activities close to natural resource base



....but

...Globalization is also associated to the expansion of the services' sectors

The services' sector (insurance, franchising, trade, transport, communications) is **apparently less** resource intensive...



...leading to the idea that **dematerialization** of the economy is taking place...

...a most welcome trend because it is associated to **less pressure on natural resources**



This misleading perception is strengthened by technological trajectories associated to miniaturization, materials' replacement, efficiency gains.

Service Sector Expansion: Road to Dematerialization?

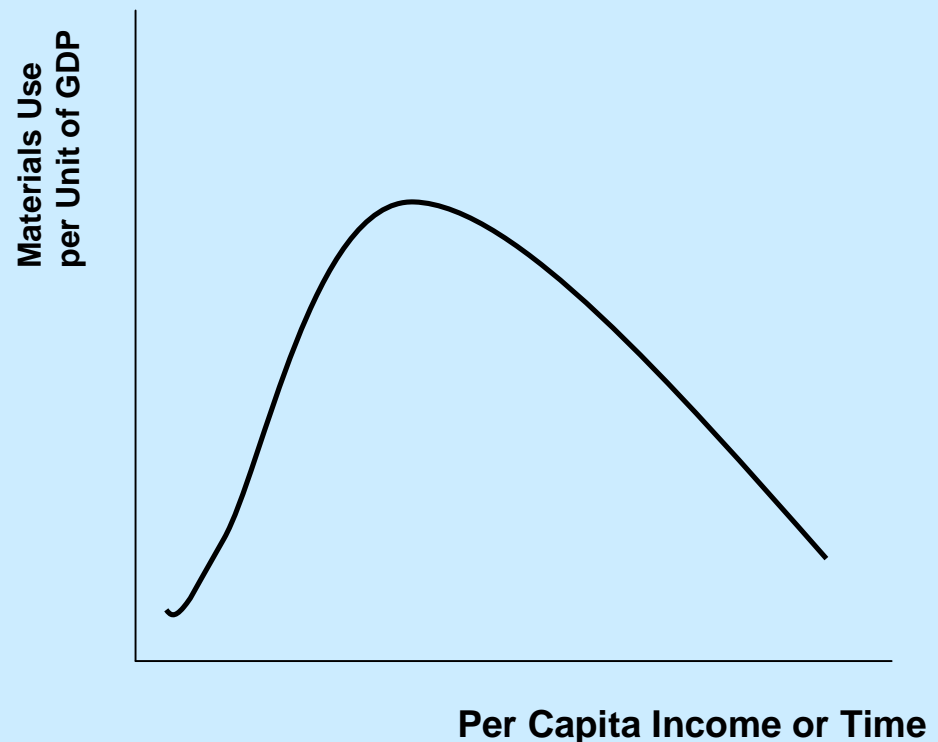
Definition:

Higher income per capita is associated with greater efficiency...

... efficiency gains lead to lower resource intensity in the economy (Weak Dematerialization)...

...if strong or persistent enough, these efficiency gains may also lead to reductions of materials' and natural resources usage rates (Strong Dematerialization)

Dematerialization Hypothesis



This generates an inverted-U shaped curve over time

Dematerialization: The Empirical Evidence

- Aggregate material consumption in US, Europe and Japan does not follow this trend
- The Reason: For individual materials the picture is fuzzy
 - Although cement, steel and aluminum show inverted U curve...
 - ...intensity of other materials (paper, petrochemicals, pesticides, plastics and copper) increased
 - Two Forces at Work:
 - materials' substitution
 - Also, international trade (displacement of environmental costs)

Dematerialization is a Dangerous Myth

...in spite of energy efficiency gains...

- global absolute consumption continues to increase
- Pressure on natural resource base remains unabated
- One key message: Efficiency gains should not lead to complacency



Decoupling materials and affluence will be much harder than decoupling carbon and prosperity

Resource Use Will Continue to Grow: What are the Implications?

Resource Curse

Resource endowment associated with:
Dutch disease,
indebtedness,
instability, strategic
competition, conflict,
civil and international
wars (Liberia, Sierra
Leone, DRC, USA-
Iraq)



Can Technology Get Us Out of this Fix?

REVENGE THEORY

The world we have created eventually will get even with us, twisting our cleverness against us.

Science and Technology frequently find themselves more on the side of problems than solutions

Things bite back.

Best example: CO2 emissions and climate change



So, let's not waste time.
Above all, abandon dangerous illusions in the form of
technological silver bullets and policies that don't work

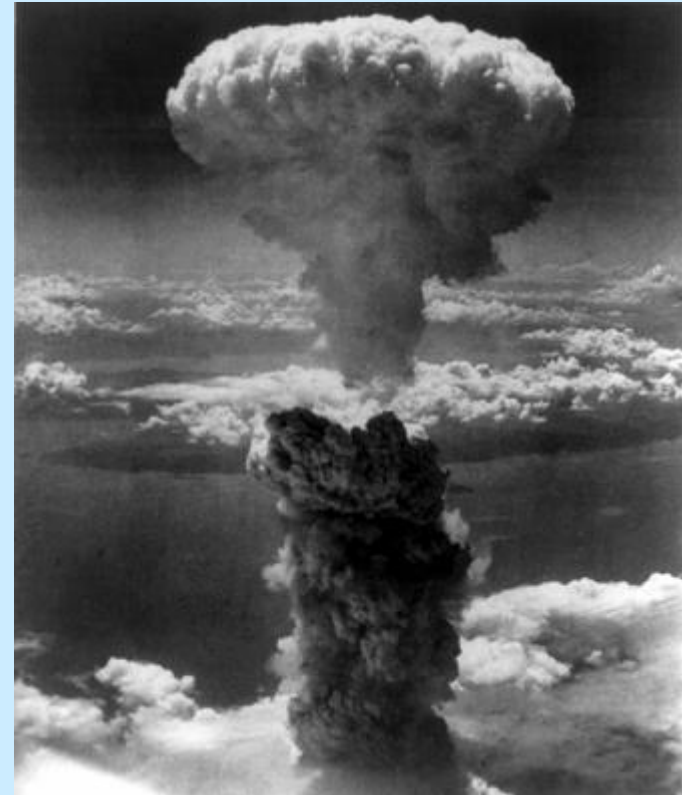


THE ROAD AHEAD

- COMMON SECURITY
- MACROECONOMICS FOR SUSTAINABILITY

The Road Ahead: Common Security

- Common Security
 - In all countries security requires economic progress as well as freedom from military fear
 - Globalization has shown interdependencies count: security cannot be pursued along familiar avenues (unilaterally)
 - Security cannot be attained at the expense of others
 - International law and the analogy to traffic laws (there were none before 1880 and then driving became too dangerous, traffic laws improve common safety)
 - Also, security passes through environmental integrity



Military strength does not breed security

The Road Ahead: Macroeconomics for Sustainability

Redefine role of State
(market efficiency is
another dangerous myth)

Reorganize international
trade: prevent cost
displacement

Supervision and
accountability of MNC's

Real cost accounting
applied to national
accounts

Redefining growth
and development
(style of civilization
and consumption
patterns)

Solidarity and ethics
vs. economic
discourse



More goodies don't mean more happiness

Like Jan Vermeer, remember



Our opportunities are like the light he captured on Delft. They will only last for a fleeting moment.

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THANK YOU