Ralph Miliband Series on the Future of Global Capitalism

Full Globalisation as a Positive-Sum Game: Green Demand as an Answer to the Financial Crisis

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FULL GLOBALISATION
AS A POSITIVE SUM GAME:
GREEN DEMAND
AS AN ANSWER TO THE CRISIS

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Ralph Miliband Lecture Series
THE FUTURE OF GLOBAL CAPITALISM

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“The future of global capitalism”

A POSITIVE-SUM GAME???

“Green” development and growth across the whole globe can be as much of a win-win proposition between business and society as the Welfare State and the official recognition of the unions were in the Post War golden age

BUT NOT IF LEFT TO THE UNFETTERED MARKET!!!
My intention with this lecture:

TO SHARE SOME REFLECTIONS
ON THE FEASIBILITY
OF SUCH A SUSTAINABLE GLOBAL GOLDEN AGE
BASED ON MY WORK
ON TECHNOLOGICAL REVOLUTIONS

The contents:

- To interpret the current crisis as turning point
- To analyse the question of demand opportunity spaces for innovation
- To look at the Post-war example
- To examine today’s global opportunity spaces
- To point to the challenges of recovery
1. The crisis as turning point
2. The opportunity spaces for innovation
3. The example of mass production
4. The current global opportunity spaces
5. The triple challenge
THE CURRENT CRISIS IS NOT AN ACCIDENTAL EVENT IN THE FINANCIAL SYSTEM

- It is a historically recurrent phenomenon
- It is endogenous to the market system
- It results from the way technological revolutions are assimilated

The collapse marks a structural shift in the forces guiding growth and innovation from financial to production capital and to the return of an active state.

If history is a guide…
A GLOBAL GOLDEN AGE MAY LIE AHEAD.
BECAUSE IN MARKET ECONOMIES
TECHNICAL CHANGE OCCURS BY REVOLUTIONS
Capitalism experiences pendular swings every two or three decades

From a “gilded age”
under the control of finance
in order to install
the technological revolution
and replace or modernise
the old with the new paradigm

To a “golden age”
under the control of production
in order to fully deploy
the installed potential
across the economy
and spread its benefits
more widely

The major bubble collapse marks the swing of the pendulum
What worked before will not work from now on
### The historical record: bubble prosperities, recessions and golden ages

<table>
<thead>
<tr>
<th>No., date, revolution, core country</th>
<th>INSTALLATION PERIOD</th>
<th>Bubble collapse</th>
<th>DEPLOYMENT PERIOD</th>
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<tbody>
<tr>
<td><strong>1st</strong> 1771 The Industrial Revolution Britain</td>
<td>Canal mania</td>
<td>1793–97</td>
<td>“Golden Age” prosperity</td>
</tr>
<tr>
<td><strong>2nd</strong> 1829 Age of Steam and Railways Britain</td>
<td>Railway mania</td>
<td>1848–50</td>
<td>Maturity</td>
</tr>
<tr>
<td><strong>3rd</strong> 1875 Age of Steel and heavy Engineering Britain / USA Germany</td>
<td>London funded global market infrastructure build-up (Argentina, Australia, USA)</td>
<td>1890–95</td>
<td>Belle Époque (Europe) “Progressive Era” (USA)</td>
</tr>
<tr>
<td><strong>4th</strong> 1908 Age of Oil, Autos and Mass Production / USA</td>
<td>The roaring twenties Autos, housing, radio, aviation, electricity</td>
<td>Europe 1929–33 USA 1929–43</td>
<td>Post-war Golden age</td>
</tr>
<tr>
<td><strong>5th</strong> 1971 The ICT Revolution USA</td>
<td>Internet mania, Telecoms, emerging markets Financial casino &amp; housing</td>
<td>2007/08 -???</td>
<td>Sustainable global “golden age”?</td>
</tr>
</tbody>
</table>

Golden Ages have been facilitated by enabling regulation and by policies for widening markets and insuring social stability.
The structural shift involves

**A CHANGE IN THE DRIVERS OF INNOVATION**
from SUPPLY-PUSH to DEMAND-PULL

**INSTALLATION** = Supply push

**THE STATE** in a facilitating service role

**FINANCE** and **THE NEW ENTREPRENEURS** as drivers and innovators

**DEPLOYMENT** = demand-pull

**FINANCE** in a facilitating service role

**PRODUCTION** and **THE STATE** as drivers and innovators

A vast free market experiment

The full flourishing of the installed potential

During deployment, the conditions for innovation in production depend on the effectiveness of INSTITUTIONAL AND POLICY INNOVATION
We are at the turning point

There are three tasks for governments after the major crash:

1. intensive therapy for finance
   - DONE… even overdone

2. redesign of financial regulation and architecture
   - This time global finance needs both national redesign and a global regulatory “floor”
   - STILL ON THE DRAWING BOARD

3. enable structural change in the real economy
   - RARELY BEING CONSIDERED AS SUCH
   - But recovery will be very difficult without it

The process can be short or long depending on the social and political forces
The last time around it took over a decade and a major war
1. The crisis as turning point
2. The opportunity spaces for innovation
3. The example of mass production
4. The current global opportunity spaces
5. The triple challenge
As Schumpeter held:

GROWTH IS DRIVEN BY INNOVATION

But not by isolated innovations
but by interrelated
systems of innovation
leading to growing synergies
and externalities

…and, obviously, to drive growth
innovations must be
PROFITABLE!
The factors defining the space of the acceptable and the profitable change over time … AND ARE ALSO CHANGEABLE!
Coming to grips with innovation

INTRODUCING THE CONCEPT
OF OPPORTUNITY SPACES

SUPPLY
opportunity space for innovation

DEMAND
opportunity space for innovation

SUPPLY

The range
of innovations
that are technologically feasible
and the global, national or local
capabilities
that can bring it to fruition

DEMAND

The range of innovations
that are economically profitable
and socially acceptable
as defined --and modified--
by institutional, social, cultural,
economic, political
and contingent factors

THE BETTER THE MATCH
BETWEEN THE DEMAND AND SUPPLY SPACES
THE MORE DYNAMIC THE ECONOMY
THE ELEMENTS OF THE DEMAND OPPORTUNITY SPACE

Generic technologies
Infrastructures
EXTERNALITIES

Sources of
DEMAND
DIRECTIONALITY

Supply
opportunity space
for INNOVATION

Sources of
DEMAND
VOLUME

The coherence and synergy among the elements generates self-reinforcing loops
1. The crisis as turning point
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The demand opportunity space that shaped the Post War Golden Age

INNOVATION ENABLERS FOR MASS PRODUCTION
- Cheap oil and materials
- Universal electricity
- Road and airway network

SPECIFIC DEMAND AS DIRECTION FOR INNOVATION
- Suburbanisation
- Post-war reconstruction
- Cold war

DEMAND VOLUME, PROFILE AND TRENDS
- Welfare State
- Labour unions
- Public procurement
- Credit system

The various elements were provided in different proportions in each “First World” country
Keynes did see beyond simple quantitative aggregate demand AND IDENTIFIED SPECIFIC OPPORTUNITY SPACES

In a letter to President Roosevelt in 1938, he recommended:

“Increased investment in … housing, public utilities [electricity], and transport…

“Housing is by far the best aid to recovery… I should advise putting most of your eggs in this basket…

“…the growth of collective bargaining … essential

“…I approve minimum wage and hours regulation. … a policy of general wage reductions … useless”
1. The crisis as turning point
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After more than three decades of diffusion of the information and communications technologies and of their application to modernise and rejuvenate all other industries, there is enough technological potential and enough knowledge about it among producers and consumers to innovate across all sectors of the economy and drive a global golden age.
The current opportunity space for a global positive-sum game

- **Cheap ICT**: Full internet access at low cost is equivalent to electrification and suburbanisation in facilitating demand (plus education).
- **“GREEN”**: Revamping transport, energy, products and production systems to make them sustainable is equivalent to post-war reconstruction and suburbanisation.
- **FULL GLOBAL DEVELOPMENT**: Incorporating successive new millions into sustainable consumption patterns is equivalent to the Welfare State and government procurement in terms of demand creation.
The three forces defining the opportunity space are interdependent.

There is enough space and potential to lift all boats, but the markets cannot do it without the support of enabling policies.

ICTs are the main enabling instruments of sustainability.

Internet access is the social, economic, and geographic frontier of the global market.

Only with sustainable production and consumption patterns is full globalisation possible.

There is enough space and potential to lift all boats, but the markets cannot do it without the support of enabling policies.
Before we continue, I would like to share THE PREMISES OF THESE REFLEXIONS

- We are in the capitalist system where growth is driven by innovation and business is driven by personal ambition for profits.
- The legitimacy of capitalism depends on whether individual “greed” results in collective benefits.
- Golden Ages are about a positive-sum games between business and society.
- Neither business nor society always know what will bring them optimal benefits beyond the short term.

Intelligent, informed and competent governments can promote the consensus required to define the positive-sum game.

STRONGLY BIASED ARRANGEMENTS ARE ECONOMICALLY AND SOCIALLY UNSTABLE.
The societal challenges posed by the environment are not just for saving the planet...

They are the best route for saving the economy!

And they are also the most effective means for increasing the well-being of the many
Each technological revolution has led to a change in consumption patterns with new life-shaping goods and services at ‘affordable’ prices.

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<thead>
<tr>
<th>DEPLOYMENT PERIOD</th>
<th>LIFESTYLE</th>
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<tbody>
<tr>
<td>1850s-1860s</td>
<td>Urban industry-aided VICTORIAN LIVING in Britain</td>
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<tr>
<td>1890s-1910s</td>
<td>Urban cosmopolitan lifestyle of THE BELLE EPOQUE in Europe</td>
</tr>
<tr>
<td>1950s-1960s</td>
<td>Suburban energy-intensive AMERICAN WAY OF LIFE</td>
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Each style became “the good life” that shaped people's desires and values and guided innovation trajectories.

2010s-20??s        Will the developed and emerging countries develop a variety of ICT-intensive “GLOCAL” SUSTAINABLE LIFESTYLES ???
It is a huge shift in the supply opportunity space for innovation, promising growth and radical changes in lifestyles.

FROM THE LOGIC OF CHEAP ENERGY (oil) for transport, electricity, synthetic materials, etc.

TO THE LOGIC OF CHEAP INFORMATION its processing, transmission and productive use

Producers’ preference for tangible products and disposability

Unthinking use of energy and materials

Unavoidable environmental destruction

Producers’ preference for services and intangible value

Huge potential for savings in energy and materials

Capacity for environmental friendliness

EACH SHIFT IS DRIVEN BY THE NEW TECHNOLOGIES AND THE WAY THEY CHANGE RELATIVE COSTS AND INNOVATION POTENTIAL

The techno-economic paradigm shift from the 1970s
Yet, mass production disposability and high energy and materials use are still with us.

A paradigm shift takes time and many changes in context.

The first automobiles also looked like horse-driven carriages.

As long as oil and transport continue to be cheap, the mass production strategies will be shaping business behaviour in the ICT world.
THE KNOWN BUT LARGELY UNREALISED POTENTIAL OF ICT AND “GREEN” FOR PRODUCERS

REDUCE
- Energy consumption
- Materials use
- Emission of pollutants, etc.

REDESIGN
- Materials / Products
- Processes / Logistics, etc.

COORDINATE AND OPTIMISE
- Disparate technologies
- Transport routes and means
- Value chains, etc.

REPLACE
- Products with services
- Travel with telecoms
- Paper with iPads, etc.

But the technologically feasible only becomes reality when facing a good opportunity space. SOCIAL VALUES, POLICIES, REGULATIONS, COSTS AND RELATIVE PRICES ARE THE ULTIMATE DRIVERS OF THE SHIFT.
Yet the main consequence of strongly turning the environment into a central element of the opportunity system IS DEFINING A LIFESTYLE DIFFERENT FROM MASS CONSUMERISM

Once the change in consumer values begins it is a mutually-reinforcing loop with the producers

BUT THE SHIFT CANNOT BE MOVED BY GUILT OR FEAR BUT BY DESIRE AND ASPIRATION
THE CHANGE IN PREFERENCES BEGINS AT THE TOP OF THE INCOME SCALE AND SPREADS BY IMITATION …AND AFFORDABILITY

Part of the paradigm shift is already happening among the most sophisticated consumers

- Natural vs. synthetic
- Minimalist design
- ‘Gourmet’ and organic food
- Exercise for well being
- Small vs. big
- Multipurpose products
- Working from home
- Solar power as luxurious as well as electric cars
- Intense Internet use

There is still a long way to go

- Durability
- High quality vs. quantity
- Reparability and upgradability
- Anti-waste, pro-recycling
- Low carbon footprint
- Customised vs. standard
- Services vs. tangible products
- Active & creative “prosumer” vs. passive consumer
- Etc. etc.

MUCH ALSO DEPENDS ON THE MARKETING STRATEGIES OF COMPANIES WHICH IN TURN DEPEND ON THE BEST DIRECTIONS FOR PROFITABILITY
And the direction of profitability
will depend on relative prices and dynamic demand

A CLEAR RISE IN THE PRICES
OF NON-RENEWABLE RESOURCES
WITH A STABLE AND RELIABLE UPWARD TREND
WOULD RESULT IN AN ENERGY AND MATERIALS-SAVING BIAS

Markets will eventually do it, but…
We don’t need to wait for the unavoidable scarcity to be reached

TILTING THE PLAYING FIELD TOWARDS “GREEN” NOW
WOULD GIVE TIME TO BRING FORTH THE NECESSARY INNOVATIONS
AND YET…

HOW CAN BUSINESS PROFITS SURVIVE IN A WORLD WHERE GOODS ARE NOT DISPOSABLE?

Planned obsolescence was precisely a strategy developed to face limits to market volume WHERE WOULD DEMAND GROWTH COME FROM?
Successive new entrants are the best solution for healthy and profitable market growth with minimum resource use.

Full global development is not only a humanitarian goal.

It is an economic and environmental imperative today.
Income polarisation is typical of installation periods and major bubble times.

Golden Age deployment periods tend to (partially) reverse the process, widening the demand opportunity space.

Source: Piketty and Saez 2010.
This time polarisation has happened both across the globe and within each country.

And the globalisation process has been biased towards Asia, not replacing the job losses in the advanced world and leaving whole continents marginalised.

GLOBALISATION CAN BE MORE BALANCED.

Part is likely happen through the rise in energy and transport costs. The rest through national and global policies shaping the demand opportunity space.

AND ALL COUNTRIES WOULD GAIN IN THE PROCESS.
GLOBALISATION
is not about the demise of the state
but about the possibility of global development
across a highly differentiated economic space

Up to now, markets worked upon
the pre-existing differentiation
and transformed the economic space

It is time for each nation state and region
to identify advantageous directions
FOR SPECIALISATION AND RESPECIALISATION
and define the role they will play on the global stage
THE VARIETY OF OPPORTUNITY SPACES

• Hyper-segmentation of all product markets (including materials)

• Decomposition of value-chains by global corporations

• “Peaceful coexistence” of different technological levels (ex. organic and standardised; “frugal” and highly sophisticated)

WITH SPECIALISATION AND RESPECIALISATION COME THE ADVANTAGES OF NETWORK SYNERGIES

• through aiming at “demand opportunity complexes” (ex. Sports and leisure, creative industries, alternative transport)

• and through collaboration to supply “complex product systems” (ex. multi-source interactive power grids, high speed railways)

THERE IS ENOUGH OPPORTUNITY SPACE FOR ALL AND DEMAND WOULD GROW FOR MUTUAL BENEFIT
Increasingly numerous specialty niches

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<thead>
<tr>
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<th>Low Volumes</th>
<th>High Volumes</th>
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<tbody>
<tr>
<td>High Profit Margins</td>
<td>Through Differentiation</td>
<td></td>
</tr>
<tr>
<td>Low Profit Margins</td>
<td>Standard Products</td>
<td></td>
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</tbody>
</table>

- **Commodity**
  - Standard
  - Price competition in basic products
  - Competition in adaptability to clients

- **Custom**
  - Adaptable

And this applies from raw materials to all manufacturing and services and to each activity along the value chain.
A possible pattern of global respecialization by regions…

...though each country would cover the whole spectrum in different proportions
Differentiated economic expansion across the planet would mean jobs, incomes and dynamic markets at home and globally for all countries.

Finding effective ways of enticing materials and energy-saving innovation and lifestyles would create jobs and markets, besides saving the planet.

And, since resources are limited, global development with the “American Way of Life” would be impossible, anyway.

GREEN GLOBALISATION COULD INDEED BE A POSITIVE-SUM GAME.
ICT has made globalisation possible and can support environmentally sustainable innovation across all industries, sectors and activities.

ICT markets and global development can set up a mutually-reinforcing feedback loop.
THE REINFORCING FEEDBACK LOOPS OF THE OPPORTUNITY SPACE

ICT

Global development marks the rhythm of growth of ICT markets

The ICT paradigm and its generic technologies facilitate “green” innovations

Global market growth enables the profitability of “green” production

“GREEN”

Only with sustainable production and consumption patterns is full globalisation possible

FULL GLOBAL DEVELOPMENT

Internet enables globalisation and widens its frontiers

The “green” direction for innovation favours the use of ICT

Global market growth enables the profitability of “green” production
A LONG-TERM POSITIVE SUM GAME

Advanced, emerging and developing countries

The range of the feasible is wide enough for each to identify opportunity spaces and shape demand conditions in consensus directions. Home and global trade would provide market growth for all.

GLOBAL BUSINESSES

Demand shaping policies would create stable differentiated spaces across the globe for sourcing production and targeting markets.

LOCAL BUSINESSES

Would flourish everywhere favoured by direct access to consumers or resources and by avoiding high transport costs.

The population of all countries

Would experience employment growth and increasing quality of life while maintaining cultural identities.
The crisis as turning point

The opportunity spaces for innovation

The example of mass production

The current global opportunity spaces

The triple challenge
Each technological revolution sets the space of the possible in wealth creation

THE SOCIO-POLITICAL FORCES SHAPE THE DIRECTION

Mass production

Flexible production (ICT)

EQUALITY = HOMOGENISATION

Welfare State: workers as “middle class”

“One best way”: The American Way of Life

International core and periphery

NATIONAL GOLDEN AGES IN THE WEST

“EQUIVALENT SATISFACTION”? Global rise in the quality of life?

Different sustainable “glocal” lifestyles?

Development across all countries?

A GLOBAL GOLDEN AGE?
THREE MAJOR CHALLENGES

- A political challenge
- A policy challenge
- A research challenge
The political challenge

A TRIPLE ALLIANCE
TO BUILD A PROGRAMME
FOR A SUSTAINABLE GLOBAL GOLDEN AGE

Social democracy

greens

and development advocates

AIMING TO ENGAGE THE BUSINESS WORLD
IN A POSITIVE-SUM GAME
The policy challenge

THE INSTITUTIONAL INNOVATIONS REQUIRED BY SUCH A PROGRAMME WILL PITCH IMAGINATION AGAINST IDEOLOGICAL AND BUREAUCRATIC INERTIA

- How to change the relative cost structure
- How to get the financial world on board
- How to establish consensus building mechanisms
- How to effectively help promote and fund development in the marginalised countries
- What is the right mix of pro-environmental policies (regulation, incentives, taxes, risk reduction, guaranteed markets, subsidies, education, legislation etc. etc.)

AN INTELLIGENT AND INFORMED TILTING OF THE PLAYING FIELD GLOBALLY, NATIONALLY AND LOCALLY
The research challenge

Whatever you think of standard economic theory in “normal” circumstances, interdisciplinarity is indispensable when we need to understand extraordinary times...

That is the case when we need to support institutional creativity to make major policy shifts.
IF IT IS TRUE THAT
THE TECHNOLOGICAL STAGE
IS SET TODAY
FOR A SUSTAINABLE GLOBAL GOLDEN AGE...

...bringing it about
would require determined political convergence
and massive doses of institutional creativity

Will it be a success or a wasted opportunity?

WE SHALL ALL BE RESPONSIBLE
FOR THE OUTCOME
Thank you!

For further reading:

www.carlotaperez.org
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