

**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

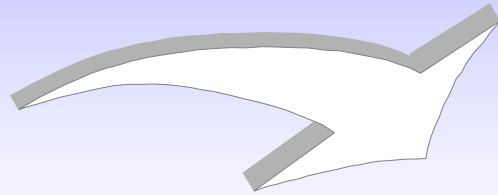
If history is a guide...

A GLOBAL GOLDEN AGE MAY LIE AHEAD

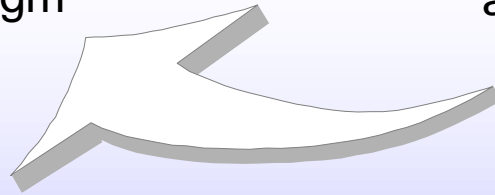
BECAUSE IN MARKET ECONOMIES TECHNICAL CHANGE OCCURS BY REVOLUTIONS

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



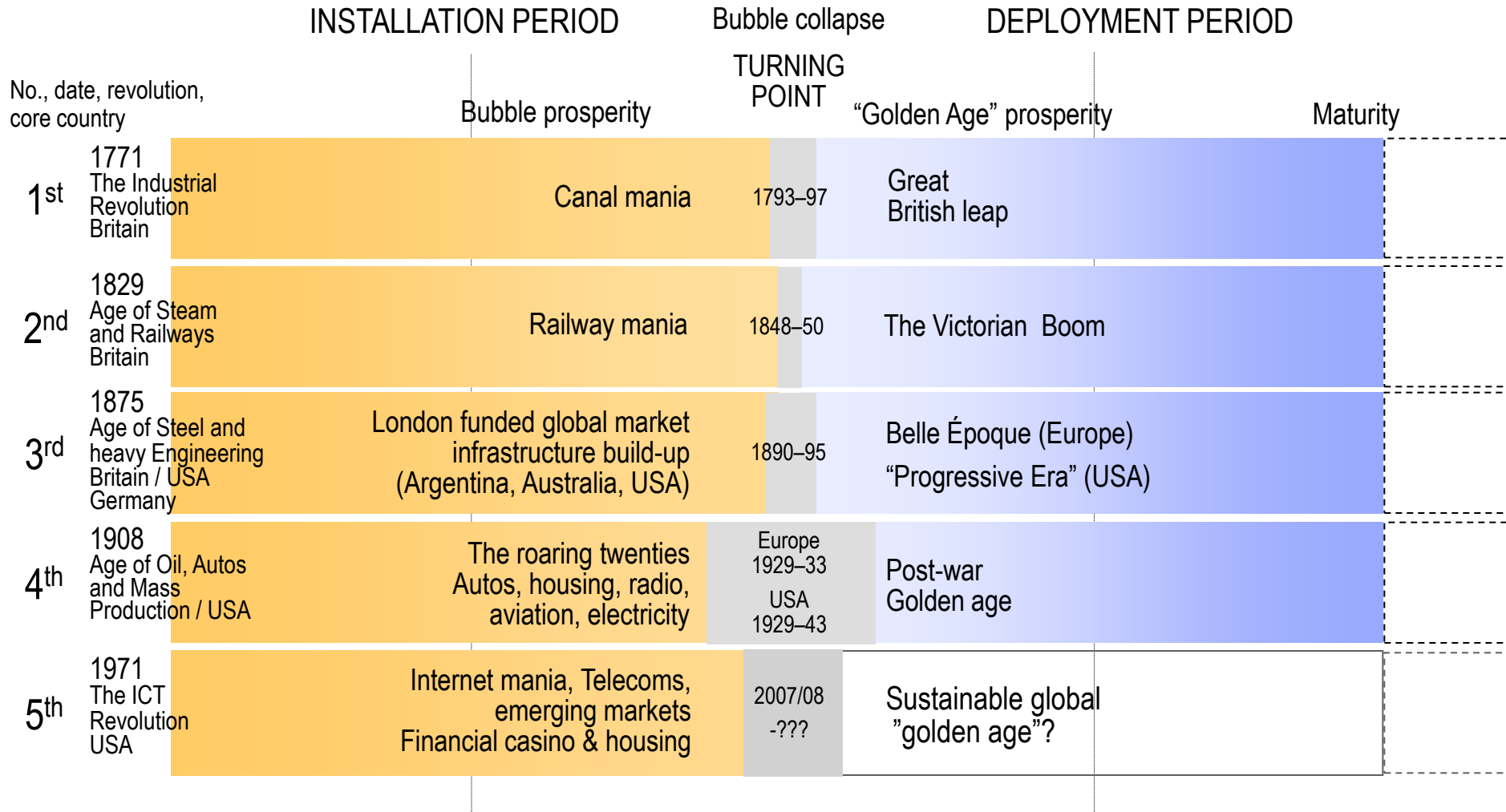
To a “golden age”
under the control of production
in order to fully deploy
the installed potential
across the economy
and spread its benefits
more widely



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



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

DEPLOYMENT = demand-pull

THE STATE
in a
facilitating
service
role

FINANCE
and
THE NEW
ENTREPRENEURS
as drivers
and innovators

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

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2 The opportunity spaces for innovation

3 The example of mass production

4 The current global opportunity spaces

5 The triple challenge

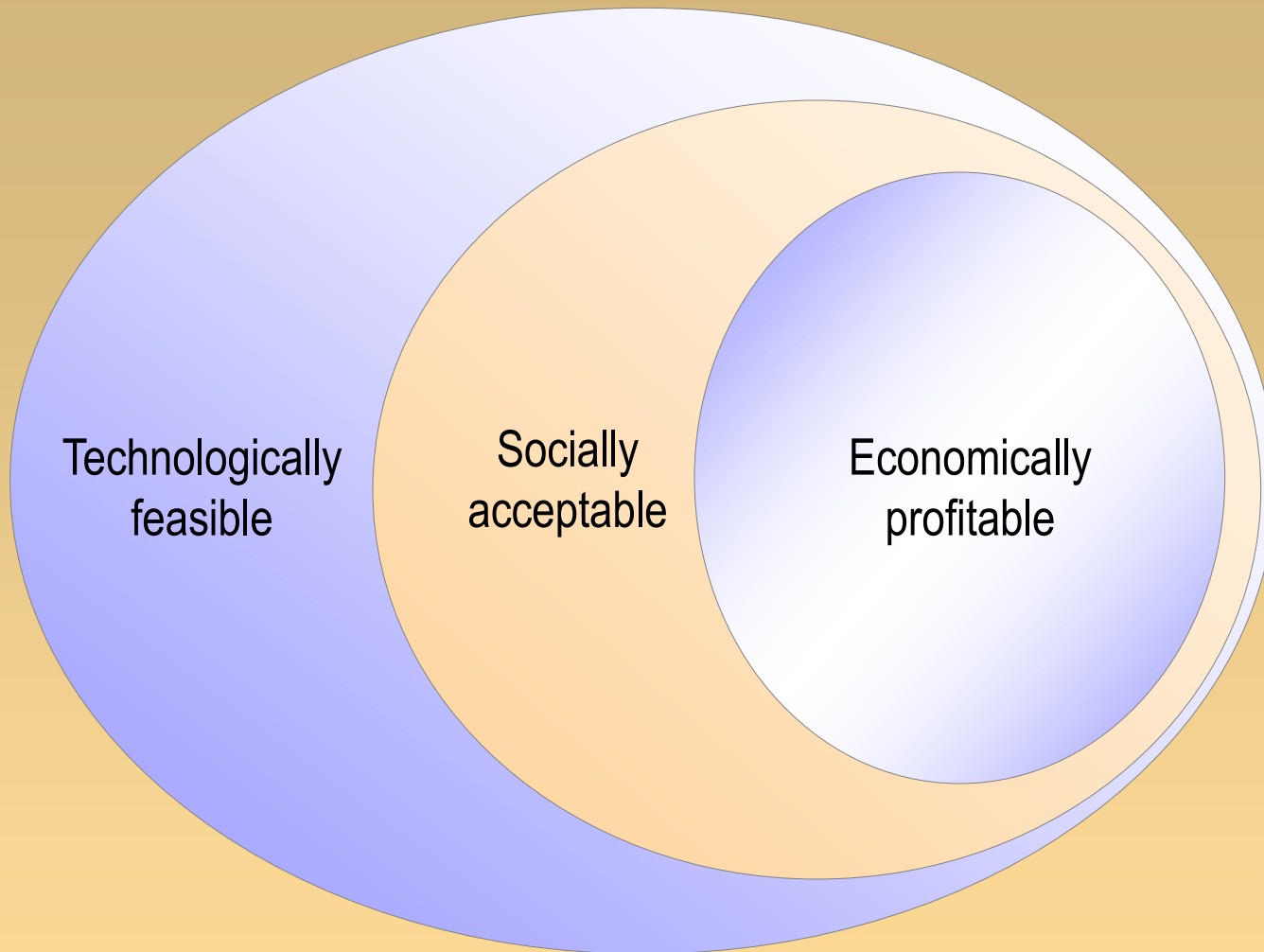
As Schumpeter held:

GROWTH IS DRIVEN BY INNOVATION

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

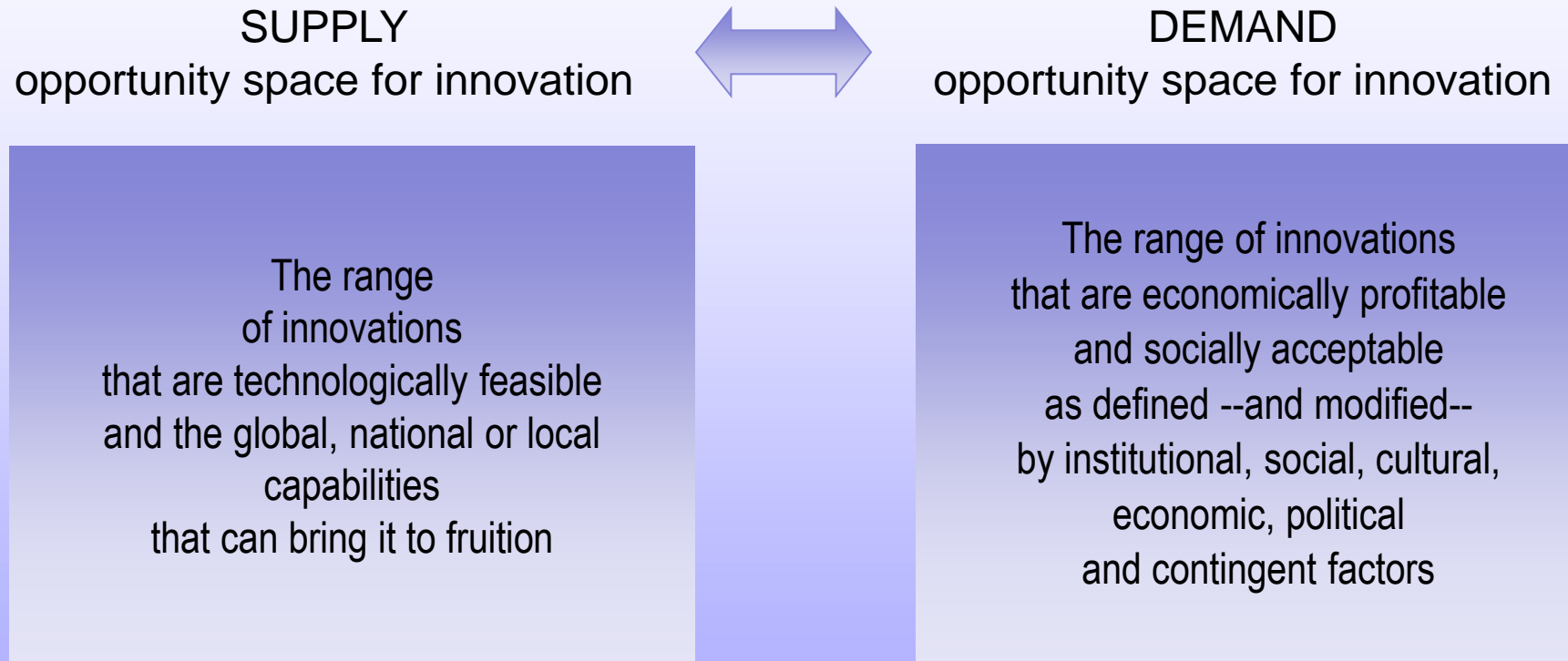
...and, obviously, to drive growth
innovations must be
PROFITABLE!

TECHNOLOGY ONLY DEFINES THE SPACE OF THE FEASIBLE



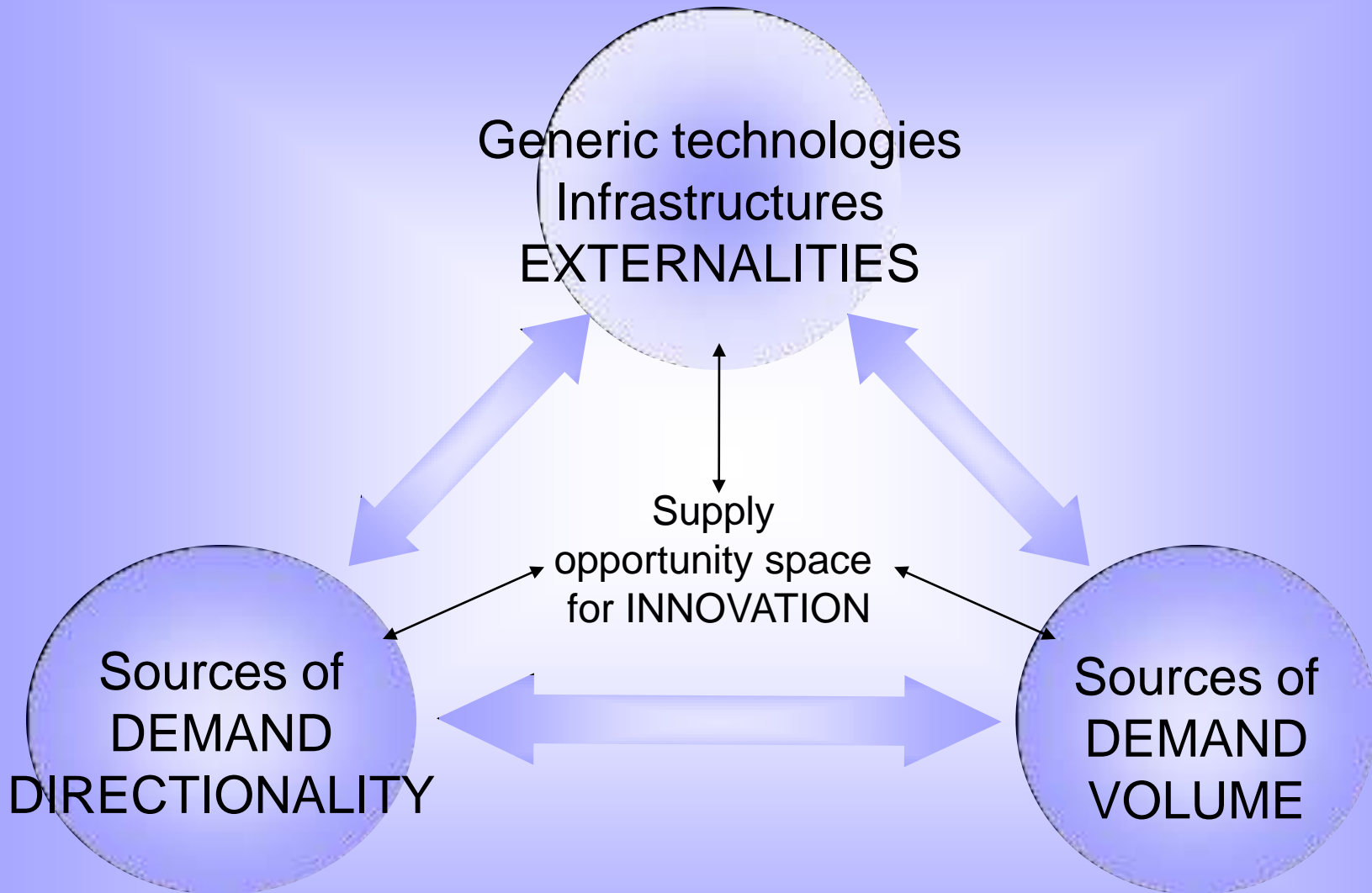
The factors defining the space of the acceptable and the profitable change over time
... AND ARE ALSO CHANGEABLE!

Coming to grips with innovation
INTRODUCING THE CONCEPT
OF OPPORTUNITY SPACES



THE BETTER THE MATCH
BETWEEN THE DEMAND AND SUPPLY SPACES
THE MORE DYNAMIC THE ECONOMY

THE ELEMENTS OF THE DEMAND OPPORTUNITY SPACE



The coherence and synergy among the elements generates self-reinforcing loops

1 The crisis as turning point

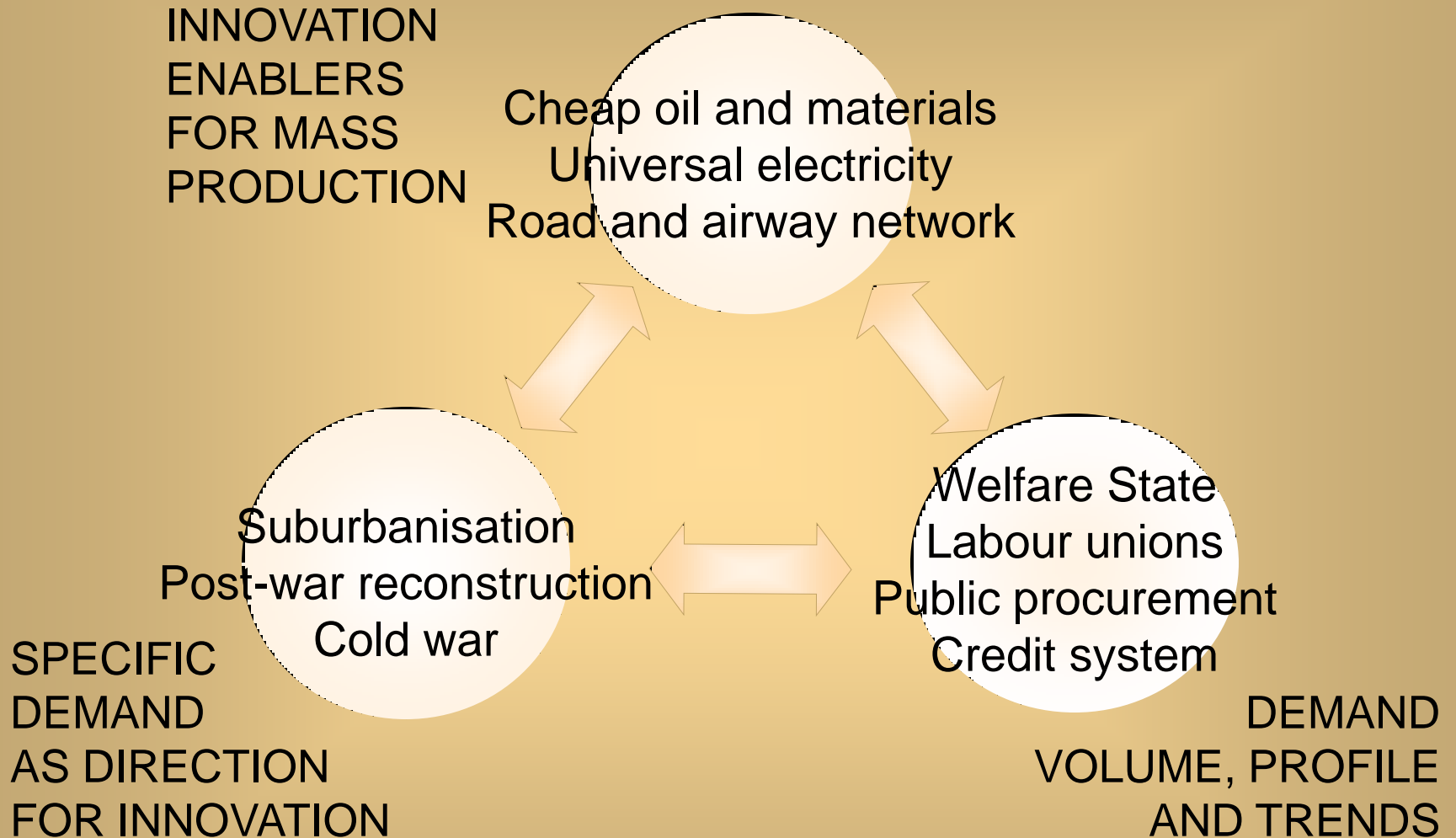
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The demand opportunity space that shaped the Post War Golden Age



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”

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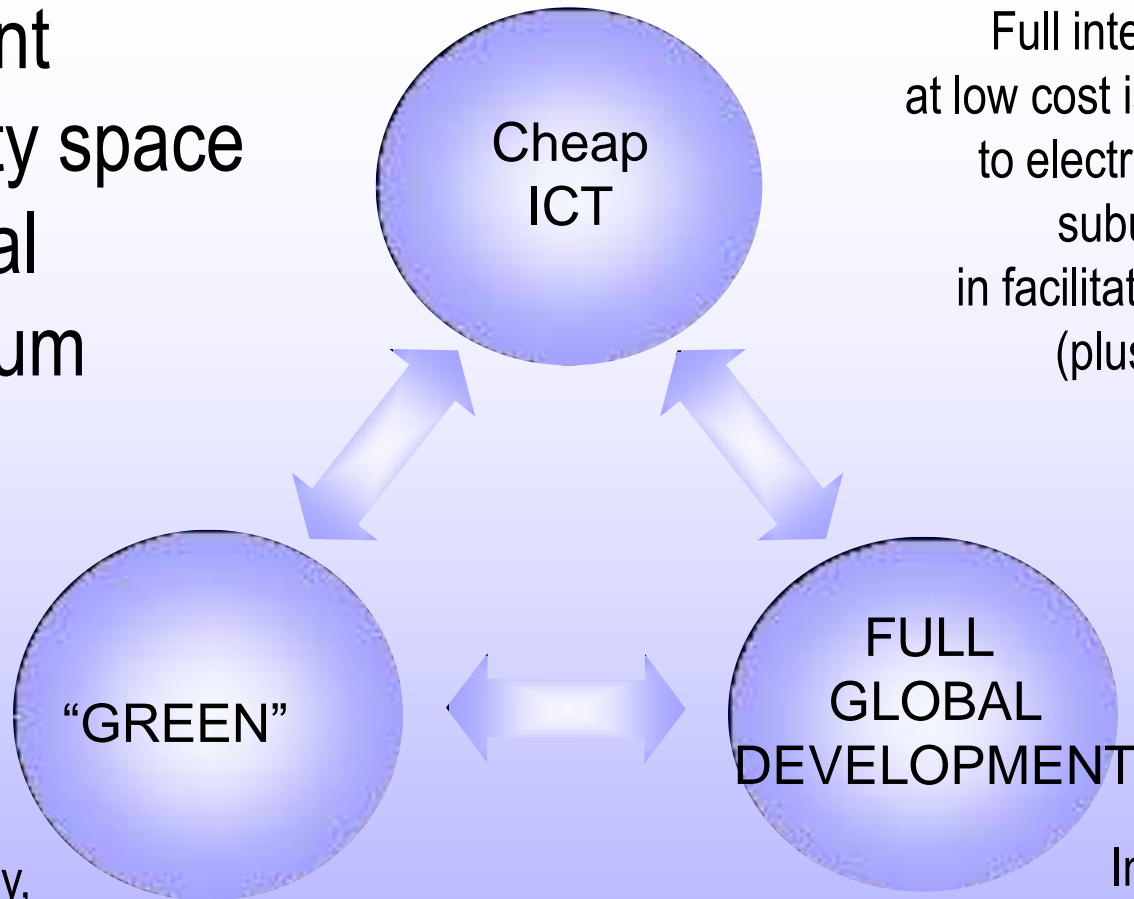
After more than three decades
of diffusion
of the information and communications technologies
and of their application to modernise
and rejuvenate all other industries

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

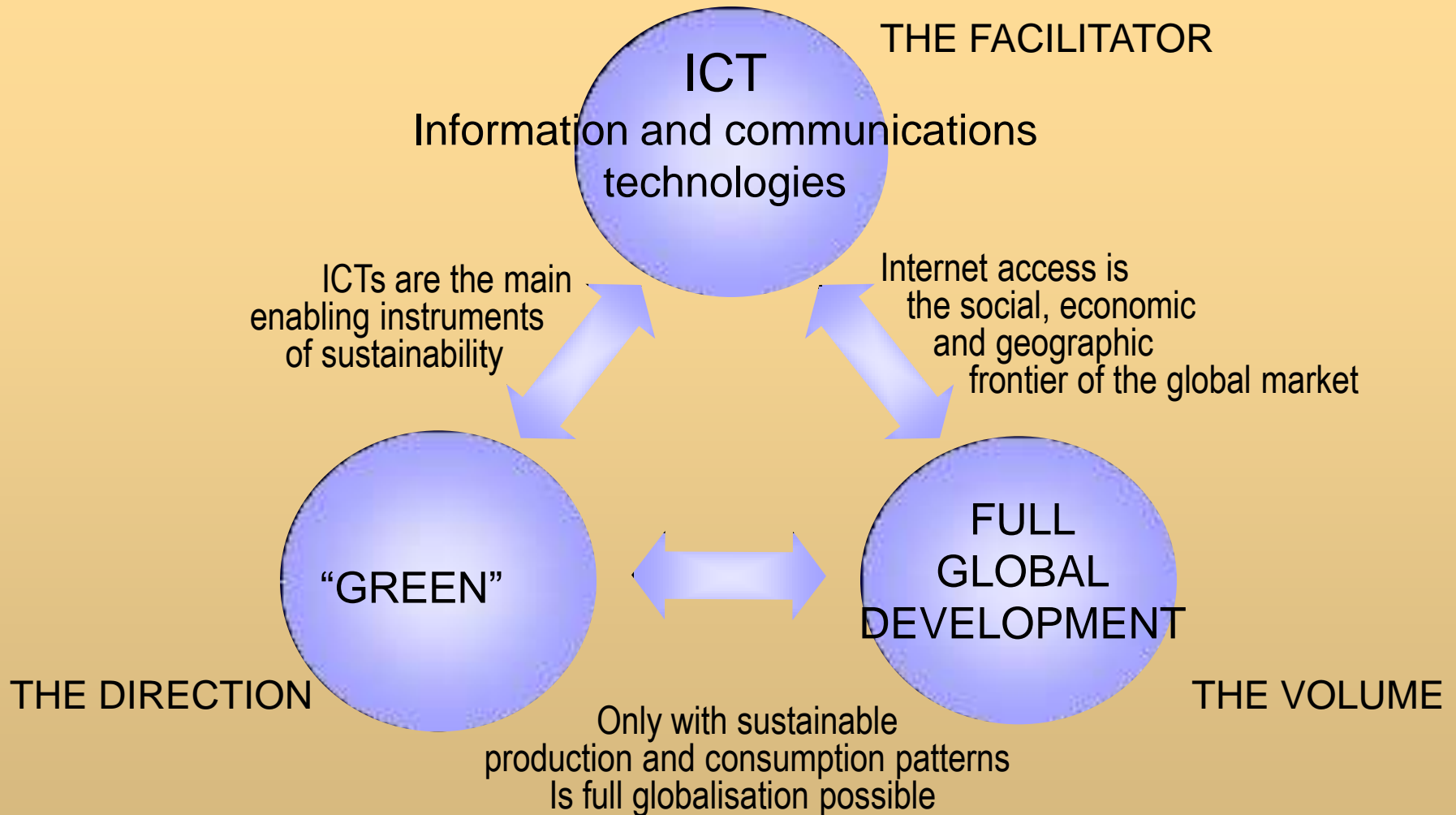


Full internet access at low cost is equivalent to electrification and suburbanisation in facilitating demand (plus education)

Revamping transport, energy, products and production systems to make them sustainable is equivalent to post-war reconstruction and suburbanisation

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



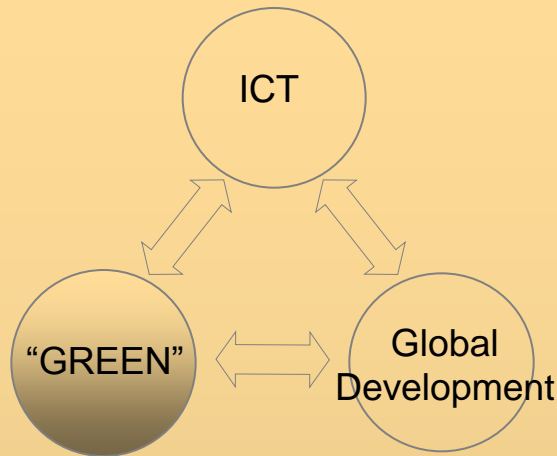
There is enough space and potential to lift all boats
but the markets cannot do it without the support of enabling policies

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 QUESTION OF DIRECTION

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

DEPLOYMENT PERIOD	LIFESTYLE
1850s-1860s	Urban industry-aided VICTORIAN LIVING in Britain
1890s-1910s	Urban cosmopolitan lifestyle of THE BELLE EPOQUE in Europe
1950s-1960s	Suburban energy-intensive AMERICAN WAY OF LIFE

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 ???
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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

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

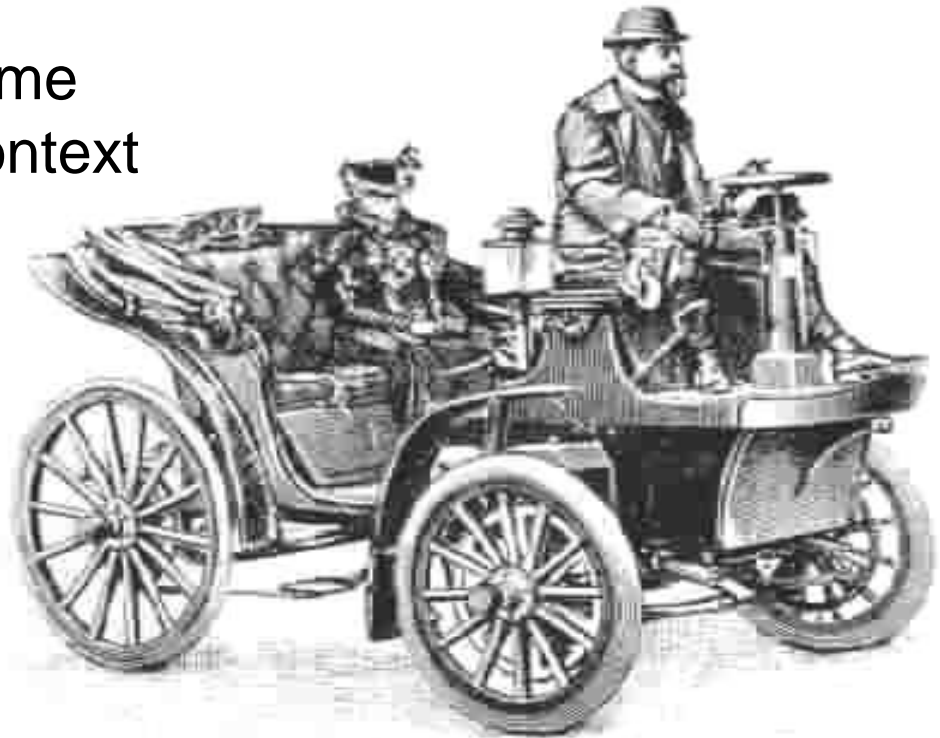
Capacity for
environmental friendliness

It is a huge shift in the supply opportunity space for innovation,
promising growth and radical changes in lifestyles

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



An automobile in 1898

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.

RE DESIGN

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

There is still
a long way to go

- 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
- 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...

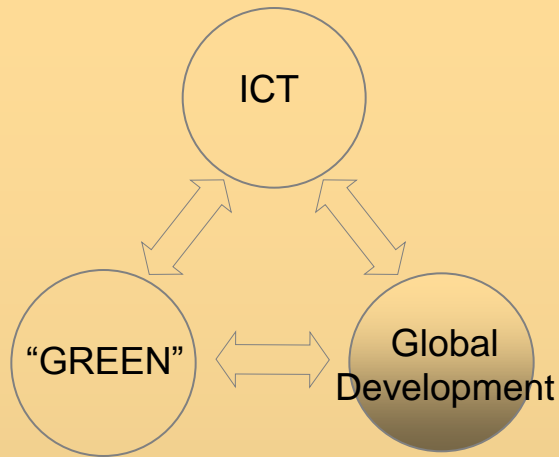
We don't need to wait for the unavoidable scarcity to be reached

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?



THE QUESTION OF PROFITABLE DEMAND VOLUME

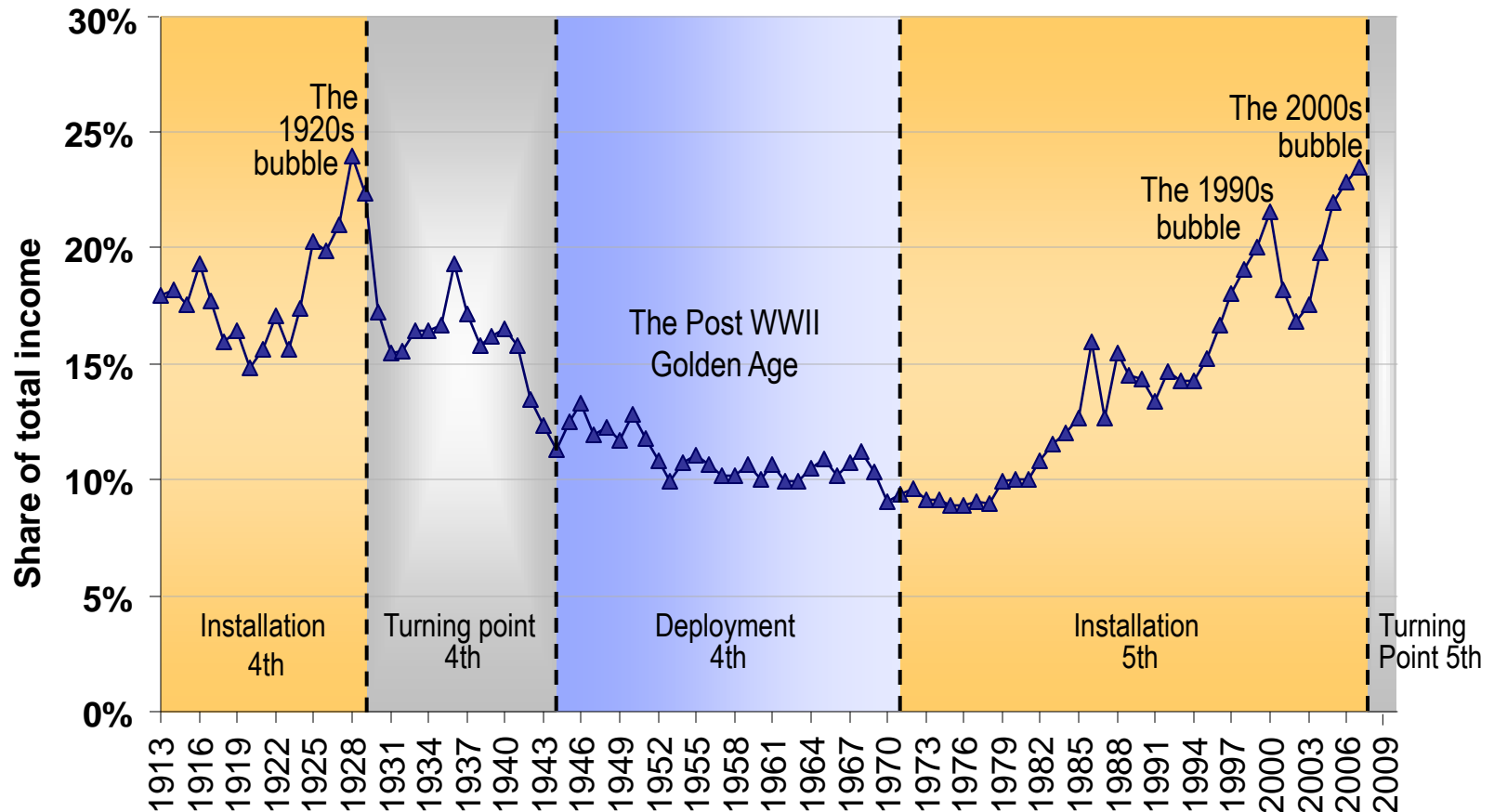
Successive new entrants are the best solution
for healthy and profitable market growth
with minimum resource use

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

Top 1% of income tax payers USA 1913 - 2007



Source: Piketty and Saez 2010

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

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

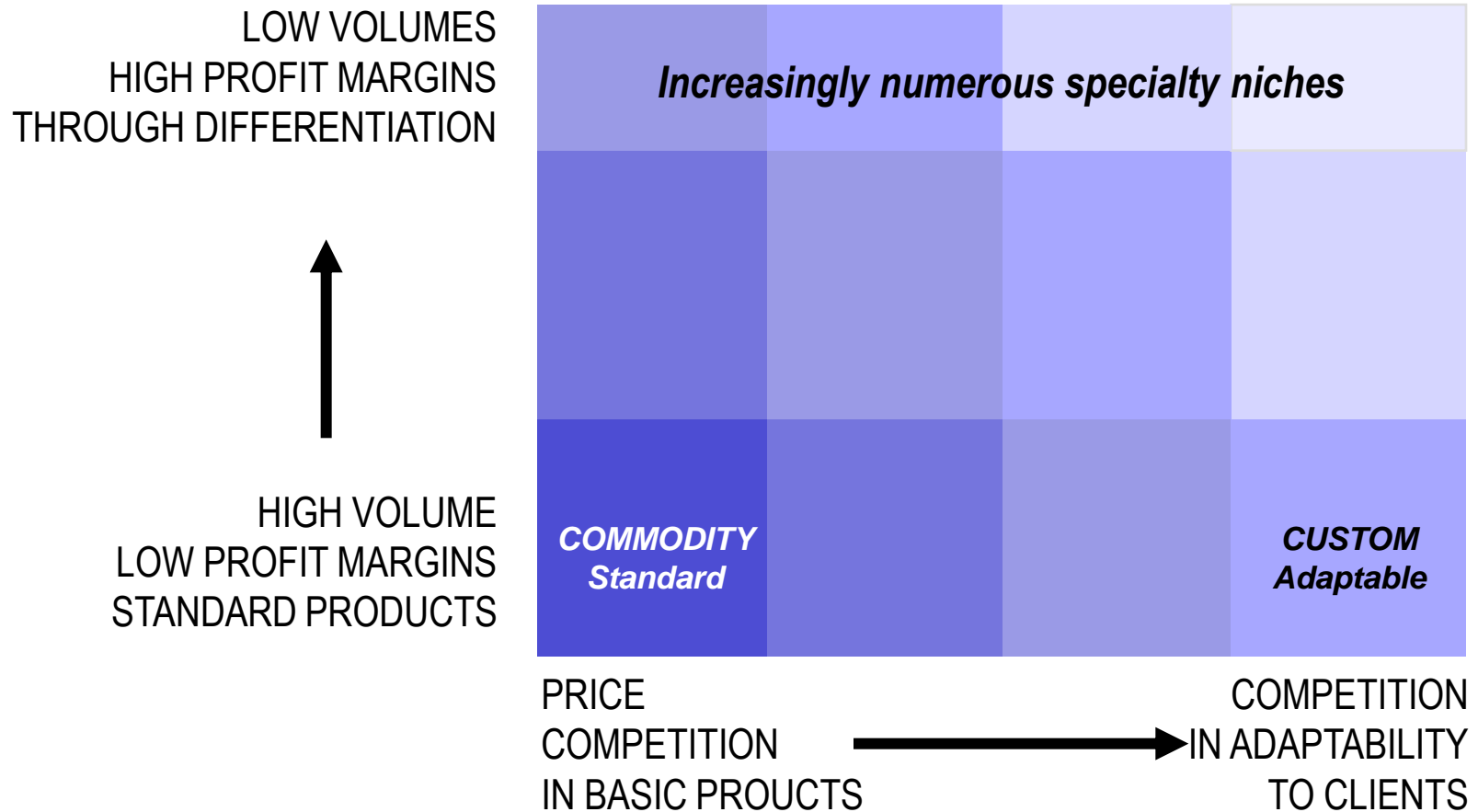
- Hyper-segmentation of all product markets (including materials)
- Decomposition of value-chains by global corporations
- “Peaceful coexistence” of different technological levels (ex. organic and standardised; “frugal” and highly sophisticated)

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)

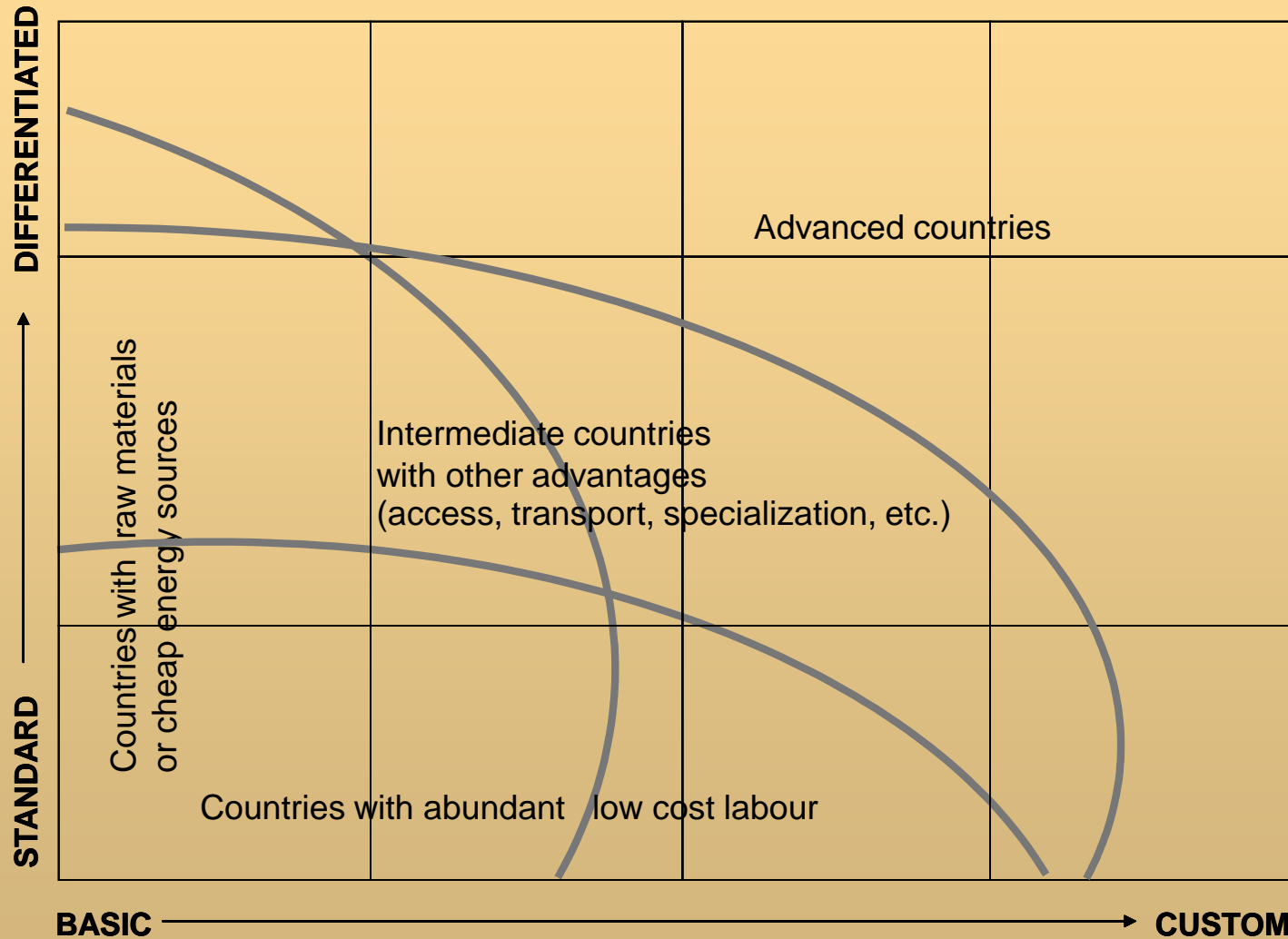
THERE IS ENOUGH OPPORTUNITY SPACE FOR ALL
AND DEMAND WOULD GROW FOR MUTUAL BENEFIT

THE HYPER-SEGMENTATION OF MARKETS AND ITS DIFFERING OPPORTUNITIES



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...



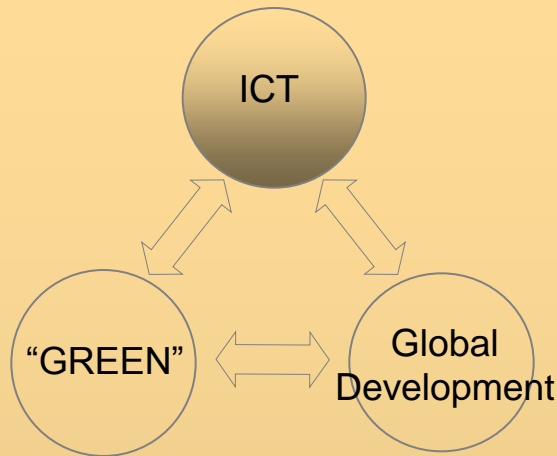
...though each country would cover the whole spectrum in different proportions

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**

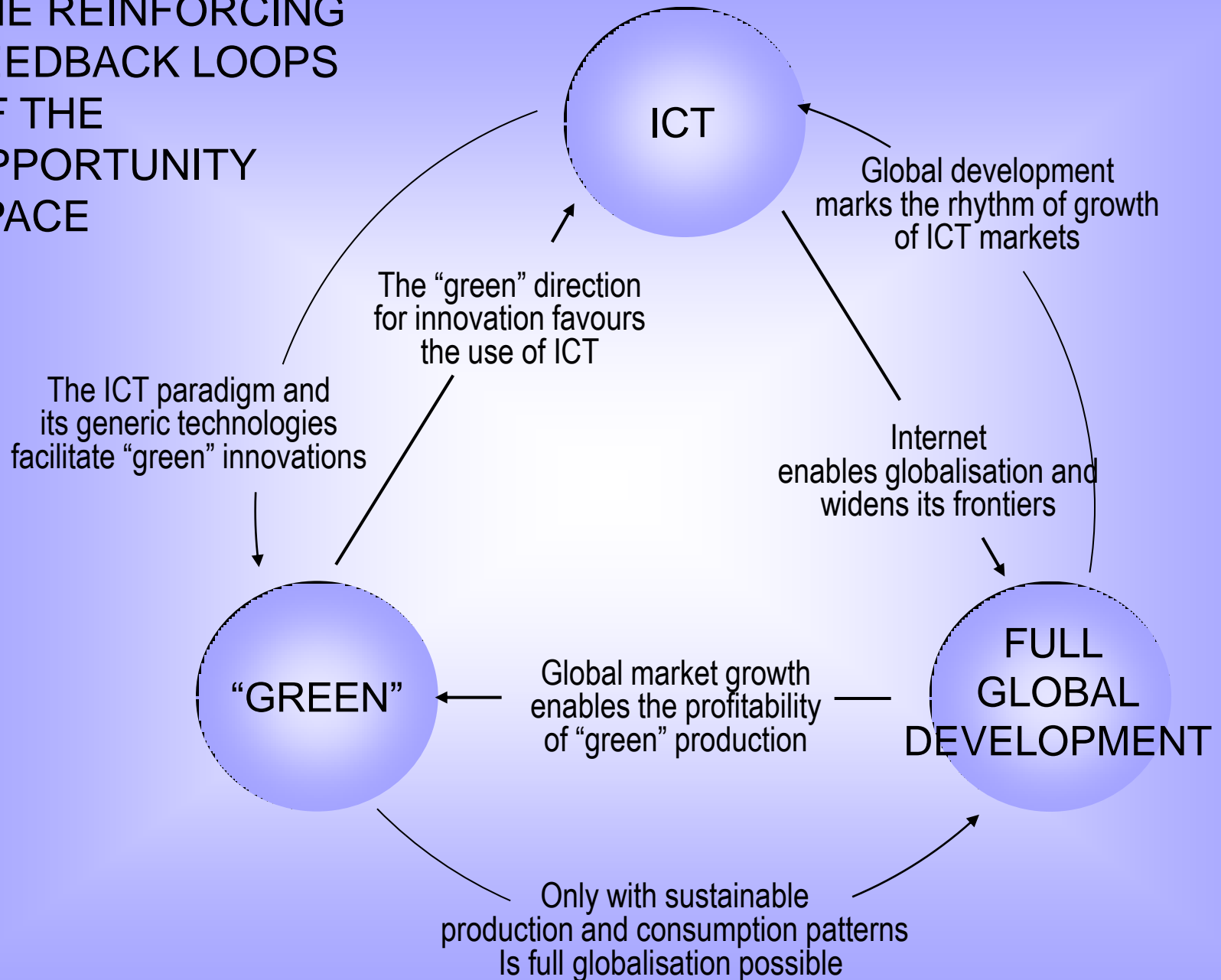


ICT AS THE TECHNOLOGICAL FACILITATOR

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



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

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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.)

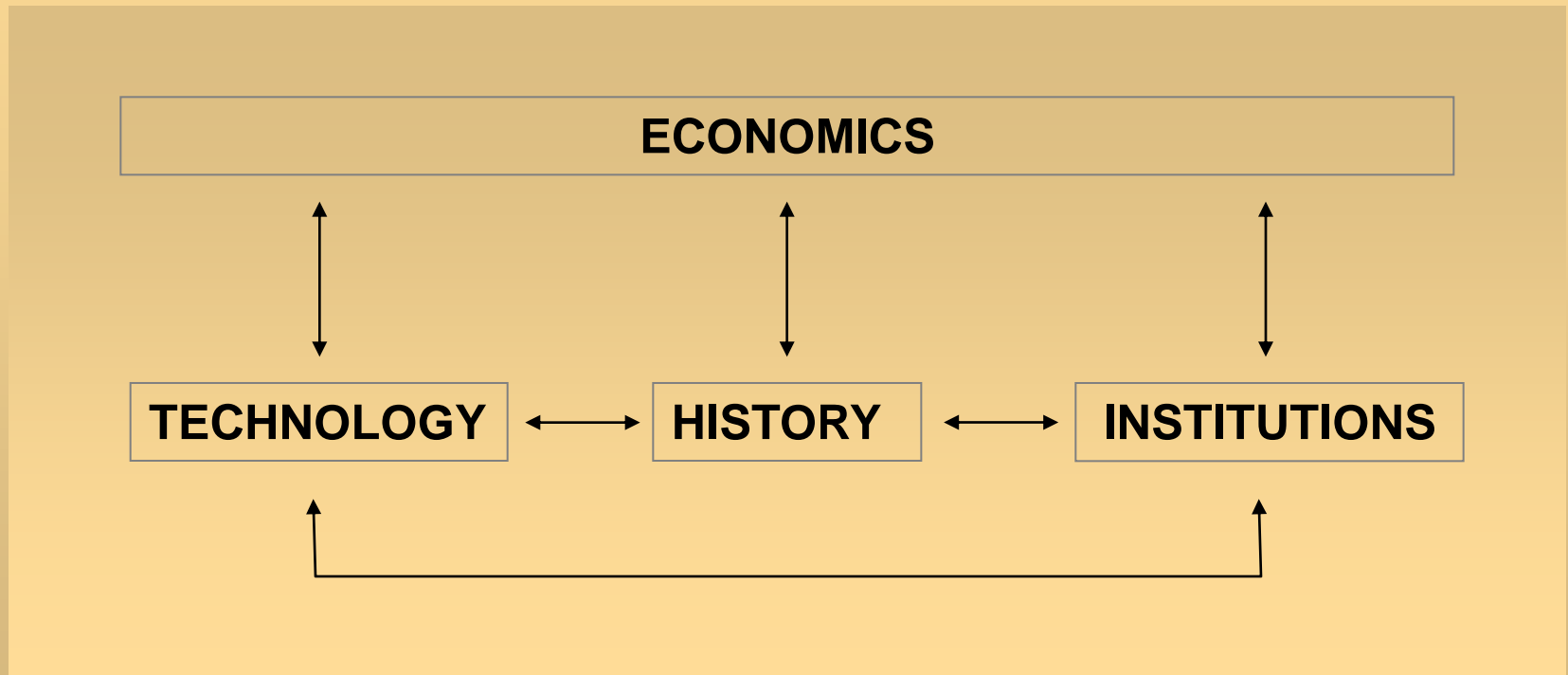
AN INTELLIGENT AND INFORMED TILTING OF THE PLAYING FIELD
GLOBALLY, NATIONALLY AND LOCALLY

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