

Tomorrow's Capitalism:

**GROWTH
AFTER
THE FINANCIAL
CRISIS**

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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 technical change is assimilated

THE COLLAPSE MARKS A STRUCTURAL SHIFT
IN THE ALIGNMENT OF FORCES
GUIDING GROWTH AND INNOVATION

If history is a guide...

A GLOBAL GOLDEN AGE MAY LIE AHEAD

WHAT IS THE BASIS
FOR MAKING
THOSE STATEMENTS?

The regular historical patterns
of diffusion and assimilation
of technological revolutions
in the economy and society

The analysis of how technological revolutions are assimilated shows powerful regularities and identifiable specificities

HISTORICAL REGULARITIES

- A technological revolution comes together every 40 or 60 years (at maturity of the previous)
- Each drives *a great surge of development* broken in two different periods one led by finance, the other by production
- A major financial collapse marks the beginning of the switch

EPOCHAL SPECIFICITIES

- Each revolution provides a different potential for growth with different leading industries
- Each brings a paradigm shift in the criteria for innovation and competitiveness
- The institutional context and the policy decisions define what part of the new potential will be deployed and how

Each great surge is unique due to historical, political and other contingent factors
But the recurring patterns have a fundamental causal explanation

The Theory of Great Surges of Development

(Schumpeterian up to a point)

Technical change in the market system
is constant but not continuous

Capitalism is revitalised by successive technological revolutions

- Widening and deepening market reach
- Raising the potential productivity levels
- Incorporating new social groups to social and economic progress (while leaving others out) and
- Encompassing greater and greater parts of the globe

The focus is on the interplay between
technology, the economy and social institutions

It is a complementary theory
that describes and explains
the way technical change drives and shapes long-term growth
and provides a context for other levels of analysis

FIVE GREAT SURGES OF DEVELOPMENT IN 240 YEARS

driven by successive technological revolutions

Spreading
from
core country

Britain

1771

The 'Industrial Revolution' (machines, factories and canals)

Britain

1829

Age of Steam, Coal, Iron and Railways

Britain

USA

1875

Age of Steel and Heavy Engineering (electrical, chemical, civil, naval)

Germany

USA

1908

Age of the Automobile, Oil, Petrochemicals and Mass Production

USA

1971

Age of Information Technology and Telecommunications

USA?

Europe?

Both?

Other?

20??

Age of Biotech, Nanotech, Bioelectronics and new materials?

Why call them revolutions?

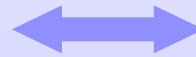
Because they transform the whole economy!

NEW INDUSTRIES

and

NEW PARADIGM FOR ALL

A powerful cluster
of visible interdependent
new and dynamic industries
and infrastructures



New multi-purpose technologies,
infrastructures and organisational
principles capable of modernising
the existing industries too



Explosive
growth
and
structural
change

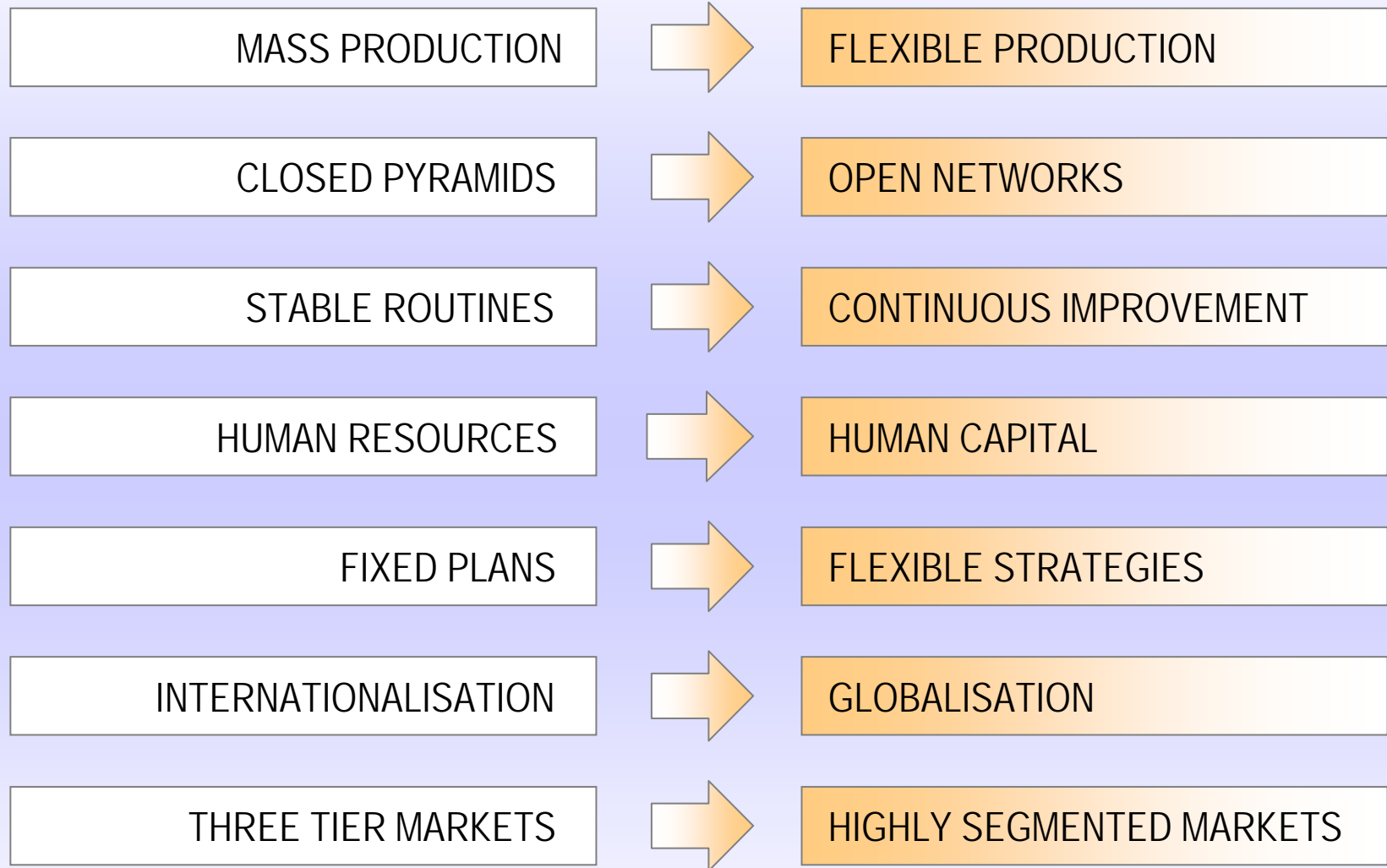


A quantum
jump in
innovation and
productivity
potential for all

A massive change in the direction of change

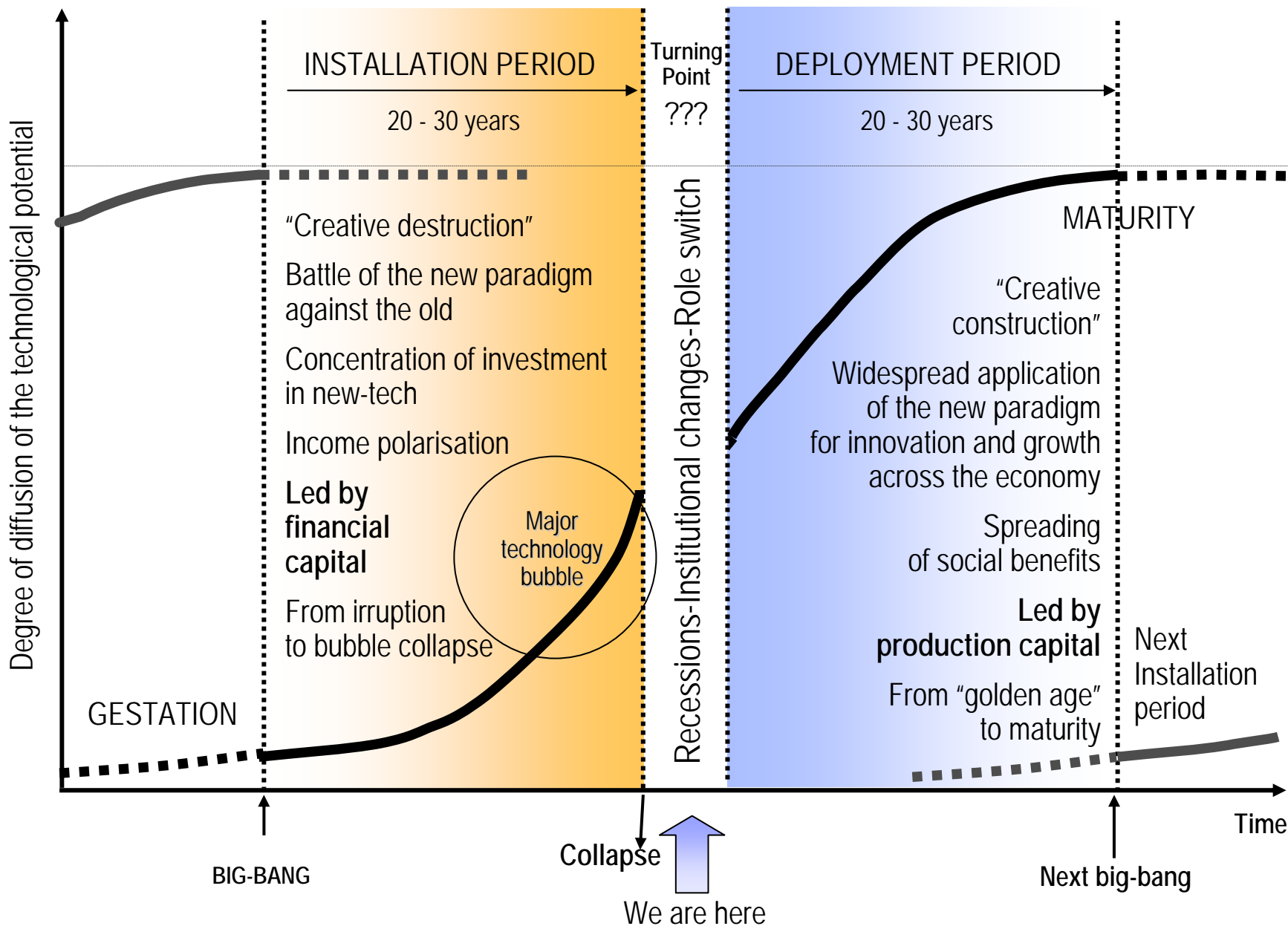
TRANSFORMING THE OPPORTUNITY SPACE AND
THE WAYS OF LIVING, WORKING AND COMMUNICATING

Some well-known aspects of the paradigm shift taking place since the 1970s



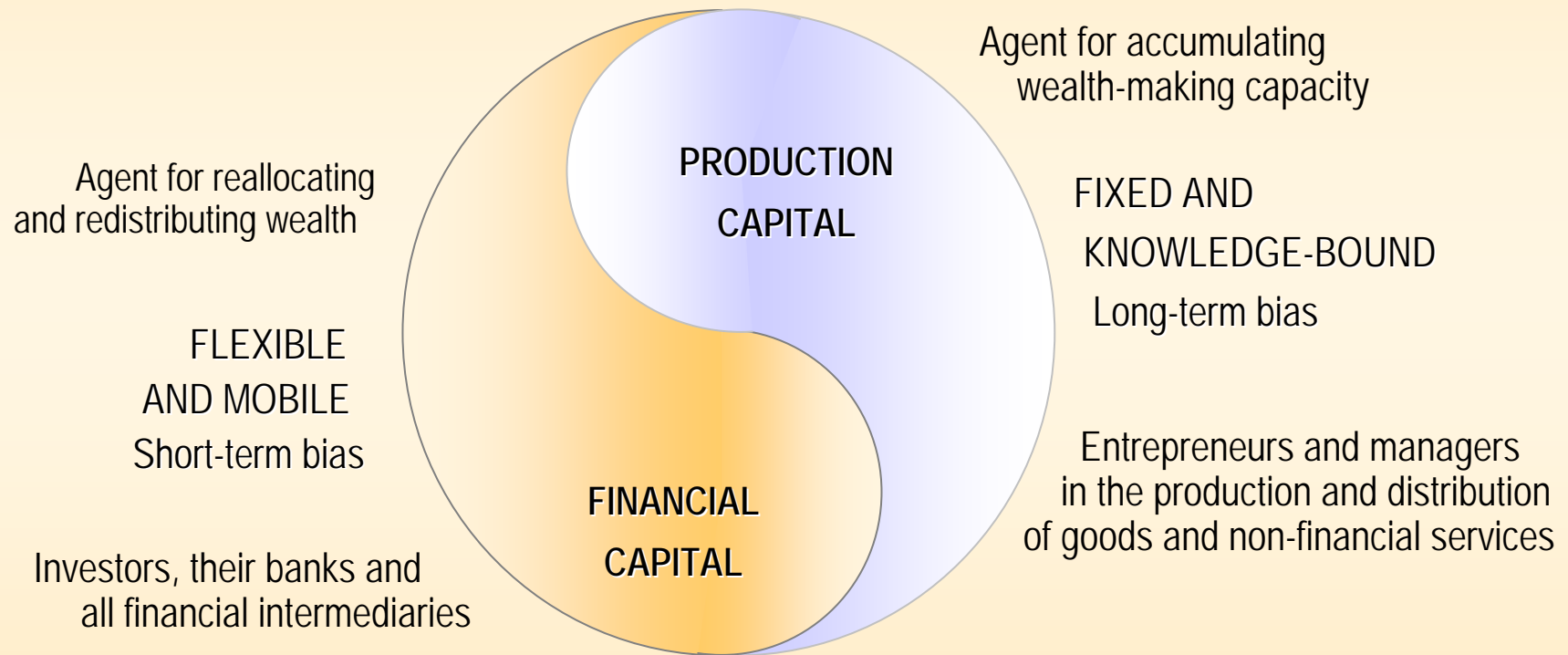
A radical change in best practice 'common sense'

Due to the difficulty of social absorption of revolutions and new paradigms
EACH GREAT SURGE IS BROKEN INTO TWO DIFFERENT PERIODS



Why this pattern? Why the role switch?

THE DYNAMICS OF THE CAPITALIST ECONOMY IS SHAPED BY TWO DIFFERENT AND FUNCTIONALLY SEPARATE PROFIT-SEEKING AGENTS



Financial capital can massively redirect resources and "force" new paradigm diffusion

Production capital is better for carrying growth and expansion within an established paradigm

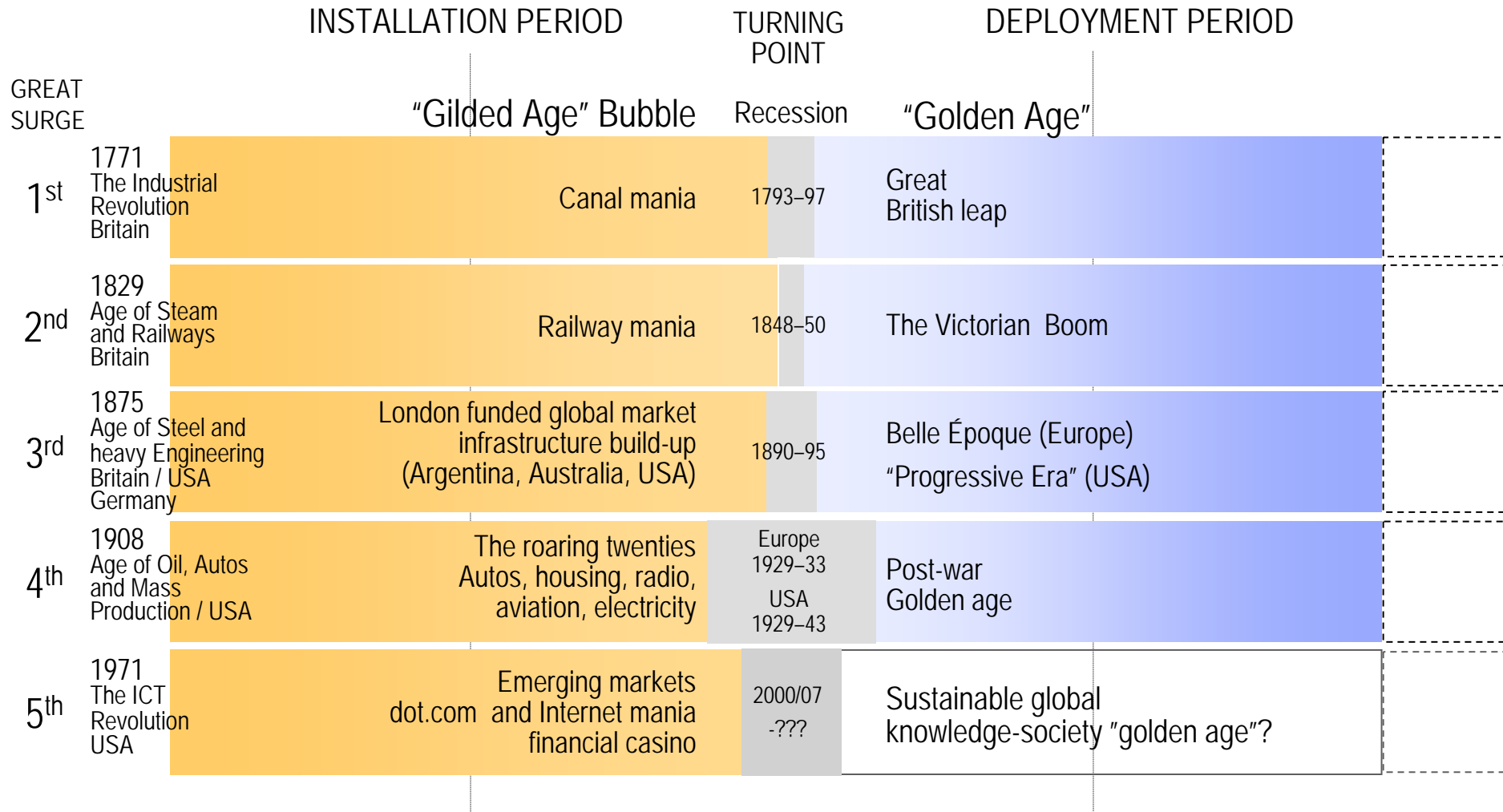
AT MATURITY
PRODUCTION CAPITAL BECOMES CONSERVATIVE

Financial capital breaks loose
backs the new entrepreneurs
and uses the new technologies to innovate in finance

AFTER THE MAJOR BUBBLE COLLAPSE
FINANCIAL CAPITAL BECOMES
AN OBSTACLE TO THE REAL ECONOMY

The new engines of growth are ready to lead the expansion
The State must come back actively to change the playing field

The historical record: bubble prosperities, recessions and golden ages



Each Golden Age has been facilitated by enabling regulation and by policies for widening markets and insuring social stability

THIS TIME THE MID-SURGE BUBBLE HAPPENED IN TWO STAGES

FIRST

Technological innovation

The INTERNET MANIA
in the 1990s

NASDAQ collapse
in 2000

SECOND

Financial innovation

The EASY CREDIT BOOM
in the 2000s

FINANCIAL MELTDOWN
in 2007-08

**SO WE ARE NOT FACING A MERE FINANCIAL CRISIS
BUT A STRUCTURAL SHIFT**

Understanding this is crucial
for finding effective solutions to the current crisis

TWO VERY DIFFERENT BUT INTERCONNECTED BUBBLES

1990s NASDAQ Boom

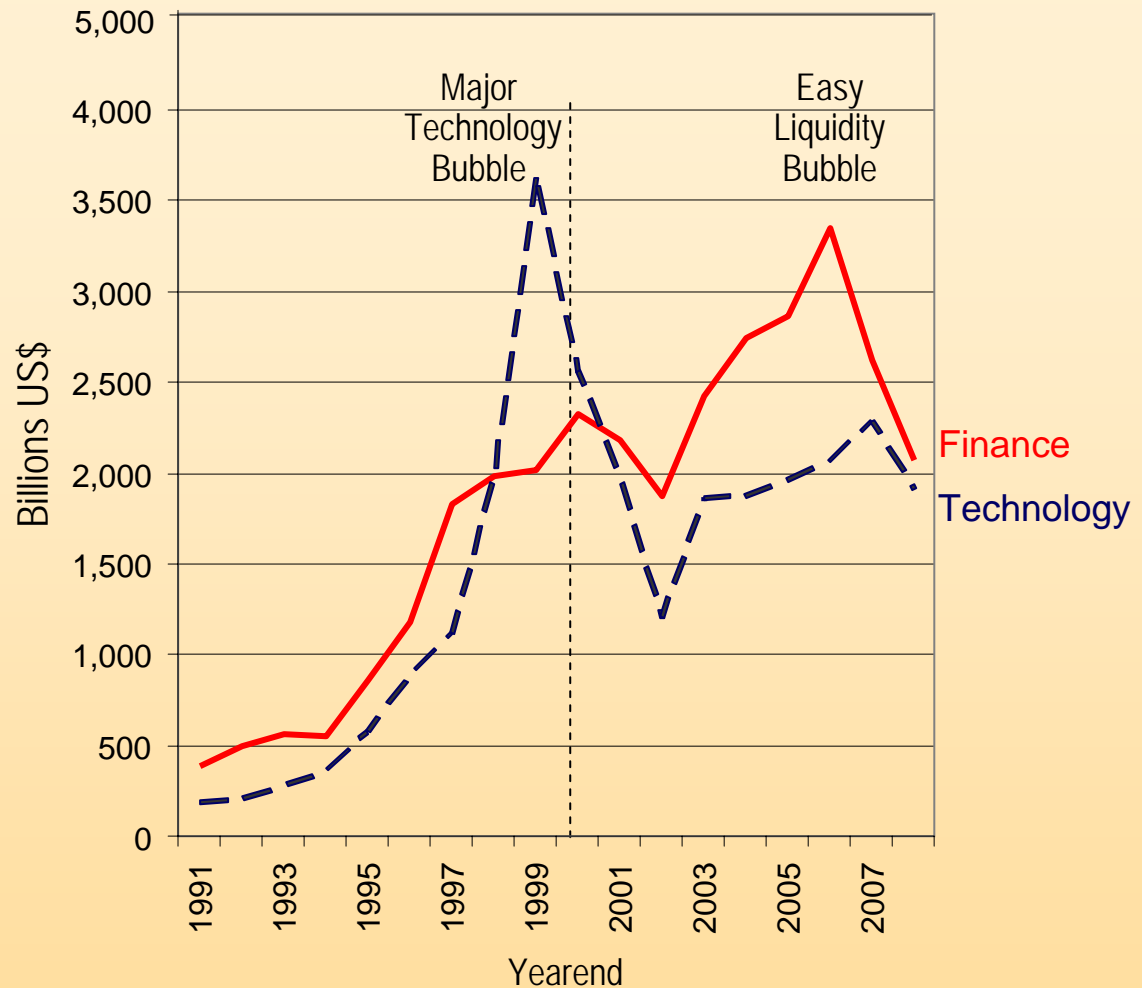
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2000s Easy-Liquidity Boom

Market capitalisation
of financial
and technology
stocks

US 1991-2008

Source: Thomson



The identification of the mechanisms that led to the casino will help regulate against repetition
**BUT ONLY AN UNDERSTANDING OF THE NATURE OF THE PHENOMENON
CAN GUIDE POLICY FOR GLOBAL ECONOMIC RECOVERY**

A SOLUTION IN THREE STEPS

Step one: Intensive therapy

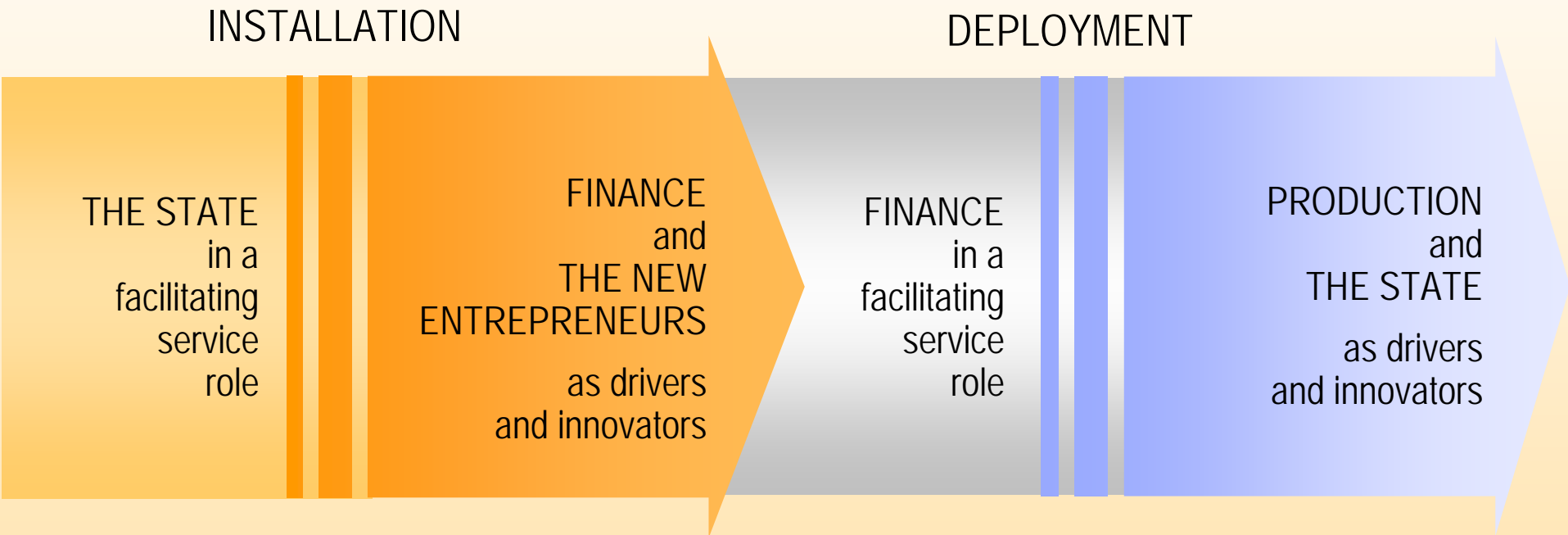
Step two: Redesign financial architecture

Step three: Enable structural shift

They all require institutional innovation

but the first two will only be successful
if they are geared to facilitating the third

The structural shift involves
A SHIFT IN THE DRIVERS OF INNOVATION



The conditions for innovation in production
will depend on the effectiveness of innovation in policies

Different periods: different role of the State

Installation THE "GILDED AGE"

The unrestrained market does it all

THE GOOD:

- Revive wealth creation
- Install the new industries
- Reward the innovators
- Overinvest in infrastructures
- Select the leaders

THE BAD:

- Skewed growth; polarised incomes
- Primacy of paper values over real ones
- Greed, corruption, short-termism
- Breakdown of collective values

INSTABILITY AND EXCLUSION

Recessions, recomposition and changeover

Deployment THE "GOLDEN AGE"

Intelligent come-back of the State

- PROMOTE LONG TERM GROWTH
- Regulate to restrain financial excesses
- Avoid monopolies; facilitate oligopolies
- Restore real values over paper ones
- Favour long-term investment in production
- Facilitate dense fabric of SMEs & KIBS

- RE-ESTABLISH SOCIAL COHESION
- Income distribution
- Social safety nets
- Expansion and stability of demand
- Restoring collective values

STABILITY AND INCLUSION

A SHIFT IN THE DYNAMICS OF GROWTH AND INNOVATION

"Gilded Age" Installation
"SUPPLY PUSH"

CONTEXT

Mature industries
are technologically exhausted
their markets are saturated

The old economy stagnates
The new technologies are only incipient

SOURCE OF DYNAMISM?

Ample finance
for massive investment and innovation
in new technologies,
industries and infrastructures
competing to select
new engines of growth
and to rejuvenate the rest

TIMES OF TURBULENT GROWTH
AND INCOME POLARISATION

Recessions, institutional recomposition and changeover

"Golden Age" Deployment
"DEMAND PULL"

CONTEXT

The new engines of growth are ready
The new infrastructure widens and deepens
market access

The old industries are rejuvenated
The new paradigm has been learned

A huge potential for growth is installed

SOURCE OF DYNAMISM?

Expansion of demand
(public and private)
and reshaping of its profile
(direct or indirect income redistribution)
to enable production growth
and constant innovation

TIMES OF BUILD-OUT, STABLE GROWTH
AND INCREASING SOCIAL WELL BEING

FOUR CRUCIAL OUTCOMES
WILL DEPEND ON ADEQUATE
INSTITUTIONAL INNOVATION:

1. Whether finance abandons the casino and concentrates on financing production
2. Whether the context is clearly favourable to production innovation and expansion
3. Whether society fully benefits from the potential of the new technologies (full employment and well being)
4. Whether widespread production globalisation replaces trade and finance globalisation

CRITERIA FOR "ADEQUATE"?

Consistent with the paradigm

Positive sum-game between business and society

AN ENORMOUS TECHNOLOGICAL POTENTIAL
FOR HIGHLY PROFITABLE INNOVATION AND EXPANSION
IS ALREADY INSTALLED

It stems from the power of the technologies and infrastructure
of the information revolution
and its techno-economic paradigm

It is enough for healthy growth in the OECD countries
and extensive growth across the whole developing world
(guaranteeing increasing markets for each other)

It is equivalent to the potential
that drove the Post-War Golden Age
but on a global scale

BUT IT HAS TO BE GUIDED
BY GOVERNMENTS, BUSINESS AND SOCIETY

Technology and profitability set the space of the possible

SOCIO- AND GEO-POLITICAL FORCES SHAPE THE DIRECTION

Cheap energy,
materials and transport

**Mass
production**

Suburbanisation
Electrification

Recent World War/Cold War
Abundant energy and materials

HOMOGENISATION

The American Way of Life
Welfare State: workers as "middle class"
International core and periphery

Cheap information
processing and transmission

**Flexible
production
(ICT)**

Globalisation/Emerging countries
Informatisation

Climate change/ "New wars"
Limits to energy and materials

VARIETY ON A COMMON BASE

Sustainable "glocal" lifestyles
"Equivalent satisfaction"
Increasingly global growth and well being

UTOPIAN OR REALISTIC?

It sounded utopian to say
in mid-1930s DEPRESSION:

Blue collar workers will have
lifetime jobs and
fully equipped suburban houses
with a car at the door

Most colonies
will gain independence

...or in the late 1960s:

Some of the values
of the hippie movement
[back to natural materials,
organic food, etc.]
will become the luxury norms

But it was realistic:

Increasing wages created
many more millions of consumers
for mass production and sustained growth

Rising middle classes in the developing world
adopted the "American Way of Life"
widening world markets for mass production

Innovations in natural textile fibres
have transformed the world of fashion

Innovation in distribution logistics
have made organic foods the premium segment
in supermarkets

Shifts in consumption patterns shift profit-making opportunities

In terms of options for the distribution of wealth creation and of its fruits
EACH PARADIGM DEFINES THE WIDE RANGE OF THE VIABLE

More inclusive

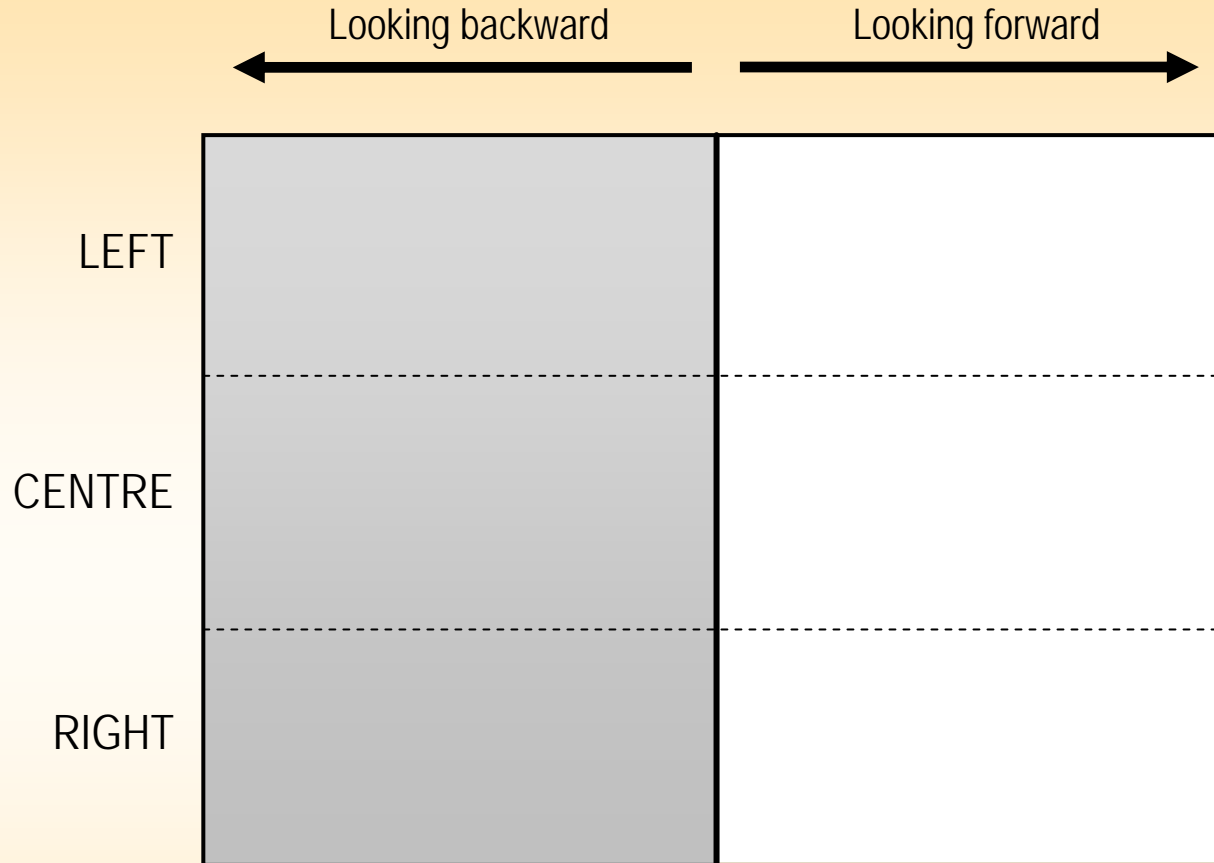


More exclusive

The space
for social confrontations
and negotiations

New
Paradigm

Each paradigm shift transforms the political spectrum



Different essential values and goals remain
but the effective methods for attaining them
vary with paradigm shifts

**SUCCESS IN THE NEW POLITICAL ARENA
IS MORE LIKELY WHEN LOOKING FORWARD**

Aiming for the best of possible outcomes
will require
an understanding of the opportunity space
and massive doses of imagination

Thank you!