

# Sea Power

*Future Navies – Present Challenges*

*Mega Trends*

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# What are the mega trends that will be the backdrop of future scenarios?

## Sustainability

- *Environmental, resource and fiscal: living within our means*

## Demographics

- *The economic slowdown and migration*

## Development

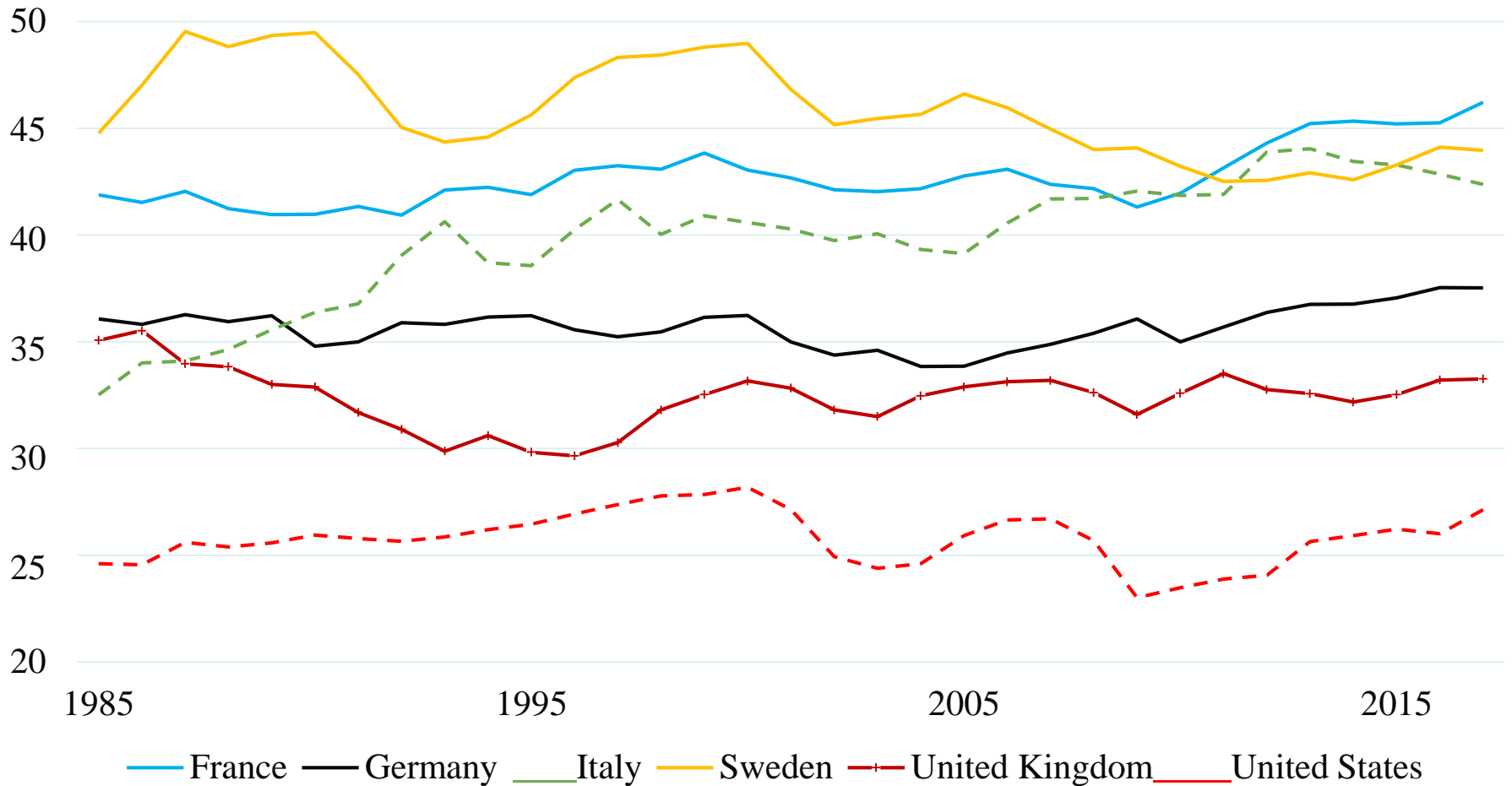
- *Preconditions and consequences of prosperity*

## Intellectual Revolution

- *More than the 4<sup>th</sup> Industrial Revolution*

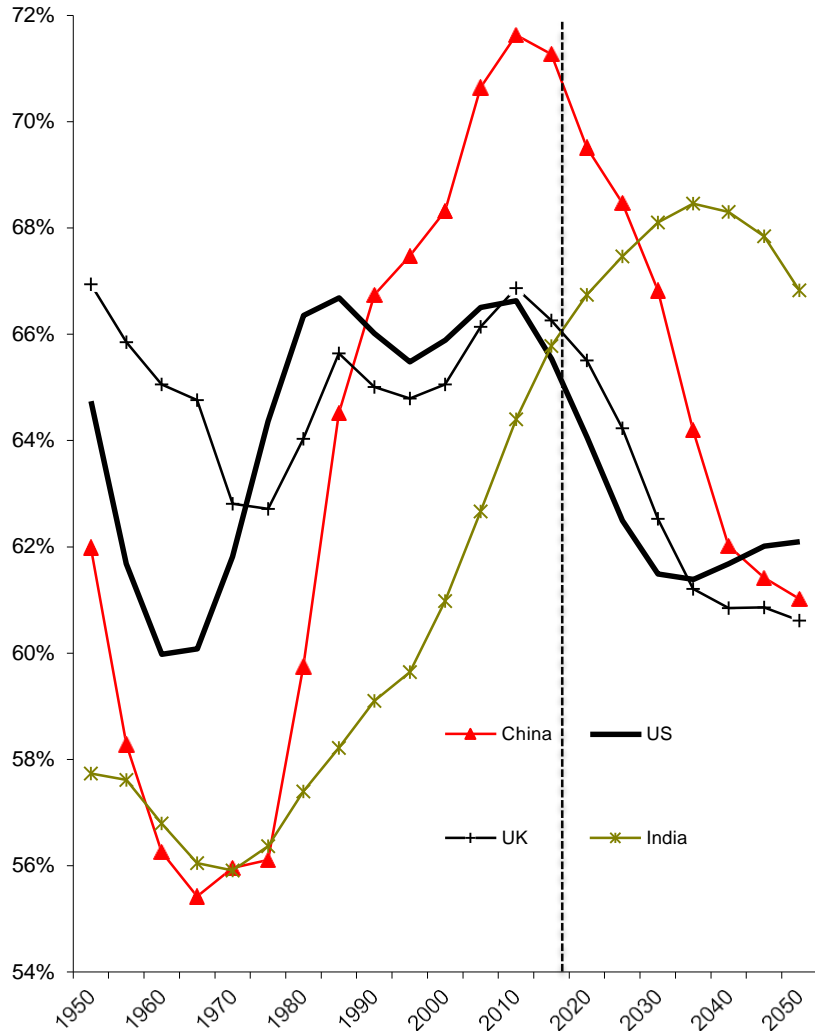
# Fiscal sustainability

*Tax Burden: % GDP*

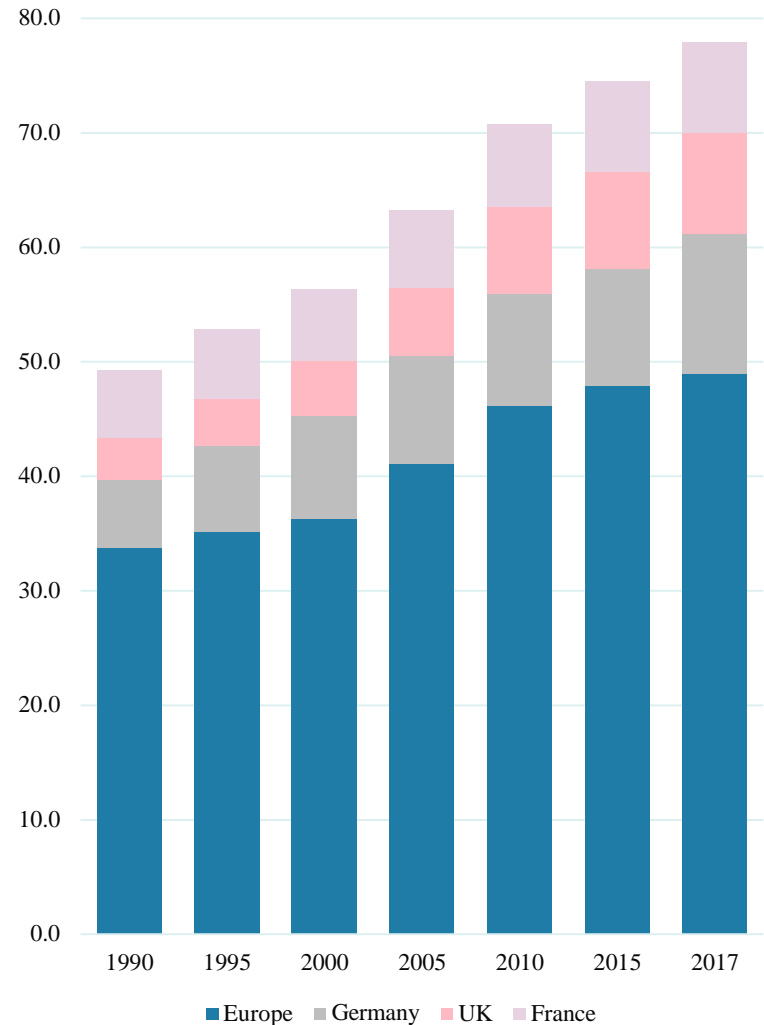


# Demographics

*Working Age Population  
(% of total Population)*



*Migrants in Europe  
(stock mln, excludes refugees)*



Source: UN Pop

# Paths to economic development



Agrarian

- Small elite – aristocratic or quasi-aristocratic
- Economic advancement was slow
- Periodic famine
- Key: land
- Income ~\$600 per annum



Industrial

From  
1830's

- Expanding elite, rapidly growing middle class
- Time to double GDP fell from 76 years (UK) to 7 years (S Korea)
- Energy is critical to economic advancement
- Key: capital
- Income ~\$2500 per annum

From  
1970's

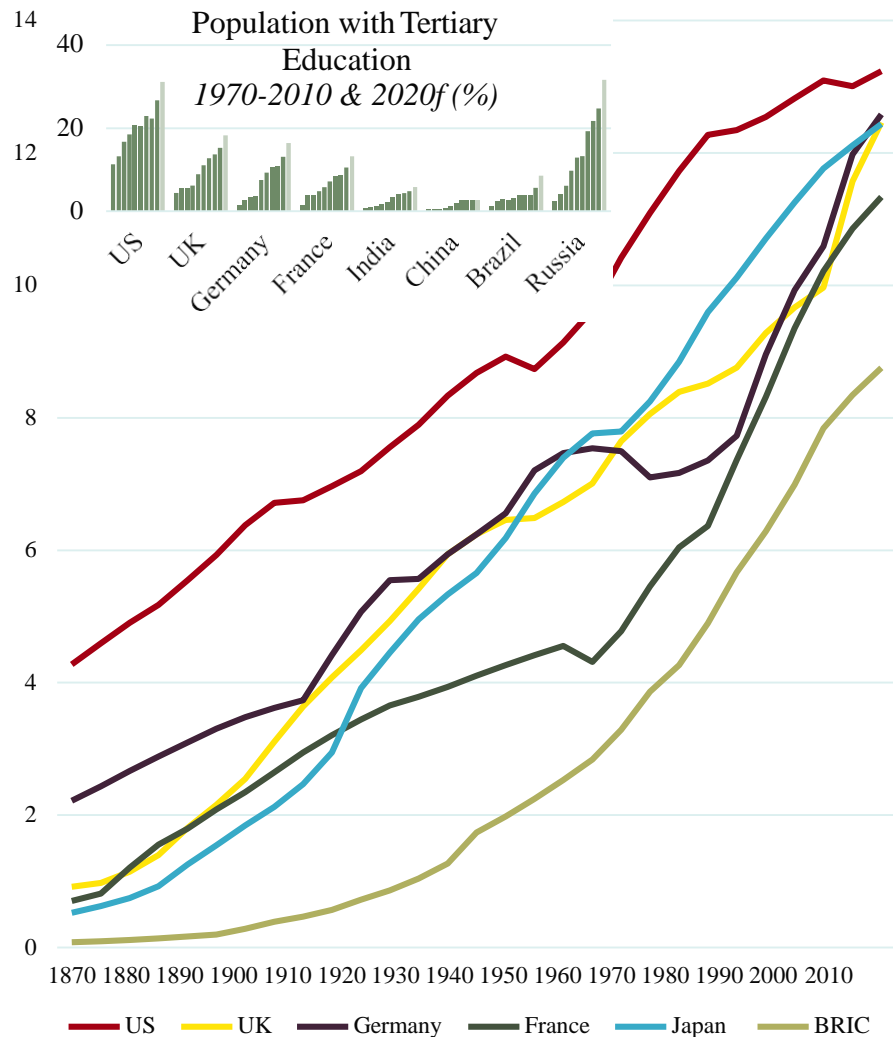


Intellectual

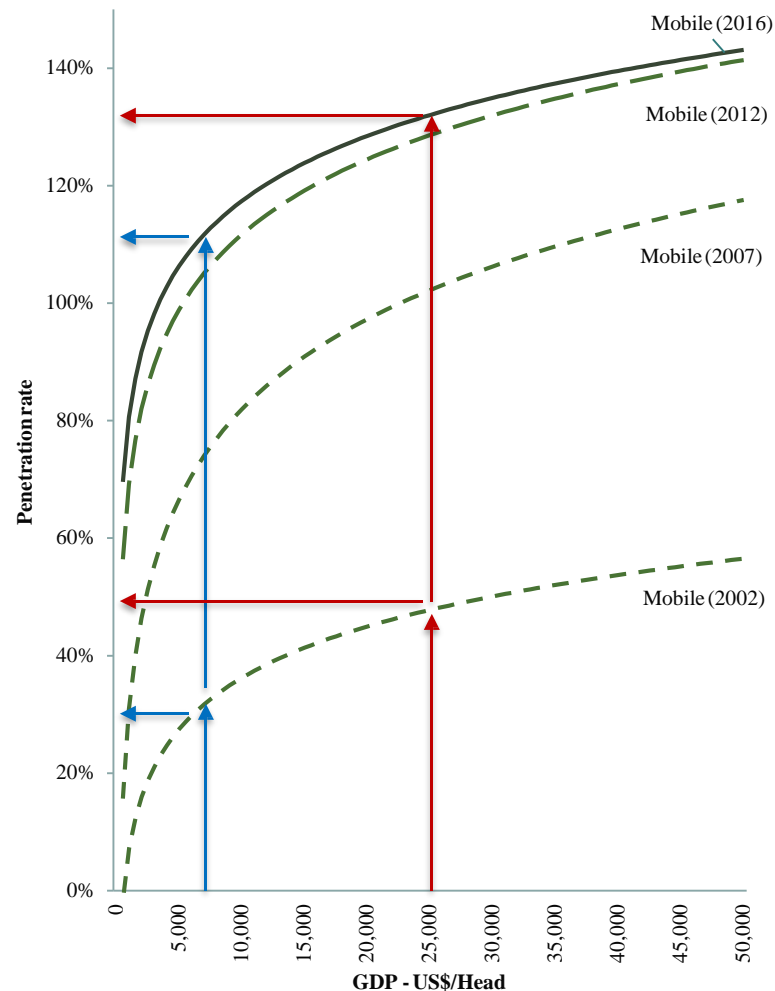
- Open, but self selecting, elite
- Economic advancement can be rapid, but not guaranteed
- Technology allows rapid diffusion of info
- Key: intellectual ability
- Income ~\$7500+ per annum

# Intellectual revolution

## Years of Schooling



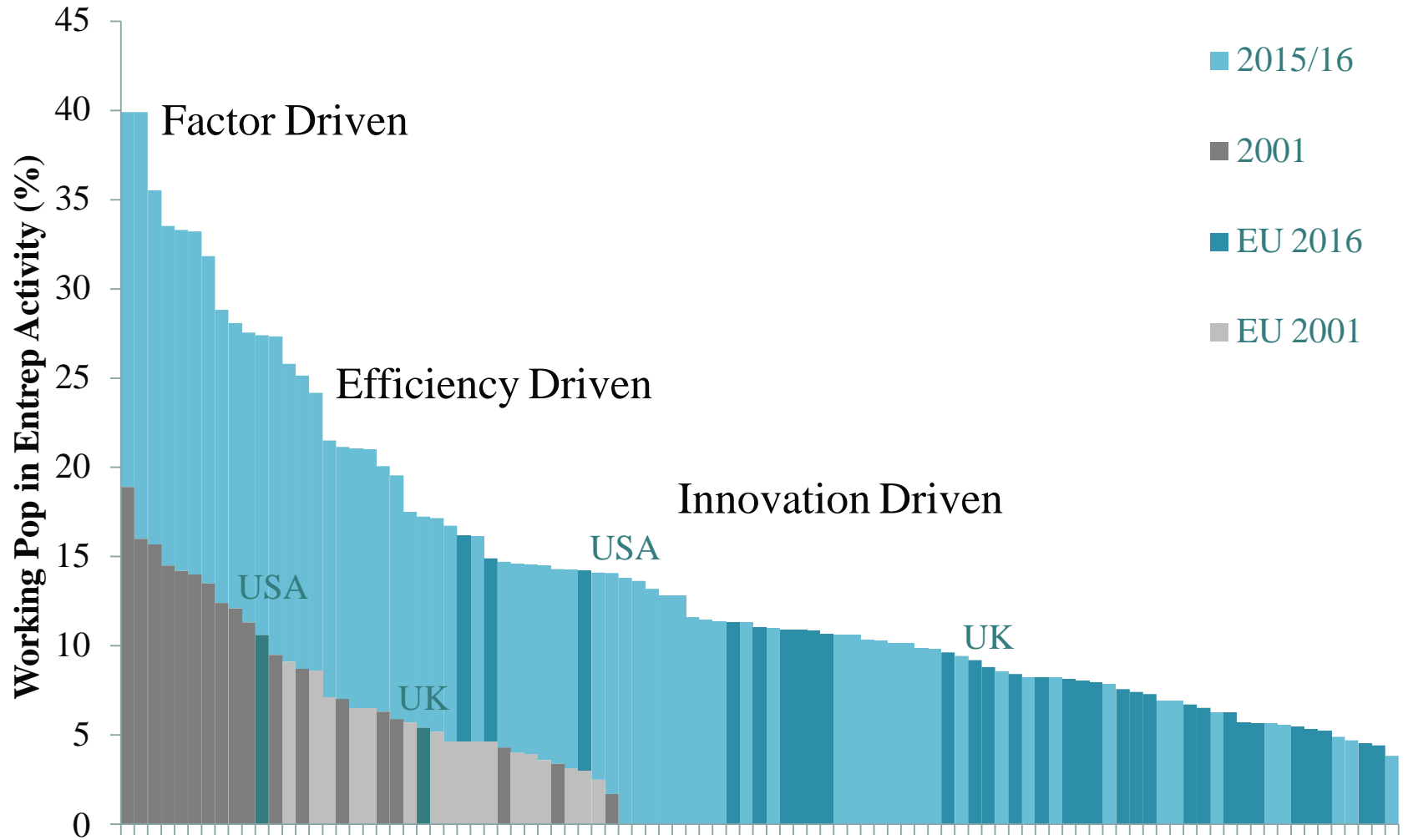
## Mobile Telecom Penetration



Source: Our World in Data, ITU

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# Explosion of entrepreneurship



Source: Global Entrepreneurship Monitor

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# What are the mega trends that will be the backdrop of future scenarios?

## [Fiscal] Sustainability

- *Money is going to remain tight*
- *Emphasis on using tech to reduce costs*

## Demographics

- *Decline in number of workers brings down trend rate of growth*
- *Migration is huge challenge*

## Development

- *Economic progress is unreliable and requires cultural change*
- *Pace of change is driven by more people gaining economic power*

## Intellectual Revolution

- *How value is created is changing*
- *Education, communications and entrepreneurship are the key drivers of future success*



# How do these mega trends play out against the Global Strategic Trends?

Powerful States

## Multilateralism

*States are the most influential actors in the global order. Almost all states use multilateral institutions to address global challenges, define legal frameworks and settle disputes. Good global governance is a characteristic of the of this world.*

## Multipolarity

*Major powers are the main international actors who form blocs with other geographically close r like-minded states. While states within a bloc co-operate under the leadership of the major power, the blocks compete for power and influence.*

## Network of Actors

*Power is shared between a variety of state and non-state actors. Co-operation and mega-city leaders are eth main non-state actors, but all actors co-operate to address global challenges and provide effective governance.*

## Fragmentation

*States, corporations, mega-cities and other non-state actors, including organised criminal and dissident groups, compete for power. Co-operation is rare and only sought when there is benefit to further an actor's interests.*

Co-operation

Competition

Diffusion of Power

Source: UK MoD Global Strategic Trends, 6<sup>th</sup> Ed

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