Commercial Shipbuilding: The Big Picture

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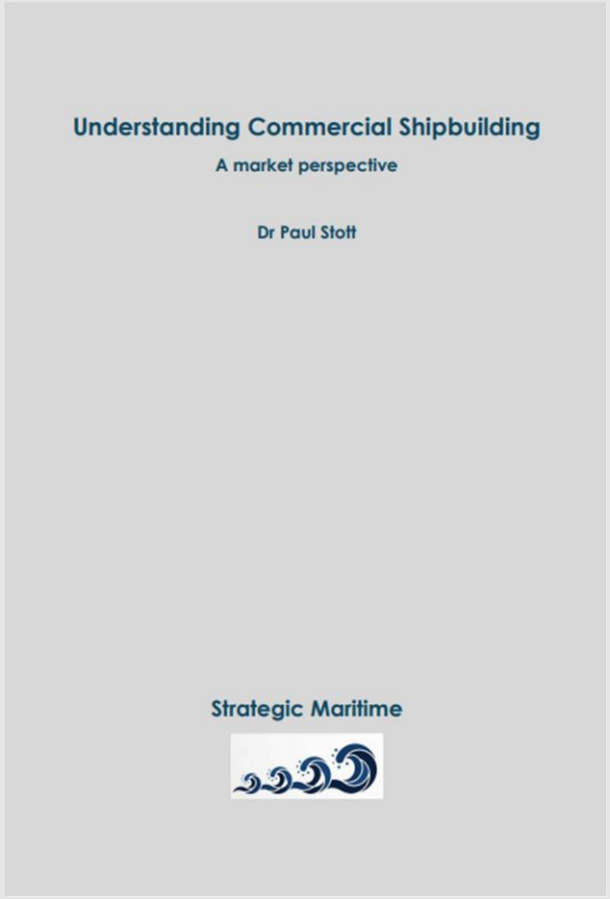
Strategic Maritime: Education and analysis for shipbuilding



Materials available free of charge at:
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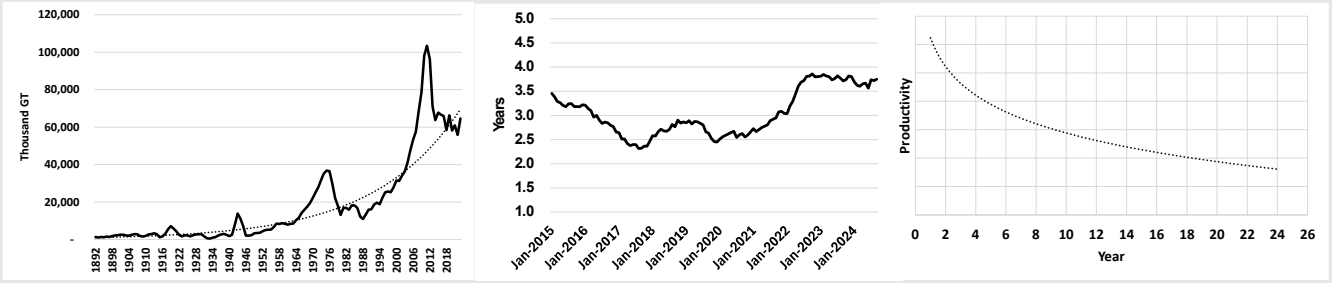
Last year I talked about three graphs that make commercial shipbuilding uniquely difficult



Dr Paul Stott, Newcastle University

This year I am going to build on this to look at where the global industry may be headed.

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Before I do that I need to talk about two points of commercial shipbuilding strategy (at the governmental level):

1. Why?
2. What?

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1. Why?

The question is: why would a government see value in dedicating time and resources to a commercial shipbuilding industry?

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Why is this not a trivial question?

It is, of course, trivial in relation to naval shipbuilding, for which there is a clear strategic justification.

But, why bother with commercial in addition?

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This is important because throughout much of Europe and elsewhere, shipbuilding has declined to a size below what might normally constitute an ‘industry sector’ and below a size that would ordinarily justify dedicating precious money and legislative time and effort.

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An effective strategy requires precision and targeting at all stages.

Why bother is the logical place to start – where is the value?

"Shipbuilding's coming home" is NOT a viable answer to this question.

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Why bother?

Let’s start with a historical perspective – there have been a number of important answers to this question.

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Why bother?

1. To support and maintain an empire

Without ships to move trade and to protect sea lanes an empire economy would be vulnerable.

- UK up to 1945

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Why bother?

2. To develop an industrial economy

Shipbuilding requires steel, machinery, skilled labour and much else, which powers up the industrial base:

- Japan post-WWII
- South Korea post-1970
- China post 2000

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Why bother?

But what about if you already have an industrial economy or are moving into a post-industrial phase? Why bother then?

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Why bother?

3. **To maintain a sector that is economically important and to maintain employment and prosperity.**
    - Europe in the 1980s
    - Japan post-2010
    - South Korea post-2030**?**

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Why bother?

But what if the sector has declined below any significant or critical mass? How can a country or region justify the cost of support?

- Europe post-2010
- United States post-2010?
- Canada post-2010?

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Why bother?

In the current context we need to reflect on the way that the world is currently changing – existing trading partnerships are evaporating and strategic uncertainty is increasing.

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Why bother?

4. Strategic resilience

A. Sovereignty over critical infrastructure.
B. Sustainability of the naval shipbuilding sector.

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Why bother?

4. A - Strategic resilience

- This has been the core justification for the Jones Act in USA for more than a century.
- It is sobering to consider that not a single wind farm construction vessel has been built in Europe.
- If we fall out with China, where will our critical infrastructure come from?

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Why bother?

4. B – Support for military shipbuilding

- If there is no shipbuilding ecosystem, the maintenance and preservation of all skills and experience is the responsibility of a very small number of companies.
- For example, without an ecosystem where would additional welders come from when a need arises? They only exist (indigenously) insofar that the very small number of companies has created them.
- What about other specialist knowledge and skills? They also only exist insofar as the very small number of companies has developed and preserved them.

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Why bother?

4. B – Support for military shipbuilding

- Put simply – it is very hard for a limited warship building industry to be self-sufficient without the eco-system.
- Importing of skills and expertise is likely to be inevitable.

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Why bother?

There is no single answer to this question and it will vary by country and over time – and the answer could actually be “don’t bother”.

What is essential is to answer this question objectively – without which it is not possible to justify the cost that is inevitable in supporting commercial shipbuilding.

We have to identify the value.

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2. What?

What do we mean by ‘commercial shipbuilding’, at which a strategy might be directed?

Why is this not a trivial question?

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2. What?

Challenger 2

Nissan Leaf

Would you include these two vehicles under the same industrial strategy?

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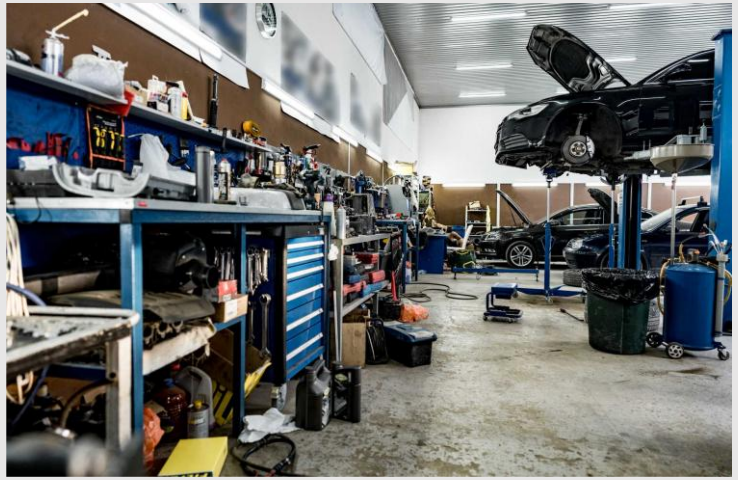
2. What?

Nissan Sunderland



A ‘muffler shop’

Would you include these two businesses under the same industrial strategy?

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2. What?

So, how could we hope to conclude a single strategy that covers both military and commercial shipbuilding?

Why do we insist on conflating shipbuilding and repair?

Each has its own specific strategic needs and aims – there can't be a single strategy for all shipyards and all nations

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2. What?

We also have a tendency to see commercial shipbuilding as a single market.

- There are at least 10 discrete commercial shipbuilding markets, all of which have specific strategic needs and aims.
- Specific targeting of strategy is essential for it to be effective.

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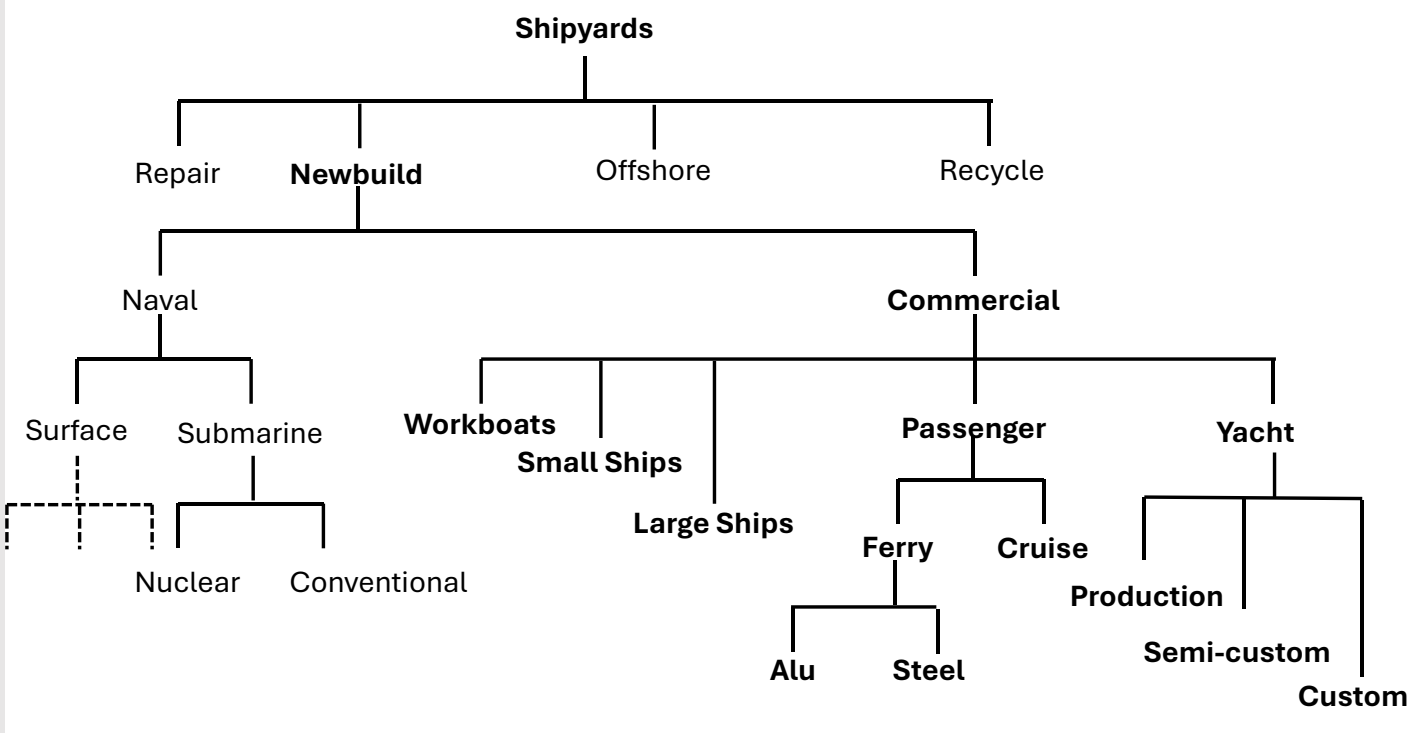
2. What?



Source: Understanding Commercial Shipbuilding (2026): www.strategicmaritime.co.uk

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2. What?

The minimum is to separate commercial and naval and then to target commercial correctly – what is important and what is sustainable?
The answer may be a relatively small sector – but size per se is not the point. National strategic value is the point.
Unless the question "why" has been answered it is not possible to answer "what" or to justify why an answer is important.

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There is, of course, a $64,000 elephant in this particular strategic room:

1. Why?
2. What?
3. **How?**

Resources to start thinking about this can be found on strategicmaritime.co.uk

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I am going to concentrate on two specific aspects:

1. Demand

2. Supply

In the context of aggregate total demand – what might be called “global shipbuilding”

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In the context of aggregate total demand – what might be called “global shipbuilding”

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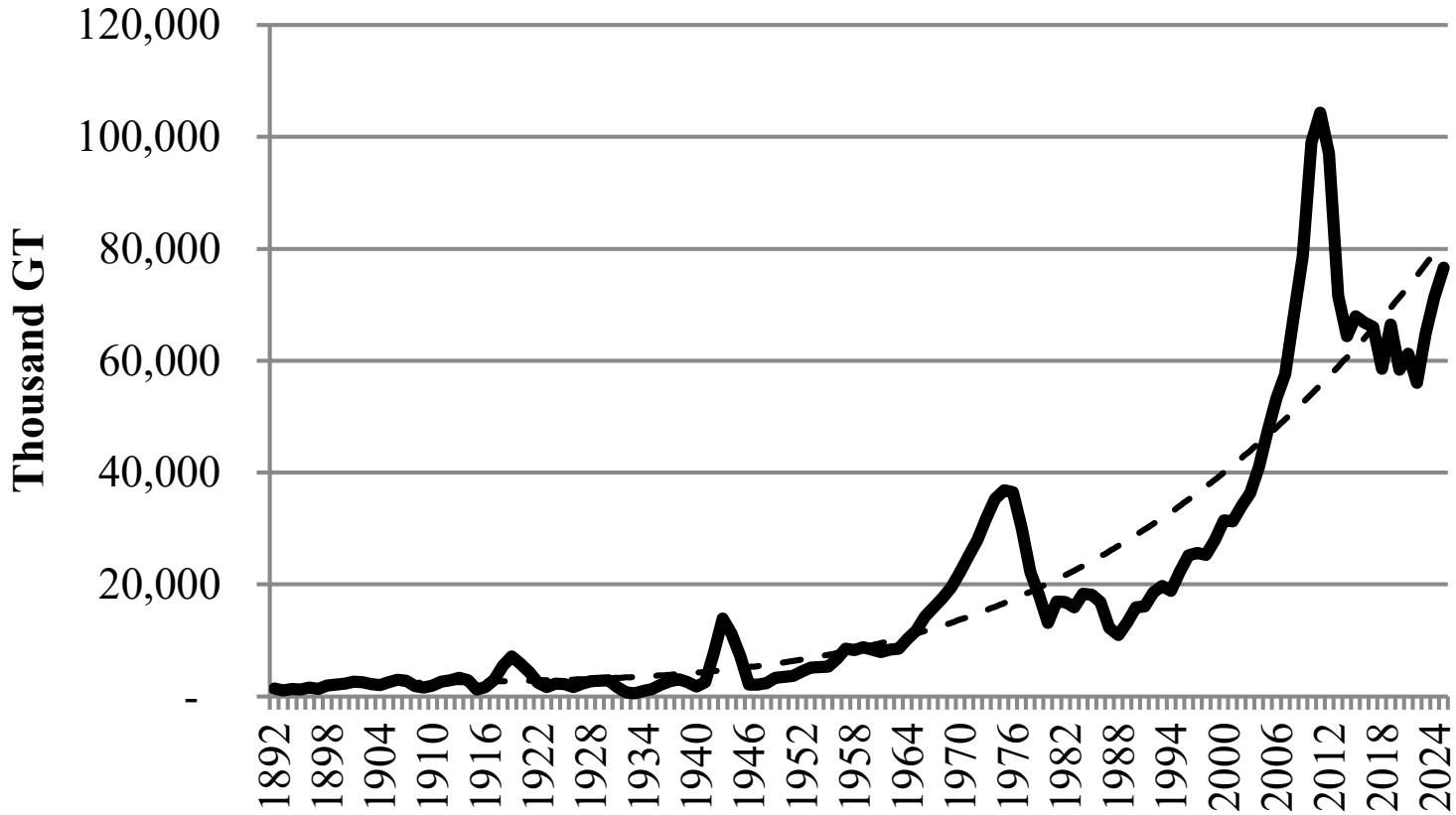

1. 4 Peaks with a pitch of approx. 30 years, superimposed on…
2. Underlying growth trend of 3.1% per annum (consistent with underlying seaborne trade growth)

Global shipbuilding output 1892 - 2025

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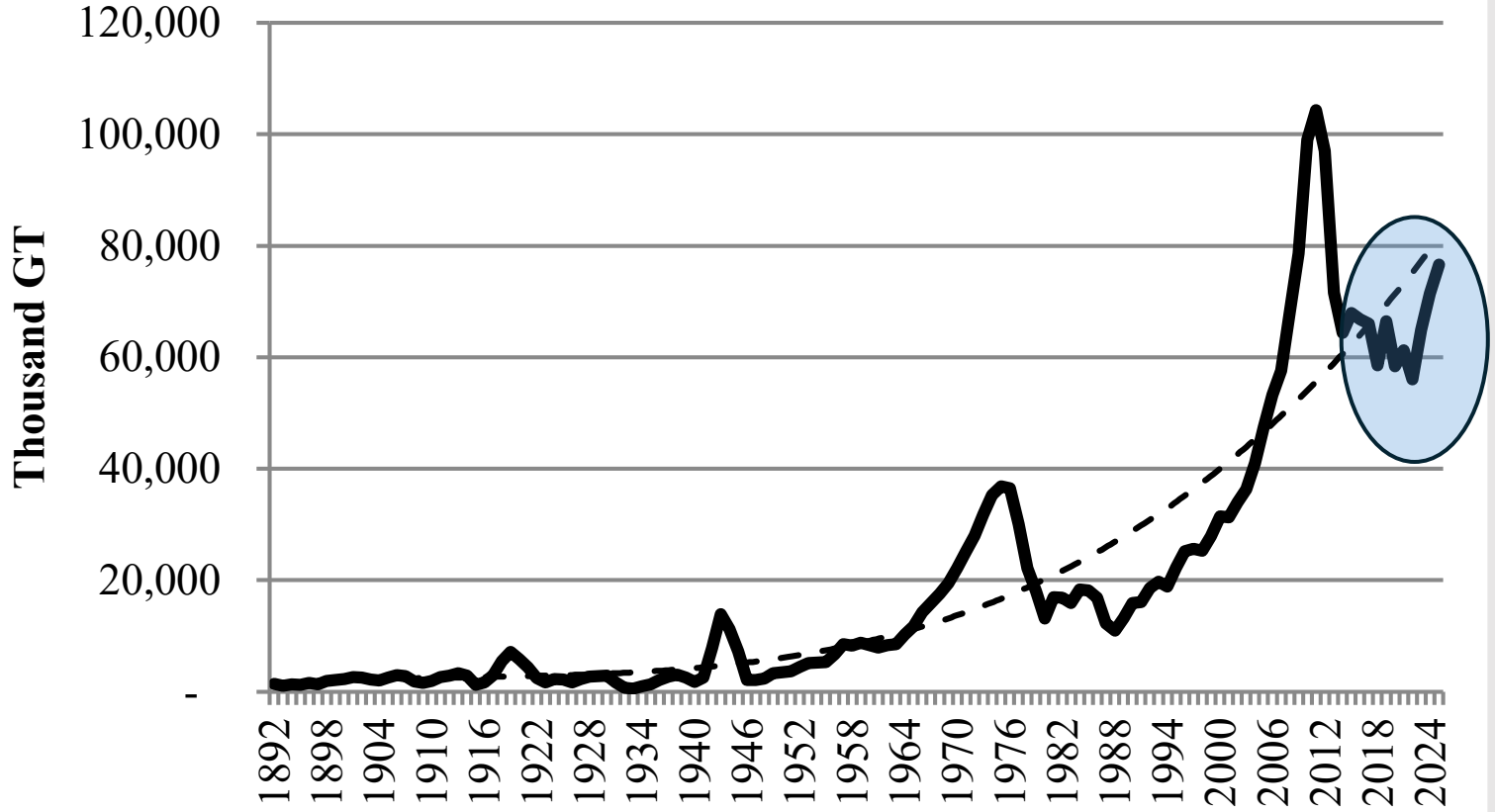

Global shipbuilding output 1892 - 2025

Is commercial shipbuilding poised to enter the next cyclical growth-phase?

What can we learn from the previous two cycles in the modern shipbuilding era?

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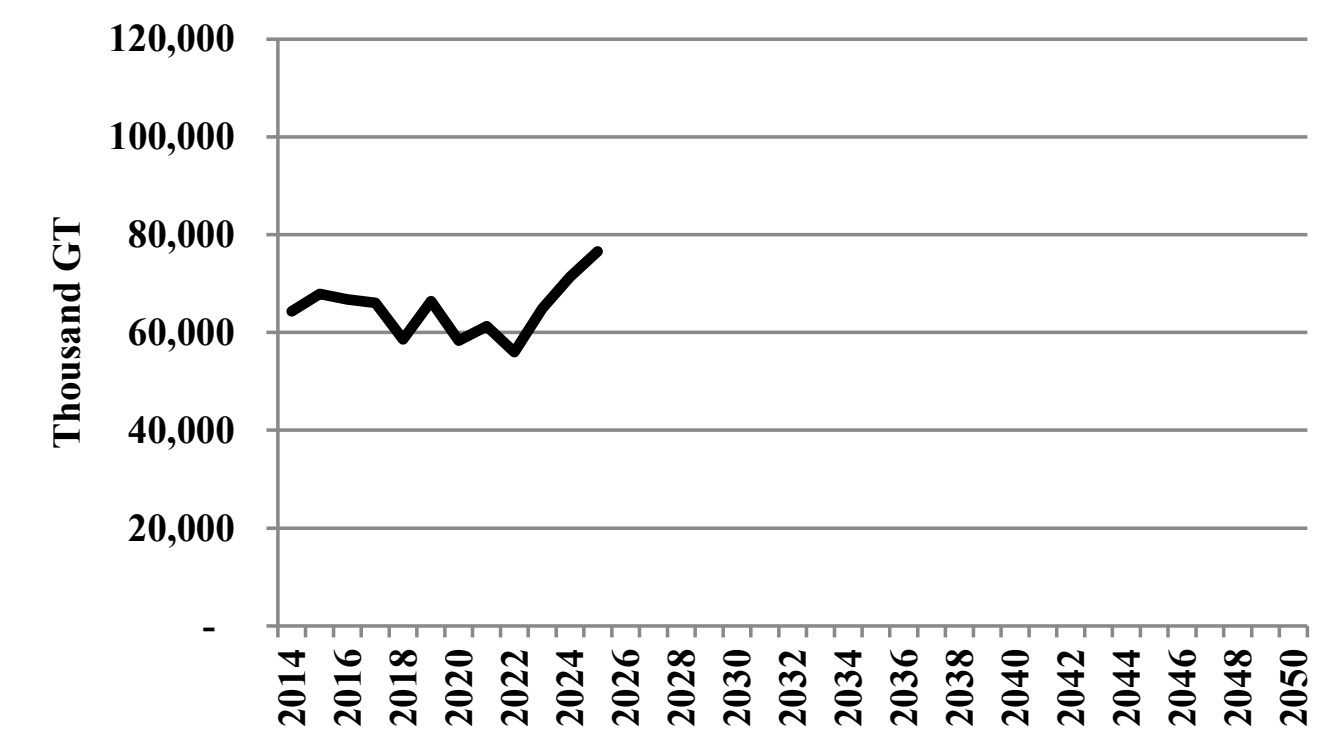
What happens next?



Global shipbuilding output 2014 - 2050

The answer is in three parts:

1. Will the **cyclicality** persist**?**
2. How will the underlying **trend** progress**?**
3. How will the **fleet respond** to that trend**?**

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What happens next?

I am going to talk about 1 and 2 only in this presentation

The answer is in three parts:

1. Will the **cyclicality** persist**?**
2. How will the underlying **trend** progress**?**
3. How will the **fleet respond** to that trend?

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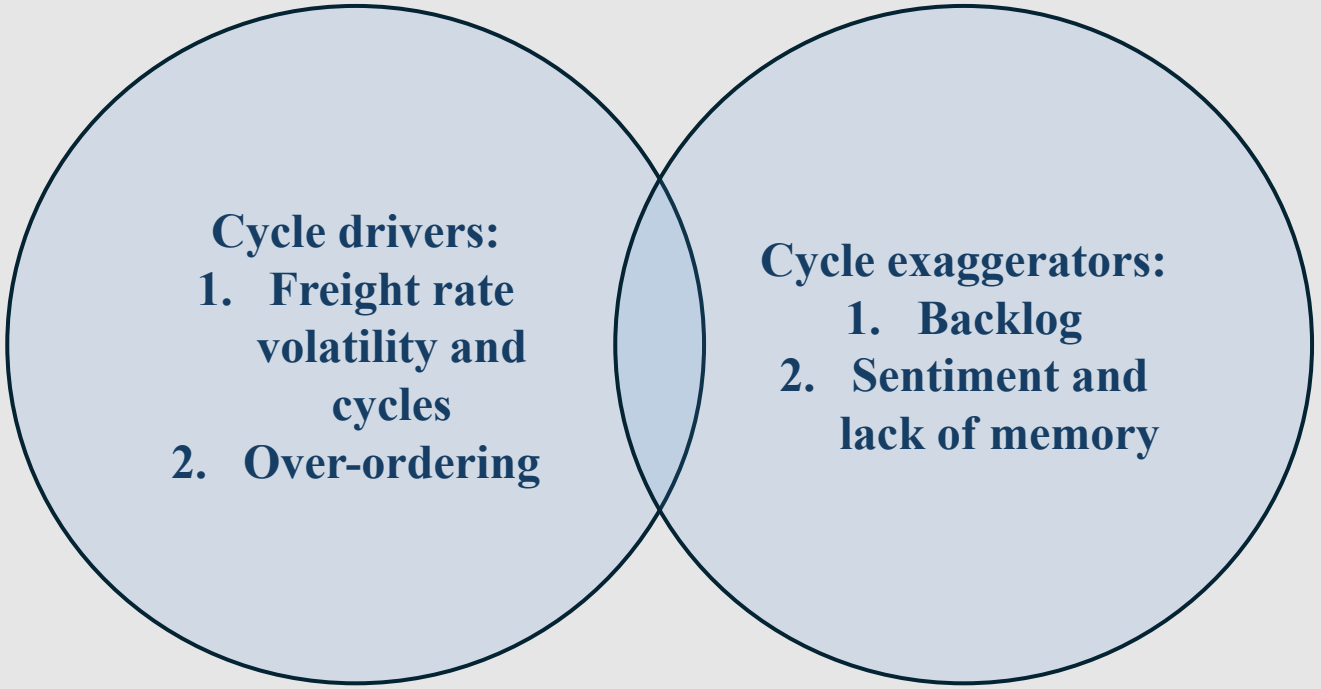
What happens next? - cyclicality

The causes of exaggerated cyclicality have not changed – so the cycle can be expected to continue in future (unless fundamentals change)

To forecast the shape of the cycle is the most difficult part – much harder than forecasting the underlying trend.



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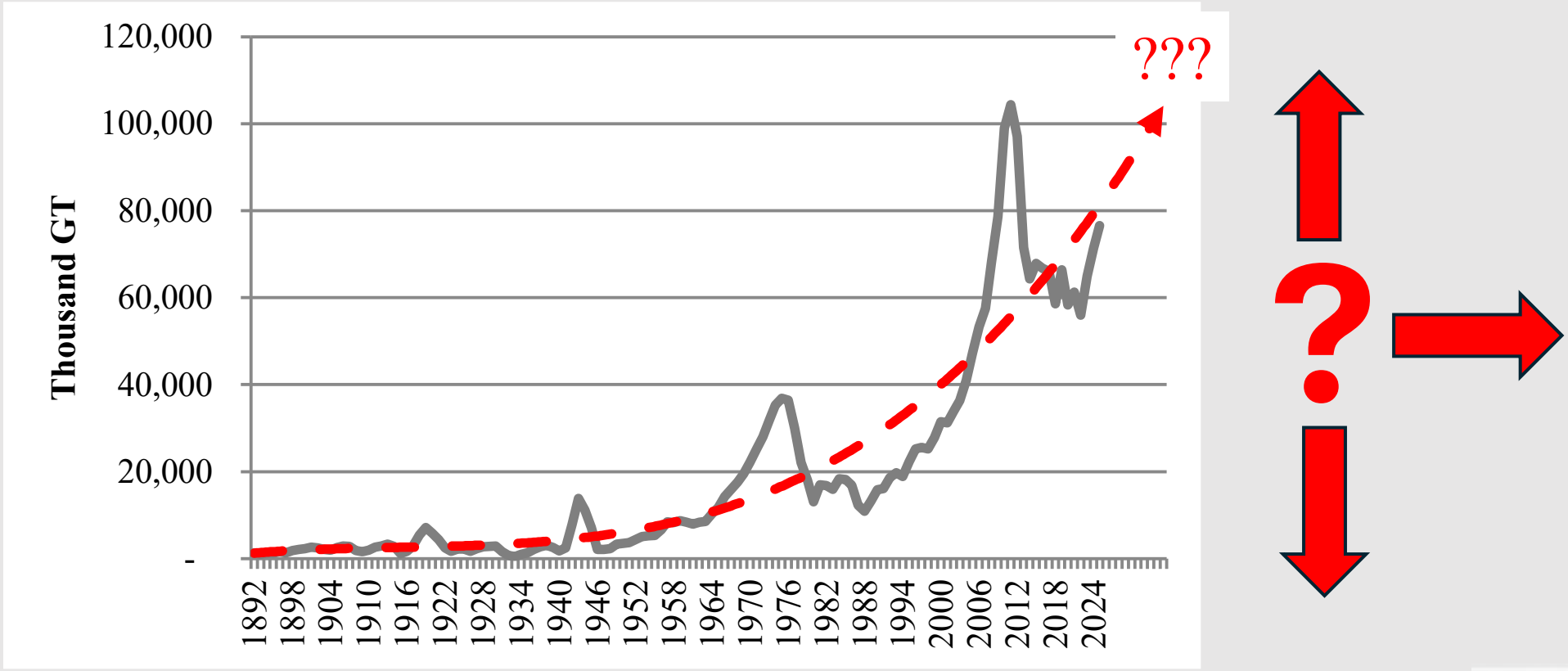
What happens next? - trend



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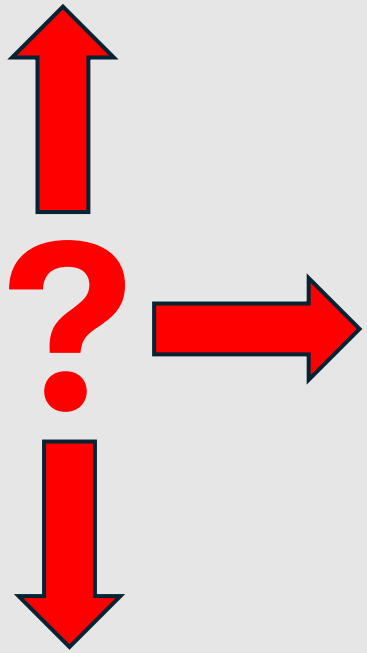
What happens next? - trend

To consider this the past demand cycles have to be viewed in the context of their causalities.



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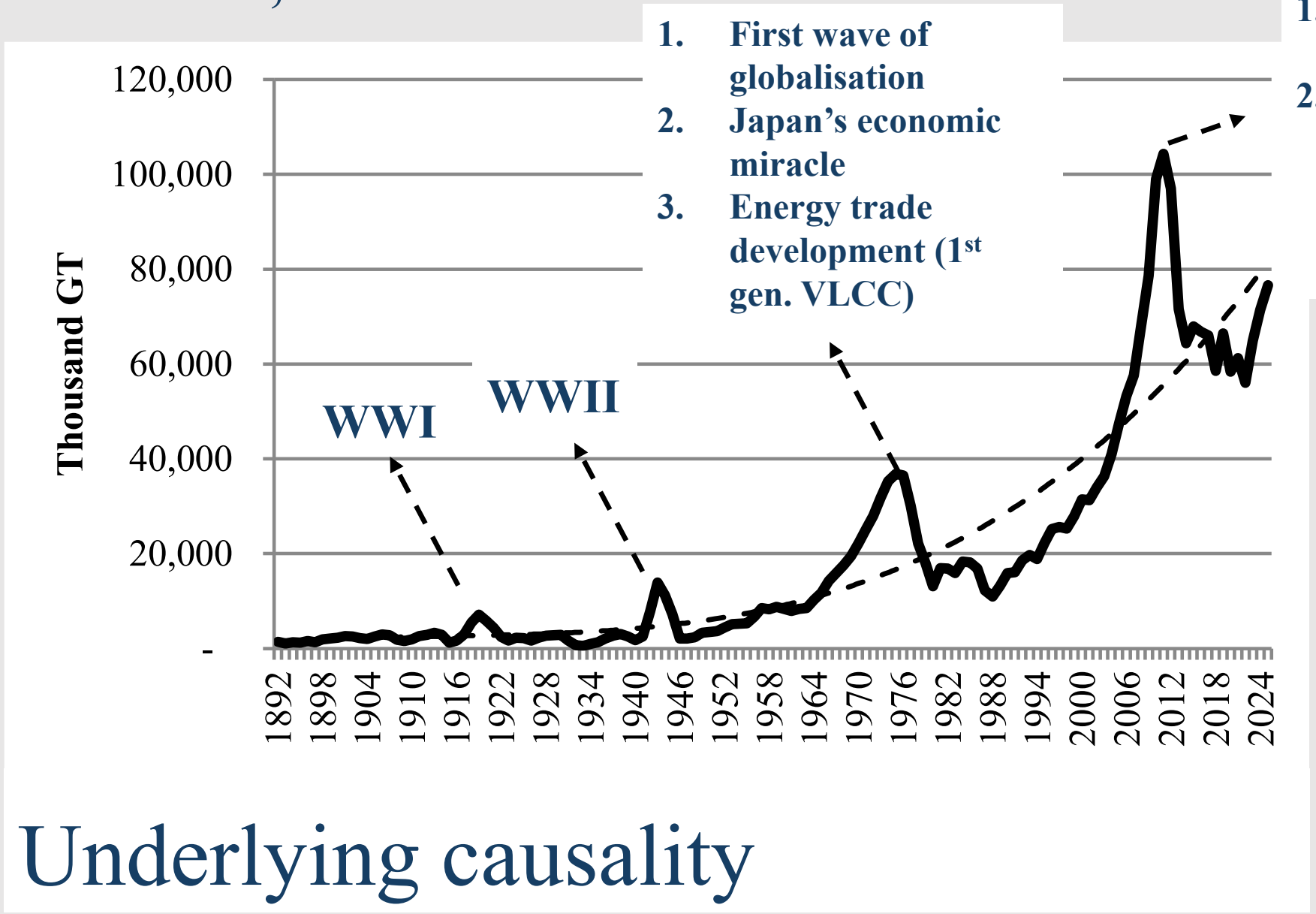

Underlying causality

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It is too early to say yet whether the current increase in output is the start of the next up-cycle – but probably not.

Contracting fell in 2025 and continues to be weak so far in 2026.

The current upswing is more likely a mini-boom related to three specific opportunities (LNG, large container and cruise) – but the cyclical upturn is likely not to be far away.

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So, what of the projection of an underlying trend – the growth in seaborne trade?

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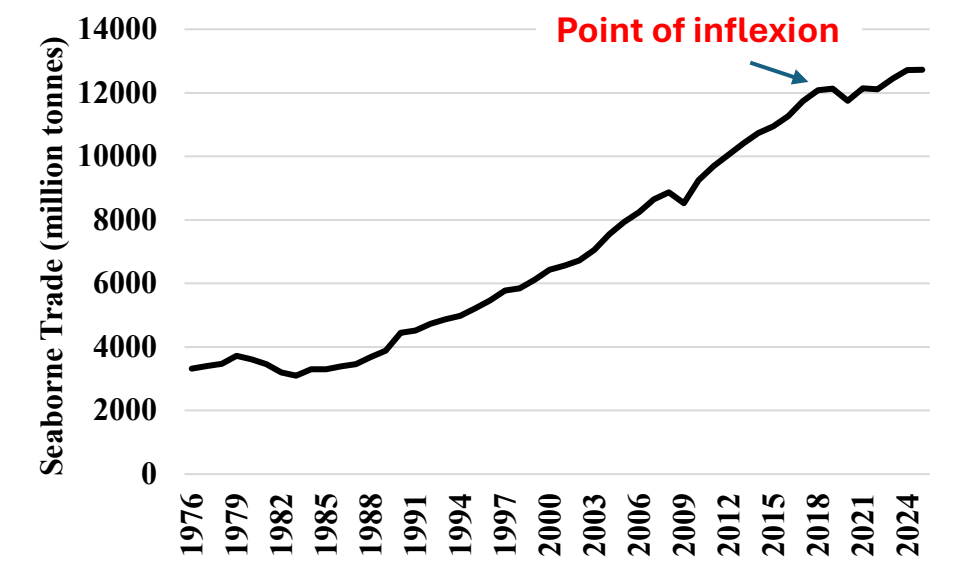

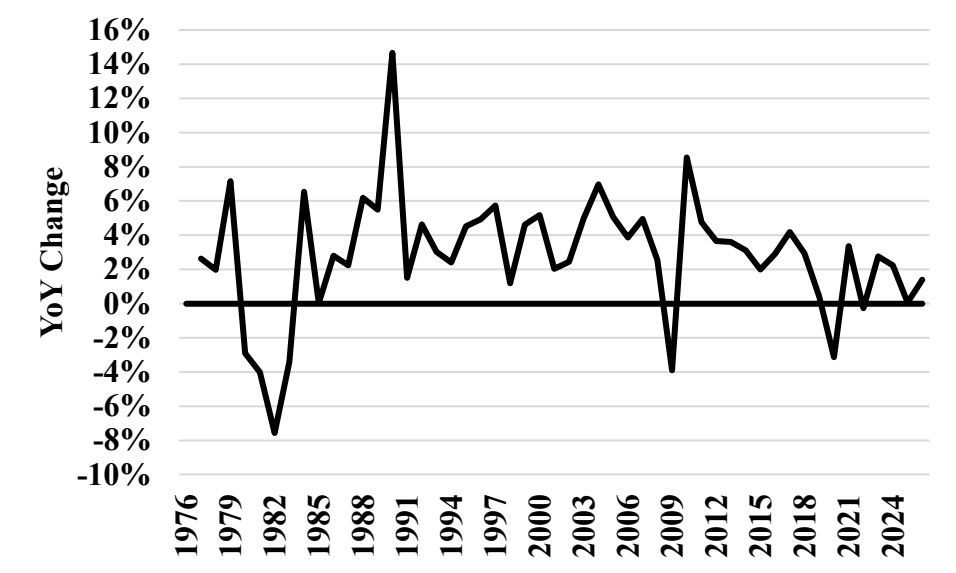

Seaborne trade has (in the past 50 years) rarely declined, but the rate of increase has been falling in the past five years. This would suggest that the next peak may not be proportionately as high as the previous peak compared to its predecessor.

High uncertainty means that the prospects are now somewhat in turmoil and forecasting is extremely difficult. A downturn in trade could see the next peak being lower than 2011.

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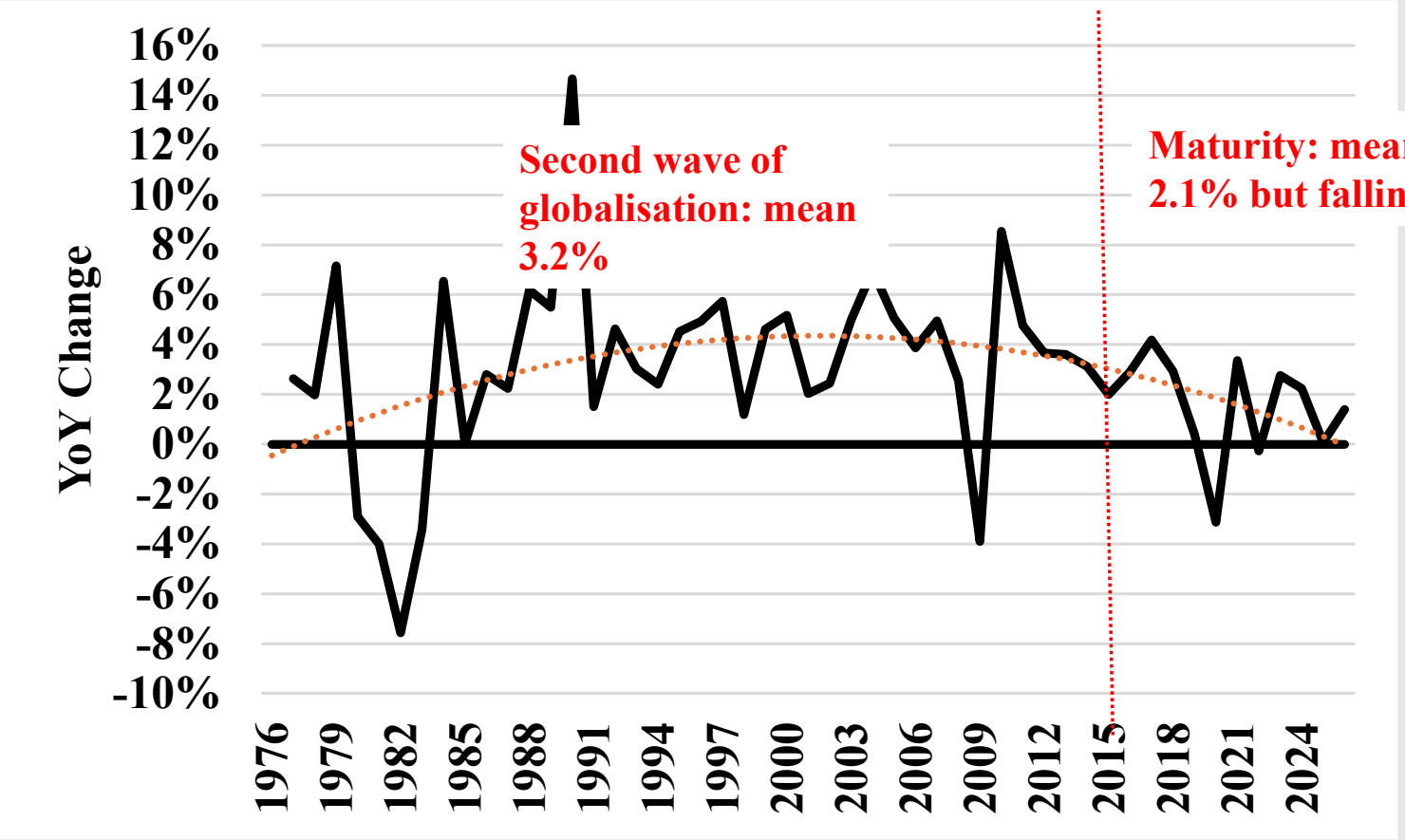

Future rate to 2050?.....

A possible categorisation of trade growth

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Seaborne trade - the big uncertainties:

1. China's future economic development
2. Protectionism and trade agreements
3. Changes in patterns of production and consumption
4. Energy usage and policy

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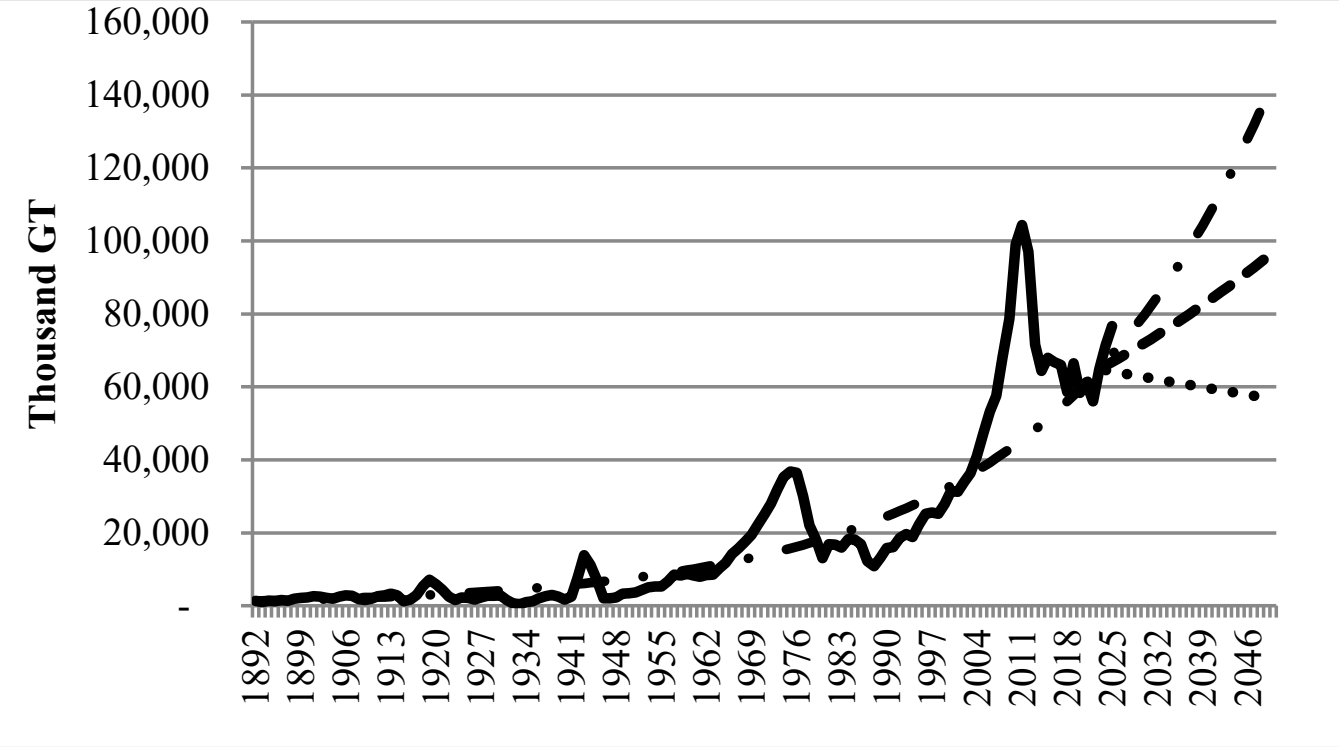
Three theoretical scenarios (trend only)

1. Status quo: 3% continued growth
2. Realistic (??): 1.5% future growth
3. Pessimistic (?): -0.5% future growth



1. Highly sensitive.
2. The cycle will be superimposed on these trends.
3. Possible peak around 2050?

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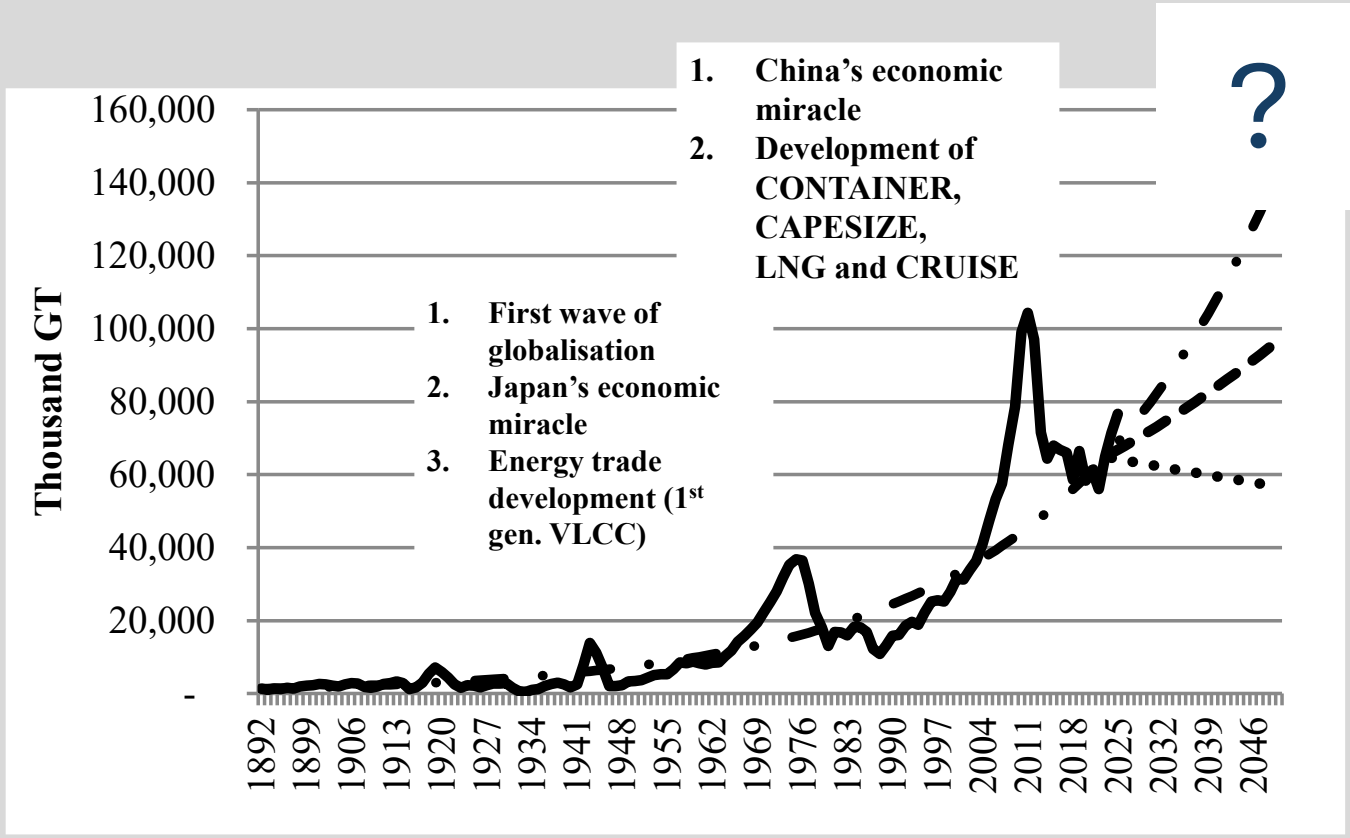
Developing a forecast



To develop this into a forecast:

1. The underlying fundamental factors need to be postulated;
2. The cycle drivers and exaggerators need to be modelled.

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I am going to concentrate on two specific aspects:

1. Demand
2. Supply

In the context of aggregate total demand – what might be called “global shipbuilding”

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Shipbuilding supply-side changes?

Last year I talked about the problems of labour shortage in global shipbuilding – this problem remains.

Labour shortage will restrict capacity and this will in future increase freight rates..
..which in turn will raise shipbuilding prices – which will be good for some shipbuilders.

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Shipbuilding supply-side changes?

This year I would like to talk briefly about the development of industries – who will be market leading in 2050?

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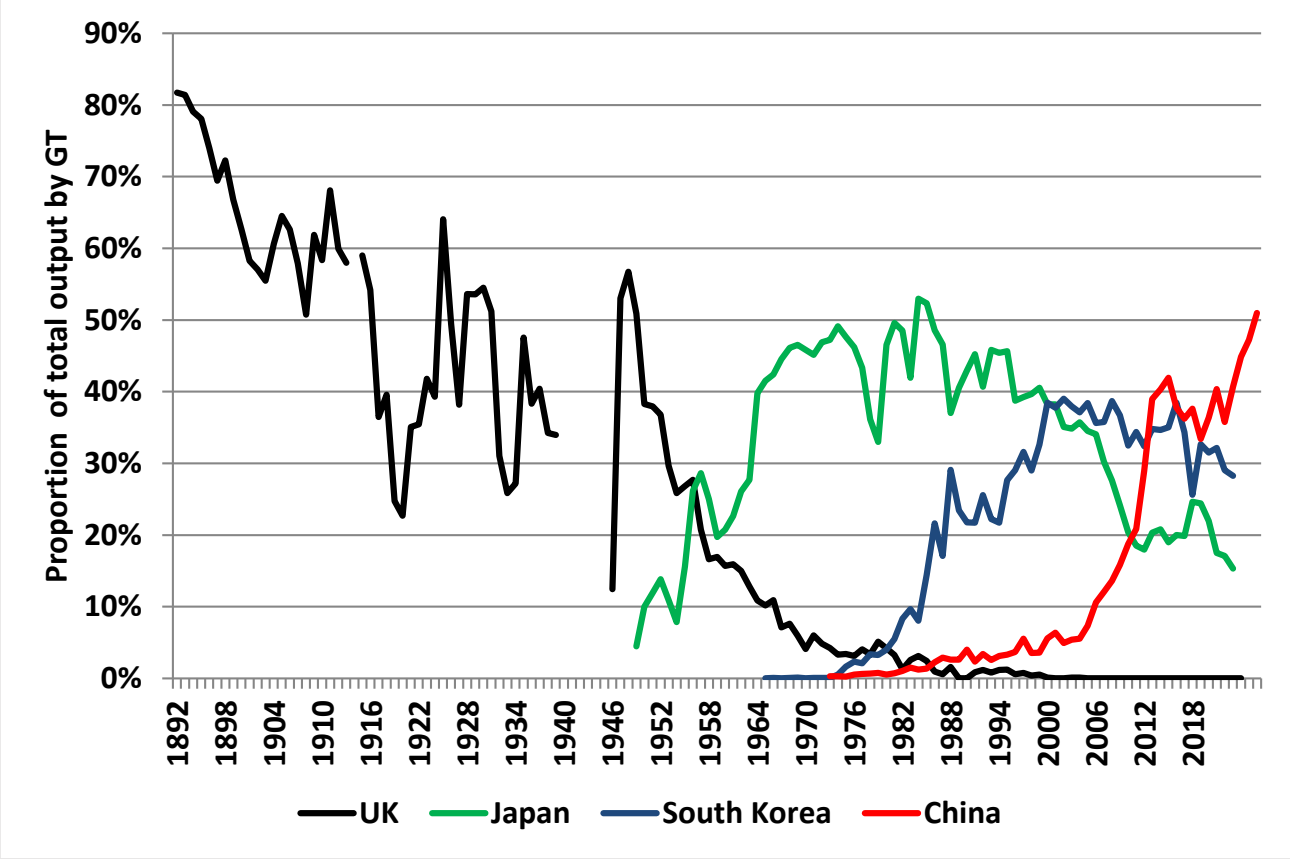
Shipbuilding could be described as a ‘shifting hegemony’ – a market dominated by a single supplier, in which the dominator changes over time.



Length of leadership:

1. UK: 65 years +
2. Japan: 42 years
3. South Korea: 13 years
4. China: ?

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Question – where will the hegemony settle next?

India and Vietnam are often cited as the most likely destinations, but neither has yet made any appreciable progress.

Currently, Korea is engaged in a major shipyard development in India, and Philippines are trying to resurrect the Hyunday Subic Bay shipyard.

Why is it that I am sceptical of these obvious candidates? – Let's look at some past attempts at significant market penetration.

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India in the first decade of the 21st Century:

India's strategy was predicated on low labour costs and investment was purely from private capital.

A number of shipyards were developed to build mid-size (panamax) cargo ships and significant orders were taken in the period of the cyclical peak.

Almost none of the ships were delivered and the yards closed with the downturn.

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Hyundai Subic Bay (Philippines).
Opened 2006;
Bankrupt 2019;
Currently trying to re-open.

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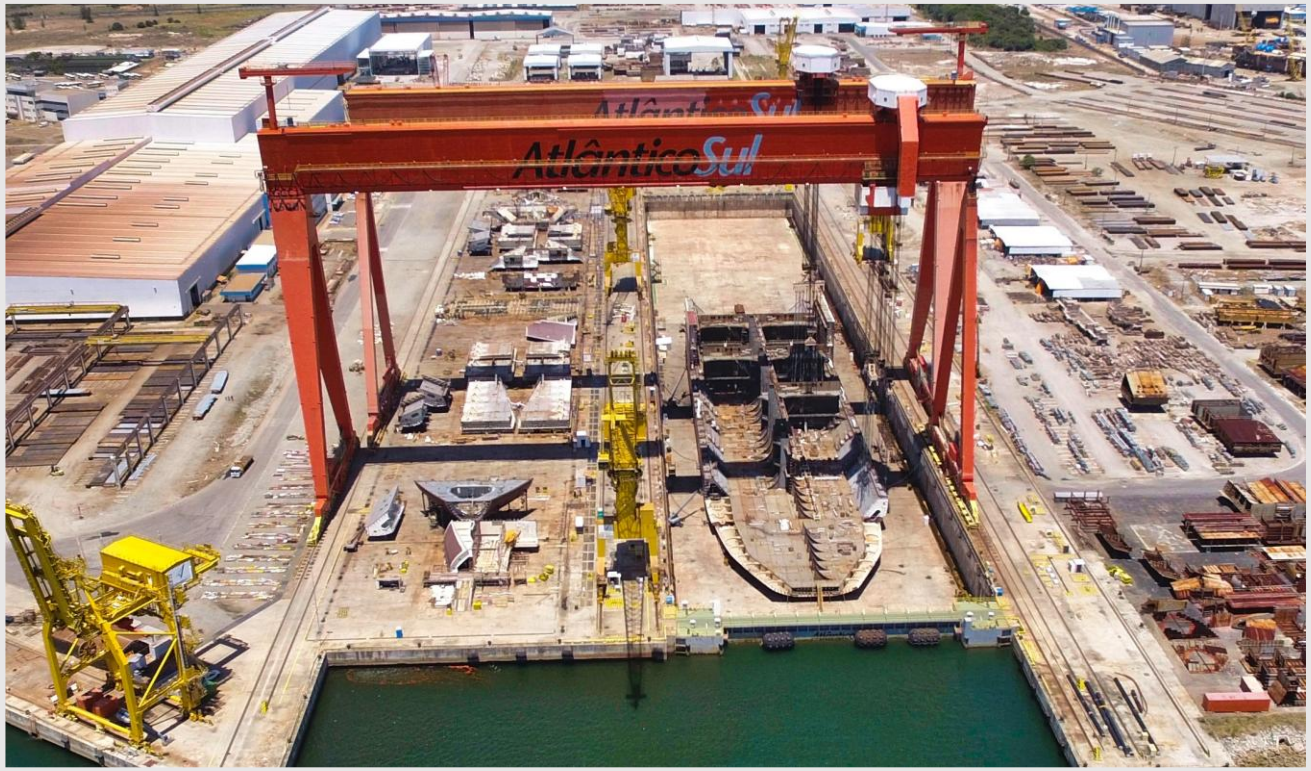

Samsung Estaliero
Atlantico Sul (Brazil) – opened 2005;
Management moved to Mitsui in 2012;
Closed 2019, currently trying to re-open.

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Why did these attempts to gain significant market share not succeed?

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1. Labour cost (India's basis for progression) is not per se a factor of competitiveness.

- It is a 'hygiene factor'. In other words, low labour cost is not a bad thing in itself but cannot alone lead to competitiveness.
- The advantage is often obliterated by poor performance and in a developing economy the labour cost soon rises – the advantage is transient.

See the chapter on competitiveness in "Understanding Commercial Shipbuilding", available from www.strategicmaritime.co.uk.

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2. The investments targeted competition with the Korean mega-yards.

A large Korean yard can fabricate 3 million tonnes of steel per annum and scale is the dominating mode of competitiveness in the large ship sector.

A shipyard targeting < 500,000 tonnes per year is too small to compete.

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3. Misunderstanding of the gross margin equation in shipbuilding – 70% of the value is in steel and equipment and supply chain is vital.

Purchasing relatively small quantities, all of which have to be delivered across the Indian Ocean or South China Sea adds significant cost.

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4. Under-estimation of the cost of getting the investment to work.

Build-up of competitiveness for a large shipyard can take a decade, during which time it is likely to be loss making.

The extent of losses in the build-up period can be OME the same as the cost of the shipyard.

For this reason, private capital alone is unlikely to succeed.

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Who will be the next dominator?

1. There is no absolute reason to anticipate that the hegemony will continue – shipbuilding is changing in many ways.
2. Higher prices may open up a window to compete with volume.
3. A candidate must (nationally) have a strategic imperative to develop an industry of any significant size because of the level of government assistance needed.

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Who will be the next dominator?

In other words – we may be moving to an era where the industry is no longer an ‘hegemony’ and market share will be more widely dispersed.
An obvious corollary of this is that opportunities will open up outside China.

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Note that these comments apply to the global industry that builds large ships.

For other market sectors, such as workboats or yachts a different set of competitive factors will apply.

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