

# THE COMPETITIVE DISADVANTAGES FACING BRITISH ASSETLESS ELECTRICITY RETAILERS



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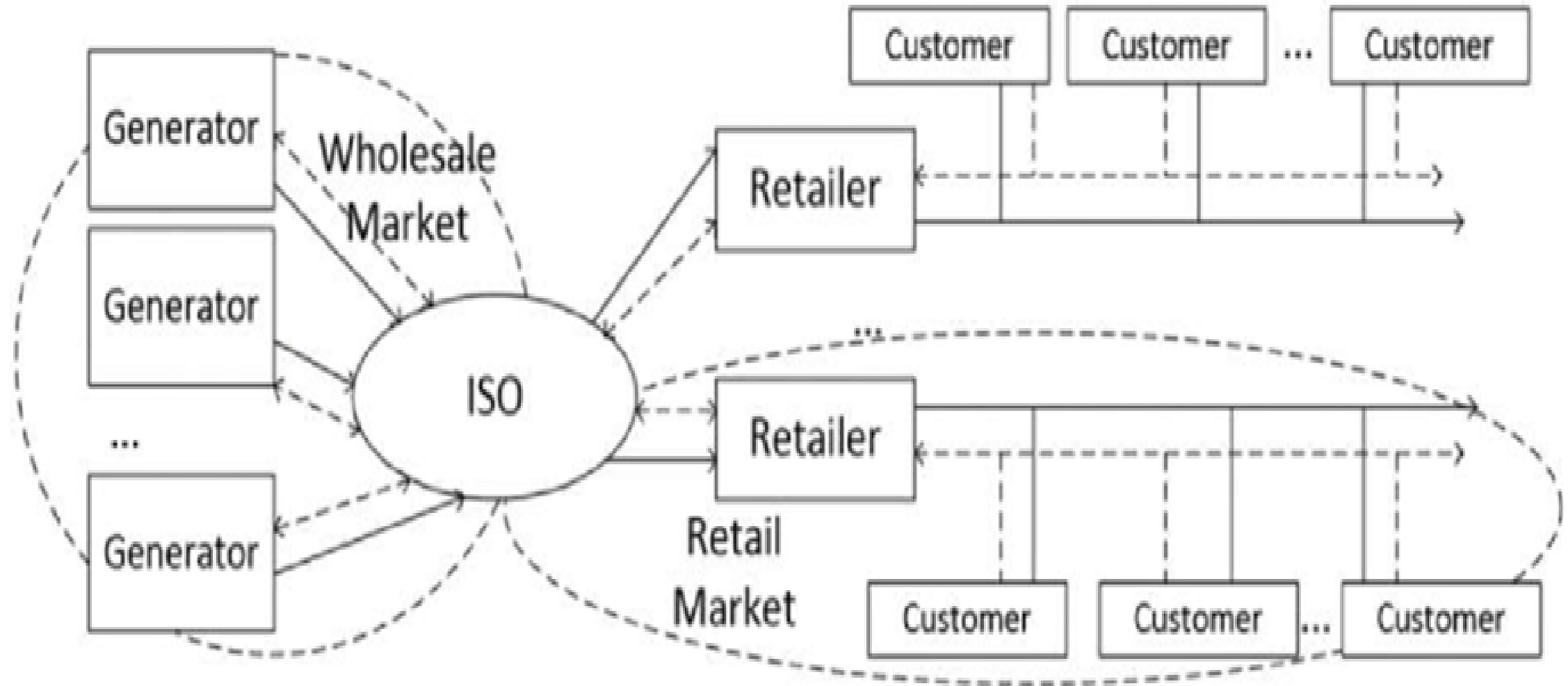
Policy Perspective

## The competitive disadvantages facing British assetless electricity retailers

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# STYLIZED STRUCTURE OF UK ELECTRICITY MARKETS

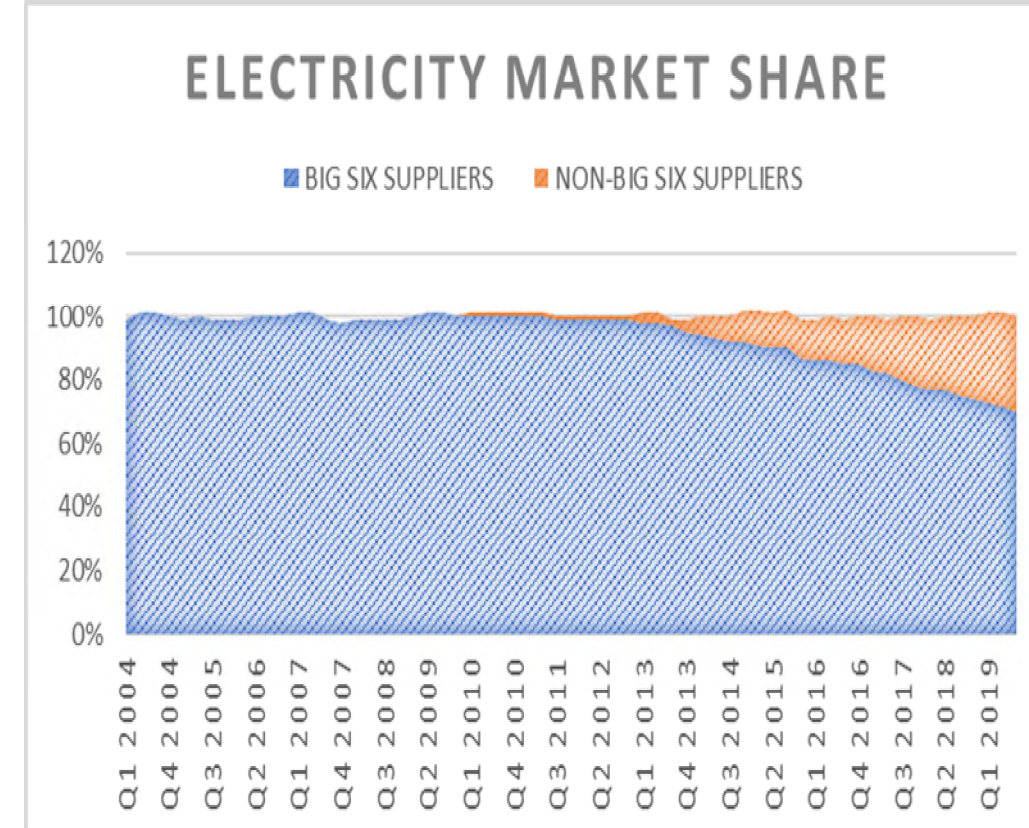


# BACKGROUND

- Since the privatization and deregulation of the United Kingdom's electricity sector through the Electricity Act of 1989, providing consumers with secure and affordable electricity has been a cornerstone of policy.
- The New Electricity Trading Arrangements (NETA) of March 2001, replacing an internal cost-based merit order with one based upon prices, initially encouraged some competition in wholesale supply.
- But by the early 2000s the consolidation of the market into a handful of vertically integrated regional firms, known as the Big Six, was seen as undesirable.
- To redress the potential for vertical integration to have anti-competitive effects, from 2014 the UK authorities began encouraging the entry of new retailers without generation assets and were unconnected to generators but which relied upon the wholesale traded market for supply.

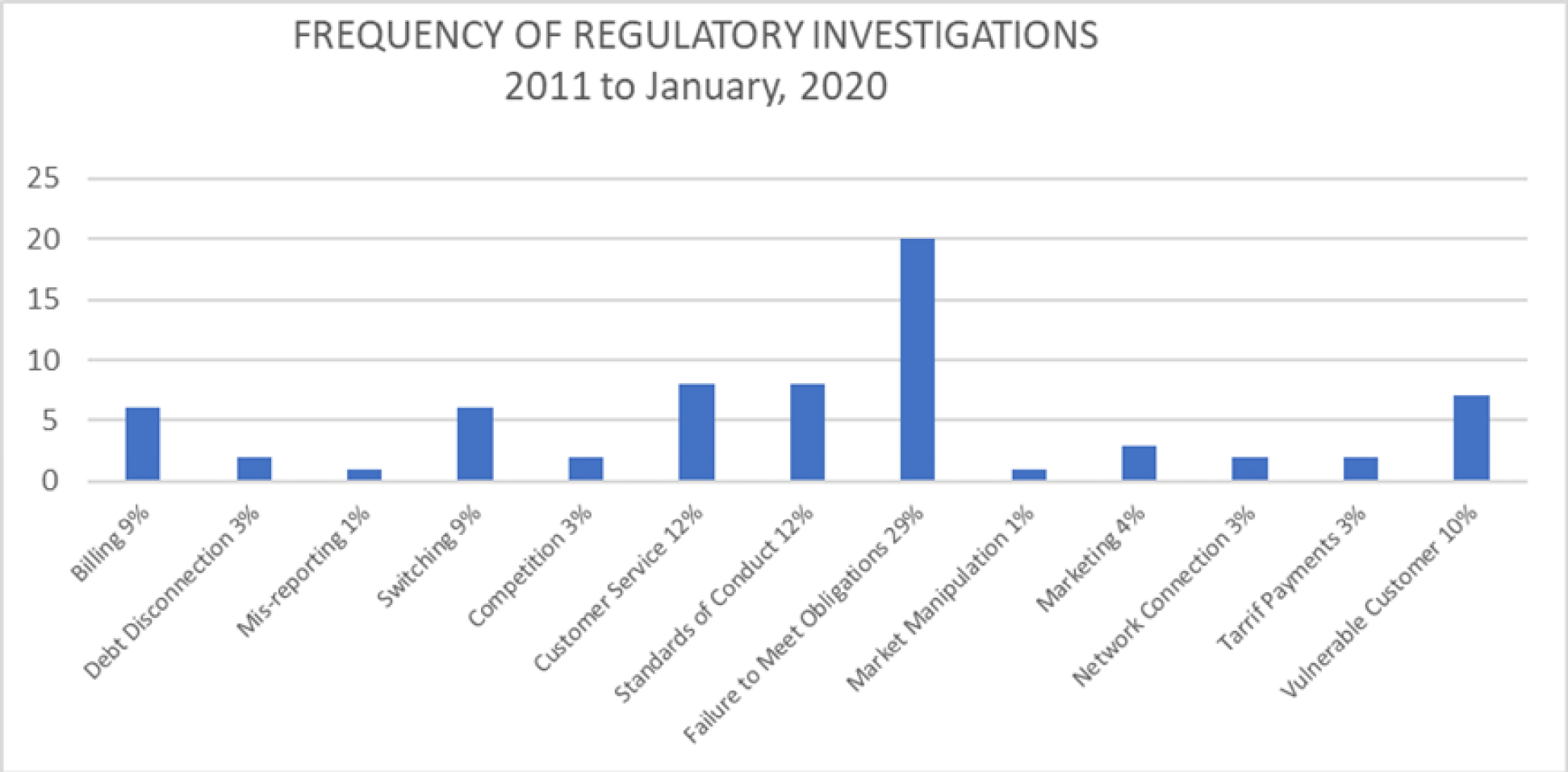
# BACKGROUND

- As shown from 2014, direct retail reliance upon the Big Six fell from almost 100 per cent, as it was before 2012, to about 70 per cent by 2019.
  - The new retail firms range widely from smaller new participants, so-called ‘suppliers in a box’, to larger, more established outfits, such as OVO and Octopus with hundreds of thousands of customers.
  - Regardless of size, they all use the traded wholesale market as a source of supply to be on-sold to retail customers.
  - Of the electricity retailers, by 2019 56 supplied both electricity and gas, six gas only and two electricity only.
  - Along with entry and growth of new suppliers, many firms have exited the market. After June 2016, 16 firms left the market, while between June 2018 and June 2019, six more small retail suppliers left the market. By mid-2019, following a period of net exits, there were 64 active licensed entities.
  - Updating the story, many more firms have gone bankrupt since the summer of 2021:
- Zebra Power
  - Bluegreen Energy
  - Goto Energy
  - Daligas
  - Pure Planet
  - Colorado Energy
  - Igloo Energy
  - Symbio Energy
  - Enstroga
  - Avro Energy
  - Green People’s Energy
  - Utility Point
  - MoneyPlus Energy
  - PFP Energy
  - Bulb Energy



Nottingham County Council on *Robin Hood Energy* and Warrington Council on *Together Energy* have wasted many millions of Council Tax revenue on their take-overs of local assetless electricity retailers.

# COMPLAINTS AGAINST ASSETLESS RETAILERS HAVE BEEN COMMON AND WORSE THAN THOSE AGAINST INTEGRATED UTILITIES



# WHAT WENT WRONG?

- Given the structure of the UK's wholesale electricity market, assetless retailers face inherent disadvantages making them unlikely to achieve reliable profitability.
- Given the rigors of trading in the wholesale electricity market, the capital requirements for retail suppliers without generation assets were inadequate.
- The Firms were not equipped for identifying, quantifying and managing market risk, credit risk and operational risk.
- Capital inadequacy has contributed to moral hazard, and rendered the suppliers unable to absorb the inevitable losses arising from market and credit exposure.
- Exacerbating matters, adverse selection, customers looking for or in need of a deal, meant greater credit risk and credit losses.
- Big negative impacts upon consumers.

# THE RIGORS OF WHOLESALE ELECTRICITY TRADING

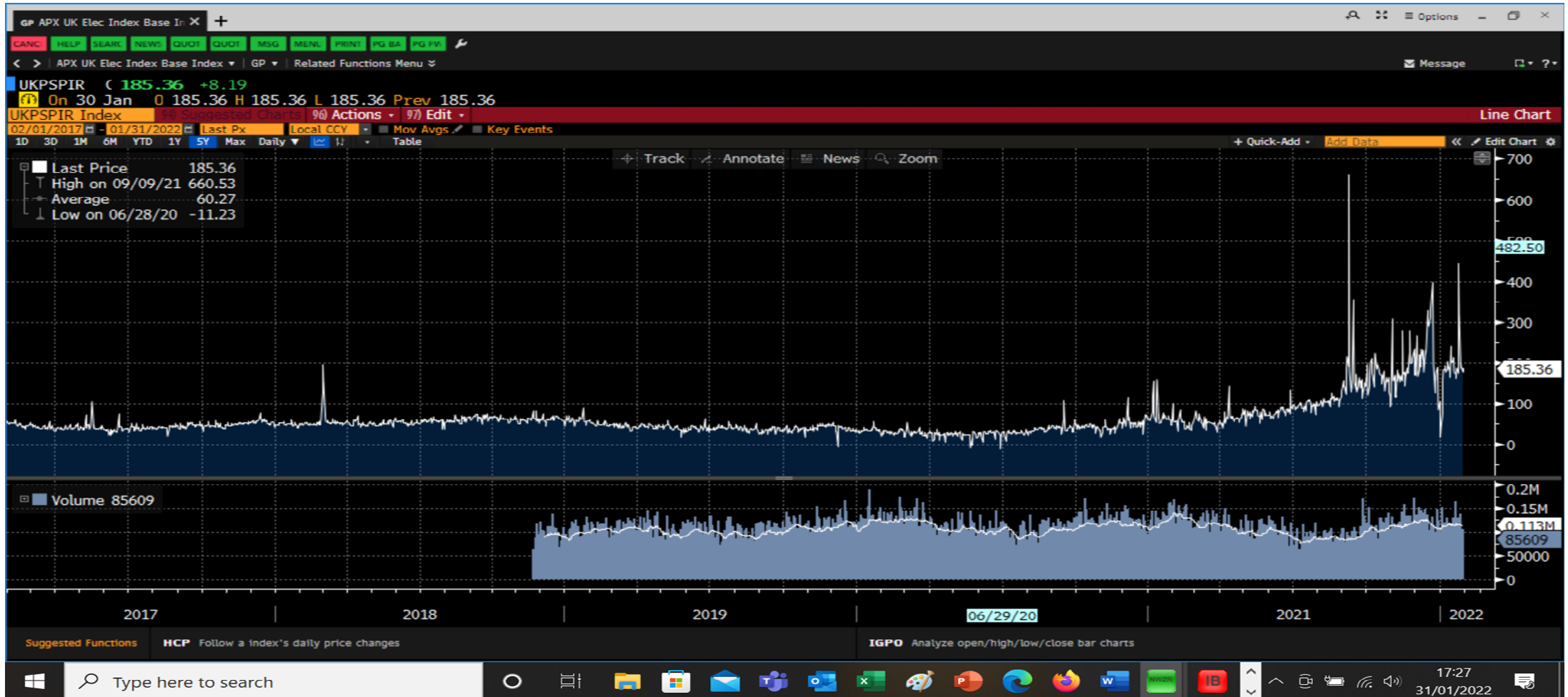
Usefully trading the wholesale market is difficult given the volatility and inherent disadvantages of a purely retail entity.

Assetless retailers without capital are confined to trading the day-ahead market.

Without credit lines, purchasing futures and options from ICE or an integrated utility is not possible.

Local orientation and small scale precludes the benefits of diversification.

# BASE LOAD ELECTRICITY PRICES

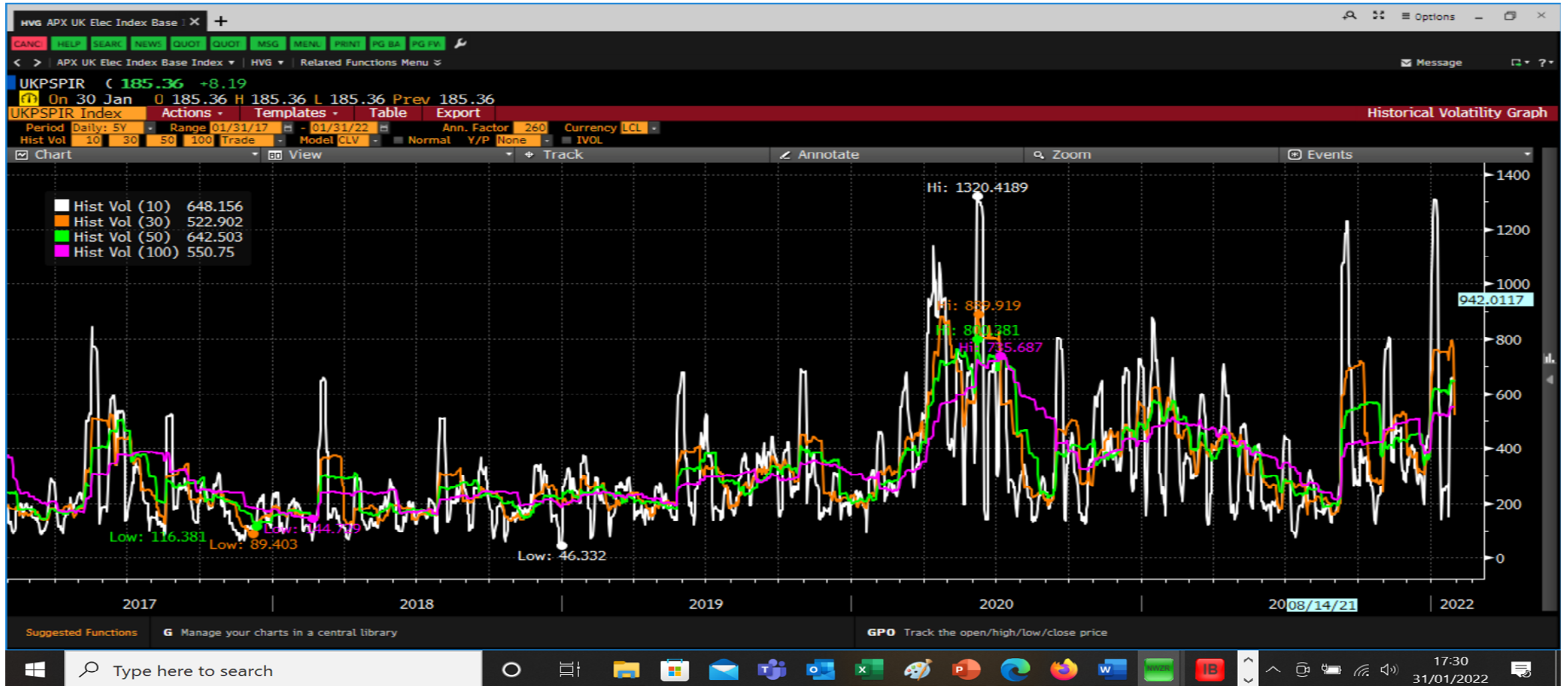




# PEAK LOAD ELECTRICITY PRICES



# HISTORICAL PRICE VOLATILITY BASE LOAD MARKET



# A SLOPED PLAYING FIELD

- If the markets were Efficient, i.e. no one had an informational advantage, then the chances of beating the market, i.e. being able to offer customers a deal as good or better than the market would be 50:50. It would be like betting on coin tosses.
- The wholesale electricity market from where assetless retailers must purchase electricity is not an Efficient Market.
- Integrated Utilities in order to manage their businesses and keep the lights on, have an informational advantage.
- Assetless retailers are at a decided disadvantage in trading such markets.
- The major banks including Goldman's have quit trading the wholesale electricity market...telling us something!

# **REQUISITES FOR TRADING THE WHOLESALE ELECTRICITY MARKET**

- Risk Governance Culture
- Risk Management Infrastructure
- Adequate Human Resources
- Risk Capital to Absorb Losses from Market Risk and Credit Risk

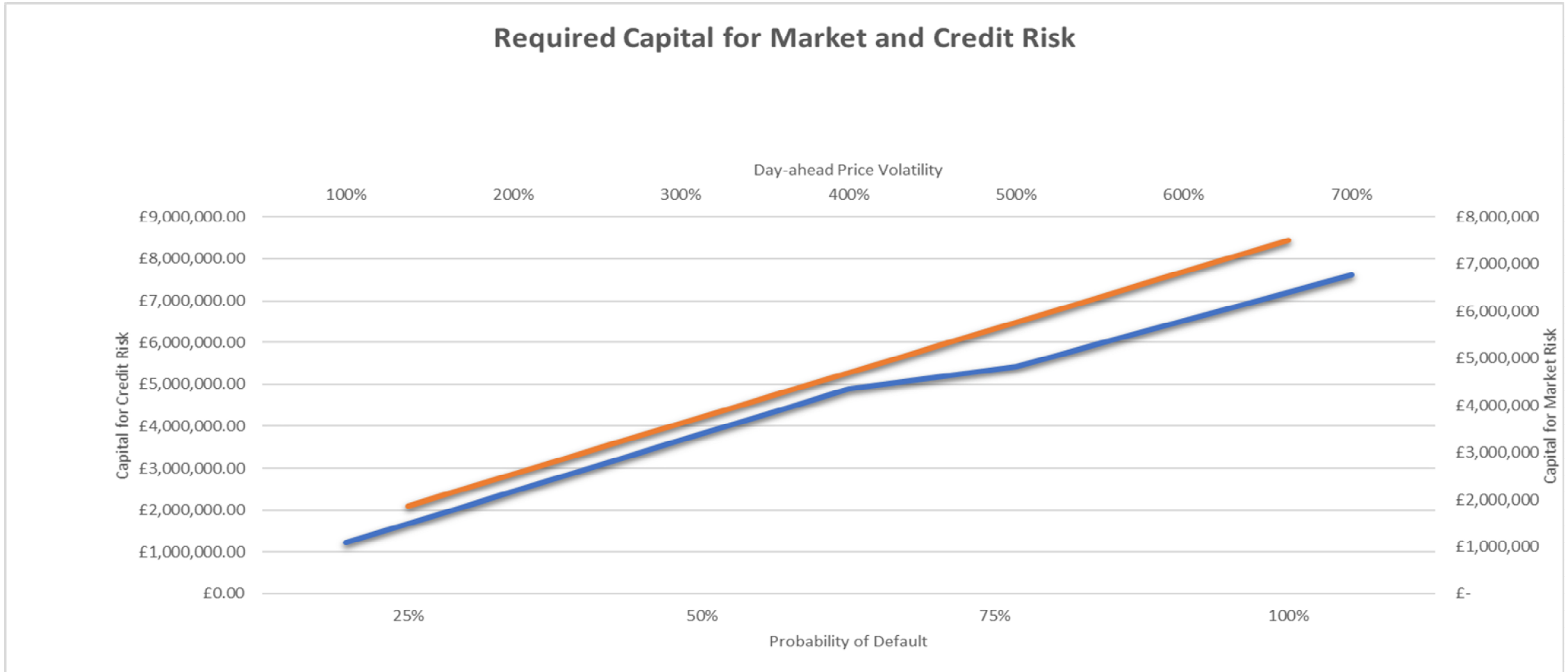
# CAPITAL FOR MARKET RISK

- For market and credit risk exposure, we calculated how much capital a bank would require if it had a short position in the retail electricity market.
- Beginning with market risk, that is, the risk that prices in the wholesale market may move in an adverse manner, a bank supplying 100,000 retail customers with an annual consumption of 3,000 kWh (an average UK household), with a day-ahead price volatility of 167 per cent and a rolling exposure of £13.5 million in the wholesale market (100,000 customers x £45 per MWh x 3,000 kWh per customer), would require around £2.2 million in market risk capital according to Prudential Risk Authority of the Bank of England.

# CAPITAL FOR CREDIT RISK

- If the probability of retail consumers not paying their electricity bills were 25 per cent and resulted in a loss of 50 per cent on the amount owed, a financial institution with 100,000 customers consuming 3,000 kWh per annum would be required to set aside over £2 million of risk capital, under Basel III rules.
- Apart from prepaid metering, all electricity supply companies have credit exposure to consumers not paying for what they have consumed.
- Adverse selection may also exacerbate such risks as individuals who respond to the promises of cheaper electricity from new retail suppliers may have greater concerns over expenditure upon utilities.
- In light of these facts, an assetless electricity retailer faces considerable credit risk.
- Although one can query the assumptions used, we see that the combined risk capital needed for a financial institution supplying 100,000 customers with 3,000 kWh per annum would be around £4.4 million.

# TRADING REQUIRES CAPITAL TO ABSORB LOSSES



# WHY DID OFGEM PROMOTE ASSETLESS RETAILERS?

- Attempting to solve the inherent problems of combining a Price Cap with Liberalised Markets. Markets can be fully regulated with a allowed rate of return to capital or fully liberalised relying upon competition to keep prices down with protection for the most vulnerable. Introducing gratuitous competition was not the answer.
- Facile understanding of electricity market competition using crude metrics like economic concentration.
- Failure to recognise how unprofitable wholesale and retail electricity markets had become in the UK with no integrated major earning its Cost of Capital with some firms giving-up.
- Ignorance of the many requirements for successfully trading the Wholesale Electricity Market.
- Perhaps it was a cynical exercise to distract from why retail energy prices were rising (see pie-chart, next page).



# Environmental Costs, Operating Costs and Network Costs have all risen because of how Renewable Energy is supported

Breakdown of an electricity bill

