

# Have utilities caught the risk bug?

## STOCK VOLATILITY AND COVID-19

Covid-19 has turned our world upside down, and the stock market has been hit hard. In recent months, there has been a dramatic increase in stock volatility – and utilities have been affected.

So what's happening to these usually low-volatility stocks? We take a look at recent developments in utility equities, and analyse how the pandemic has affected them.

### The Covid crash means high market volatility

Covid-19 has had a devastating impact on the stock market. Between 19 February and 23 March 2020, the S&P 500 and the STOXX Europe 600 experienced drops of -33.9% and -35.4% respectively. By mid-March, volatility levels had reached or even surpassed those seen in October 1987, December 2008, and even during the Wall Street Crash of 1929.<sup>1</sup>

### In a crisis utilities are less volatile than the market...

Market basics and previous experience indicate that, during a global systemic shock, firms with regulated assets – like utility companies – should be less volatile than the market overall.

As a result, utility stock betas tend to remain low in a crisis. This is a somewhat artificial trend, taking place not because of a change in their risk profile but because of overall market volatility.

This is what happened during the 2008 financial crisis: a selection of pure network and integrated utilities from Western Europe averaged a levered beta of 0.63 during the crash, and 0.57 if we focus only on pure network utilities.<sup>2</sup>

### ...but not in this crisis

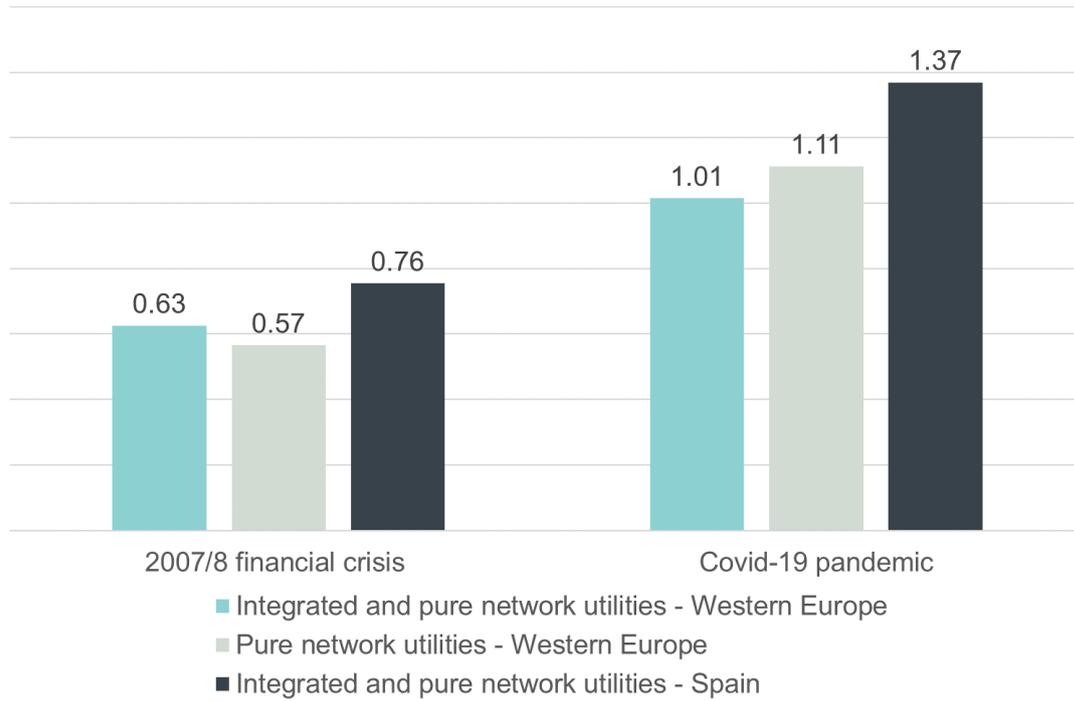
The market shock sparked by Covid-19 has defied convention, however. Instead of dropping, utility betas have actually *risen*. Between 19 February and 23 March 2020, the levered betas of pure network utilities spiked to 1.11, while the group that includes integrated utilities averaged 1.01.

---

<sup>1</sup> Baker, S. R., Bloom, N., Davis, S. J., Kost, K. J., Sammon, M. C. & Viratyosin, T, 'The unprecedented stock market impact of Covid-19', National Bureau of Economic Research Working Paper No. w26945, 2020.

<sup>2</sup> The utility companies included are provided in the annex.

**Levered beta of utilities: 2007/8 financial crisis versus Covid-19 crisis**



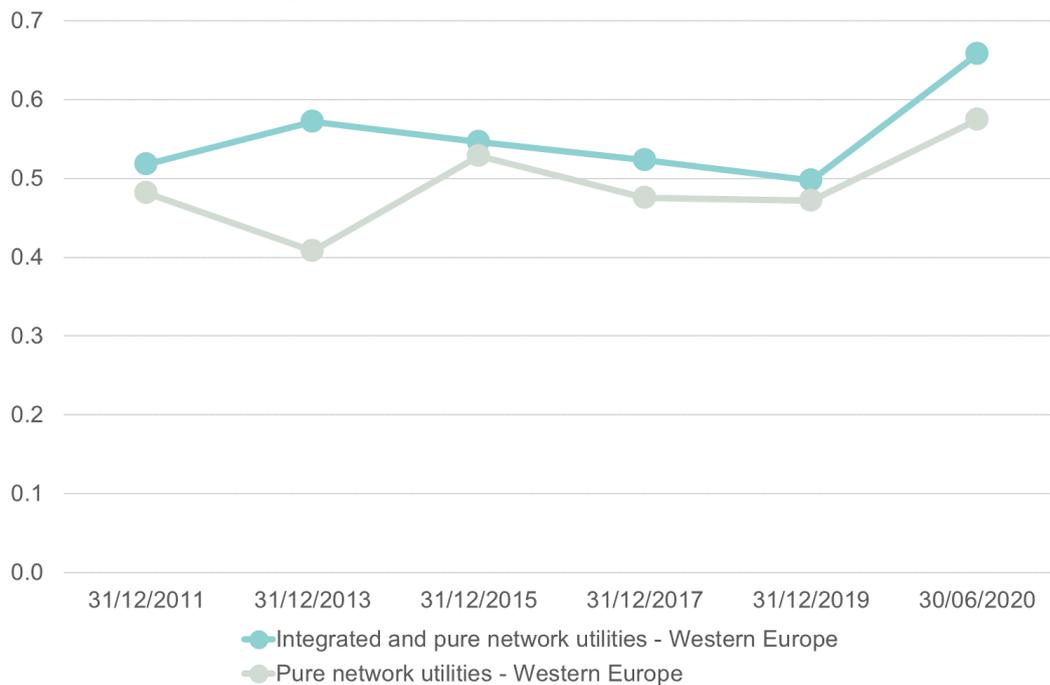
Source: Frontier Economics analysis of Bloomberg data.

In some countries, this abnormal reaction has been even more pronounced – in Spain, the main transmission and distribution energy companies have averaged a levered beta of 1.37.

This spike in volatility of utilities may turn out to be short-lived. After all, this is why regulators around the world consider longer time frames for estimating the WACC of network utilities.

But a two-year regression for the previous peer groups, pre-Covid, shows that the pandemic is having an impact on betas that may alter cost-of-capital estimates in forthcoming regulatory reviews.

**Two-year rolling average of utility levered betas**



Source: Frontier Economics analysis of Bloomberg data.

### What does this mean for the future?

It's not yet clear whether investors' risk perception of both integrated and pure network utilities will be fundamentally altered in the post-Covid world. The sector is, for example, adapting well to the serious steps that governments are taking to limit CO2 emissions, such as the European Green Deal.<sup>3</sup>

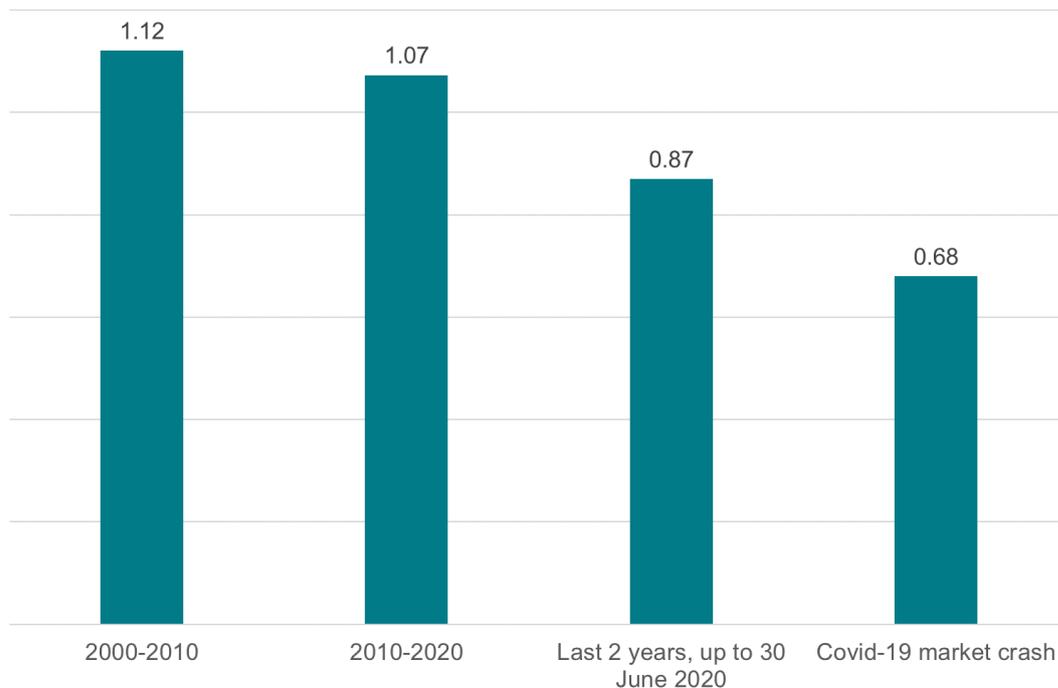
But Covid-19 has posed a challenging question to regulators: should they incorporate this unprecedented spike in betas in their current and future regulatory determinations? And if so – how?

### If utilities are more volatile, who is less?

Finally, if the Covid-19 market crash has altered the beta of utilities, which assets have seen their betas fall? Interestingly, the beta of the 10 largest tech companies, for one, has fallen from 1.07 in the 2010-2020 period to 0.68 during the Covid-19 market crash.<sup>4</sup>

Covid-19 has certainly turned things around for utilities and the market. But, will the market fundamentals that have changed as a result of the pandemic be restored in a post-Covid world? This is something to look out for...

#### Levered beta of 10 largest tech companies, 2000 onwards



Source: Frontier Economics analysis of Bloomberg data

<sup>3</sup> [https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal\\_en](https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en).

<sup>4</sup> The 10 largest tech companies considered in the analysis are: Apple, Samsung Electronics, Microsoft, Alphabet, Intel, IBM, Facebook, Cisco Systems, Tencent Holdings and Oracle.

## Annex

## Integrated utilities and pure network utilities of Western Europe

Firm	Country
ACEA SPA	
ACSM - AGAM SPA	
ASCOPIAVE SPA	
ATHENS WATER SUPPLY & SEWAGE	
ATLANTICA SUSTAINABLE INFRAS	
BKW AG	
EDF	
EDP-ENERGIAS DE PORTUGAL SA	
ELECTRICITE DE STRASBOURG-RG	
ELEKTRIZITATSWERK ALTDORF	
ELIA GROUP SA/NV	
ENAGAS SA	
ENDESA SA	
ENEL SPA	
ENERGIEDIENST HOLDING AG-REG	
FJORDKRAFT HOLDING ASA	
FLUXYS BELGIUM*	
FORTUM OYJ	
GAS PLUS	
GELSENWASSER AG	
HERA SPA	
IREN SPA	
ITALGAS SPA	
LUXFER HOLDINGS PLC	
NATIONAL GRID PLC	
NATURGY ENERGY GROUP SA	
PHOENIX GLOBAL RESOURCES PLC	
PUBLIC POWER CORP	
RED ELECTRICA CORPORACION SA*	
REDES ENERGETICAS NACIONAIS*	
ROMANDE ENERGIE HOLDING-REG	
SNAM SPA	
SSE PLC	
TERNA SPA	
VERBUND AG	
VIAFIN SERVICE OYJ	

## Fernando Barrera Rey

+34 91 343 2370

+34 664 471 051

fernando.barrera@frontier-economics.com

## David Muñoz Martínez

+34 91 343 2357

+34 616 600 759

david.munoz@frontier-economics.com