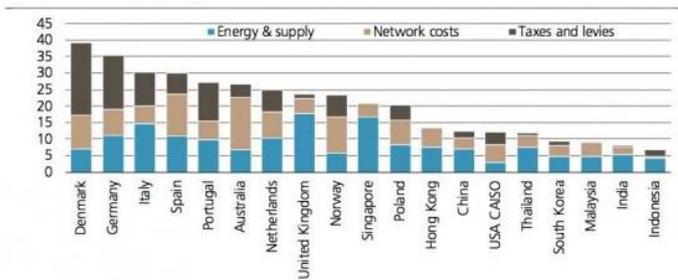


## Who pays higher prices and why?—Perry Sioshansi’s Letter from America

The answer is not as simple as consumers would like.

As everyone knows, retail electricity prices vary a lot from place to place, and it is always a puzzle to figure out why. Many variables combine to make the answer not so simple or transparent—as consumers prefer. Prices vary because

**Average retails tariffs for selected countries in US cents/kWh in 2013**



Note: Residential tariffs for Australia, Europe and the US; national average for Asian markets.  
Source: Power utility companies, government databases, UBS estimate

Source: UBS estimates

the components that make up the total vary. And the components include generation, network costs plus taxes and various levies that are added in many jurisdictions. As illustrated in graph below, prices in Denmark and Germany are high in part because of heavy taxes and levies that are applied. Singapore, on the other hand, has relatively high prices mostly due to high cost of wholesale energy.

A study by UBS compares not only the average retail prices but also how much they have risen between 2007-2013. Australia’s retail tariffs, which were among the lowest within OECD countries a decade ago have risen significantly—

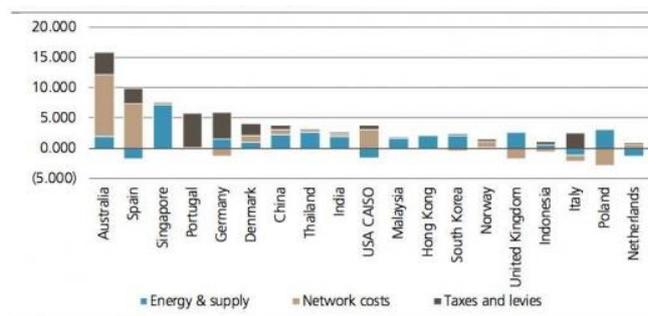
and inexplicably—mostly due to the rise in network charges, followed by Spain for the same reason. Prices in Singapore have also risen, but in this case the rise is explained by the rise in energy prices (graph below). For California, on the other hand, energy prices actually declined over 2007-13.

How prices will change over time will depend on the rise or fall of the components of tariffs. Network costs are projected to rise almost everywhere as the ageing grid needs to get modernised. Ditto for taxes and levies, especially in places where ambitious renewable targets or a low-carbon energy mix has to be met. Energy prices are likely to be a factor in places heavily reliant on imported fossil fuel imports and the potential rise of these prices.

Retail tariffs being highly political, they are affected by non-economic factors and a long list of variables that depend on local and historical reasons. Long periods of under-investment in networks, for example, are followed by rapid price increases due to network fees. Overly generous renewable subsidies result in high levies of one form or other as do low-carbon targets. Heavy investments in generation, say nuclear or renewable capacity, provide a measure of price stability since the fuel component of such technologies are negligible or zero. Demand growth rate and load patterns—specifically the peakiness of demand—is another important determinant of prices.

Among the benefits of countries with aggressive renewable targets is the fact that rising fossil fuel prices will not be a major factor in determining the price of electricity since the fuel component of renewable generation is free and unaffected by changes in fossil fuel prices.

**Changes in retail prices in select countries from 2007-13 in US cents/ kWh**



Source: Power utility companies, government databases, UBS estimate

Source: UBS

**Perry Sioshansi is a specialist in electricity sector restructuring, and has been actively involved in discussions in a number of developed, developing and transition economies. He is founder and president of Menlo Energy Economics and is the editor and publisher of EEnergy Informer, from which we have sourced this article, and which we commend.**