Chief economist's comment

Does oil matter?

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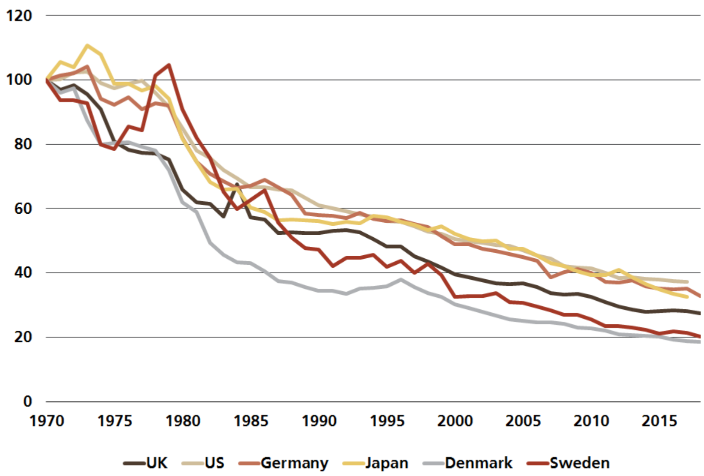
- The oil price shock of 1973 did a lot of damage to the world economy. Investors tend to look back to that event. But we are not in 1973 anymore.
- Oil is far less important to economic activity than it was in the 1970s – or even in 2010.
- Oil sellers are more likely to spend oil revenues than in the past. Thus an oil price rise does less damage to global demand than in the past.
- Oil does affect consumers, because consumers think inflation is only about food and fuel. We do not think the recent oil price increase will last. If it does, it might mean higher wage claims in economies with tight labor markets.

The first OPEC oil price shock in 1973 did a lot of damage to the world economy. But we are not living in 1973 anymore. Oil price moves have a smaller economic impact than they used to. We do not believe that the recent oil price increase is likely to last. But the rise does give an excuse to revisit oil's lower economic importance.

One reason that oil is less economically important is that oil is just less important overall. The world economy is more efficient in using oil. It takes less oil to make things today than it did in the past.

Less oil is needed to make things
Index of oil consumption relative to real GDP, 1970=100

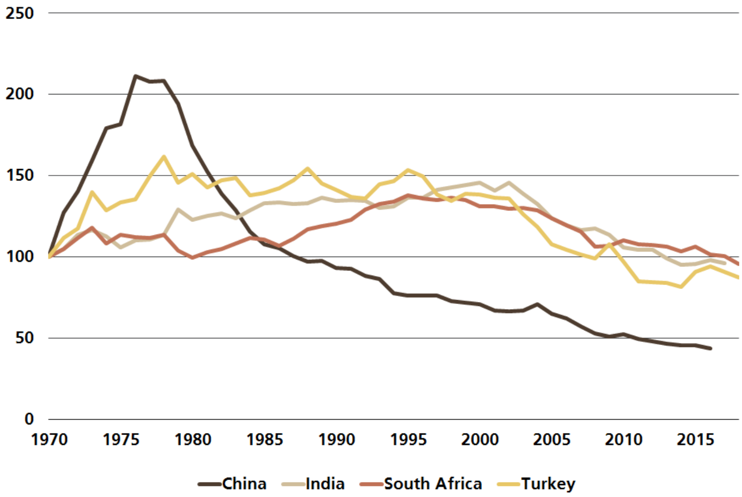


Source: UBS calculations. The index is based off the ratio of oil consumption (barrels) against real GDP (local currency terms). Thus a krone of Danish GDP today uses less than 20% of the oil a krone of Danish GDP used in 1970.

The chart shows how much oil is needed for an economy to make a unit of real GDP. The indices show that on average an economy needs less than 40% of the oil it needed in 1970 to make something. Economies are more energy efficient today. Alternative energy has replaced oil as a new economic power source.[1] More economic activity is due to services, which tend to need less energy. It is also worth noting that countries need less energy to make things than they did in 2010. The last big rise in crude oil prices was in 2010.

Emerging markets also cut oil intensity

Index of oil consumption relative to real GDP, 1970=100



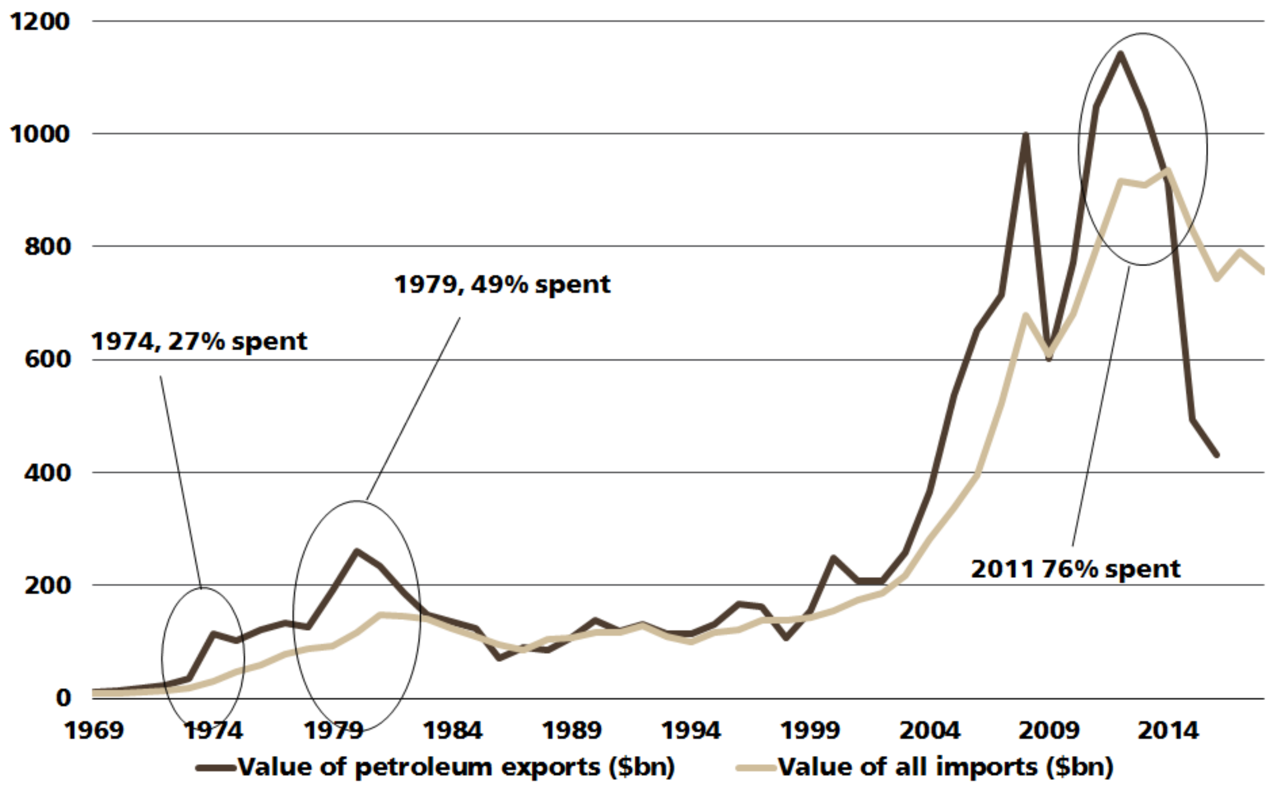
Source: UBS calculations. The index is based off the ratio of oil consumption (barrels) against real GDP (local currency terms)

Emerging markets have also cut the amount of oil needed to make a unit of economic output. The falling economic importance of oil has mainly taken place this century. Emerging markets have increased the number of barrels of oil they use. However, the economies have grown faster than oil use. This is why the oil price is less important to these economies.[2]

Oil revenues are spent, not saved

Another reason an oil price rise matters less today is that oil producers have learned to spend money. A price rise simply transfers more money from buyers to sellers. What matters to the economy is what the sellers do with their additional money. In 1973, oil producers saved most of their new money. Almost three quarters was saved. That meant that money was being transferred from spenders (oil buyers) to savers (oil sellers). Global savings went up. Global spending went down. This was not good for the economy.

OPEC used to save its money. Now it spends it
Value of OPEC petroleum exports, compared to value of OPEC imports from the rest of the world



Source: OPEC

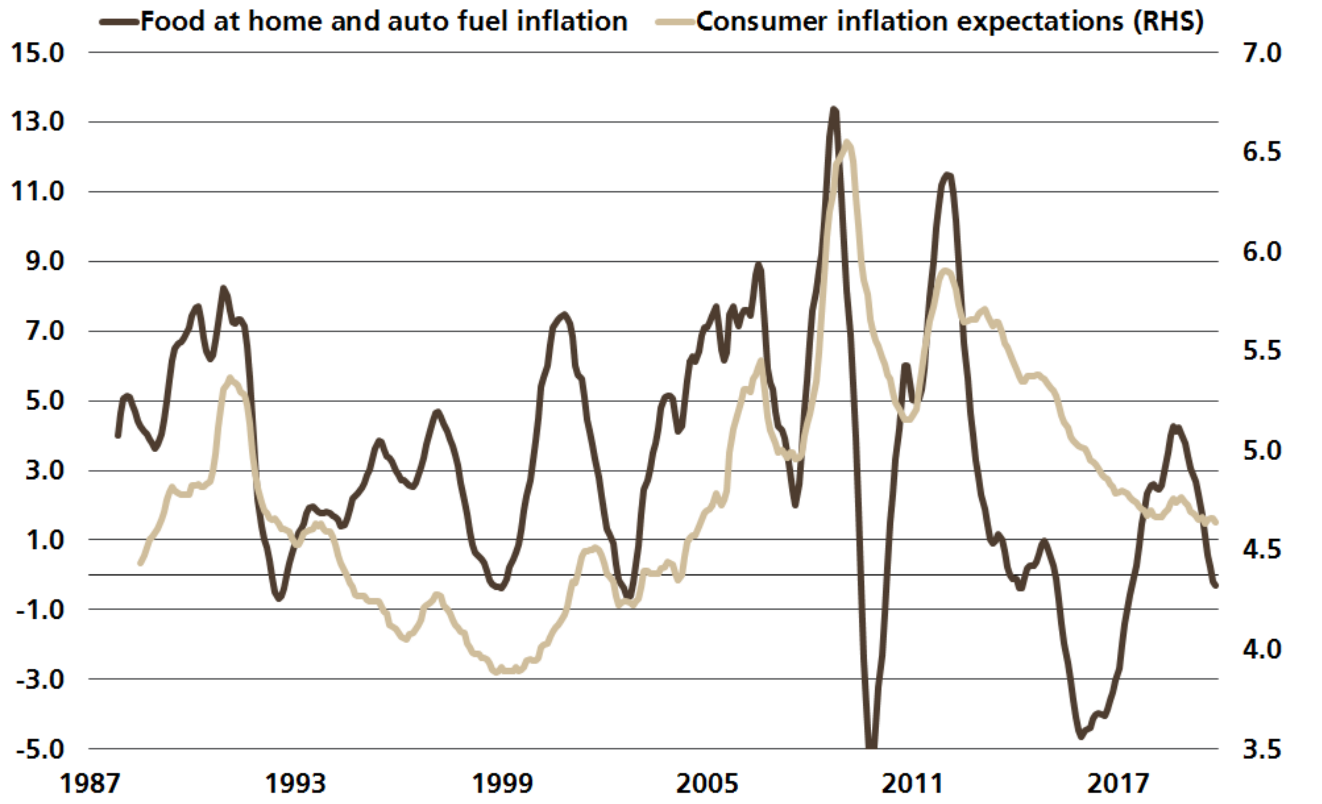
Now oil producers spend most of their money. In 2011 almost three quarters was spent. Total global demand should not fall with an oil price rise. Certainly total global demand is not likely to fall as much as it did in the 1970s. The pattern of demand may be different. Oil sellers may buy different things. But the total economic shock is a lot lower.

Consumers get inflation wrong – which matters

So can we ignore oil entirely? Not really. Oil price rises do still hurt consumer behavior. Consumers, generally speaking, are not very good at understanding inflation. When economists think about inflation, they use thousands and thousands of different items to get a number. Consumers do not do this. Consumers remember the price of things that they buy regularly. They forget about the lower price of the washing machine that they bought two years ago. Consumers' view of inflation is driven by high frequency purchases. Economists call this "frequency bias".

What do consumers buy most frequently? Food and fuel. In the US, consumers' view of inflation is very strongly tied to the price changes of food (eaten at home) and fuel for the car.

Food and fuel drive American consumers' inflation expectations
When high frequency purchases rise in price, consumer expectations of inflation rise as well



Source: UBS, Conference Board. The chart is using a weighted average of auto fuel prices and food consumed at home prices. The inflation expectations are from the Conference Board suvey. Both measures are 12 month moving averages of the % yoy change, in order to smooth the data.

Every time combined food and fuel prices have risen in the US, consumer expectations of overall inflation have risen in the US. If oil prices were to rise for some time, consumer expectations of inflation would almost certainly rise. Overall inflation may not change very much – but consumers do not think about overall inflation. In the mind of the consumer, inflation is all about the cost of fueling the family fleet of sports utility vehicles. For a country like the US, where gasoline is not taxed very heavily, the link between crude oil prices and consumer oil prices is strong. That makes the link between crude oil prices and consumer inflation expectations strong.

The last oil spike happened in 2010. In 2010, US labor markets were weak. Consumers could not do very much about their (mistaken) view that inflation was around 6%. Now labor markets are stronger. If oil prices lead consumers to mistakenly think inflation is rising again, they may try and push wages higher.

Oil. Less important. Not irrelevant.

The world has moved a long way from 1973. The first OPEC oil shock was so big an event that it has biased our thinking about oil ever since. We need to break away from that view. Oil matters less than it did 45 years ago. Oil matters less than it did 10 years ago.

The one area where oil does matter is inflation expectations. Consumers do not think about inflation the way economists think about inflation. In the unlikely event that oil prices do remain high, investors should watch wages a little more carefully.

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[1] Alternative energy has not reduced the demand for oil in terms of barrels consumed. Alternative energy has reduced the "market share" or intensity of use of oil in the economy. New energy demand is more likely to be met with non-oil supply.

[2] In thinking about the economic importance of oil, it is the contribution of oil to economic output that is relevant – hence the indices of oil to GDP. If there were an oil embargo or some other supply shock that meant oil was not available, then the absolute volume of oil consumed may be a relevant measure.

Appendix

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