

Matthies, Klaus

Article — Published Version

Hooked on oil

Intereconomics

Suggested Citation: Matthies, Klaus (2004) : Hooked on oil, Intereconomics, ISSN 0020-5346, Springer, Heidelberg, Vol. 39, Iss. 5, pp. 234-235

This Version is available at:

<https://hdl.handle.net/10419/41787>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

Hooked on Oil

Recently, dollar prices for crude oil reached an all-time high. Similarly high prices were seen for the first time at the end of the 1970s in the wake of the second oil price crisis, and once again on a number of days in 1990 following the invasion of Kuwait by Iraq. However, the current record prices do not seem quite so extreme when compared over a long period of time and taking other price developments into account. Calculated in real terms, using export prices for industrial goods as a deflator, oil cost well over 50 dollars a barrel in the early 1980s. Applying the commonly used US inflation rate as a deflator, prices were even higher in the past.

The reasons for the rise in oil prices are rapidly increasing global oil demand coupled with limited production capacity as well as concerns in the oil market regarding possible supply interruptions. Since last year, world-wide demand for oil has been increasing at a considerably faster rate than originally expected; this year, according to an International Energy Agency (IEA) estimate, it will rise by 2.5 million barrels a day or 3.2%, the fastest rate for 24 years. World oil supplies have also been expanded substantially, reaching 83.6 million barrels a day in August, 5% more than a year previously. Despite joint resolutions on production ceilings, OPEC output also increased to record levels – namely its highest point since 1979.

At present, therefore, there is no supply problem. However, the fact that all the world's available oil production facilities are now operating at close to full capacity does give cause for concern. At the beginning of September, OPEC put its immediately available spare capacity at 1-1.5 million barrels a day – a figure largely determined by Saudi Arabia, which claims to be able to deliver an additional 1 million barrels a day at short notice. Compared to earlier years, OPEC's reserve capacity has shrunk considerably. Given that the existing production facilities in the other oil producing countries are generally operating at full capacity, there is little scope to offset short-term supply interruptions by increasing output elsewhere. In view of possible problems within or involving important oil producing countries – such as Russia, Nigeria, Saudi Arabia or Iran, but in particular Iraq – there is thus great uncertainty in the oil market concerning the security of future oil supplies. In recent months, Iraqi output stood at just two-thirds of its pre-war volume. Oil production and exports are repeatedly interrupted by sabotage and assaults. Following the installation of a provisional national government in the middle of this year there are no signs that the situation in the country is becoming any calmer.

There is thus no reason to expect a marked decline in oil prices for the time being. Oil price rises represent an additional burden for the buyers, however: one dollar a barrel more raises the daily oil bill to be paid by the world's oil consumers by 80 million dollars. In other words, every oil price increase of one dollar – assuming that the price increase is maintained – means that a sum of 29 billion dollars a year is no longer available for other consumption purposes. Consequently, there are concerns within the oil importing countries that higher oil prices, which have already been prevailing for a considerable length of time, will have a negative effect on the global economy. The economic effects of higher oil prices are determined not only by the extent but also by the duration of the increase. Temporary price rises are not so much a problem, but lasting ones certainly are. Recent model calculations come to the conclusion that negative effects are above all to be expected in the first two years. Thus, for example, an enduring increase in oil prices of

10 dollars a barrel would weaken the growth rate in the industrialised countries in the first two years by 0.2 to 0.4 percentage points compared to the base scenario. The “vulnerability” of individual oil importing countries largely depends on how much oil is imported and to how great an extent the national economy is dependent on oil. The USA suffers comparatively little since domestic sources are able to cover almost 40% of its oil consumption and a certain amount of oil revenues thus remain in the country. In contrast, the countries of the euro area are more badly affected as a result of their very strong dependency on oil imports.

The prospect that the most recent increase in oil prices may be not just temporary, but – in view of the strong increase in oil requirements in the emerging economies, especially in Asia – could be more enduring, has added fuel to the discussion concerning the dependency of the world’s economies on oil. After every oil price crisis in the last 30 years there has always been a consensus in the oil importing countries that, in view of the fact that oil reserves are running out and are strongly concentrated in politically unstable regions, consumption must be reduced and oil substituted by other energy sources. However, the weight of oil production in the Middle East, which provides 30% of the world’s oil production – in 1973, the year of the first oil price crisis, this figure was 37% – will probably tend to increase in future, since more than half of the world’s estimated oil reserves are to be found in the Gulf region. With regard to reducing oil consumption, however, significant progress has been made in recent decades in the industrialised countries at least: within the OECD, only half as much oil is required to generate one unit of domestic product as in 1973. While the most substantial demand restraint measures took place in the period of high oil prices in the early 1980s, “decoupling” continues today, thus reducing the susceptibility of national economies to oil price shocks.

Nonetheless, global oil requirements continue to rise, particularly as a result of the increasing level of motorisation and industrialisation in the developing and emerging economies of the world. The IEA has forecast a long-term annual expansion of global oil consumption of 1.6%; in the year 2030 it would then be half as high again as it is today. Consequently, substantial financial efforts will have to be made in the coming years in order to expand global production capacity accordingly. An increase in global oil consumption from 80 million barrels a day now to 120 million barrels a day in 25 years necessitates new production capacity on a far greater scale, since a large proportion of capital expenditure will be needed for the replacement of those – existing and future – facilities that will have to be abandoned during the forecast period as oil wells dry up. Substantial investments will also be necessary in the form of transport and processing facilities, i.e. the construction of tankers, pipelines and refineries.

According to the forecast, total energy consumption will increase only marginally faster than oil consumption, so that there will be little perceptible decline in oil’s share of the total energy supply. So far at least, a pronounced move away from oil has proved impracticable because alternatives are not competitive where oil products are most widely used. This is particularly true of their use in road traffic, despite sometimes far higher taxes on oil products. In the case of petrol and diesel fuel, moreover, drivers can fall back on a functioning, country-wide network of filling stations; a corresponding network for competing energy forms would first have to be established. For this reason too, in spite of car owners’ objections to record prices at the petrol pumps, these high prices are unlikely to have any substantial effect on car use in the short or medium term. Only in the longer term, with a more pronounced increase in oil prices, will other energy supply systems gain a stronger foothold. In the meantime, consumers will be confronted time and again with the effects of sharply rising oil prices.

Klaus Matthies

Senior Economist, HWWA Department “International Macroeconomics”