

2010-09-16

PRESS RELEASE

Energy markets and the macroeconomy

(Article published in the September 2010 Economic Review)

Energy plays a crucial role in economic life, particularly in the operation of advanced economies such as the euro area or Belgium. In recent times, energy prices have been particularly volatile. In particular, the price of crude oil – around USD 20 per barrel in the 1990s - has risen steadily since 2004. It reached a record level of almost 150 dollars in mid 2008 before dropping to just under 35 dollars at the end of that year. Since then, the price per barrel has climbed back, and stood at 75 dollars in mid August when this article went to press. It is important to understand how the energy markets operate and how shocks affecting global oil prices are ultimately transmitted to business activity and prices. Among other things, that information is necessary for designing monetary policy.

Compared to other euro area countries, the Belgian economy is relatively sensitive to oil price shocks in terms of both inflation and economic activity. For instance, a 10% increase in oil prices would lead to a 0.71 percentage point rise in the harmonised index of consumer prices in Belgium after three years, compared to 0.45 percentage point in the euro area. Regarding the impact on activity, a 10% increase in oil prices would depress GDP in Belgium by 0.46 percentage point after three years, compared to 0.24 percentage point in the euro area.

That greater sensitivity is due primarily to a relatively high energy intensity resulting in part from a specific industrial structure in that respect, namely the over-representation of branches of activity consuming large amounts of energy, such as metallurgy, chemicals and non-ferrous metals, and specialisation in the initial product processing stages in those branches of activity. In addition, the consumption of energy products by Belgian households is also higher than in the euro area. Since Belgium no longer has any fossil fuels, and renewable energy is not yet well developed there, that implies a high degree of energy dependency on other countries. The management and, if possible, reduction of the energy intensity of both the Belgian production process and consumption patterns therefore present a major challenge, not only on environmental grounds but also for macroeconomic reasons, as demonstrated in this analysis.

The associated greater vulnerability of the Belgian economy to oil price shocks is augmented by a range of other factors. Some of them concern the pricing of energy products and the operation of the energy markets themselves, while others relate to the operation of the broader product and labour markets in Belgium.

The first range of factors include the relatively low level of excise duty and related taxes on diesel, natural gas and particularly heating oil. Belgian consumer prices of these energy products are consequently more sensitive to fluctuations in the crude oil price. Also, the consumer price of gas and electricity in Belgium reacts much faster than in neighbouring countries to fluctuations in prices on the international energy markets. That is due to the monthly adjustment of Belgian consumer prices via tariff-setting formulas based partly on the movement in the price of energy commodities; that practice is unique in Europe. Thus, the suppliers' gross margin is largely stabilised, and the uncertainty associated with energy price volatility mainly affects the consumer. In contrast, prices in other countries are adjusted less frequently and in some cases – unlike in Belgium – the adjustments are still subject to some form of regulation. More generally, despite liberalisation, the effective degree of competition on the gas and electricity markets is still very low, both in Belgium and in the other euro area countries.

Moreover, the indexation applied in Belgium, not only to wages but also to certain prices, heightens the economy's sensitivity to oil price shocks, even though the use of the health index partly neutralises the initial shock. Owing to indexation, there are second round effects on inflation, and economic activity suffers a stronger negative impact due to a loss of competitiveness, even though private consumption is relatively well protected. However, that additional negative impact could be curbed by constant monitoring of Belgian competitiveness, as prescribed by the law of 1996 on the promotion of employment and the safeguarding of competitiveness.

boulevard de Berlaimont 14 1000 Brussels phone + 32 2 221 46 28 www.nbb.be Company's number: 0203.201.340 - RLP Brussels