International Oil Price Changes: Impact of Oil Prices on Growth and Inflation in the EU

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1 Introduction

The increase in oil prices during 2004 by nearly 50% has raised new concerns about the detrimental effects of such price movements for oil importing industrial economies. In particular there are fears that this could cause effects similar to the large oil price shocks in 1973-74 and 1979-80, namely an economic downturn combined with rising inflation. This phenomenon was given the term 'stagflation' in those days. Such a fear is probably exaggerated since the share of oil in total output is much smaller nowadays then it was 30 years ago and monetary policy has learned how to control inflation in the case of adverse supply shocks. Nevertheless an oil price increase, especially in this order of magnitude still constitutes an adverse supply shock with non negligible macroeconomic consequences. This paper analyses how oil prices affect the macro economy and assesses quantitatively how an increase in oil prices is likely to affect growth and inflation in the

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EUR area. In particular, this paper summarises recent findings on the likely effects of a rise in oil prices. Though at the moment it is not clear whether the oil prices will remain at the current level, there is nevertheless the perception that rising oil demand especially from Asian transition economies will put more permanent upward pressure on the price of oil. Therefore it appears useful to consider a scenario where oil prices stay high permanently in order to show orders of magnitude for output effects to be expected.

The paper will be organised as follows. The first section gives an overview of oil price developments since the early 70s and provides an assessment of the current oil price hike. Section 2 describes how oil prices affect the macro economy and presents DG ECFINs macro model which is used for our quantitative assessments. Section 3 presents results from various policy institutions and research institutes in order to provide the full range of currently available estimates. Though macro policy, especially monetary policy, can do little to counter the long run impacts of an oil price increase, a comparison of the simulation results nevertheless reveals that policy may have some impact in smoothing the adjustment of the economy to a new steady state. In particular over a period of about two years there might be a trade off between inflation and GDP which could provide policy with some options on how to react to such an increase in oil prices. The magnitude of this trade off is analysed in the last section.

2 Oil Price Developments in Historical Perspective

Political and military tensions in the Middle East in the 1970s ended a long period of stable oil prices and oil prices increased to about 10 EUR in 1974 and they peaked in 1983 at about 35 EUR. The global recession exerted downward pressure on oil prices and they remained at a fairly stable level of slightly above 10 EUR until 1999. From January 1999 to September 2000 they rose again by about 200%. Geopolitical tensions kept oil prices high throughout 2001-03.

Since the beginning of 2004 oil prices have surged again. In October 2004 they stood about 48% above their level at the beginning of the year. Though the price of crude oil has fallen in December it still currently remains above 45$ per barrel. Oil prices are now approaching levels prevailing at the beginning of the 1980s. However, measuring oil prices against domestic prices reveals that the real price of oil is less than 50% of what it was at the peak in the 1980s.

Apart from the observed increase in oil prices over the year 2004, the important question remains, to what extent this constitutes a permanent increase? For the autumn forecast DG ECFIN has assumed that oil prices will remain high throughout the forecast period. Such a scenario was regarded as consistent with the futures contracts prevailing when the forecast was finalised (mid-October), and, although futures markets are less than perfect in predicting oil prices, they are probably the best available option for oil price expectations.