

## BOX II.1:

### Spillover of oil shock to the CPI

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The significant increase in international oil prices is a major shock to inflation. In the short term, this shock is transmitted directly—through local fuel prices—and indirectly through its effects on the production costs of other goods and services. The magnitude of these effects depends on various factors, notably the characteristics of the shock—especially its magnitude and persistence—and the macroeconomic conditions under which it occurs, including the state of the business cycle and the evolution of inflation expectations. This box provides further details on the estimation of direct and indirect effects, as well as real-time monitoring of the magnitude and timing of their transmission.

Headline inflation rose from 2.4% in February to 3.9% in May, driven mainly by the direct impact of rising international fuel prices. In line with expectations, the indirect effect has been of a more limited magnitude than the direct effect. In the central scenario of this IPoM, as in March, the pass-through of the shock to the CPI is expected to remain around historical averages, in a context where the output gap is projected to remain slightly negative over the projection horizon. Overall, the magnitude of the shock, uncertainty regarding its future evolution, and the possibility of a more dynamic than anticipated economy imply upside inflationary risks, which are captured as sensitivity scenarios.

#### Transmission channels in response to an oil price shock and estimation of its impact

Given the weight of fuels in the CPI, the direct impact is the main channel through which the rise in the price of oil affects inflation<sup>1/</sup>. On average, a 10% increase in international oil prices leads to an increase in local gasoline prices of approximately 5% over the course of a year, which is equivalent to 0.2 pp of the CPI ([Guzmán et al., 2026](#))<sup>2/</sup>. In the short term, the speed of price pass-through depends on the parameters of the stabilization mechanism and on factors such as refining and marketing margins.

Meanwhile, the indirect impact operates primarily through increases in production costs and how these affect the prices of other goods and services. Estimates based on supply-use tables show that, at the aggregate level, fuels (either directly or through transportation services) account for about 2% of the total production cost of the goods and services consumed by households<sup>3/</sup> ([Guzmán et al., 2026](#)). In accordance with this, various estimates suggest that a 10% increase in the price of oil leads to an impact on the prices of other goods and services of between 0.1pp and 0.3 pp over one year. The results are consistent with evidence based on firm-level microdata, which suggests that price adjustments are greater among firms more exposed to fuel use (Table II.5).

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<sup>1/</sup> Fuels account for 6.4% of the consumer basket according to the CPI with base 2023=100.

<sup>2/</sup> Estimated using local projections for the gasoline CPI component, and then weighted by gasoline's share of the CPI (3.4%). For fuels overall, the analysis suggests a 4% increase over one year and an impact of 0.3 pp on the CPI.

<sup>3/</sup> This metric excludes fuels from the households' consumer basket.

In addition to the aforementioned factors, there are other transmission channels, including indexation to past inflation, lower demand resulting from a decline in household purchasing power, and the substitution with other goods in consumption and production decisions, among others. The results of a multisectoral general equilibrium model with price rigidities ([Guzmán et al., 2026](#)) suggest that this type of shock exerts greater pressure on the costs and prices of goods. The reaction of service prices tends to be more limited in the short term, though more persistent, in line with the greater rigidities and indexation processes that characterize them (Figure II.10).

### Pass-through observed up until May

Until now, the pass-through to domestic inflation has unfolded as anticipated in the March IPoM. The direct effect has been the main driver behind the rise in the CPI, with its annual contribution increasing by 1.6 pp since February, like the rise recorded by annual inflation during that period. Thus, while international prices for oil and its derivatives rose by nearly 60% from the outbreak of the shock through May, local fuel prices accumulated increases of nearly 30%, suggesting that most of the direct pass-through has already occurred.

As expected, the indirect pass-through to domestic inflation has been more limited than the direct one and, apart from some transportation services, has been in line with projections. This is partly so because firms have absorbed part of the shock through reductions in their margins, as suggested by indicators derived from microdata and qualitative evidence from entrepreneurial surveys (Figure II.11).

In any case, the evidence suggests that the shock has been passed on to a greater extent for goods with higher exposure to oil. Estimates based on microdata show that goods produced by manufacturing and wholesale and retail trade firms more exposed to energy inputs have seen greater price increases than those less exposed ([Rivera et al., 2026](#)). Similarly, survey data reveal that firms where fuels account for a larger share of their cost structure report higher price expectations than firms that do not use such inputs in their production processes ([Business Perceptions Report \(IPN\), May 2026](#)).

### Risks to inflation

Inflation has performed as expected; however, risks associated with the cost shock triggered by the conflict in the Middle East persist. The price hikes in oil and byproducts were significant, so we must continue to carefully assess its spillover effects on other prices in the economy. All of this is taking place within a context where more extreme fluctuations in crude oil prices cannot be ruled out (Box I.2).

Historically, the magnitude of oil price increases has been a key determinant of how those increases are passed on to the prices of other goods and services. In the face of more significant oil price increases, the pass-through has been—on average—higher (Figure II.12 and [Rivera et al., 2026](#)). Thus, scenarios in which the shock persists or intensifies, or in which firms' margins cannot absorb the cost pressures they face, could lead to greater inflationary pressures in the future. Conversely, scenarios where the economy exhibits greater capacity slack would be associated with more limited pass-through (Figure II.12 and [Guzmán et al., 2026](#)). These findings are consistent with what firms reported in the [May IPN](#) survey, which noted that among the main reasons for not fully passing on higher costs were insufficient sales and the expectation that the cost increase would be temporary.

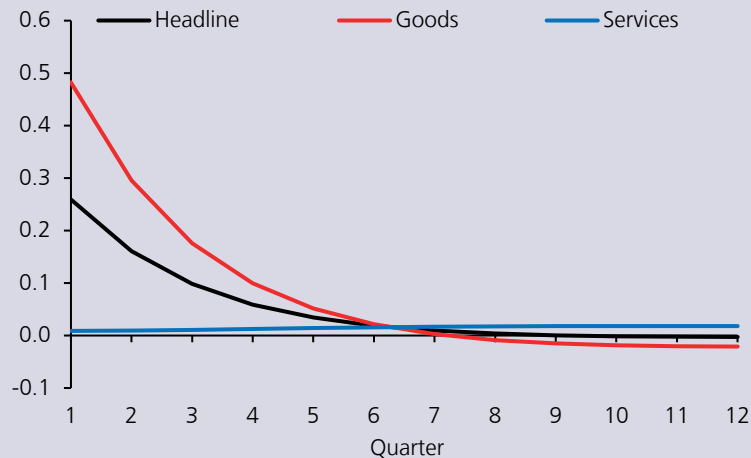
**TABLE II.5**  
ONE-YEAR PASS-THROUGH COEFFICIENT OF THE RISE IN THE PRICE OF OIL  
(elasticity)

Variable	Methodology	Result/range
IPC without energy	Econometric estimation using INE data (1)	0.01 y 0.03
IPC without energy	Supply-use tables (2)	0.01 y 0.02
Firms' prices (wholesale and retail trade and industry)	Econometric estimation using electronic invoice data (3)	0.01

(1) Estimate with local projections for the CPI excluding energy. (2) Aggregate estimate based on the relevance of oil (and derivatives) and the match between economic activities and CPI subclasses, considering a pass-through of costs to prices in line with historical evidence. (3) Panel estimate based on electronic invoice data with local projections according to firms' exposure to the shock, evaluated for a firm with average fuel expenditure.

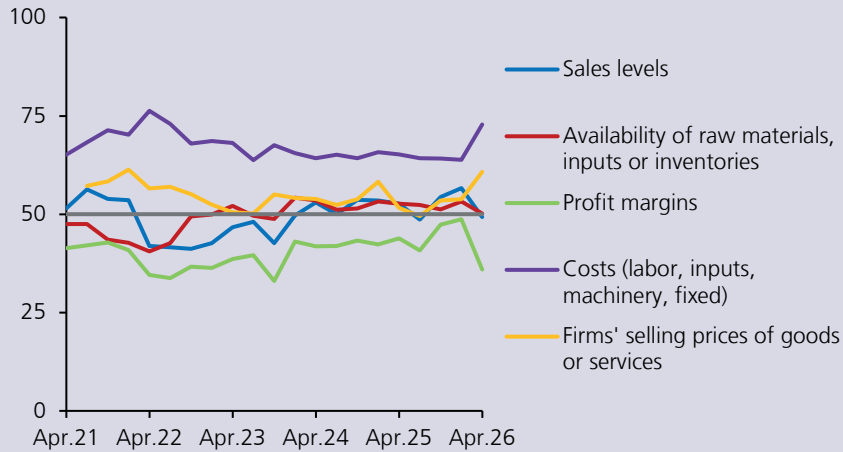
Sources: [Guzmán et al. \(2026\)](#) and [Rivera et al. \(2026\)](#).

**FIGURE II.10**  
RESPONSE OF HEADLINE, GOODS AND SERVICES INFLATION TO A 10% INCREASE IN THE PRICE OF OIL  
(percentage points)



Source: [Guzmán et al. \(2026\)](#).

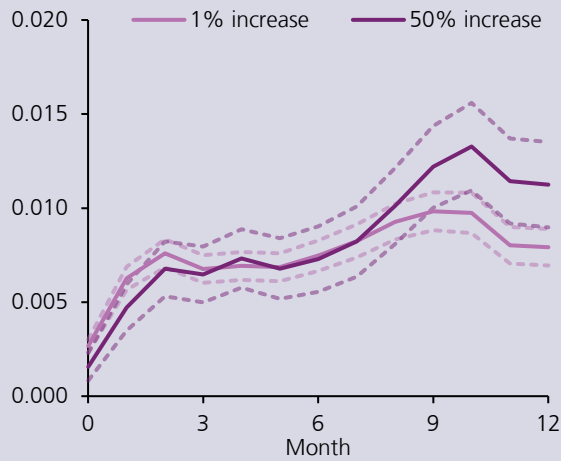
**FIGURE II.11**  
EVOLUTION OF THE FIRMS' FACTORS IN THE NEXT THREE MONTHS  
(diffusion index)



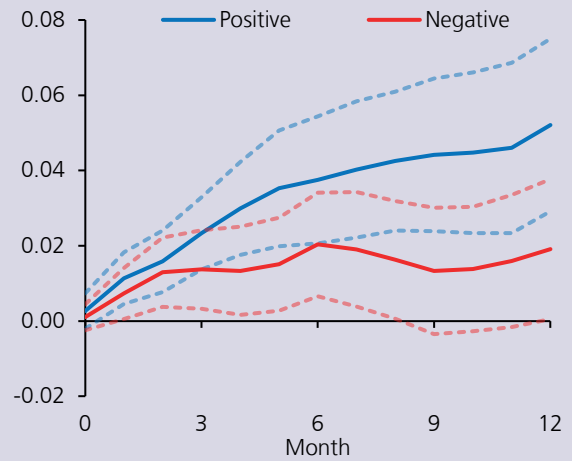
Source: [Business Perceptions Survey \(EPN\)](#), May 2026.

**FIGURE II.12** PASS-THROUGH TO PRICES OF AN OIL PRICE SHOCK

a) According to the magnitude of the shock (1)  
(percentage points)



b) According to activity gap (2)  
(percentage points)



(1) The figure shows the pass-through coefficient to prices of firms (microdata) in response to oil price shocks of varying magnitudes, for an average exposure of 2.2% of their costs to energy inputs. 95% confidence intervals. (2) The figure shows the pass-through to consumer prices, excluding energy. 68% confidence intervals.

Sources: [Guzmán et al. \(2026\)](#) and [Rivera et al. \(2026\)](#).