

Forwards & Swaps: Hedging price and exchange rate risks in industrial procurement

Forwards and swaps are financial instruments that allow buyers to hedge commodity, energy and currency risks. They make it possible to bindingly fix prices or interest rates for a future date, thereby stabilising the calculation of quotations and orders. For procurement managers in DACH industry, they are increasingly part of the standard toolkit, particularly with volatile material costs such as steel, plastics, metals or energy.

Key facts

- Forwards are individually agreed forward transactions in which delivery or settlement takes place at a fixed price and date.
- Swaps exchange future cash flows, typically fixed against variable prices or interest rates, often over several periods.
- The essential purpose in procurement is not speculation but the plannable hedging of material and currency costs.
- Typically, buyers hedge only part of the demand, in practice often 30 to 80 per cent, depending on risk-bearing capacity and customer contracts.
- The price risk is not eliminated but transformed: an opportunity loss looms if the market price falls below the hedged price.
- Their use requires clear governance, documentation and coordination with treasury and the executive board.

Definition: Forwards & Swaps

Forwards (forward contracts) are bilateral or exchange-traded contracts agreeing the purchase or sale of a good at a price fixed today and a future date. Swaps are agreements to exchange cash flows, for example fixed against variable commodity prices or interest rates, usually over several settlement periods. Both instruments serve in procurement for hedging, not speculation.

Distinction from futures and options

Forwards are tailor-made OTC contracts, whereas futures are standardised, exchange-traded forward transactions settled daily via margin accounts. Options, by contrast, confer a right but not an obligation to exercise, and therefore cost an option premium. In procurement, futures are often the first entry point because of the low barriers, while OTC forwards are used for large, individual demand volumes.

Typical use cases in procurement

Frequently hedged positions are metals such as aluminium, copper or zinc, energy such as electricity, gas and diesel, agricultural commodities and foreign currency positions from supply contracts. Interest rate swaps can also become relevant when capital goods are financed or lease instalments are calculated. The prerequisite is a plannable, approximately reliable demand volume.

Methods and approach for buyers

The use of forwards and swaps follows a structured process: identify risks, define the hedging strategy, select instruments, organise execution and monitor continuously. Close coordination between procurement, treasury, controlling and the executive board is important, as hedge gains and losses must be treated for accounting and tax purposes. Legal and tax details should be examined on a case-by-case basis.

Risk identification and demand planning

The starting point is the analysis of which positions carry price and exchange rate risks to a relevant extent. A structured spend taxonomy is helpful, making commodity and currency exposures visible by material group. In addition, demand forecasts from S&OE and order prioritisation provide the volume basis. A risk register documents exposures, horizons and hedge ratio per position.

Hedge strategies: fixed, dynamic, staggered

Full hedging fixes the entire expected risk and maximises plannability, but also opportunity costs. Partial hedging typically covers the baseline demand and leaves residual volumes open. In practice, the staggered approach (rolling hedge) is popular: the demand for the next twelve months is hedged step by step in tranches of, for example, three months, which reduces speculative market-timing decisions.

Implementation via contracts and price mechanisms

Commodity risks can also be hedged within the supplier relationship, for example via fixed-price agreements with delivery window bands, price adjustment clauses or demand call-offs at agreed formula prices. Such contracts from a single negotiation round function economically like a forward without requiring a separate derivative. It is important to reconcile contract quantities and forecast quality to avoid over- or under-supply; a quantity deviation workflow helps to clarify discrepancies between hedged and actually called-off quantities promptly.

Key KPIs for forwards & swaps

Success should not be measured by the short-term gain or loss of individual transactions, but by the effectiveness of the hedge compared with the unhedged state. Key figures relate to hedge ratio, budget adherence and process quality. They are most sensibly consolidated in a hedging report that is regularly presented to the executive board and controlling.

Hedge ratio and budget adherence

The hedge ratio indicates what share of the planned risk volume is hedged, typically as a guideline value between 30 and 80 per cent depending on risk appetite. Budget adherence measures how strongly actual procurement prices deviate from the calculated target budget. Both key figures should be reported per commodity and currency.

Hedge effectiveness and transaction costs

Hedge effectiveness compares the price change of the hedged position with the counter-movement of the derivative; values close to 100 per cent indicate an effective hedge. Bank margins, exchange fees and operating costs are also relevant. For steering and balance sheet purposes, the documentation of the effectiveness test must be agreed on a case-by-case basis with tax and accounting.

Risks and controls

Derivatives are tools with risks of their own: liquidity risks from margin requirements, counterparty risks, basis risks between the hedged good and the reference price, as well as the risk of speculation through uncontrolled positions. Solid controls and clear responsibilities are therefore essential. Legal aspects, such as the delineation of transactions subject to supervisory regulation or EMIR, should be professionally reviewed.

Governance, limits and documentation

Access should be supported by a hedging manual that defines permitted instruments, maximum hedge ratios, tenors and decision-making authority. Position limits and loss thresholds are monitored regularly, every transaction is documented and subject to an approval workflow. A four-eyes principle between execution and control reduces the risk of misconduct.

Counterparty risk and compliance

For OTC transactions, the counterparty's creditworthiness must be assessed, supplemented by legally binding framework agreements and, where customary, collateral agreements. Sanctions list screening and KYC in procurement or in the treasury contract environment are standard before new transactions. In exchange transactions, a clearing house assumes essential parts of the counterparty risk but requires liquidity for margin payments.

Alignment with contracts and customers

Fixed procurement prices are only valuable if the sales price or customer calculation corresponds. With fixed-price contracts with customers, a forward hedges the margin; with variable pass-through prices, hedging can even create risk. Buffer stocks and safety stock levels are also physical hedging instruments that tie up capital and should be weighed against financial hedging.

Current developments

Demand for price hedging has noticeably increased with the energy and commodity price disruptions of recent years. At the same time, digital platforms and emissions or energy market instruments are becoming more accessible, including for mid-sized buyers. The trend is towards embedding hedging in a holistic price strategy for the procured material groups.

Digitalisation and operational embedding

Hedging data is increasingly integrated directly into ERP and e-procurement systems, so that hedged prices automatically appear in calculations and approval processes. Exception management can automatically signal the need for action during sharp market movements, for example when hedged prices deviate significantly from market prices. This turns a treasury topic into a manageable part of operational procurement execution.

Price strategy and sourcing models

In some category charters, the hedging strategy is now explicitly anchored as part of the category strategy, including coverage rules and responsibilities. E-auctions and short-term spot purchases deliberately remain unhedged, while framework agreements and derivatives carry the baseline loads. Freight cost management complements the picture, as transport costs (such as BAF surcharges) also represent swappable index risks.

Energy prices and the regulatory framework

Forward markets are established for electricity and gas, with tenors typically stretching several years ahead. Regulatory requirements for derivatives transactions, reporting and clearing obligations have recently become stricter; the individual case should be legally reviewed. What remains important: hedging does not replace a fundamental price negotiation strategy or the diversification of sources of supply.

Typical metrics

Hedge ratio: 30–80 %

Hedged share of the planned risk volume per commodity or currency.

Budget adherence (price deviation): < ±5 %

Deviation of actual procurement prices from the calculated target budget, typical guideline value.

Hedge effectiveness: > 90 %

Alignment of the hedge with the original risk movement; high values indicate effective hedging.

Margin coverage ratio: > 150 %

Free liquidity relative to exchange margin requirements, to avoid margin calls.

Practical example

A mid-sized mechanical engineering company processes around 4,000 tonnes of aluminium profiles per year, mostly for export orders in US dollars. Its margin was heavily burdened by simultaneous fluctuations in the aluminium price and the exchange rate. After building a risk register and coordinating with treasury, the company defined a staggered hedge strategy and embedded it in the category strategy.

- Around 60 per cent of the twelve-month aluminium requirement is hedged in staggered three-month tranches via exchange-traded futures.
- The USD supplier share is hedged via currency forwards in the volume of firm purchase orders.
- Supplier contracts receive formula-based price limits to steer contractual and derivative hedging consistently.
- A monthly hedging report with hedge ratio, budget adherence and deviations goes to the executive board and controlling.

Conclusion

Forwards and swaps turn unplannable market fluctuations into calculable costs and thereby strengthen the quotation and margin security of industrial suppliers. They are no substitute for solid contract and supplier strategies, but a complementary instrument that should be anchored via S&OE, demand planning and the risk register. Clear governance, limited hedge ratios and clean coordination between procurement, treasury and controlling are decisive. Those who understand hedging as part of a holistic price strategy gain plannability without entering speculative positions. Getting started with simple, exchange-traded instruments and manageable volumes has proven itself in practice.

Frequently asked questions

What is the difference between a forward and a swap?

A forward fixes the price for a single future transaction at a fixed date. A swap, by contrast, exchanges cash flows over multiple periods, for example fixed against variable commodity or interest rates. In procurement, both serve as hedging instruments; a swap is better suited to continuous demand, while a forward is used for one-off deliveries or payments.

Is hedging with forwards also worthwhile for SMEs?

Yes, particularly where raw material or currency content in the calculation is high. The effort can be kept small through exchange-traded standard products and simple governance. What matters are realistic volume forecasts, a defined limit and coordination with financial accounting.

Which commodities and prices do buyers typically hedge?

Commonly hedged positions include metals such as aluminium, copper, zinc or steel reference quantities, energy sources such as electricity, gas and diesel, and relevant foreign currencies. Index positions in freight cost management can also be partly hedged. The prerequisite is a liquid reference market where the price is actually quoted.

What risks arise from forwards and swaps?

The central risk is the opportunity loss if the market price falls below the hedged price. Added to this are liquidity requirements from margin payments, counterparty risks in OTC transactions and basis risks when the reference price and the goods actually procured diverge. Clear limits and documentation limit these risks.

What percentage of demand should buyers hedge?

In practice, hedge ratios typically range between 30 and 80 per cent, depending on demand reliability, customer contracts and risk-bearing capacity. A staggered hedge in tranches reduces the timing risk. A hedge ratio of 100 per cent is rarely sensible, as forecasts are never exact.

Can price risks also be hedged without derivatives?

Yes, through fixed-price contracts with suppliers, price adjustment clauses, demand bundling or physical buffer stocks and safety stock levels. These options are simpler but often less flexible or tie up capital. In practice, contractual and financial hedging are combined depending on the material group.