Euro Area Research

Germany's VAT cut sends euro inflation on a roller coaster

- Drawing on the historical precedent of the German VAT hike enacted in January 2007, we expect Germany's VAT cut to lower euro inflation by c.0.2 percentage points on average in 2020.
- We are sceptical that other countries will follow the German example of broad-based VAT cuts, but targeted cuts on travel and tourism-related items remain an option.

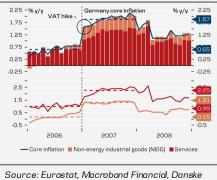
Germany's government keeps opening the spending taps and at the beginning of June unveiled another sizable recovery stimulus package of EUR130bn (3.8% of GDP). As part of the package, VAT rates will be temporarily cut from 19% to 16% (lower band from 7% to 5%) from July until December 2020.

While the VAT cut is welcome from a growth perspective by boosting consumer spending, it will also have a marked impact on the short-term euro area inflation outlook as HICP data is collected from the shelf price displayed in shops or advertised by service providers. As normal inflation rates will hence be distorted by the effect of the tax changes, focus will also turn to the HICP at constant tax rates (also published by Eurostat), which filters out these effects and provides a better gauge of price changes due to supply and demand.

Drawing on the lessons from 2007

The 2007 German VAT hike from 16% to 19% boosted average HICP inflation by some 1.6pp in Germany and 0.4pp in the euro area as the chart on the right illustrates. The price increases were more or less exclusively centred on core inflation, as food items which are taxed at the reduced rate of 7% were excluded from the VAT hike. Overall, average German core inflation was boosted by more than 1.2pp during 2007 and euro area core inflation by c.0.5pp, with both services and non-energy industrial goods (NEIG) prices contributing to the increase. Within services, the impact was most pronounced for communication, miscellaneous, recreation and transport services, while the effect on package tours and housing services stayed more muted. For NEIG inflation, durables and non-durables prices in particular registered a marked boost, while the impact on semidurables (clothing & footwear) was more muted.

VAT hike boosted German core inflation by some 1.2pp during 2007...



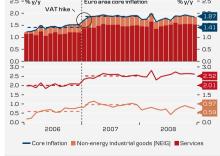
Bank

0.5 -0.0 -

2.5 -% y/y % y/y - 2.5

. and also left its mark on euro area

core inflation



Source: Eurostat, Macrobond Financial, Danske Bank

Other reading

Euro Area Research - The road to recovery, 14 May

2007 VAT hike boosted average HICP inflation by some 1.6pp in Germany and 0.4pp in the euro area



Source: Eurostat, Macrobond Financial, Danske Bank

2007 VAT hike mainly boosted German core inflation



Source: Eurostat, Macrobond Financial, Danske Bank

Senior Analvst Aila Mihr +45 45 12 85 35 amih@danskebank.dk

Firms' price response crucial

With respect to the current German VAT cut, we expect to see similar dynamics as in 2007, with the **majority of the HICP impact to stem from lower core inflation**. However, as the VAT cut this time also includes the reduced tax bracket (from 7% to 5%), we expect some impact on food price inflation as well.

For the magnitude of the HICP impact, two factors will be important beyond the applicable tax rates: the price setting behaviour of firms and consumers' response. In 2007, the higher VAT rates seem to have largely been passed on to consumer prices, as a back of the envelope calculation illustrates: with around three quarters of the German HICP basket taxed at the standard VAT rate, the VAT hike from 16% to 19% should have increased German inflation by $1.19/1.16 \times 0.75 = 1.9$ pp. This is relatively close to the 1.6pp average difference registered between German HICP and HICP at constant tax rates in 2007.

Some companies in the car sector (an important part of durables) and recreational services have already indicated that the VAT cut will be fully passed on to consumers. However, in times such as these where margins generally are under pressure, we also expect some companies – especially in less competitive sectors – to be more muted in their price response to cushion operating costs. Furthermore, the temporary nature of the VAT cut might also dampen the pass-through, with the risk that it turns into just another industry subsidy.

The second unknown remains how consumers will react to the VAT cut. All else equal, lower prices should stoke demand - especially for big ticket items - and thereby partly compensate the downward pull on prices. However, in light of the lingering uncertainty expressed in consumer surveys about employment prospects and households' financial situation this demand effect could turn out to be more muted.

VAT cut to send euro inflation on a roller coaster, but still room for higher inflation in 2021 and beyond

Overall, we have lowered our profile for euro area HICP inflation by c.0.2pp in 2020 and 0.1pp in 2021 (see chart on the right). Taking into account Germany's 27.6% weight in the HICP, this is broadly in line with similar experiences of temporary VAT cuts, for example in the UK, where a temporary reduction in the VAT rate from 17.5% to 15% from December 2008 lowered the 12-month CPI rate by c.0.5pp (see *Economic and Labour Market Review, August 2009*).

While the VAT cut will depress core inflation rates in the coming months, it will also give an artificial boost in the latter part of 2021. However, we expect the ECB to look through these gyrations in core inflation and focus on the medium-term inflation dynamics to determine its policy stance – and while the ECB's mandate is focused on inflation (most recently illustrated by linking the PEPP to inflation), it also aims to create a conducive growth environment. Looking into 2021 and beyond, we still see a case for (core) inflation rates to move higher, both due to the mechanical effect from the temporary VAT cut, but also from the unprecedented monetary/fiscal easing and cost push inflation in some industries eventually emerging (see also *Euro Area Research - The road to recovery*, 14 May).

Apart from Germany, so far only Greece (2.2% HICP weight) and Belgium (3.8% HICP weight) have enacted similar (though much more limited) cuts in VAT rates on passenger transport, restaurants and some beverages to help the ailing tourism/hospitality sector. **Will other countries – notably France, Italy and Spain - followsuit? We remain sceptical.** Germany remains in a unique fiscal position and few other European countries can afford the loss of EUR20bn in tax revenues in the current situation, where fiscal fragilities are already looming large due to increased public spending needs. That said, targeted VAT cuts on travel and tourism-related items/services remain a possibility.

Durables and non-durables prices boosted by 2007 VAT hike...



Source: Eurostat, Macrobond Financial, Danske Bank

... but price response in housing services and package tours more muted





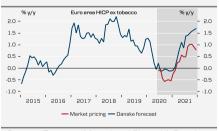
Euro inflation to accelerate in 2021



Assumptions: EUR/USD at 1.12 in 2020 and 1.11 in 2021; Brent oil at 41 USD/bbl in 2020 and 46 USD/bbl in 2021

Source: Eurostat, Macrobond Financial, Danske Bank

Inflation market pricing too subdued



Source: Eurostat, Macrobond Financial, Danske Bank

Disclosures

This research report has been prepared by Danske Bank A/S ('Danske Bank'). The author of this research report is Aila Mihr, Senior Analyst.

Analyst certification

Each research analyst responsible for the content of this research report certifies that the views expressed in the research report accurately reflect the research analyst's personal view about the financial instruments and issues covered by the research report. Each responsible research analyst further certifies that no part of the compensation of the research analyst was, is or will be, directly or indirectly, related to the specific recommendations expressed in the research report.

Regulation

Danske Bank is authorised and subject to regulation by the Danish Financial Supervisory Authority and is subject to the rules and regulation of the relevant regulators in all other jurisdictions where it conducts business. Danske Bank is subject to limited regulation by the Financial Conduct Authority and the Prudential Regulation Authority (UK). Details on the extent of the regulation by the Financial Conduct Authority and the Prudential Regulation Authority are available from Danske Bank on request.

Danske Bank's research reports are prepared in accordance with the recommendations of the Danish Securities Dealers Association.

Conflicts of interest

Danske Bank has established procedures to prevent conflicts of interest and to ensure the provision of high-quality research based on research objectivity and independence. These procedures are documented in Danske Bank's research policies. Employees within Danske Bank's Research Departments have been instructed that any request that might impair the objectivity and independence of research shall be referred to Research Management and the Compliance Department. Danske Bank's Research Departments are organised independently from, and do not report to, other business areas within Danske Bank.

Research analysts are remunerated in part based on the overall profitability of Danske Bank, which includes investment banking revenues, but do not receive bonuses or other remuneration linked to specific corporate finance or debt capital transactions.

Financial models and/or methodology used in this research report

Calculations and presentations in this research report are based on standard econometric tools and methodology as well as publicly available statistics for each individual security, issuer and/or country. Documentation can be obtained from the authors on request.

Risk warning

Major risks connected with recommendations or opinions in this research report, including as sensitivity analysis of relevant assumptions, are stated throughout the text.

Expected updates

Ad hoc

Date of first publication

See the front page of this research report for the date of first publication.

General disclaimer

This research has been prepared by Danske Bank A/S. It is provided for informational purposes only and should not be considered investment, legal or tax advice. It does not constitute or form part of, and shall under no circumstances be considered as, an offer to sell or a solicitation of an offer to purchase or sell any relevant financial instruments (i.e. financial instruments mentioned herein or other financial instruments of any issuer mentioned herein and/or options, warrants, rights or other interests with respect to any such financial instruments) ('Relevant Financial Instruments').

This research report has been prepared independently and solely on the basis of publicly available information that Danske Bank A/S considers to be reliable but Danske Bank A/S has not independently verified the contents hereof While reasonable care has been taken to ensure that its contents are not untrue or misleading, no representationor warranty, express or implied, is made as to, and no reliance should be placed on, the fairness, accuracy, completeness or reasonableness of the information, opinions and projections contained in this research report and Danske Bank A/S, its affiliates and subsidiaries accept no liability whatsoever for any direct or consequential loss, including without limitation any loss of profits, arising from reliance on this research report.

The opinions expressed herein are the opinions of the research analysts and reflect their opinion as of the date hereof. These opinions are subject to change and Danske Bank A/S does not undertake to notify any recipient of this research report of any such change nor of any other changes related to the information provided in this research report.

This research report is not intended for, and may not be redistributed to, retail customers in the United Kingdom (see separate disclaimer below) and retail customers in the European Economic Area as defined by Directive 2014/65/EU.

This research report is protected by copyright and is intended solely for the designated addressee. It may not be reproduced or distributed, in whole or in part, by any recipient for any purpose without Danske Bank A/S's prior written consent.

Disclaimer related to distribution in the United States

This research report was created by Danske Bank A/S and is distributed in the United States by Danske Markets Inc., a U.S. registered broker-dealer and subsidiary of Danske Bank A/S, pursuant to SEC Rule 15a-6 and related interpretations issued by the U.S. Securities and Exchange Commission. The research report is intended for distribution in the United States solely to 'U.S. institutional investors' as defined in SEC Rule 15a-6. Danske Markets Inc. accepts responsibility for this research report in connection with distribution in the United States solely to 'U.S. institutional investors'.

Danske Bank A/S is not subject to U.S. rules with regard to the preparation of research reports and the independence of research analysts. In addition, the research analysts of Danske Bank A/S who have prepared this research report are not registered or qualified as research analysts with the New York Stock Exchange or Financial Industry Regulatory Authority but satisfy the applicable requirements of a non-U.S. jurisdiction.

Any U.S. investor recipient of this research report who wishes to purchase or sell any Relevant Financial Instrument may do so only by contacting Danske Markets Inc. directly and should be aware that investing in non-U.S. financial instruments may entail certain risks. Financial instruments of non-U.S. issuers may not be registered with the U.S. Securities and Exchange Commission and may not be subject to the reporting and auditing standards of the U.S. Securities and Exchange Commission.

Disclaimer related to distribution in the United Kingdom

In the United Kingdom, this document is for distribution only to (I) persons who have professional experience in matters relating to investments falling within article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the 'Order'); (II) high net worth entities falling within article 49(2)(a) to (d) of the Order; or (III) persons who are an elective professional client or a per se professional client under Chapter 3 of the FCA Conduct of Business Sourcebook (all such persons together being referred to as 'Relevant Persons'). In the United Kingdom, this document is directed only at Relevant Persons, and other persons should not act or rely on this document or any of the contents.

Disclaimer related to distribution in the European Economic Area

This document is being distributed to and is directed only at persons in member states of the European Economic Area ('EEA') who are 'Qualified Investors' within the meaning of Article 2(e) of the Prospectus Regulation (Regulation (EU) 2017/1129) ('Qualified Investors'). Any person in the EEA who receives this document will be deemed to have represented and agreed that it is a Qualified Investor. Any such recipient will also be deemed to have represented and agreed that it has not received this document on behalf of persons in the EEA other than Qualified Investors or persons in the UK and member states (where equivalent legislation exists) for whom the investor has authority to make decisions on a wholly discretionary basis. Danske Bank A/S will rely on the truth and accuracy of the foregoing representations and agreements. Any person in the EEA who is not a Qualified Investor should not act or rely on this document or any of the contents.

Report completed: 10 June 2020, 15:04 CEST Report first disseminated: 11 June 2020, 06:00 CEST