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How has COVID-19 affected income, consumption and saving inequality in the euro area?

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European Central Bank

Overview

Motivation

- Lockdown measures have affected some (contact-intensive) sectors more than others;

- Employees in lockdown sectors have lower income, savings and lower levels of education, exacerbating inequalities (US evidence: Beland et al. 2020 - Mongey et al. 2020 – UK: Joyce and Xu 2020);

- Unprecedented, heterogeneous decrease in consumption and increase in the saving rate due to the social distancing rules;

- Previous pandemics amplified inequalities (Furceri et al. 2020);

Our work

- Complementary evidence for the euro area;

Data sources

Existing (pre-pandemic) micro data

Income: Statistics on Income and Living Conditions (EU-SILC)

Consumption/Saving: Household Budget Survey (HBS)

Assets: Household Finance and Consumption Survey (HFCS)

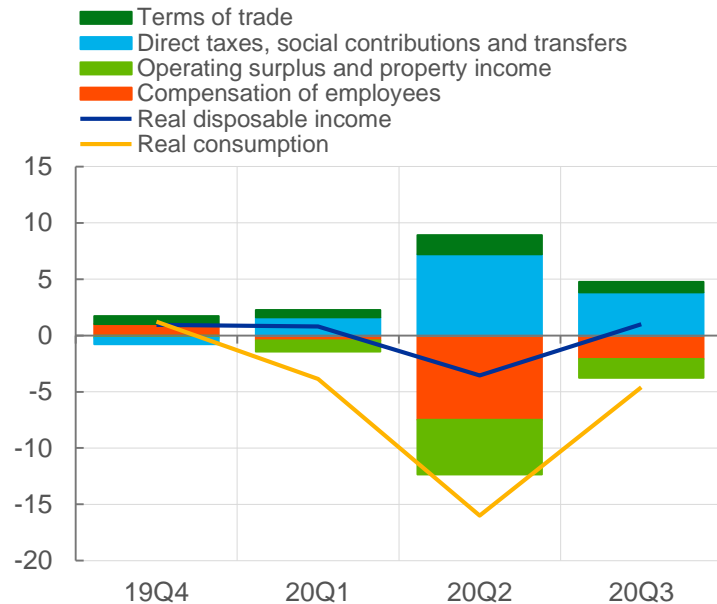## Euro area: disposable income and consumption
(y-o-y percentage change, percentage points contribution)

Legend:
- Terms of trade
- Direct taxes, social contributions and transfers
- Operating surplus and property income
- Compensation of employees
- Real disposable income
- Real consumption

Sources: ECB and Eurostat.
Latest observation: 2020Q3.

Household propensity to save
(x-axis: years, y-axis: lhs: percentage points rhs: percentage)

Legend:
- CEPR recession periods
- Consumer survey (lhs)
- Saving rate (rhs)
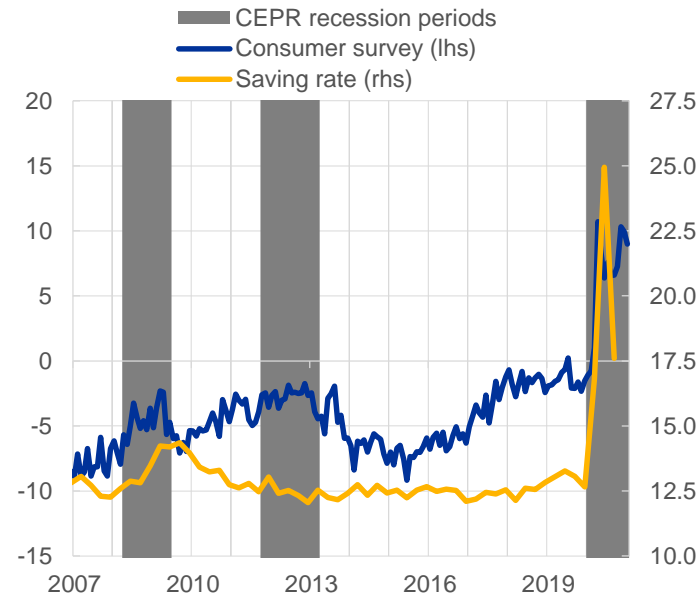
Sources: DG-ECFIN, Eurostat and ECB staff calculations.

Notes: The grey bars represent the recession periods as defined by the Centre for Economic Policy Research. All data are seasonally adjusted. Latest observations: 2020Q3 for the saving rate and January 2021 for the indicator based on the Consumer Survey. The saving rate is derived by sectoral accounts. The consumer survey indicator is a qualitative indicator of the propensity to save computed as the difference between the answers to the survey question about households' expected savings and the answers to the question about their expected financial situation

Restrictions have asymmetric effects across countries and income distribution

Share of employees in lockdown sectors by country
(x-axis: euro area countries, y-axis: percentage of respondents)
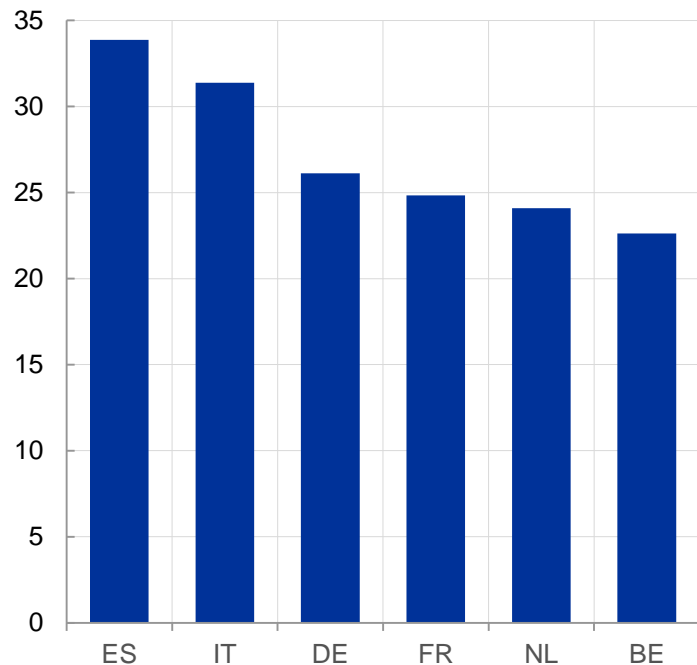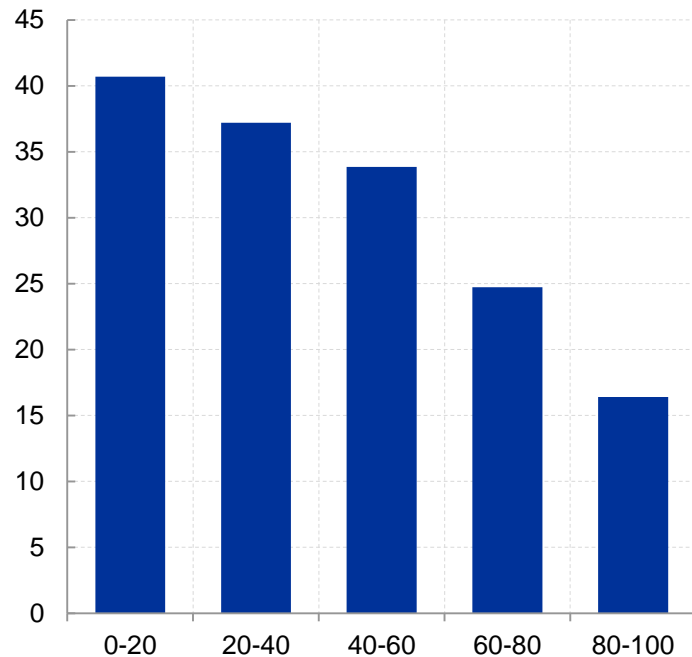

Source: EU Statistics on Income and Living Conditions (EU-SILC), 2018; Ireland and Slovakia 2017.
Note: The chart shows the distribution of the share of employees in lockdown sectors across different euro area countries. Lockdown sectors are: wholesale and retail trade, repair of motor vehicles and motorcycles; transporting and storage; accommodation and food service activities; arts, entertainment and recreation (sectors G, H, I and R in the Statistical Classification of Economic Activities in the European Community (NACE) classification). (Due to data limitations also the following sectors are included among those affected by the lockdown: other services activities; activities of households as employers; undifferentiated goods-and services-producing activities of households for own use; activities of extraterritorial organisations and bodies.)

Share of employees in lockdown sectors by income quintiles
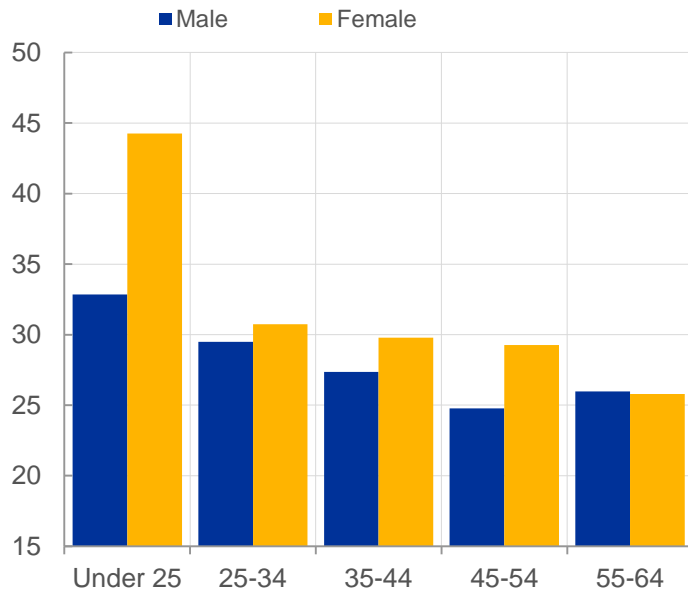(x-axis: income quintiles, y-axis: percentage of respondents)

Source: EU Statistics on Income and Living Conditions (EU-SILC), 2018; Ireland and Slovakia 2017.
Note: The chart shows the distribution of the share of employees in lockdown sectors across quintiles of the income distribution in the euro area

Share of employees in lockdown sectors by age and gender, euro area
(x-axis: age groups, y-axis: percentage of respondents)

Net liquid-asset income ratio by income quintiles
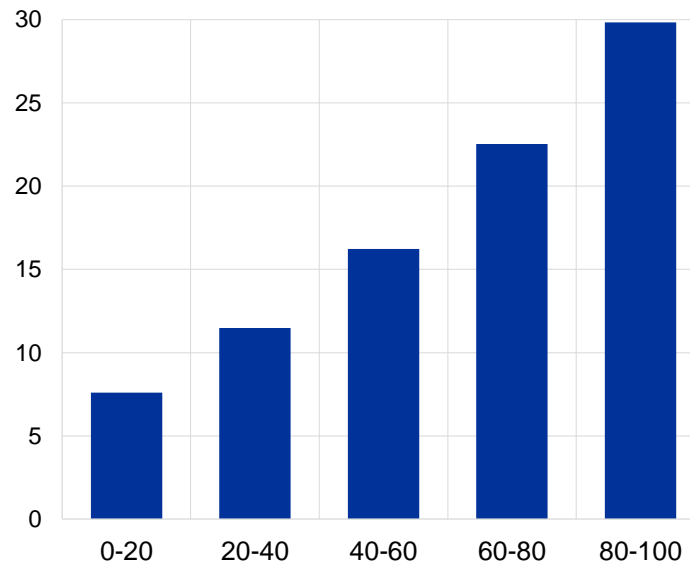(x-axis: income quintiles, y-axis: median net liquid-asset income ratio)

Sources: EU Statistics on Income and Living Conditions (EU-SILC), 2018; Ireland and Slovakia 2017.
Notes: The chart shows the distribution of the share of employees in lockdown sectors across age and gender.

Source: Household Finance and Consumption Survey, wave 2017.
Net liquid assets-income ratio: ratio of net liquid assets to household gross annual income. Net liquid assets are calculated as the sum of value of deposits, mutual funds, bonds, non-self-employment business wealth, (publicly traded) shares and managed accounts, net of credit line/overdraft debt, credit card debt and other nonmortgage debt.

Categories of spending and savings by income quintiles

(x-axis: income quintiles, y-axis: amount in euro spent in different categories of spending)
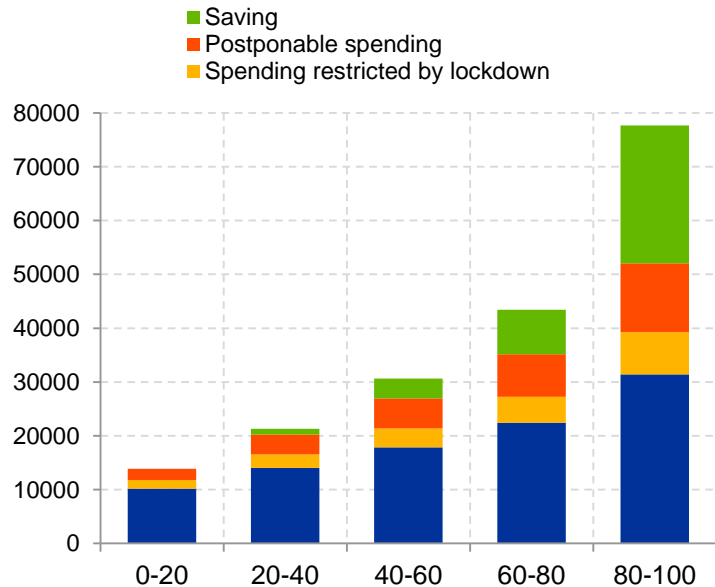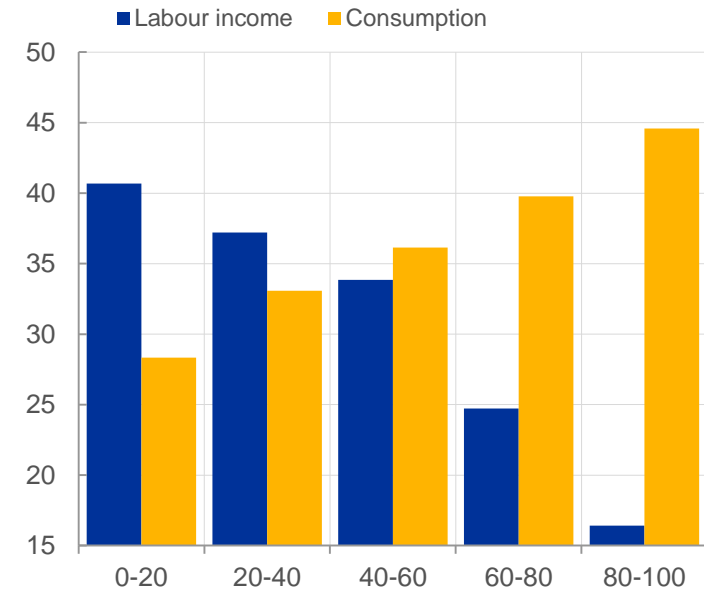

Source: Household Budget Survey.

Note: The chart shows the structure of household expenditures (spending) and saving across income quintiles. Blue bars denote necessities, items unaffected by lockdown, such as food at home, housing and utilities, health items, communications and education. Yellow bars denote items restricted by the lockdown, such as food in restaurants, transport services, holidays, hotels and cultural services. Red bars denote postponable spending items, such as purchases of motor vehicles, clothing and footwear, and furnishings and furniture. Green bars show household saving. The chart shows an aggregate of Germany, Spain and France.

Income and consumption exposed to lockdown measures by income quintile

(x-axis: income quintiles, y-axis: share of labour income and share of consumption)

Sources: EU Statistics on Income and Living Conditions (EU-SILC), 2018; Ireland and Slovakia 2017 and Household Budget Survey.

Notes: The chart shows the share of income and consumption exposed to lockdown measures across income quintiles. Exposed consumption includes food in restaurants, transport services, holidays, hotels and cultural services and postponable spending items, such as purchases of motor vehicles, clothing and footwear, and furnishings and furniture.

Our findings

- The pandemic has impacted euro area economies differently because of the differences in their economic structures;

- Impact of COVID-19 is regressive across the income distribution, for labour income, and progressive for consumption;

- Young workers and women are more likely to be employed in sectors subject to lockdown measures;

- Bottom quintiles of the income distribution have less liquid assets to maintain expenses in case of a job loss;

- Top of the income distribution contributes disproportionately to the unprecedented increase in the aggregate saving rate.

References

Beland, L.-P., Brodeur, A. and Wright, T. (2020), "COVID-19, Stay-At-Home Orders and Employment: Evidence from CPS Data", *IZA Discussion Paper Series*, Discussion Paper No 13282, May.

Furceri, D., Loungani, P., Ostry, J.D. and Pizzuto, P. (2020), "Will COVID-19 affect inequality? Evidence from past pandemics", *Covid Economics*, Issue 12, pp. 138-157.

Joyce, R. and Xu, X. (2020). "Sector shutdowns during the coronavirus crisis: which workers are most exposed?", *Briefing Note* BN278, Institute for Fiscal Studies.

Mongey, S., Pilossoph, L. and Weinberg, A. (2020), "Which workers bear the burden of social distancing policies?", *Covid Economics*, Issue 12, pp. 69-86.

Thanks for your attention!