



BANCA D'ITALIA  
EUROSISTEMA

## Mercati, infrastrutture, sistemi di pagamento

(Markets, Infrastructures, Payment Systems)

Report on the payment attitudes of consumers in Italy:  
results from ECB surveys

by Gabriele Coletti, Alberto Di Iorio, Emanuele Pimpini and Giorgia Rocco





BANCA D'ITALIA  
EUROSISTEMA

## Mercati, infrastrutture, sistemi di pagamento (Markets, Infrastructures, Payment Systems)

## Questioni istituzionali (Institutional Issues)

Report on the payment attitudes of consumers in Italy:  
results from ECB surveys

by Gabriele Coletti, Alberto Di Iorio, Emanuele Pimpini and Giorgia Rocco

Number 21 – March 2022

*The papers published in the 'Markets, Infrastructures, Payment Systems' series provide information and analysis on aspects regarding the institutional duties of the Bank of Italy in relation to the monitoring of financial markets and payment systems and the development and management of the corresponding infrastructures in order to foster a better understanding of these issues and stimulate discussion among institutions, economic actors and citizens.*

*The views expressed in the papers are those of the authors and do not necessarily reflect those of the Bank of Italy.*

*The series is available online at [www.bancaditalia.it](http://www.bancaditalia.it).*

*Printed copies can be requested from the Paolo Baffi Library:  
[richieste.pubblicazioni@bancaditalia.it](mailto:richieste.pubblicazioni@bancaditalia.it).*

*Editorial Board: STEFANO SIVIERO, LIVIO TORNETTA, GIUSEPPE ZINGRILLO, GUERINO ARDIZZI, PAOLO LIBRI, CRISTINA MASTROPASQUA, ONOFRIO PANZARINO, TIZIANA PIETRAFORTE, ANTONIO SPARACINO.*

*Secretariat: ALESSANDRA ROLLO.*

ISSN 2724-6418 (online)  
ISSN 2724-640X (print)

Banca d'Italia  
Via Nazionale, 91 - 00184 Rome - Italy  
+39 06 47921

*Designed and printing by the Printing and Publishing Division of the Bank of Italy*



# Report on the payment attitudes of consumers in Italy: results from ECB surveys

by Gabriele Coletti,\* Alberto Di Iorio,\* Emanuele Pimpini\* and Giorgia Rocco\*

**JEL:** E41, D12, D14.

**Keywords:** payment instruments, cash, payment habits, consumers' payment behavior.

## TABLE OF CONTENTS

<b>ABSTRACT</b>	5
<b>EXECUTIVE SUMMARY</b>	5
<b>1. INTRODUCTION</b>	7
<b>2. EUROSISTEM SURVEYS IN A NUTSHELL</b>	8
<b>3. WHERE DO WE STAND? A COMPARISON WITH OTHER EURO-AREA COUNTRIES</b>	10
<b>4. TIME TRENDS IN CONSUMERS' PAYMENTS AT POS</b>	12
<b>5. RESULTS OF THE SPACE AND IMPACT SURVEYS FOR ITALY</b>	13
5.1 POS payments	13
5.2 Remote and bill payments	15
5.3 Access to different payment instruments	16
5.4 Preferences for different payment instruments and cash as store of value	18
<b>6. CONCLUDING REMARKS</b>	19
<b>REFERENCES</b>	21
<b>APPENDIX: DETAILED CHARTS</b>	22
<b>LIST OF CHARTS</b>	23

\* Directorate General for Currency Circulation and Retail Payments.



## ABSTRACT

This report describes the use of cash and other payment instruments in Italy using the survey data from the Study on the Payment Attitudes of Consumers in the Euro area (SPACE), conducted by the European Central Bank in 2019. The study also exploits recent data from a survey conducted in July 2020 to measure the impact of the pandemic on payments (IMPACT). The data show that cash remains the most used instrument at physical points of sale (POS), although its use has declined over time. The COVID-19 pandemic has further strengthened this trend. The role of cash is limited in other transactions, such as remote and bill payments; payment cards are the principal cashless instrument. Cash is used more in the Centre and South of the country, by women, young people and those with lower incomes; the self-employed, students and the unemployed also tend to make more intensive use of cash. By contrast, people with higher levels of education, people with medium-high incomes, office workers and retirees make greater use of alternative payment instruments.

## EXECUTIVE SUMMARY

This report outlines the use of cash and other means of payment in Italy through the survey results of the Study on the Payment Attitudes of Consumers in the Euro area (SPACE), conducted by the European Central Bank in 2019, and the ad hoc survey conducted in July 2020 to assess the impact of the pandemic from Covid-19 on payment habits (IMPACT). Survey data refer to the use of different payment instruments by individuals at the physical point of sale (POS) and for person-to-person (P2P) transactions, as well as for remote purchases (namely online, telephone and mail order transactions) and bill and recurring payments.

The SPACE results for Italy show that:

- cash is the most used payment instrument at the physical point of sale, although its share has declined with respect to 2016: the value of cash payments represents 58 per cent of the total payments (68 in 2016), compared to 32 per cent of transactions with cards (29 in 2016) and 10 per cent with other instruments (3 in 2016);
- cash is mainly used for low-value transactions; the average value for cash is € 16.18 (€ 45.24 for cards);
- cash is more used in the central and southern regions, by women and people with lower incomes and levels of education and by self-employed workers; alternatives to cash are mainly preferred by people with medium-high income and education, employees and retirees;
- alternative instruments are little used in transactions between individuals (person-to-person), where cash remains the dominant instrument;
- the use of contactless technology in card payments is noticeable (54.6 and 46.1 per cent in volume and value, respectively); this technology was available to about one over two respondents at the time of the survey;

- about half of the respondents stated that, being able to choose freely, they would prefer to use alternative instruments, while only a quarter expressed a preference for cash. The difference between actual use and declared preferences may depend on factors related to the supply, in particular the acceptance of alternative tools by the merchants. The respondents stated, in fact, that, in 40 per cent of cash transactions, this was the only instrument accepted at the physical point of sale;
- for remote purchases, the most used instruments are cards (54.4 and 59.0 per cent, in volume and value, respectively) and the PayPal service (27.2 and 22.6 per cent, in volume and value, respectively);
- for bill payments and recurring payments (e.g. utilities, mortgages, subscriptions) the incidence of the various payment instruments (cash, cards and direct debits) is broadly similar in terms of both volume and value of transactions, although cash is mostly used by respondents from the southern regions;
- payments initialized with more innovative tools (for example, smartphones) are still not widespread, with just one over ten citizens declaring that they have access to this technology.

The responses to the IMPACT survey suggest that the pandemic has led to a further reduction in the use of cash at the physical point of sale. About 32 per cent of respondents said they pay less frequently in cash, while 27 per cent use cards more for payments. Of those who used cash less during the pandemic, 94 per cent plan to continue this habit in the future. The reasons behind the increased use of cards would lie in the greater convenience for 48 per cent of the interviewees – probably due to the spread of contactless technology – and in the lower risks of infection compared to banknotes (27 per cent) or through human contact at the cash desk (21 per cent).



# 1. INTRODUCTION<sup>1</sup>

The evolution of payment systems is nowadays at the heart of central banks' policy discussion in terms of reliability, efficiency and inclusiveness. Cashless payments grew for years, sustained by the widespread adoption of debit and credit cards and the usage of new technologies, such as contactless, mobile and instant payments. Further innovation may come from the activity of FinTech and large internet platform companies (Google, Facebook, Amazon). In Italy, in recent years, the use of payment instruments has been affected by a range of government measures to promote digital payments. For instance, the legal limit on the use of cash in transactions between citizens has been reduced several times. Other measures have also been introduced in the framework of the Italian Digital Agenda, which transfers the strategies and the principles outlined by the Digital Agenda for Europe<sup>2</sup> to the Italian context; among them there is the establishment of a digital platform (PagoPA) which enables private payments towards government entities using each of the payment services provider connected to the platform.

Against this background, cash is actually the only legal tender, easy to use and accessible to all, including those people who do not have a bank account. Therefore, the transition towards a cashless society is not without costs. It can imply restrictions on access to payment services in some social classes and difficulty in relying on safe and liquid assets in times of financial distress (Perrazzelli, 2021). In order to satisfy the increasing demand for digital payments and to continue playing its role as the anchor of the monetary system, many central banks are now evaluating electronic cash substitutes, namely the design and the implementation of a Central Bank Digital Currency – CBDC-including the ECB's project to develop a digital euro (ECB, 2020a).

In view of the continuing transformation towards a more digital payment landscape, the Eurosystem is committed to carefully monitoring new trends and the nature and extent of the changes in consumers' payment preferences. In the case of Italy, policymakers can use indicators of payment habits based on transaction data from clearing and processing systems (Ardizzi *et al.*, 2020; Ardizzi, Nobili, Rocco, 2020), which are available at high-frequency but are characterized by two important information gaps. First, data on the use of cash for transaction purposes can be only proxied by withdrawals at Automated Teller Machines (ATMs). Second, the granularity transaction data is quite limited to few sectors and geographical regions, thus preventing from a deep understanding of payment behaviours according to socio-economic characteristics, such as gender, age, dwelling place, education and income levels. In this regard, information from ad hoc surveys on payment habits, albeit available at very low frequency, are able to close these gaps, which may be important for financial inclusion considerations, for the design and the evaluation of the most appropriate policy actions and, more generally, to promote efficiency among the relevant payment system stakeholders.

---

<sup>1</sup> We are grateful to Guerino Ardizzi, Massimo Doria, Paola Giucca, Michele Lanotte, Andrea Nobili and an anonymous referee for their insightful suggestions and remarks on a previous draft of this paper. The views expressed herein are those of the authors and do not necessarily reflect those of the Bank of Italy. All remaining errors are ours.

<sup>2</sup> The aim of the European Digital Agenda is to leverage the potential of ICT technologies to foster innovation, progress and economic growth, having as main objective the development of the digital single market.

For this purpose, the ECB has been conducting a survey focused on payment behaviours every two (or three) years since 2016. The first Study on the Use of Cash by Households (SUCH), focused on euro-area consumers' payment behaviour at the point of sale (POS) and for person-to-person (P2P) transactions, has been deeply described in Esselink and Hernandez (2017). The results suggested that cash was the most used instrument at the POS, especially for low-value payments, but marked heterogeneity across euro-area countries.

The second survey was conducted in 2019 (Study on the Payment Attitudes of Consumers in the Euro area – SPACE); in 2020 the ECB decided to launch a further survey in all euro-area countries to measure the impact of the COVID-19 pandemic on payment habits (IMPACT). The euro-area results for SPACE and IMPACT surveys were published on December 2020 in a report (ECB, 2020b). The broad picture is that cash remained the most popular means of payment for in-person retail payments in 2019 but the coronavirus pandemic accelerated the use of cashless payment methods in 2020.

In this report we focus on payment habits in Italy by using the rich and granular information from both the SPACE and the IMPACT survey. We describe recent trends also offering a comparison with the 2016 SUCH survey, previously discussed in Rocco (2019). Moreover, we provide a deep assessment of the factors influencing Italians' payment attitudes by exploiting the socio-demographics characteristics of the respondents and a number of transaction-related features, such as the amount of the transaction, the adoption of technology, the place of purchase and the acceptance of other instruments.

The report is structured as follows. Section 2 provides some information about the Eurosystem surveys on consumers' payment behaviour. Section 3 contextualizes Italian evidence on payment habits within the euro area using both official payment statistics and survey data. Section 4 reports time trends in the use of payment instruments by consumers in the last five years, as captured by answers to ECB's surveys. In Section 5 we assess the heterogeneity in payment choices across individuals by exploiting the granularity of the SPACE and IMPACT surveys, with links to the relevant charts in the Appendix. Finally, Section 6 offers some concluding remarks.

## **2. EUROSYSTEM SURVEYS IN A NUTSHELL**

In 2016, the European Central Bank (ECB) conducted the Study on the Use of Cash by Households (SUCH), being the first study analysing consumers' payment behaviour at POS and P2P for the euro area based on a survey consisting of one payment diary and a questionnaire. In 2019, the ECB carried out the new Study on the Payment Attitudes of Consumers in the Euro area (SPACE) to update the SUCH data also exploring remote and recurring payments, in order to allow a deeper understanding about the use of these types of payments.

In the SPACE survey, euro-area residents older than 18 years were interviewed by filling in three modules covering: i) POS and P2P payments, ii) remote payments including online purchases, telephone and mail orders, and iii) bill and recurring payments. The first two modules refer to a one-day diary, while

the last one reports any bill payments made during the last 7 days. Furthermore, they had to answer a questionnaire with questions about their behaviour and attitudes towards cash and other payment instruments. Between mid-March and mid-December 2019, three different waves were conducted; 41,155 respondents were interviewed, of which 4,199 in Italy.

SUCH and SPACE samples refer to 17 of all 19 euro-area countries excluding Germany and the Netherlands. Indeed, the Deutsche Bundesbank (DBB) and De Nederlandsche Bank (DNB) and the Dutch Payments Association (DPA) carried out their own surveys on payment behaviour and their data have been integrated where possible in the ECB reports.

In July 2020, ECB launched a further survey in all euro-area countries in order to measure the impact of the COVID-19 pandemic on cash trends (IMPACT survey). The survey provides an update on the attitudes towards cash and gives an indication to what extent cash use might have declined as a result of the pandemic. In the IMPACT survey, euro-area residents older than 18 years were interviewed by a questionnaire. In contrast to the previous surveys, there are no modules relating to payment diaries. To estimate volumes of use, only the payment instrument used in the last transaction is asked, while to assess whether the pandemic has changed habits, there is a block of questions (one for each instrument) with ordinal answers relating to the change in the frequency of use.<sup>3</sup> A total of 17,779 persons were interviewed in the last two weeks of July 2020, of which 1,007 in Italy. In the end, the different structure of the two surveys (payment diary in SPACE vs. questionnaire in IMPACT) and the different methodologies (see Box below) makes a direct comparison impossible for some variables, especially those related to purchases.

#### SPACE AND IMPACT SAMPLE ASSESSMENT

*The sample for SPACE was designed taking into account the population size of each country and the heterogeneity across regions within each country. The sample design aimed to achieve representativeness of the population for gender, age, education, and region. To capture payment behaviour for each day of the week, a quota was also set on the day of the transactions recorded in the payment diary, thereby targeting representativeness for the population for each day of the week.*

*In order to prevent panel bias, the interviews were conducted for a half online (computer-assisted web interviewing – CAWI) and for a half over the telephone (computer-assisted telephone interviewing – CATI) using a mix of mobile and fixed lines.*

*The sample was weighted to minimise the observable bias of survey estimates and to enable solid inferences to be made about the sample based on the demographic characteristics of each country using known population benchmarks for gender within age bands, educational attainment, employment, household size, regions and internet access as calibration benchmarks.*

---

<sup>3</sup> Question: Now, think about how you have been paying recently, after certain restrictions have been lifted, without considering the frequency of your purchases, compared to the situation before the coronavirus crisis started, are you using the following payment instruments more or less often? The answer options include “I do not have this payment instrument” and “Don’t know / Prefer not to say”. The instruments investigated are: cash, payment cards with pin or signature, contactless payment cards, mobile device, and cheques.

Furthermore, the weighting procedure has reduced the differences observed in the key outcomes of the online and telephone samples.

At the end of the fieldwork of each wave, the responses were checked for completeness, consistency and plausibility on the basis of multiple criteria, including sociodemographic information, outliers, contradicting and unusual answers, balance in the diary part, payment instrument ownership, and consistency between respondent characteristics and payment made. Finally, the overall aggregates calculated from the answers were compared with the results of the previous study (i.e. SUCH), with payment data collected at the ECB (Payment statistics dataset in the Statistical Data Warehouse, reference year: 2019; aggregates calculated for the Household Finance and Consumption Survey, reference year: 2017), and with national datasets.

IMPACT was an online survey in most countries and interviews were not spread evenly over the days of the week. The target for the sample size was to achieve 1,000 interviews in each country. The weighting model elaborated for SPACE was applied to the online sample of the IMPACT survey.

---

### **3. WHERE DO WE STAND? A COMPARISON WITH OTHER EURO-AREA COUNTRIES**

Based on the ECB report published in December 2020, this section aims to provide an overview about a set of selected Italian payment attitude and preference indicators with respect to the euro area as well as to some specific countries. Official payment statistics suggest that the adoption of cashless means of payment (credit transfers, direct debits, card payments, cheques, mobile payments) in Italy has been growing fast in the last five years (6.4 per cent the compound annual growth rate of non-cash payments per capita compared to 5.3 per cent in the euro-area – ECB, Payments Statistics, July 2021). The country, however, remains behind the euro-area average in terms of yearly cashless transactions per capita (130.1 in 2020 in Italy with respect to 296.6 in the euro area – ECB, Payments Statistics, July 2021).

By looking at the SPACE evidence, cash is the most used retail payment instrument in the euro area, as 73 per cent of all POS and P2P payments are made using banknotes and coins. However, vast differences among countries are noticeable. The proportion of transactions settled by cash in Italy (82 per cent), similarly to Spain (83 per cent), Portugal (81 per cent), and Greece (80 per cent), is greater than in the euro area. By contrast, the lowest cash-intensive countries in the euro area are the Netherlands (34 per cent), Finland (35 per cent) and Estonia (48 per cent).

The main cashless payment instruments consist of credit and debit cards: in Italy, in terms of number of transactions, card payments account for 16 per cent of POS payments, below the 24 per cent of the euro-area countries. Italian card usage is consistent with the Mediterranean countries, such as Spain (15 per cent), Greece (18 per cent), and Portugal (15 per cent), but it is far from Finland (58 per cent), Luxembourg (39 per cent), and Belgium (36 per cent). As pointed out by Rocco (2019) using SUCH data, payments in cash decrease relative to cashless payments as the value of the transaction increases. This evidence is even more tangible in Italy compared to euro-area countries: more than 97 per



cent of the payments below €5 are settled in cash, in respect to 92 per cent of the euro area. In Italy, the only value range of transactions in which cash payments are not dominant are those greater than €100.

Italian physical contactless card payments are widespread, representing 55 per cent of all card payments; the contactless euro-area landscape, ranging between 77 per cent of Slovakia and 16 per cent of Belgium, with a mean value of 38 per cent, shows substantial differences between countries, which may be caused by specific market features.

Another important payment habit taken into account by SPACE refers to remote payments, namely online, telephone and mail order purchases which do not require physical interaction with the merchant. In Italy, cards account for more than half of all remote payments (54 per cent), while they account for 49 per cent of all euro-area remote payments. E-payment solutions<sup>4</sup> are the second remote means of payment both in Italy (28 per cent) and in the euro-area countries (27 per cent), whereas credit transfers represent just 3 per cent of remote transactions in Italy relative to 10 per cent of the euro area.

The preference as to which payment instruments to use at the physical POS is very similar to the mean preference among the euro-area countries. If Italians could choose how to pay in a shop, they would prefer to use cards or other cashless methods (47 per cent), close to the euro-area average value (49 per cent), but behind the most cashless countries like Finland (75 per cent), Belgium (72 per cent), Estonia and France (69 per cent). On the other hand, cash is the preferred means of payments for 28 per cent of Italian respondents, again very close to the overall euro area (27 per cent) and far by Cyprus (48 per cent), Austria (42 per cent) and Malta (37 per cent), the nations where cash is the most preferred across respondents. However, although cash is not the favourite payment instrument at the POS, having the option to pay with cash is still important for citizens. In Italy 52 per cent of respondents (55 per cent in the euro area) deemed it very important or important to have the chance to pay by cash, pointing out, at least, the significance of cash as backstop means of payment. However, the importance of cash is very heterogeneous across European countries: while only 31 per cent of Slovakia and 41 per cent of Belgium respondents



## CASHLESS INSTRUMENTS

**The adoption of cashless payment instruments is widespread in Italy: 90 per cent of the respondents has access to at least one payment card (94 per cent for the euro area). Contactless card payments represent 55 per cent of all card payments (38 per cent for the euro area). Italy lags behind in the access to innovative means of payment compared with the euro area: only 10 per cent of Italian respondents use them, against 28 per cent in the euro area.**

<sup>4</sup> E-payment solutions include transactions based on PayPal and other online methods.

considered the cash option very important or important, 83 per cent of Cyprus and 71 of Austria deemed it very important or important.

The survey looked into consumer's access to cashless payment instruments, a topic related to important social issues such as financial inclusion. Although the possession of payment instruments is widespread in Italy, the Italian figures are still behind the average euro-area scores: for instance, on average, 90 per cent of the Italian respondents reveal having access at least to a payment card against the 94 per cent of the euro area. Even by looking at the most innovative means of payment, like mobile phone, Italy shows a gap in respect to the euro area as only 10 per cent of Italian respondents have access to them relative to 28 per cent of the euro area. At the same time, about 5 per cent of the Italian respondents do not have access to cashless payment instruments (more than 2 per cent for the euro area). Only Malta (11 per cent), Cyprus (11 per cent) and Greece (10 per cent) reveal even greater shares of citizens with no access to any of non-cash payment methods.

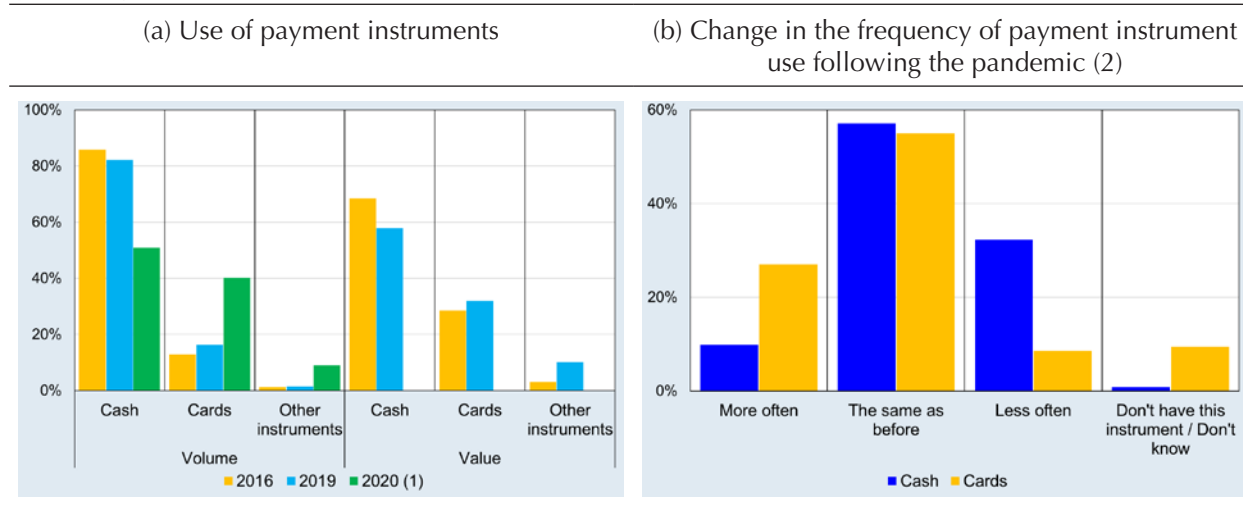
#### **4. TIME TRENDS IN CONSUMERS' PAYMENTS AT POS**

Results from the diary for the payments made by consumers at the POS and P2P in 2019 show that the use of cash has declined in three years in favour of non-cash payments. More precisely, the share of cash transactions in number of payments at the POS declined to 82.2 per cent from 86 per cent in 2016. The share of cash payments in value was 57.8 per cent in Italy with a decline of more than 10 per cent from 2016 (68 per cent). Moreover, results from the ad hoc survey conducted in July 2020 (IMPACT) to assess the effects of the pandemic from COVID-19 confirm this trend. Albeit the answers are not directly comparable with those of previous surveys for differences in the sampling technique, there is clear-cut evidence of a more pronounced substitution of cash in transactions. The results for Italy show that more than half of the respondents reported using cards and cash as they did before the start of the pandemic. However, 32.3 per cent of those interviewed declared they used cash less often than before, while 27.0 per cent used cards more often. Contactless technology was used more frequently by 30.6 per cent of respondents (Figure 1).

People using cash less frequently also indicated, from a given list, some prevailing reasons for avoiding the use of cash in physical places since the pandemic started. They mentioned that paying electronically, likely through contactless technology, had become more convenient (47.6 per cent of respondents). The risk of infection by the virus is another main driver: via banknotes for 26.7 per cent of those interviewed and via hand contact or proximity to the cashier for 21.1 per cent. Interestingly, access to cash is not a major issue. Looking forward, about 94 per cent of the respondents who reported using cash less than before declared that they would certainly or probably continue to pay less with cash, thus suggesting a permanent change in payment behaviours even when the pandemic is over.

**Figure 1 - Trends in consumers' payments at POS**

(percentages)



Source: authors' calculations based on ECB SUCH (2016), SPACE (2019) and IMPACT (2020) survey data.

Note: the "Other instruments" category includes credit transfers, bank cheques, direct debits and mobile phone payments.

(1) The July 2020 IMPACT results refer only to the last payment made by each respondent without considering the transaction value (see the green bars on the left-side graph). Then, the estimates are not based on a diary and cannot be directly compared with previous studies.

(2) The estimates are based on the perception of the respondents, who were asked how often they used the various instruments compared with before the outbreak of the pandemic, and also after the removal of some restrictions; the frequency of purchases was not taken into consideration.

## 5. RESULTS OF THE SPACE AND IMPACT SURVEYS FOR ITALY

### 5.1 POS PAYMENTS

*General facts* (see [Section A1.1](#)). – SPACE data show that each consumer makes, on average, about 2 transactions at the POS on a daily basis: cash is the most used instrument (about 11 transactions in a week), while cards are used more than 2 times a week. The use of other payment instruments at POS is negligible: on average, each consumer in Italy uses an instrument other than cards or cash less than once a month.

When looking at the value of transactions, the weight of cards and other payment instruments increases, meaning that the use of a specific instrument depends on the transaction value. While above 90 per cent of the transactions below 10 euro are cash-settled, this percentage reduces, in favor of cards, when the payment value increases. In fact, for cash the average value of a transaction is €16.18; for mobile payments €24.65; for debit cards €42.64; and for credit cards €52.08. In general, the average value of a card transaction not using the contactless technology is €53.93, while it is €38.30 when using contactless technology (in detail, €52.59 when PIN is required and €23.59 without PIN). The other instruments are used for high amounts, especially for bank transfers (€527.36) and checks (€192.4).

*Geographical characteristics* (see [Section A1.2](#)). – As for the transaction volume, cash usage is homogenous across Italian regions (from 73.5 to 88.8 per cent), while there is important heterogeneity when looking at the transaction value. Northern regions show less reliance on cash (generally less than 50 per cent)

and a greater use of cashless instruments, especially cards, if compared to the national average. The picture is different in southern regions, where about 70 per cent of payments are made in cash with the sole exception of Sicily and Sardinia (59.6 per cent).

*Socio-demographic characteristics* (see [Section A1.3](#)). – A similar behaviour can be found when looking at the socio-demographic variables. In fact, the volume of transactions with the various payment instruments is approximately equal to the national average in different age groups, among males and females, different schooling levels and occupations. An exception is the role played by the income level: cash usage decreases for richer respondents, while payments with cards increase. Focusing on the value of the transactions, the landscape is completely different. Male respondents reported a lower share of cash-settled transactions compared to women (53.9 and 62.6 per cent respectively). While the percentage of card payments is similar between these two groups, males exhibit a larger use of other than cash and cards instruments (13.5 and 6.4 per cent respectively). Younger groups report a larger reliance on cash with respect to older ones (65.7 per cent for age 18-24 and 57.9 per cent for over 65). At the same time they declared a greater use of cards (32.0 and 25.5 per cent respectively) and a lower use of alternative instruments other than cards (2.3 and 16.6 per cent respectively); older groups, on the contrary, declared a greater use of more traditional instruments such as cheques and credit transfers. Higher levels of education and income are associated with less use of cash compared to alternative instruments, while the situation is reversed for less educated and poorer respondents. When looking at the different job profiles, we find that managers use cash the least (34.9 per cent) and cards the most (45.6 per cent) while housepersons and the unemployed are at the opposite (cash 75.6 per cent; cards 21.6 per cent).



### ACCEPTANCE OF CASHLESS INSTRUMENTS

**The acceptance rate of alternative instruments is around 90 per cent in supermarkets, at petrol stations, in durable goods markets and travel-related business, and when paying taxes and other public charges. By contrast, it is less than 25 per cent for P2P payments and transactions made for charity or with street vendors. Overall, in about 40 per cent of cash-settled transactions, cash is the only accepted means of payment.**

*Location and acceptance* (see [Section A1.4](#)). – With a view to the value of transactions, cash is the most used instrument for purchases on the street<sup>5</sup> (86.7 per cent), at the vending or ticketing machine (76.5 per cent) and for purchase of food at restaurants, bar and café or in shop for day-to-day items<sup>6</sup> (76.3 per cent). Cards are the most used instrument for travel purposes (84.1 per cent

<sup>5</sup> Purchases on the street include, for instance, those made at a newspaper's stand, at a florist, in a street market, etc.

<sup>6</sup> Shops for day-to-day items include bakeries and drug stores.



in value) and durable goods purchases (47.1 per cent in value). As for P2P transactions cash remains the most widely used instrument (about 60 per cent in value), while non-cash payments are mostly made by credit transfers (16.9 per cent) or payments cards (13.6 per cent). The use of alternative instruments clearly depends on the rate of acceptance of these instruments by the payment receiver. Respondents report that cash alternatives are almost always accepted in supermarkets, when paying taxes and public charges, at petrol stations, in durable goods markets and in travel-related business. On the opposite side, there is the lowest rate of acceptance of other instruments among P2P payments and transaction made for charity or with street vendors. Overall, in about 40 per cent of cash-settled transactions, cash is the only accepted means of payment.

*Contactless technology* (see [Section A1.5](#)). – Payment cards are the most used cashless payment instrument, especially through the contactless technology, adopted for around 55 per cent of card transactions, particularly for payments of lower amount.<sup>7</sup> The card usage at physical POS in Italy could have been fostered by the increasing adoption of contactless technology. This technology is easy to use and tails off transaction time; furthermore, the demand for contactless is supposed to accelerate the shift from cash to cash-less options for low value transactions.

## 5.2 REMOTE AND BILL PAYMENTS

*Remote payments* (see [Section A2.1](#)). – About 10 per cent of Italian respondents reported at least one remote payment, with a quite homogeneous distribution across regions. This figure monotonically decreases with the age while it increases with the level of income. A remarkable difference exists between low-educated versus highly-educated people (5.3 vs 14.8 per cent) and rural respondents versus urban respondents (7.0 vs 11.8 per cent). Cards and PayPal are the main tools for remote payments; in aggregate, they are used in more than 80 per cent of transactions, both in terms of volume and in terms of value.

*General picture for bill payments* (see [Section A3.1](#)). – The dominant instrument for frequency of use in bill payments is cash (29.7 per cent), directly followed by direct debits (27.6 per cent) and cards (25.7 per cent). Credit transfers and other instruments have a marginal role (8.9 and 8.2 per cent respectively). Looking at the value of bill transactions, direct debit is the main instrument (24.3 per cent), followed by cards (22.2 per cent) and cash (21.9 per cent). Differently from the frequency of use, where credit transfer is below 10 per cent, this instrument represents the 18.5 per cent of the total amount of bill transactions, indicating that it is primarily used for high value payments.

*Geographical evidence for bill payments* (see [Section A3.2](#)). – Among Italian regions, the southern ones are those that make more use of cash to pay bills

---

<sup>7</sup> As of the date of the survey, paying contactless with cards in Italy required the personal identification number (PIN) for transactions above €25. After the COVID-19 outbreak, the limit for “PIN-less” card payments has in principle been raised up to €50: however, the actual possibility of not having to insert PIN for card transactions in the range between €25 and €50 depends on some technical adjustments, mainly linked to scheme rules as well as issuing and acquiring domains. In these cases, even if the cardholder has to physically touch a card reader in order to confirm a transaction over a fixed amount, the contactless technology is still used.

both in term of frequency and value, while those of the north-east use more direct debits and credit transfers. The use of cards shows a lower variability.

*Payment instruments used in bill categories* (see [Section A3.3](#)). – Cash is the most used instrument, in terms of volume and amount, for charity transactions (86.9 and 75.0 per cent respectively) and it also shows an usage above the average for medical expenses (47.6 and 33.6 per cent). Moreover, focusing on transaction value, house-related services are also cash-intensive (42.6 per cent). Direct debits are widely used, both in terms of volume and value, to pay utilities (35.8 and 34.4 per cent, respectively), telephone bills (39.7 and 40.5 per cent) and rents or mortgages (27.6 and 27.8 per cent). Cards show an above-the-average employment, both in terms of volume and value, for medical expenses (44.5 and 40.3 per cent), subscriptions (33.1 and 46.1 per cent) and utilities (28.3 and 31.6 per cent), while credit transfer is the main instrument to pay tuition fees (41.2 and 52.4 per cent) and rents or mortgages (33.7 and 43.0 per cent).

### 5.3 ACCESS TO DIFFERENT PAYMENT INSTRUMENTS

*Cash sources* (see [Section A4.1](#)). – The most relevant source of cash provision is withdrawing from ATMs (48.9 per cent in terms of volume; 67.2 per cent in terms of value), followed by cash reserves at home (22.2 and 10.4 per cent, respectively) and obtaining cash from family, friends and colleagues (16.0 and 7.7 per cent, respectively). Moreover, the last category plays an important role, in terms of both frequency and value, among young people (38.1 and 28.4 per cent), students (41.9 and 33.0 per cent) and manual workers (24.4 and 35.1 per cent).

*Income in cash* (see [Section A4.2](#)). – Only less than 15 per cent of respondents declared to receive a part of their regular income in cash. This percentage is higher in the southern regions than in the northern ones and among young and low-educated people. Students and self-employed people are among those who receive income in cash more frequently than the average. Same consideration keep holding true for people with low income.

*ATM access easiness* (see [Section A5.1](#)). – Access to ATM cash is considered fairly easy or very easy by almost all respondents (around 90 per cent) from both SPACE and IMPACT respondents. This picture appears slightly worse for inhabitants of southern regions, low income, young and low-educated people.

*Access to alternative instruments* (see [Section A5.2](#)). – With regard to the access to non-cash instruments, a vast majority of Italians possesses at least one card (89.5 per cent). As of the survey date, the contactless technology is available to just over half population (51.2 per cent).<sup>8</sup> The access to cheque, direct debit and credit transfer ranges between 40 and 70 per cent, while one in ten has access to mobile payments and 1.9 per cent of the population own crypto-assets. The share of people who do not have access to non-cash instruments is around 5 per cent.

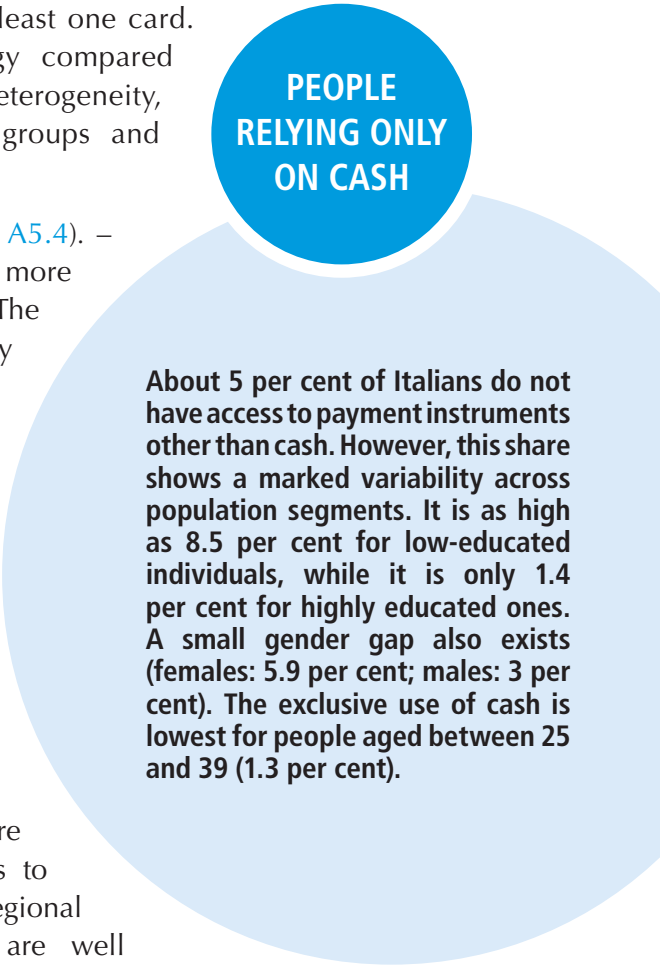
---

<sup>8</sup> Recent evidence from other sources shows an increased supply of contactless cards, especially due to an acceleration in the substitution process of traditional cards in 2020.

*Card owners* (see [Section A5.3](#)). – Focusing on the geographic distribution, the northern and central regions are those with the larger percentage of residents possessing at least one card, while at the opposite stand the southern regions. However, the difference between the regions with the highest percentage (Tuscany-Umbria-Marche) and those with the lowest (Abruzzo-Molise-Campania) slightly exceeds 10 per cent. Among socio-demographic distributions, almost all of those who have a high level of schooling (university/PhD), a high income (more than 4,000 euro) and managers possess at least one card. The access to contactless technology compared to traditional cards shows a large heterogeneity, especially among age and income groups and across occupations.

*Innovative payments users* (see [Section A5.4](#)). – Overall, innovative payments are more widespread in northern regions. The diffusion of mobile payments is fairly uniform across the country (around 10 per cent), with the exception of the macro-area Piedmont-Liguria-Valle d’Aosta, which shows the highest rate of possession. Considering individual-level characteristics, innovative payments are more diffused among males, highly educated, young (under 40) and those with a high income.

*Cash only users* (see [Section A5.5](#)). – From a different perspective, the share of Italian people that has only access to cash shows a large heterogeneity at regional level, with some macro-areas that are well above the average (Abruzzo-Molise-Campania and Sicily-Sardinia). At a socio-demographic level, there are some gaps, more evident in specific groups. For example, among low-educated people the incidence of individuals that have access only to cash amounts to 8.5 per cent, while for the highly educated this value reduces to 1.4 per cent. Other sizable gaps are between those who have a low income (10.1 per cent) compared to high income (close to 0 per cent) and housepersons and the unemployed (11.0 per cent) compared to people with a job (around 1 per cent). Also a gender gap exists, but is less pronounced (females: 5.9 per cent; males: 3 per cent). Regarding the age groups, the people between 25 and 39 years show the lowest rate (1.3 per cent) of access limited to cash. This rate increases in all the other groups, also younger one (4.1 per cent), with the older groups that are those who exhibit the largest percentage of people with access only to cash (more than 6 per cent).



**PEOPLE  
RELYING ONLY  
ON CASH**

**About 5 per cent of Italians do not have access to payment instruments other than cash. However, this share shows a marked variability across population segments. It is as high as 8.5 per cent for low-educated individuals, while it is only 1.4 per cent for highly educated ones. A small gender gap also exists (females: 5.9 per cent; males: 3 per cent). The exclusive use of cash is lowest for people aged between 25 and 39 (1.3 per cent).**

## 5.4 PREFERENCES FOR DIFFERENT PAYMENT INSTRUMENTS AND CASH AS STORE OF VALUE

*General facts* (see [Section A6.1](#)). – Even if the majority of transactions, for both value and number, are cash-settled, SPACE data show a clear preference among Italians for cashless payments (46.9 per cent). Only 28.1 per cent prefer cash, while 24.9 per cent have not a clear preference. The difference found between preference and actual use of cash could be due to supply constraints, especially on merchant acceptance of alternative instruments. After the COVID-19 outbreak, these preferences shifted further in favour of cashless payments (55.8 per cent) with a consequent reduction of people who prefer cash (24.1 per cent) or have not a clear preference (about 20 per cent).

*Geographical characteristics* (see [Section A6.2](#)). – These preferences exhibit a certain degree of variability at a territorial level. In some regions of the south, preference for cashless instruments declines significantly, primarily to the benefit of cash. On the opposite side, in some northern regions the preference for cashless instruments is well above the Italian average, mainly at the expense of cash.

*Socio-demographic characteristics* (see [Section A6.3](#)). – Some of the gaps found in the access to payment instruments are also preserved at the preference level, while others disappear. In this regard, for example, both younger and older people exhibit a share of preference for gaps that are instead confirmed, there are low- vs high- educated people and low- vs high- income group. Low-educated and low-income group have a stronger preference for cash than for cashless instruments, differently from what happens at national level. Clearly, this relationship is reversed in highly-educated and high-income groups, where especially the latter show a very small preference for cash (around 14 per cent) and a very high preference for cashless instruments (over 60 per cent) compared to the average.

*The impact of the pandemic* (see [Section A6.4](#)). – As already seen, the impact of the pandemic strengthened the preference for cashless instruments. Looking at the data at a more granular level, this continues to be generally true, but with different gradations. The preference of old people (over 65 years) for cash significantly decreases (from 35.0 per cent to 20.7 per cent), with the preference for cashless instruments that increases by the same amount (from 39.9 per cent to 53.6 per cent). Also highly-educated people show a steady preference for cashless instruments (from 57.3 to 59.2 per cent), while low-educated ones increase

### HOW WOULD ITALIANS LIKE TO PAY?

**If there were no constraints, Italians would pay primarily with cashless instruments. This preference, however, shows a certain degree of heterogeneity. The preference for alternative instruments is particularly low in some southern regions.**



their preferences for cashless instruments (from 34.2 to 45.4 per cent), mainly at the expenses of cash (from 39.3 to 29.2 per cent). Males experience a larger increase (from 50.2 to 61.3 per cent) in their preference for cash-alternative instruments compared to women (from 43.8 to 50.1 per cent).

*Importance of cash* (see [Section A6.5](#)). – Even if cards and cashless payments are the preferred instruments of Italians, 51.8 per cent of them considers important or very important the option to pay with cash. This percentage increases especially among young (58.9 per cent), low-educated (61.3 per cent) and low-income people (70.1 per cent). These ongoing trends are confirmed by IMPACT data.

*Cash as a store of value* (see [Section A7.1](#)). – More than one Italian on three (36.3 per cent) stores precautionary cash at home. This value increases to one in two among people with less than 25 years (49.9 per cent) and students (51.7 per cent). The use of cash as a store of value is widespread in southern regions (about 40 per cent). Almost all respondents (88.2 per cent) hold less than €500 euros as a precautionary amount.

## 6. CONCLUDING REMARKS

The use of cash in Italy declined from 2016 to 2019, although it remains the most used instrument at POS, while payment cards are the most used cashless instruments. Cash is used primarily in micropayments, and the high usage of contactless technology, which stands as a direct competitor in this segment, seems to have driven the increased use of cards even if this technology in 2019 was available just to the half of the population. The results for 2020 support these trends, confirming that Italian consumers use less cash than before the pandemic and they would certainly maintain this attitude when the crisis is over.

Cards and other cashless instruments would be preferred in case the individual could choose the payment method without any constraint, although most of them still consider the option of paying with cash important or very important. The use of alternative instruments mainly depends on the acceptance by the payment receiver whereas in Italy, in more than one in three cash-settled transactions, cash is the only accepted means of payment. Furthermore, cashless instruments are little used in P2P transactions, where cash remains the dominant instrument.

Cash is used more in the Centre and South, by women, young people and those with lower incomes. The self-employed, housepersons, students and the unemployed mainly use cash as well. On the other hand, the use of alternative instruments, particularly cards, is greater for respondents with higher levels of education, people with medium-high incomes, office workers and retirees. This picture shows that, excluding the self-employed, the categories that show greater use of cash are usually economically dependent on others, therefore they may be inclined to use the instruments with which they are financed. In contrast, the groups that use more alternative instruments are more likely to be financially self-sufficient having the opportunity to express their propensity to use any payment instrument.

By looking at other transactions, such as remote and bill payments, the role of cash appears more limited. Cards (both credit and debit) and PayPal are the most used instruments for remote payments, while in settling bill payments cash, cards or direct debits have an almost equal role.

Currently, the most innovative payments, as mobile payments, are still not much popular in Italy, except for internet payment instruments that, however, are limited to e-commerce and remote purchases.

## References

Ardizzi, G., E. Bonifacio, C. Demma and L. Painelli (2020), *Regional Differences in Retail Payment Habits in Italy*, Bank of Italy, Occasional Papers no. 576, September 2020.

Ardizzi, G., A. Nobili and G. Rocco (2020), *A game changer in payment habits: evidence from daily data during a pandemic*, Bank of Italy, Occasional Papers no. 591, December 2020.

Esselink, H. and L. Hernandez (2017), *The use of cash by households in the euro area*, ECB Occasional Paper Series no. 201, November 2017.

European Central Bank (2020a), *Report on a digital euro*, October 2020.

European Central Bank (2020b), *Study on the payment attitudes of consumers in the euro area (SPACE)*, December 2020.

Perrazzelli, A. (2021), *L'accelerazione digitale del sistema finanziario: nuove sfide per il mercato e le autorità*, Webinar – Open finance: il futuro del banking a portata di mano, Associazione CIVITA – CBI, February 2021.

Rocco, G. (2019), *The use of cash in Italy: evidence from the ECB Study on the use of cash by households*, Bank of Italy, Occasional Papers no. 481, January 2019.

## APPENDIX: DETAILED CHARTS

This part of the paper consists of a comprehensive set of graphs with the aim of providing the reader with a detailed insight of Italians' payment habits from all perspectives.

Following the same path as Section 5 of the main text, the sequence of the figures starts from the use of payment instruments in Italy in POS and P2P payments (Section A1), remote payments (Section A2) and bills (Section A3), followed by an overview of the sources of cash for Italians (Section A4). The access to payment instruments is the theme of the next section (Section A5), based on a comparison between the figures of both SPACE and IMPACT surveys. This comparison continues in the following section, dealing with consumers' preferences in Italy (Section A6). After an overview of cash as a store of value in Italy (Section A7), the appendix concludes with a focus on the IMPACT survey results (Section A8), providing valuable information about the effect of COVID-19 pandemic on payment habits in Italy.

Note to the reader:

- percentages may not add up to 100 per cent due to rounding,
- the subdivision into macro-regions is aimed to achieve representativeness of the population of the sample,
- debit cards figures include prepaid cards data.

## LIST OF CHARTS

<b>A1. USE OF PAYMENT INSTRUMENTS IN ITALY – POINT OF SALE AND P2P</b>	<b>29</b>
A1.1. General facts	29
Fig. A1.1.1 Share of payment instruments	29
Fig. A1.1.2 Average value of transactions per payment instrument	29
Fig. A1.1.3 Average value of transactions per payment instrument: focus on “Cards” and “Others”	30
Fig. A1.1.4 Average value of card transactions per technology	30
Fig. A1.1.5 Frequency distribution of transaction value by payment instrument	31
A1.2. Geographical characteristics	32
Fig. A1.2.1 Cash payments – number and value of transactions by regional macro-area	32
Fig. A1.2.2 Use of payment instruments by regional macro-area	33
Fig. A1.2.3 Use of payment instruments by regional macro-area	33
A1.3. Socio-demographic characteristics	34
Fig. A1.3.1 Use of payment instruments by demographic	34
Fig. A1.3.2 Use of payment instruments by demographic	34
Fig. A1.3.3 Use of payment instruments by occupation	35
Fig. A1.3.4 Use of payment instruments by occupation	35
Fig. A1.3.5 Use of payment instruments by income group	36
Fig. A1.3.6 Use of payment instruments by income group	36
A1.4. Location and acceptance	37
Fig. A1.4.1 Payments by place of purchase (left panel) and by place of purchase and instrument (right panel)	37
Fig. A1.4.2 Payments by place of purchase (left panel) and by place of purchase and instrument (right panel)	37
Fig. A1.4.3 Payment instruments by place of purchase	38
A1.5. Contactless technology	39
Fig. A1.5.1 Share of payment technology used in card transactions	39
Fig. A1.5.2 Share of payment technology used in debit card transactions	40
Fig. A1.5.3 Share of payment technology used in credit card transactions	40
Fig. A1.5.4 Card transactions per value range, percentage breakdown by payment technology	41
Fig. A1.5.5 Debit card transactions per value range, percentage breakdown by payment technology	41
Fig. A1.5.6 Credit card transactions per value range, percentage breakdown by payment technology	42
Fig. A1.5.7 Use of payment technology in card transactions by regional macro-area	43

Fig. A1.5.8	Use of payment technology in card transactions by regional macro-area	43
Fig. A1.5.9	Use of payment technology in card transactions by demographic	44
Fig. A1.5.10	Use of payment technology in card transactions by demographic	44
Fig. A1.5.11	Use of payment technology in card transactions by occupation	45
Fig. A1.5.12	Use of payment technology in card transactions by occupation	45
Fig. A1.5.13	Use of payment technology in card transactions by income group	46
Fig. A1.5.14	Use of payment technology in card transactions by income group	46
Fig. A1.5.15	Use of payment technology in card transactions by place of purchase	47
Fig. A1.5.16	Use of payment technology in card transactions by place of purchase	47
<b>A2.</b>	<b>USE OF PAYMENT INSTRUMENTS IN ITALY – REMOTE PAYMENTS</b>	<b>48</b>
A2.1.	Remote payments	48
Fig. A2.1.1	Respondents who reported at least one remote payment by regional macro-area and at national level	48
Fig. A2.1.2	Respondents who reported at least one remote payment by demographic	48
Fig. A2.1.3	Respondents who reported at least one remote payment by occupation	49
Fig. A2.1.4	Respondents who reported at least one remote payment by income group	49
Fig. A2.1.5	Share of payment instruments at national level	50
Fig. A2.1.6	Average value of transactions per payment instrument	50
Fig. A2.1.7	Payments per value range, percentage breakdown by payment instrument	51
Fig. A2.1.8	Use of payment instruments by regional macro-area	52
Fig. A2.1.9	Use of payment instruments by regional macro-area	52
Fig. A2.1.10	Use of payment instruments by demographic	53
Fig. A2.1.11	Use of payment instruments by demographic	53
Fig. A2.1.12	Use of payment instruments by occupation	54
Fig. A2.1.13	Use of payment instruments by occupation	54
Fig. A2.1.14	Use of payment instruments by income group	55
Fig. A2.1.15	Use of payment instruments by income group	55
Fig. A2.1.16	Payments by product type (left panel) and by product type and instrument (right panel)	56
Fig. A2.1.17	Payments by product type (left panel) and by product type and instrument (right panel)	56
<b>A3.</b>	<b>USE OF PAYMENT INSTRUMENTS IN ITALY – BILL PAYMENTS</b>	<b>57</b>
A3.1.	General picture for bill payments	57
Fig. A3.1.1	Share of payment instruments	57
A3.2.	Geographical evidence for bill payments	58



Fig. A3.2.1	Use of payment instruments by regional macro-area	58
Fig. A3.2.2	Use of payment instrument by regional macro-area	58
A3.3.	Payment instruments used in bill categories	59
Fig. A3.3.1	Payments by type of bill (left panel) and breakdown by payment instrument (right panel)	59
Fig. A3.3.2	Payments by type of bill (left panel) and breakdown by payment instrument (right panel)	59
Fig. A3.3.3	Payments per type of bill and instrument used	60
Fig. A3.3.4	Payments per type of bill and instrument used	60
<b>A4.</b>	<b>HOW CONSUMERS OBTAIN CASH IN ITALY</b>	<b>61</b>
A4.1.	Cash sources	61
Fig. A4.1.1	Cash additions to wallets by source, by regional macro-area and at national level	61
Fig. A4.1.2	Cash additions to wallets by source, by regional macro-area and at national level	61
Fig. A4.1.3	Cash additions to wallets by source and demographic	62
Fig. A4.1.4	Cash additions to wallets by source and demographic	62
Fig. A4.1.5	Cash additions to wallets by source and occupation	63
Fig. A4.1.6	Cash additions to wallets by source and occupation	63
Fig. A4.1.7	Cash additions to wallets by source and income group	64
Fig. A4.1.8	Cash additions to wallets by source and income group	64
A4.2.	Income in cash	65
Fig. A4.2.1	Share of regular income received in cash by regional macro-area and at national level	65
Fig. A4.2.2	Share of regular income received in cash by demographic	65
Fig. A4.2.3	Share of regular income received in cash by occupation	66
Fig. A4.2.4	Share of regular income received in cash by income group	66
<b>A5.</b>	<b>ACCESS TO PAYMENT INSTRUMENTS IN ITALY</b>	<b>67</b>
A5.1.	ATM access easiness	67
Fig. A5.1.1	Ease of access to cash withdrawals at an ATM or a bank at national level	67
Fig. A5.1.2	Ease of access to cash withdrawals at an ATM or a bank by regional macro-area (SPACE 2019 data)	67
Fig. A5.1.3	Ease of access to cash withdrawals at an ATM or a bank by demographic (SPACE 2019 data)	68
Fig. A5.1.4	Ease of access to cash withdrawals at an ATM or a bank by demographic (IMPACT 2020 data)	68
Fig. A5.1.5	Ease of access to cash withdrawals at an ATM or a bank by occupation (SPACE 2019 data)	69

Fig. A5.1.6	Ease of access to cash withdrawals at an ATM or a bank by occupation (IMPACT 2020 data)	69
Fig. A5.1.7	Ease of access to cash withdrawals at an ATM or a bank by income group (SPACE 2019 data)	70
Fig. A5.1.8	Ease of access to cash withdrawals at an ATM or a bank by income group (IMPACT 2020 data)	70
A5.2.	Access to alternative instruments	71
Fig. A5.2.1	Access to non-cash payment instruments at national level	71
A5.3.	Card owners	72
Fig. A5.3.1	Access to non-cash payment instruments focus on cards by regional macro-area and at national level	72
Fig. A5.3.2	Access to non-cash payment instruments – focus on cards by demographic	72
Fig. A5.3.3	Access to non-cash payment instruments – focus on cards by occupation	73
Fig. A5.3.4	Access to non-cash payment instruments – focus on cards by income group	73
A5.4.	Innovative payments users	74
Fig. A5.4.1	Access to non-cash payment instruments focus on innovative instruments by regional macro-area and at national level	74
Fig. A5.4.2	Access to non-cash payment instruments focus on innovative instruments by demographic	74
Fig. A5.4.3	Access to non-cash payment instruments – focus on innovative instruments by occupation	75
Fig. A5.4.4	Access to non-cash payment instruments – focus on innovative instruments by income group	75
A5.5.	Cash only users	76
Fig. A5.5.1	Population that only has access to cash by regional macro-area and at national level	76
Fig. A5.5.2	Population that only has access to cash by demographic	76
Fig. A5.5.3	Population that only has access to cash by occupation	77
Fig. A5.5.4	Population that only has access to cash by income group	77
<b>A6.</b>	<b>CONSUMERS' PAYMENT PREFERENCES IN ITALY</b>	<b>78</b>
A6.1.	General facts	78
Fig. A6.1.1	Preferred payment instrument	78
A6.2.	Geographical characteristics	79
Fig. A6.2.1	Preferred payment instrument by regional macro-area (SPACE 2019 data)	79
A6.3.	Socio-demographic characteristics	80
Fig. A6.3.1	Preferred payment instrument by demographic (SPACE 2019 data)	80
Fig. A6.3.2	Preferred payment instrument by occupation (SPACE 2019 data)	80

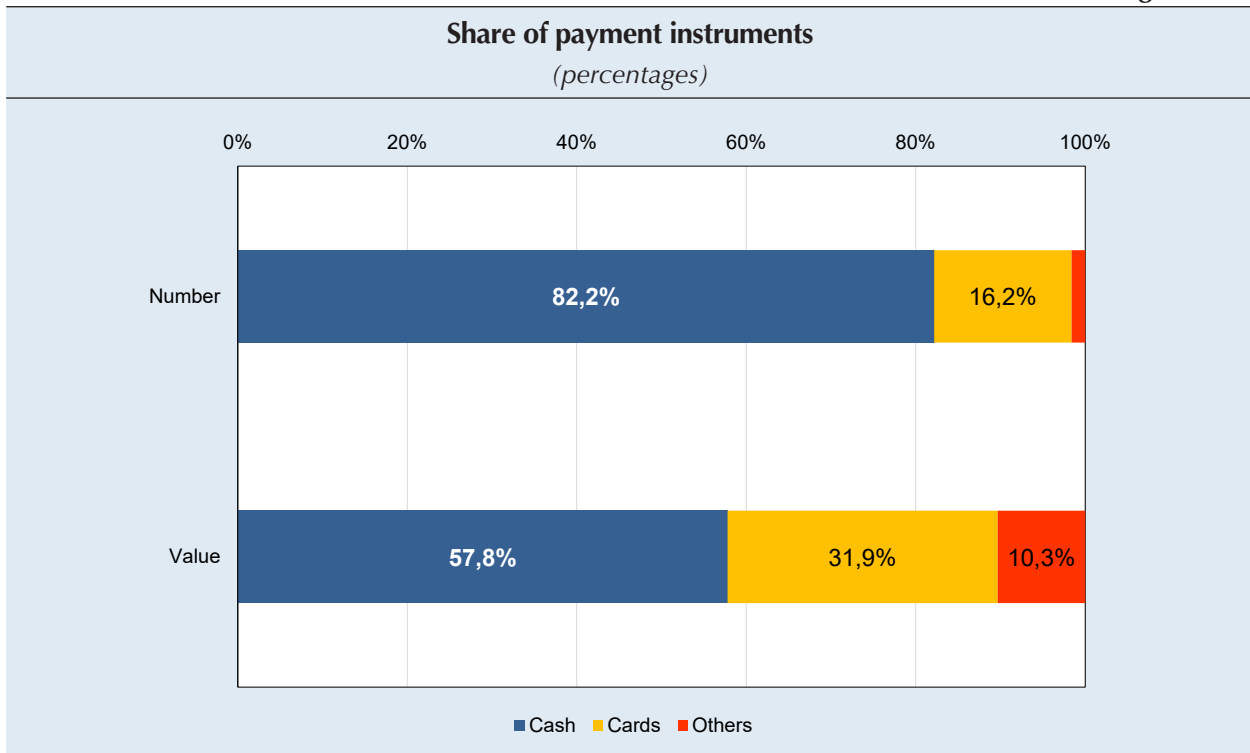
Fig. A6.3.3	Preferred payment instrument by income group (SPACE 2019 data)	81
A6.4.	The impact of the pandemic	82
Fig. A6.4.1	Preferred payment instrument by demographic (IMPACT 2020 data)	82
Fig. A6.4.2	Preferred payment instrument by occupation (IMPACT 2020 data)	82
Fig. A6.4.3	Preferred payment instrument by income group (IMPACT 2020 data)	83
A6.5.	Importance of cash	84
Fig. A6.5.1	The importance of having the option to pay with cash	84
Fig. A6.5.2	The importance of having the option to pay with cash by regional macro-area (SPACE 2019 data)	84
Fig. A6.5.3	The importance of having the option to pay with cash by demographic (SPACE 2019 data)	85
Fig. A6.5.4	The importance of having the option to pay with cash by demographic (IMPACT 2020 data)	85
Fig. A6.5.5	The importance of having the option to pay with cash by occupation (SPACE 2019 data)	86
Fig. A6.5.6	The importance of having the option to pay with cash by occupation (IMPACT 2020 data)	86
Fig. A6.5.7	The importance of having the option to pay with cash by income group (SPACE 2019 data)	87
Fig. A6.5.8	The importance of having the option to pay with cash by income group (IMPACT 2020 data)	87
<b>A7.</b>	<b>USE OF CASH AS A STORE OF VALUE IN ITALY</b>	<b>88</b>
A7.1.	Cash as a store of value	88
Fig. A7.1.1	Share of respondents storing cash at home by regional macro-area and at national level	88
Fig. A7.1.2	Share of respondents storing cash at home by demographic	88
Fig. A7.1.3	Share of respondents storing cash at home by occupation	89
Fig. A7.1.4	Share of respondents storing cash at home by income group	89
Fig. A7.1.5	Amount of extra cash held by those who reported storing cash at home by regional macro-area and at national level	90
Fig. A7.1.6	Amount of extra cash held by those who reported storing cash at home by demographic	90
Fig. A7.1.7	Amount of extra cash held by those who reported storing cash at home by occupation	91
Fig. A7.1.8	Amount of extra cash held by those who reported storing cash at home by income group	91
<b>A8.</b>	<b>USE OF PAYMENT INSTRUMENTS IN ITALY – IMPACT SURVEY</b>	<b>92</b>
Fig. A8.1	Cash Frequency of usage – after restrictions have been lifted – reported by respondents at national level	92
Fig. A8.2	Cash Frequency of usage – after restrictions have been lifted – reported by respondents by demographic	92

Fig. A8.3	CashFrequency of usage – after restrictions have been lifted – reported by respondents by occupation	93
Fig. A8.4	CashFrequency of usage – after restrictions have been lifted – reported by respondents by income group	93
Fig. A8.5	Payment card with PIN or signatureFrequency of usage – after restrictions have been lifted – reported by respondents at national level	94
Fig. A8.6	Payment card with PIN or signatureFrequency of usage – after restrictions have been lifted – reported by respondents by demographic	94
Fig. A8.7	Payment card with PIN or signatureFrequency of usage – after restrictions have been lifted – reported by respondents by occupation	95
Fig. A8.8	Payment card with PIN or signatureFrequency of usage – after restrictions have been lifted – reported by respondents by income group	95
Fig. A8.9	Contactless payment cardFrequency of usage – after restrictions have been lifted – reported by respondents at national level	96
Fig. A8.10	Contactless payment cardFrequency of usage – after restrictions have been lifted – reported by respondents by demographic	96
Fig. A8.11	Contactless payment cardFrequency of usage – after restrictions have been lifted – reported by respondents by occupation	97
Fig. A8.12	Contactless payment cardFrequency of usage – after restrictions have been lifted – reported by respondents by income group	97
Fig. A8.13	Mobile device (phone or smart watch)Frequency of usage – after restrictions have been lifted – reported by respondents at national level	98
Fig. A8.14	Mobile device (phone or smart watch)Frequency of usage – after restrictions have been lifted – reported by respondents by demographic	98
Fig. A8.15	Mobile device (phone or smart watch)Frequency of usage – after restrictions have been lifted – reported by respondents by occupation	99
Fig. A8.16	Mobile device (phone or smart watch)Frequency of usage – after restrictions have been lifted – reported by respondents by income group	99
Fig. A8.17	Main reasons for changing payment behaviour during the pandemic	100
Fig. A8.18	Payment behaviour expected after the pandemic at national level	100
Fig. A8.19	Payment behaviour expected after the pandemic by demographic	101
Fig. A8.20	Payment behaviour expected after the pandemic by occupation	101
Fig. A8.21	Payment behaviour expected after the pandemic by income group	102

# A1. Use of payment instruments in Italy – Point of sale and P2P

## A1.1. General facts

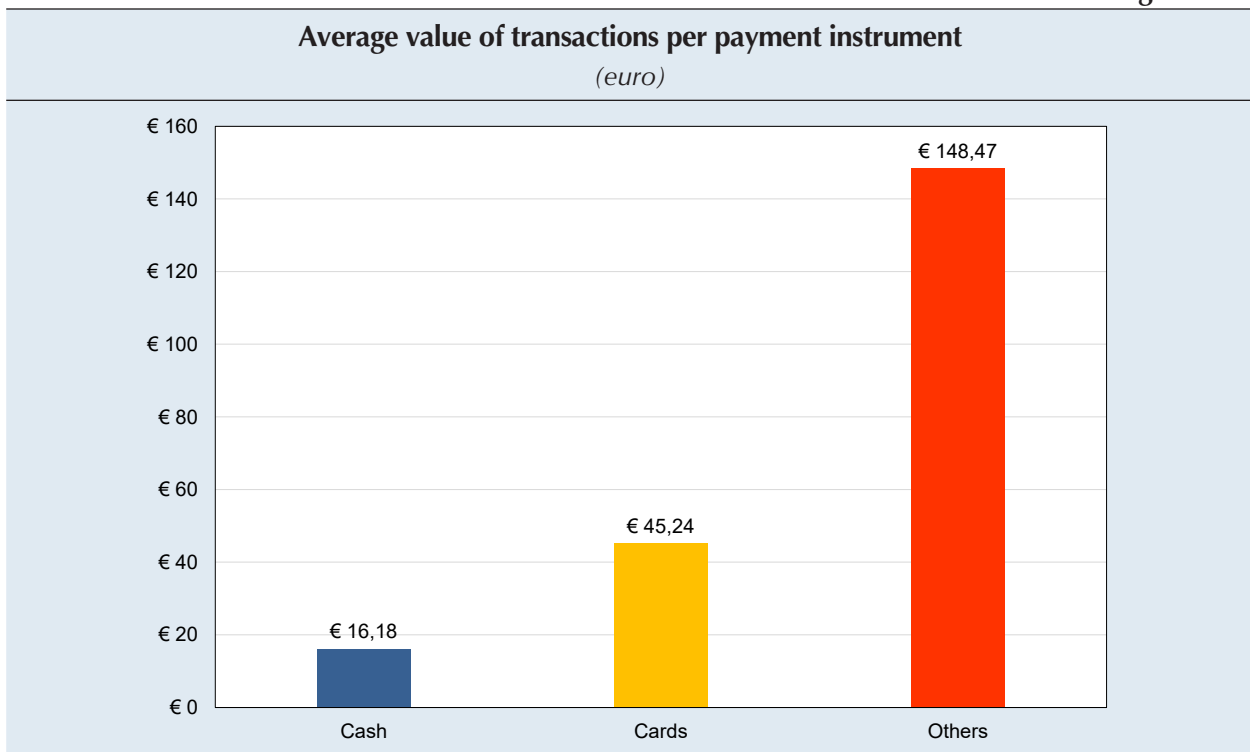
Fig. A1.1.1



Source: authors' calculations based on ECB SPACE survey data (2019).

Note: the "Others" category includes credit transfers, bank cheques, direct debits and mobile phone payments.

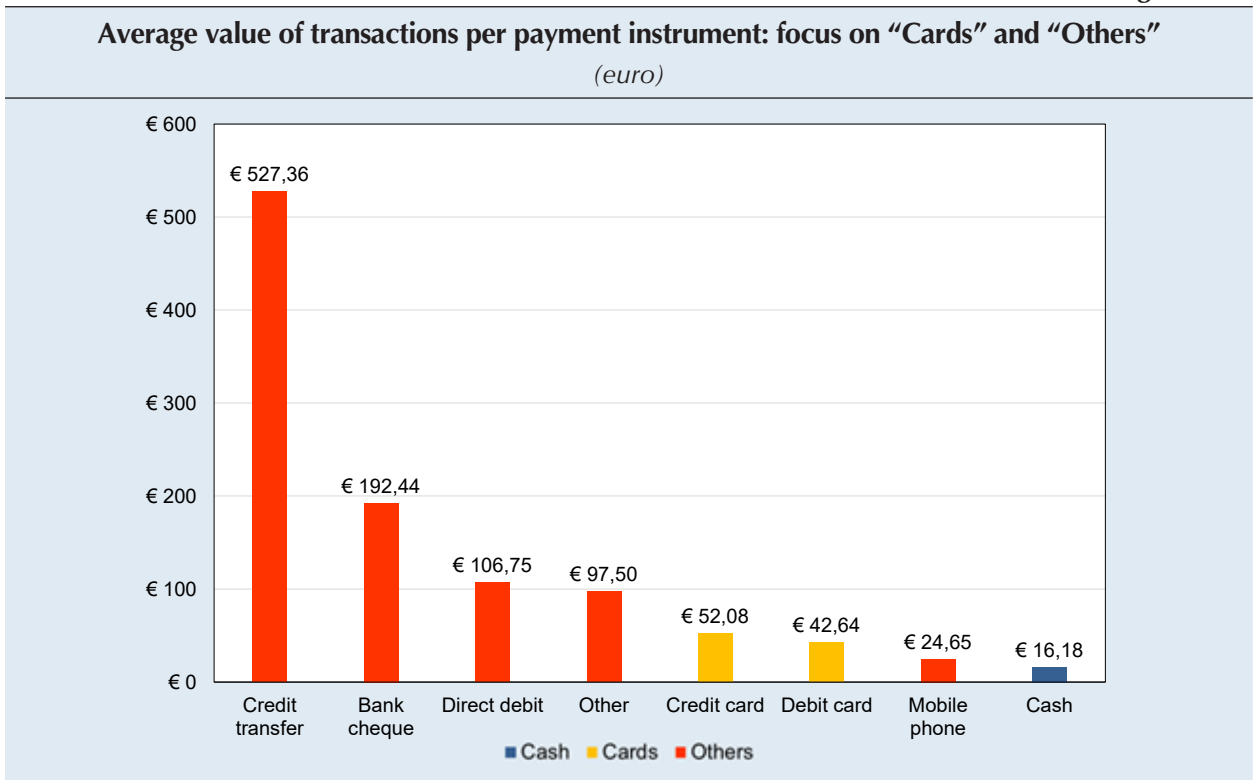
Fig. A1.1.2



Source: authors' calculations based on ECB SPACE survey data (2019).

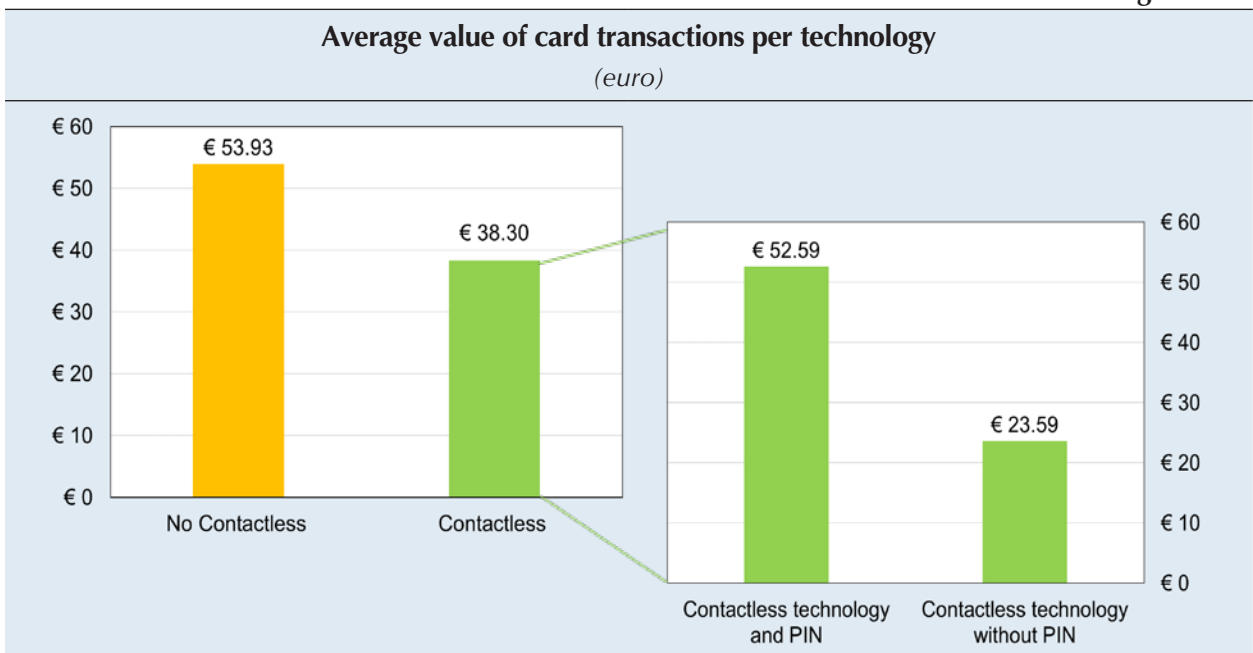
Note: the "Others" category includes credit transfers, bank cheques, direct debits and mobile phone payments.

Fig. A1.1.3



Source: authors' calculations based on ECB SPACE survey data (2019).  
Note: the "Others" category includes credit transfers, bank cheques, direct debits and mobile phone payments.

Fig. A1.1.4

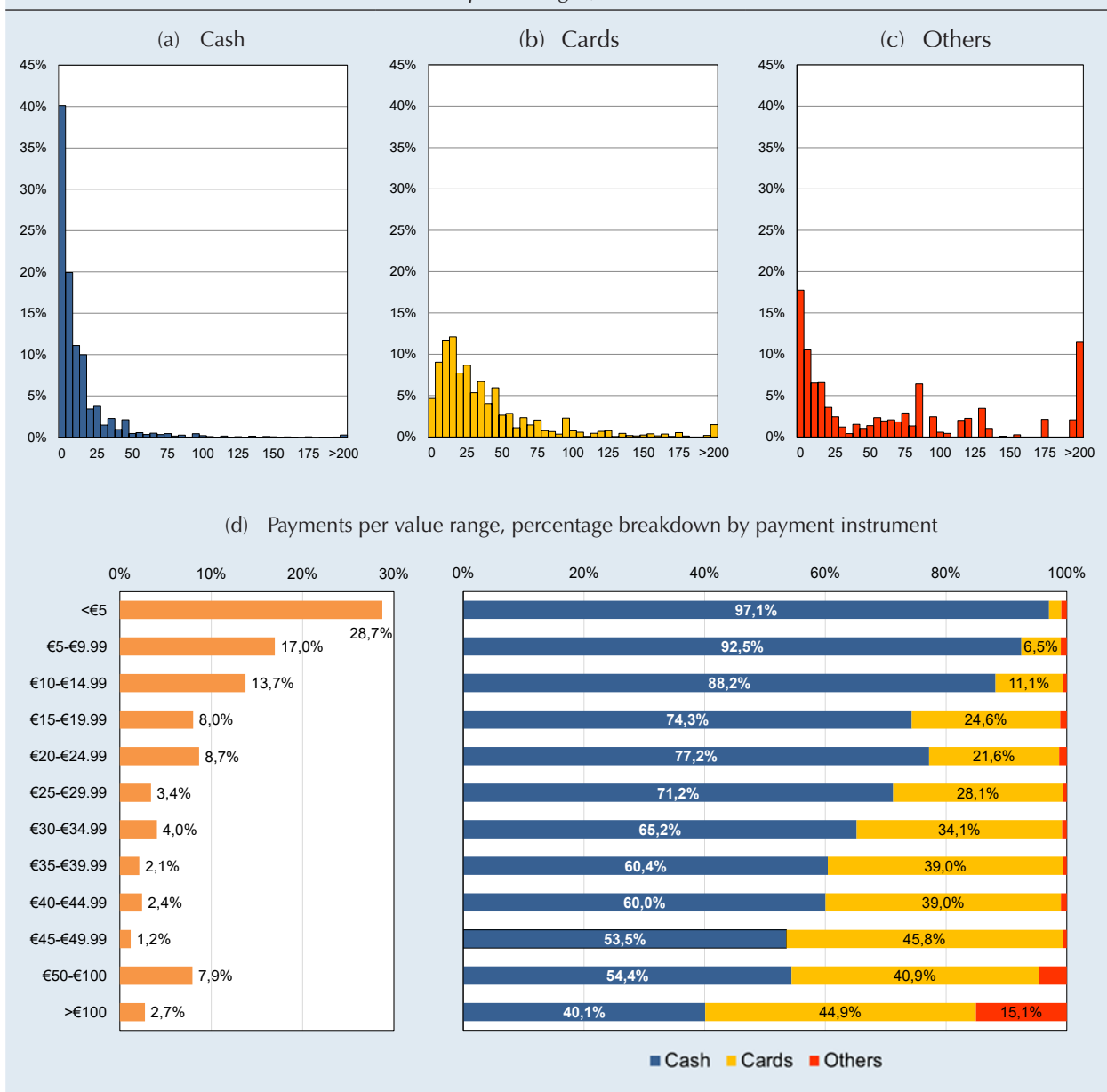


Source: authors' calculations based on ECB SPACE survey data (2019).



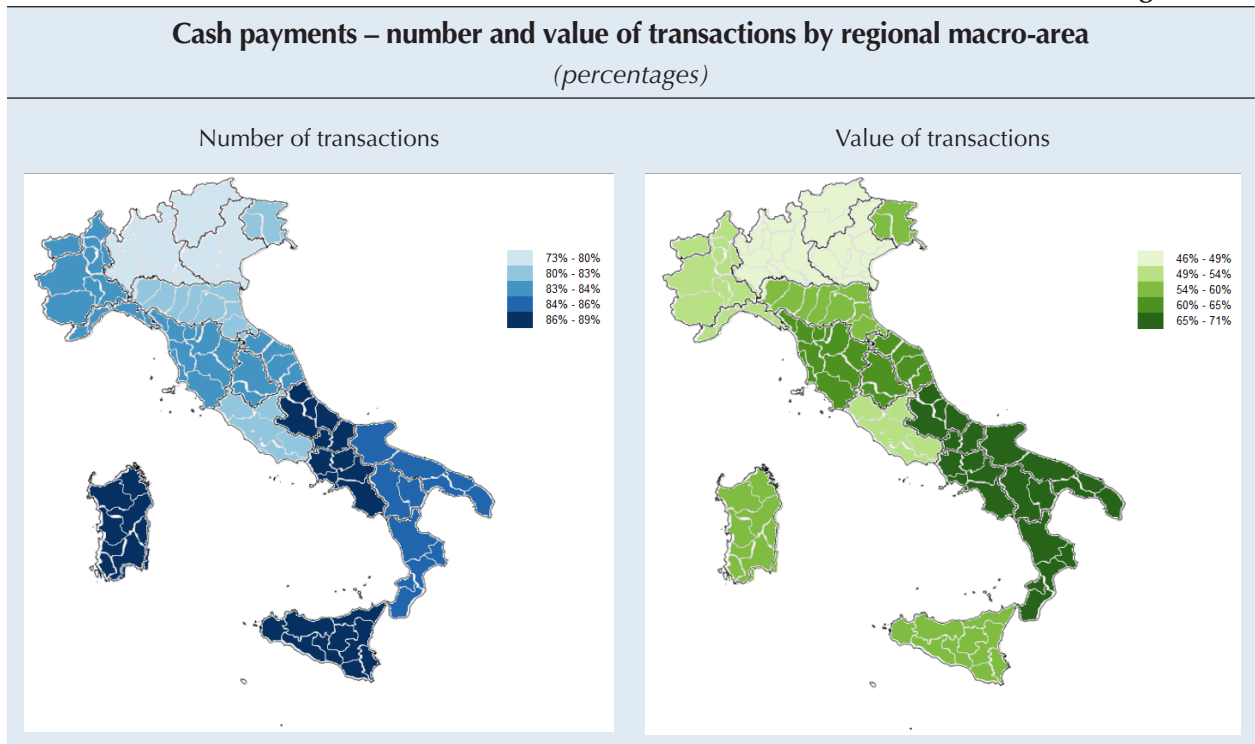
Fig. A1.1.5

**Frequency distribution of transaction value by payment instrument**  
(percentages, euro)



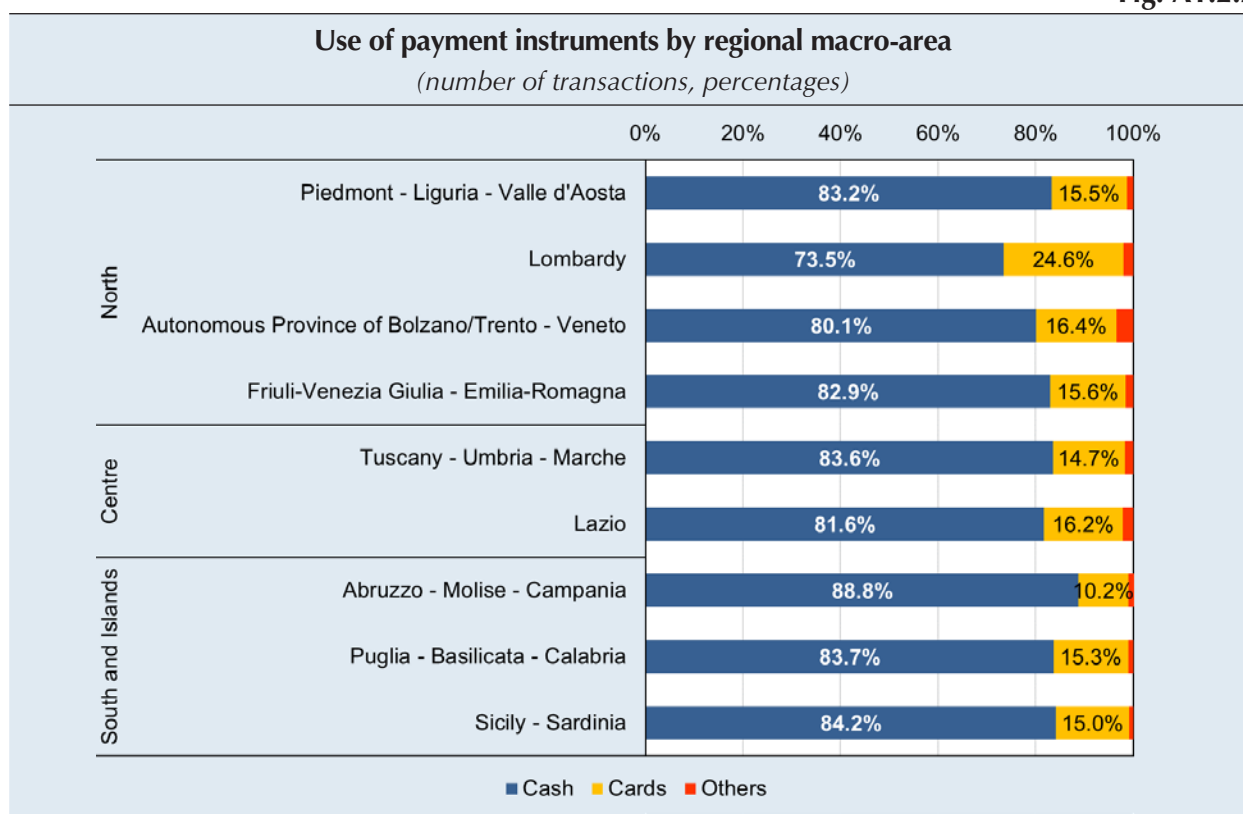
Source: authors' calculations based on ECB SPACE survey data (2019).

Note: the "Others" category includes credit transfers, bank cheques, direct debits and mobile phone payments.



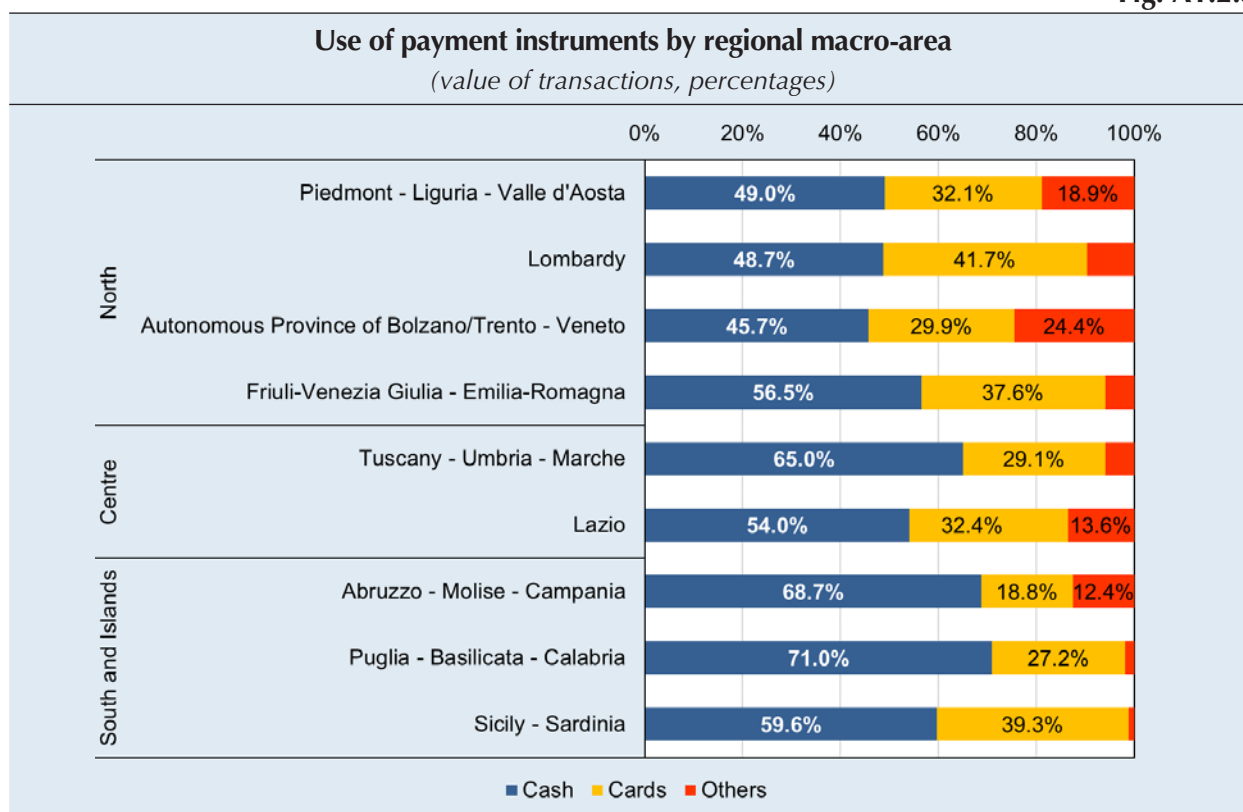
Source: authors' calculations based on ECB SPACE survey data (2019).

Fig. A1.2.2



Source: authors' calculations based on ECB SPACE survey data (2019).

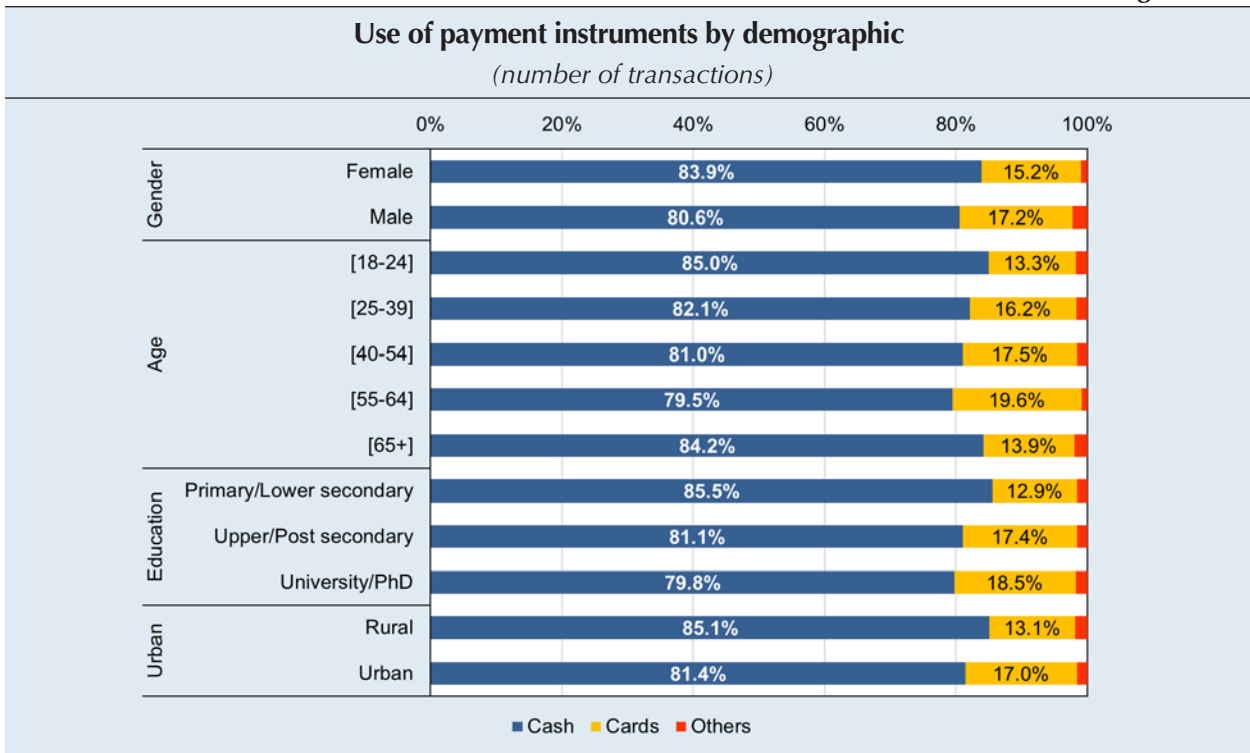
Fig. A1.2.3



Source: authors' calculations based on ECB SPACE survey data (2019). Percentages may not add up to 100% due to rounding.

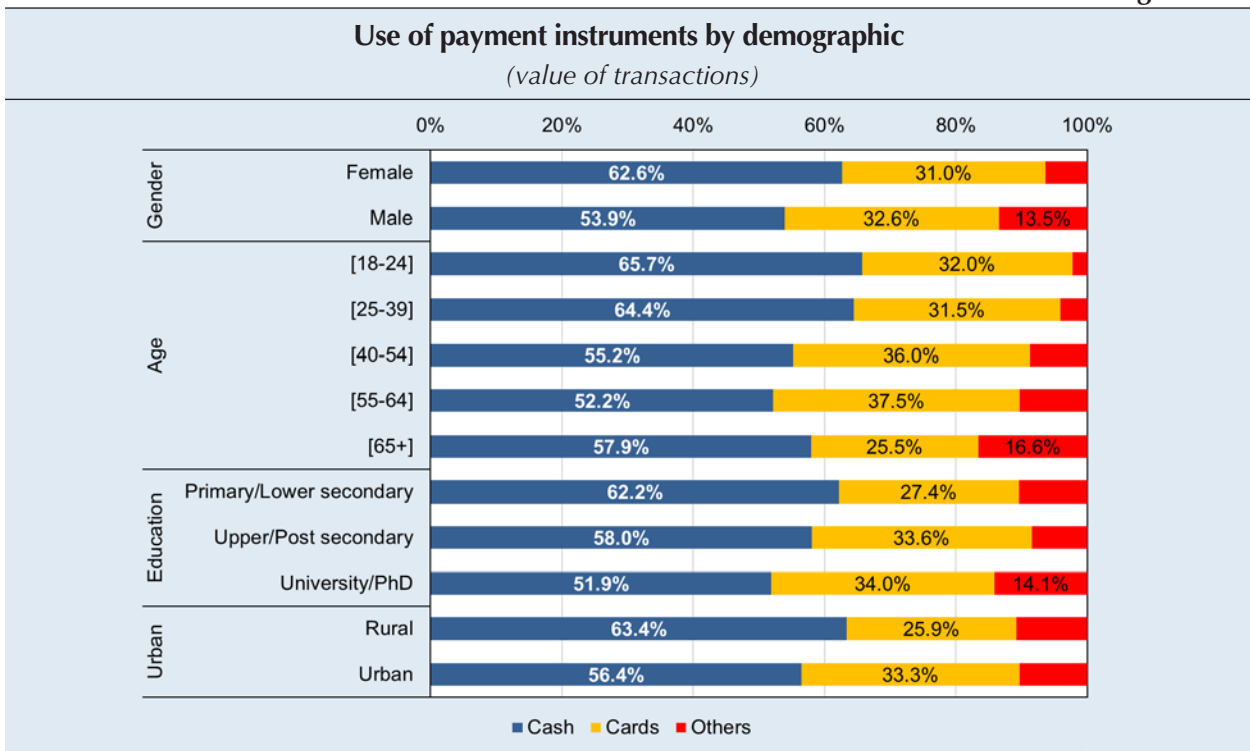
A1.3. Socio-demographic characteristics

Fig. A1.3.1



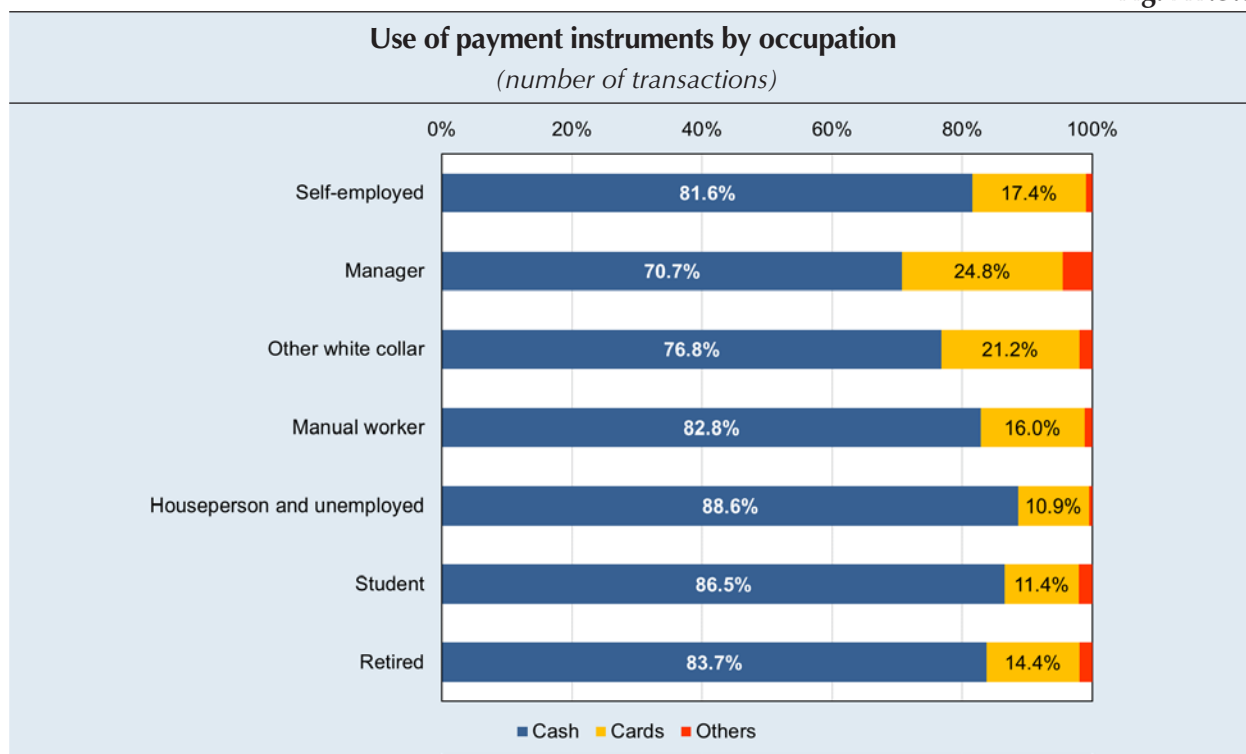
Source: authors' calculations based on ECB SPACE survey data (2019).  
Note: the "Others" category includes credit transfers, bank cheques, direct debits and mobile phone payments.

Fig. A1.3.2



Source: authors' calculations based on ECB SPACE survey data (2019).  
Note: the "Others" category includes credit transfers, bank cheques, direct debits and mobile phone payments.

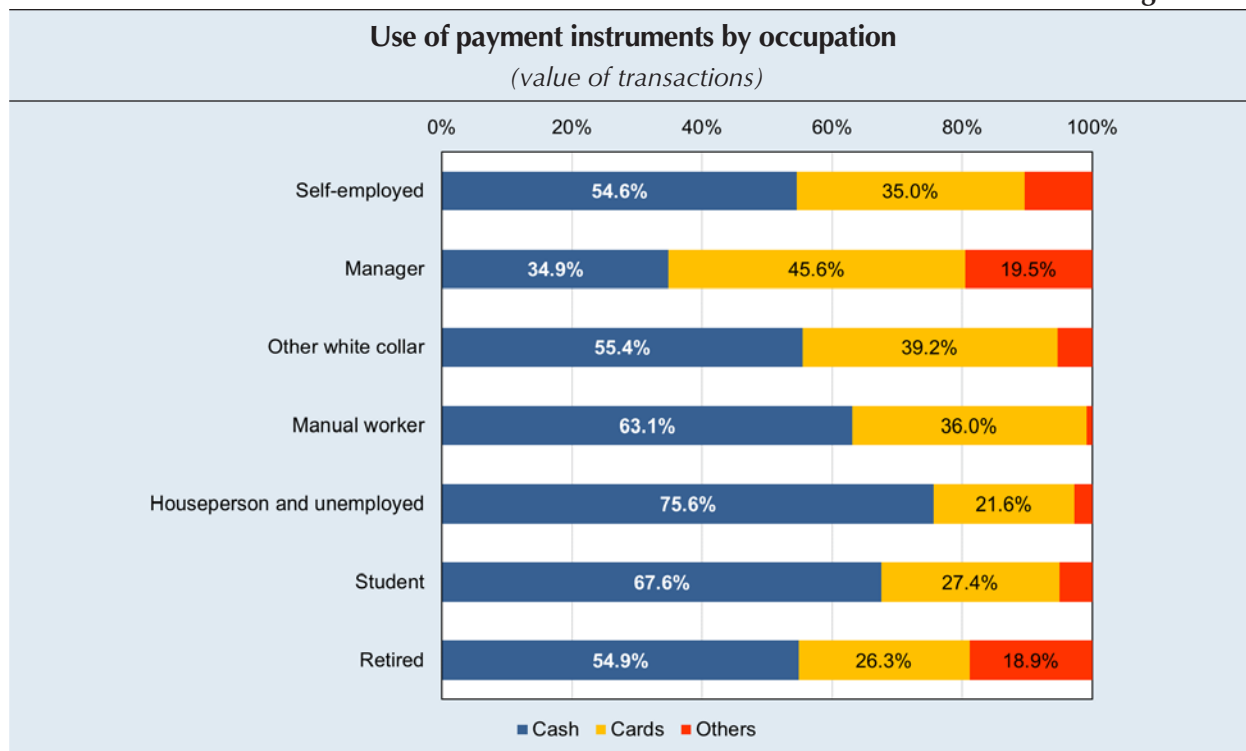
Fig. A1.3.3



Source: authors' calculations based on ECB SPACE survey data (2019).

Note: the "Others" category includes credit transfers, bank cheques, direct debits and mobile phone payments.

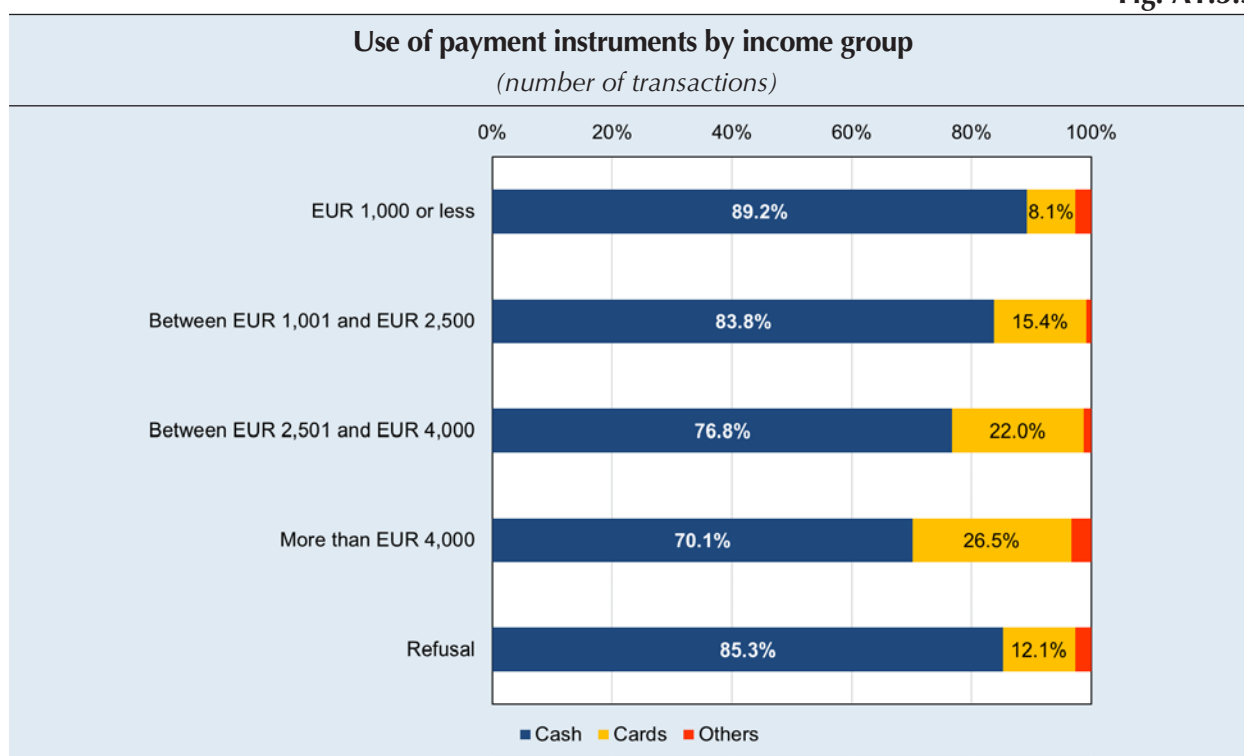
Fig. A1.3.4



Source: authors' calculations based on ECB SPACE survey data (2019). Percentages may not add up to 100% due to rounding.

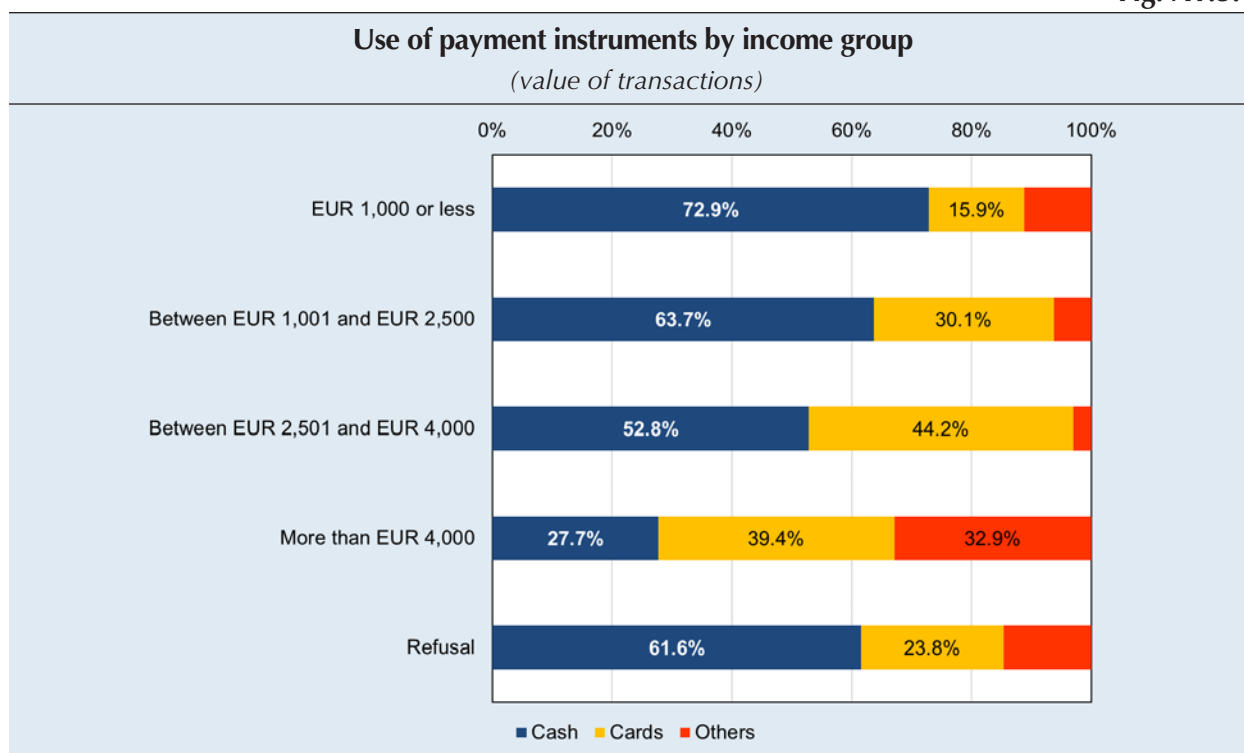
Note: the "Others" category includes credit transfers, bank cheques, direct debits and mobile phone payments.

Fig. A1.3.5



Source: authors' calculations based on ECB SPACE survey data (2019).  
 Note: the "Others" category includes credit transfers, bank cheques, direct debits and mobile phone payments.

Fig. A1.3.6

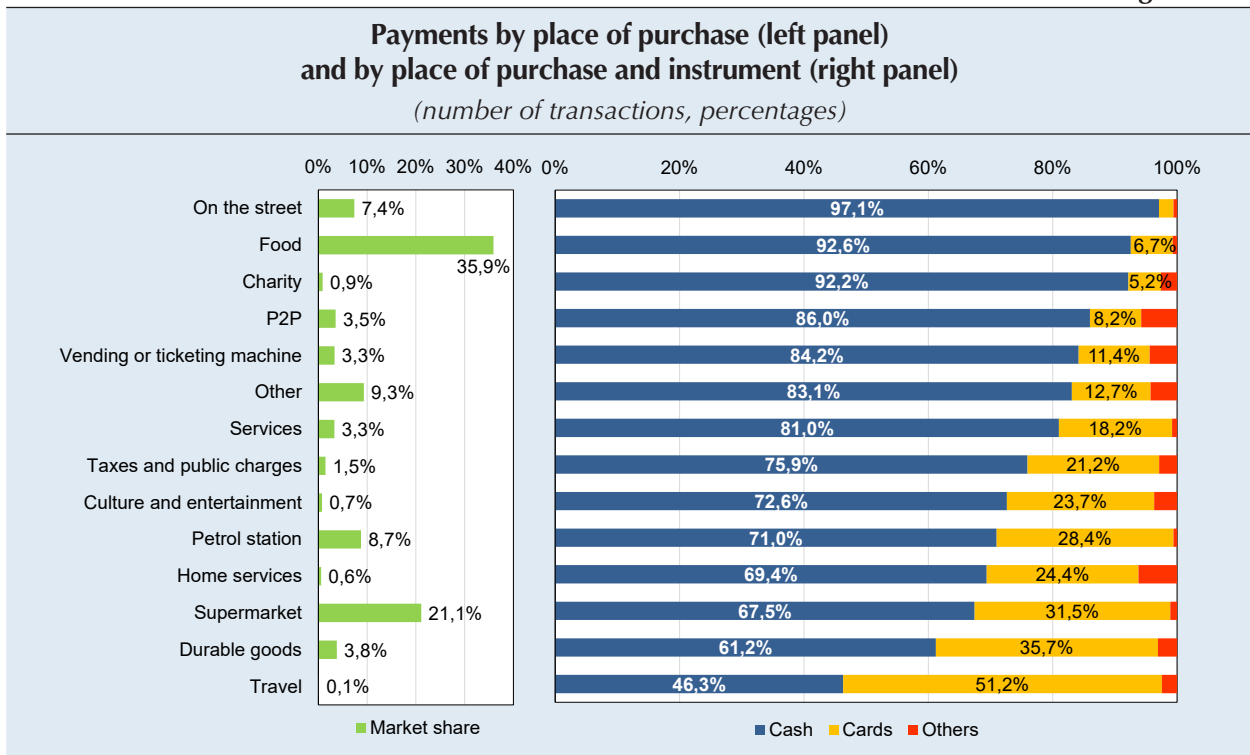


Source: authors' calculations based on ECB SPACE survey data (2019).  
 Note: the "Others" category includes credit transfers, bank cheques, direct debits and mobile phone payments.



A1.4. Location and acceptance

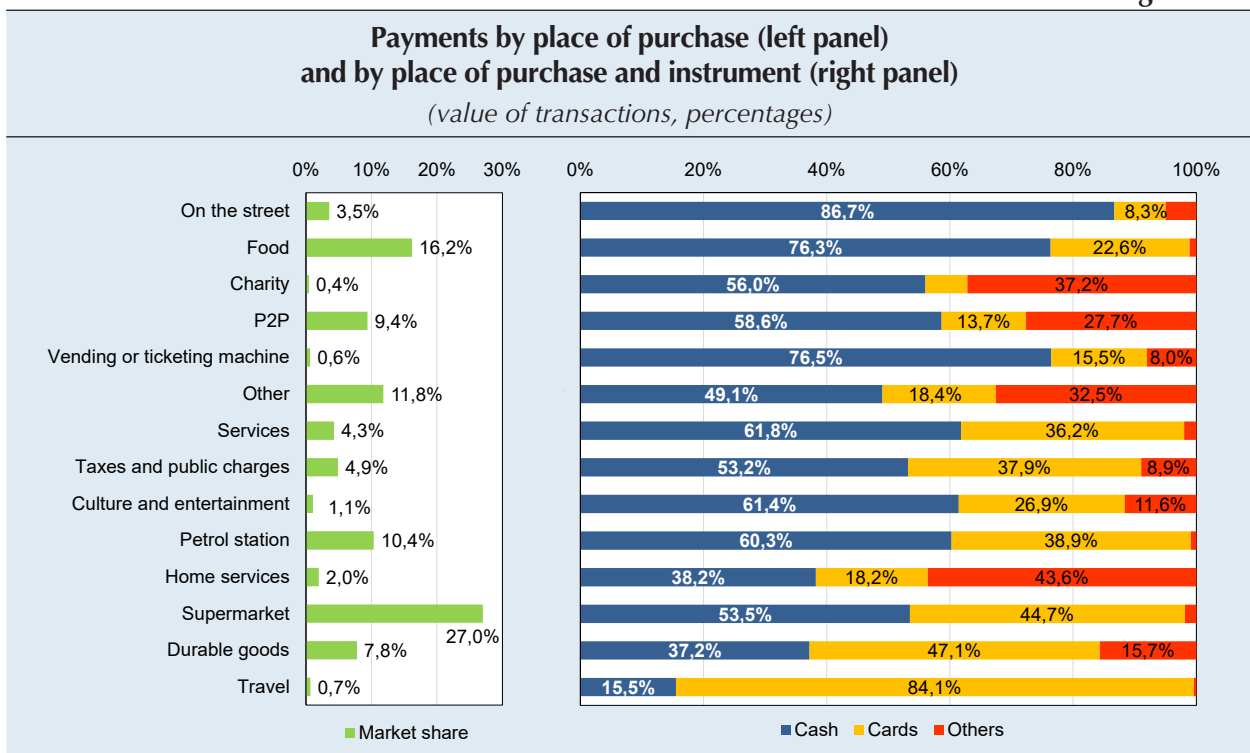
Fig. A1.4.1



Source: authors' calculations based on ECB SPACE survey data (2019).

Note: the "Others" category includes credit transfers, bank cheques, direct debits and mobile phone payments.

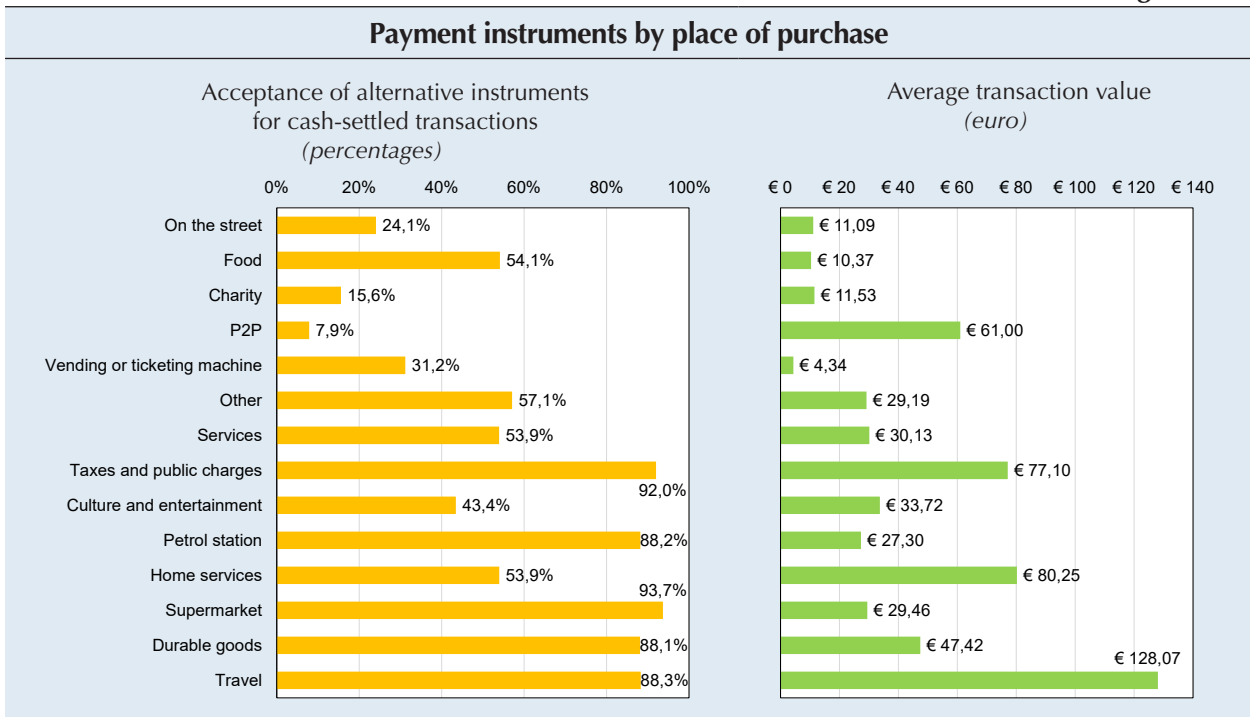
Fig. A1.4.2



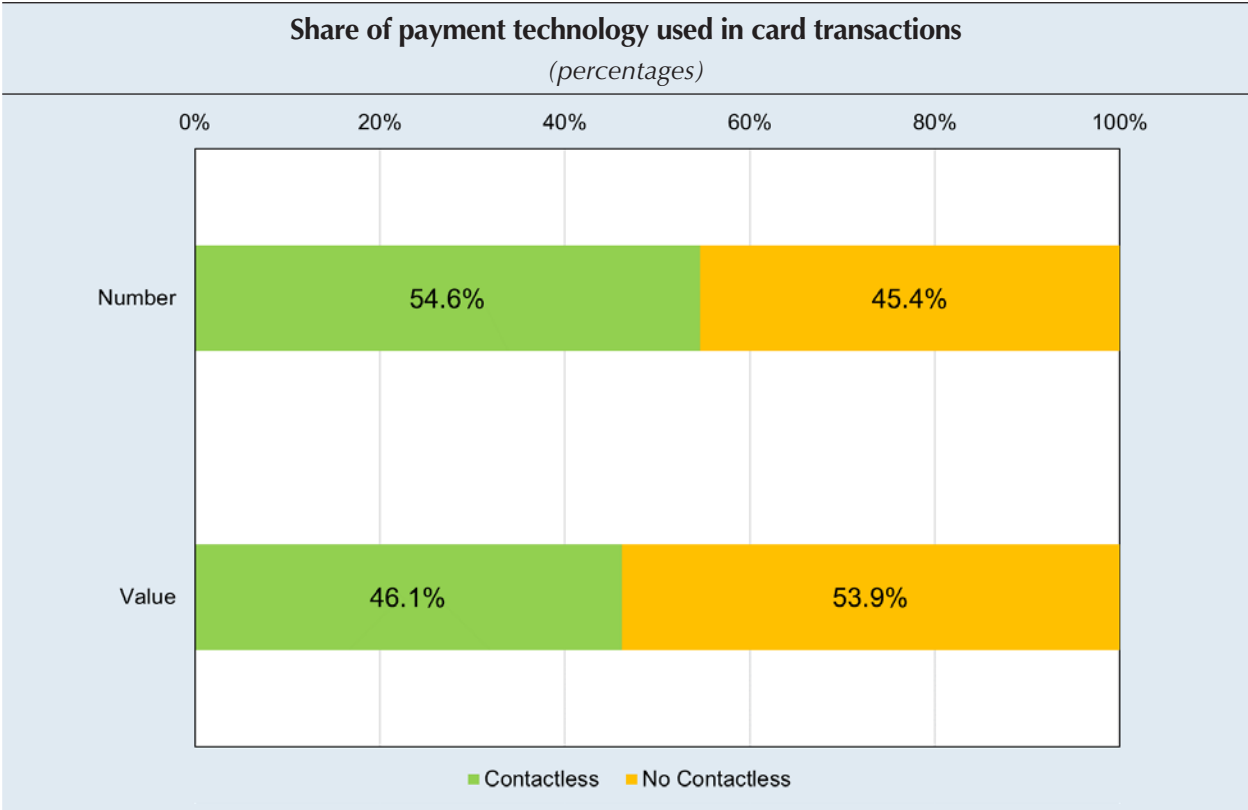
Source: authors' calculations based on ECB SPACE survey data (2019). Percentages may not add up to 100% due to rounding.

Note: the "Others" category includes credit transfers, bank cheques, direct debits and mobile phone payments.

Fig. A1.4.3

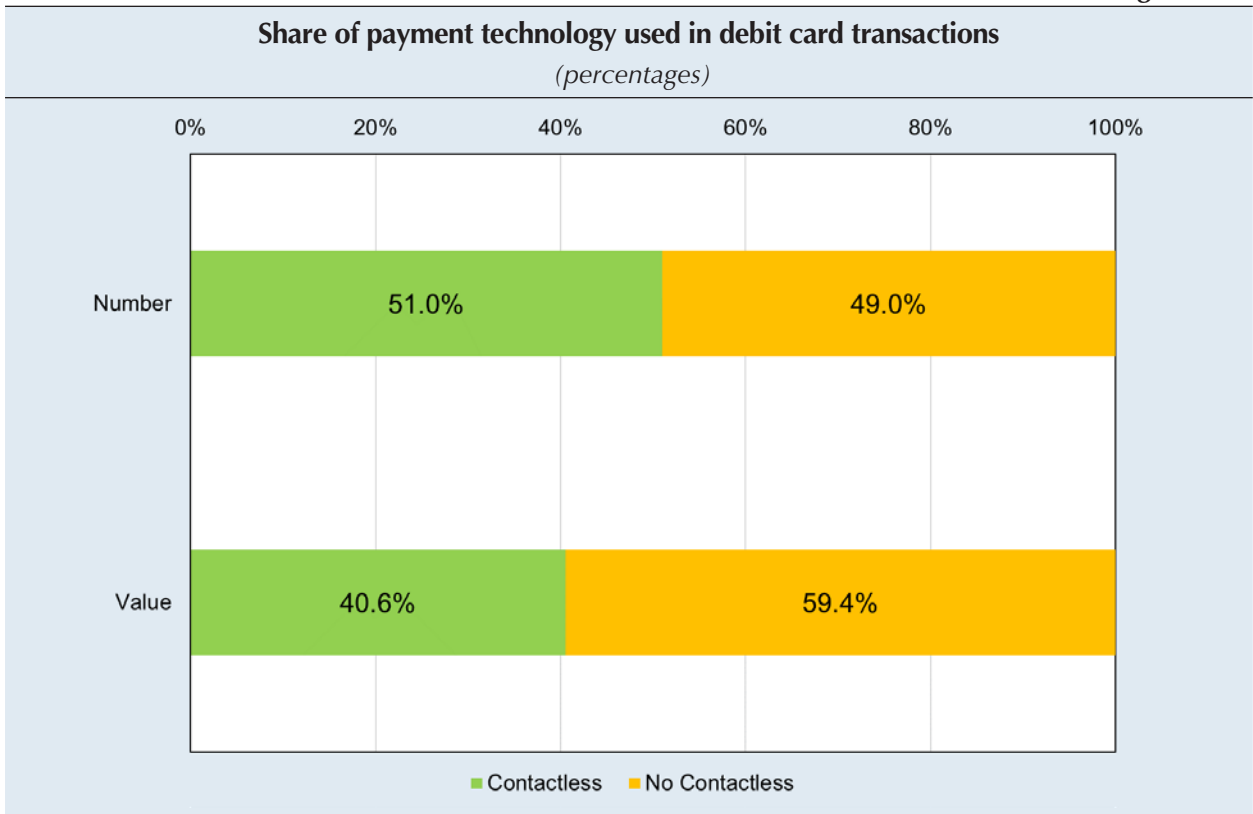


Source: authors' calculations based on ECB SPACE survey data (2019).



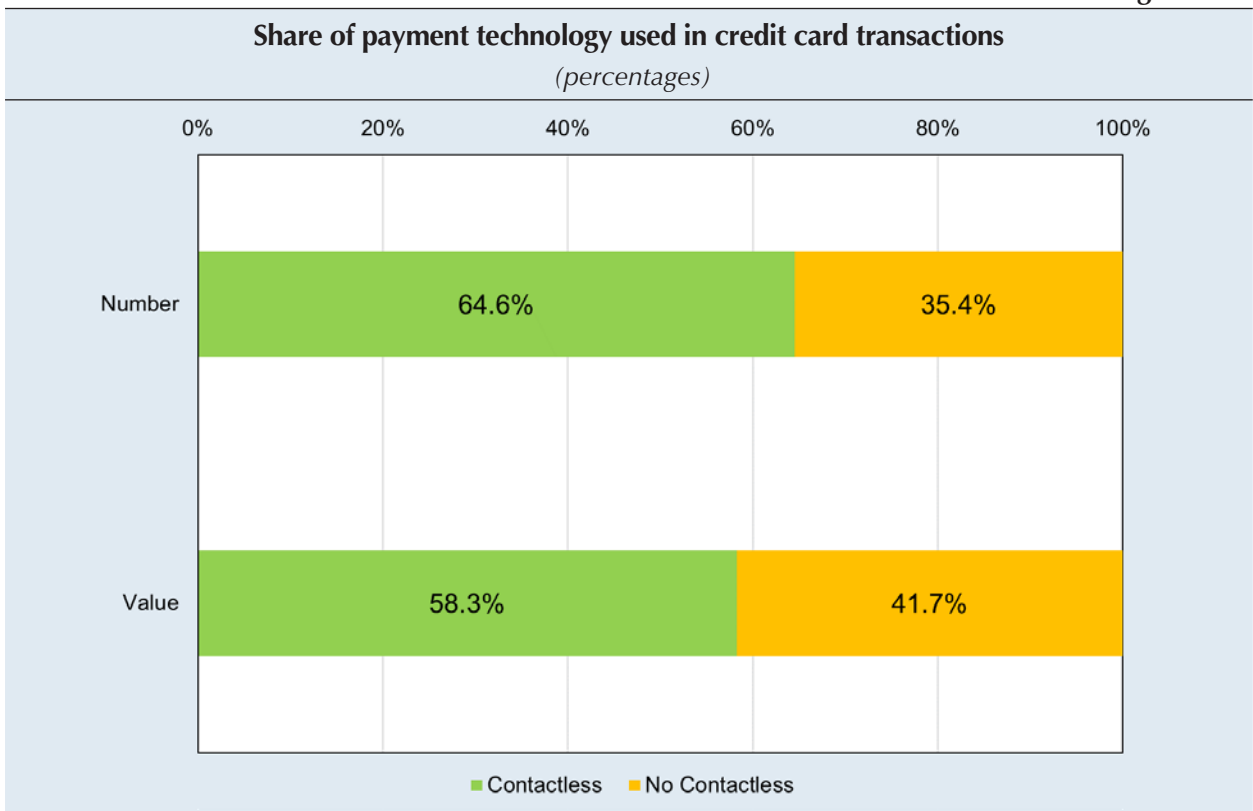
Source: authors' calculations based on ECB SPACE survey data (2019).

Fig. A1.5.2

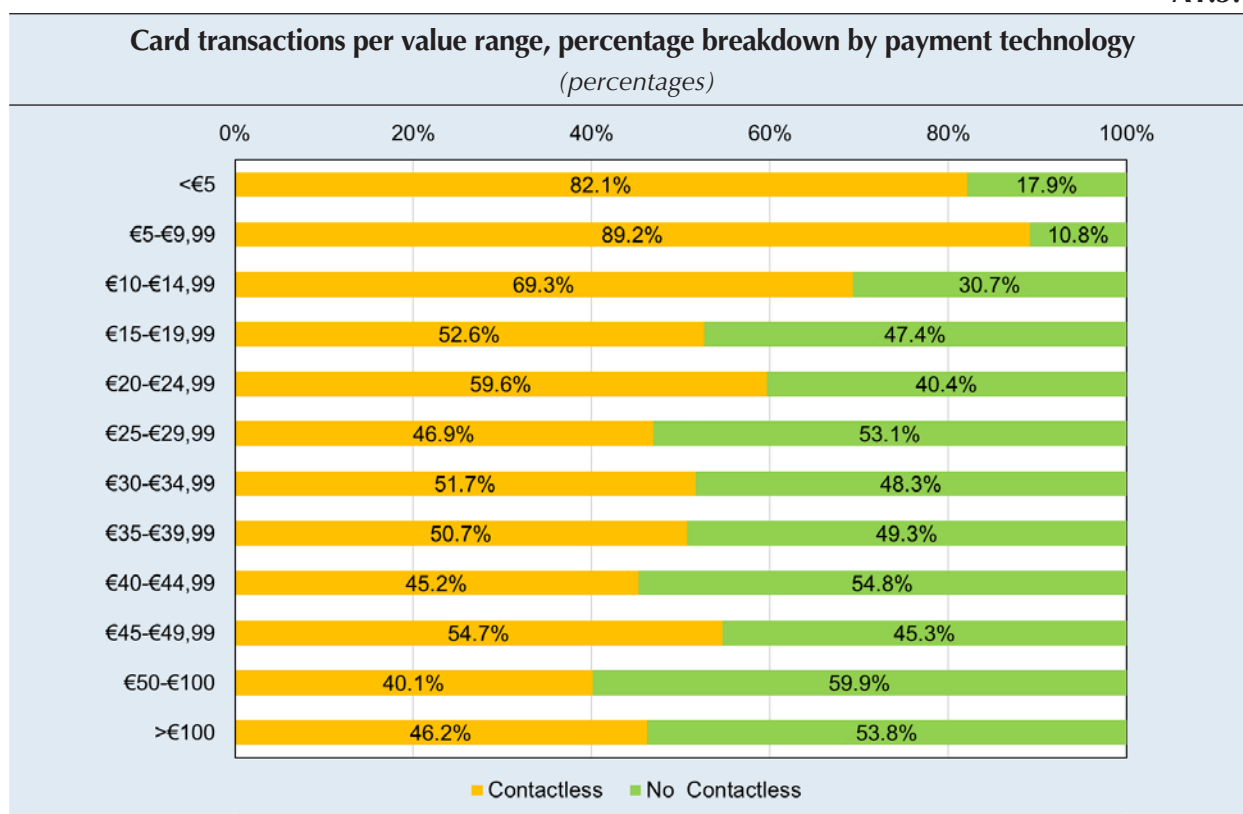


Source: authors' calculations based on ECB SPACE survey data (2019).

Fig. A1.5.3

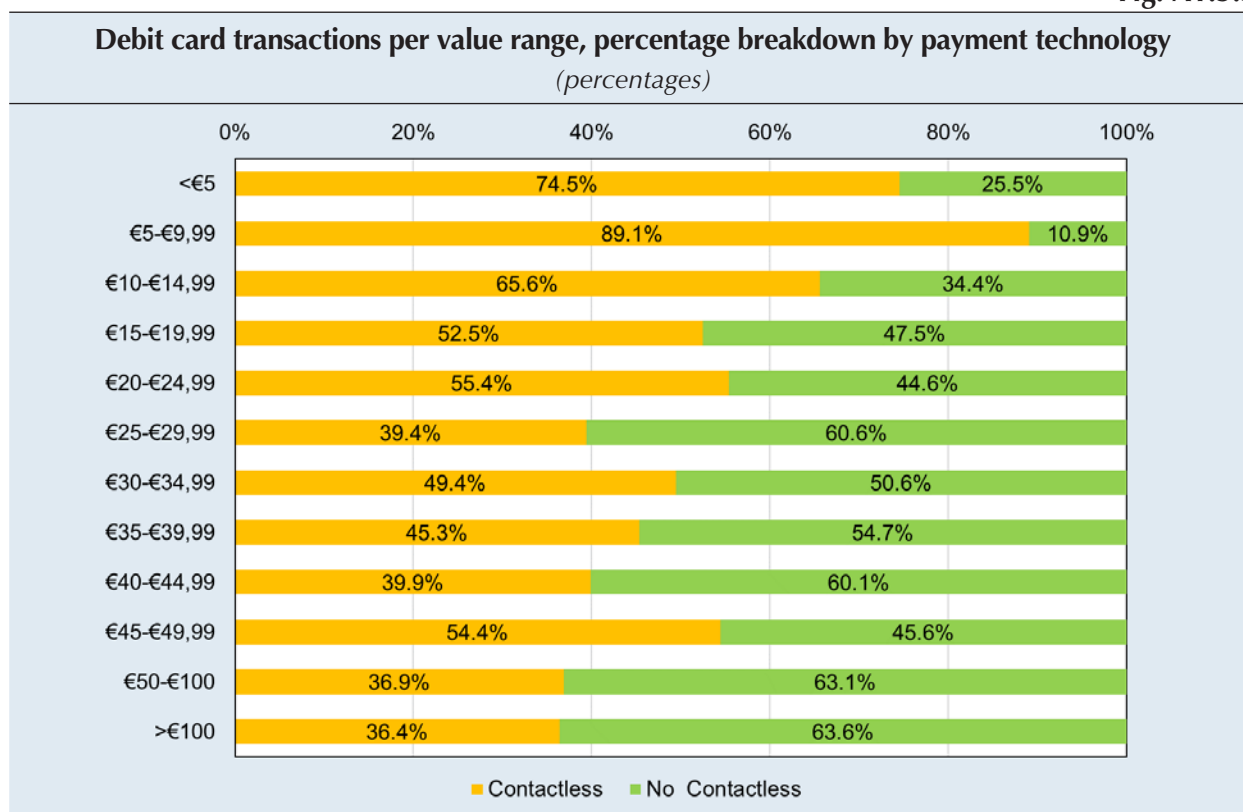


Source: authors' calculations based on ECB SPACE survey data (2019).



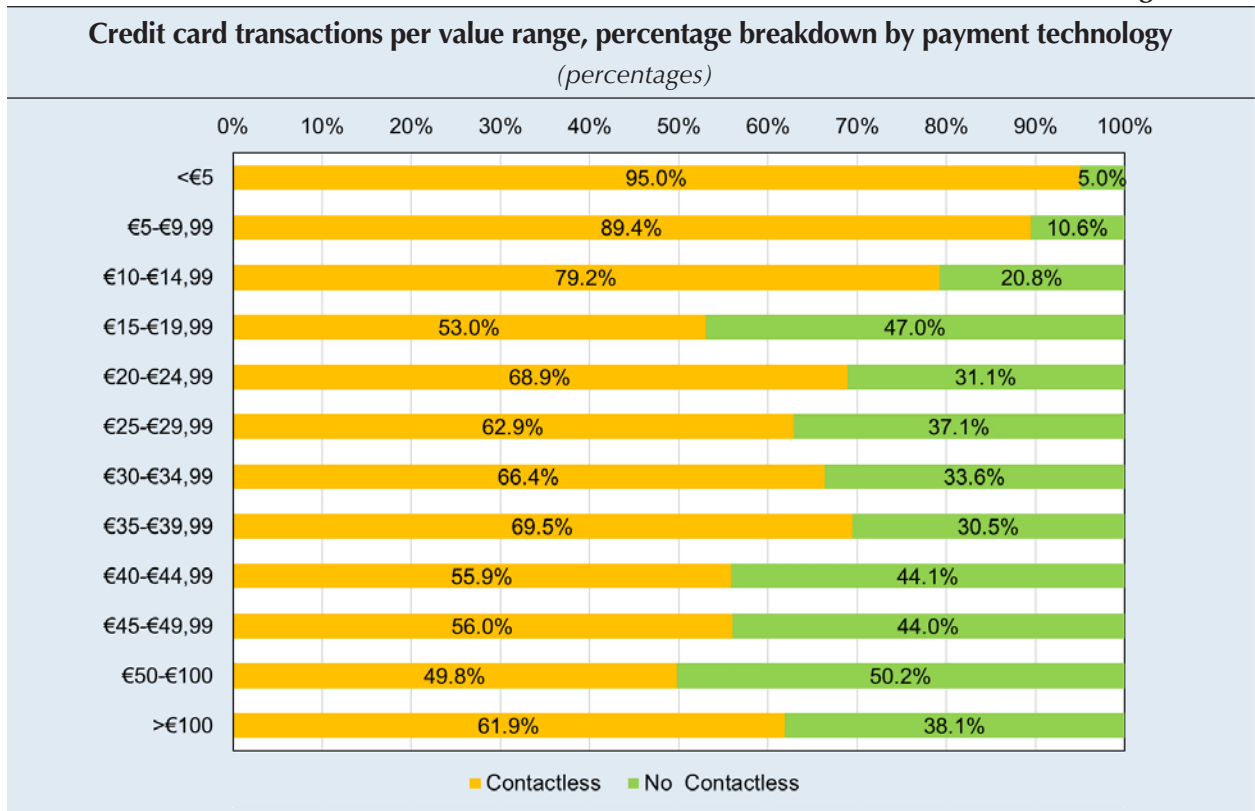
Source: authors' calculations based on ECB SPACE survey data (2019).

Fig. A1.5.5



Source: authors' calculations based on ECB SPACE survey data (2019).

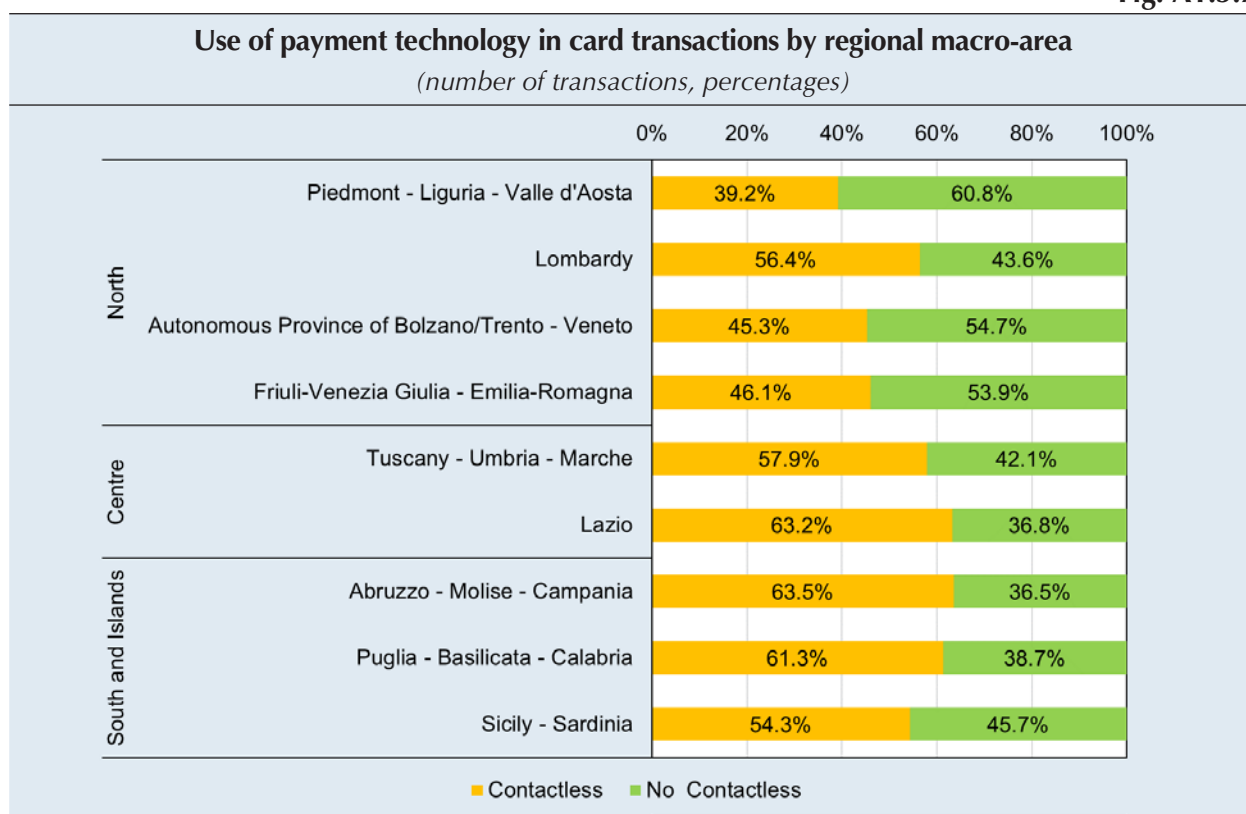
Fig. A1.5.6



Source: authors' calculations based on ECB SPACE survey data (2019).

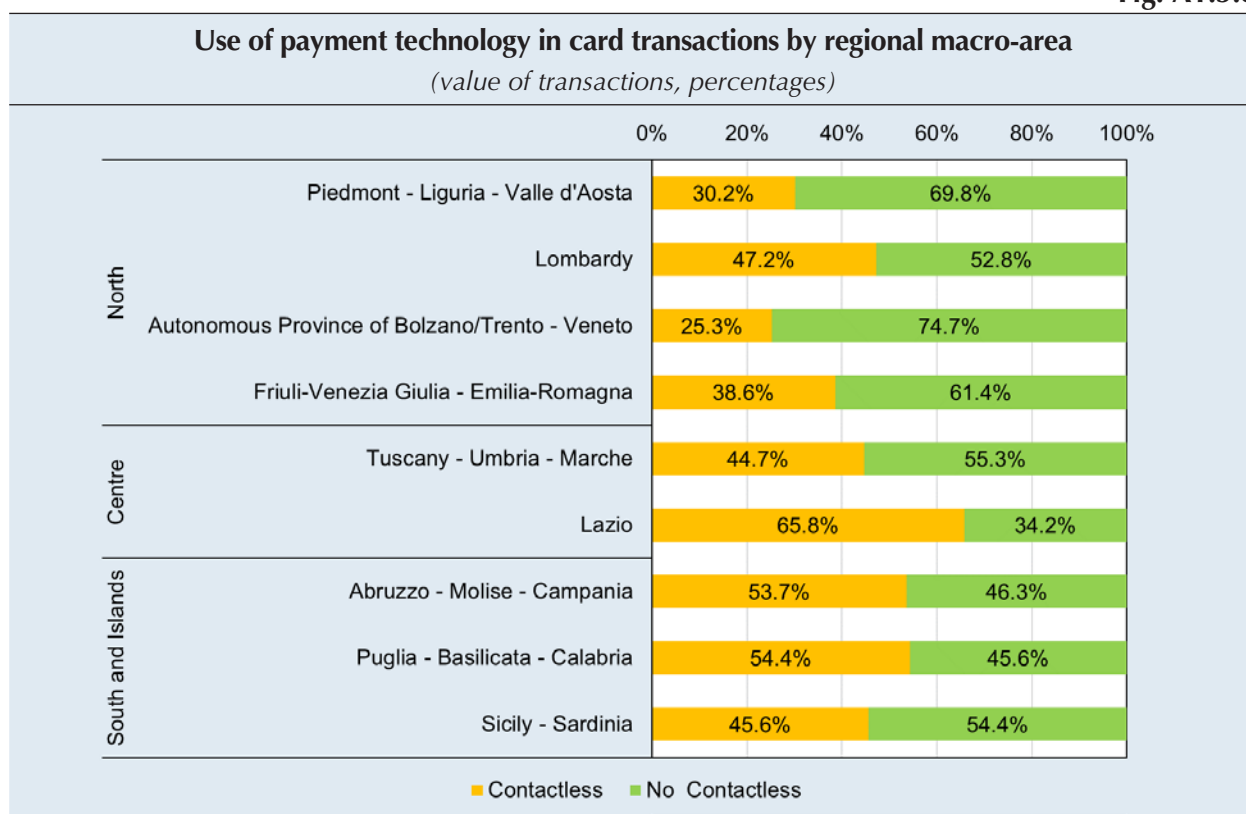


Fig. A1.5.7



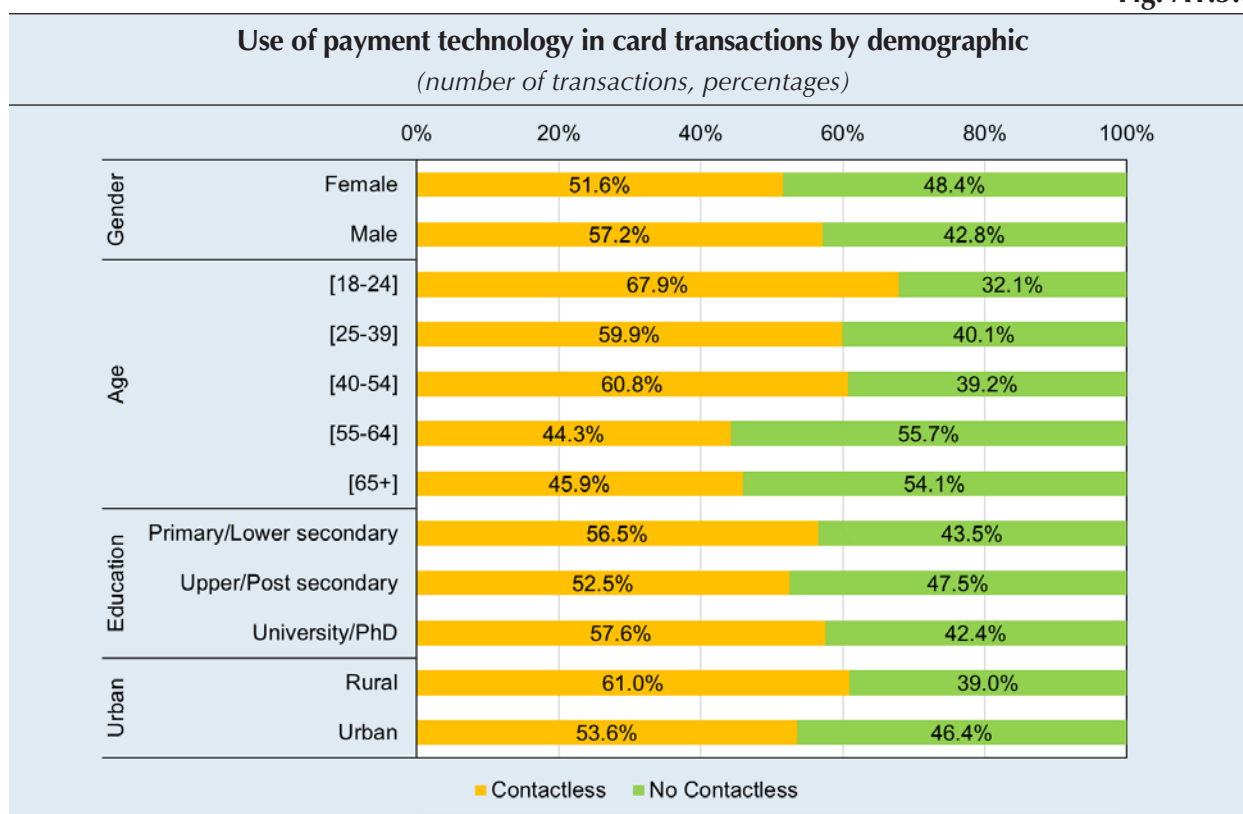
Source: authors' calculations based on ECB SPACE survey data (2019).

Fig. A1.5.8



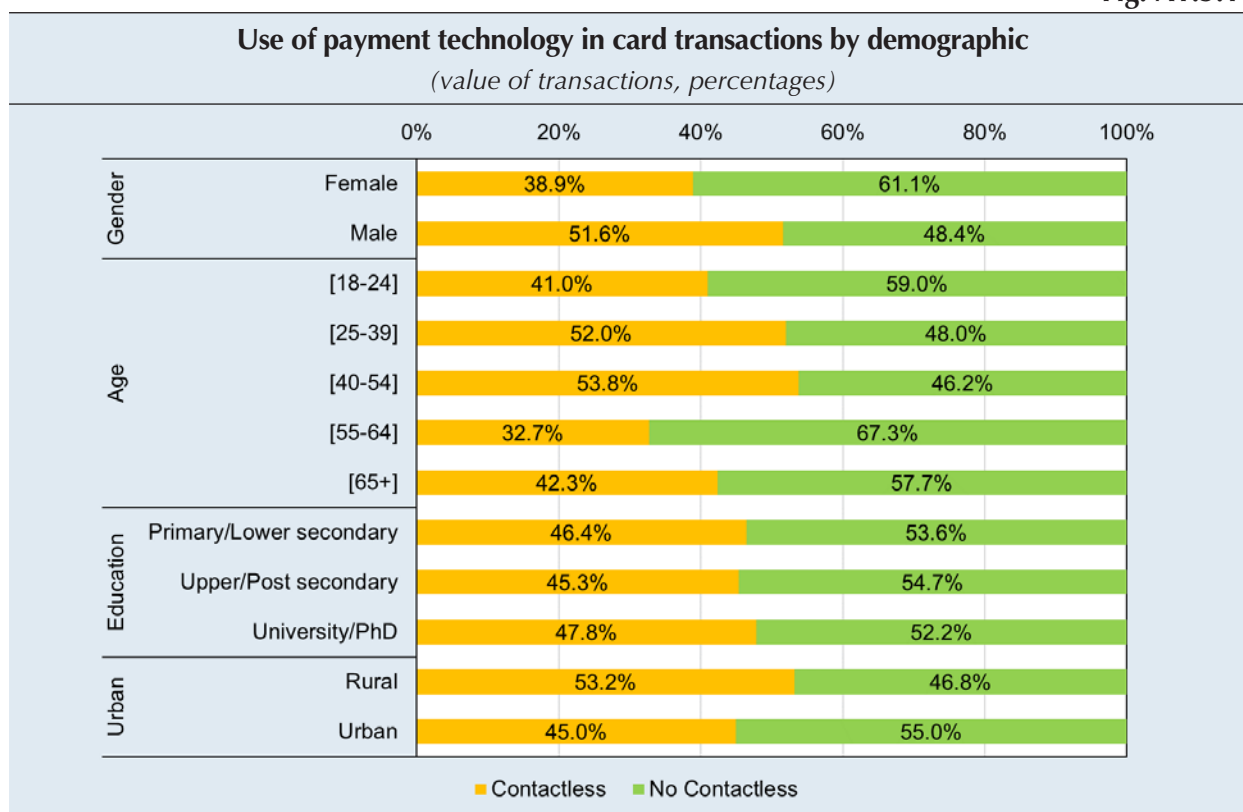
Source: authors' calculations based on ECB SPACE survey data (2019).

Fig. A1.5.9



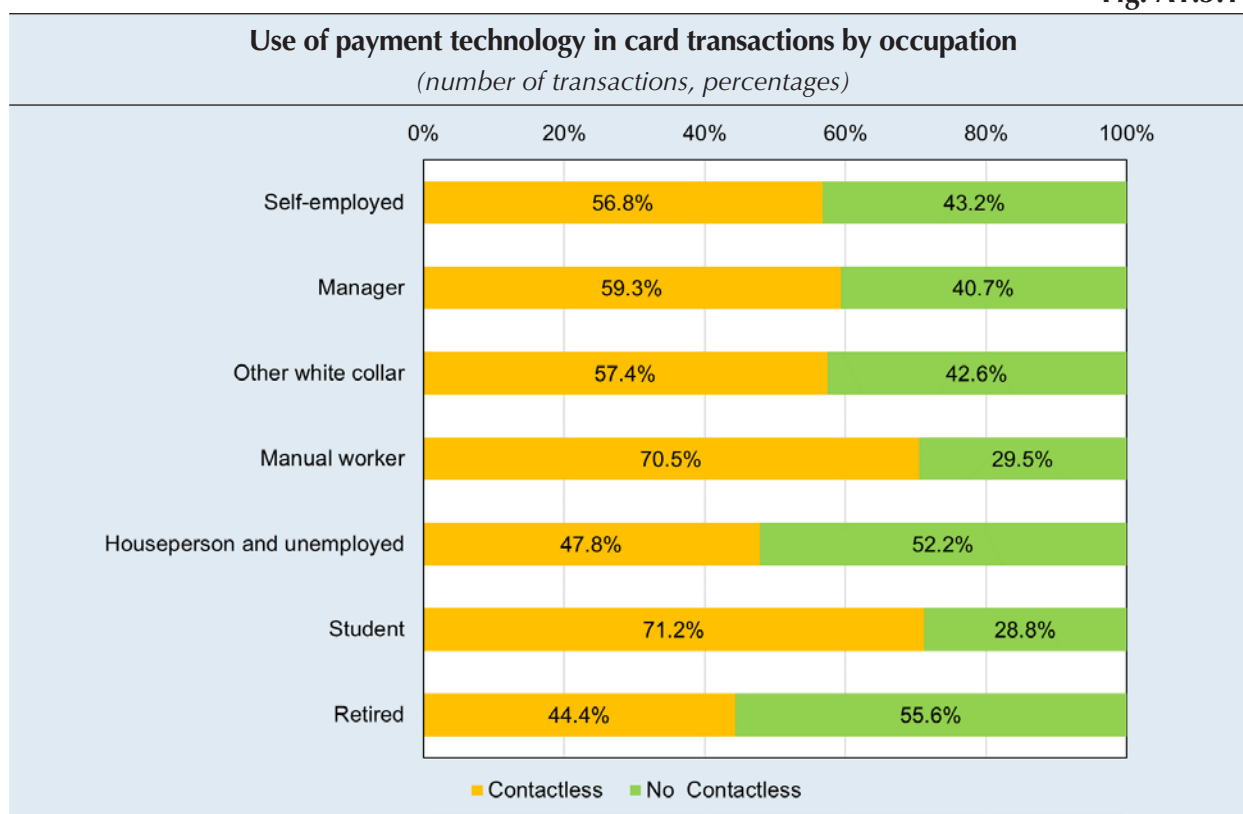
Source: authors' calculations based on ECB SPACE survey data (2019).

Fig. A1.5.10



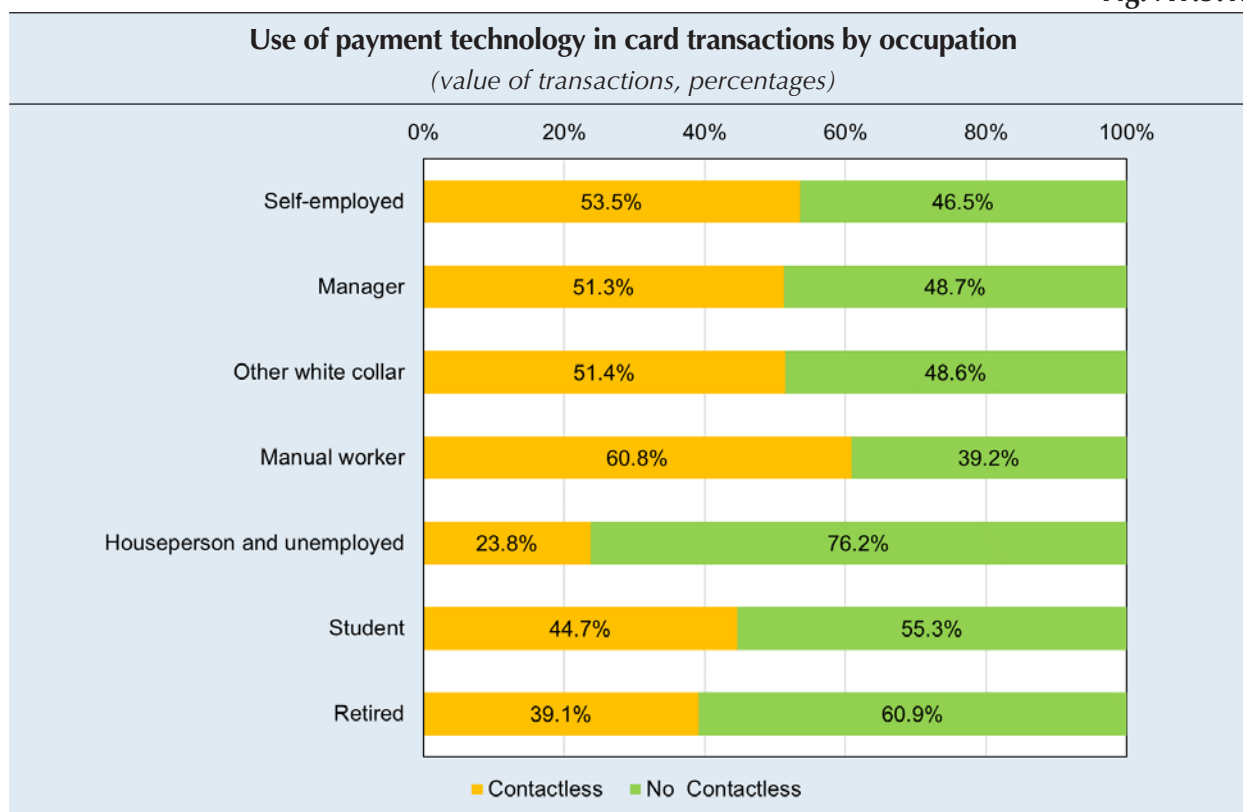
Source: authors' calculations based on ECB SPACE survey data (2019).

Fig. A1.5.11



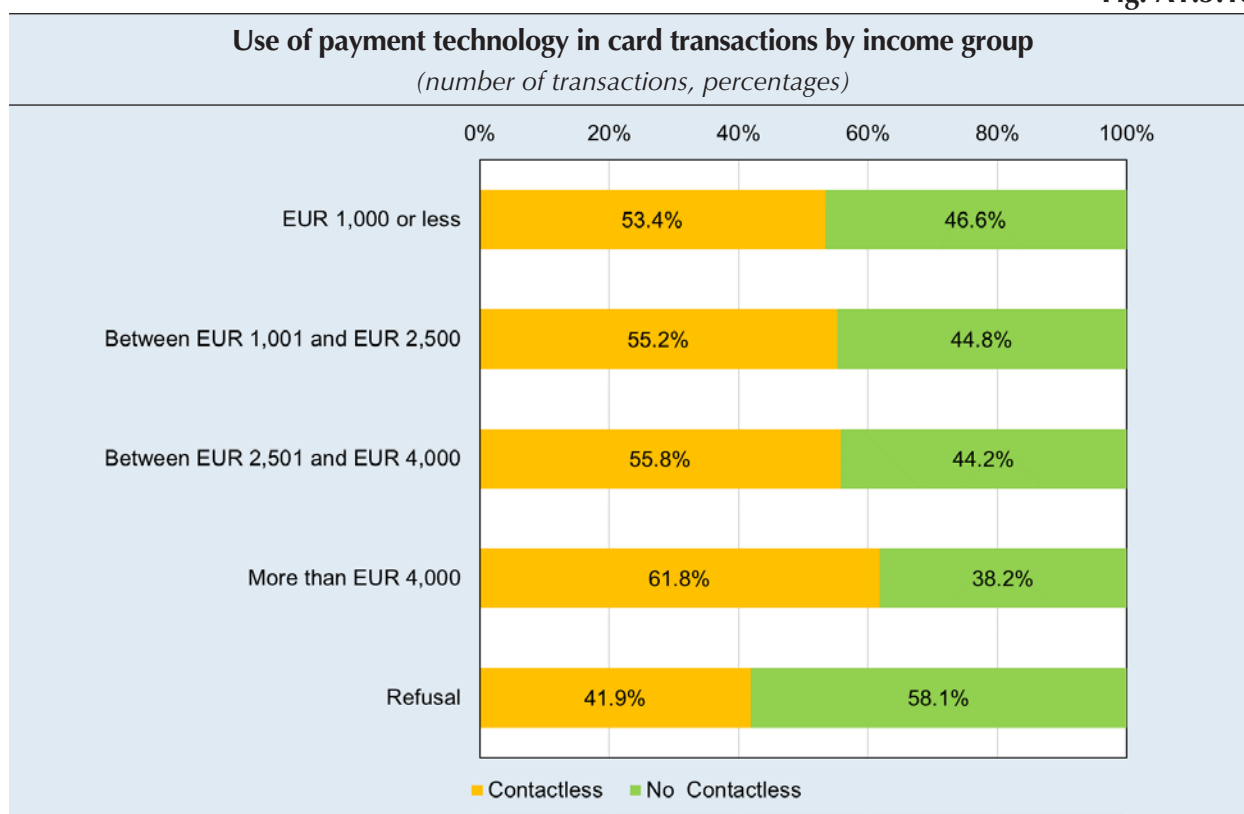
Source: authors' calculations based on ECB SPACE survey data (2019).

Fig. A1.5.12



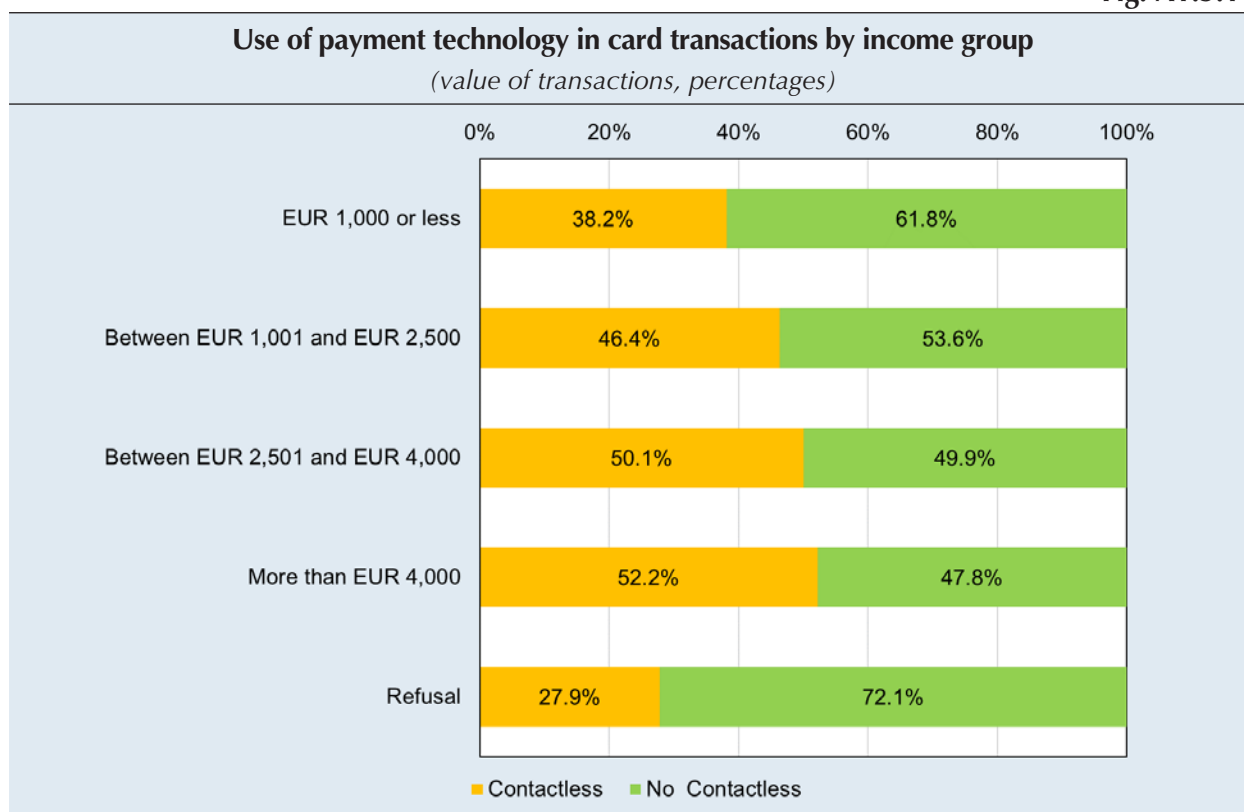
Source: authors' calculations based on ECB SPACE survey data (2019).

Fig. A1.5.13



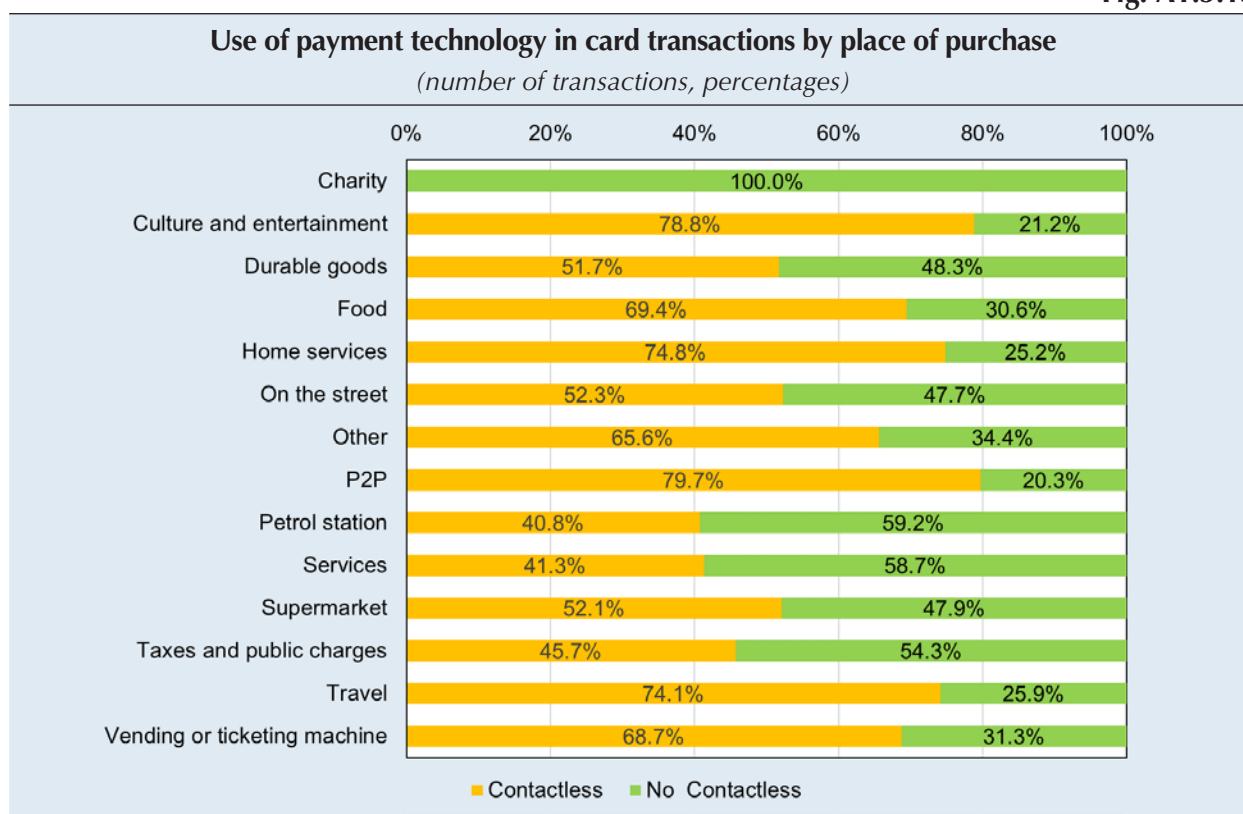
Source: authors' calculations based on ECB SPACE survey data (2019).

Fig. A1.5.14



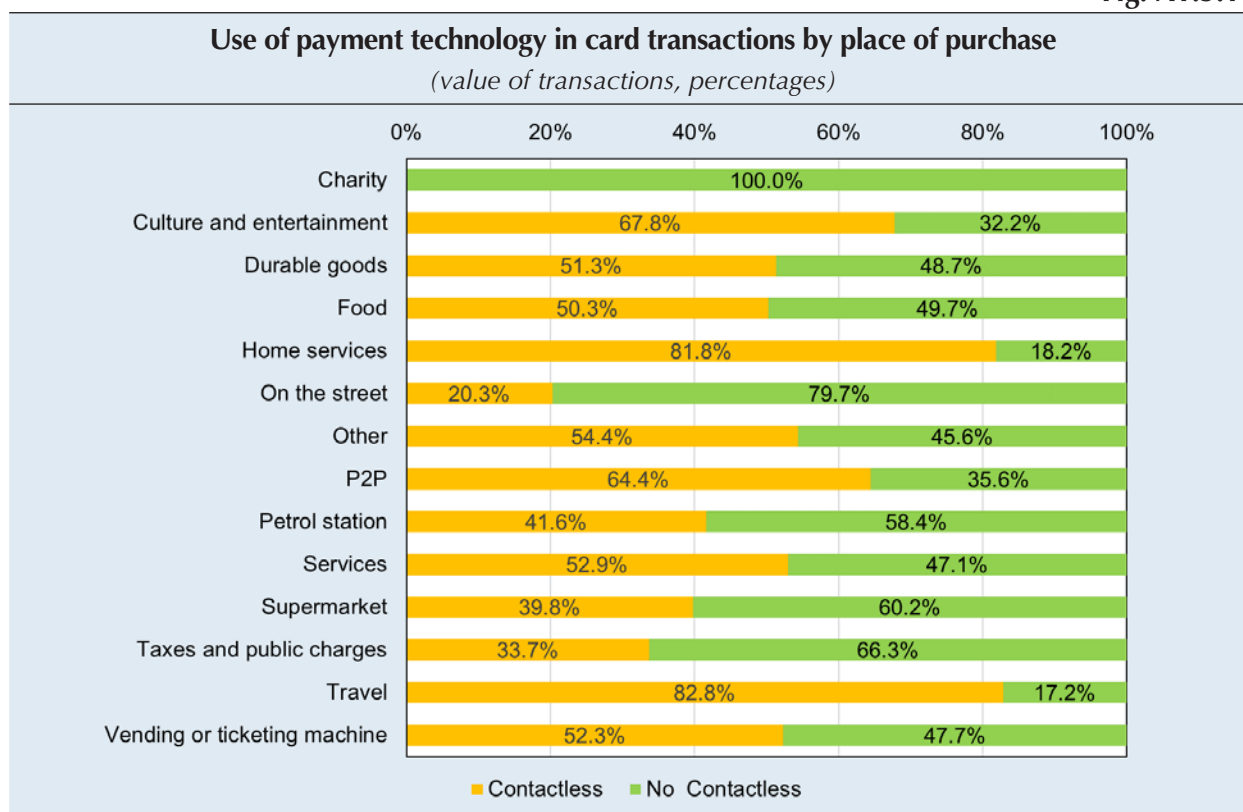
Source: authors' calculations based on ECB SPACE survey data (2019).

Fig. A1.5.15



Source: authors' calculations based on ECB SPACE survey data (2019).

Fig. A1.5.16

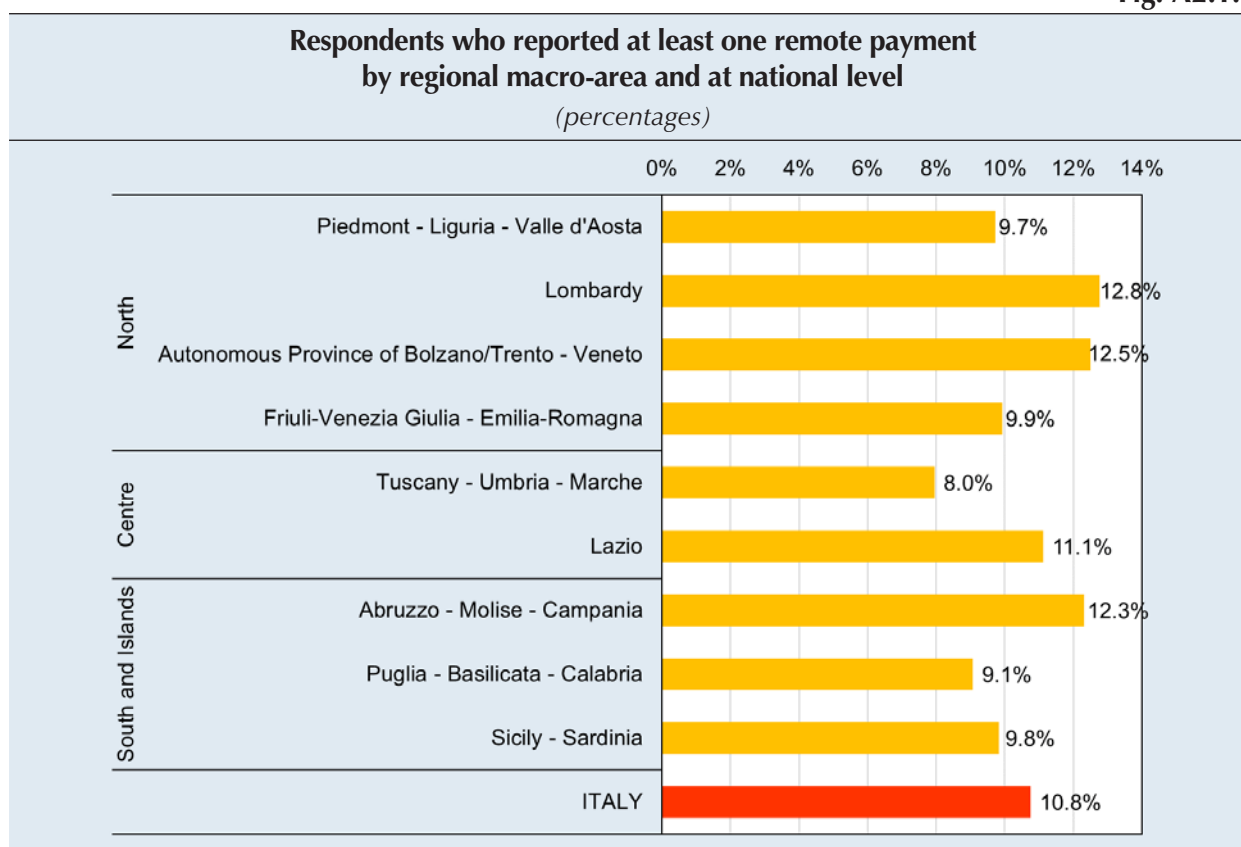


Source: authors' calculations based on ECB SPACE survey data (2019).

## A2. Use of payment instruments in Italy – Remote payments

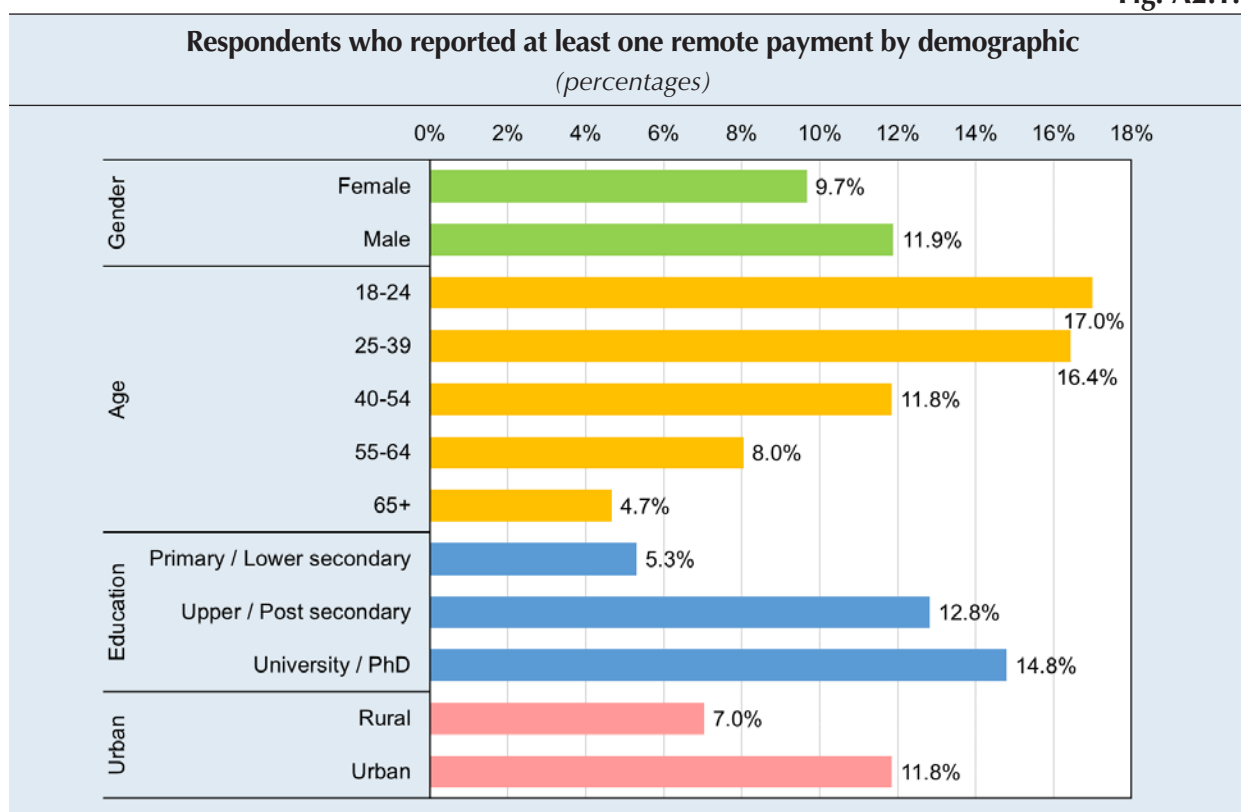
### A2.1. Remote payments

Fig. A2.1.1



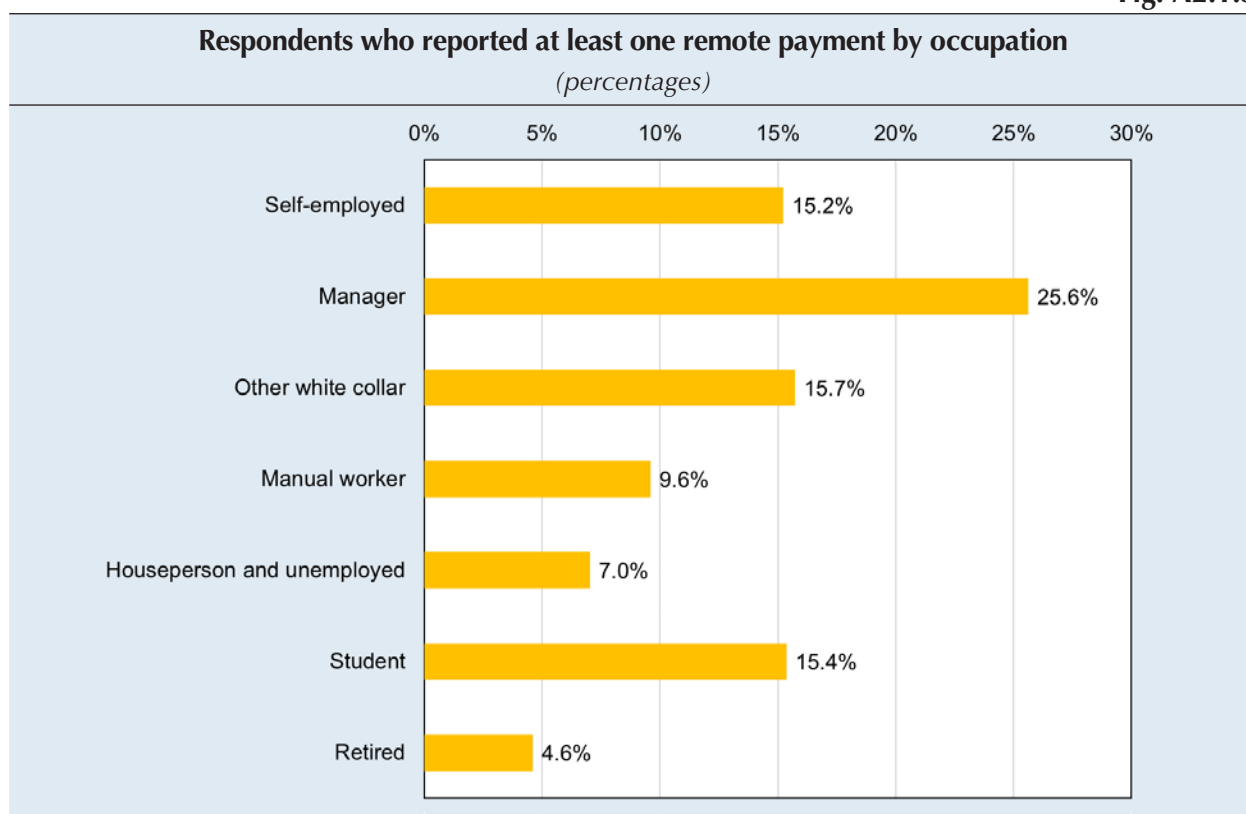
Source: authors' calculations based on ECB SPACE survey data (2019).

Fig. A2.1.2



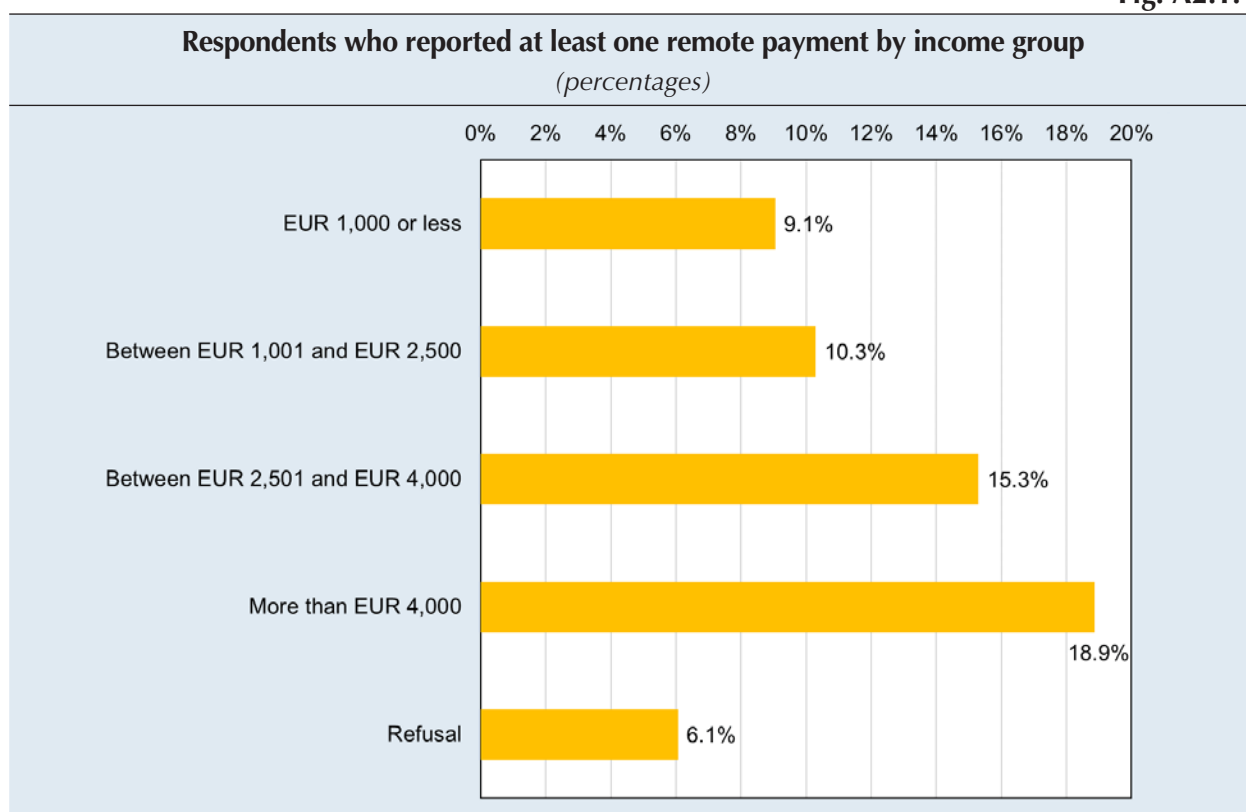
Source: authors' calculations based on ECB SPACE survey data (2019).

Fig. A2.1.3



Source: authors' calculations based on ECB SPACE survey data (2019).

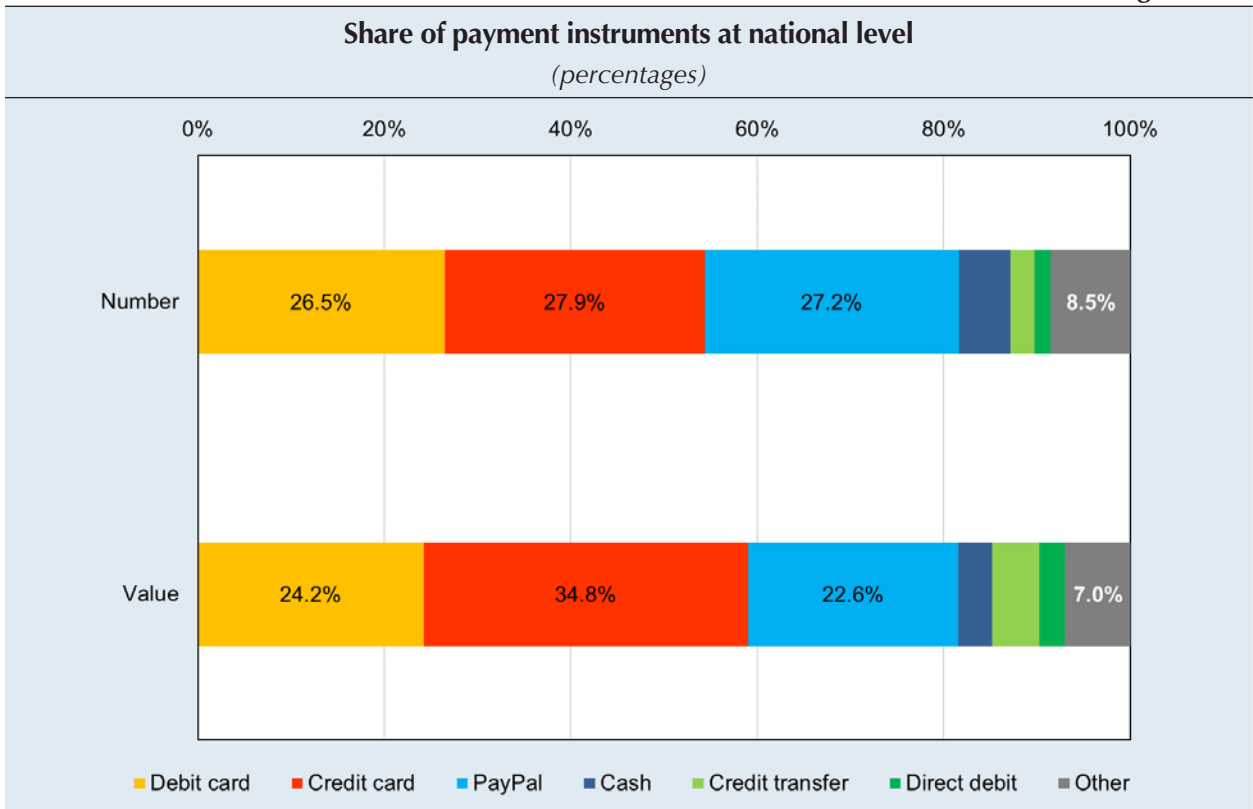
Fig. A2.1.4



Source: authors' calculations based on ECB SPACE survey data (2019).



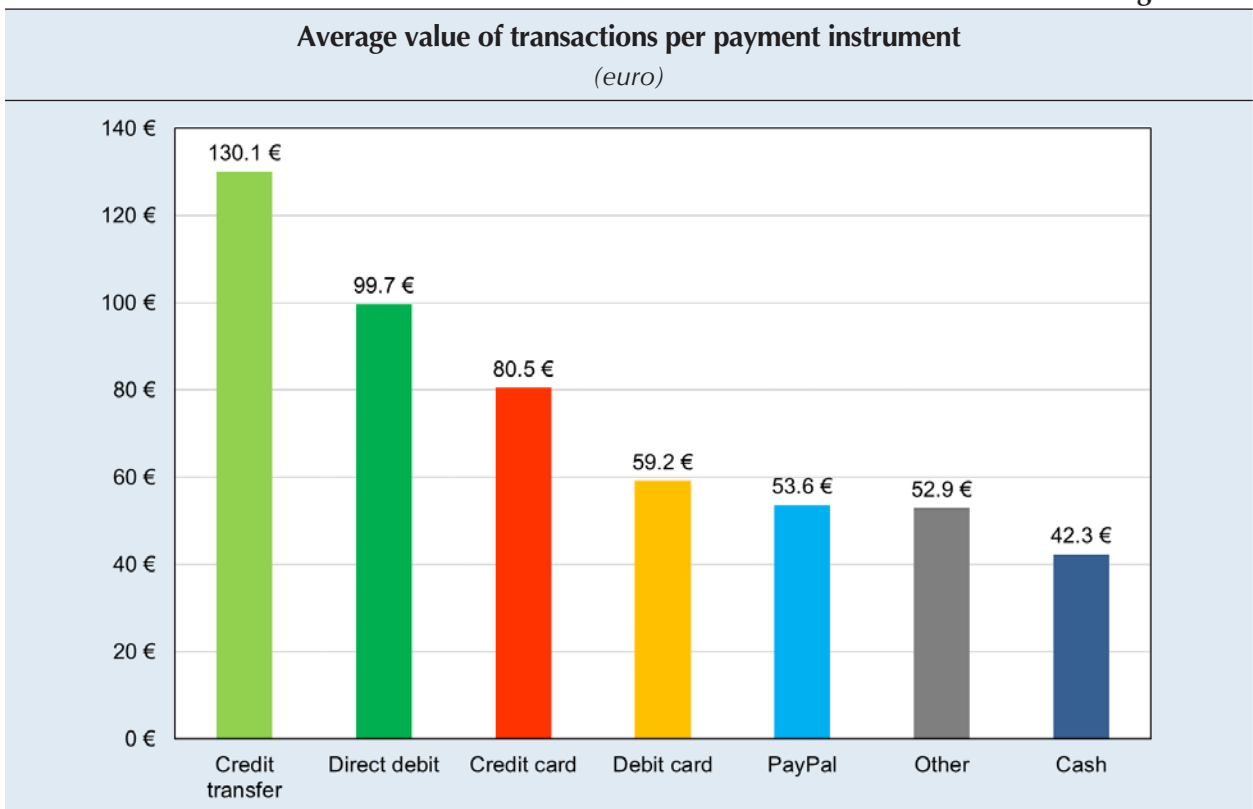
Fig. A2.1.5



Source: authors' calculations based on ECB SPACE survey data (2019).

Note: the "Other" category includes bank cheques, gift cards or vouchers, crypto-assets and other online payment methods.

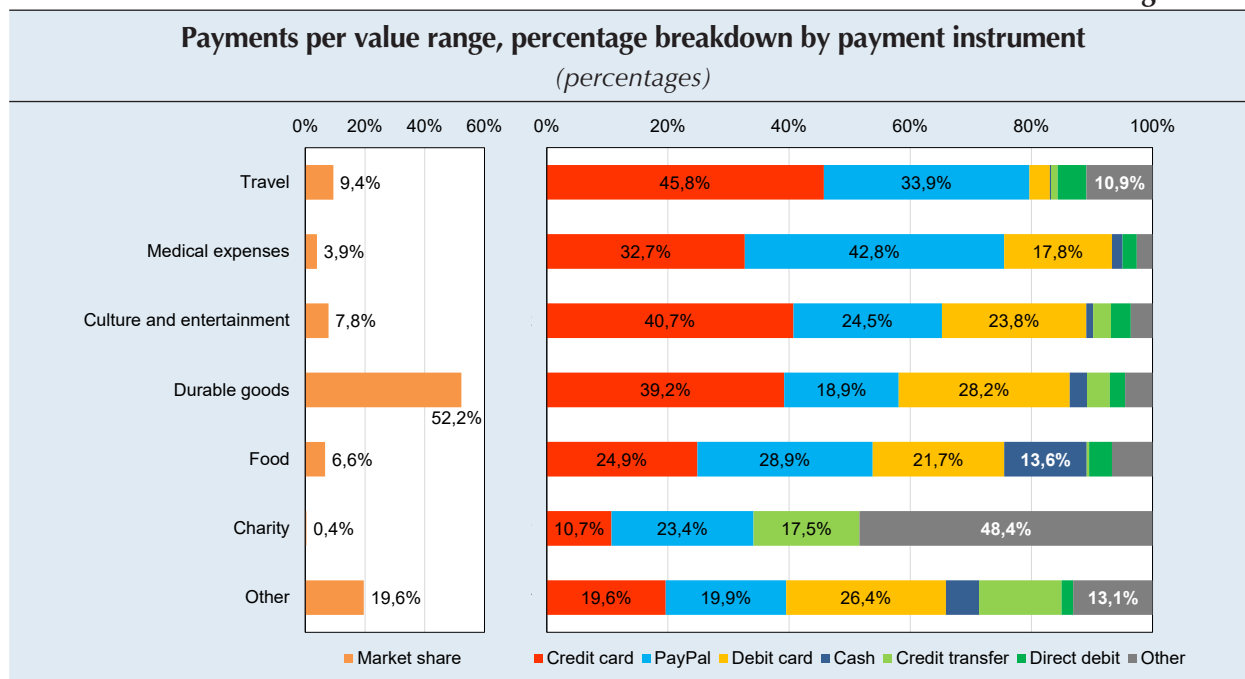
Fig. A2.1.6



Source: authors' calculations based on ECB SPACE survey data (2019).

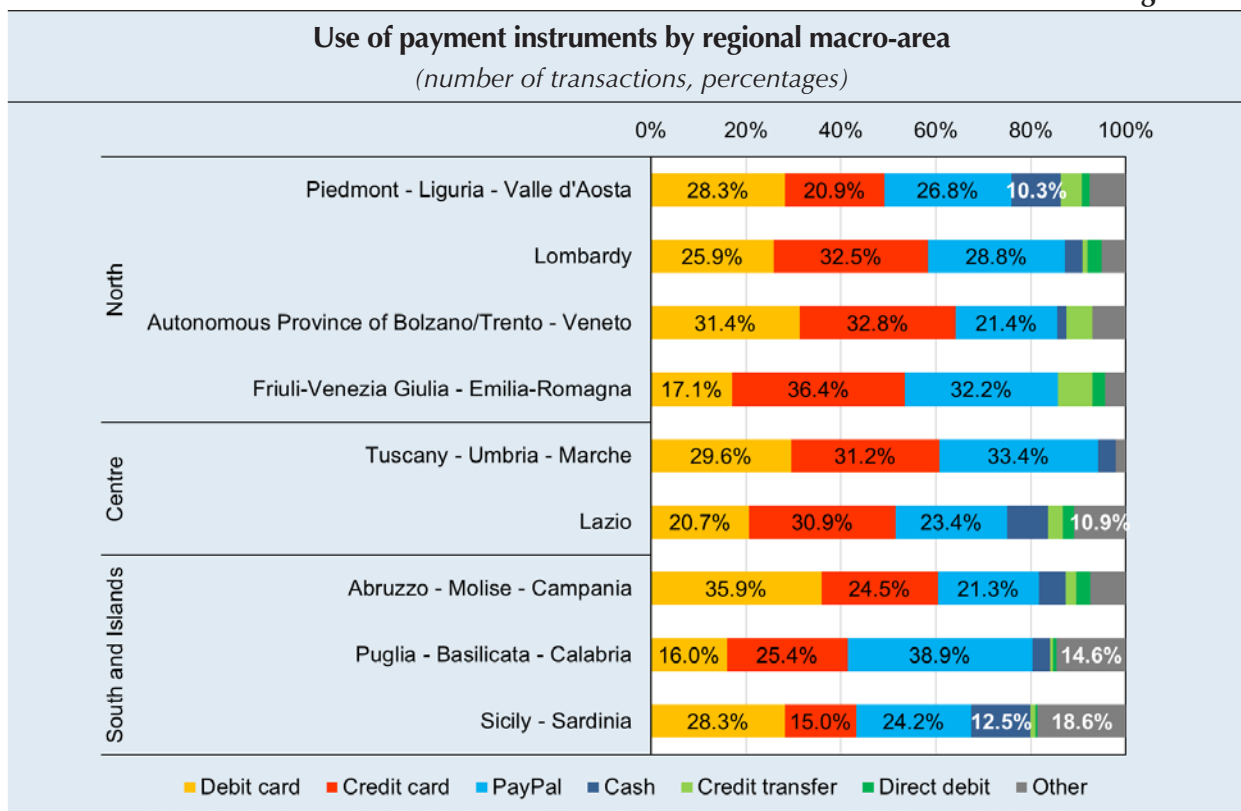
Note: the "Other" category includes bank cheques, gift cards or vouchers, crypto-assets and other online payment methods.

Fig. A2.1.7



Source: authors' calculations based on ECB SPACE survey data (2019). Percentages may not add up to 100% due to rounding.  
 Note: the "Other" category includes bank cheques, gift cards or vouchers, crypto-assets and other online payment methods.

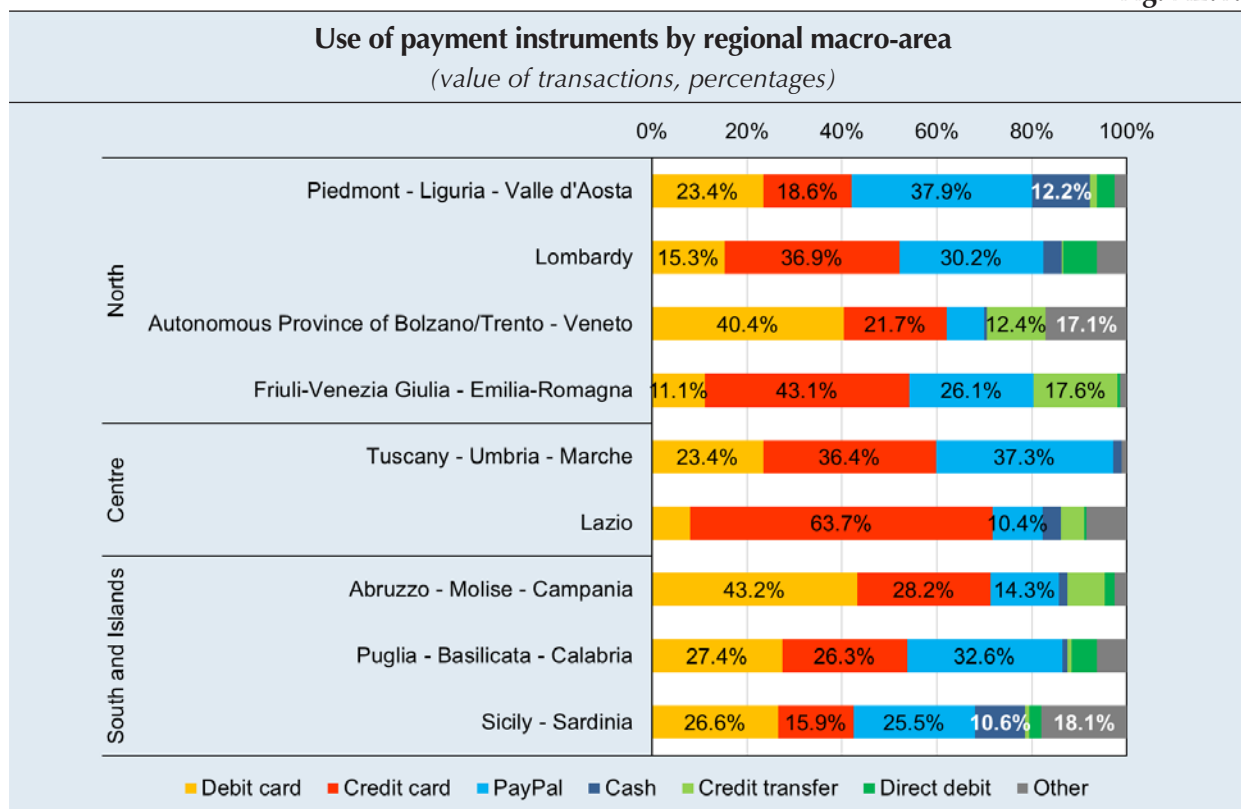
Fig. A2.1.8



Source: authors' calculations based on ECB SPACE survey data (2019).

Note: the "Other" category includes bank cheques, gift cards or vouchers, crypto-assets and other online payment methods.

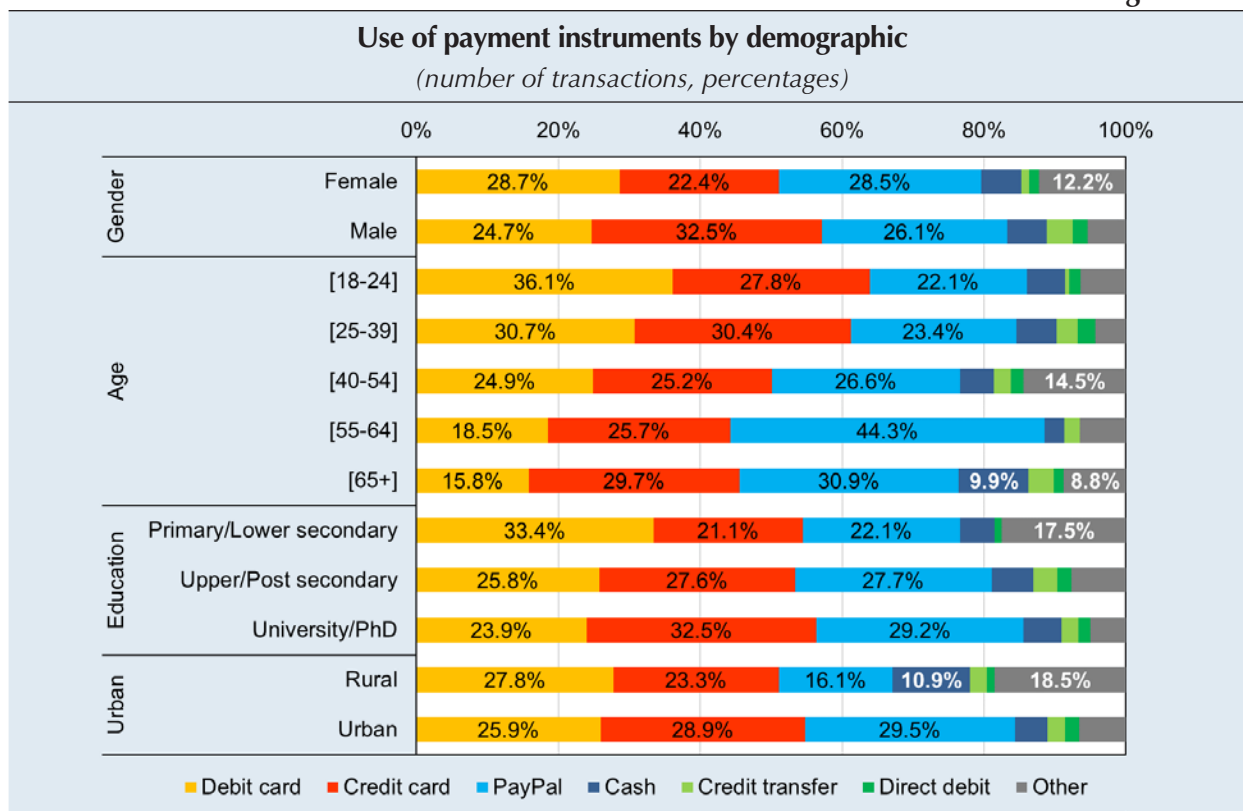
Fig. A2.1.9



Source: authors' calculations based on ECB SPACE survey data (2019).

Note: the "Other" category includes bank cheques, gift cards or vouchers, crypto-assets and other online payment methods.

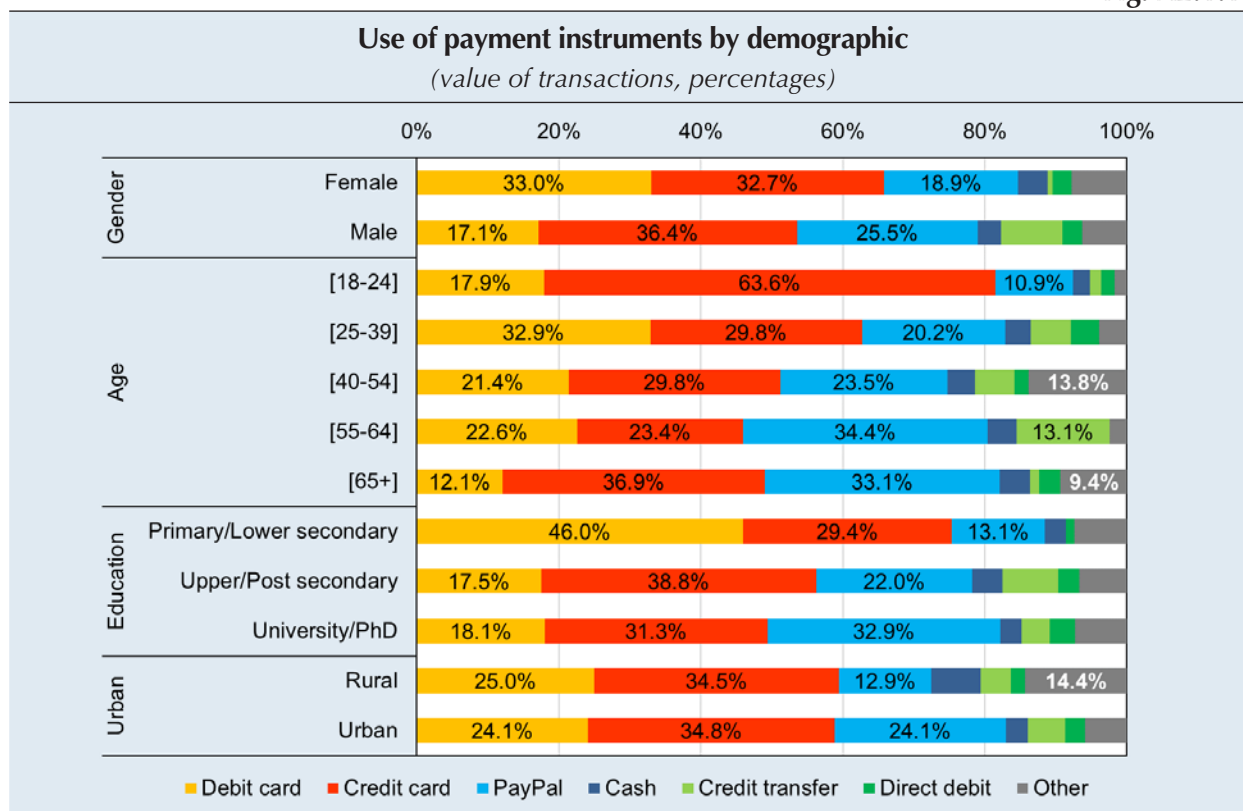
Fig. A2.1.10



Source: authors' calculations based on ECB SPACE survey data (2019).

Note: the "Other" category includes bank cheques, gift cards or vouchers, crypto-assets and other online payment methods.

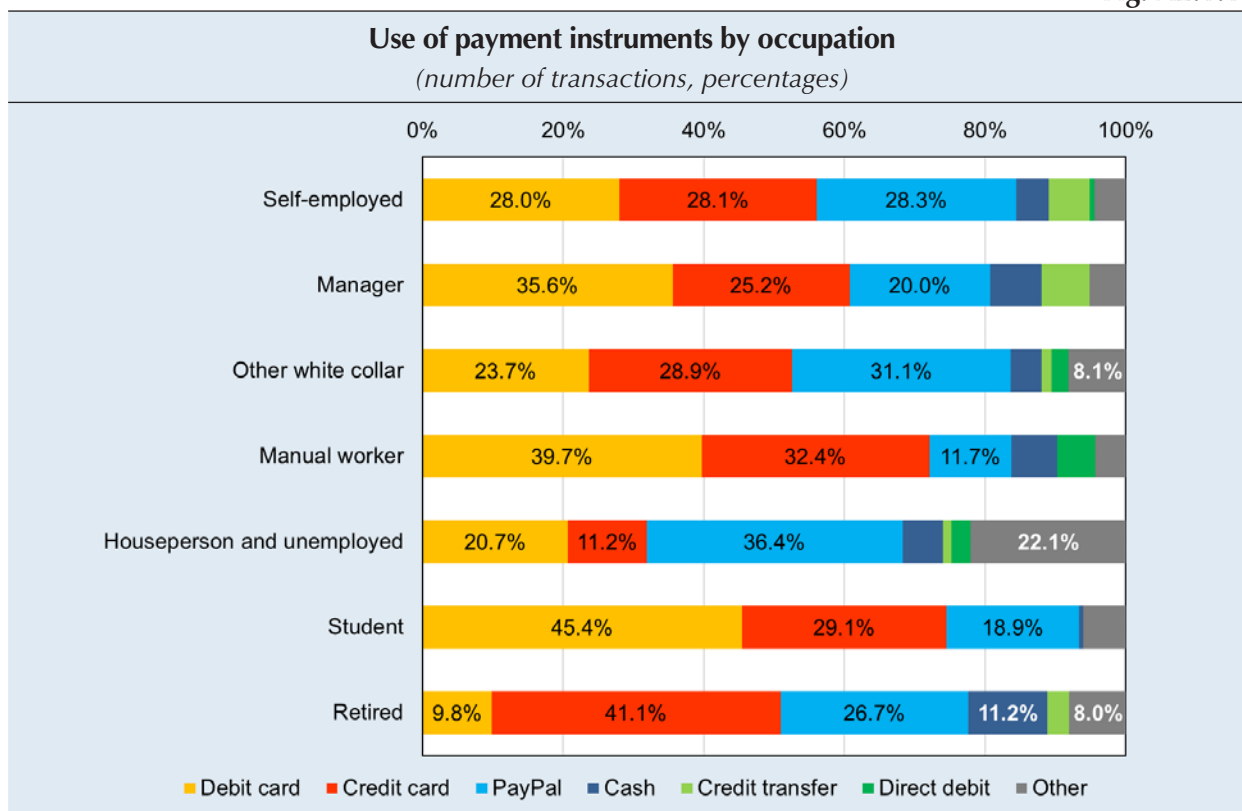
Fig. A2.1.11



Source: authors' calculations based on ECB SPACE survey data (2019).

Note: the "Other" category includes bank cheques, gift cards or vouchers, crypto-assets and other online payment methods.

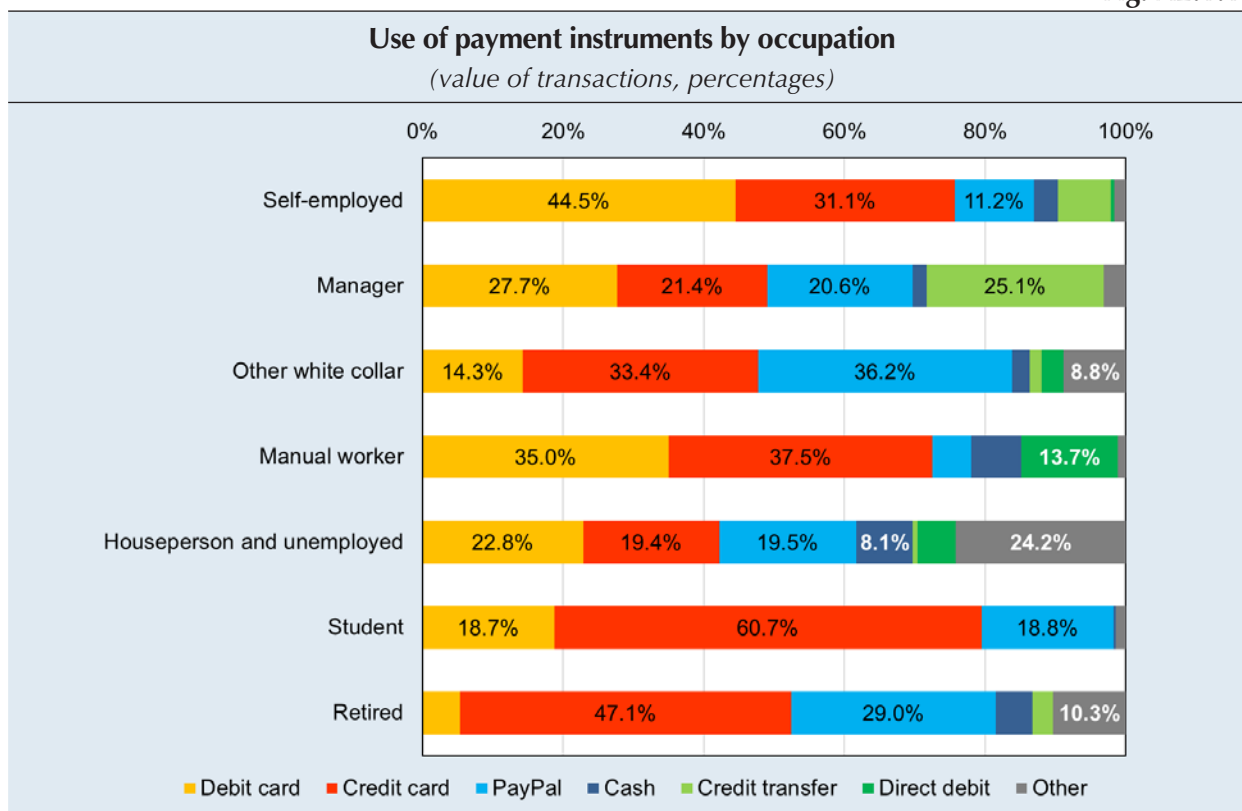
Fig. A2.1.12



Source: authors' calculations based on ECB SPACE survey data (2019).

Note: the "Other" category includes bank cheques, gift cards or vouchers, crypto-assets and other online payment methods.

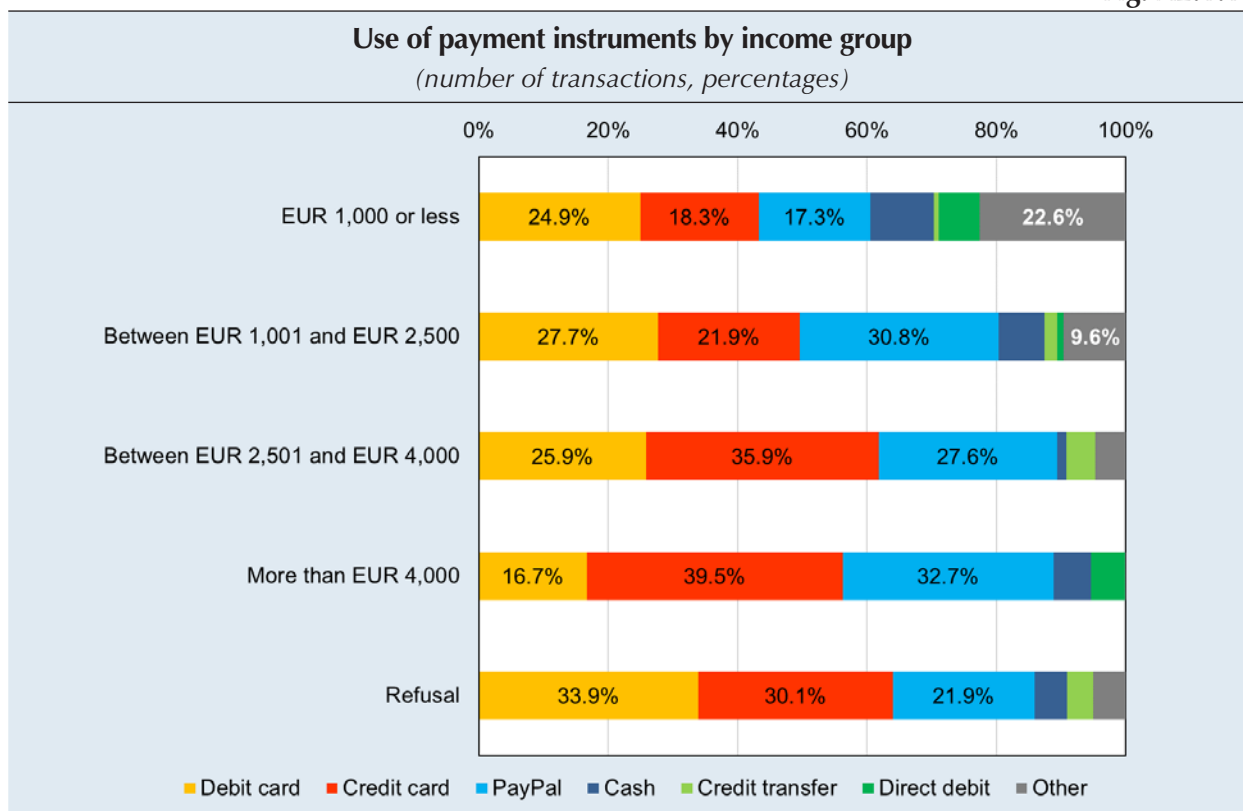
Fig. A2.1.13



Source: authors' calculations based on ECB SPACE survey data (2019).

Note: the "Other" category includes bank cheques, gift cards or vouchers, crypto-assets and other online payment methods.

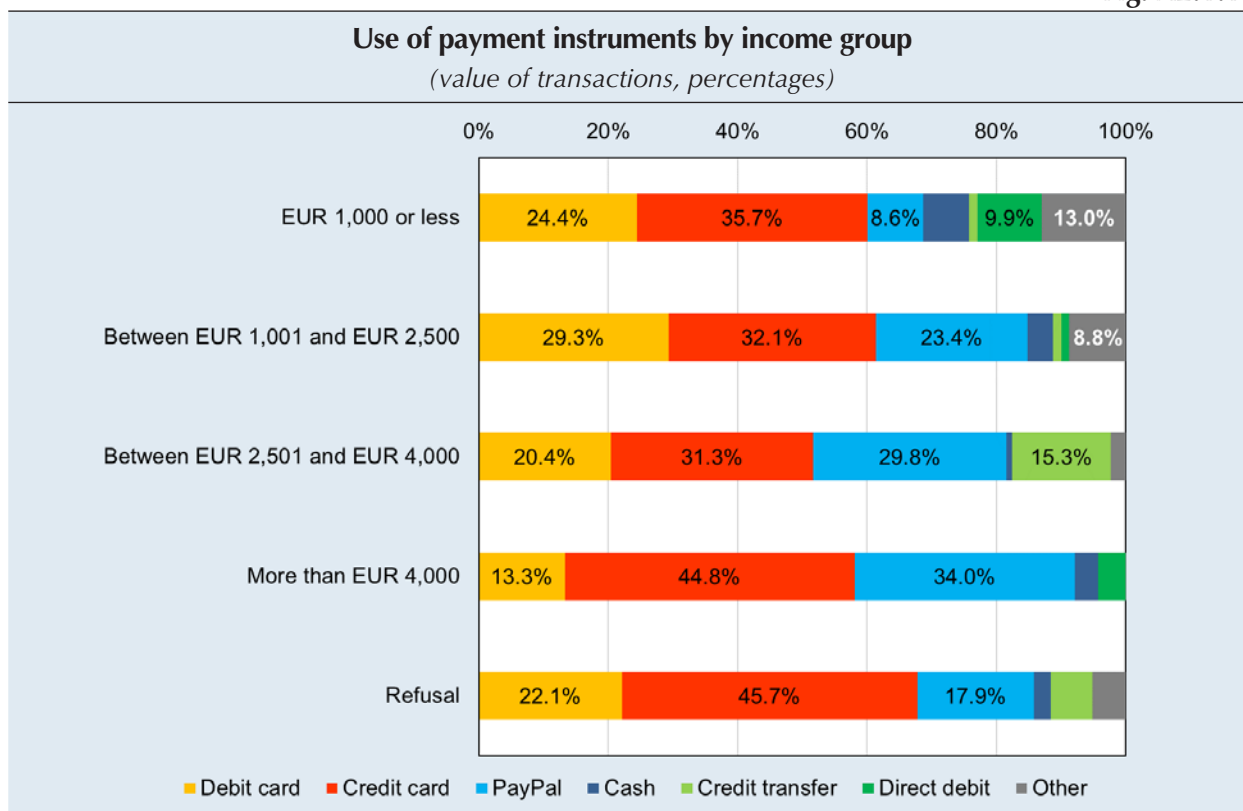
Fig. A2.1.14



Source: authors' calculations based on ECB SPACE survey data (2019).

Note: the "Other" category includes bank cheques, gift cards or vouchers, crypto-assets and other online payment methods.

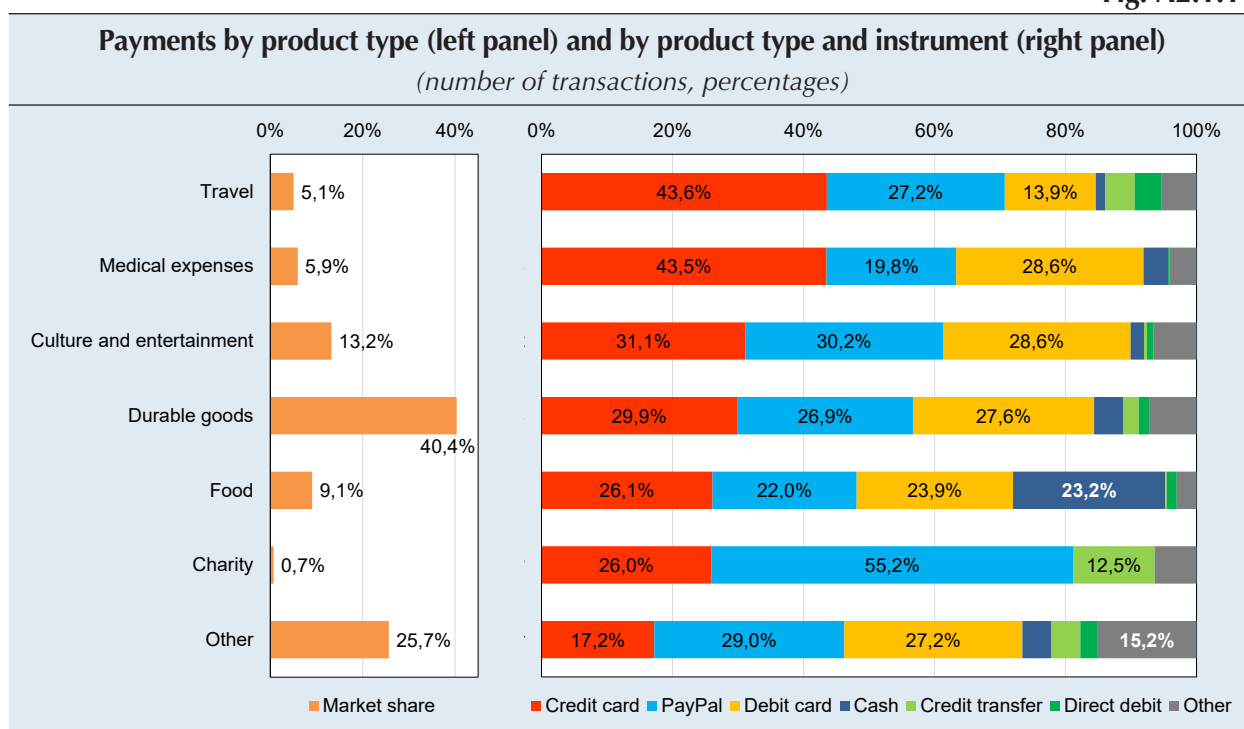
Fig. A2.1.15



Source: authors' calculations based on ECB SPACE survey data (2019).

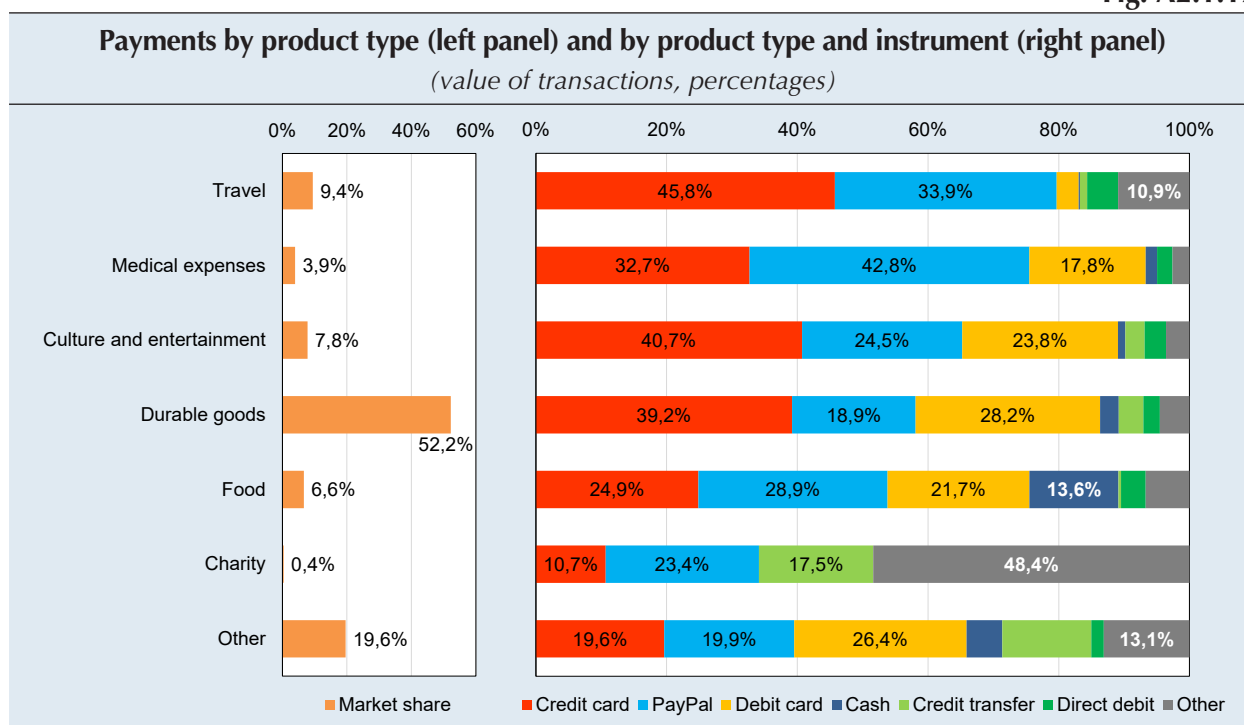
Note: the "Other" category includes bank cheques, gift cards or vouchers, crypto-assets and other online payment methods.

Fig. A2.1.16



Source: authors' calculations based on ECB SPACE survey data (2019). Percentages may not add up to 100% due to rounding.  
 Note: the "Other" category includes bank cheques, gift cards or vouchers, crypto-assets and other online payment methods.

Fig. A2.1.17



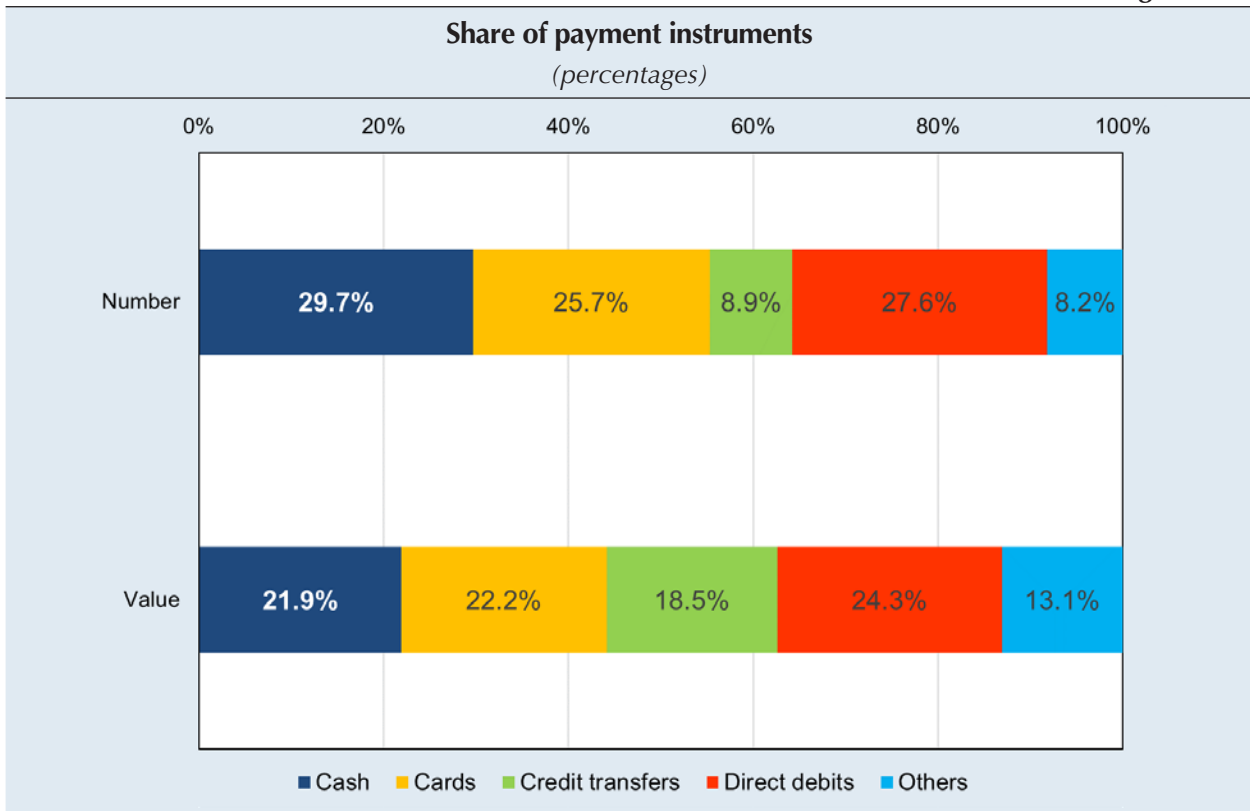
Source: authors' calculations based on ECB SPACE survey data (2019). Percentages may not add up to 100% due to rounding.  
 Note: the "Other" category includes bank cheques, gift cards or vouchers, crypto-assets and other online payment methods.



### A3. Use of payment instruments in Italy – Bill payments

#### A3.1. General picture for bill payments

Fig. A3.1.1

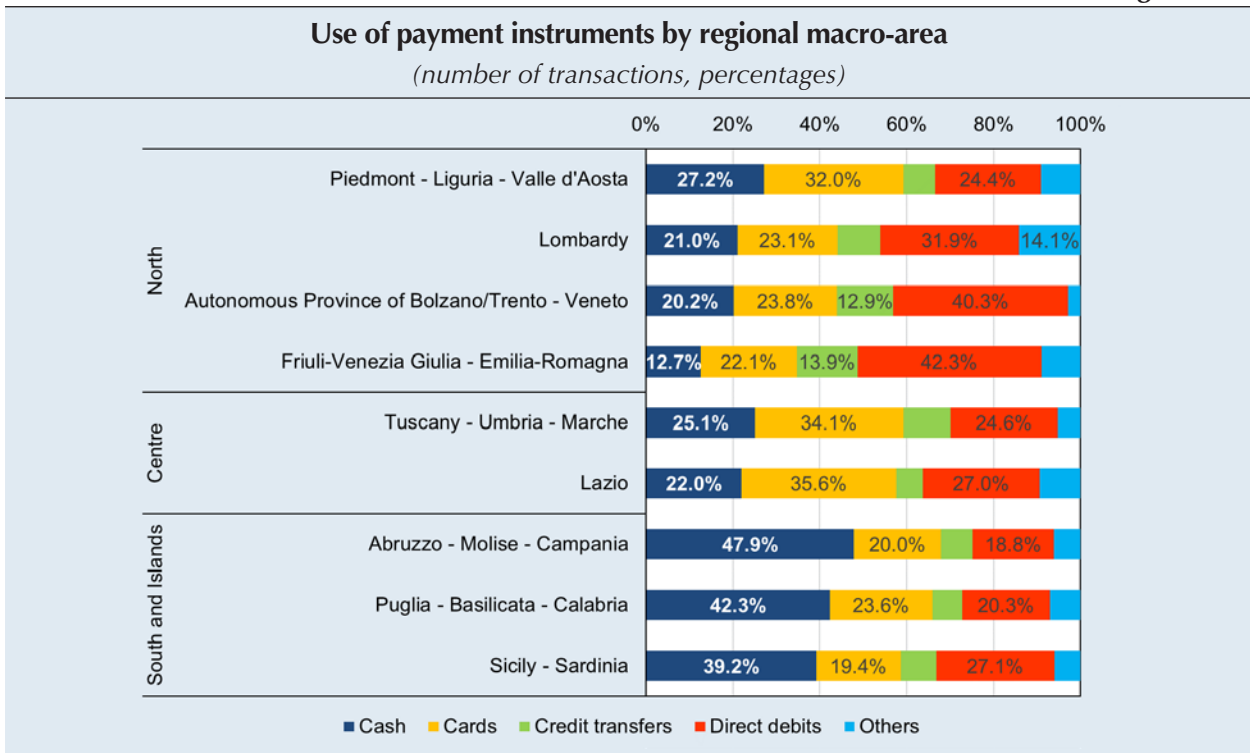


Source: authors' calculations based on ECB SPACE survey data (2019).

Note: the "Others" category includes bank cheques and mobile phone payments.

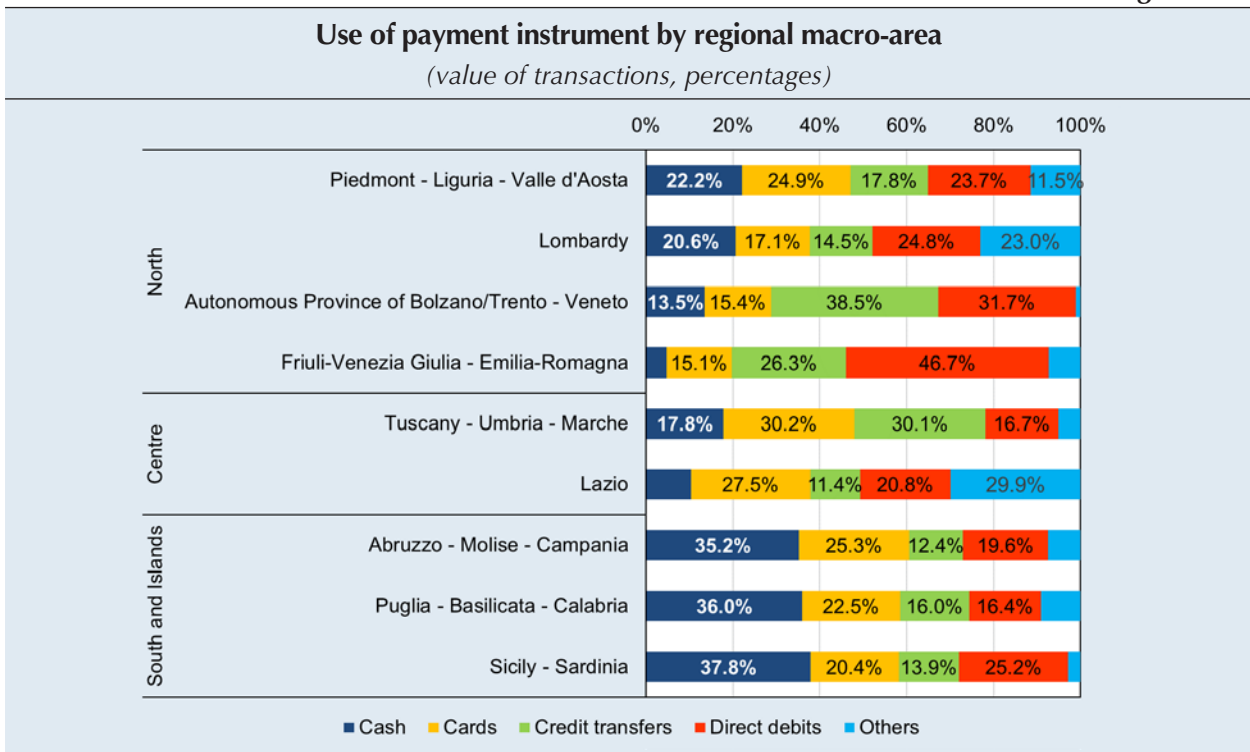
A3.2. Geographical evidence for bill payments

Fig. A3.2.1



Source: authors' calculations based on ECB SPACE survey data (2019). Percentages may not add up to 100% due to rounding. Note: the "Others" category includes bank cheques and mobile phone payments.

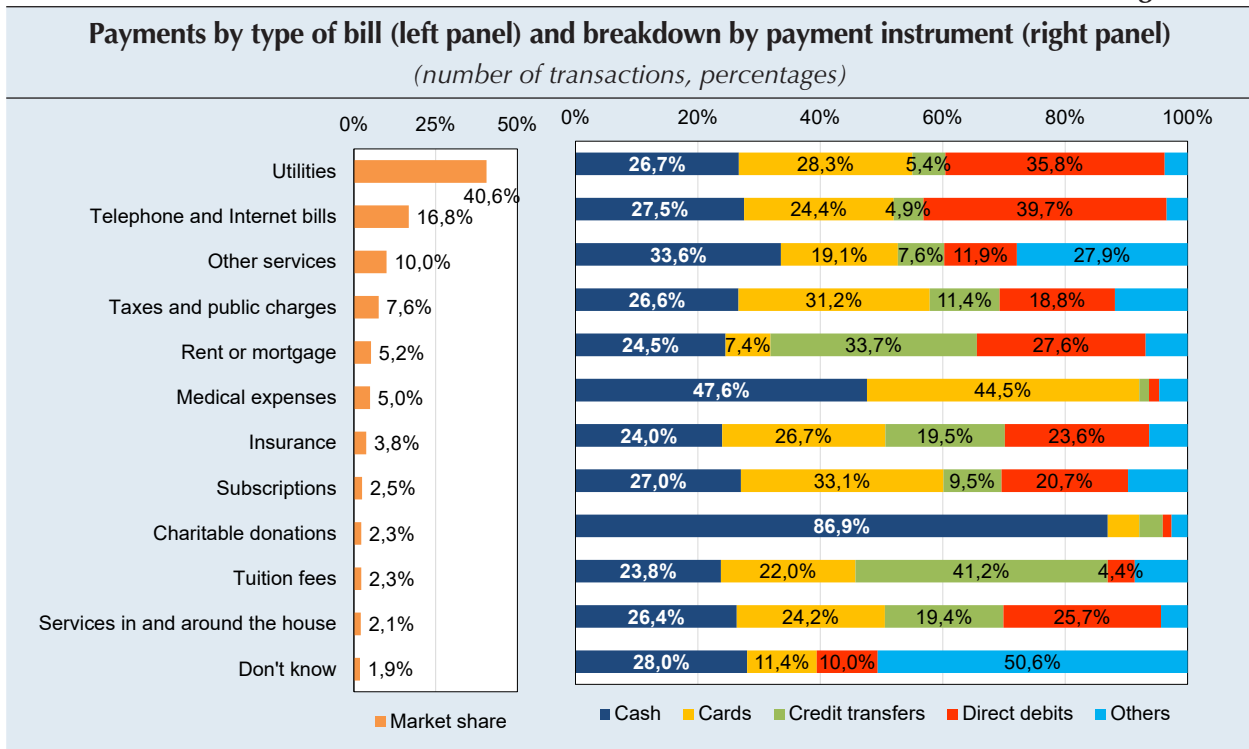
Fig. A3.2.2



Source: authors' calculations based on ECB SPACE survey data (2019). Percentages may not add up to 100% due to rounding. Note: the "Others" category includes bank cheques and mobile phone payments.

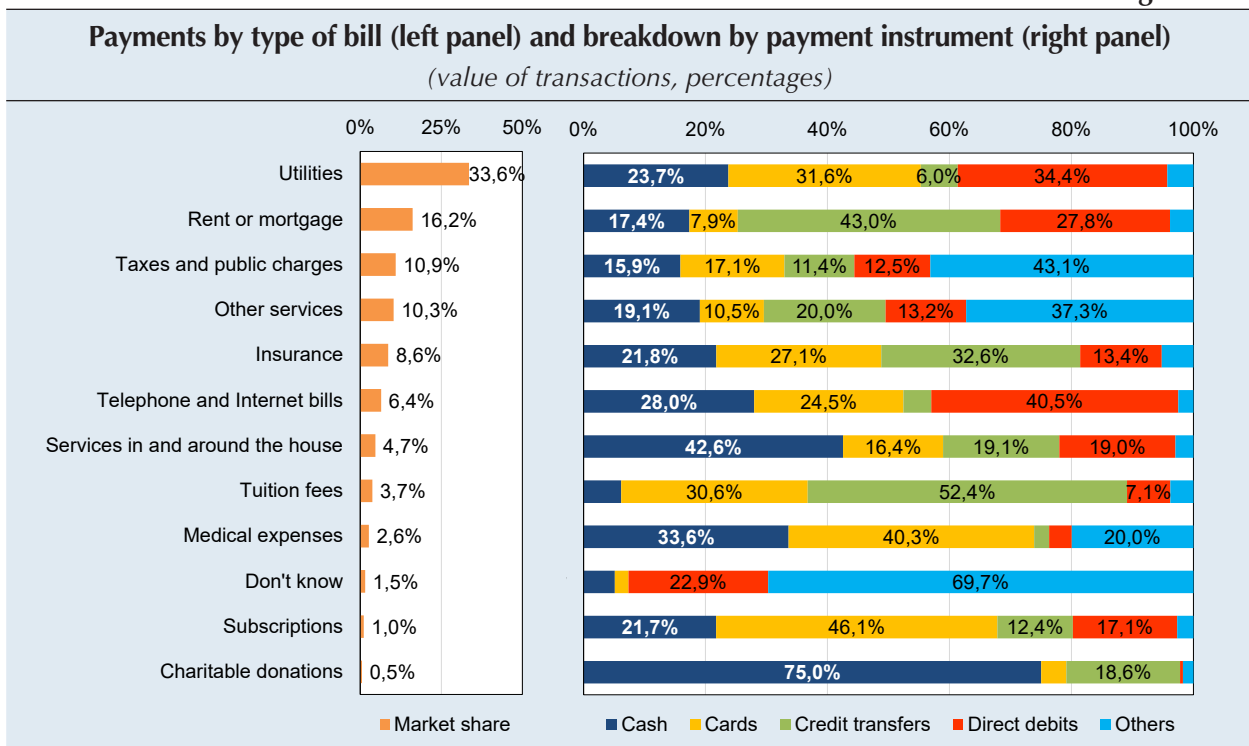
### A3.3. Payment instruments used in bill categories

Fig. A3.3.1



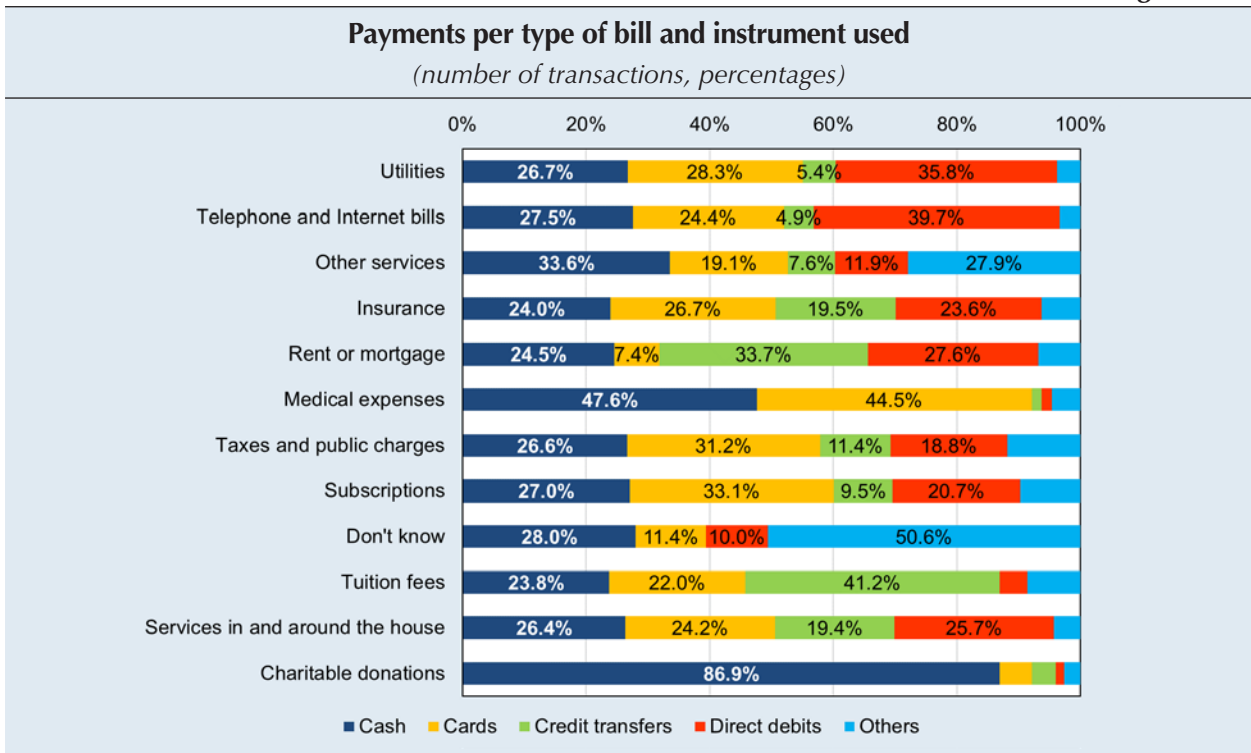
Source: authors' calculations based on ECB SPACE survey data (2019). Percentages may not add up to 100% due to rounding.  
Note: the "Others" category includes bank cheques and mobile phone payments.

Fig. A3.3.2



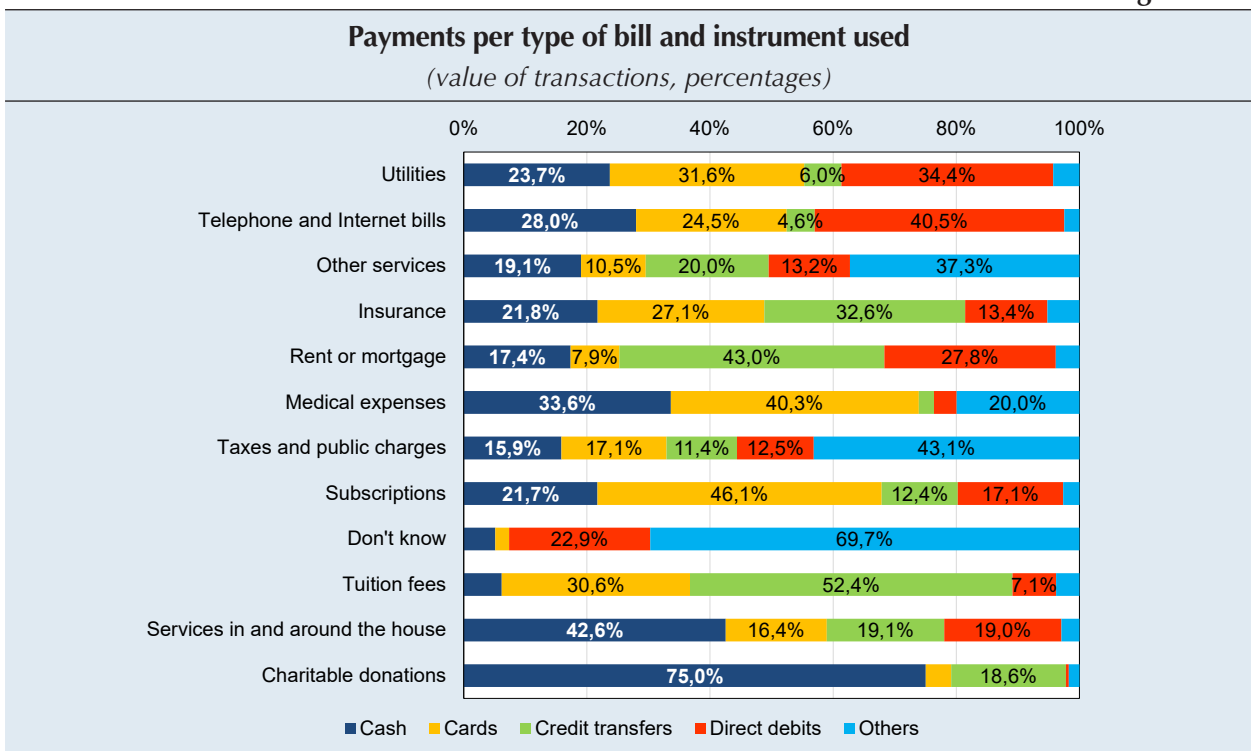
Source: authors' calculations based on ECB SPACE survey data (2019). Percentages may not add up to 100% due to rounding.  
Note: the "Others" category includes bank cheques and mobile phone payments.

Fig. A3.3.3



Source: authors' calculations based on ECB SPACE survey data (2019). Percentages may not add up to 100% due to rounding. Note: the "Others" category includes bank cheques and mobile phone payments.

Fig. A3.3.4

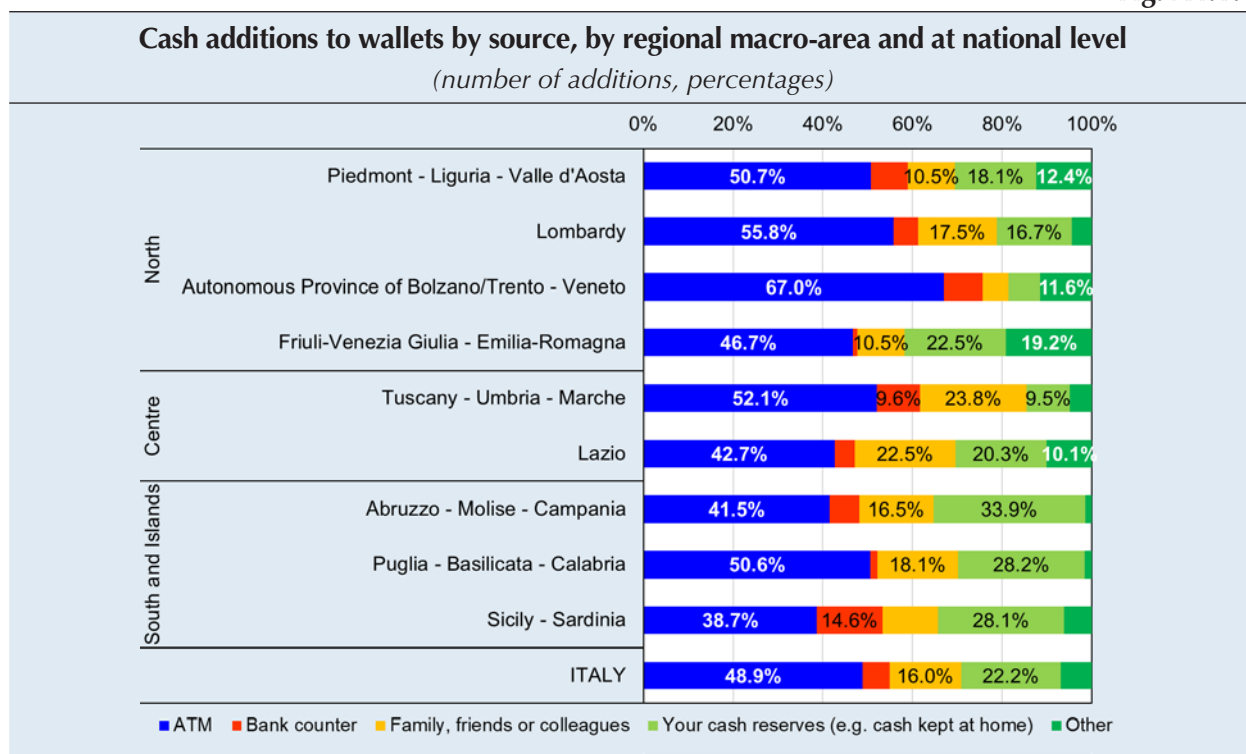


Source: authors' calculations based on ECB SPACE survey data (2019). Percentages may not add up to 100% due to rounding. Note: the "Others" category includes bank cheques and mobile phone payments.

## A4. How consumers obtain cash in Italy

### A4.1. Cash sources

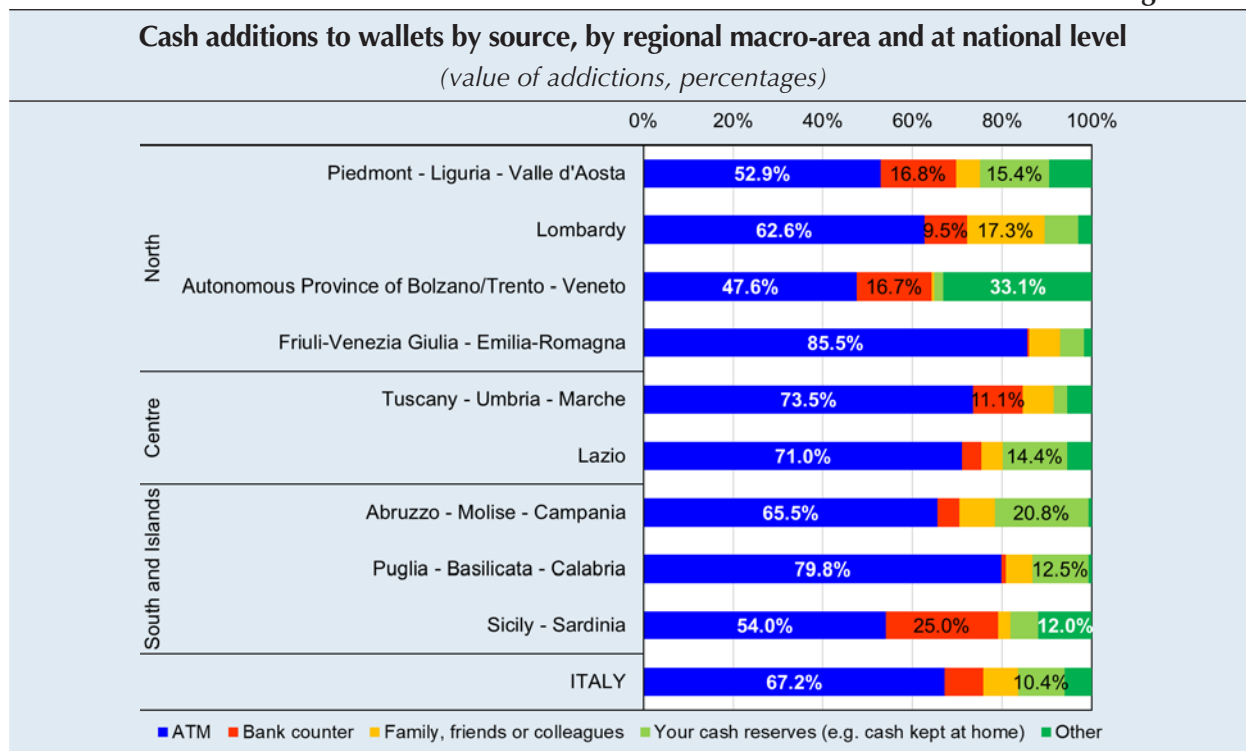
Fig. A4.1.1



Source: authors' calculations based on ECB SPACE survey data (2019).

Note: the "Other" category includes income received in cash and cashback (a service provided by retailers).

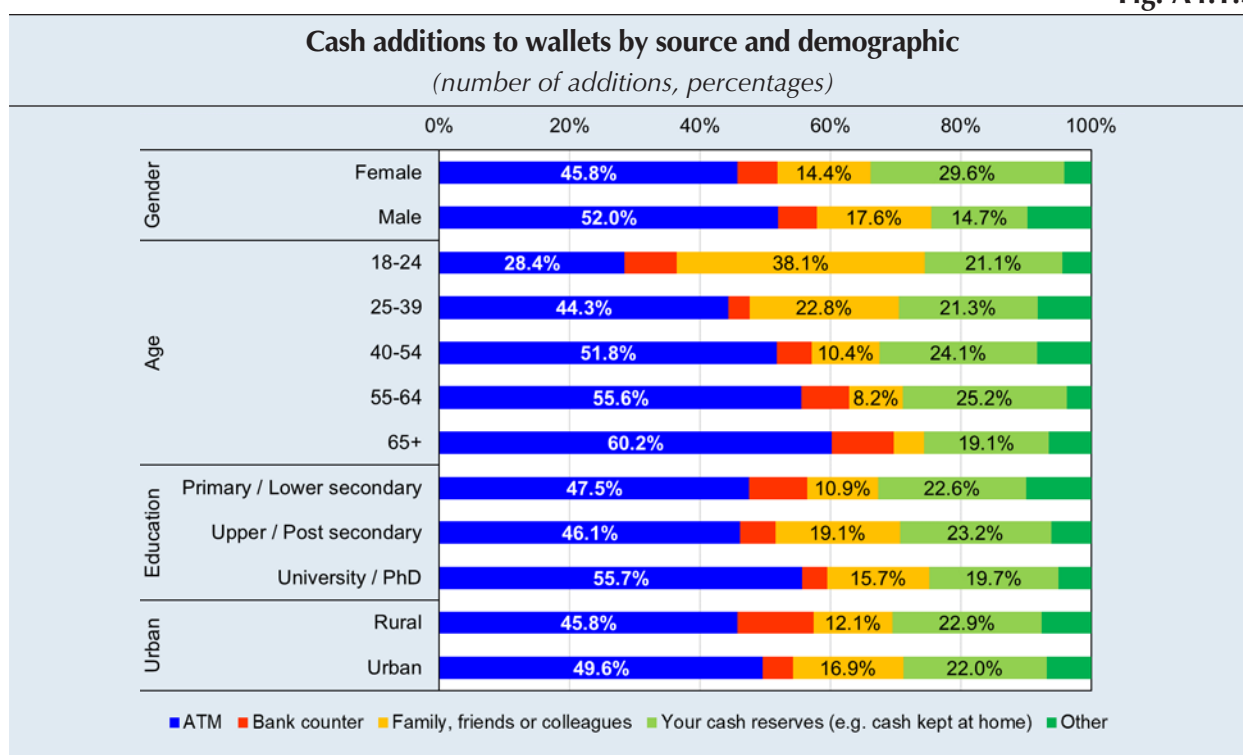
Fig. A4.1.2



Source: authors' calculations based on ECB SPACE survey data (2019).

Note: the "Other" category includes income received in cash and cashback (a service provided by retailers).

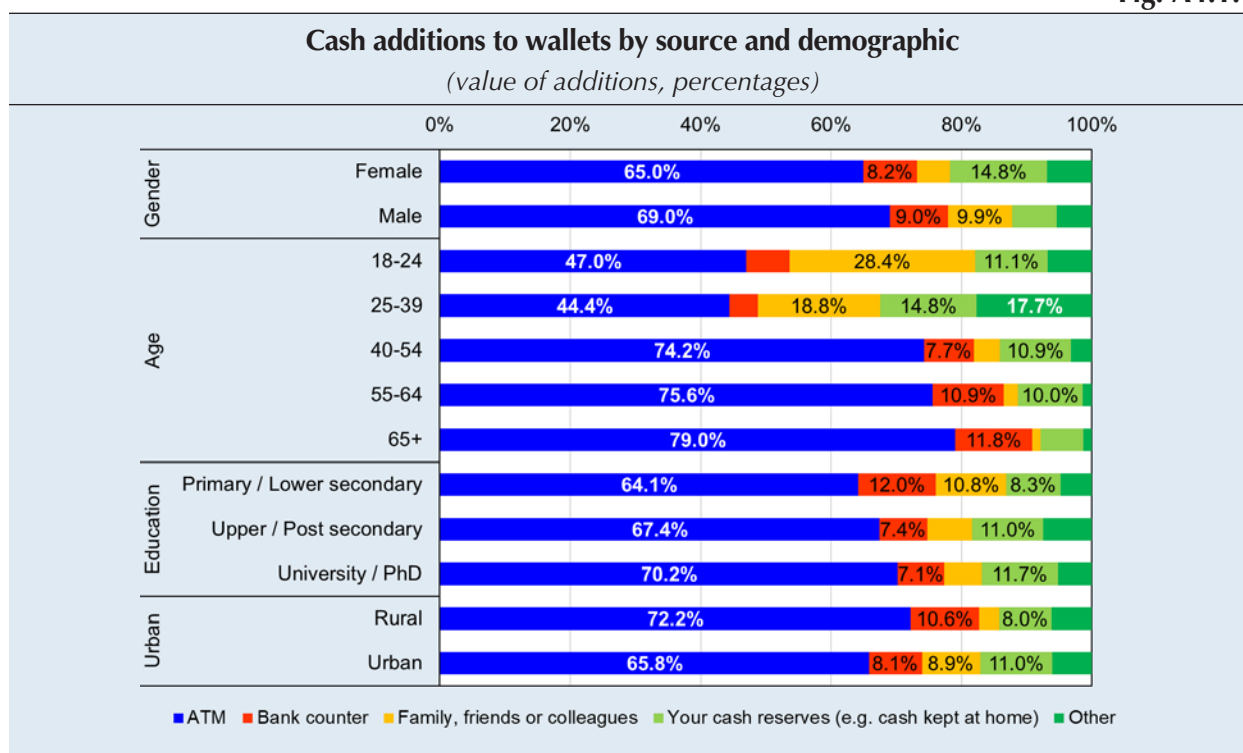
Fig. A4.1.3



Source: authors' calculations based on ECB SPACE survey data (2019).

Note: the "Other" category includes income received in cash and cashback (a service provided by retailers).

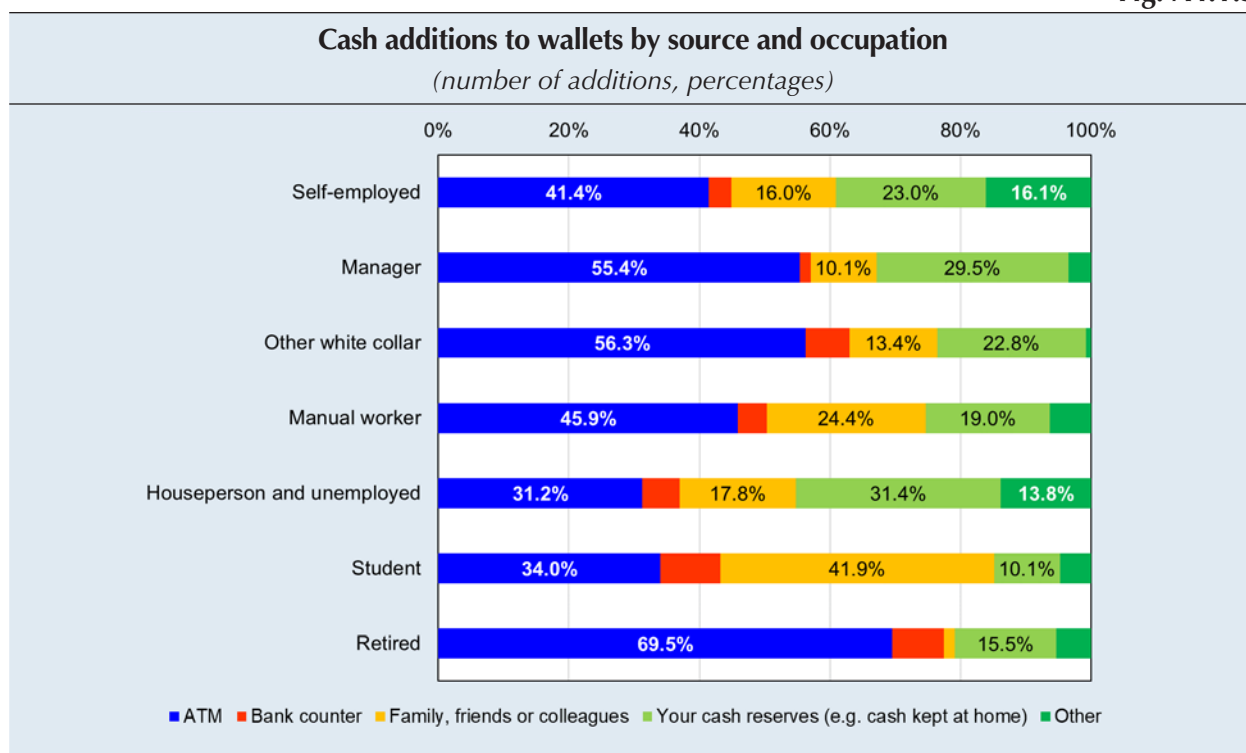
Fig. A4.1.4



Source: authors' calculations based on ECB SPACE survey data (2019).

Note: the "Other" category includes income received in cash and cashback (a service provided by retailers).

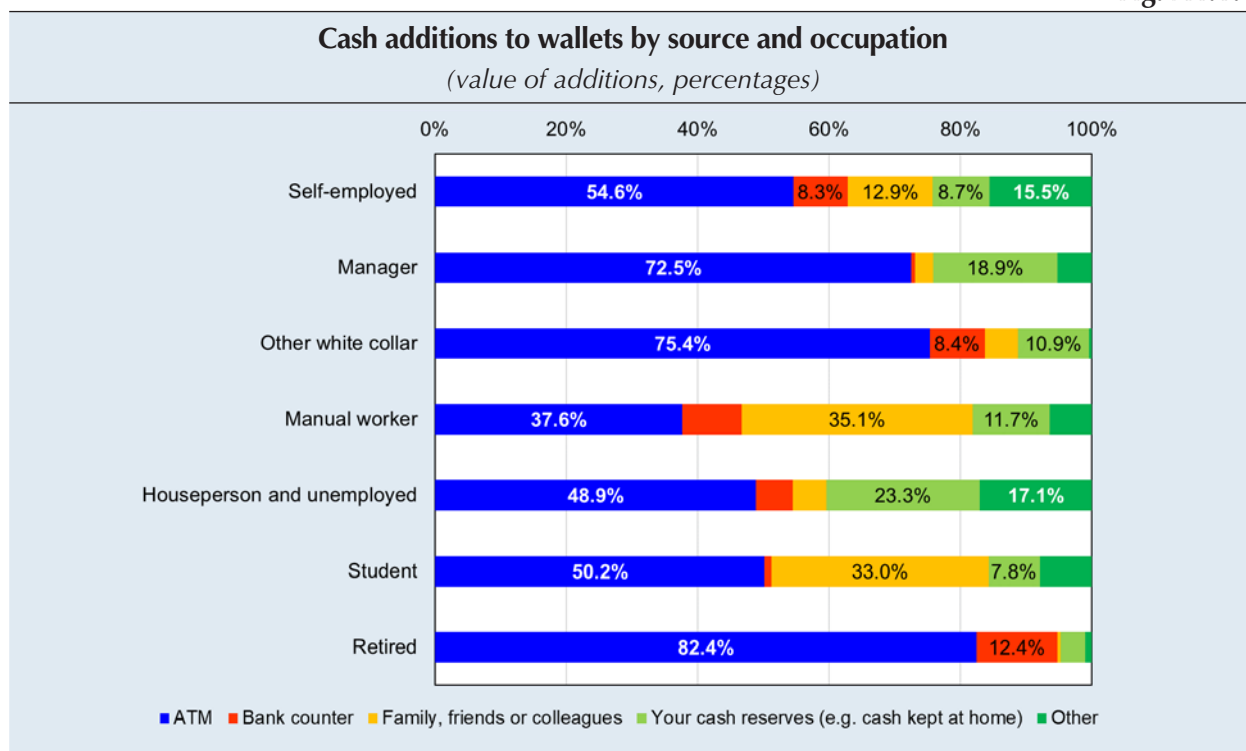
Fig. A4.1.5



Source: authors' calculations based on ECB SPACE survey data (2019).

Note: the "Other" category includes income received in cash and cashback (a service provided by retailers).

Fig. A4.1.6

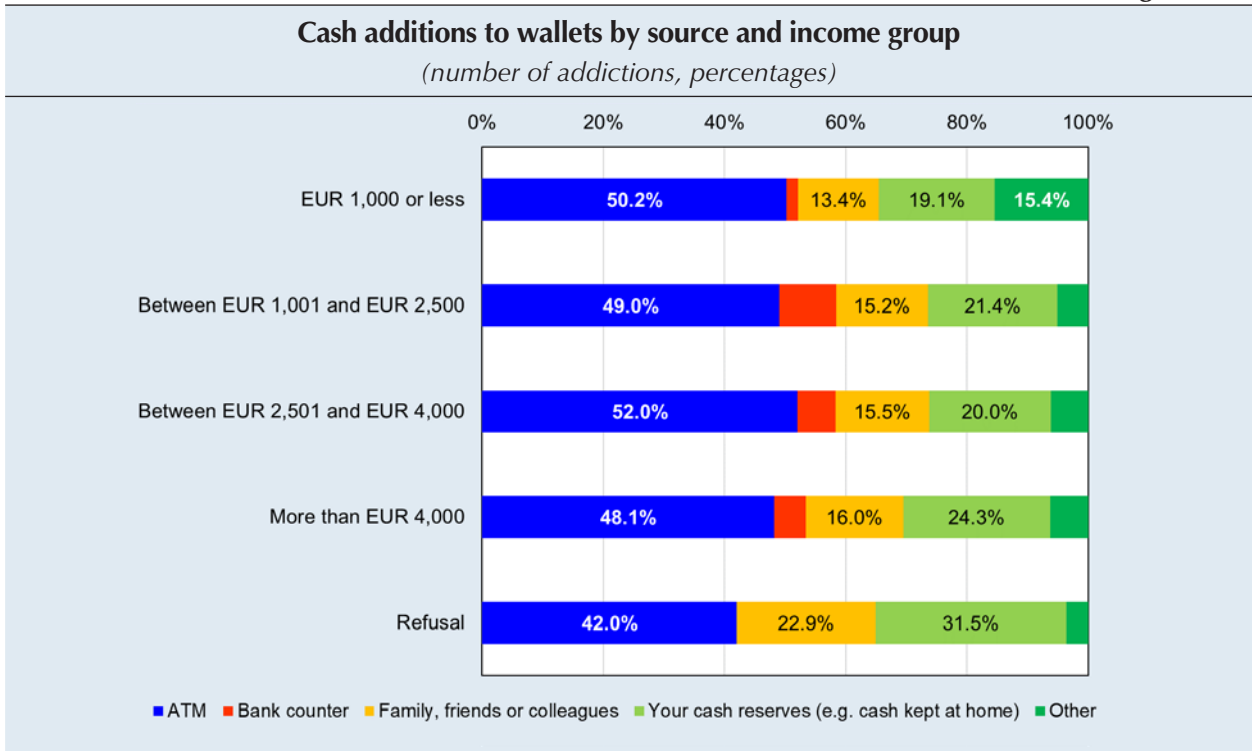


Source: authors' calculations based on ECB SPACE survey data (2019).

Note: the "Other" category includes income received in cash and cashback (a service provided by retailers).

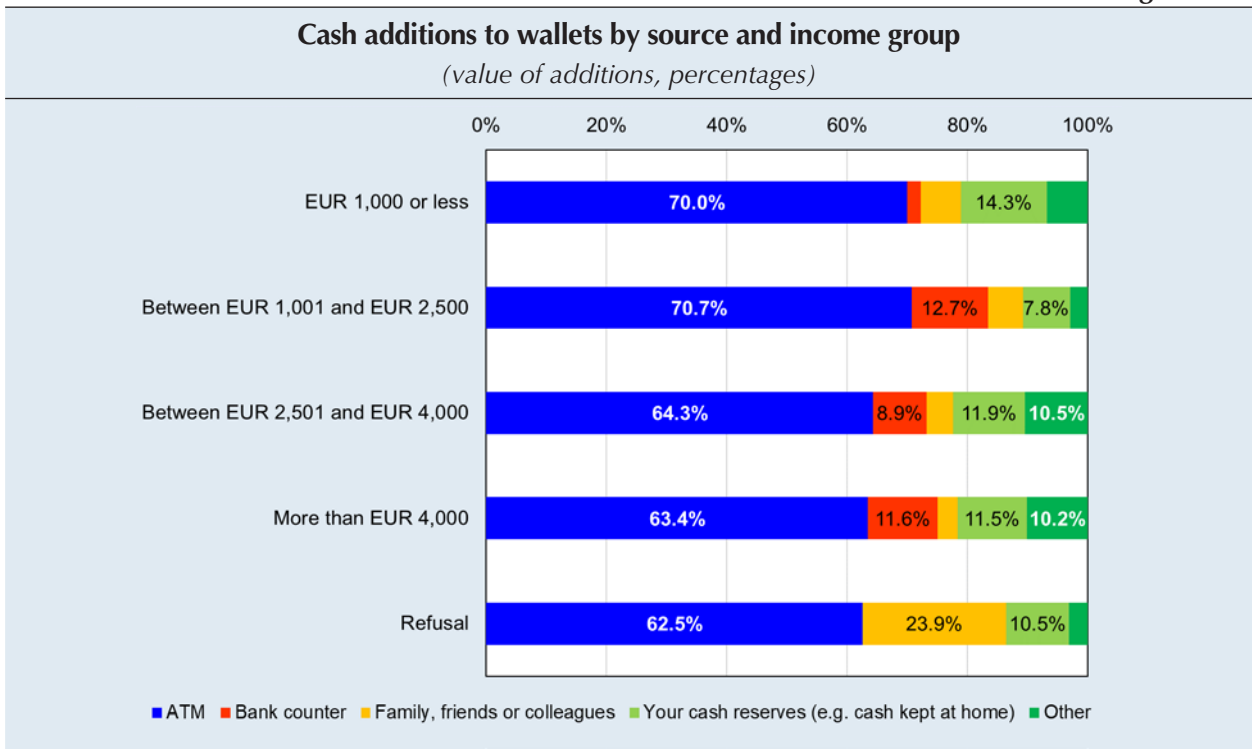


Fig. A4.1.7



Source: authors' calculations based on ECB SPACE survey data (2019). Percentages may not add up to 100% due to rounding. Note: the "Other" category includes income received in cash and cashback (a service provided by retailers).

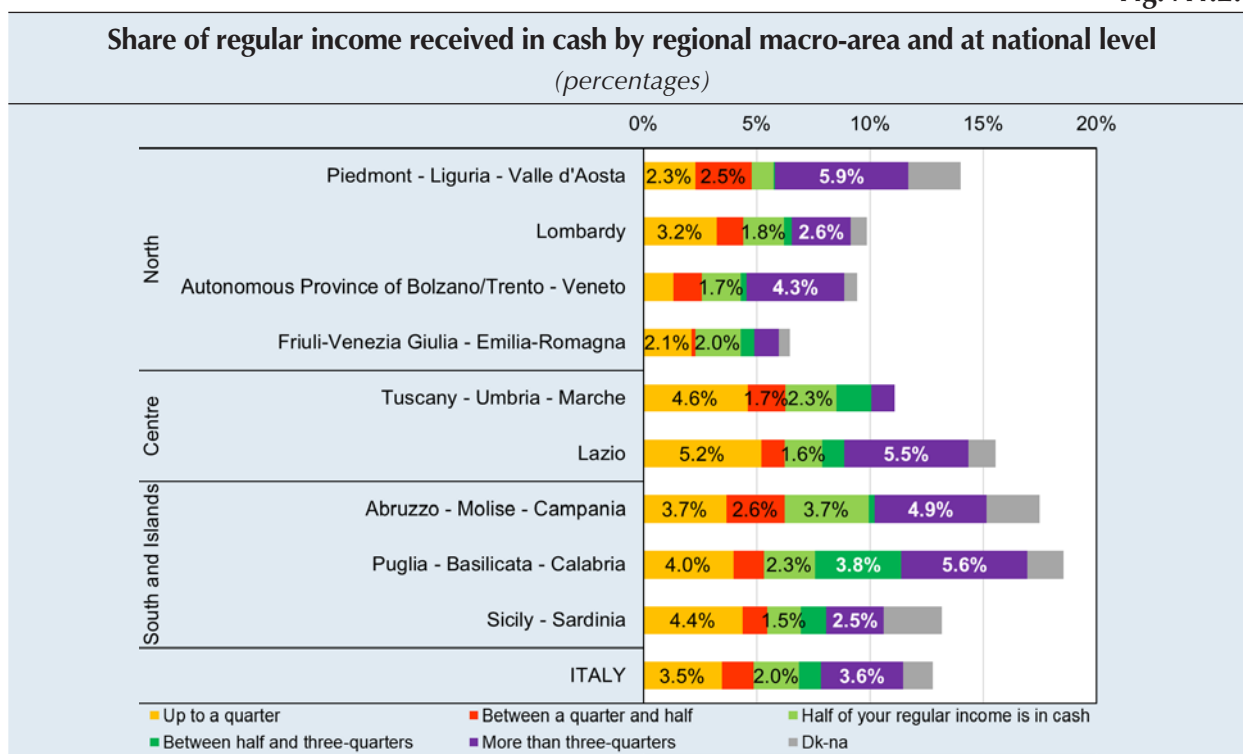
Fig. A4.1.8



Source: authors' calculations based on ECB SPACE survey data (2019). Note: the "Other" category includes income received in cash and cashback (a service provided by retailers).

A4.2. Income in cash

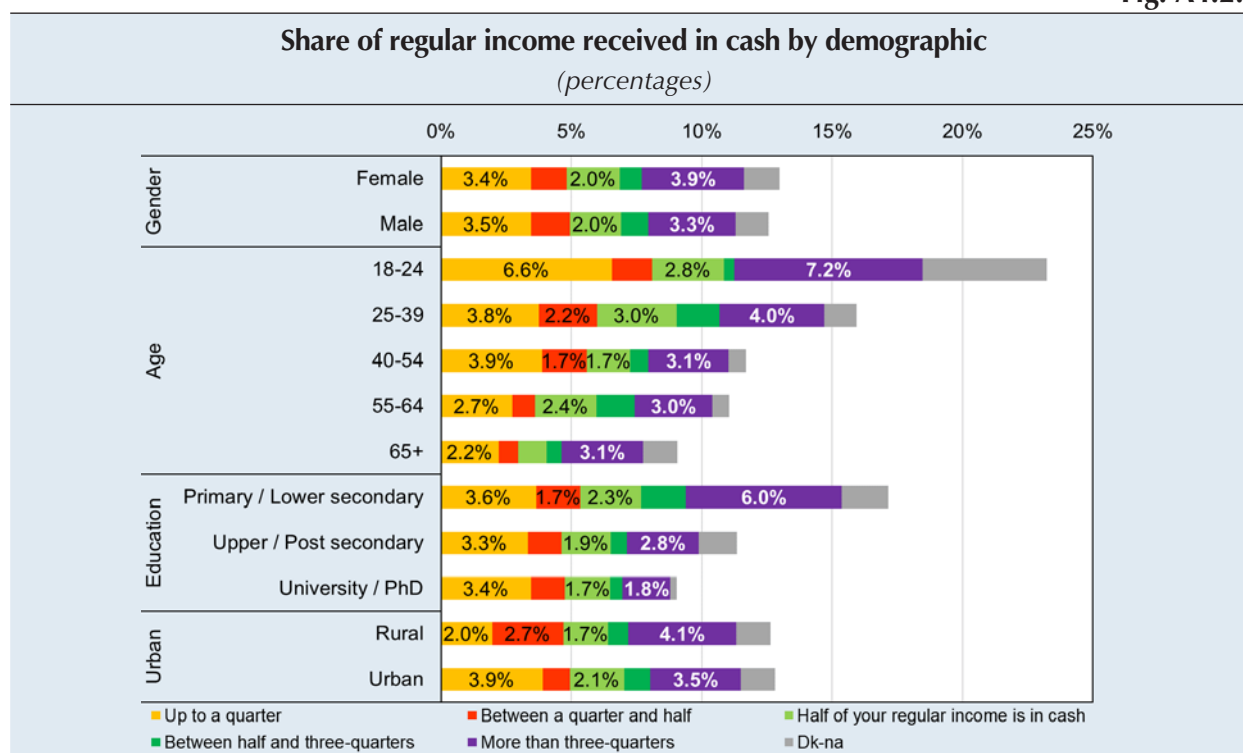
Fig. A4.2.1



Source: authors' calculations based on ECB SPACE survey data (2019).

Note: the complement to 100 – not shown here as it would be out of scale – consists of people who receive none of their income in cash.

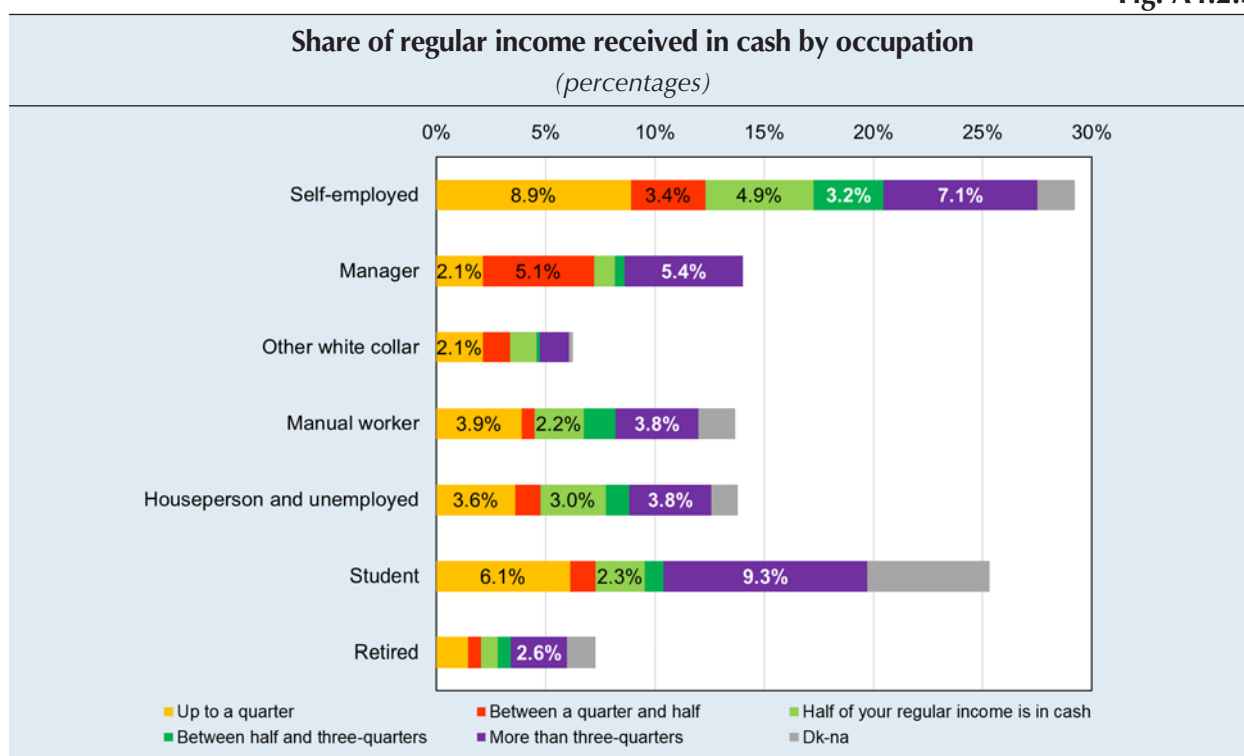
Fig. A4.2.2



Source: authors' calculations based on ECB SPACE survey data (2019).

Note: the complement to 100 – not shown here as it would be out of scale – consists of people who receive none of their income in cash.

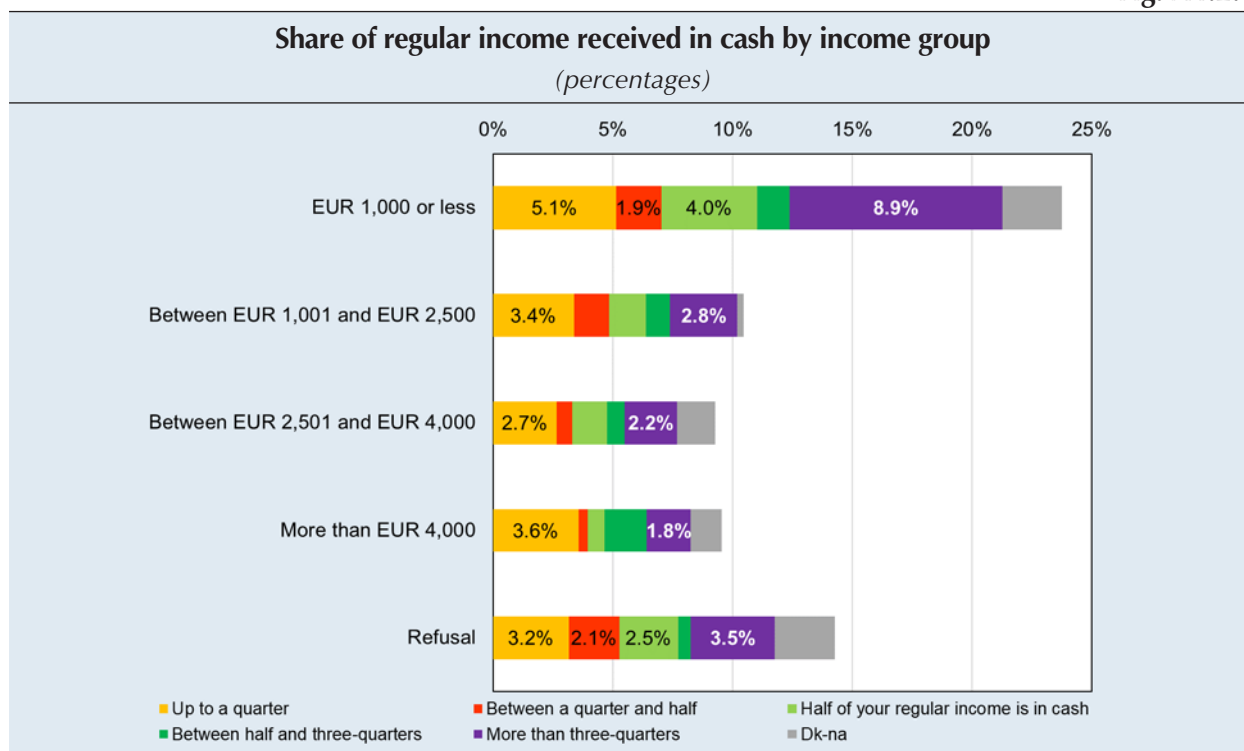
Fig. A4.2.3



Source: authors' calculations based on ECB SPACE survey data (2019).

Note: the complement to 100 – not shown here as it would be out of scale – consists of people who receive none of their income in cash.

Fig. A4.2.4



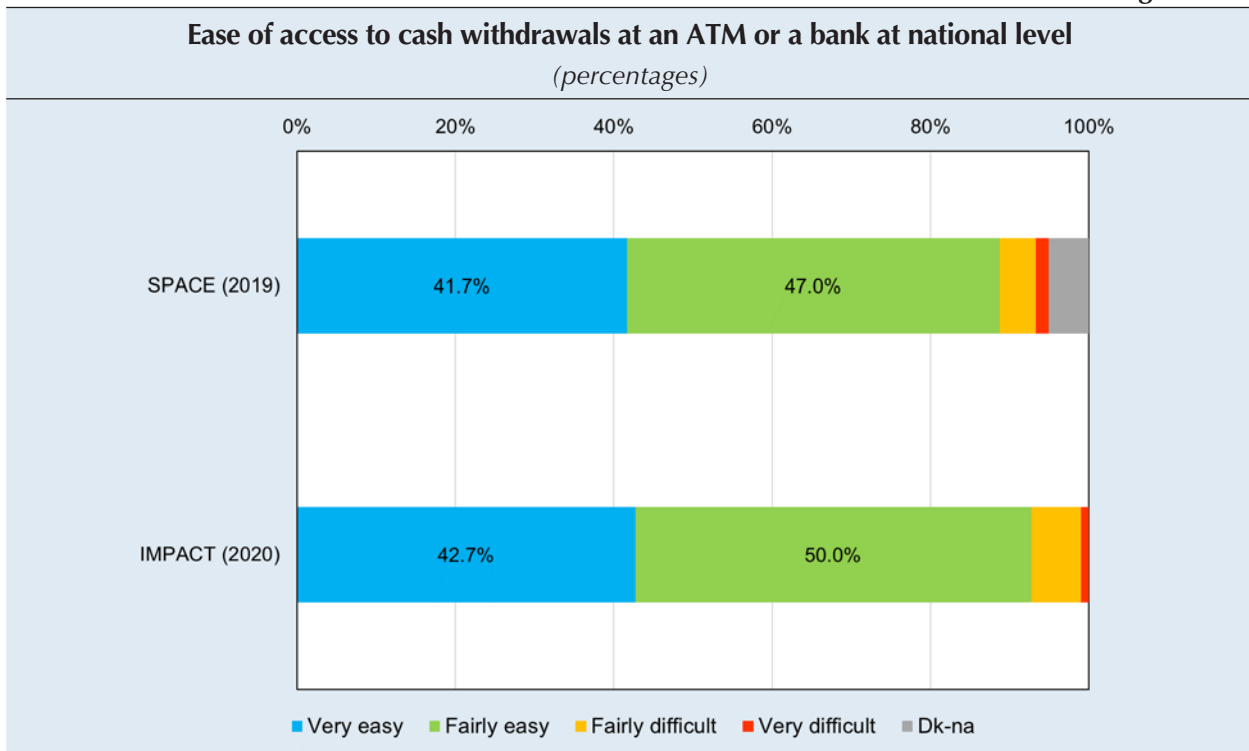
Source: authors' calculations based on ECB SPACE survey data (2019).

Note: the complement to 100 – not shown here as it would be out of scale – consists of people who receive none of their income in cash.

## A5. Access to payment instruments in Italy

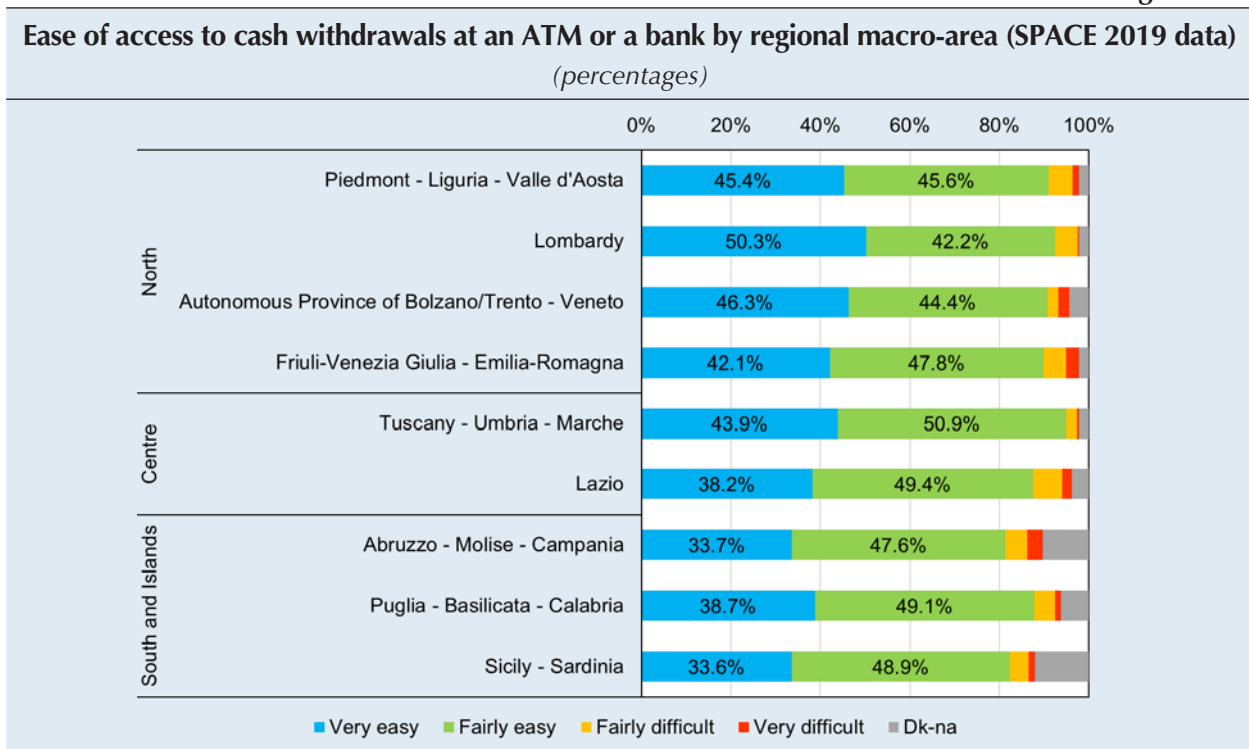
### A5.1. ATM access easiness

Fig. A5.1.1



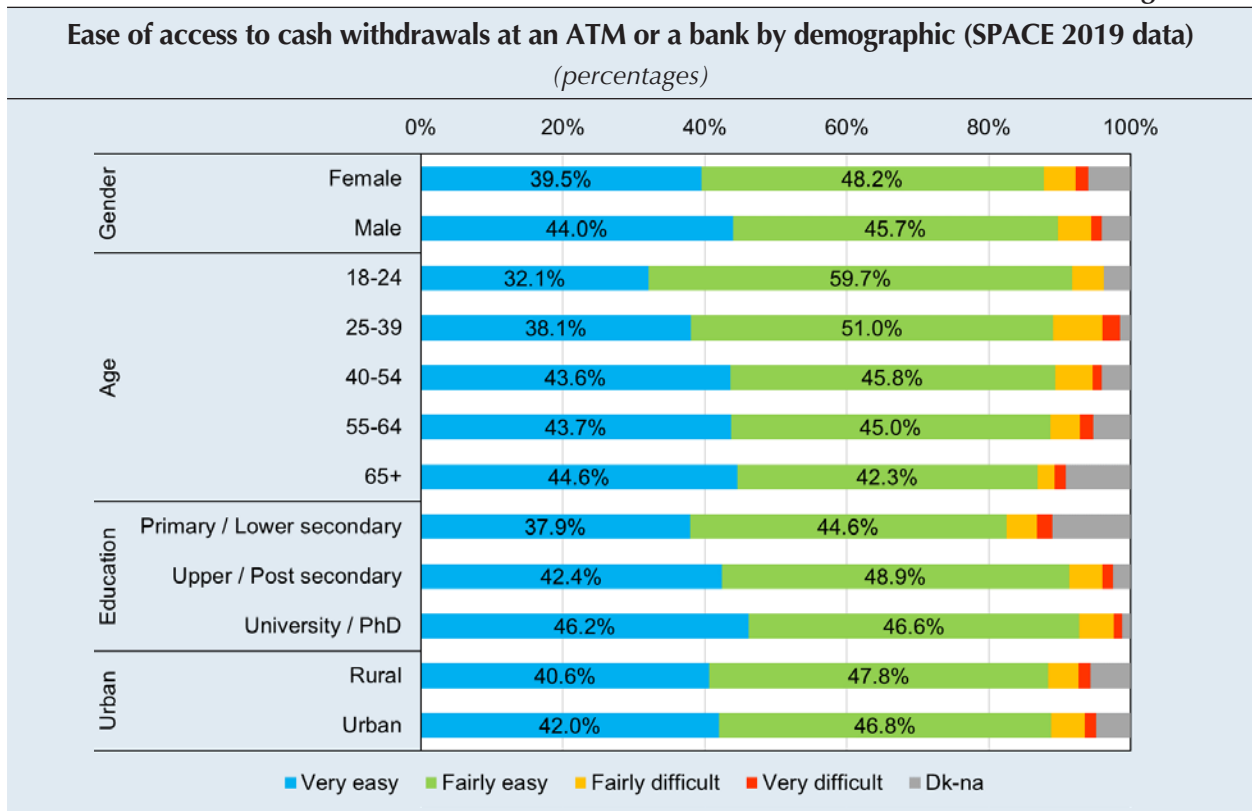
Source: authors' calculations based on ECB SPACE (2019) and IMPACT (2020) survey data.

Fig. A5.1.2



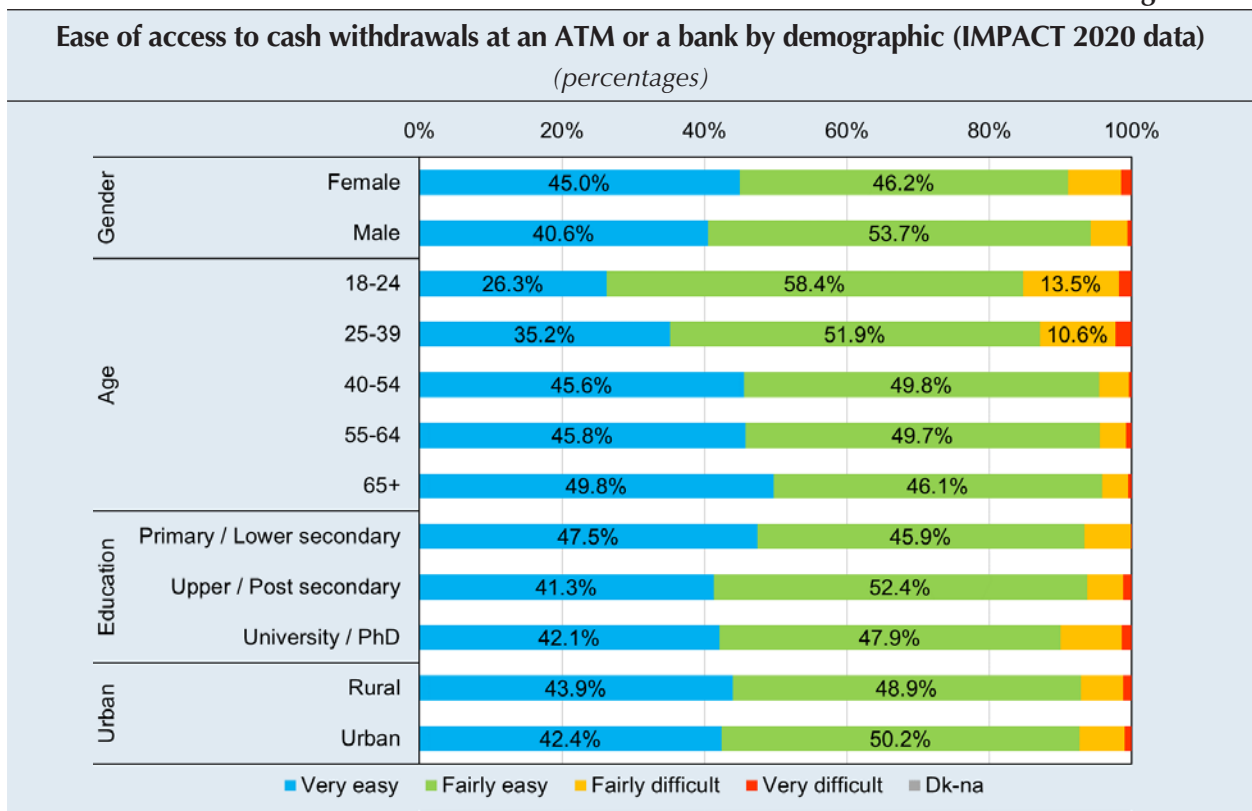
Source: authors' calculations based on ECB SPACE survey data (2019), since only SPACE data are available at regional level.

Fig. A5.1.3



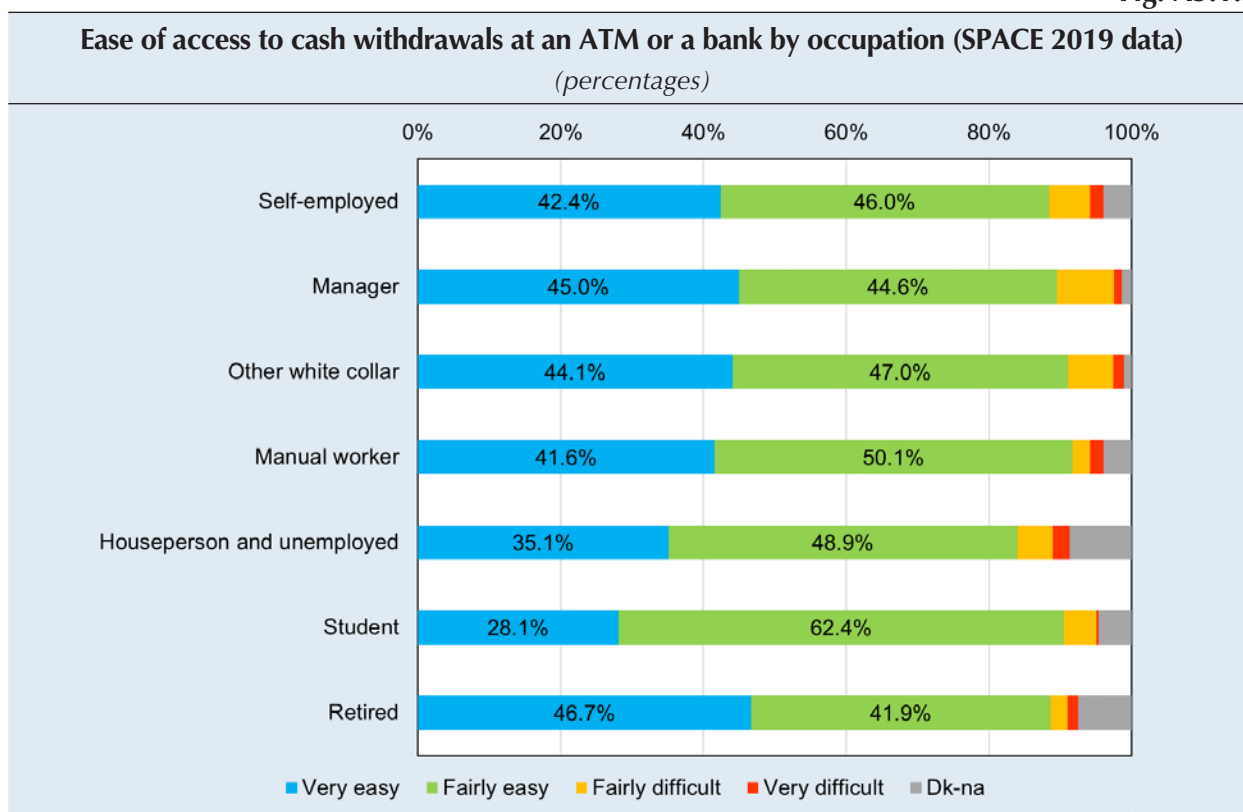
Source: authors' calculations based on ECB SPACE survey data (2019).

Fig. A5.1.4



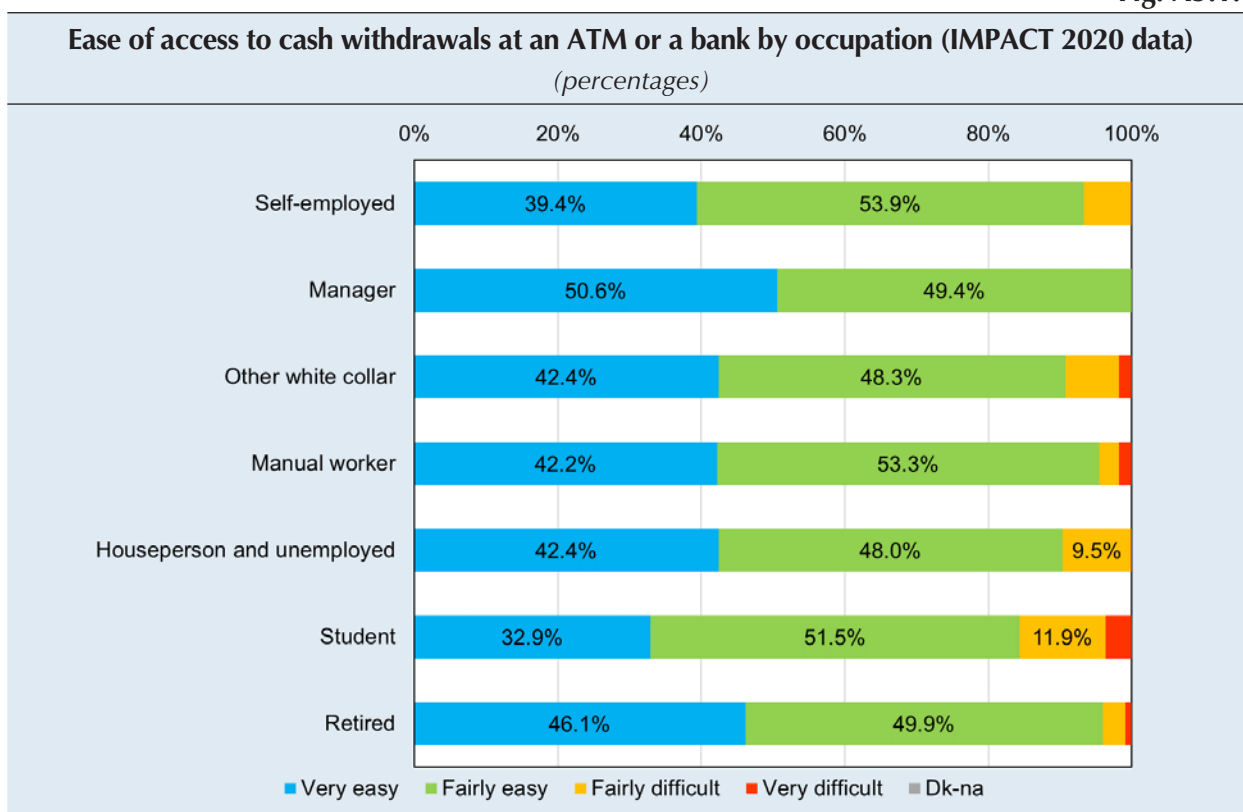
Source: authors' calculations based on ECB IMPACT survey data (2020).

Fig. A5.1.5



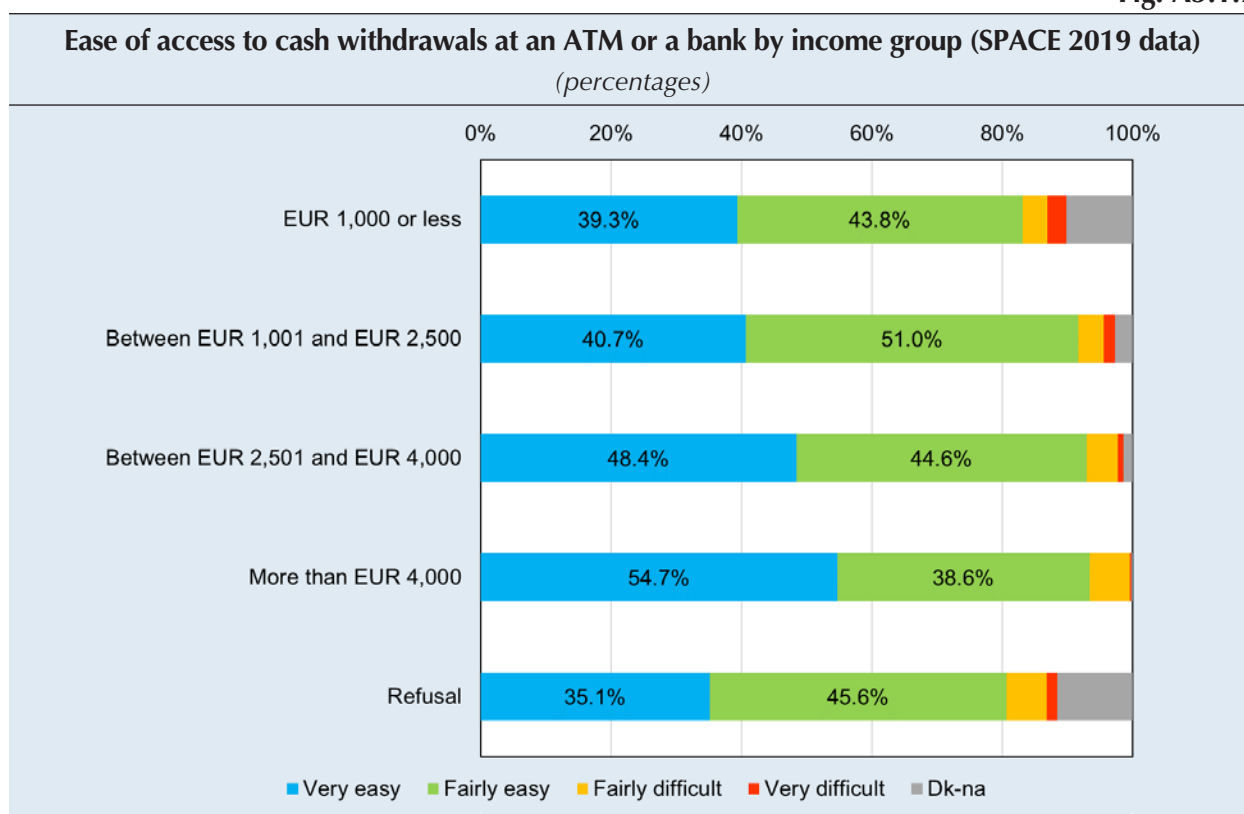
Source: authors' calculations based on ECB SPACE survey data (2019).

Fig. A5.1.6



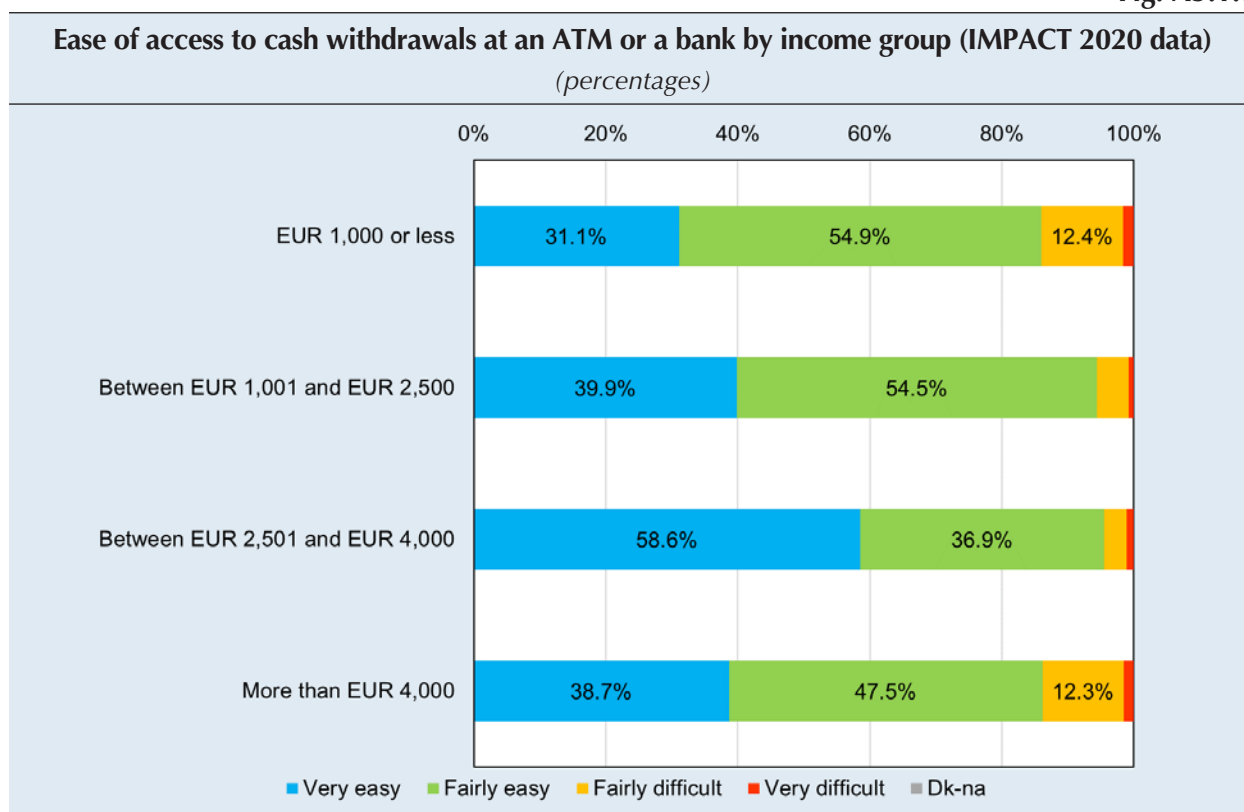
Source: authors' calculations based on ECB IMPACT survey data (2020).

Fig. A5.1.7

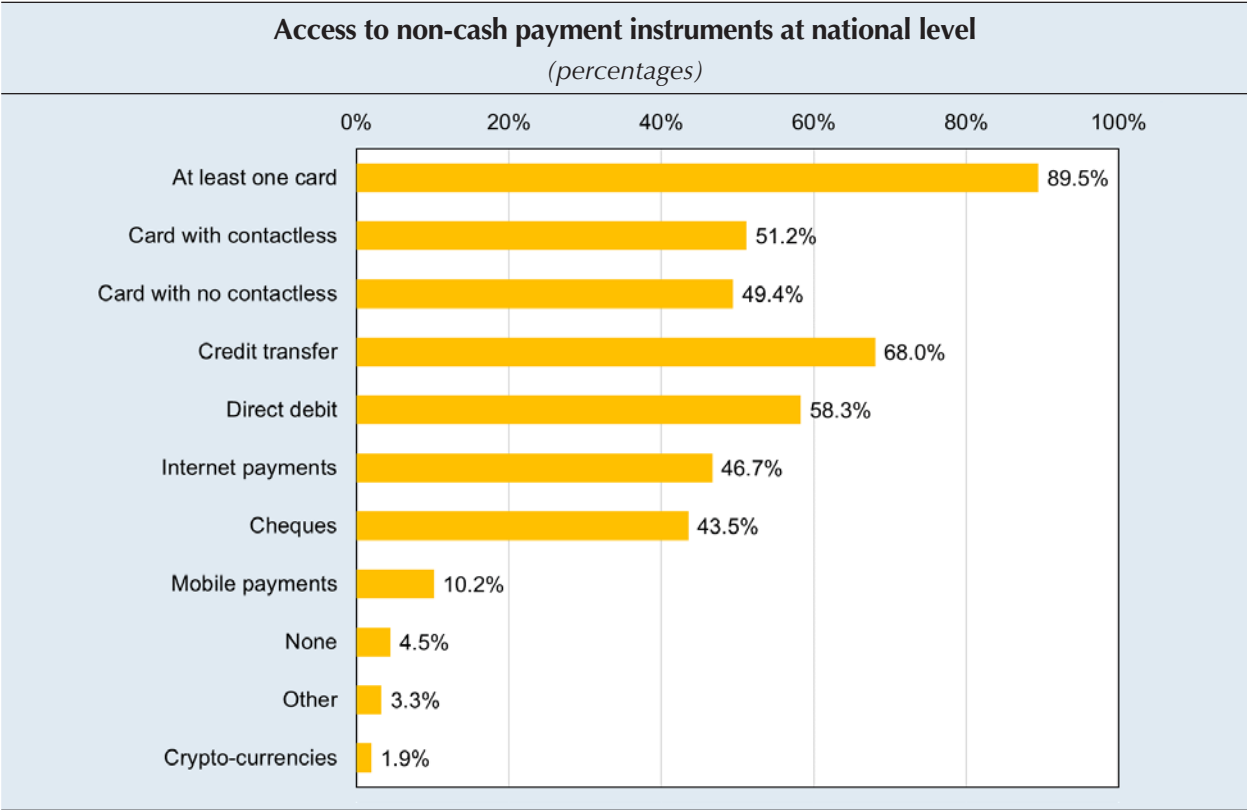


Source: authors' calculations based on ECB SPACE survey data (2019).

Fig. A5.1.8



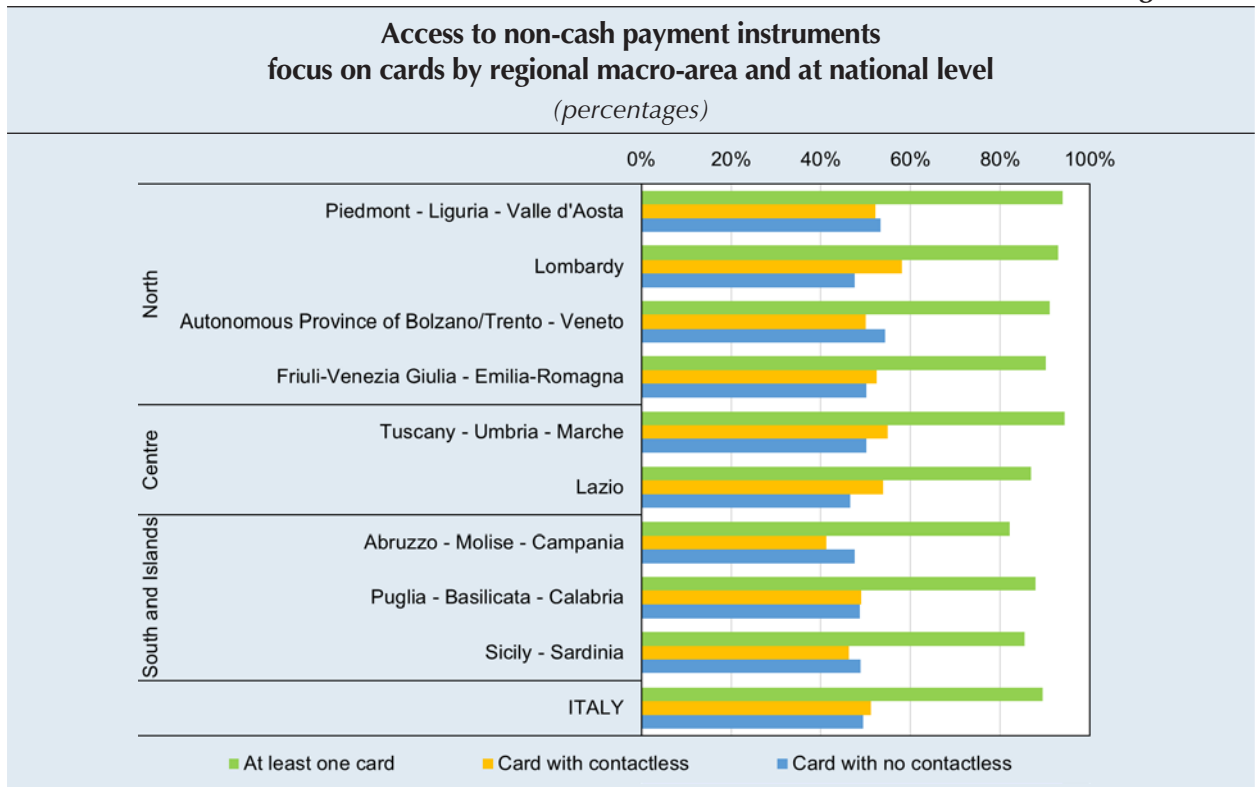
Source: authors' calculations based on ECB IMPACT survey data (2020).



Source: authors' calculations based on ECB SPACE survey data (2019).

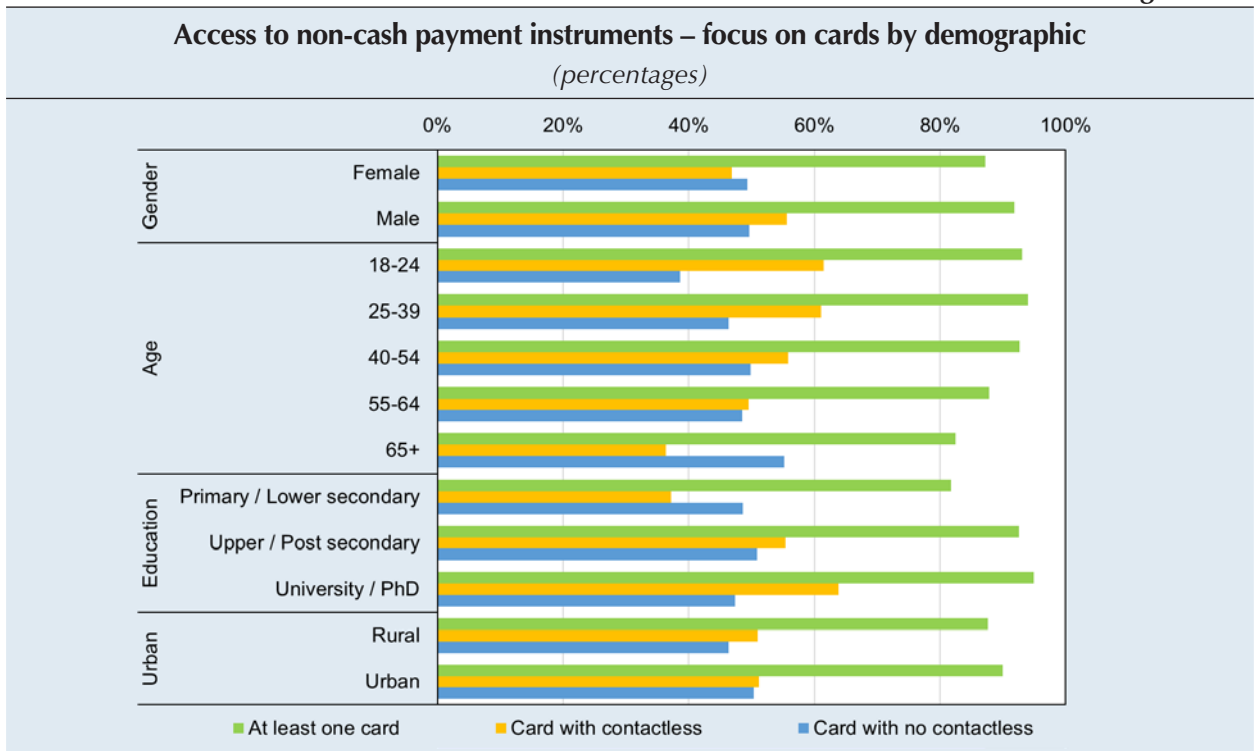


Fig. A5.3.1



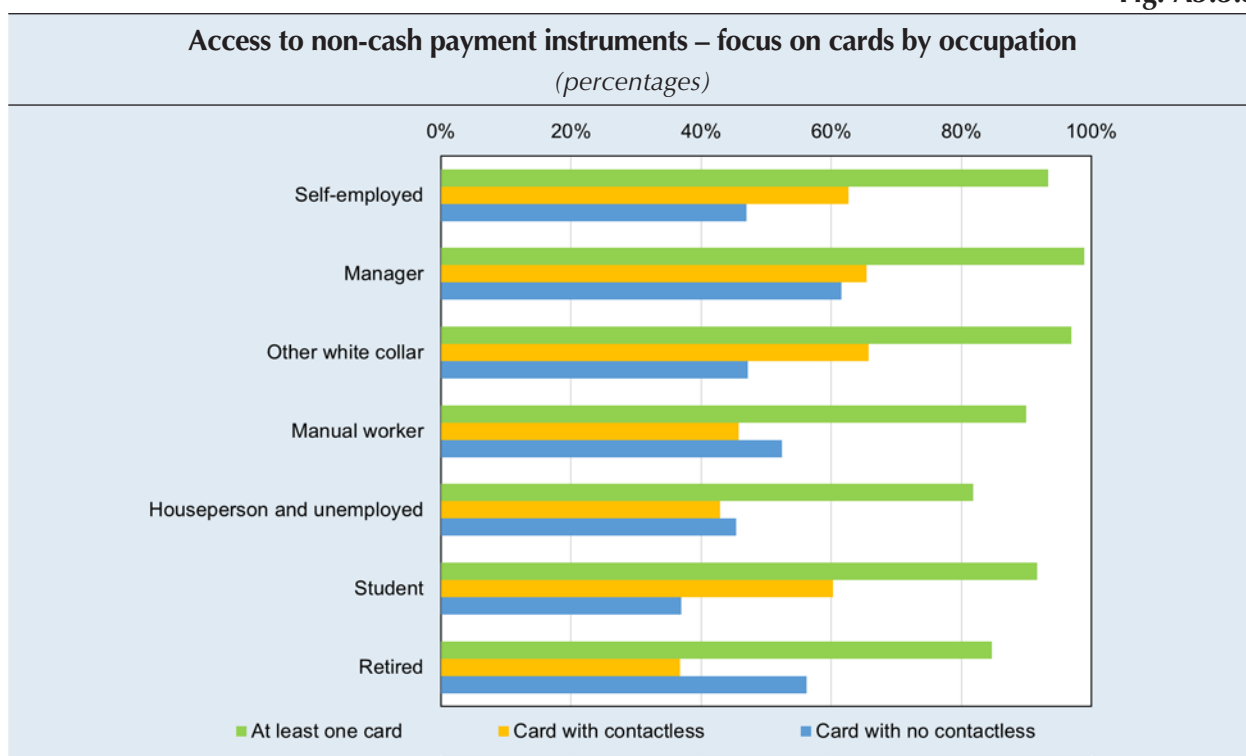
Source: authors' calculations based on ECB SPACE survey data (2019).

Fig. A5.3.2



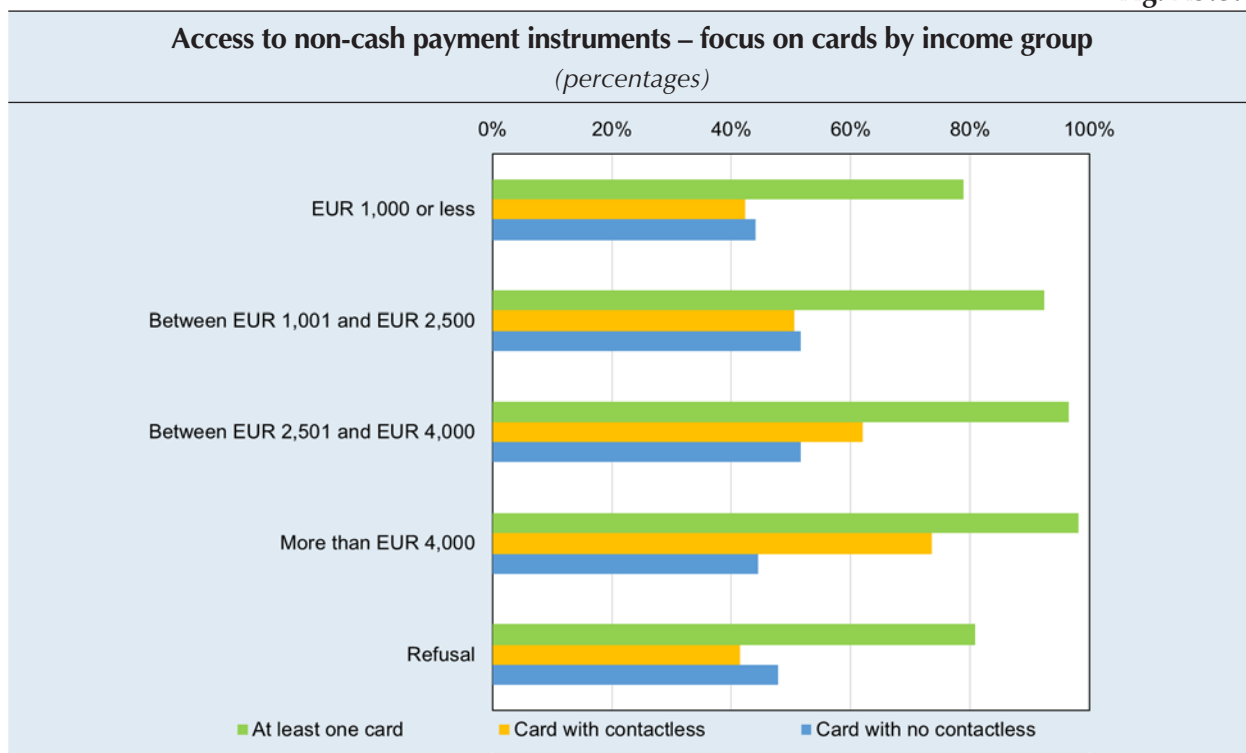
Source: authors' calculations based on ECB SPACE survey data (2019).

Fig. A5.3.3

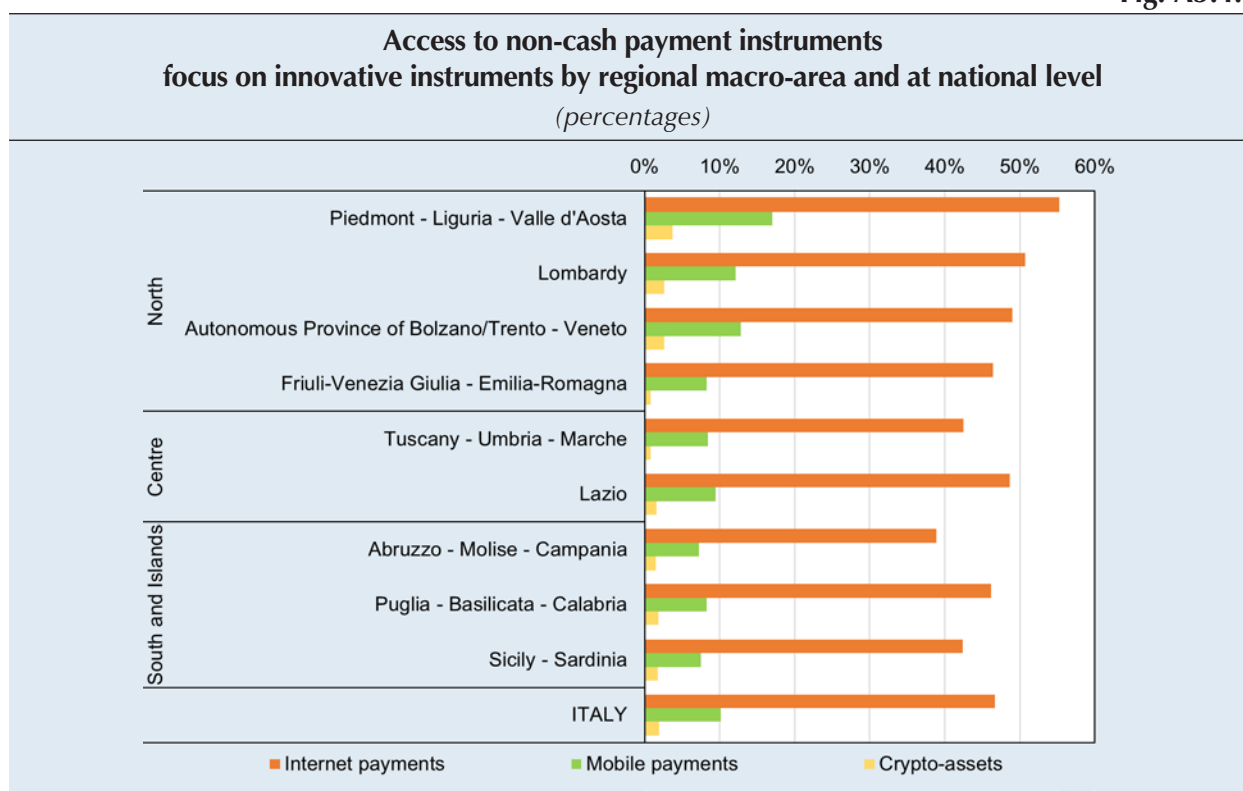


Source: authors' calculations based on ECB SPACE survey data (2019).

Fig. A5.3.4

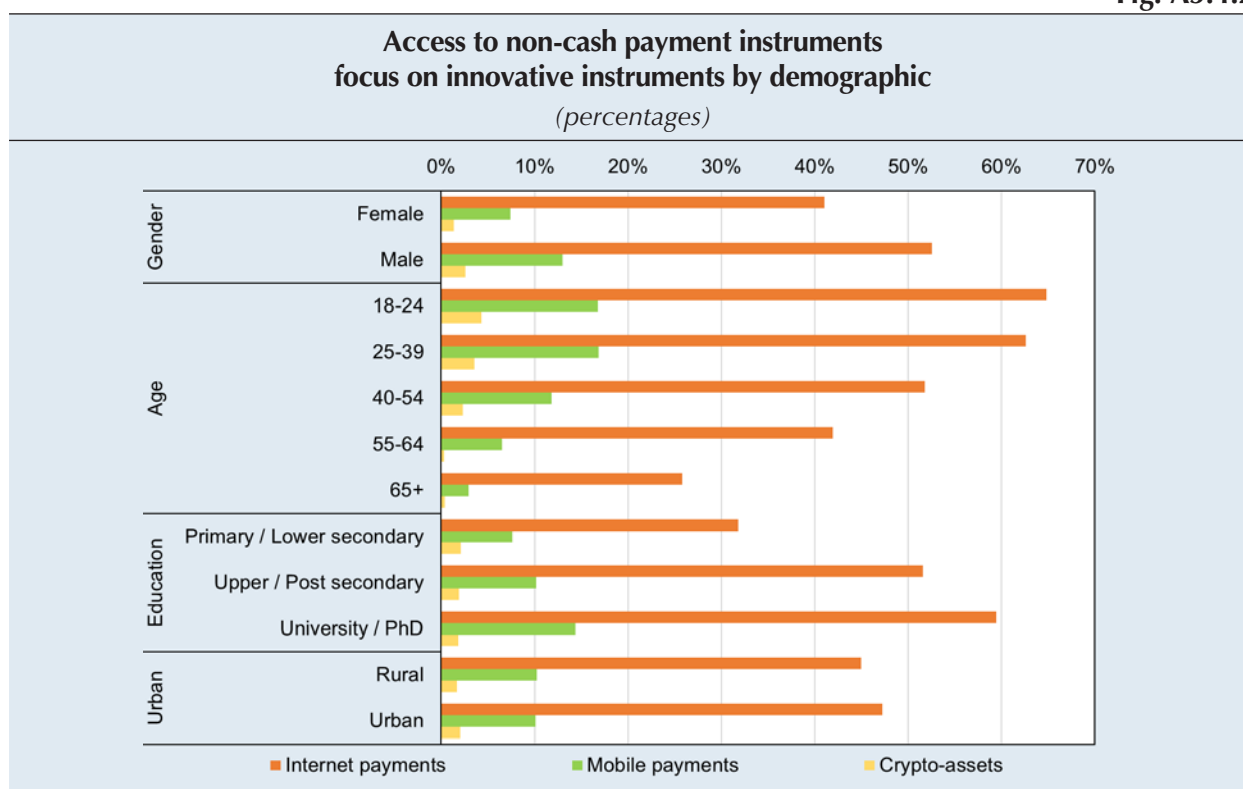


Source: authors' calculations based on ECB SPACE survey data (2019).



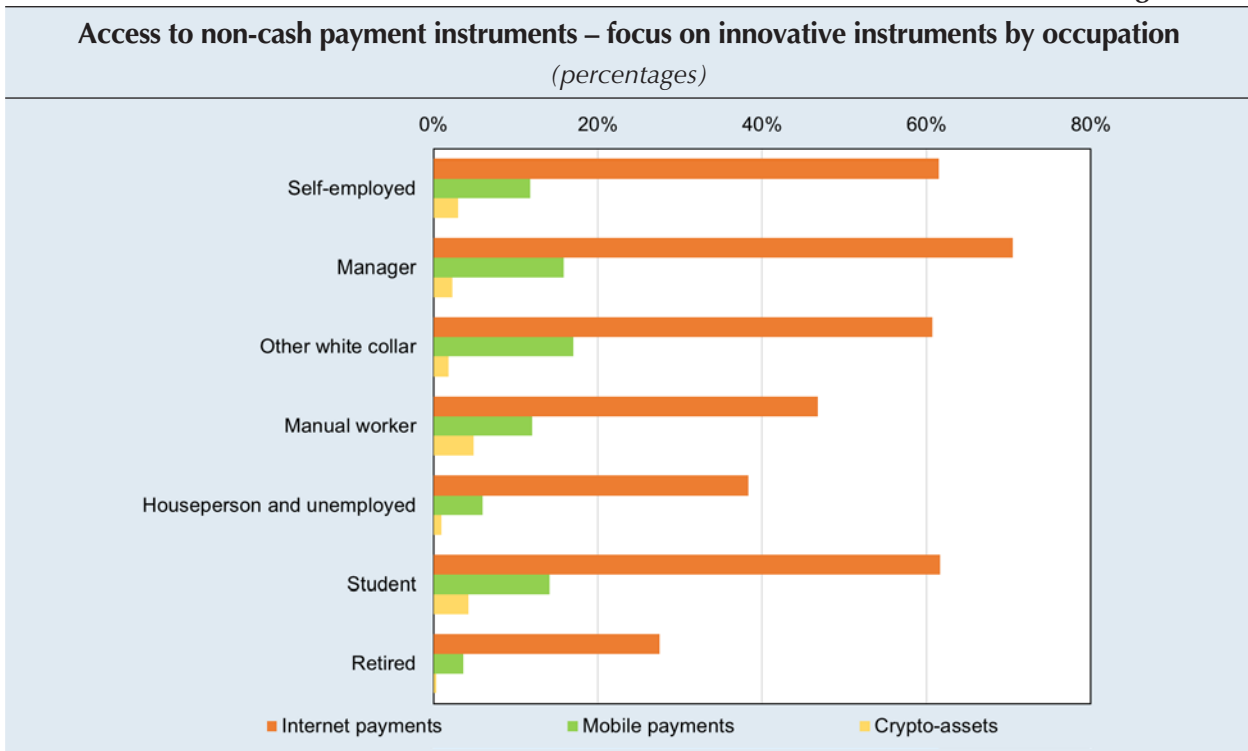
Source: authors' calculations based on ECB SPACE survey data (2019).

Fig. A5.4.2



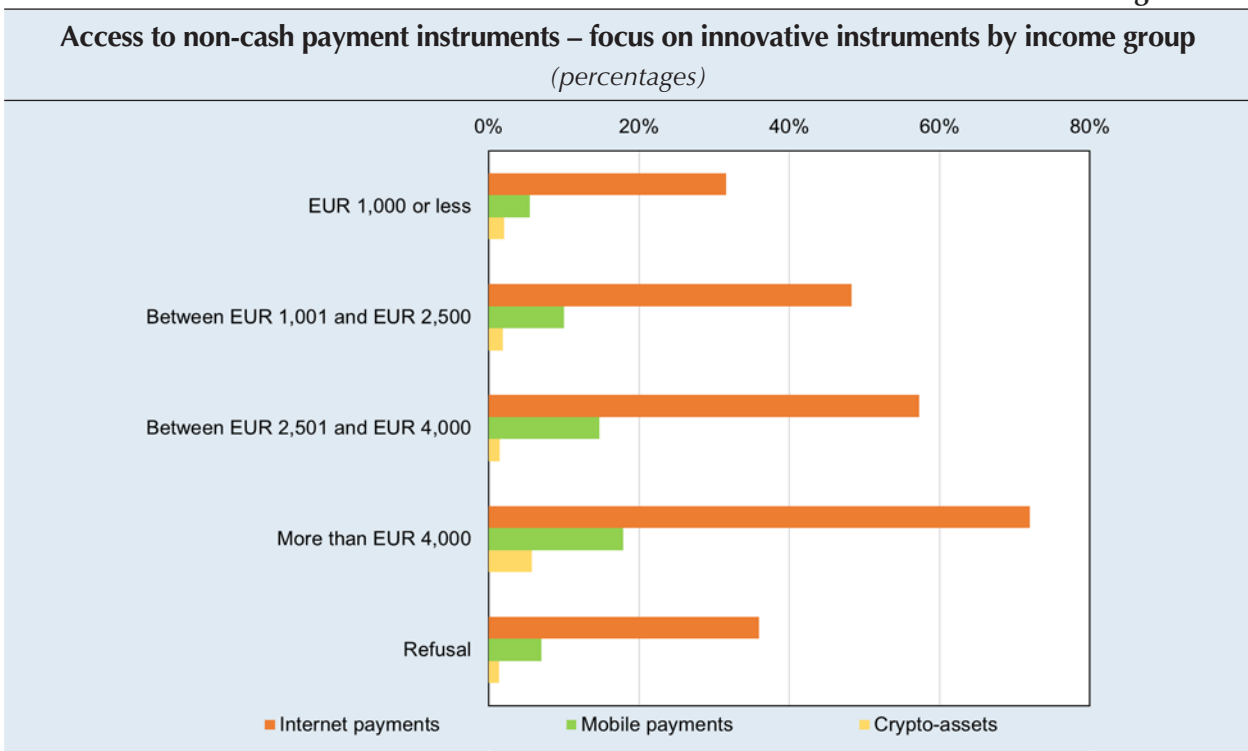
Source: authors' calculations based on ECB SPACE survey data (2019).

Fig. A5.4.3



Source: authors' calculations based on ECB SPACE survey data (2019).

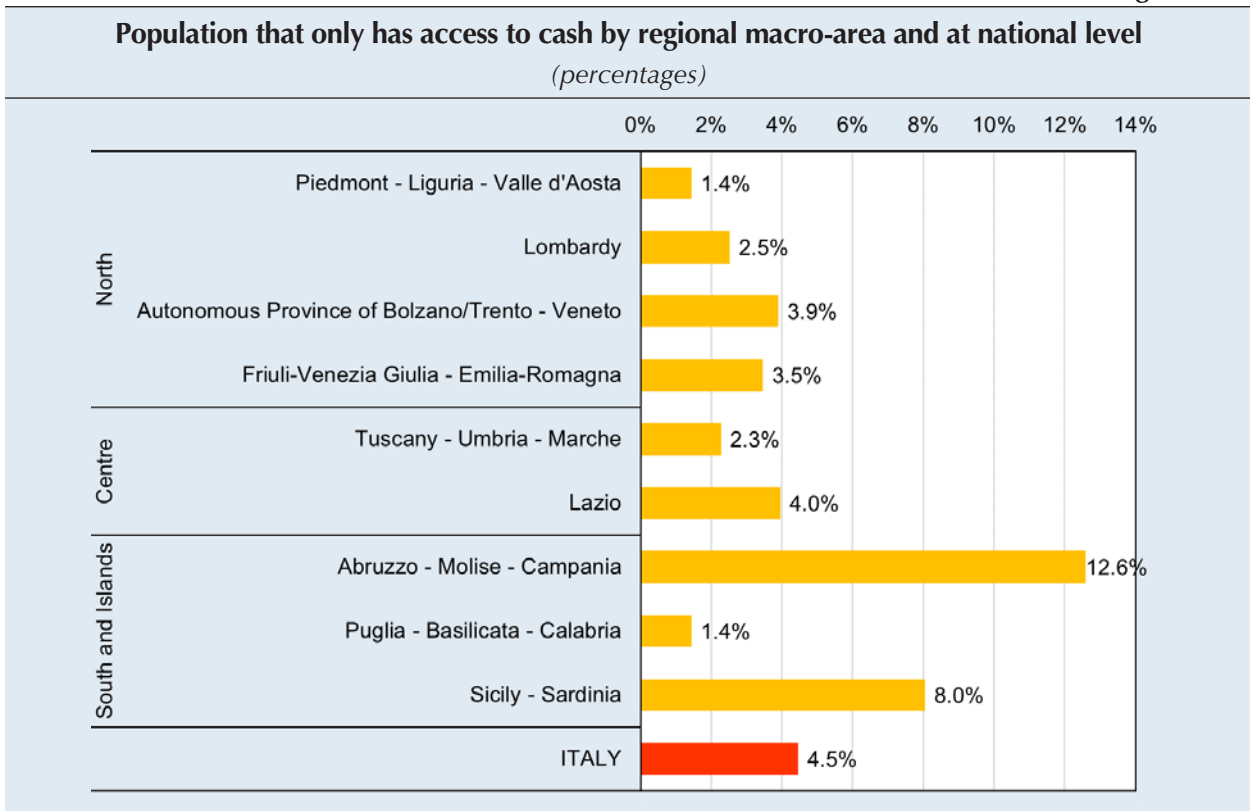
Fig. A5.4.4



Source: authors' calculations based on ECB SPACE survey data (2019).

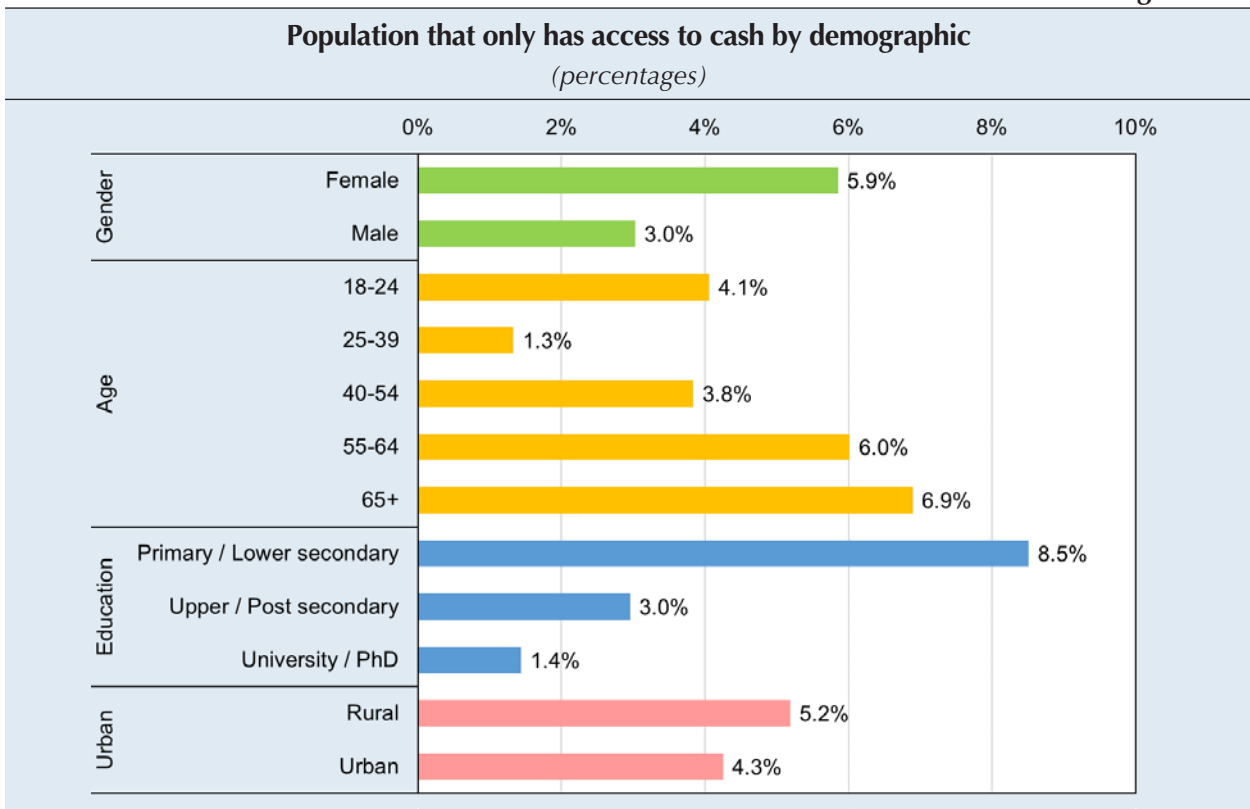
A5.5. Cash only users

Fig. A5.5.1



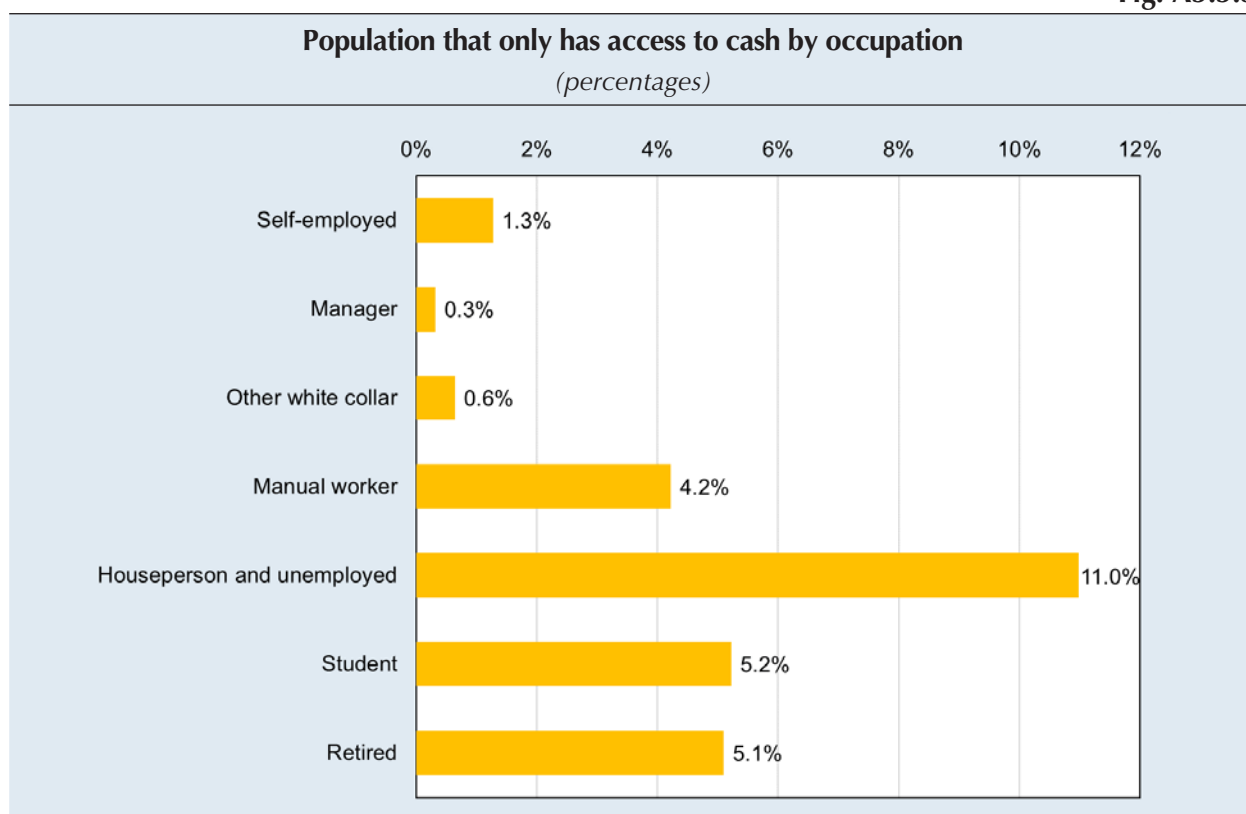
Source: authors' calculations based on ECB SPACE survey data (2019).

Fig. A5.5.2



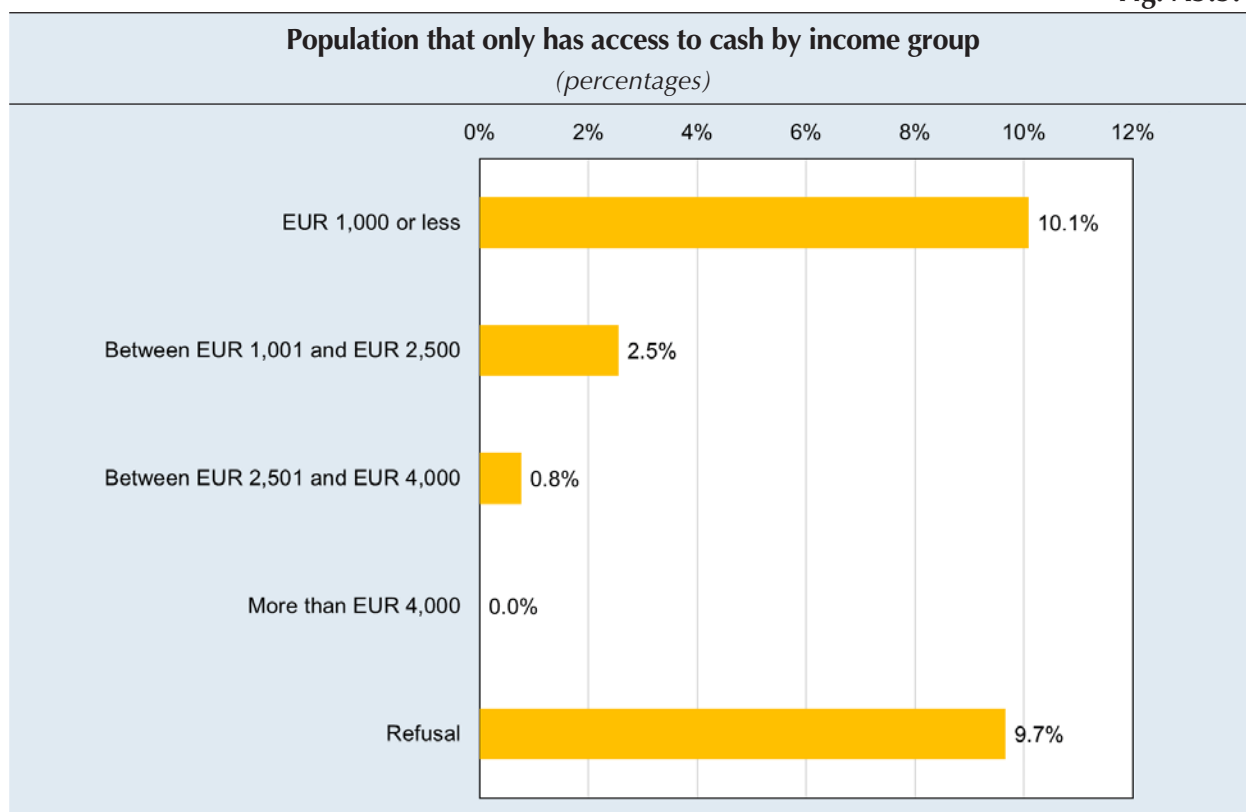
Source: authors' calculations based on ECB SPACE survey data (2019).

Fig. A5.5.3



Source: authors' calculations based on ECB SPACE survey data (2019).

Fig. A5.5.4

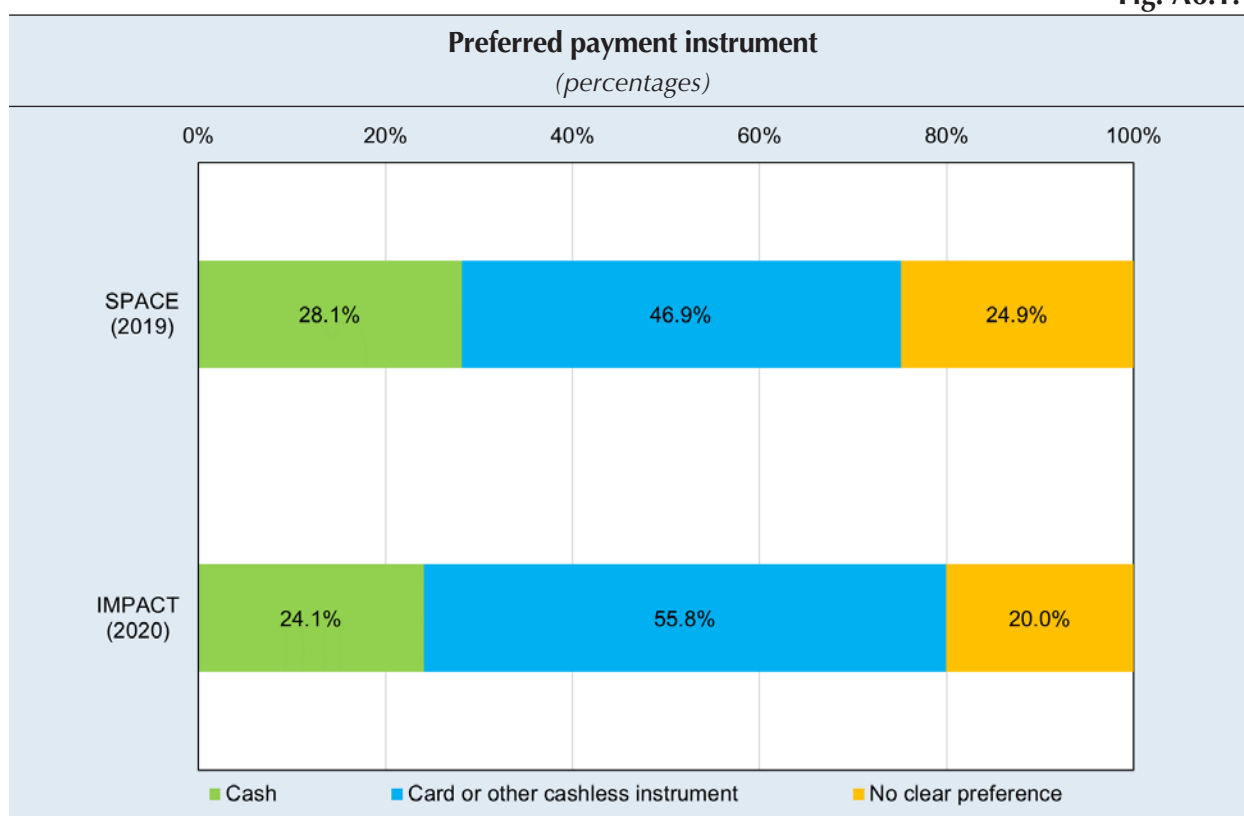


Source: authors' calculations based on ECB SPACE survey data (2019).

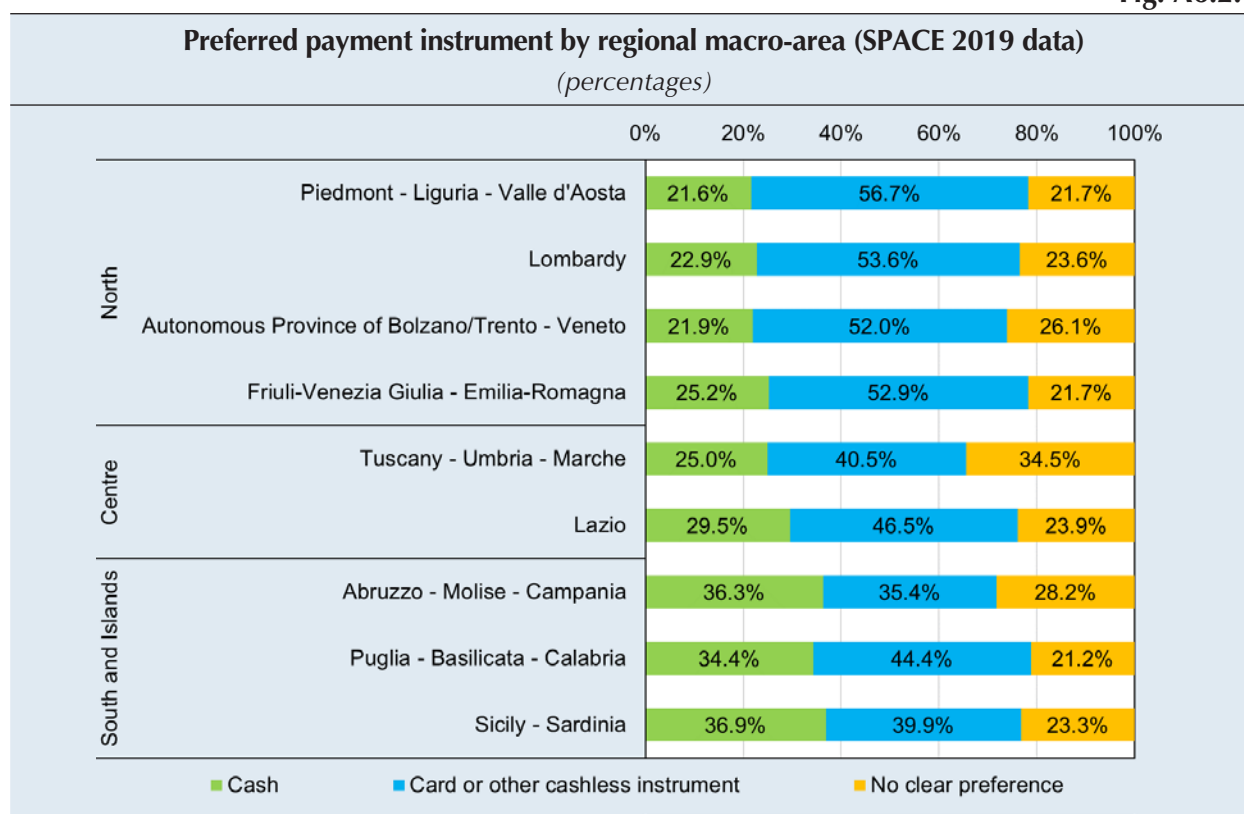
## A6. Consumers' payment preferences in Italy

### A6.1. General facts

Fig. A6.1.1



Source: authors' calculations based on ECB SPACE (2019) and IMPACT (2020) survey data. Percentages may not add up to 100% due to rounding.

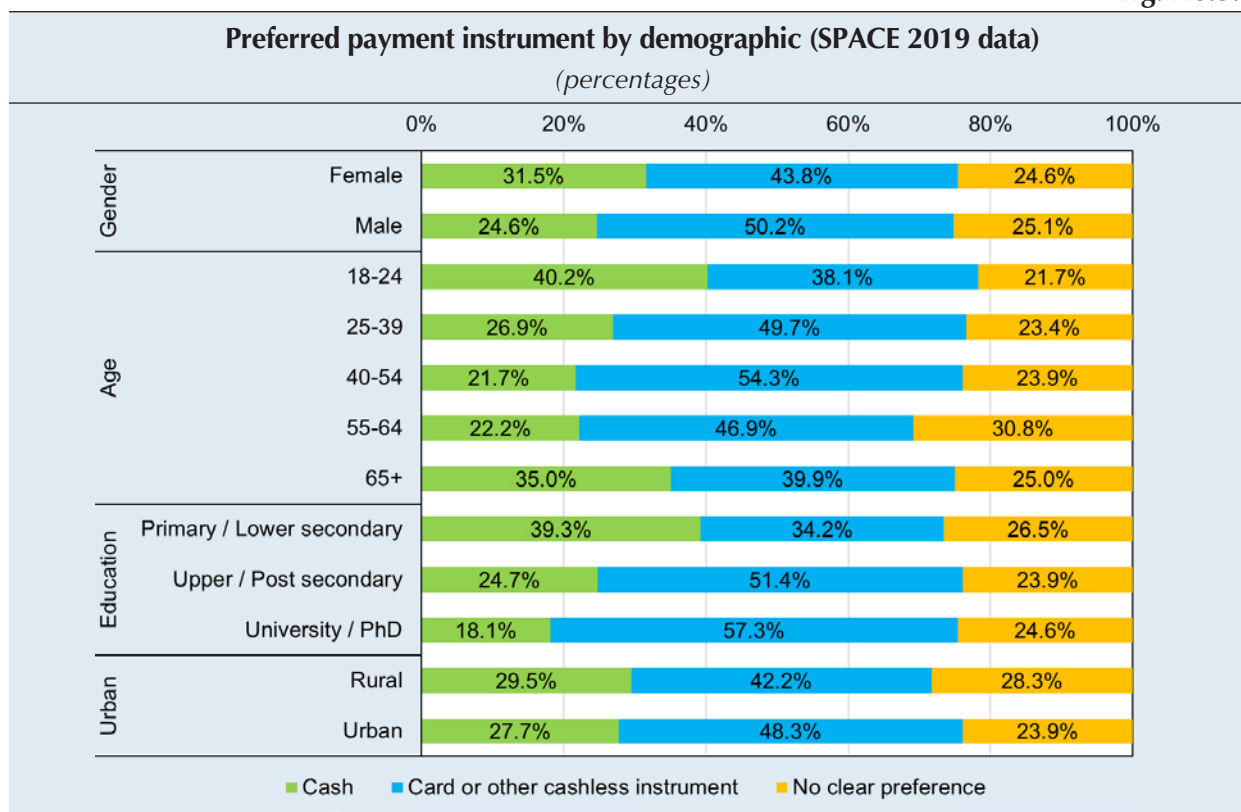


Source: authors' calculations based on ECB SPACE survey data (2019), since only SPACE data are available at regional level. Percentages may not add up to 100% due to rounding.



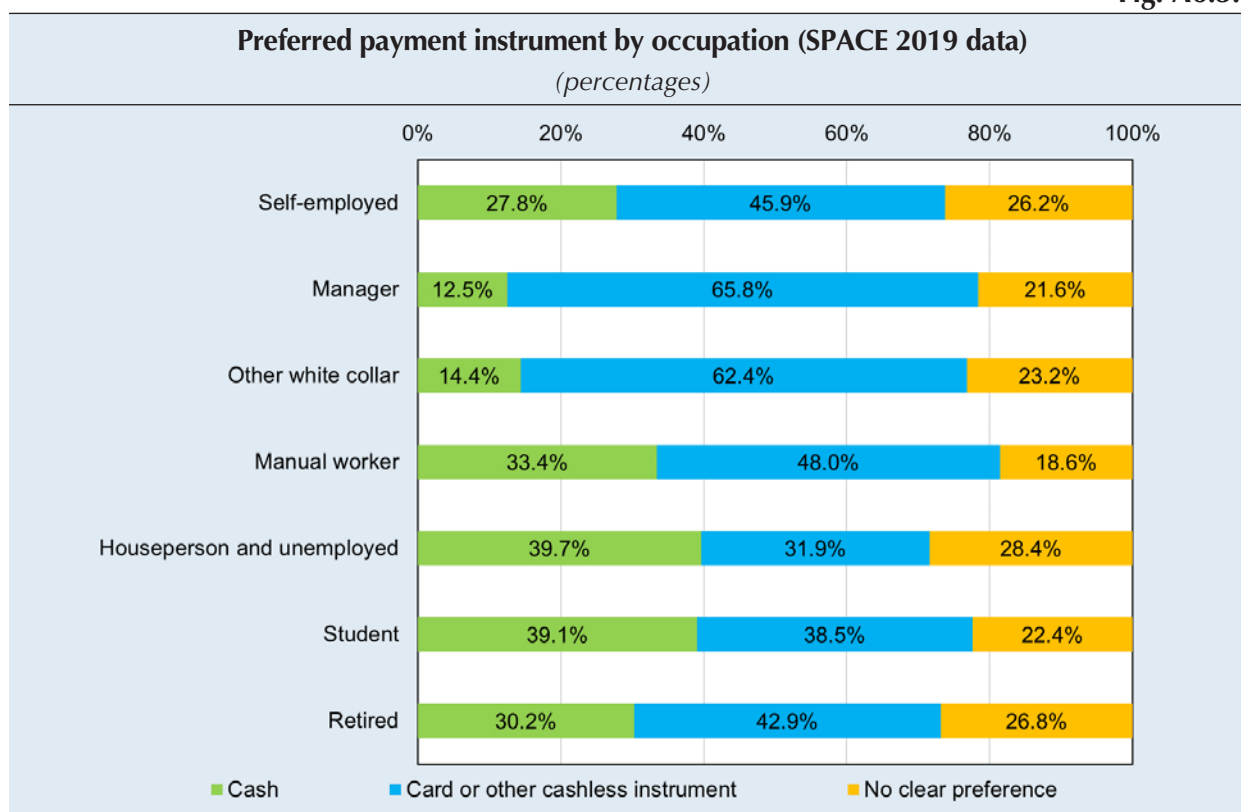
### A6.3. Socio-demographic characteristics

Fig. A6.3.1



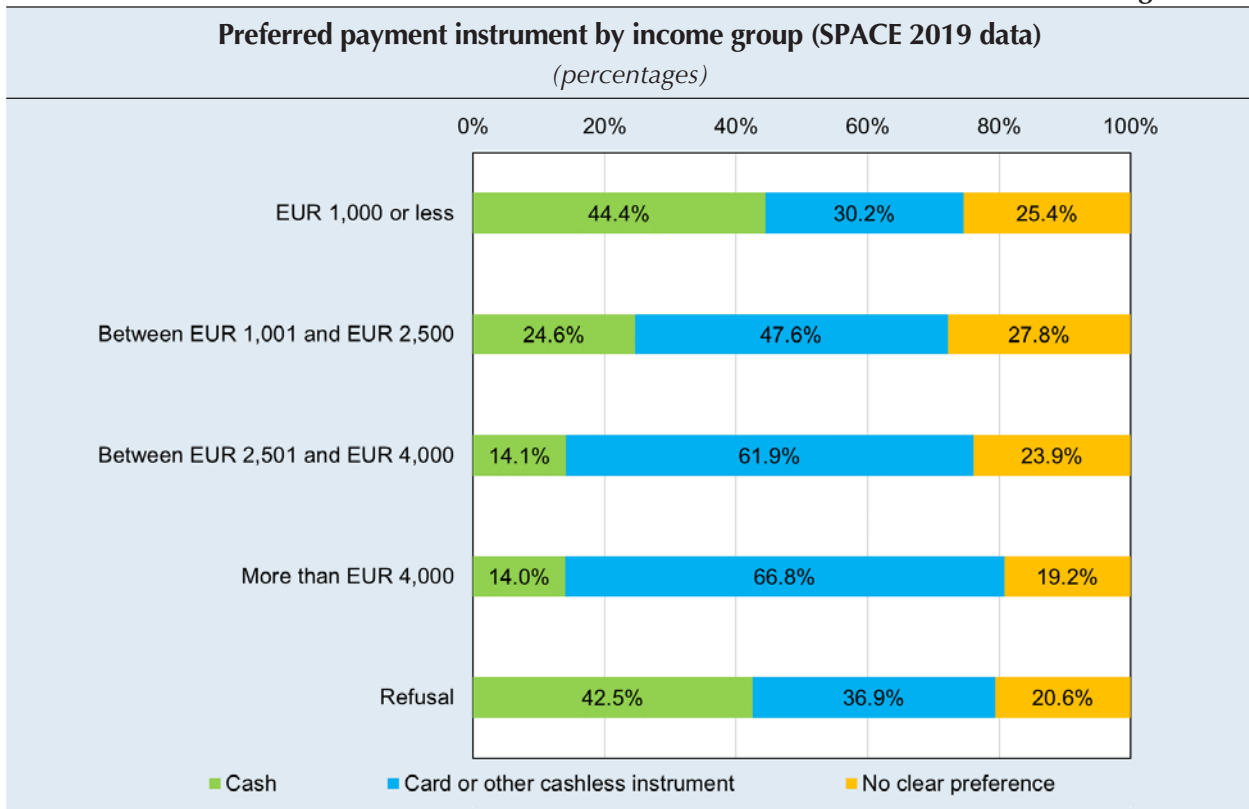
Source: authors' calculations based on ECB SPACE survey data (2019). Percentages may not add up to 100% due to rounding.

Fig. A6.3.2



Source: authors' calculations based on ECB SPACE survey data (2019). Percentages may not add up to 100% due to rounding.

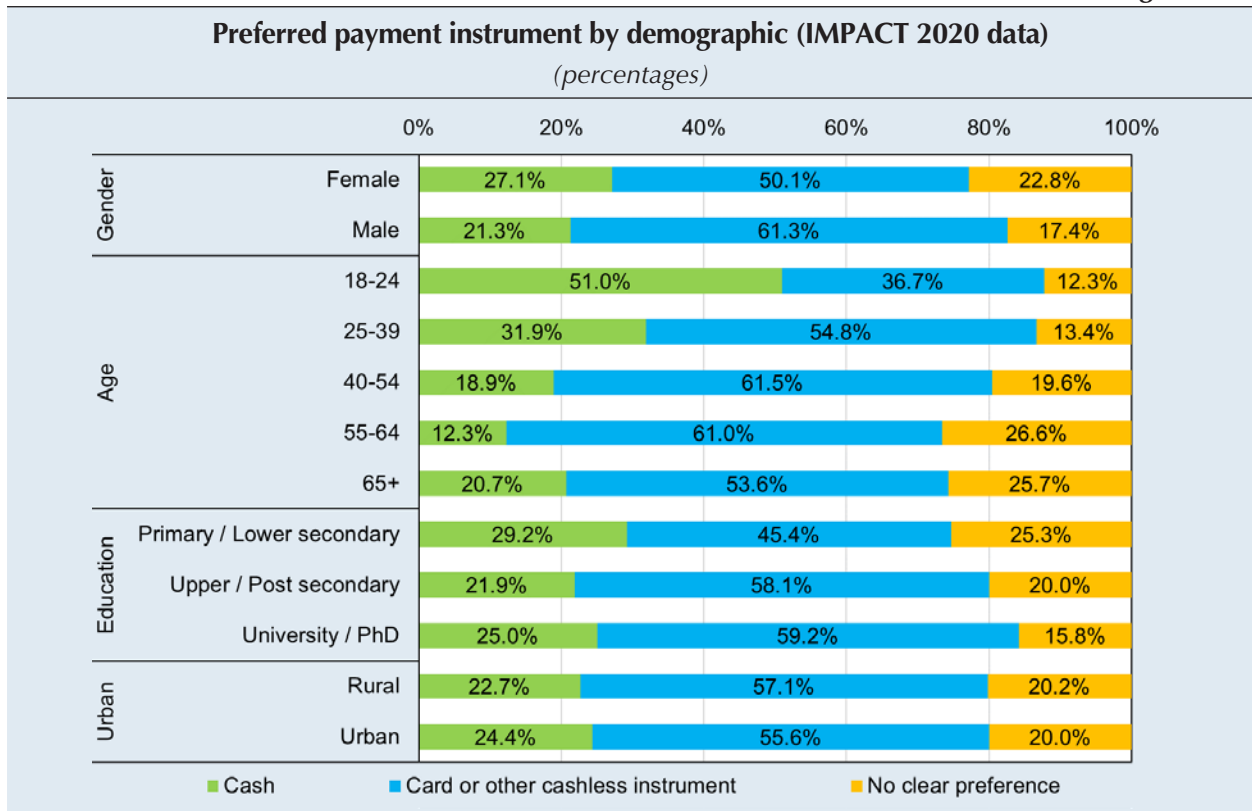
Fig. A6.3.3



Source: authors' calculations based on ECB SPACE survey data (2019). Percentages may not add up to 100% due to rounding.

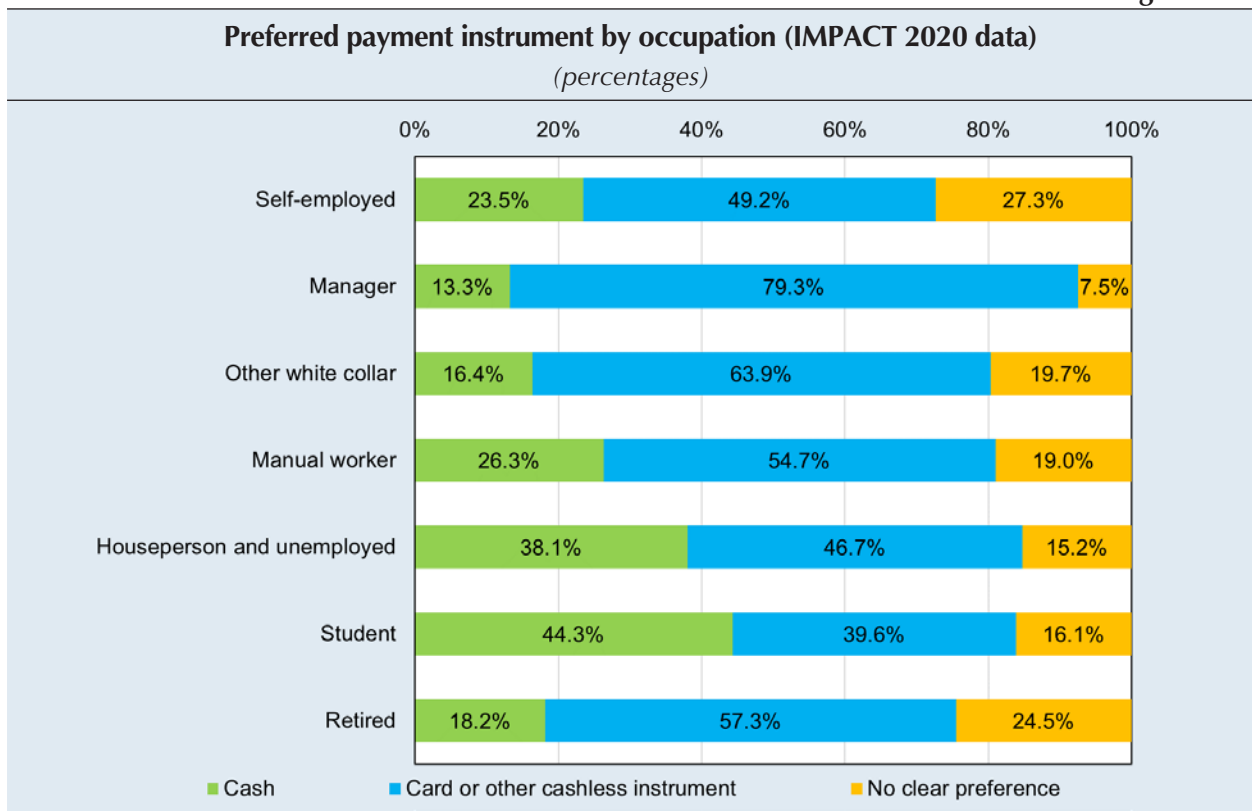
A6.4. The impact of the pandemic

Fig. A6.4.1



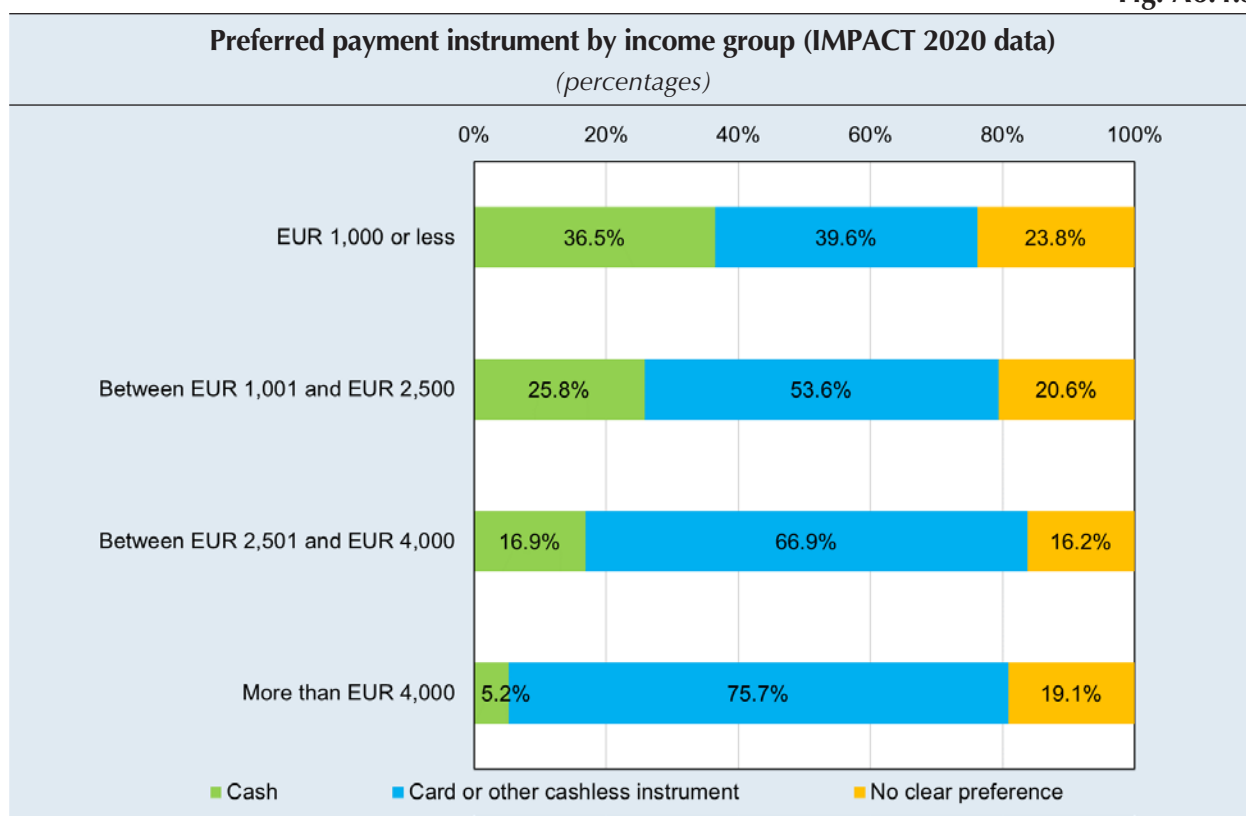
Source: authors' calculations based on ECB IMPACT survey data (2020). Percentages may not add up to 100% due to rounding.

Fig. A6.4.2



Source: authors' calculations based on ECB IMPACT survey data (2020). Percentages may not add up to 100% due to rounding.

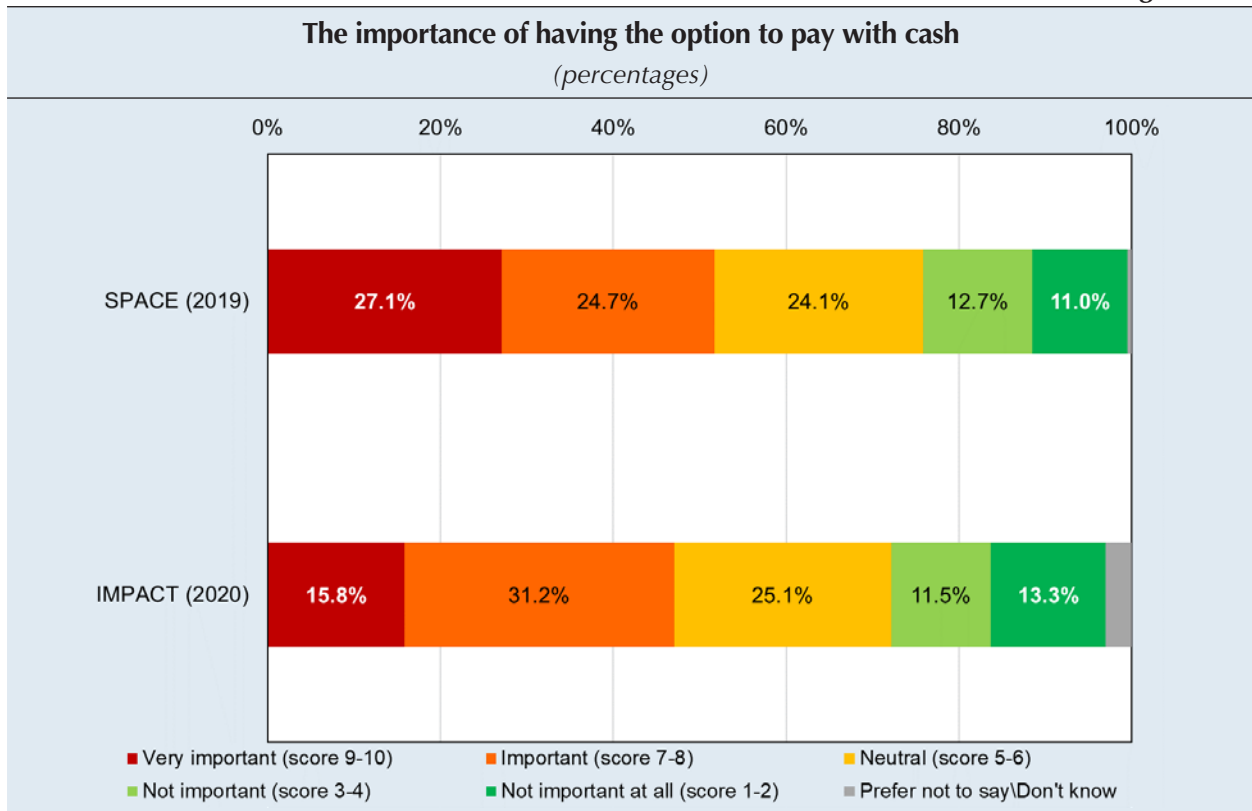
Fig. A6.4.3



Source: authors' calculations based on ECB IMPACT survey data (2020). Percentages may not add up to 100% due to rounding.

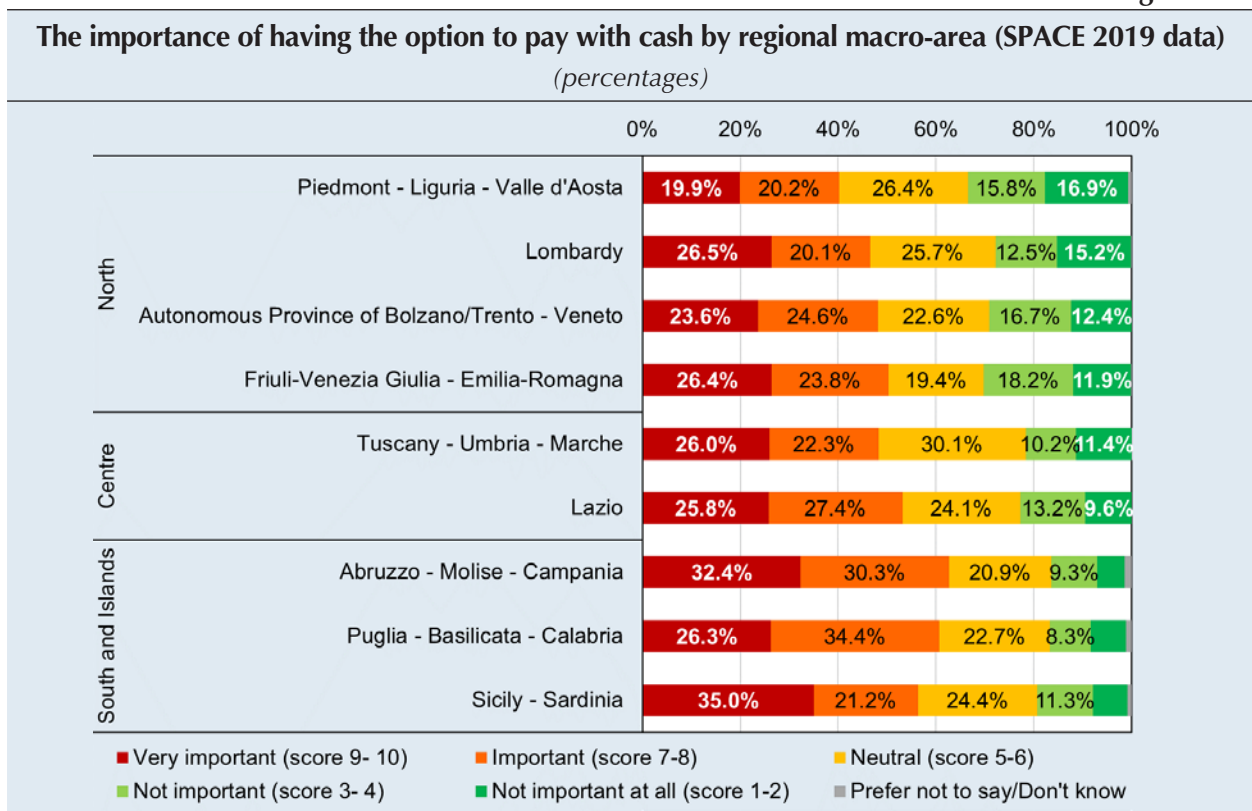
A6.5. Importance of cash

Fig. A6.5.1



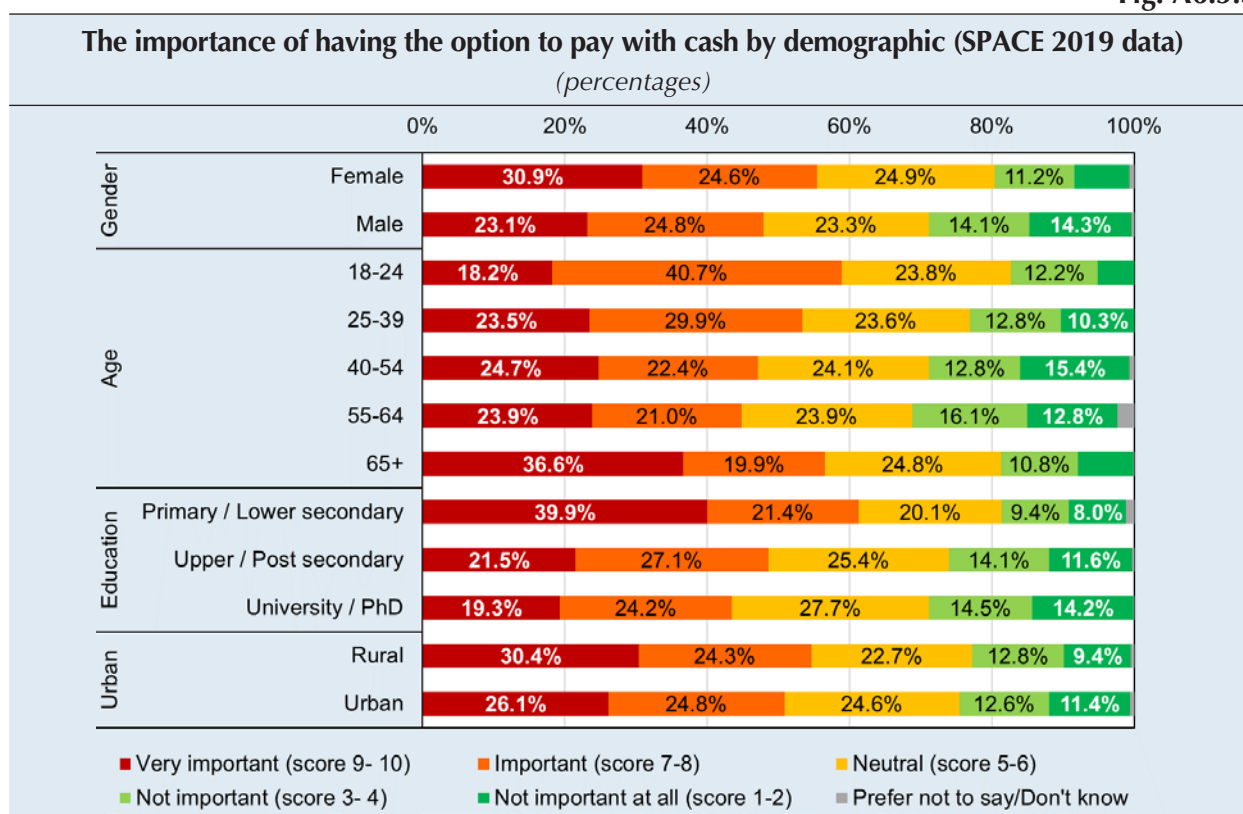
Source: authors' calculations based on ECB SPACE (2019) and IMPACT (2020) survey data.

Fig. A6.5.2



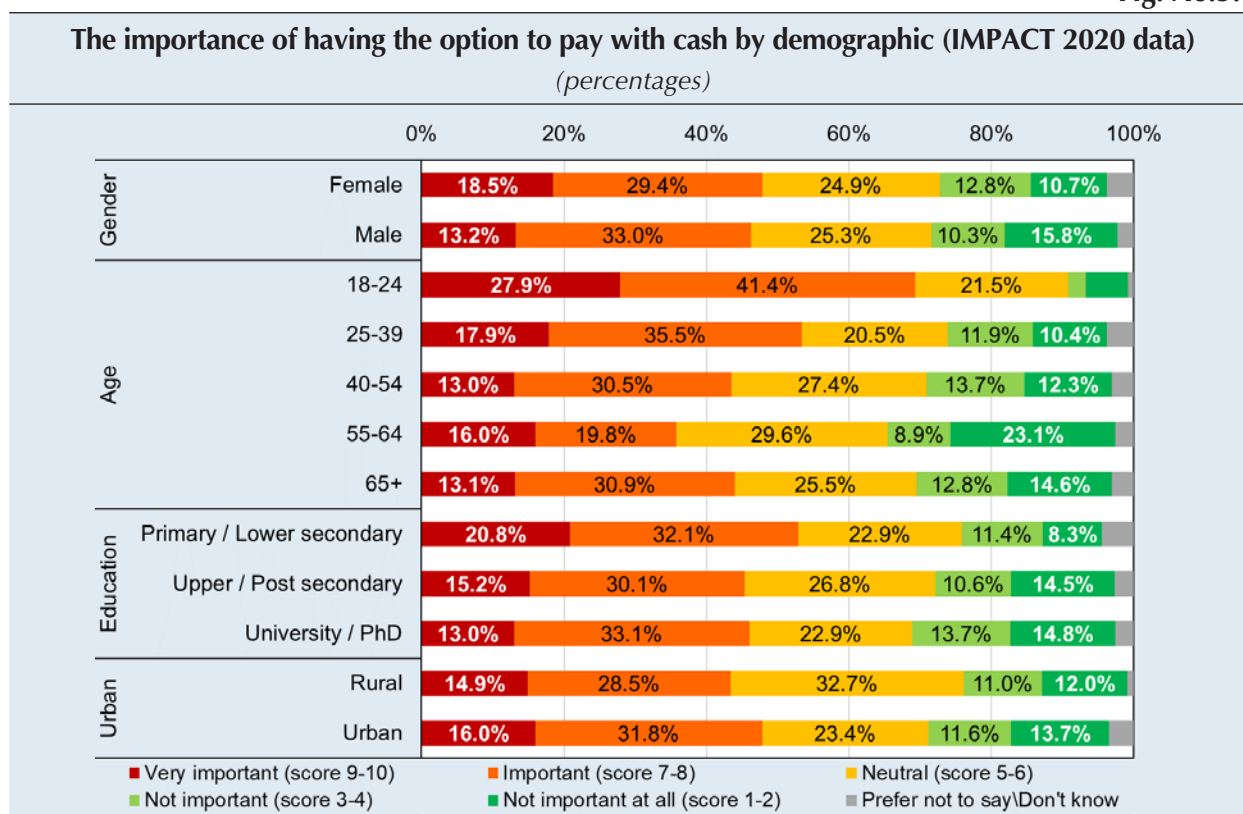
Source: authors' calculations based on ECB SPACE data (2019), since only SPACE data are available at regional level.

Fig. A6.5.3



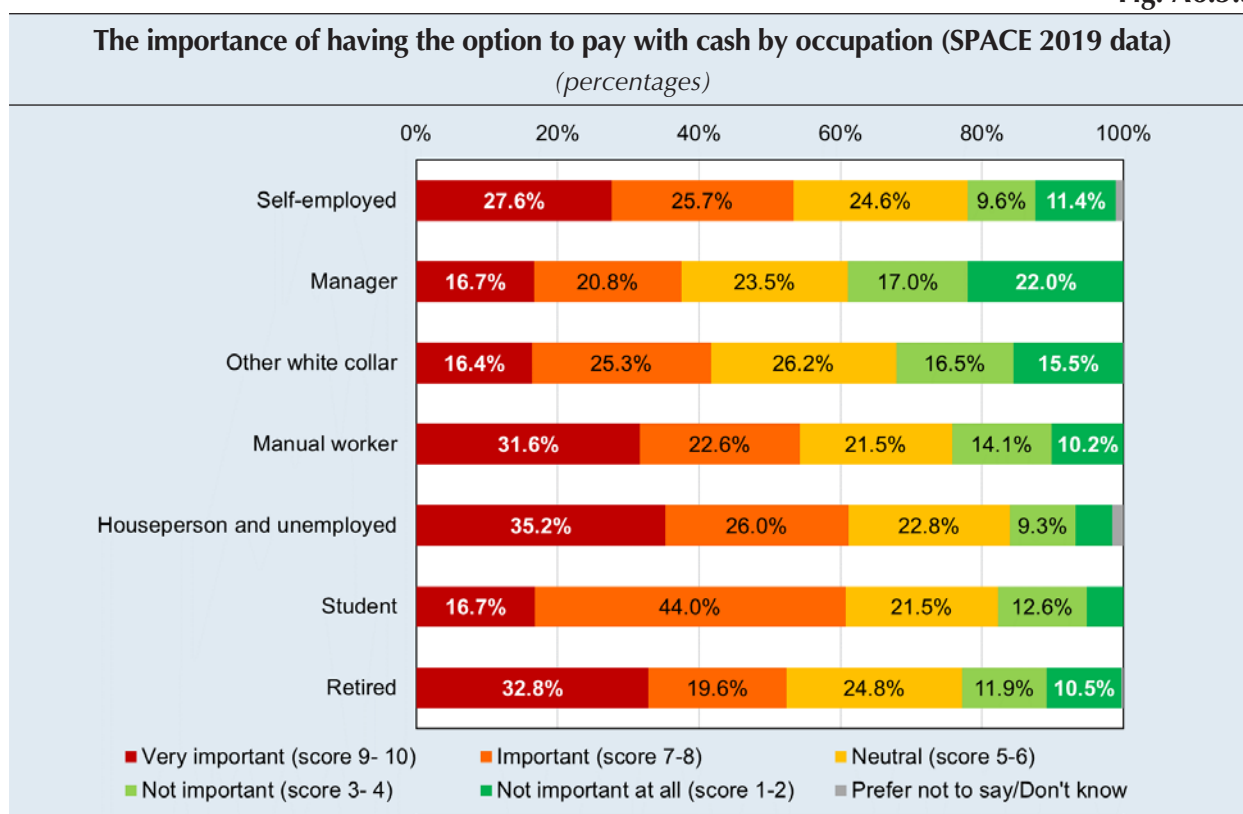
Source: authors' calculations based on ECB SPACE survey data (2019).

Fig. A6.5.4



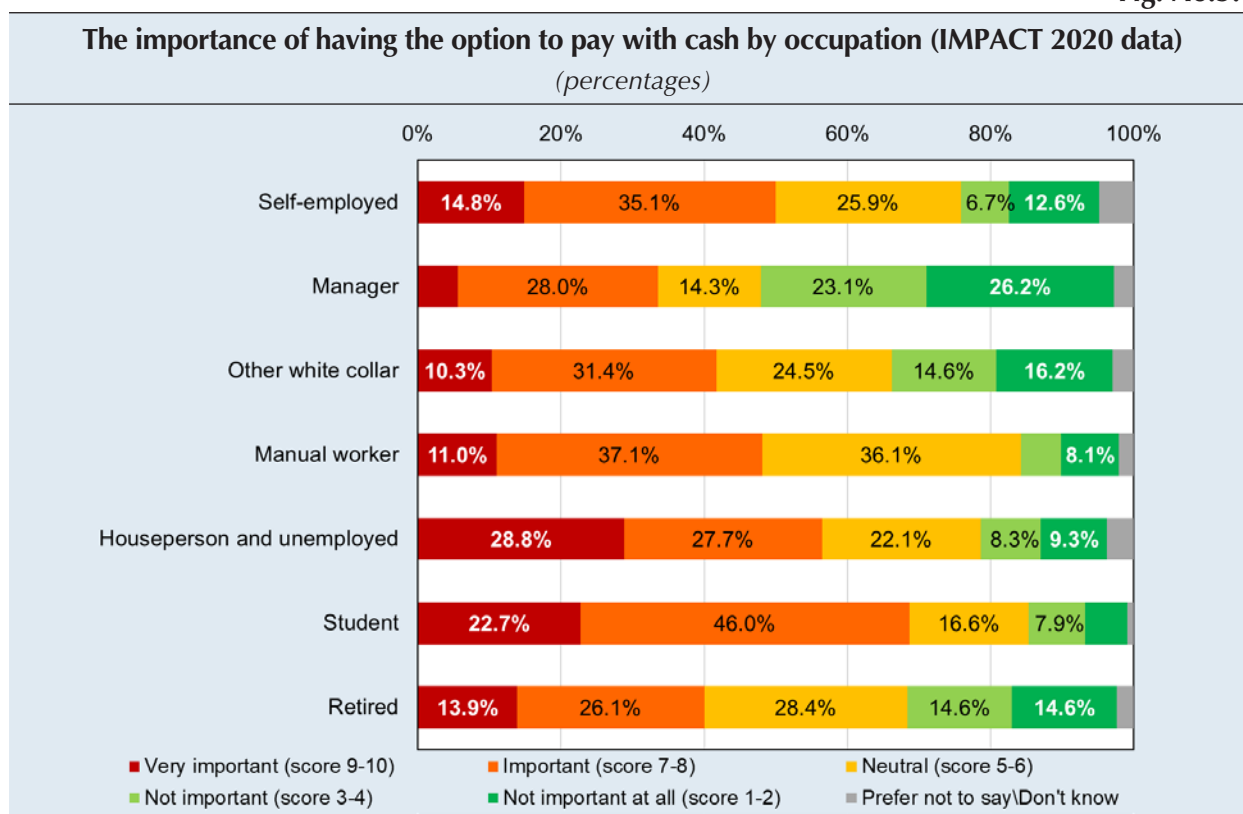
Source: authors' calculations based on ECB IMPACT survey data (2020).

Fig. A6.5.5



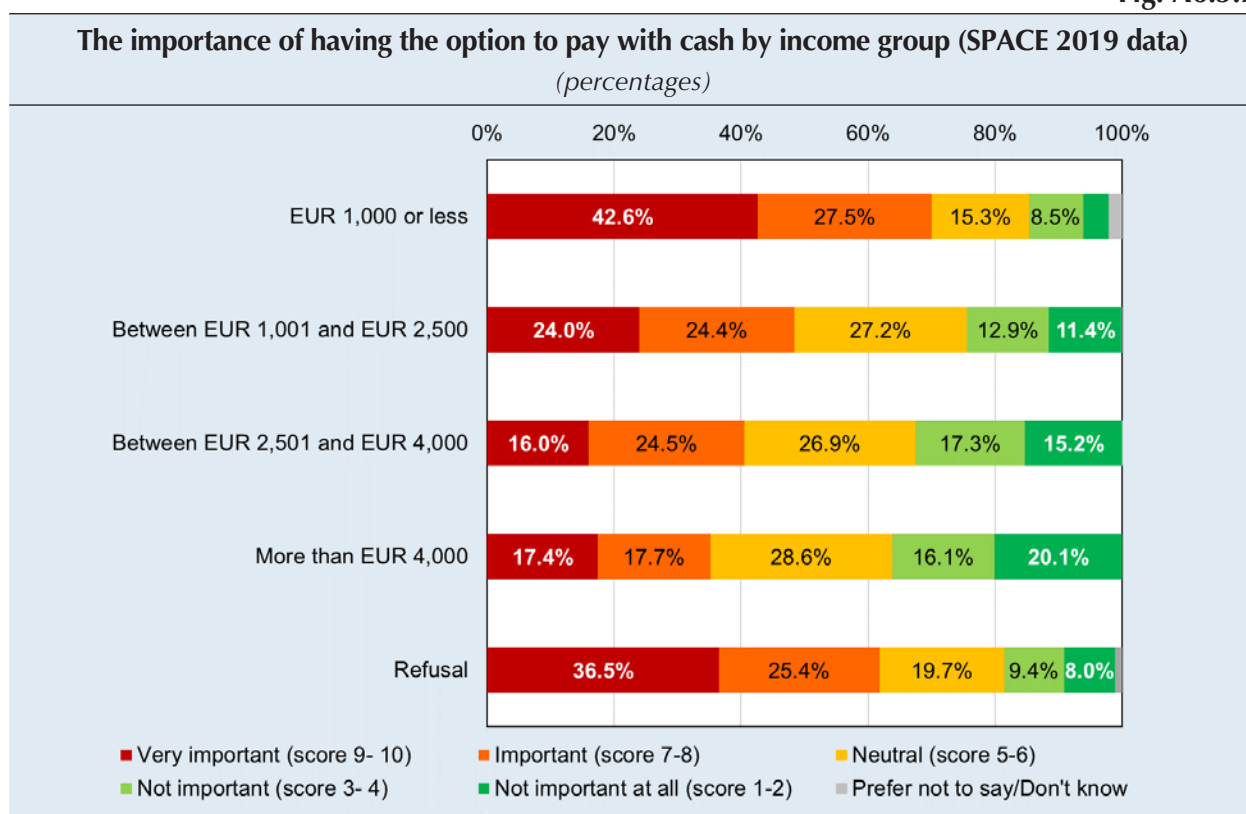
Source: authors' calculations based on ECB SPACE survey data (2019).

Fig. A6.5.6



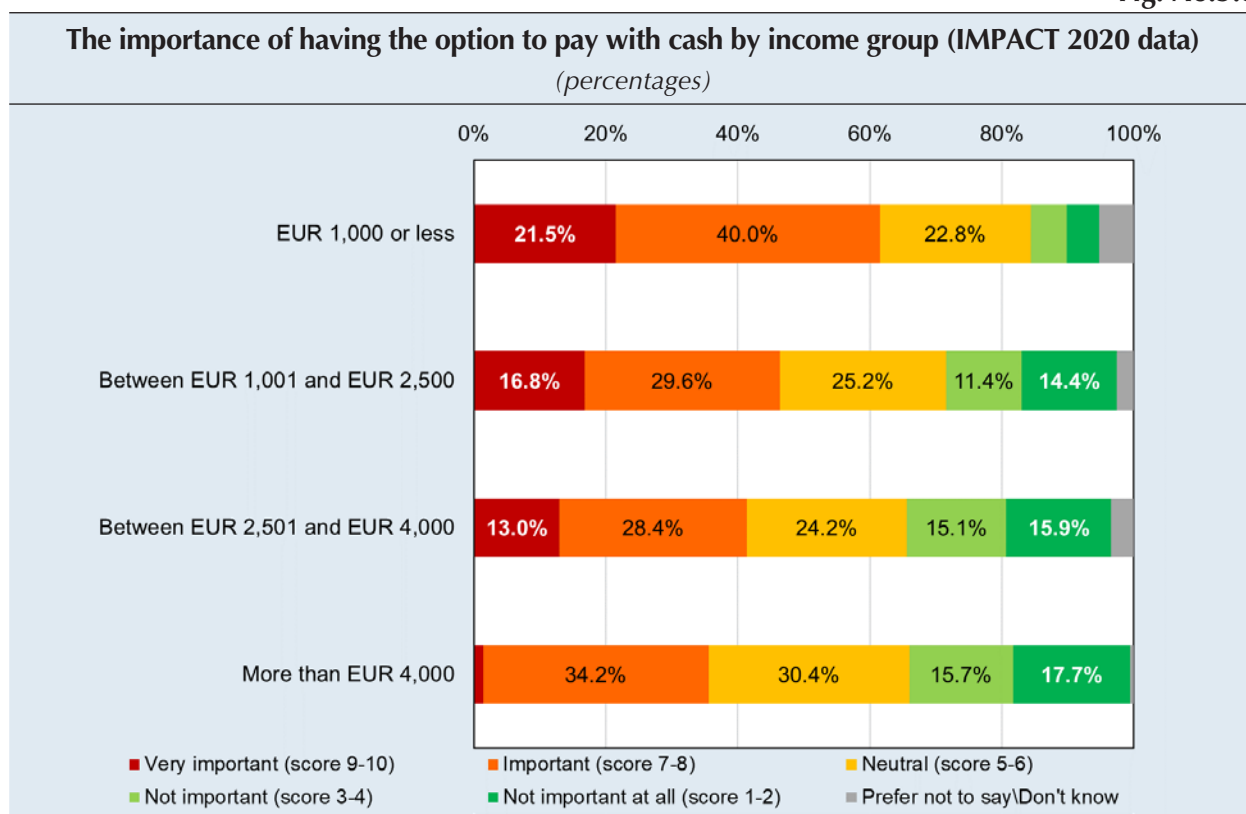
Source: authors' calculations based on ECB IMPACT survey data (2020).

Fig. A6.5.7



Source: authors' calculations based on ECB SPACE survey data (2019).

Fig. A6.5.8



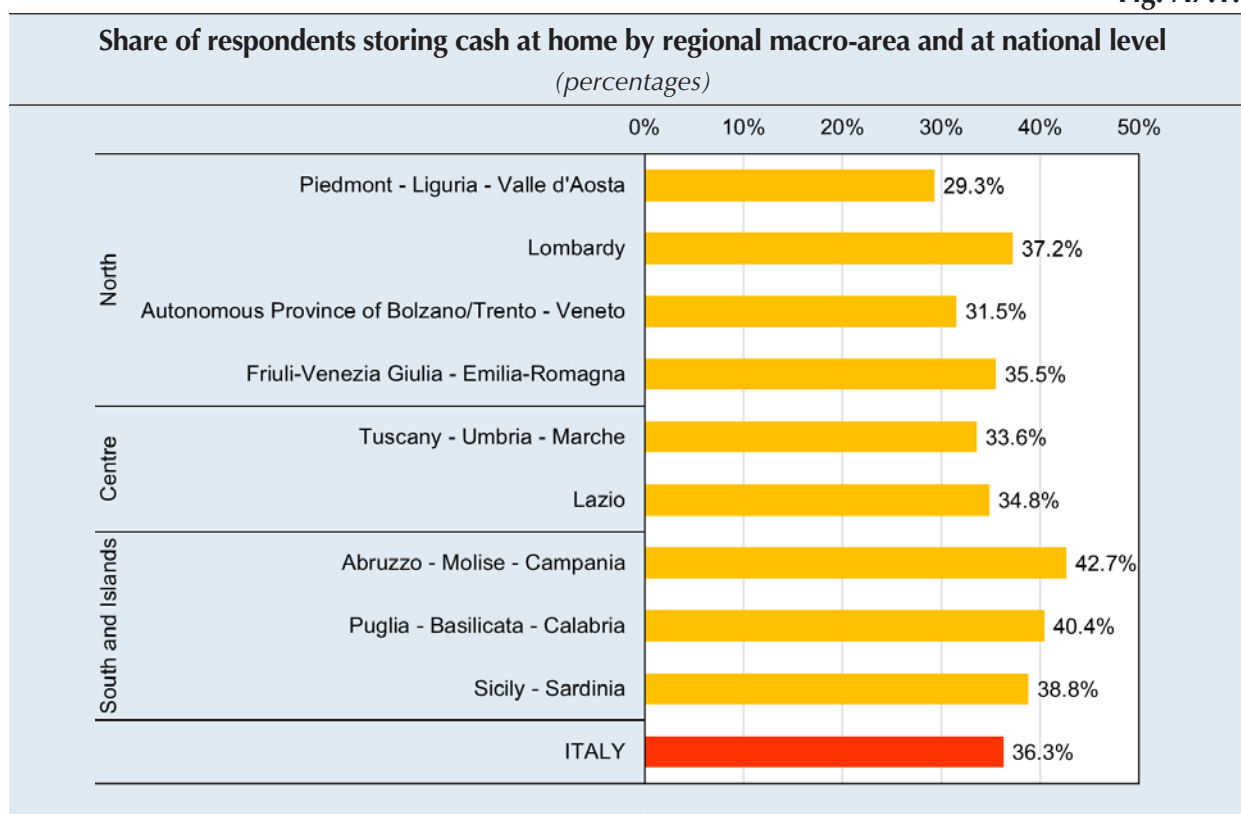
Source: authors' calculations based on ECB IMPACT survey data (2020).



## A7. Use of cash as a store of value in Italy

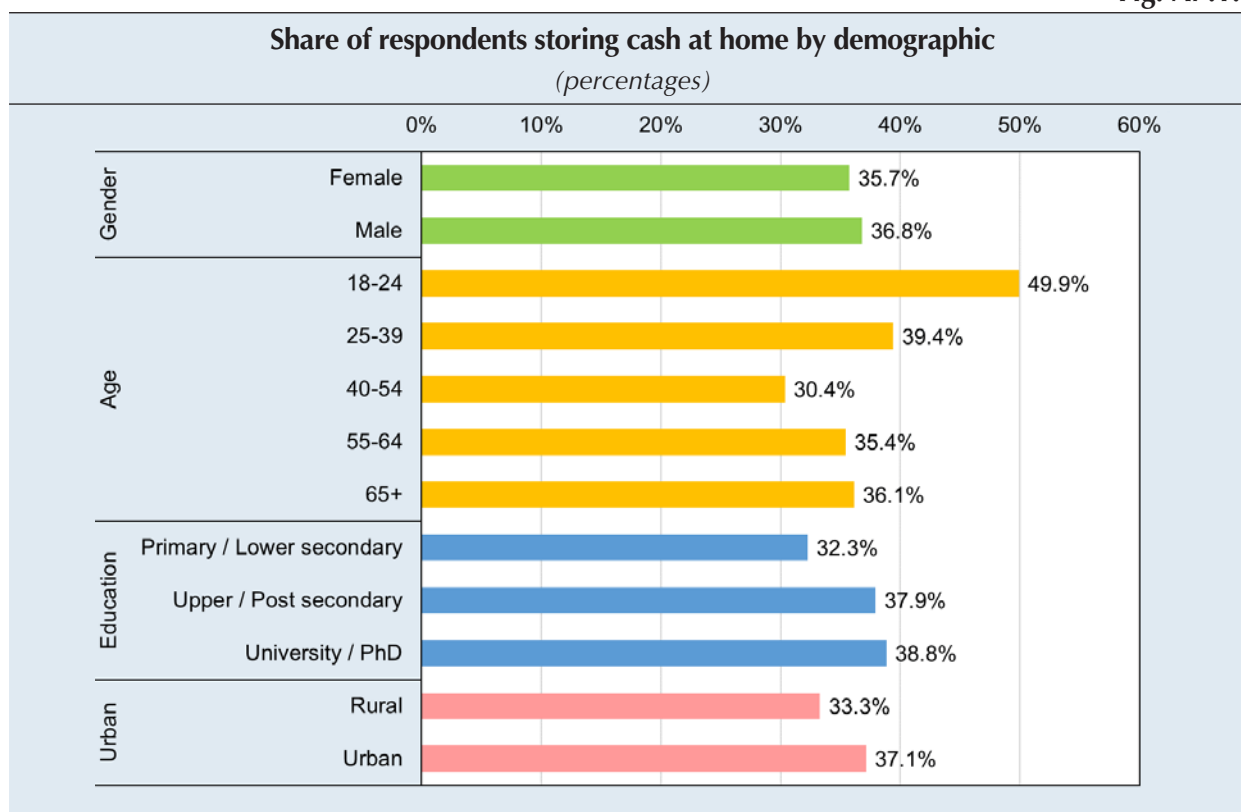
### A7.1. Cash as a store of value

Fig. A7.1.1



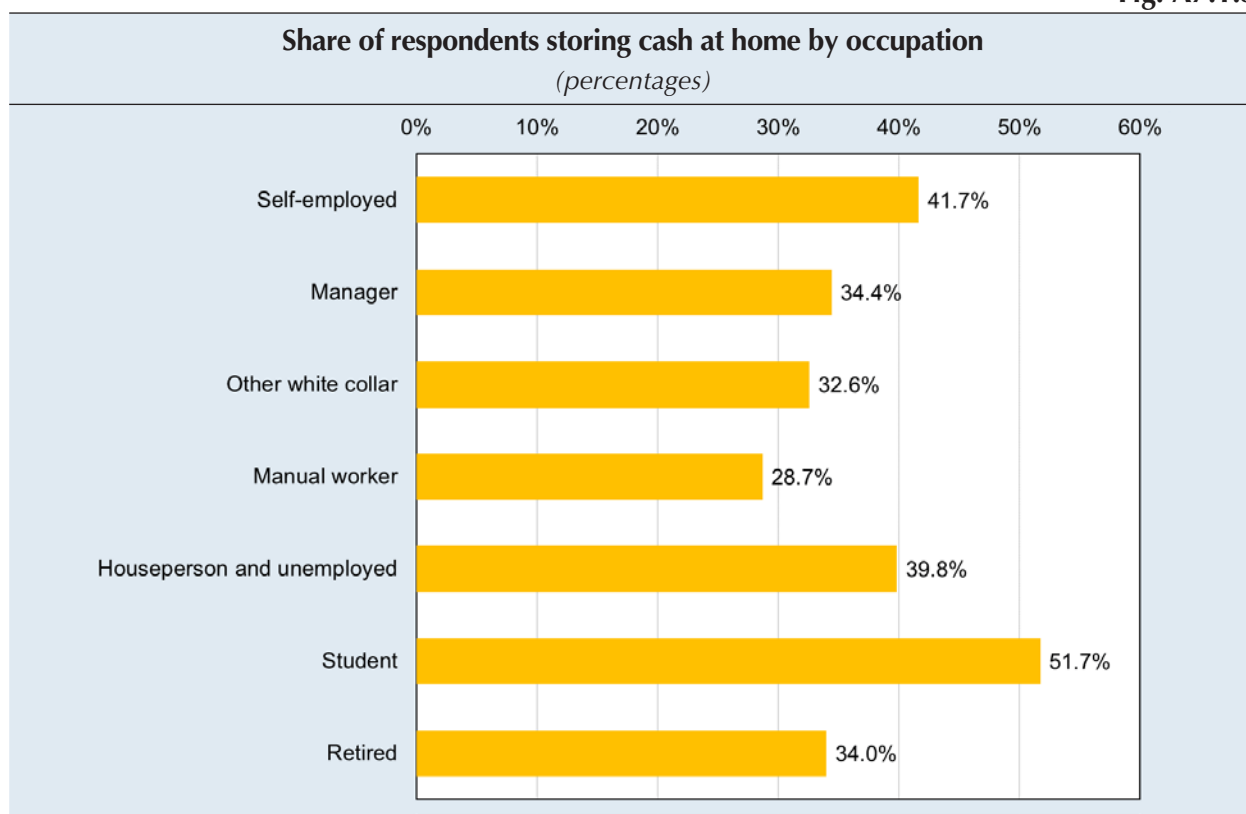
Source: authors' calculations based on ECB SPACE survey data (2019).

Fig. A7.1.2



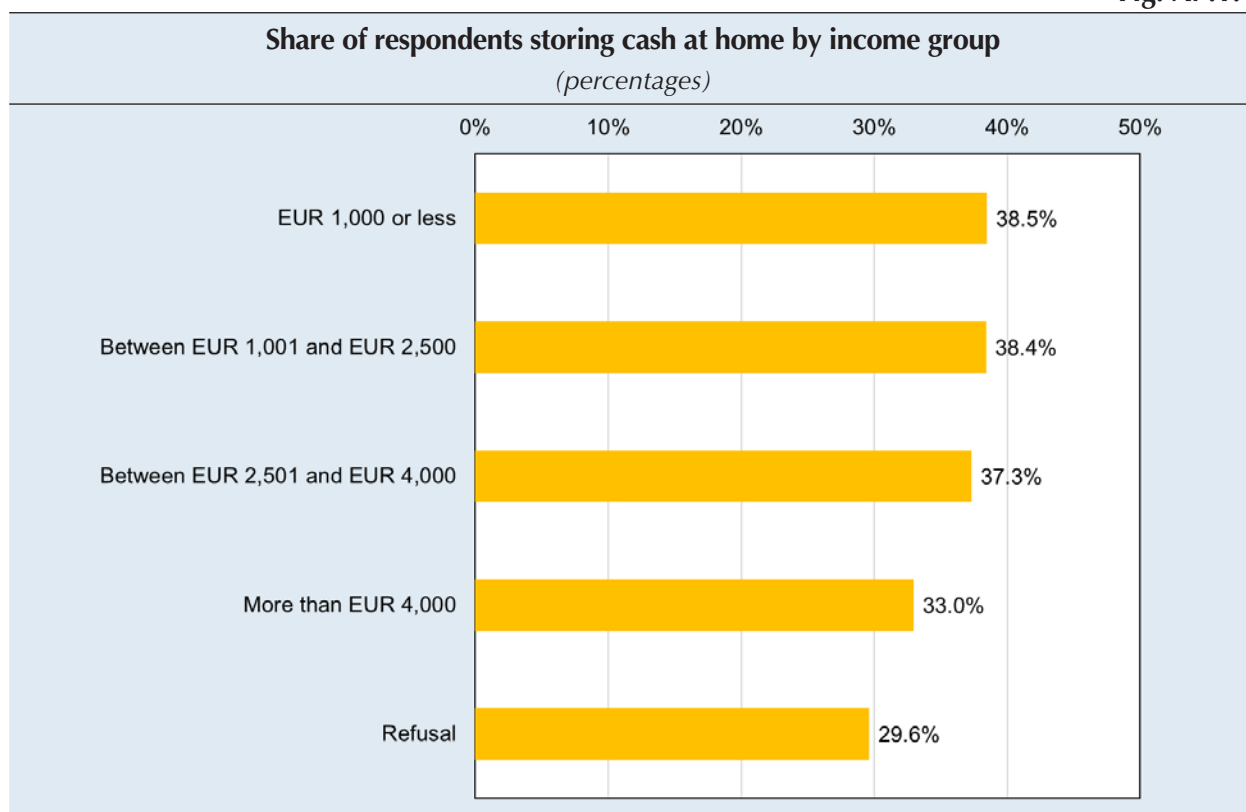
Source: authors' calculations based on ECB SPACE survey data (2019).

Fig. A7.1.3



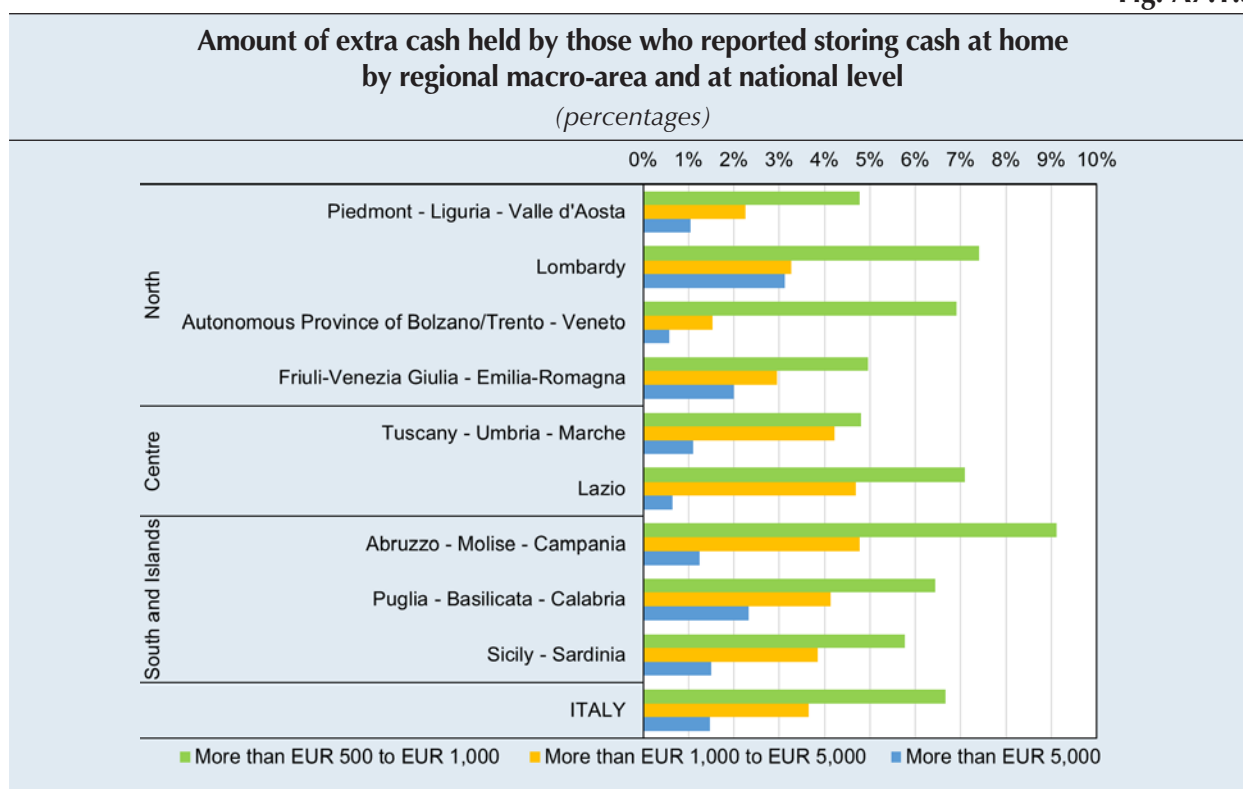
Source: authors' calculations based on ECB SPACE survey data (2019).

Fig. A7.1.4



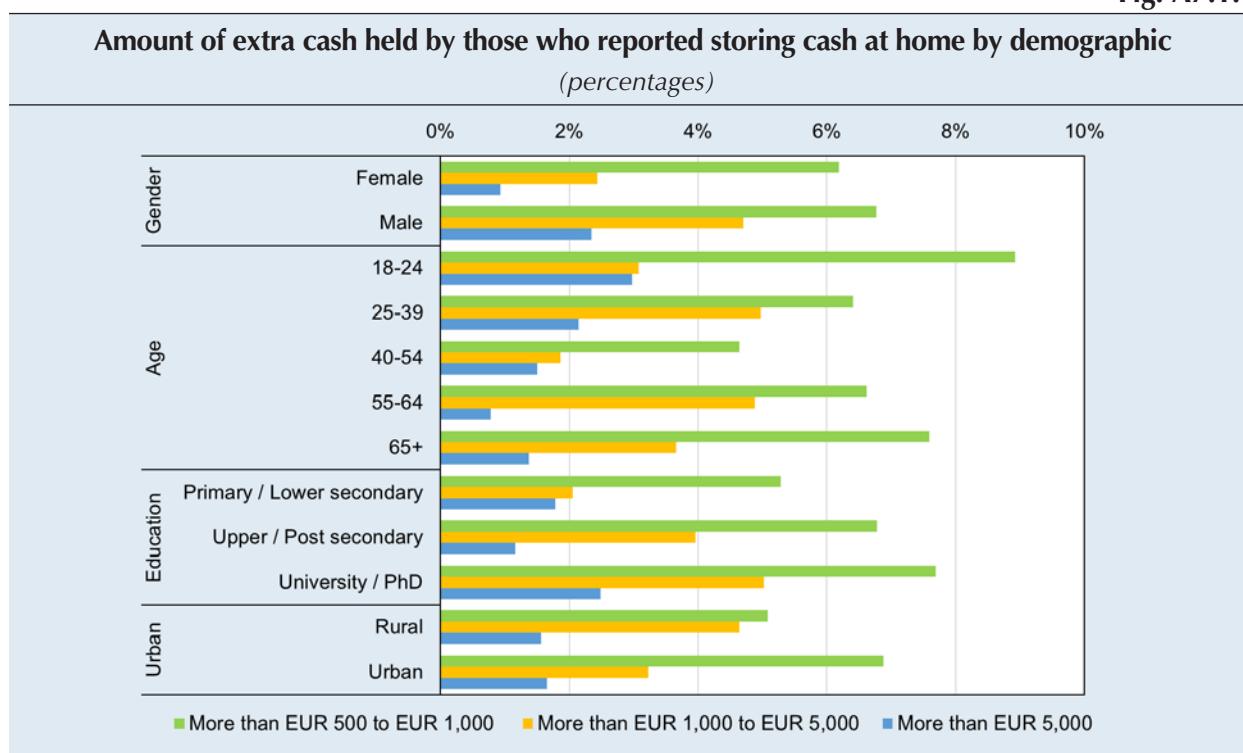
Source: authors' calculations based on ECB SPACE survey data (2019).

Fig. A7.1.5



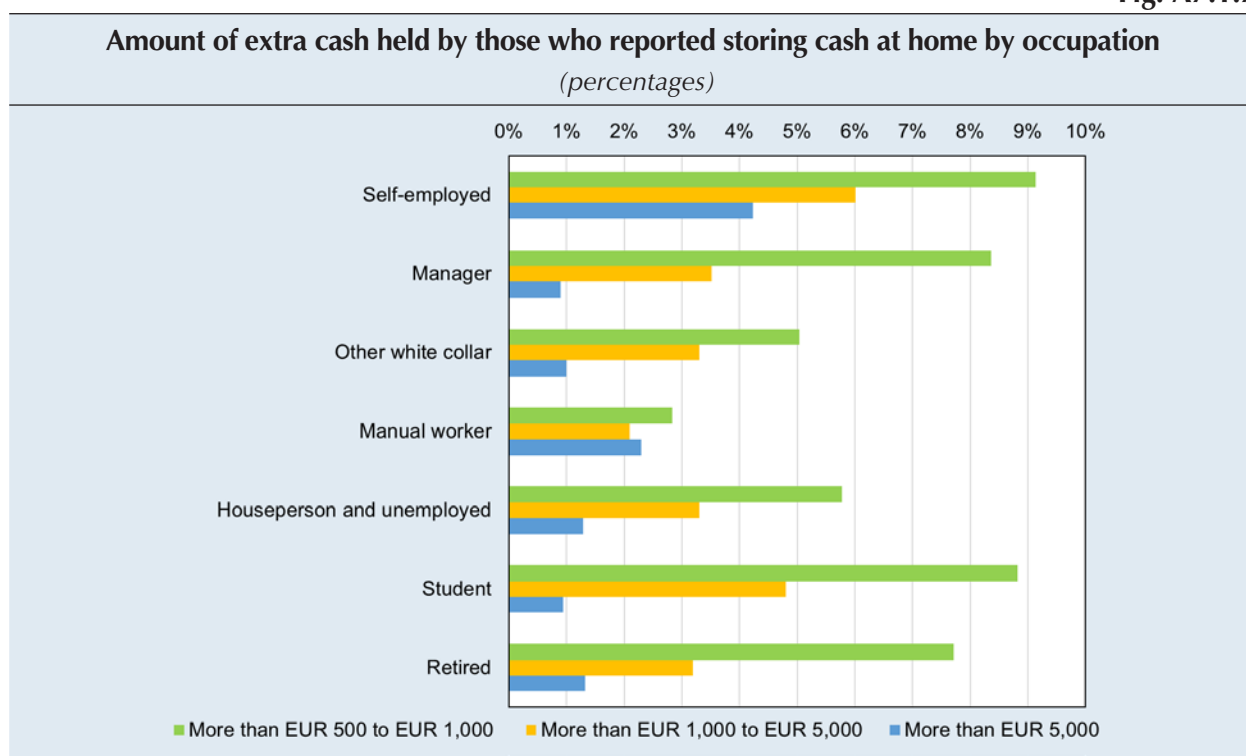
Source: authors' calculations based on ECB SPACE survey data (2019).  
Note: the category "Less than EUR 500" is not shown in the graph, as it would be out of scale.

Fig. A7.1.6



Source: authors' calculations based on ECB SPACE survey data (2019).  
Note: the category "Less than EUR 500" is not shown in the graph, as it would be out of scale.

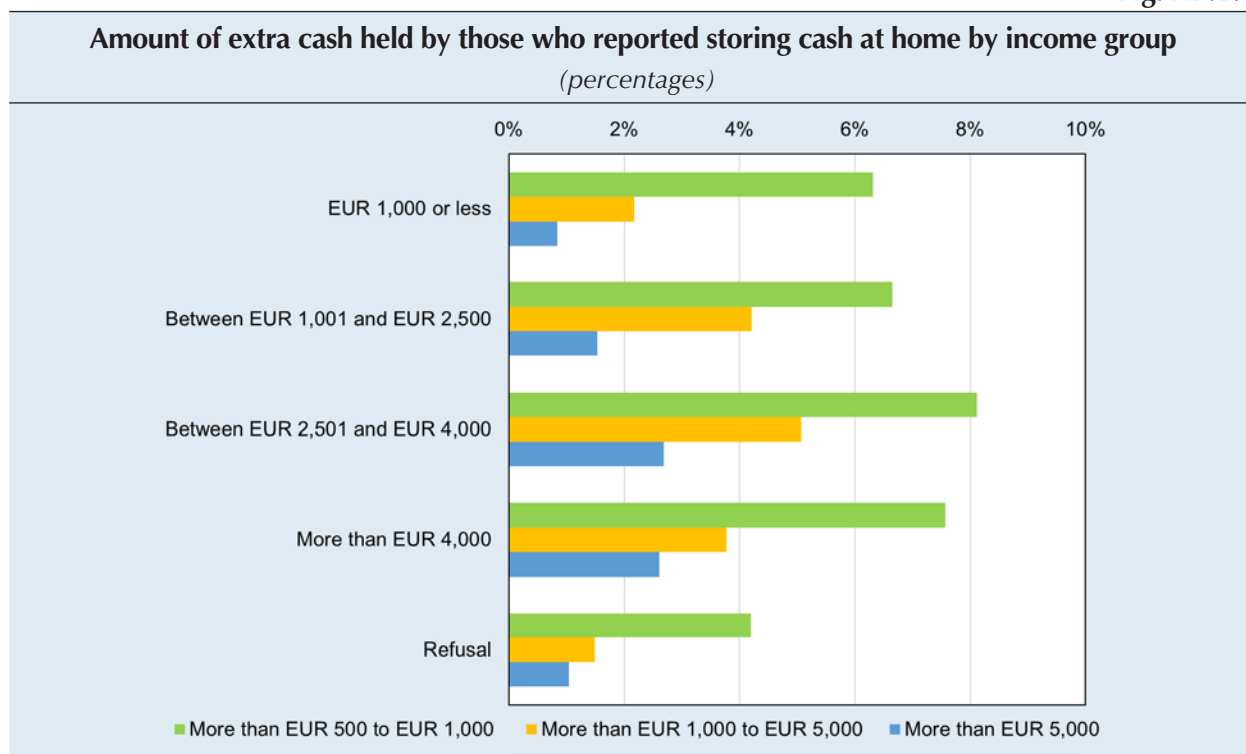
Fig. A7.1.7



Source: authors' calculations based on ECB SPACE survey data (2019).

Note: the category "Less than EUR 500" is not shown in the graph, as it would be out of scale.

Fig. A7.1.8

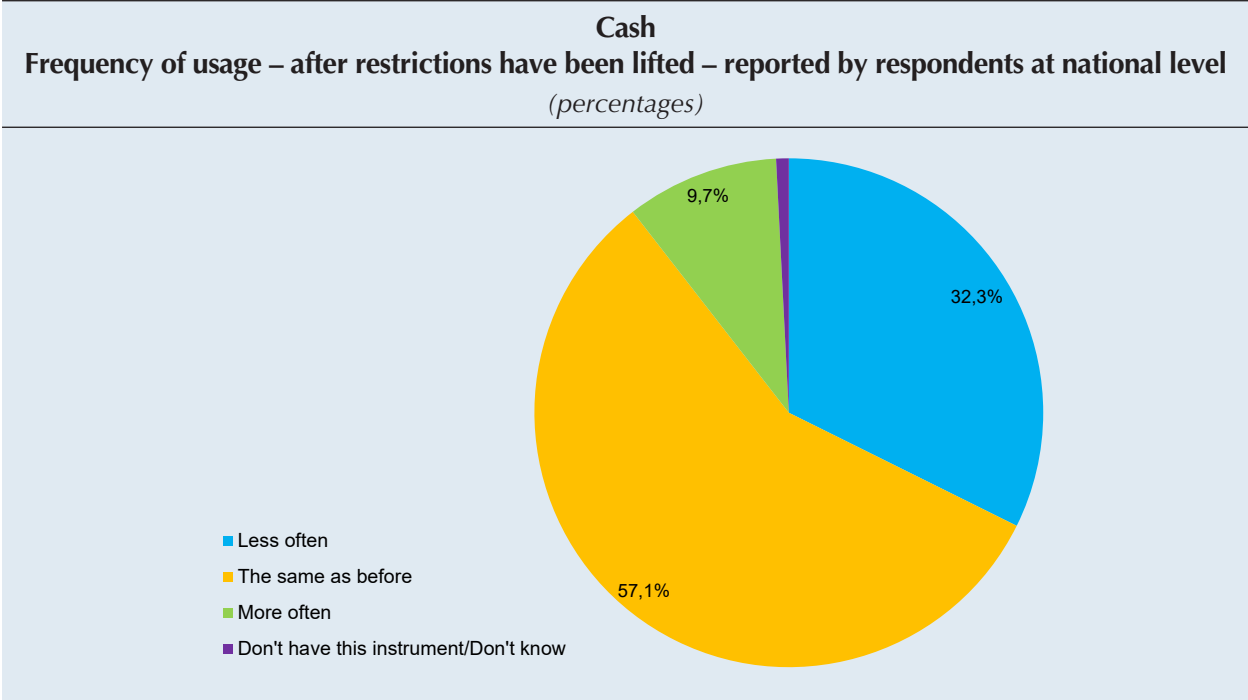


Source: authors' calculations based on ECB SPACE survey data (2019).

Note: the category "Less than EUR 500" is not shown in the graph, as it would be out of scale.

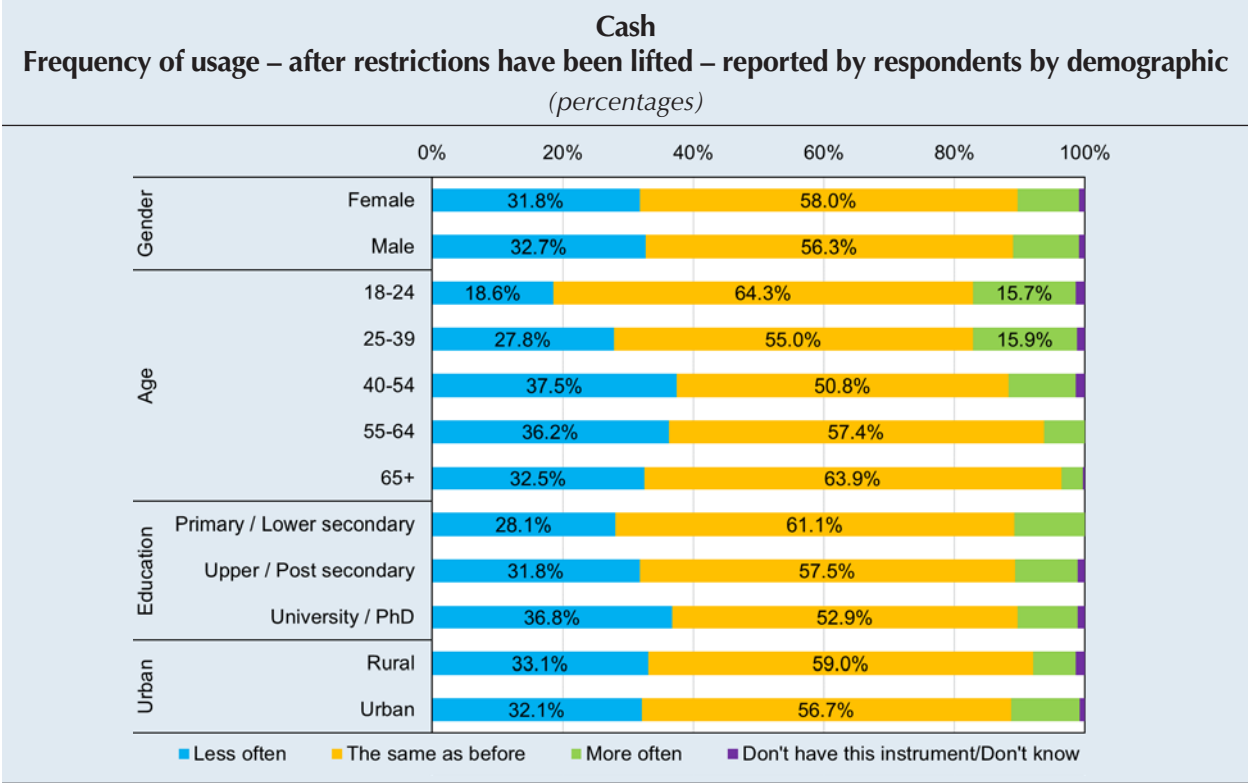
A8. Use of payment instruments in Italy – IMPACT survey

Fig. A8.1



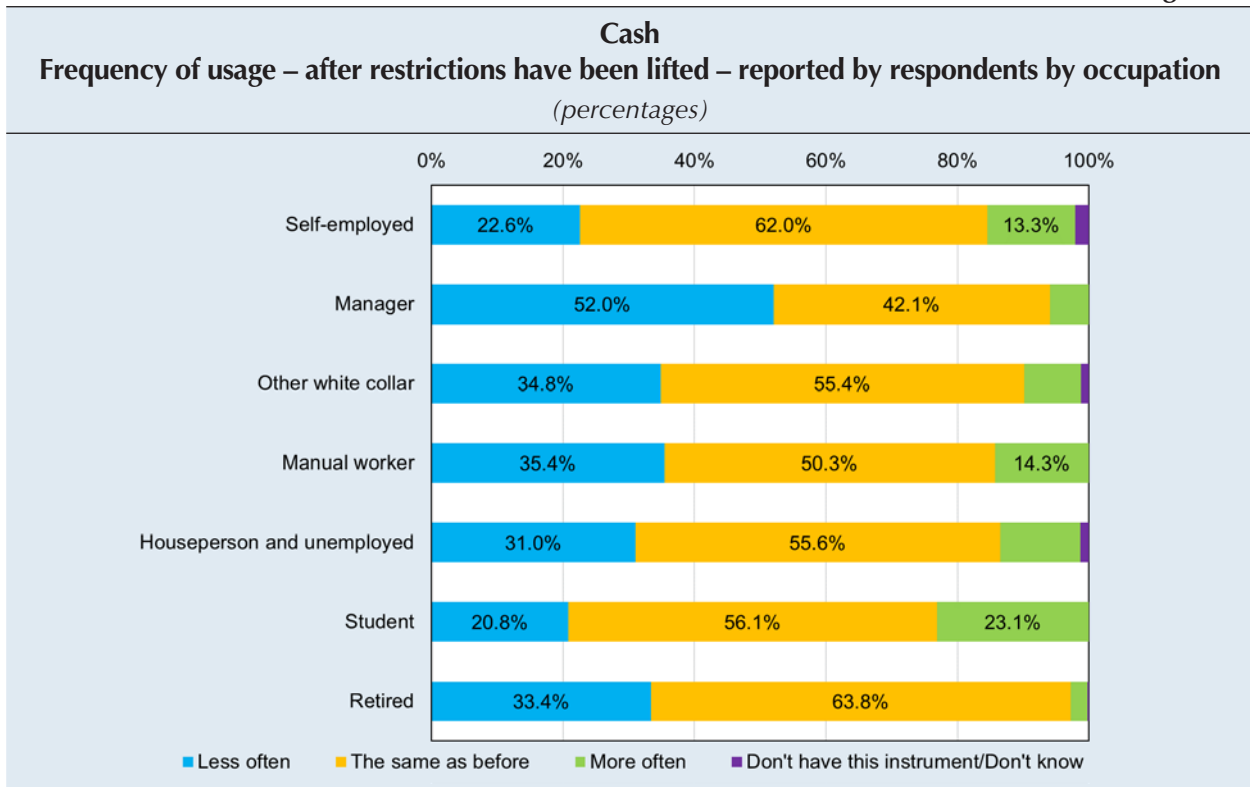
Source: authors' calculations based on ECB IMPACT survey data (2020).

Fig. A8.2



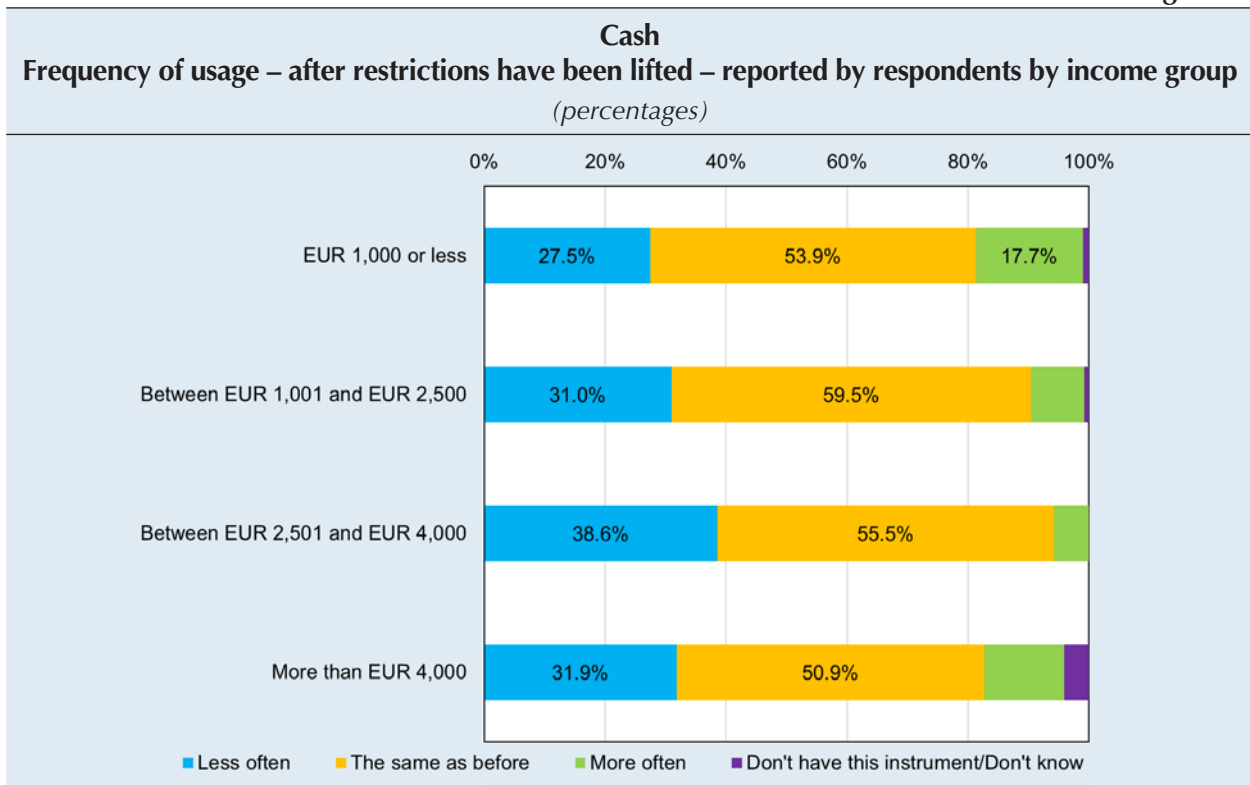
Source: authors' calculations based on ECB IMPACT survey data (2020).

Fig. A8.3



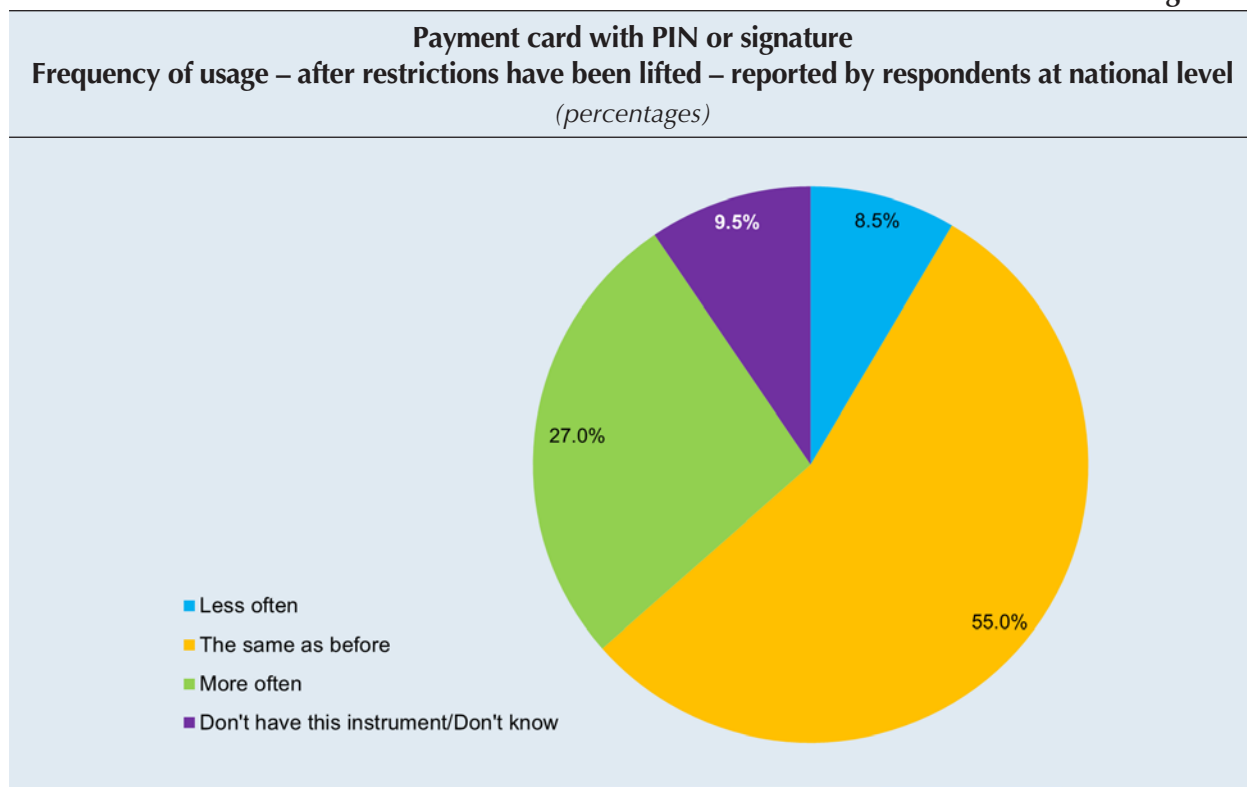
Source: authors' calculations based on ECB IMPACT survey data (2020).

Fig. A8.4



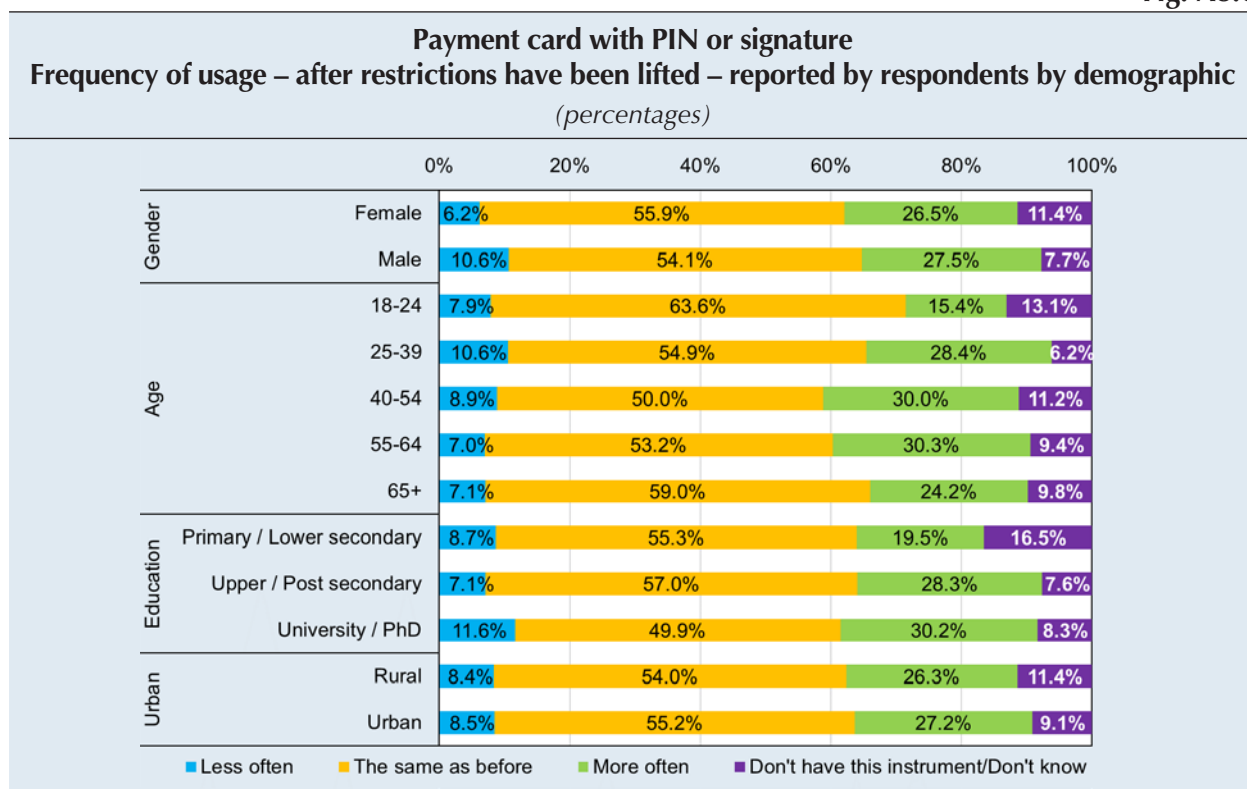
Source: authors' calculations based on ECB IMPACT survey data (2020).

Fig. A8.5



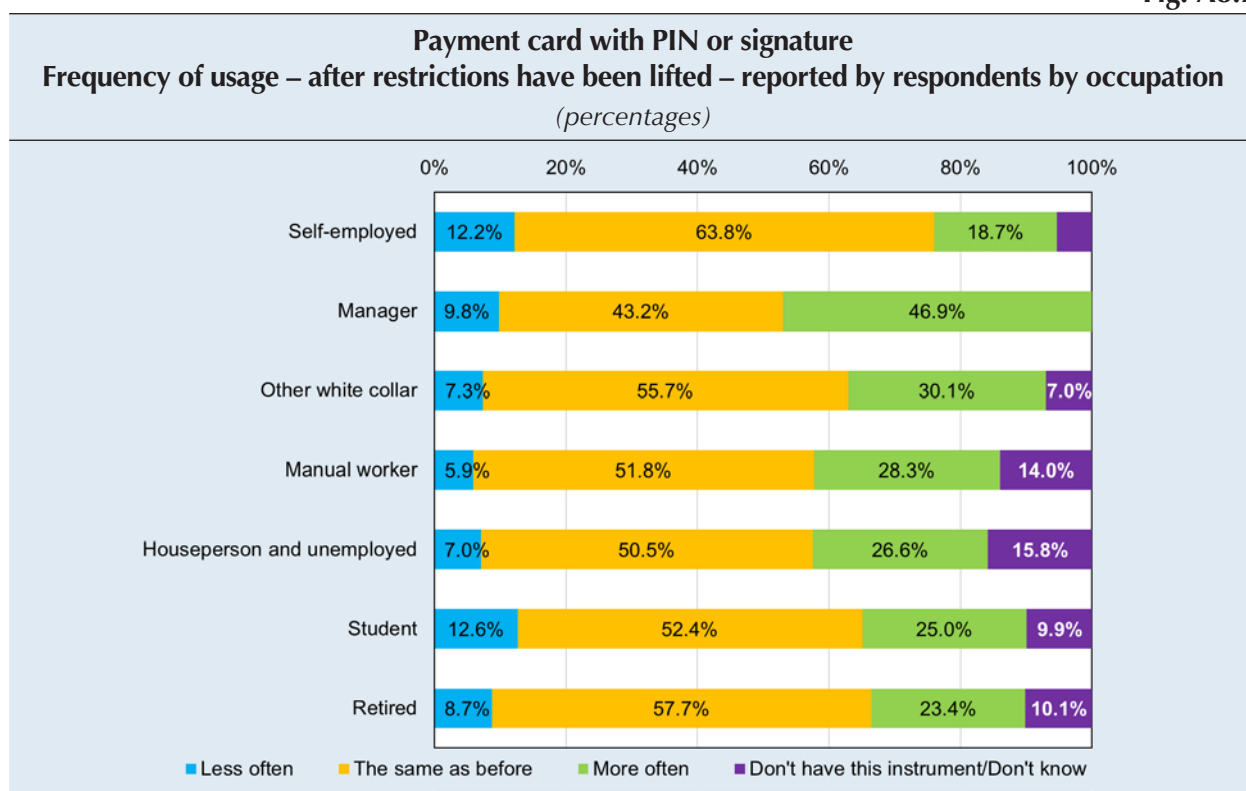
Source: authors' calculations based on ECB IMPACT survey data (2020).

Fig. A8.6



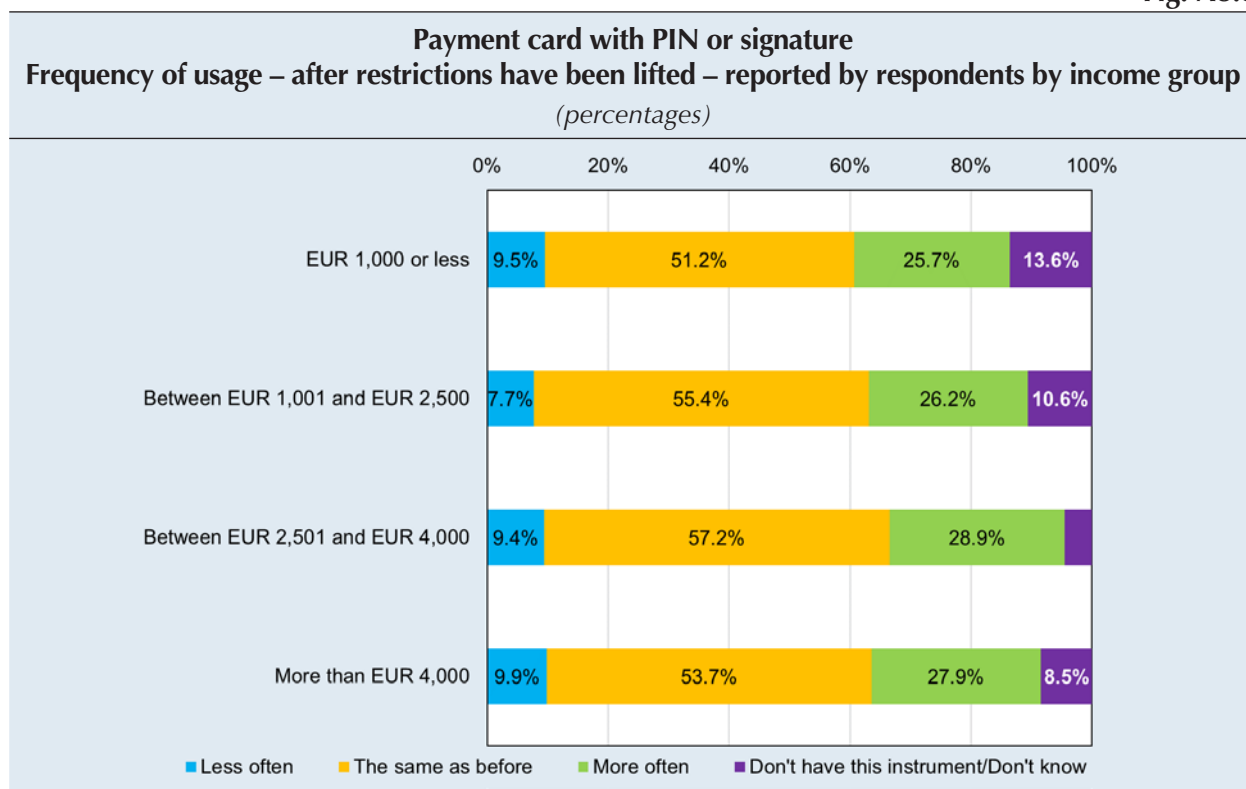
Source: authors' calculations based on ECB IMPACT survey data (2020). Percentages may not add up to 100% due to rounding.

Fig. A8.7



Source: authors' calculations based on ECB IMPACT survey data (2020). Percentages may not add up to 100% due to rounding.

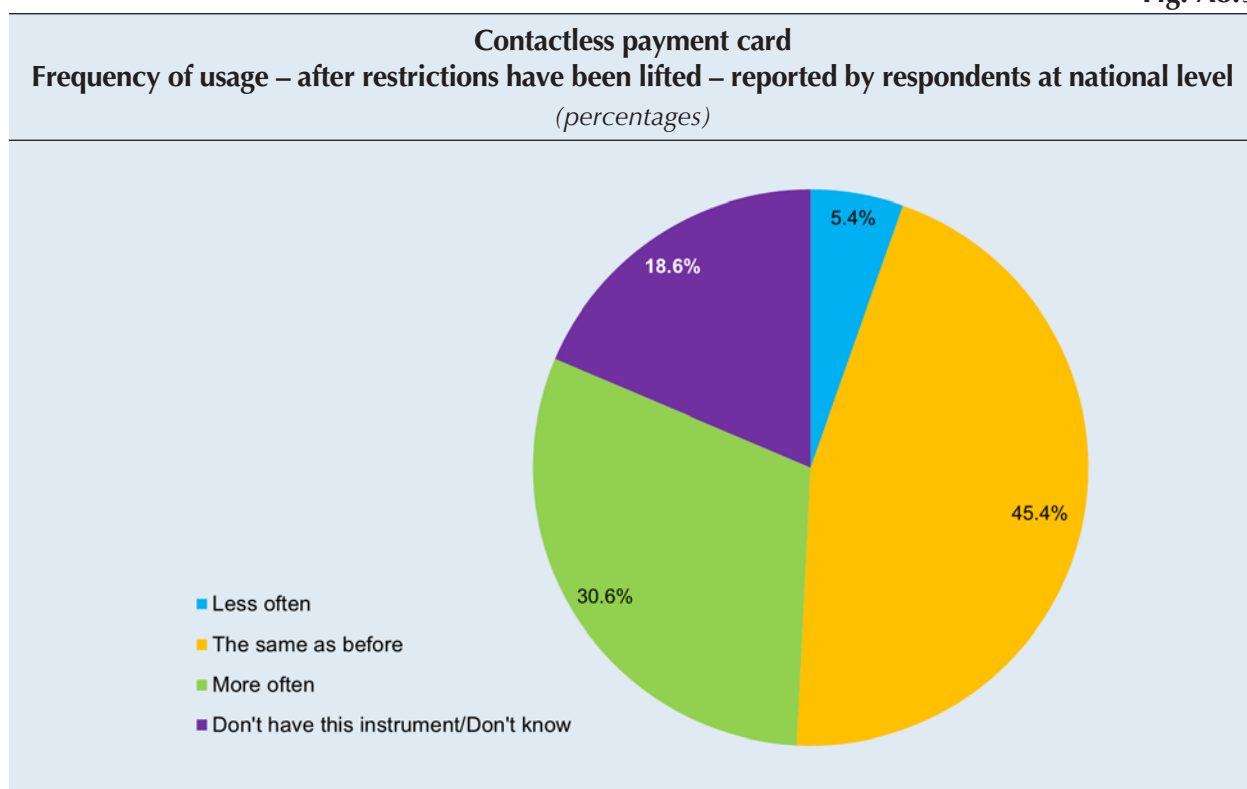
Fig. A8.8



Source: authors' calculations based on ECB IMPACT survey data (2020). Percentages may not add up to 100% due to rounding.

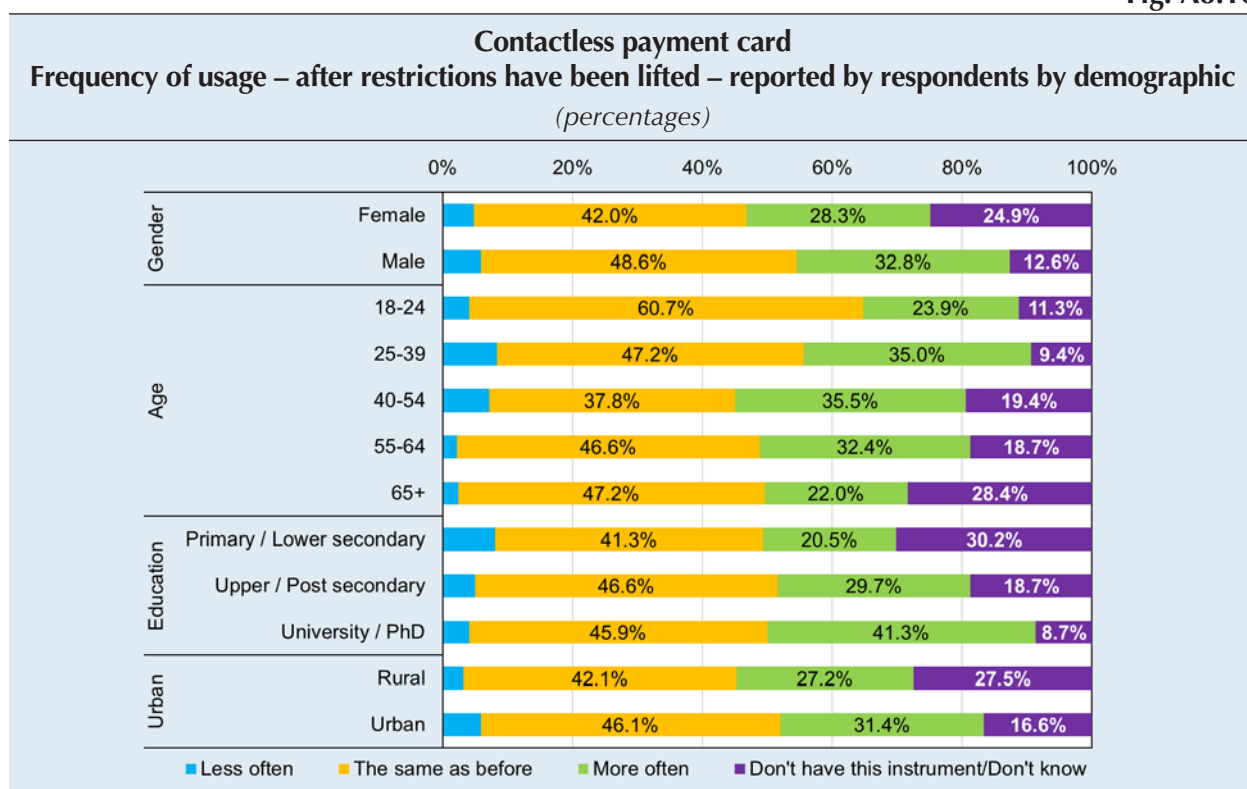


Fig. A8.9



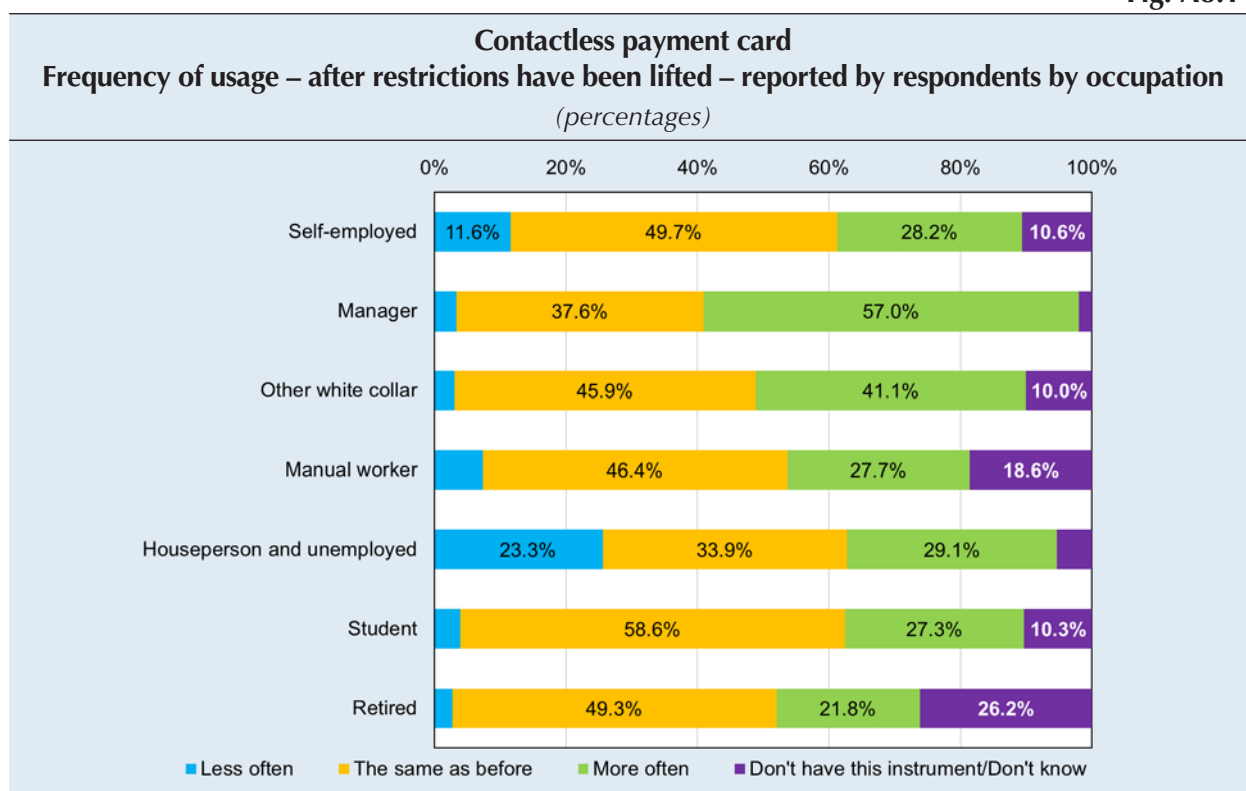
Source: authors' calculations based on ECB IMPACT survey data (2020).

Fig. A8.10



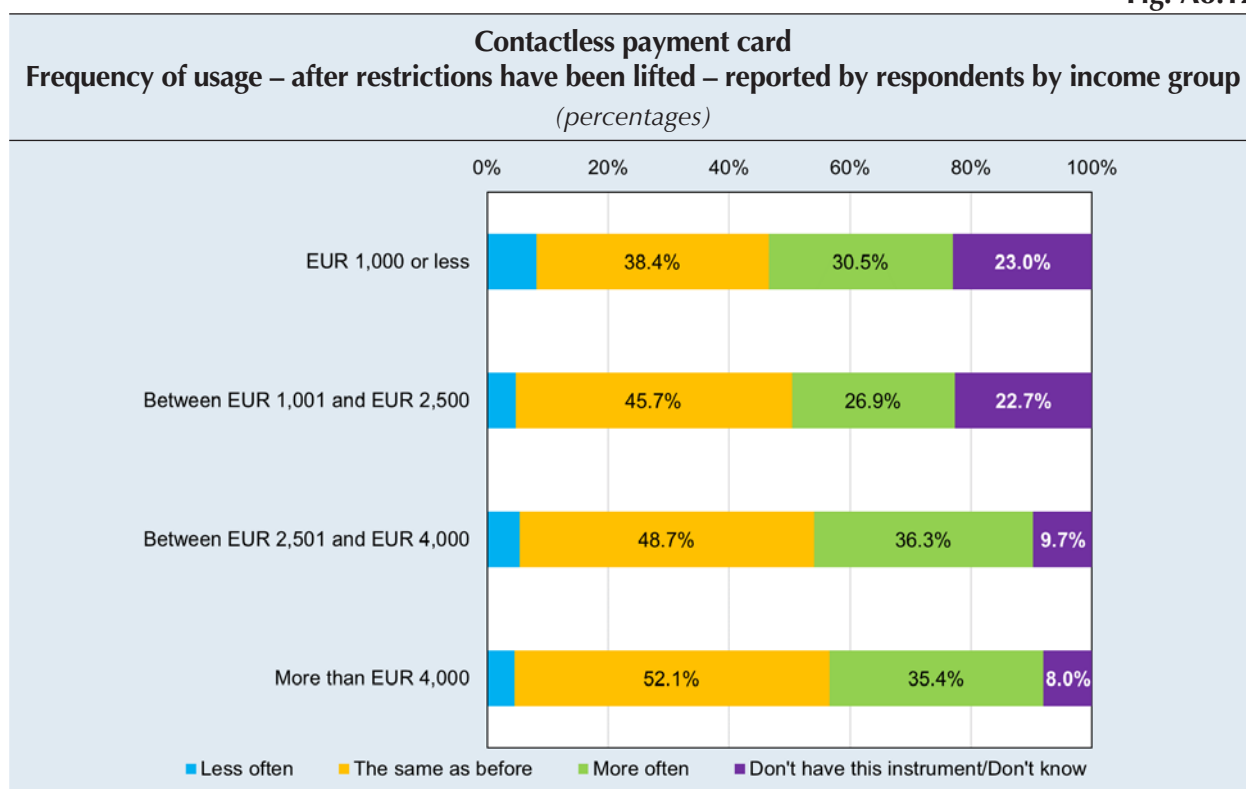
Source: authors' calculations based on ECB IMPACT survey data (2020).

Fig. A8.11



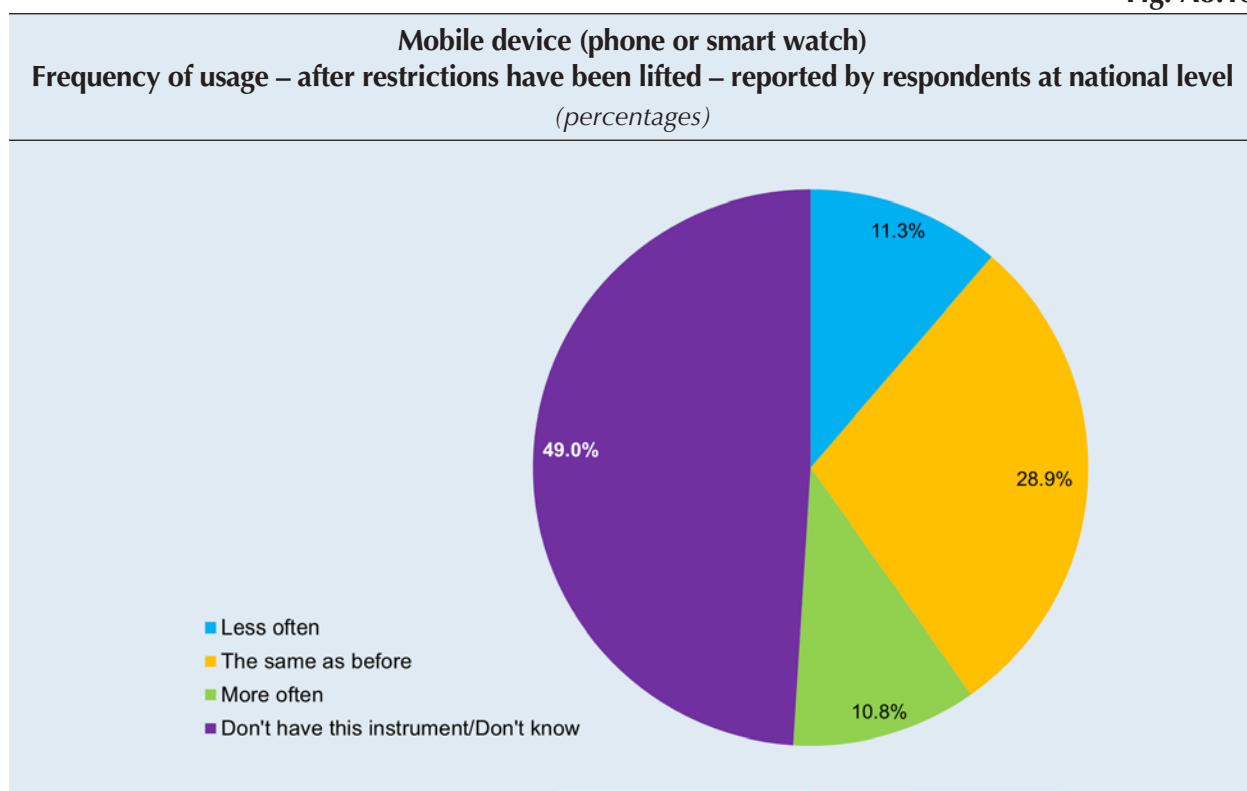
Source: authors' calculations based on ECB IMPACT survey data (2020). Percentages may not add up to 100% due to rounding.

Fig. A8.12



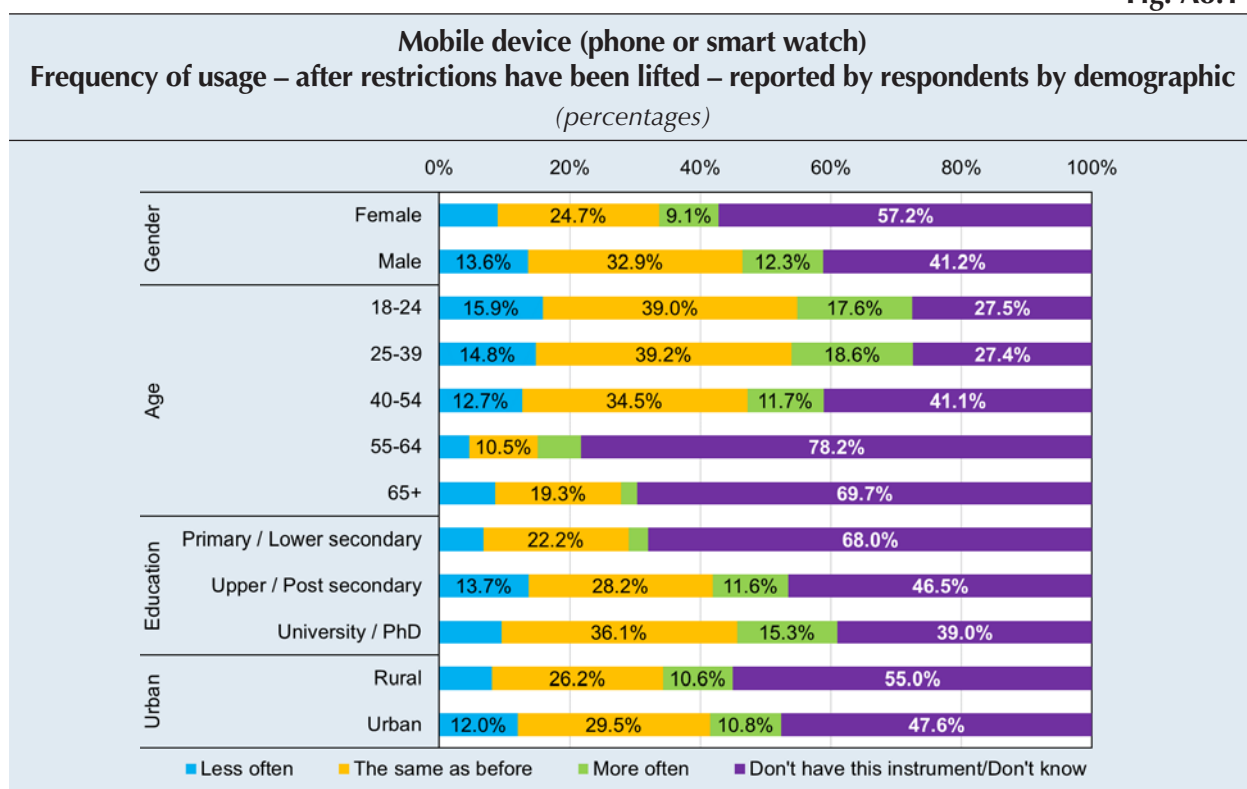
Source: authors' calculations based on ECB IMPACT survey data (2020).

Fig. A8.13



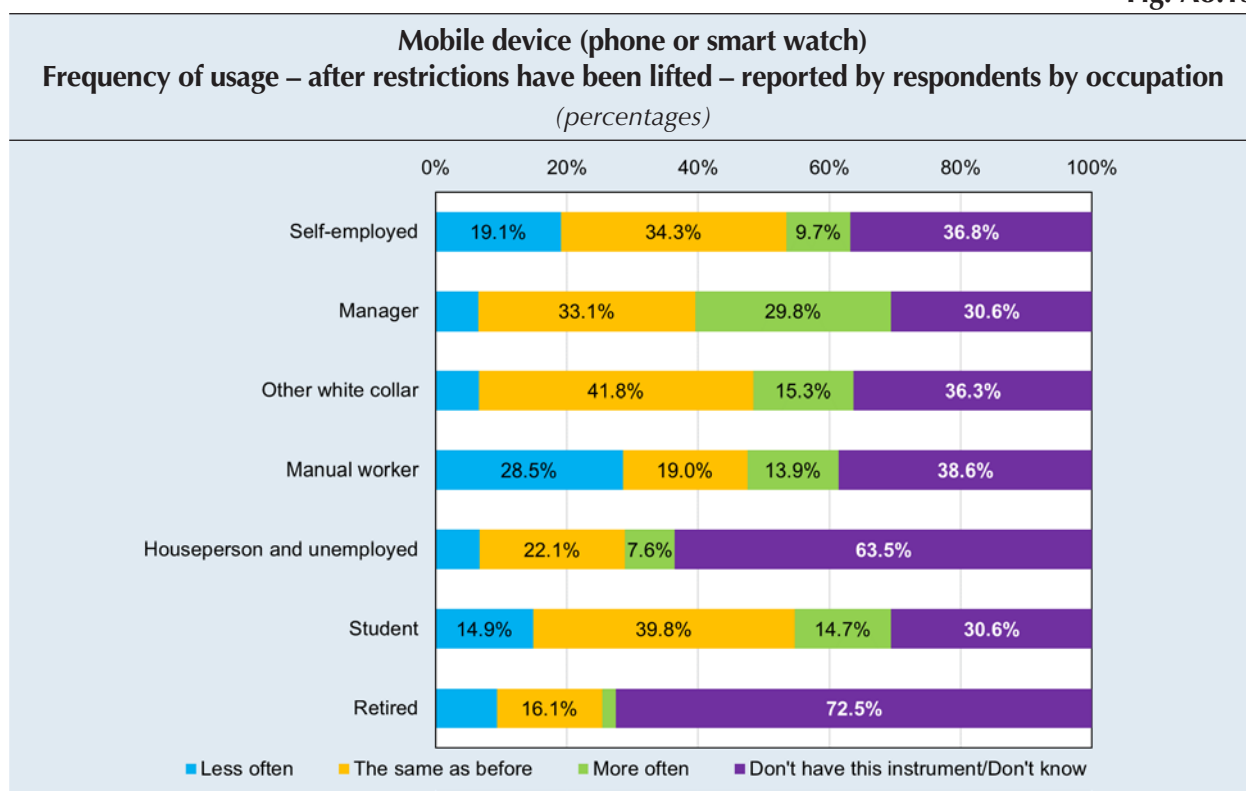
Source: authors' calculations based on ECB IMPACT survey data (2020).

Fig. A8.14



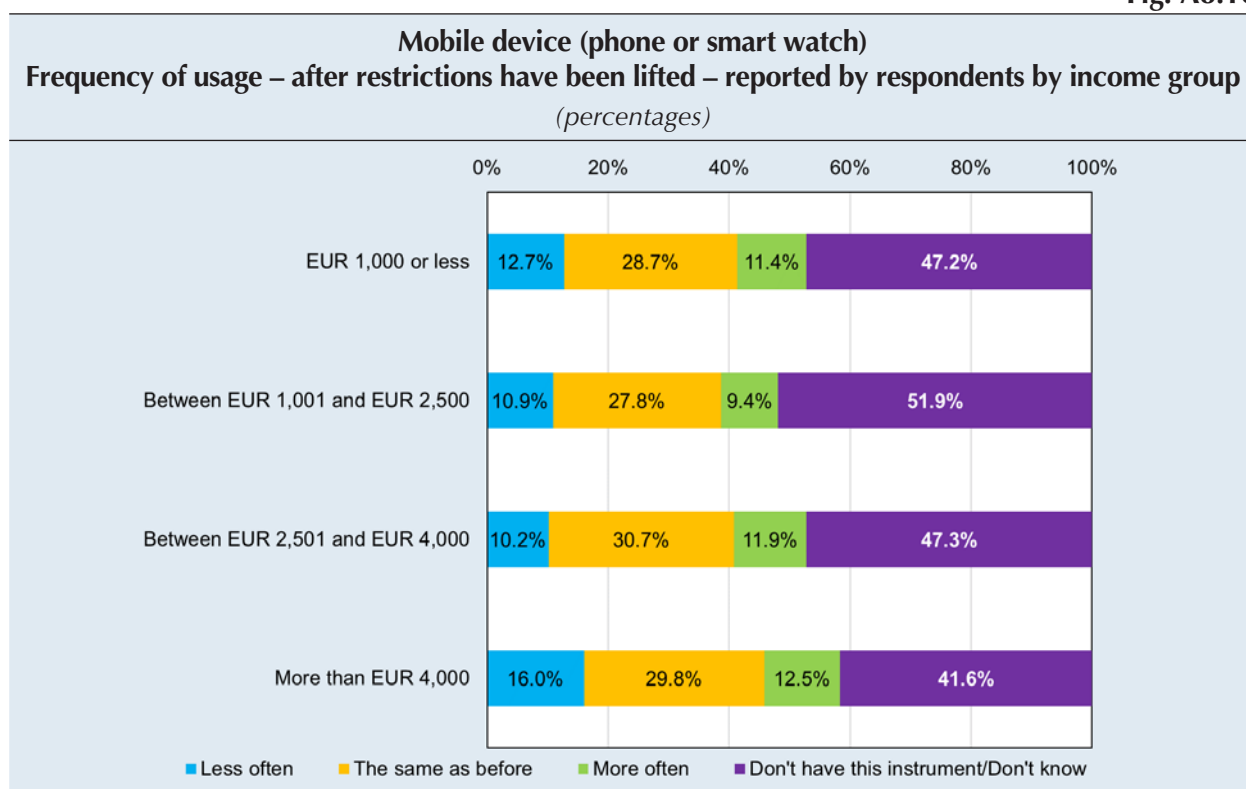
Source: authors' calculations based on ECB IMPACT survey data (2020). Percentages may not add up to 100% due to rounding.

Fig. A8.15



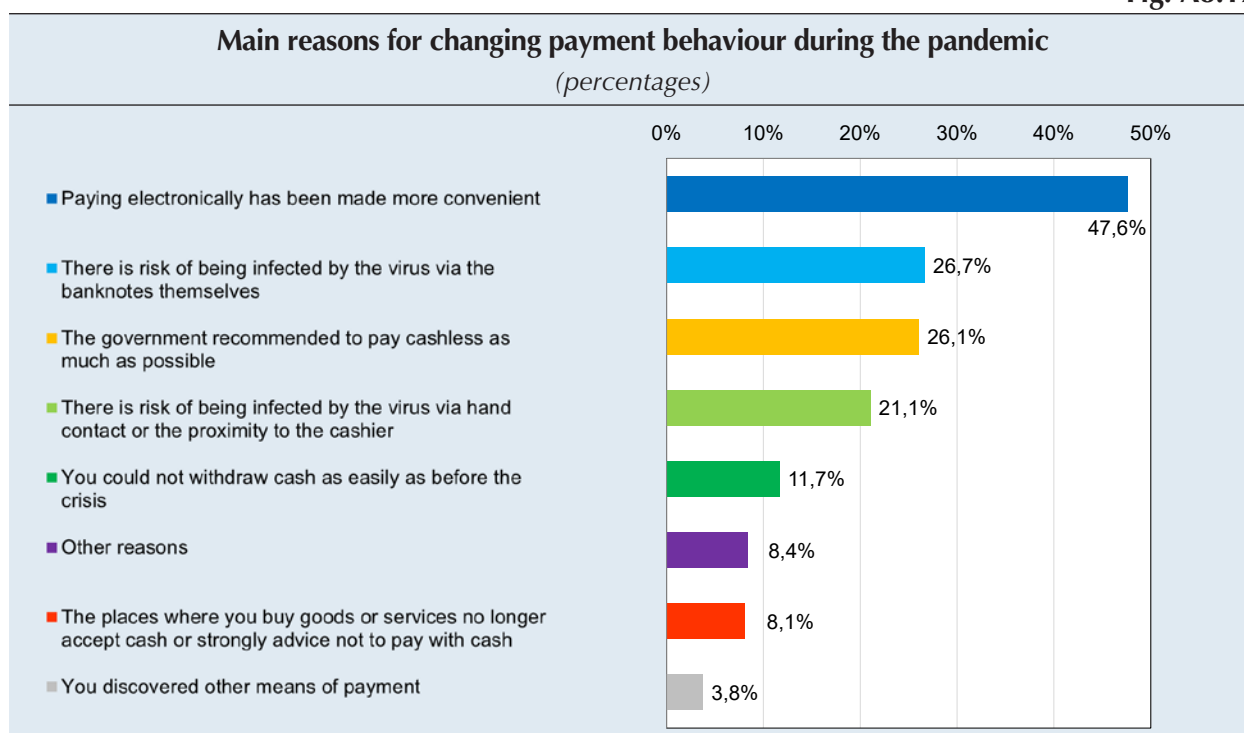
Source: authors' calculations based on ECB IMPACT survey data (2020). Percentages may not add up to 100% due to rounding.

Fig. A8.16



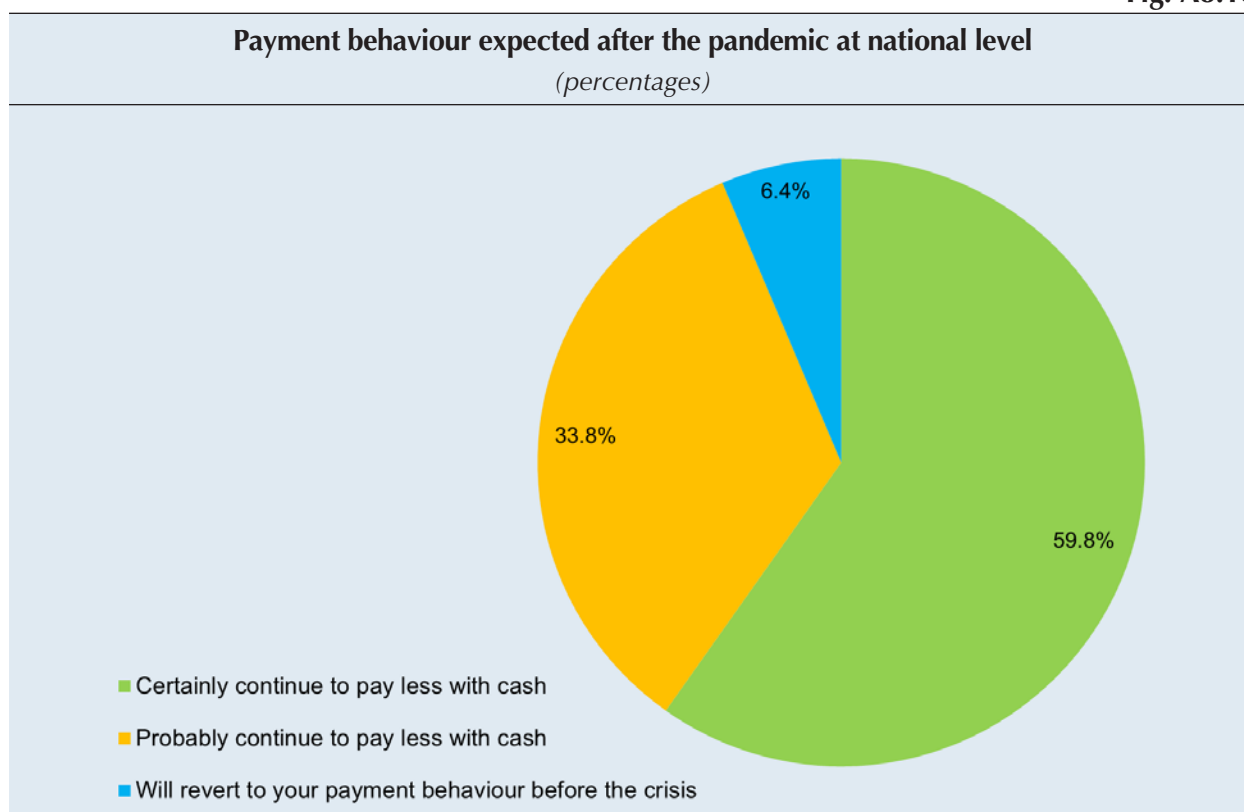
Source: authors' calculations based on ECB IMPACT survey data (2020).

Fig. A8.17



Source: authors' calculations based on ECB IMPACT survey data (2020).

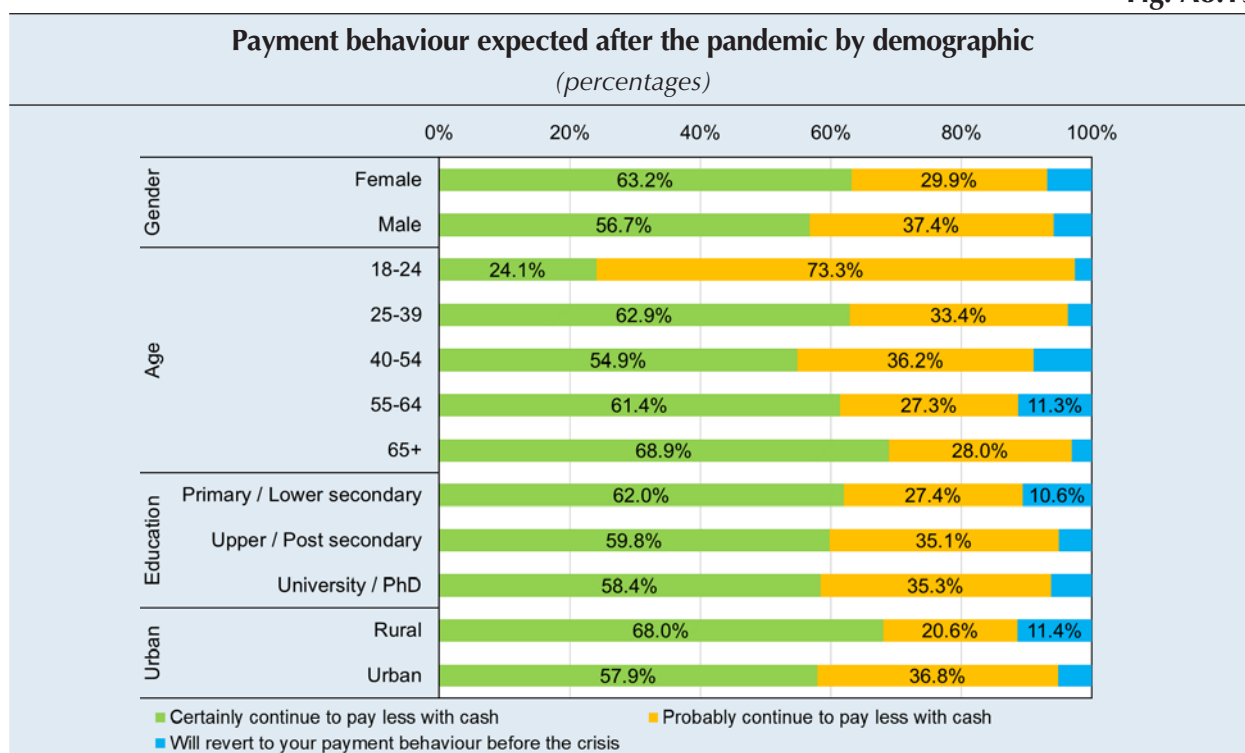
Fig. A8.18



Source: authors' calculations based on ECB IMPACT survey data (2020).

Note: the question is addressed only to respondents who reported that they would pay less often in cash (see Fig. A8.1).

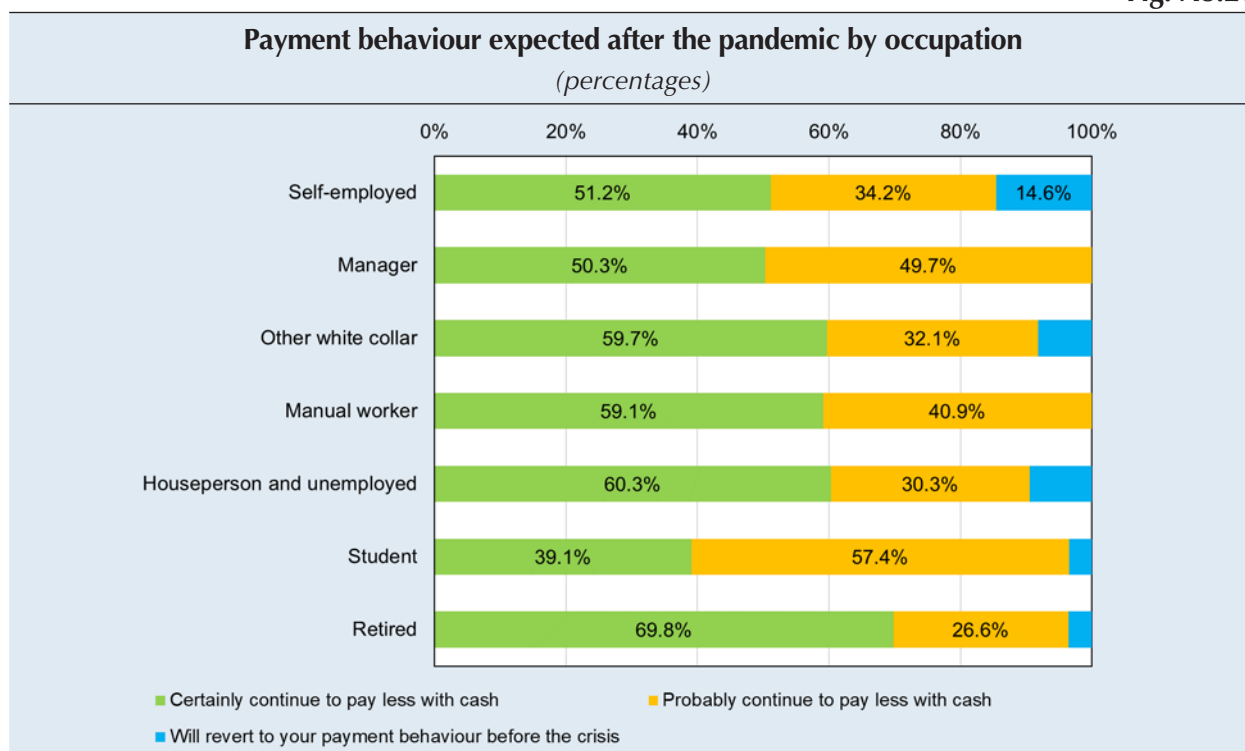
Fig. A8.19



Source: authors' calculations based on ECB IMPACT survey data (2020).

Note: the question is addressed only to respondents who reported that they would pay less often in cash (see Fig. A8.1).

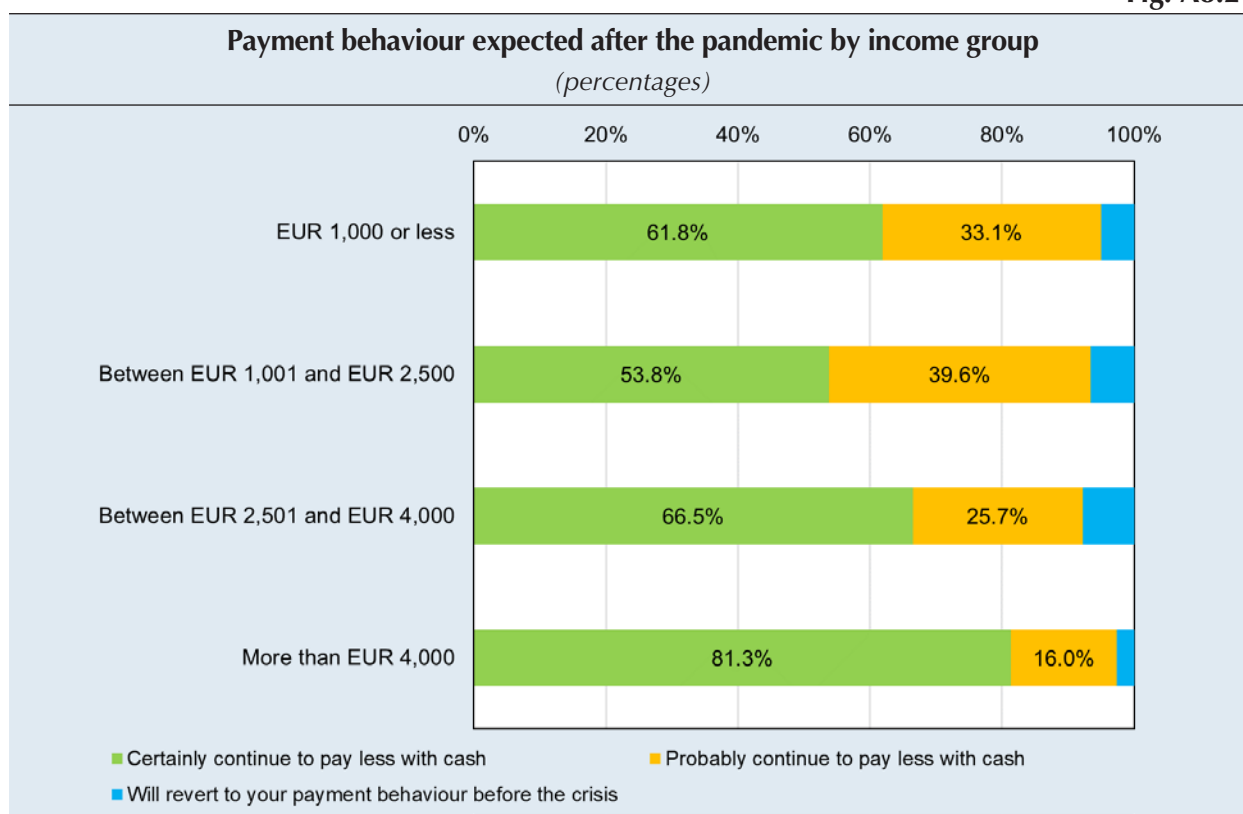
Fig. A8.20



Source: authors' calculations based on ECB IMPACT survey data (2020).

Note: the question is addressed only to respondents who reported that they would pay less often in cash (see Fig. A8.1).

Fig. A8.21



Source: authors' calculations based on ECB IMPACT survey data (2020).

Note: the question is addressed only to respondents who reported that they would pay less often in cash (see Fig. A8.1).

## PAPERS PUBLISHED IN THE 'MARKETS, INFRASTRUCTURES, PAYMENT SYSTEMS' SERIES

- n. 1 TIPS - TARGET Instant Payment Settlement – The Pan-European Infrastructure for the Settlement of Instant Payments, *by Massimiliano Renzetti, Serena Bernardini, Giuseppe Marino, Luca Mibelli, Laura Ricciardi and Giovanni M. Sabelli* (INSTITUTIONAL ISSUES)
- n. 2 Real-Time Gross Settlement systems: breaking the wall of scalability and high availability, *by Mauro Arcese, Domenico Di Giulio and Vitangelo Lasorella* (RESEARCH PAPERS)
- n. 3 Green Bonds: the Sovereign Issuers' Perspective, *by Raffaele Doronzo, Vittorio Siracusa and Stefano Antonelli* (RESEARCH PAPERS)
- n. 4 T2S - TARGET2-Securities – The pan-European platform for the settlement of securities in central bank money, *by Cristina Mastropasqua, Alessandro Intonti, Michael Jennings, Clara Mandolini, Massimo Maniero, Stefano Vespucci and Diego Toma* (INSTITUTIONAL ISSUES)
- n. 5 The carbon footprint of the Target Instant Payment Settlement (TIPS) system: a comparative analysis with Bitcoin and other infrastructures, *by Pietro Tiberi* (RESEARCH PAPERS)
- n. 6 Proposal for a common categorisation of IT incidents, *by Autorité de Contrôle Prudentiel et de Résolution, Banca d'Italia, Commissione Nazionale per le Società e la Borsa, Deutsche Bundesbank, European Central Bank, Federal Reserve Board, Financial Conduct Authority, Ministero dell'Economia e delle Finanze, Prudential Regulation Authority, U.S. Treasury* (INSTITUTIONAL ISSUES)
- n. 7 Inside the black box: tools for understanding cash circulation, *by Luca Baldo, Elisa Bonifacio, Marco Brandi, Michelina Lo Russo, Gianluca Maddaloni, Andrea Nobili, Giorgia Rocco, Gabriele Sene and Massimo Valentini* (RESEARCH PAPERS)
- n. 8 The impact of the pandemic on the use of payment instruments in Italy, *by Guerino Ardizzi, Alessandro Gambini, Andrea Nobili, Emanuele Pimpini and Giorgia Rocco* (RESEARCH PAPERS) (in Italian)
- n. 9 TARGET2 – The European system for large-value payments settlement, *by Paolo Bramini, Matteo Coletti, Francesco Di Stasio, Pierfrancesco Molina, Vittorio Schina and Massimo Valentini* (INSTITUTIONAL ISSUES) (in Italian)
- n. 10 A digital euro: a contribution to the discussion on technical design choices, *by Emanuele Urbinati, Alessia Belsito, Daniele Cani, Angela Caporini, Marco Capotosto, Simone Folino, Giuseppe Galano, Giancarlo Goretti, Gabriele Marcelli, Pietro Tiberi and Alessia Vita* (INSTITUTIONAL ISSUES)
- n. 11 From SMP to PEPP: a further look at the risk endogeneity of the Central Bank, *by Marco Fruzzetti, Giulio Gariano, Gerardo Palazzo and Antonio Scalia* (RESEARCH PAPERS)
- n. 12 TLTROs and collateral availability in Italy, *by Annino Agnes, Paola Antilici and Gianluca Mosconi* (RESEARCH PAPERS) (in Italian)
- n. 13 Overview of central banks' in-house credit assessment systems in the euro area, *by Laura Auria, Markus Bingmer, Carlos Mateo Caicedo Graciano, Clémence Charavel, Sergio Gavilá, Alessandra Iannamorelli, Aviram Levy, Alfredo Maldonado, Florian Resch, Anna Maria Rossi and Stephan Sauer* (INSTITUTIONAL ISSUES)
- n. 14 The strategic allocation and sustainability of central banks' investment, *by Davide Di Zio, Marco Fanari, Simone Letta, Tommaso Perez and Giovanni Secondin* (RESEARCH PAPERS) (in Italian)
- n. 15 Climate and environmental risks: measuring the exposure of investments, *by Ivan Faiella, Enrico Bernardini, Johnny Di Giampaolo, Marco Fruzzetti, Simone Letta, Raffaele Loffredo and Davide Nasti* (RESEARCH PAPERS)



- n. 16 Cross-Currency Settlement of Instant Payments in a Multi-Currency Clearing and Settlement Mechanism, *by Massimiliano Renzetti, Fabrizio Dinacci and Ann Börestam* (RESEARCH PAPERS)
- n. 17 What's ahead for euro money market benchmarks?, *by Daniela Della Gatta* (INSTITUTIONAL ISSUES) (in Italian)
- n. 18 Cyber resilience per la continuità di servizio del sistema finanziario, *by Boris Giannetto and Antonino Fazio* (INSTITUTIONAL ISSUES) (in Italian)
- n. 19 Cross-Currency Settlement of Instant Payments in a Cross-Platform Context: a Proof of Concept, *by Massimiliano Renzetti, Andrea Dimartina, Riccardo Mancini, Giovanni Sabelli, Francesco Di Stasio, Carlo Palmers, Faisal Alhijawi, Erol Kaya, Christophe Piccarelle, Stuart Butler, Jwallant Vasani, Giancarlo Esposito, Alberto Tiberino and Manfredi Caracausi* (RESEARCH PAPERS)
- n. 20 Flash crashes on sovereign bond markets – EU evidence, *by Antoine Bouveret, Martin Haferkorn, Gaetano Marseglia and Onofrio Panzarino* (RESEARCH PAPERS)