TURKISH CARD PAYMENT MARKET REPORT



2018 Yearly Assessment



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Issue: 3, February 2019





As TROY, Turkey's first and only national payment method, our mission is to contribute to healthy and sustainable growth of Turkey's payment market.

We are driven to advance Turkey's payment market, where card users have developed a rather positive approach to the card payment industry with increased awareness about card usage and a growing interest in digital payments.

In line with our mission, we are pleased to share the third issue of "Turkish Card Payment Market Report" that examines the development of Turkey's card payment market, Europe's largest and one of the world's leading markets, shedding light on the key data and findings about the payments industry in 2018.

This issue includes a special focus on commercial cards within Turkish card payment market with detailed analyses and insights about commercial cards.

We are happy to present the third issue of Turkish Card Payment Market Report and truly believe that it will be instrumental for our members and business partners in determining their market position and future strategies.

Yours sincerely, TROY



TROY has a wide range of solutions from magnetic stripe cards, chip cards, and contactless cards, which are compatible with EMVCo standards, to payments through innovative technologies such as mobile payments, wearables, and QR payments.





Turkish Card Payment Market Report

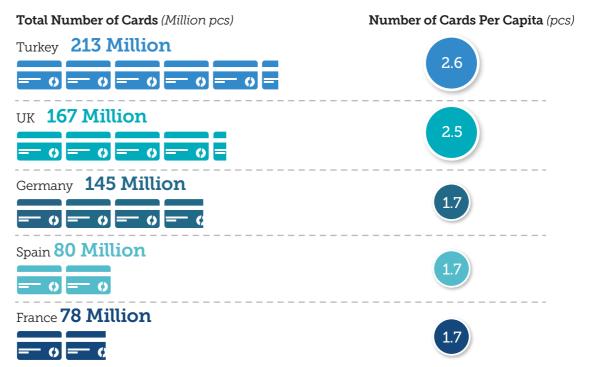
February 2019



Turkey is "Europe's largest card payment market" boasting 213 million cards and has a high growth potential going forward

As of 2018 year-end, the total number of cards in the market amounted to 213 million with Turkey retaining the title of Europe's largest card payment market. The number of cards in the UK and Germany, which have similar population sizes to Turkey, was 167 million and 145 million, respectively. The number of cards per capita in Turkey is similar to that of the UK.

Figure 1: Comparison of Europe and Turkey's Card Payment Market



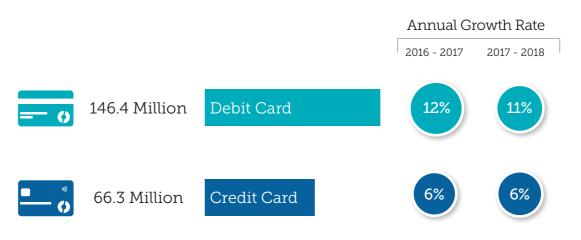


Note: Turkey's data is based on 2018 figures, while other countries' data show 2017 figures. As of 2017, the total number of cards was 194 million in Turkey with 2.4 cards per capita. The number of cards per capita reflects the number of cards with payment functionality in proportion to the total population.

Source: The Interbank Card Center of Turkey, European Central Bank

The data in Figure 2 shows that the number of debit cards has climbed to 146 million, an 11 percent increase over 2017. In 2017, the number of debit cards had grown by 12 percent, meaning that debit cards sustained high growth also in 2018. In parallel with 2017, the number of credit cards grew by 6 percent in 2018 and rose to 66.3 million.

Figure 2: Number of Cards by Card Type (December 2018)



Source: The Interbank Card Center of Turkey, TROY Analysis

The number of prepaid cards increased by 33 percent compared to 2017 and reached 25.9 million, scoring a 17.7 percent share of total debit cards (2017: 14.8 percent)



The market still bears significant growth potential going forward. The share of card payments within household expenditures is one of the important indicators of this potential. Figure 3 shows that the cumulative share of card payments in household expenditures soared to 38.2 percent by the end of third quarter of 2018, increasing 120 basis points over 2017. This figure stood at 38.6 percent the end of third quarter alone. The growth potential of the market becomes evident, considering the 60-70 percent share of card payments within total household expenditures in developed markets.*

Figure 3: Share of Card Payments within Total Household Expenditures

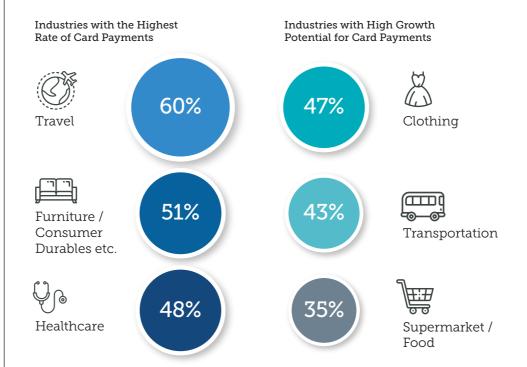




^{*} Euromonitor International's data suggest that as of 2012, the share of card payments in total household expenditures in countries such as Sweden, the UK and South Korea ranges from 54 to 67 percent. Source: TurkStat, The Interbank Card Center of Turkey's Analysis

According to Ipsos' research on "Household Expenditure" the categories of "Travel" (60 percent), "Furniture / Consumer Durables" (51 percent), and "Healthcare" (48 percent) have the highest card payment shares in total expenditures. (Figure 4) On the other hand, card payments can be expected to grow further in categories of "Supermarket and Food" and "Transportation", considering the high transaction volumes and relatively low share of card payments in those categories. The "Clothing" category with a high transaction volume also holds great growth potential, even though the share of card payments in this category is already relatively high at 47

Figure 4: Card Payment Penetration by Industries

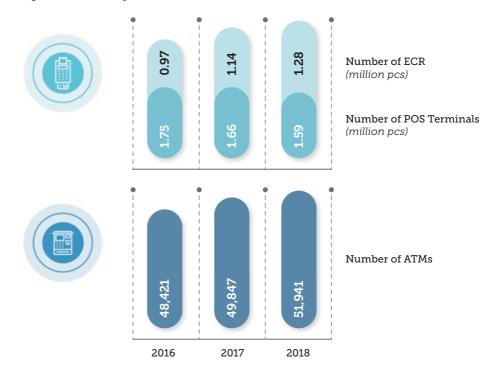




Terminal network continued expanding and Turkey still bears growth potential over the short and medium term

Regarding terminals in Turkey, the number of POS devices dropped to 1.59 million in 2018 from 1.66 million in 2017, while the number of electronic cash registers (ECR) with payment software jumped by 12 percent to 1.28 million. Hence, considering that the number of software per device is 1.65, the total number of terminals reached 2.36 million. The number of terminals has remained steady at this level for the last three years. Moreover, the number of ATMs rose by 4 percent year-on-year and reached 52,000.

Figure 5: Card Acceptance Statistics





On the other hand, Turkey has a low level of terminal penetration per capita compared to European countries. In Turkey, the number of terminals per 1,000 people is 29, while there are 634 ATMs per 1 million people. These figures are 37 and 1,054 in the UK; 15 and 1,027 in Germany; and 34 and 1,096 in Spain, respectively. (*Figure 6*) Hence, the number of terminals may be expected to rise in Turkey over the short term.

Figure 6: Per Capita Terminals and ATMs comparison with Europe

	Turkey	UK	Germany	Spain	France
Number of Terminals per 1,000 People					
	29	37	15	34	25
Number of ATMs per Million People	634	1,054	1,027	1,096	873



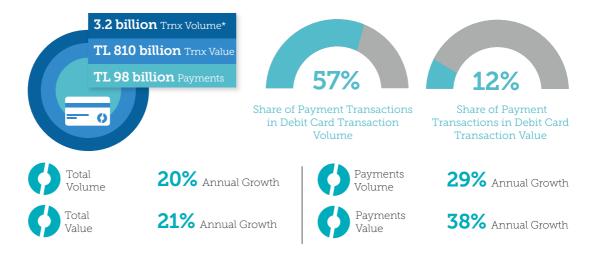
Note: Turkey's data is based on 2018 figures; other countries' data is from 2017. As of 2017, the number of POS devices per 1,000 people is 29 and ATMs per 1 million people is 617. The per capita number of terminals and ATMs reflects the proportion of the number of terminals and ATMs to the population.

Debit card transactions continued growing thanks to payment transactions and constituted a 32 percent share in card payments

In parallel with the increased number of cards, debit card transactions have maintained their upward trend in 2018. The annualized volume of cash withdrawal and payment transactions with debit cards has reached 3.2 billion, a 20 percent increase, and the total transaction value increased by 21 percent to reach 810 billion Turkish lira.

Debit cards payment volume grew by 29 percent, and annual payments value climbed by 38 percent. The share of debit card payment transactions in the total debit card transaction volume increased to 57 percent, a rise of 400 basis points compared to 2017. The share of payment transactions in the debit card transaction value in 2018 was 12 percent, an increase of 100 basis points compared to 2017. (*Figure 7*)

Figure 7: Debit Card Transaction Statistics (2018)

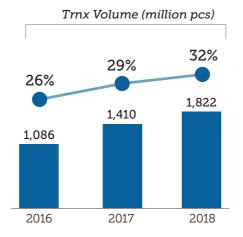


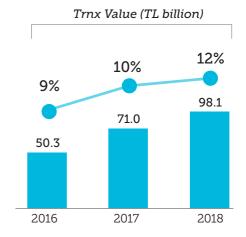


^{*}Shows the total of cash withdrawal and payment transactions. Note: Growth compared to 2017. Source: The Interbank Card Center of Turkey, TROY Analysis

Compared to 2017, the share of debit card payment transactions in total card payment transactions rose by 300 basis points to 32 percent in transaction volume, and by 200 basis points to 12 percent in transaction value. (Figure 8)

Figure 8: Debit Card Payment Transactions and its Share in Total Card Payments





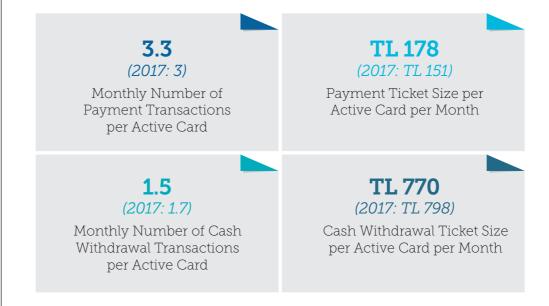




Debit card payments have outnumbered cash withdrawals for the last two years

The banks' efforts to raise awareness on saving money and increase the use of debit cards for payments have created a lasting effect on user behaviors. More and more consumers today consider debit cards as a means of payment. Accordingly, debit card payments have outnumbered cash withdrawals for the last two years. In 2018, the average number of payment transactions per month per debit card was about 3.3 (2017: 3.0), while the number of cash withdrawals per month per debit card stood at 1.5. In this period, payment value per month per active debit card rose to 178 Turkish lira in 2018 from 151 Turkish lira in 2017. (*Figure 9*)

Figure 9: Transactions per Active Debit Card (2018)

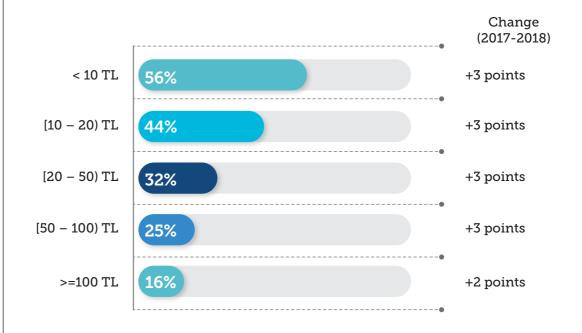




Note: The average is based on the number of cards that were used at least once during the year for cash withdrawals or payment transactions. Source: The Interbank Card Center of Turkey, TROY Analysis

In 2018, ticket size of debit card payments was 54 Turkish lira, while debit card payments constituted 40 percent of all card payments under 50 Turkish lira. The share of debit cards in payments under 10 Turkish lira was 56 percent. For payments between 10 and 20 Turkish lira, the share of debit cards was 44 percent. (*Figure 10*). Compared to 2017, the share of debit card payments in total card payments rose by 3 points (300 basis points) for all ticket size ranges.

Figure 10: Share of Debit Card Transactions in Total Card Payments by Ticket Size (Transaction Volume, 2018)





Debit cards were most commonly used in the categories of "Supermarket, Shopping Mall and Food," "Restaurant," "Gas and Fuel" and "Clothing/Accessories." The shares of these categories in total payments with debit cards have dropped in 2018 compared to prior year. For example, the "Supermarket and Shopping Mall" category constituted 43 percent of debit card transactions in 2017 and dropped to 41 percent in 2018. However, the use of debit cards in these categories remained high for payments under 50 Turkish lira. For instance, payments with debit cards constituted half the total card payments under 50 Turkish lira in the Restaurant industry. (Figure 11, Figure 12)

Figure 11: Breakdown of Debit Card Transactions by Industry (Transaction Volume)

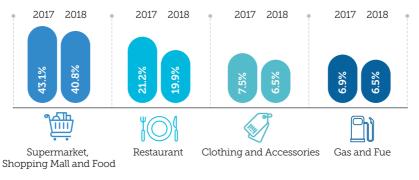
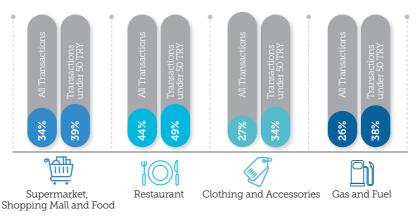


Figure 12: The Share of Debit Cards in Card Payments by Industry (Transaction Volume, 2018)





Source: The Interbank Card Center of Turkey, TROY Analysis

In 2018, credit card transaction value stood at 794 billion Turkish lira with 18 percent growth

In 2018, the number of total cash advance and payment transactions performed with credit cards amounted to 3.9 billion, a 12 percent annual growth, while the transaction value rose by 18 percent, reaching 794 billion Turkish lira. In this period, the payment transactions constituted 97 percent of the number of credit card transaction volume and 90 percent of transaction value.

Figure 13: Credit Card Transaction Statistics (2018)



^{*} Total number of payments and cash advance transactions. Note: Growth compared to 2017. Source: The Interbank Card Center of Turkey, TROY Analysis

Credit card users made an average of 6.4 payment transactions per month in 2018, while the monthly ticket size of payment transactions per active card was 1,201 Turkish lira. In 2017, these figures stood at 6.1 and 1,083 Turkish lira, respectively. (*Figure 14*)

Figure 14: Transactions per Active Credit Card





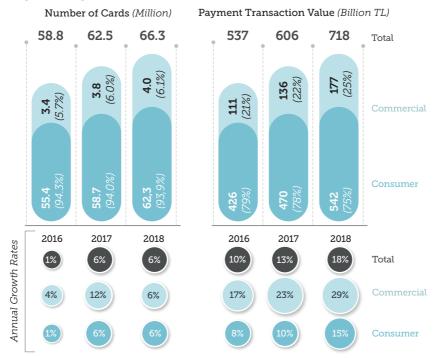
Note: The per card figures are based on the number of cards used at least once in the related period. The numbers in parentheses refer to the figures in 2017.

Source: The Interbank Card Center of Turkey, TROY Analysis

Commercial credit cards have sustained high growth while 1.2 million new users added to consumer credit cards market

Figure 15 presents the segment breakdown of credit cards, showing that commercial cards have maintained their upward trend with an increased share in total payment transactions. The number of commercial cards reached 4 million at 2018 year-end with a 6 percent increase, up from 3.8 million in 2017. The share of commercial cards in total credit cards increased to 6.1 percent; this rate was 5.7 percent in 2016 and 6 percent in 2017. On the other hand, the payment value with commercial credit cards surged by 29 percent in 2018, reaching 177 billion Turkish lira. The share of commercial card payments in credit card payment value rose by 300 basis paints to 25 percent, up from 22 percent in 2017. (The second part of the report includes a more detailed market analysis of commercial credit cards.)

Figure 15: Segment Breakdown of Credit Cards



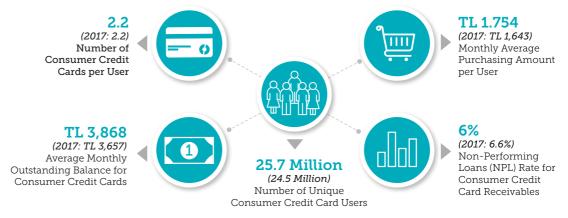


Note: Consumer credit card statistics do not include virtual cards. Source: The Interbank Card Center of Turkey, TROY Analysis

In the consumer card segment, the most apparent trend is that users within the system are making more responsible card purchases and the market is growing with new users.

Figure 16 illustrates that the number of consumer credit card users climbed by 1.2 million compared to 2017, reaching 25.7 million as of November 2018, while the number of consumer credit cards per capita remained steady at 2.2.

Figure 16: Consumer Credit Card Statistics (November, 2018)



In 2018, a consumer credit card holder spent on average 1,754 Turkish lira per month with her/his card; the same figure was 1,643 Turkish lira in 2017. Namely, monthly credit card spending increased by 8 percent, remaining below the inflation rate. On the other hand, total transaction value with consumer credit cards grew by 15 percent in 2018 (*Figure 15*). The difference between the growth rates in per credit card spendings per month and total transaction value means that it was the addition of new users that expanded the consumer credit card market, not the increased spending of existing users. Average monthly credit card outstanding balance rose by 6 percent, also below the inflation rate, reaching 3,868 Turkish lira (2017: 3,657 Turkish lira). The rate of non-performing consumer credit cards followed a descending trend and dropped by 60 basis points from year-end 2017 to 6.0 by November 2018 (*Figure 16*), hitting the lowest point of the last five years.



While calculating the number of credit cards per person, commercial credit cards and virtual cards were excluded from the total number of credit cards. Monthly average spending and credit card outstanding balance show the average of the last 12 months for the period.

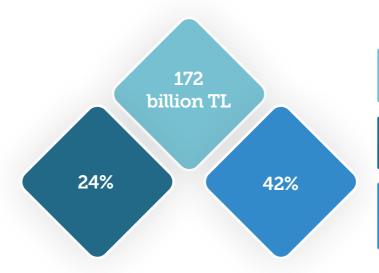
Source: The Banks Association of Turkey Risk Center Report, The Interbank Card Center of Turkey, TROY Analysis

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In 2018, installment payments consituted 24 percent of total transaction value while share of installment payments in total credit card receivables decreased compared to 2017

Installment payments have been one of the most appealing product feature of credit cards for consumers. In 2018, 24 percent of payment transactions in terms of value was installment payments; in this period the total transaction value of installment payments increased by 15 percent to 172 billion Turkish lira. On the other hand, the share of installment payments in total consumer credit cards receivables dropped to 42 percent in 2018 from 47 percent in 2017.

Figure 17: Installment Payment Statistics (2018)



Installment Payments Transaction Value

In 2018, 172 billion Turkish lira of installment payments were made. The amount of installment payments rose by 15 percent compared to 2017.

Share of Installment Payments in Transaction Value

In **2018, installment payments constituted 24 percent of total credit card payment value**presenting a slightdecrease from **25 percent** in 2017.

Share of Installment Payments in Credit Card Receivables

The share of installment payments (43 billion Turkish lira) in total consumer credit cards receivables dropped to **42 percent** in 2018 from **47 percent** in 2017.



The value of online payments rose to 140 billion Turkish lira in 2018 and the share of online payments in card payments continued increasing

Online payments continue to rise. Online card payment transaction value reached 139 billion Turkish lira in 2018, up from 99 billion Turkish lira in 2017, a 40 percent increase. The share of online card payments in total card payments rose to 16.5 percent in 2018, up from 14.5 percent last year.

Figure 18: Online Payment Statistics (2018)



Source: The Interbank Card Center of Turkey, TROY Analysis

The number of unique credit cards used in online payments climbed to 28.2 million in 2018 from 26.6 million in 2017, amounting to 42.4 percent of total number of credit cards. This figure climbes to 57 percent, when only the cards there were used for payments in 2018 are taken as the denominator.

On the debit cards side, 11.1 million unique debit cards were used for online payments, constituting 7.6 percent of total debit cards. This ratio increases to 24 percent when only the cards that were used for payments in 2018 are considered as the denominator.

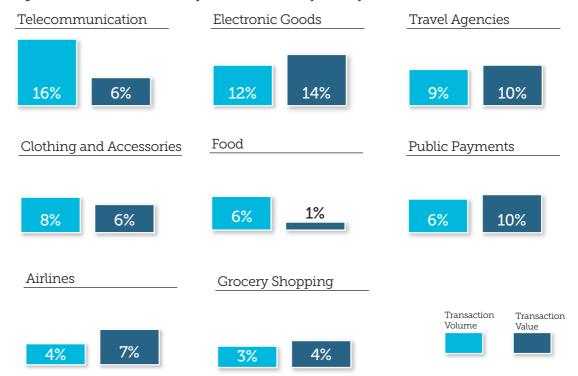




Online payments are concentrated in the categories of "Telecommunication", "Electronic Goods", and "Travel Agencies", and in payments above 50 Turkish lira

Figure 19 illustrates that the number of online payment transactions mainly concentrated in three categories: "Telecommunication" (16 percent), "Electronic Goods" (12 percent) and "Travel Agencies" (9 percent). The three categories that took the lead in transaction value were "Electronic Goods" (14 percent), "Travel Agencies" (10 percent), and "Public Payments" (10 percent).

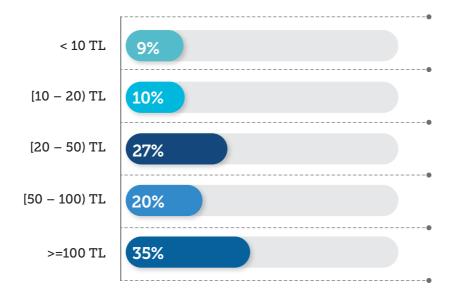
Figure 19: Breakdown of Online Payment Transactions by Industry





Online payments are more concentrated on transactions above 100 Turkish lira; 35 percent of online payments in 2018 had a ticket size of 100 Turkish lira or higher. Online payments between 20-50 Turkish lira accounted for 27 percent and payments between 50-100 Turkish lira equaled 20 percent. (*Figure 20*)

Figure 20: Breakdown of Online Card Payments by Ticket Size (Transaction Volume, 2018)

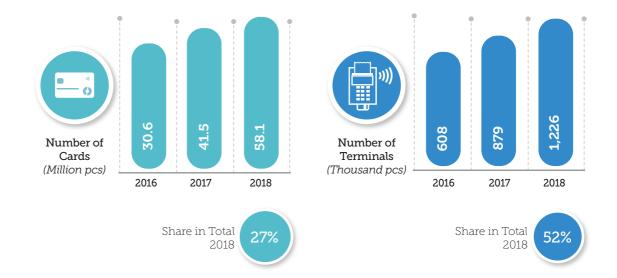




In Turkey, one out of every four cards is contactless, while one out of two terminals accept contactless cards

Contactless payments are becoming more widespread each day. The number of contactless cards rocketed by 40 percent to 58.1 million in 2018 from 41.5 million in 2017. The share of contactless cards in total cards reached 27 percent. The acceptance rate of contactless cards has improved, too. In 2018, the number of contactless terminals surged by 40 percent, exceeding 1.2 million. As of 2018, half of the terminals could accept contactless cards.

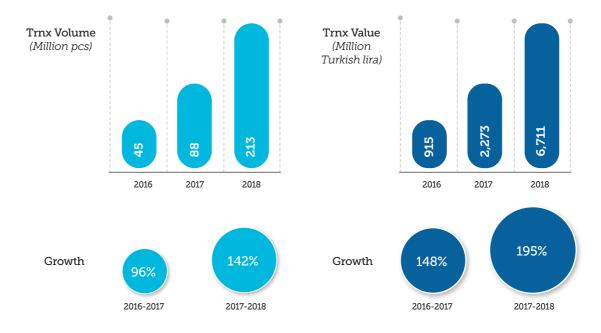
Figure 21: Number of Contactless Cards and Terminals Statistics





Contactless payment transactions are increasing along with the increase in the number of contactless cards and terminals. In 2018, the number of contactless transactions significantly grew by 142 percent to 213 million, and contactless transaction value reached 6.7 billion Turkish lira with a growth rate of 195 percent. Contactless transactions made up 3.8 percent of total card payment transactions, taking 0.8 percent share in total card payment transaction value. These rates were 1.8 and 0.3 percent in 2017, respectively.

Figure 22: Contactless Transaction Statistics



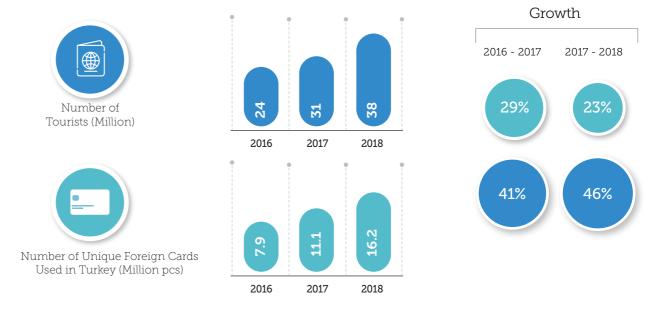
Contactless payments are most frequently used in "Supermarket and Food", and "Restaurant" categories, making up 4.3 and 9.0 percent of total card payments, respectively.



The number of foreign tourists who visited Turkey hit an all-time high in 2018, moving the foreign card payment up to 44 billion Turkish lira

In 2018, the number of foreign tourists visiting Turkey skyrocketed having risen by 23 percent from 31 million in 2017 to 38 million in the first 11 months of 2018. With the increasing number of tourists, the use of foreign credit cards has also climbed higher. The number of unique foreign cards used in Turkey rose to 16.2 million in the first 11 months of 2018 from 11.1 million in 2017.

Figure 23: Number of Foreign Tourists and Unique Foreign Cards Used in Turkey





The payment transaction value by foreign cards reached 44 billion Turkish lira (\$8.9 billion) from 24 billion Turkish lira (\$6.6 billion) in 2017. Online payments including airline payments constitute nearly 36 percent of this value. In 2018, the average ticket size of a payment transaction by foreign cards was 610 Turkish lira.

Figure 24: Statistics on Foreign Card Payments in Turkey (2018)



TL 44 billion (2017: TL 24 billion)

Payment Transaction Value by Foreign Cards



36% (2017: 34%)

Share of Online Payments in Foreign Card Payments



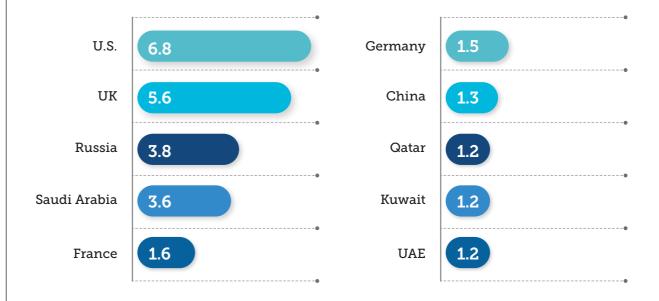
TL 610 (2017: TL 462)

Payment Transactions Ticket Size by Foreign Cards



The U.S. cards had the largest share in payment value, amounting to 6.8 billion Turkish lira. Of this value, 38 percent or 2.5 billion Turkish lira was due to airline purchases. The U.S. was followed by the UK (5.6 billion Turkish lira), Russia (3.8 billion Turkish lira), Saudi Arabia (3.6 billion Turkish lira) and France (1.6 billion Turkish lira). Other countries in the top 10 include Germany, China, Qatar, Kuwait and the UAE, with a transaction value ranging from 1.2 billion to 1.5 billion Turkish lira.

Figure 25: Transaction Value by Foreign Cards Used in Turkey by Country (2018, Billion TL)

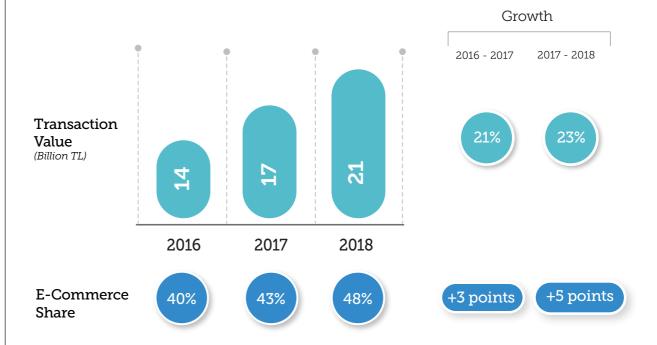




The international payments made with cards issued in Turkey reached 21 billion Turkish lira; almost half of these payments consisted of e-commerce transactions

The international payments made with cards issued in Turkey showed an increase of 23 percent in 2018 reaching 21 billion Turkish lira; half of those transactions were made physically in abroad and the other half was e-commerce transactions.

Figure 26: International Payment Transactions Made with Cards Issued in Turkey (Billion TL)



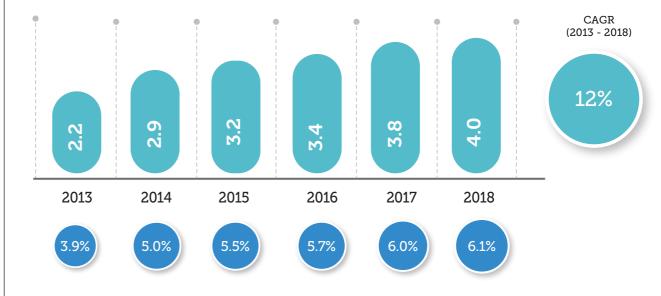




In Turkey, the number of commercial credit cards and their share in total credit cards are rapidly increasing

In the last five years, the number of commercial credit cards has surged in Turkey. As of 2018, the number of commercial credit cards rose by a compound annual growth rate of 12 percent to 4.0 million from 2.2 million in 2013. The share of commercial credit cards in the total number of credit cards also showed a climb from 3.9 percent in 2013 to 6.1 percent by the end of 2018.

Figure 27: Number of Commercial Credit Cards and Their Share in Total Credit Cards (Million, %)

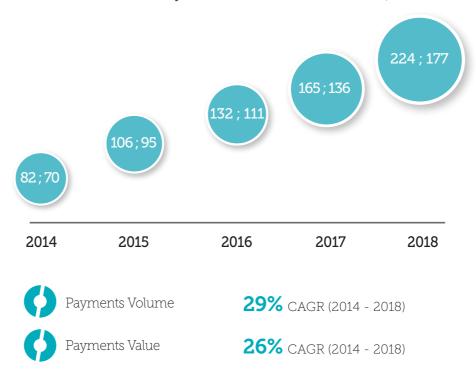




Payment transactions with commercial credit cards have also grown rapidly both in volume and value

Commercial credit card payments are growing at a higher rate than the number of cards. In 2018, the number commercial card payment transactions nearly tripled to 224 million from 82 million in 2014. In the same period, payment transaction value showed a 26 percent compound annual growth rate, rising to 177 billion Turkish lira from 70 billion Turkish lira.

Figure 28: Commercial Credit Card Payment Transactions (Million transactions; Billion TL)

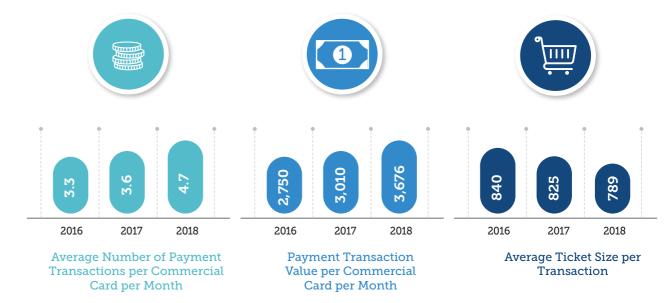




In 2018, commercial credit card users made 5 payment transactions per month amounting to a transaction value of 3,600 Turkish lira while average ticket size per transaction was 790 Turkish lira

In 2018, the number of payment transactions per commercial card rose to 4.7 from 3.6 in 2017. Compared to 2017, the average monthly transaction value per card climbed by 650 Turkish lira to reach 3,676 Turkish lira. On the other hand, average ticket size per transaction declined slightly to 789 Turkish lira. (*Figure 29*) In other words, commercial cards were used more actively in 2018 than in 2017, including lower ticket size transactions.

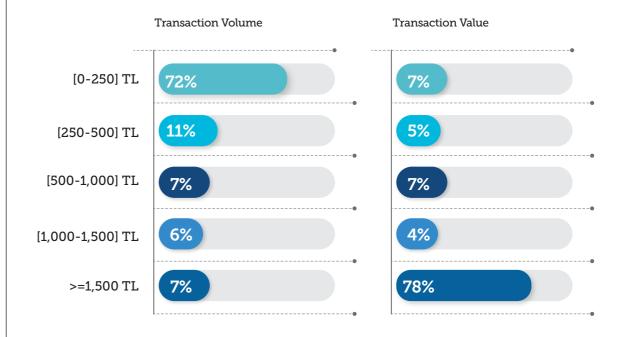
Figure 29: Commercial Credit Card Usage Statistics





A significant portion of the transactions with commercial credit cards are payments under 250 Turkish lira; 72 percent of commercial credit card transactions in 2018 consisted of transactions with ticket sizes of 250 Turkish lira and below. On the other hand, those transactions comprised only 7 percent of the total payment transaction value by commercial credit cards. Moreover, the transactions between 250 Turkish lira and 500 Turkish lira correspond to 11 and 5 percent of the transaction volume and transaction value, respectively. Last but not least, 78 percent of transaction value consisted of transactions over 1,500 Turkish lira, which only constitutes 7 percent of the total number of transactions.

Figure 30: Breakdown of Payment Transactions by Commercial Credit Cards by Ticket Size (2018)





In 2018, commercial credit cards were most commonly used in the categories of "Telecommunication", "Supermarket and Food", "Gas and Fuel", and "Restaurant"

In the retail segment, 39 percent of the number of payment transactions with commercial cards were in the category of "Supermarket, Shopping Mall and Food", followed by the "Restaurant" category with 12 percent.

Compared with categories where consumer credit cards are used most commonly, it is possible to say that commercial credit cards used for different purposed than consumer credit cards. Interestingly enough, "Telecommunication" payments constitute 24 percent of commercial card payment transactions in terms of volume, whereas it only has a 3 percent share in terms of transaction value.

The category of "Supermarket, Shopping Mall and Food" follows with a 21 percent in payment transaction volume by commercial credit cards. This category has the highest share (27 percent) in transaction value. Other categories, where the commercial credit cards were most commonly used, include "Gas and Fuel," and "Food and Restaurant".

Figure 31: Breakdown of Payment Transactions by Commercial Credit Cards by Industry

