

# clustering\_bankid

- clustering\_bank\_id
- count, transaction\_value, transaction\_cost
  - transaction\_value transaction\_cost:
    - -
    - 10000
  - transaction\_cost transaction\_value:
    - -
    - 10000
  - transaction\_value transaction\_cost
    - -
    - 10000
  - transaction\_value
    - -
    - 10000
  - transaction\_cost
    - -
    - 10000
  - transaction\_cost
    - -
    - 10000
  - transaction\_value
    - -
    - 10000
- transaction\_type chain
  - -
  - s
- transaction\_type chain s bankid
  - bankid
  - bankid
    - p
    - c
    - m
    - -
    - s, p
- transaction\_type chain bankid
  - bankid
  - bankid
    - s, m
- transaction\_type chain bankid
  - bankid
  - bankid
    - s, c
    - p, c
    - m, c
    - p, m
    - -
    - s, p, m
- transaction\_type chain bankid
  - bankid
  - bankid
    - s, p, c
- transaction\_type chain bankid
  - bankid
  - bankid
    - s, c, m
- transaction\_type chain bankid

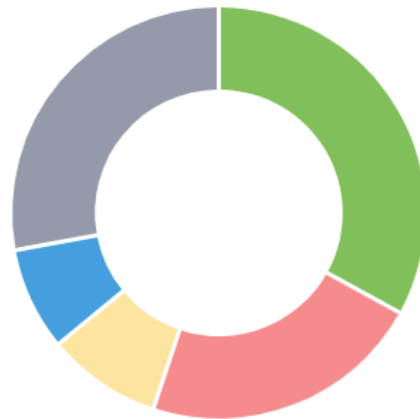
- ```

select bank_id, swtv/greatest(swtc,1) total_devide
from(
    select bank_id, sum(transaction_value) swtv, sum(transaction_cost) swtc
    from(
        select bank_id, sum(new_count) wight, transaction_cost, transaction_va
        from(
            select *
            from(
                select bank_id, count(count) new_count, transaction_cost, tran
                from data_dataset
                where count = 0
                group by bank_id, transaction_cost, transaction_value) as b0

            union all
            select *
            from(
                select bank_id, count new_count, transaction_cost, transaction
                from data_dataset
                where count != 0) as b1) as b2
        group by bank_id, transaction_cost, transaction_value) as b3
    group by bank_id) as b4--) as b5
order by total_devide desc

```

|         |        |
|---------|--------|
| 12,660  | 33.24% |
| 204,834 | 22.09% |
| 44,841  | 8.77%  |
| 44,375  | 7.89%  |
| Other   | 28.01% |



- 10000

```
select bank_id/10000 bank_id, sum(swtv)/greatest(sum(swtc),1) result
from(
  select bank_id, sum(transaction_value) swtv, sum(transaction_cost) swtc
  from(
    select bank_id, sum(new_count) wight, transaction_cost, transaction_value
    from(
      select *
      from(
        select bank_id, count(count) new_count, transaction_cost, transaction_
        from data_dataset
        where count = 0
        group by bank_id, transaction_cost, transaction_value) as b0

      union all
      select *
      from(
        select bank_id, count new_count, transaction_cost, transaction_value
        from data_dataset
        where count != 0) as b1) as b2
    group by bank_id, transaction_cost, transaction_value) as b3
  group by bank_id) as b4
group by bank_id/10000
order by result desc
```

|       |        |
|-------|--------|
| 21    | 13.35% |
| 2     | 11.90% |
| 39    | 10.59% |
| 26    | 9.74%  |
| 1     | 9.61%  |
| Other | 44.82% |



- transaction\_cost transaction\_value :

```

select bank_id, swtc/greatest(swtv,1) total_devide
from(
  select bank_id, sum(transaction_value) swtv, sum(transaction_cost) swtc
  from(
    select bank_id, sum(new_count) wight, transaction_cost, transaction_va
    from(
      select *
      from(
        select bank_id, count(count) new_count, transaction_cost, tran
        from data_dataset
        where count = 0
        group by bank_id, transaction_cost, transaction_value) as b0
      union all
      select *
      from(
        select bank_id, count new_count, transaction_cost, transaction
        from data_dataset
        where count != 0) as b1) as b2
    group by bank_id, transaction_cost, transaction_value) as b3
  group by bank_id) as b4-- ) as b5
order by total_devide desc

```

|           |       |
|-----------|-------|
| ● 22,601  | 16.1% |
| ● 5,774   | 15.2% |
| ● 2,685   | 13.5% |
| ● 37,387  | 11.5% |
| ● 1,541   | 11.3% |
| ● 199,417 | 10.4% |
| ● 197,886 | 10.1% |
| ● Other   | 12.0% |



● 10000

```

select bank_id/10000 bank_id, sum(swtc)/greatest(sum(swtv),1) result
from(
  select bank_id, sum(transaction_value) swtv, sum(transaction_cost) swtc
  from(
    select bank_id, sum(new_count) wight, transaction_cost, transaction_value
    from(
      select *
      from(
        select bank_id, count(count) new_count, transaction_cost, transaction_
        from data_dataset
        where count = 0
        group by bank_id, transaction_cost, transaction_value) as b0
      union all
      select *
      from(
        select bank_id, count new_count, transaction_cost, transaction_value
        from data_dataset
        where count != 0) as b1) as b2
    group by bank_id, transaction_cost, transaction_value) as b3
  group by bank_id) as b4-- ) as b5
order by total_devide desc

```

```

    group by bank_id, transaction_cost, transaction_value) as b3
group by bank_id) as b4
group by bank_id/10000
order by result desc

```

|       |        |
|-------|--------|
| 32    | 42.53% |
| 27    | 29.43% |
| 3     | 8.69%  |
| Other | 19.35% |



- **transaction\_value transaction\_cost**

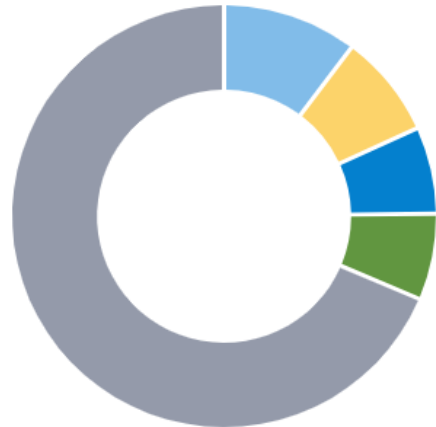
```

select bank_id, swtc+swtv total
from(
  select bank_id, sum(transaction_value) swtv, sum(transaction_cost) swtc
  from(
    select bank_id, sum(new_count) wight, transaction_cost, transaction_va
    from(
      select *
      from(
        select bank_id, count(count) new_count, transaction_cost, tran
        from data_dataset
        where count = 0
        group by bank_id, transaction_cost, transaction_value) as b0

      union all
      select *
      from(
        select bank_id, count new_count, transaction_cost, transaction
        from data_dataset
        where count != 0) as b1) as b2
    group by bank_id, transaction_cost, transaction_value) as b3
  group by bank_id) as b4-- ) as b5
order by total desc

```

|        |        |
|--------|--------|
| 24,940 | 10.12% |
| 31,549 | 7.73%  |
| 0      | 6.45%  |
| 13,335 | 6.42%  |
| Other  | 69.28% |



• 10000

```
select bank_id/10000 bank_id, sum(swtc)+sum(swtv) result
from(
  select bank_id, sum(transaction_value) swtv, sum(transaction_cost) swtc
  from(
    select bank_id, sum(new_count) wight, transaction_cost, transaction_value
    from(
      select *
      from(
        select bank_id, count(count) new_count, transaction_cost, transaction_
        from data_dataset
        where count = 0
        group by bank_id, transaction_cost, transaction_value) as b0

      union all
      select *
      from(
        select bank_id, count new_count, transaction_cost, transaction_value
        from data_dataset
        where count != 0) as b1) as b2
    group by bank_id, transaction_cost, transaction_value) as b3
  group by bank_id) as b4
group by bank_id/10000
order by result desc
```

|       |       |
|-------|-------|
| 1     | 28.5% |
| 0     | 17.4% |
| 2     | 16.2% |
| 3     | 12.1% |
| Other | 25.8% |



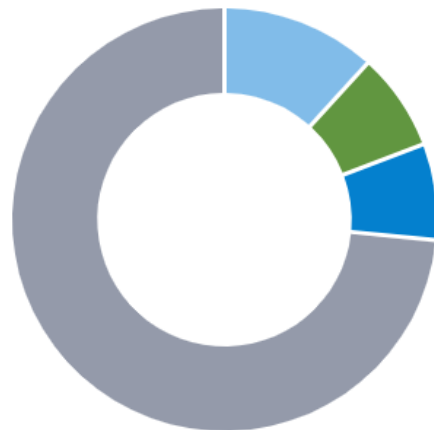
• transaction\_value

```

select bank_id, swtv total
from(
    select bank_id, sum(transaction_value) swtv, sum(transaction_cost) swtc
    from(
        select bank_id, sum(new_count) wight, transaction_cost, transaction_va
        from(
            select *
            from(
                select bank_id, count(count) new_count, transaction_cost, tran
                from data_dataset
                where count = 0
                group by bank_id, transaction_cost, transaction_value) as b0
            union all
            select *
            from(
                select bank_id, count new_count, transaction_cost, transaction
                from data_dataset
                where count != 0) as b1) as b2
        group by bank_id, transaction_cost, transaction_value) as b3
    group by bank_id) as b4-- ) as b5
order by total desc

```

|        |        |
|--------|--------|
| 24,940 | 11.62% |
| 13,335 | 7.25%  |
| 0      | 7.12%  |
| Other  | 74.01% |



• 10000

```

select bank_id/10000 bank_id, sum(swtv) result
from(
    select bank_id, sum(transaction_value) swtv, sum(transaction_cost) swtc
    from(
        select bank_id, sum(new_count) wight, transaction_cost, transaction_value
        from(
            select *
            from(
                select bank_id, count(count) new_count, transaction_cost, transaction_
                from data_dataset
                where count = 0
                group by bank_id, transaction_cost, transaction_value) as b0
            union all
            select *
            from(
                select bank_id, count new_count, transaction_cost, transaction_value
                from data_dataset
                where count != 0) as b1) as b2
        group by bank_id, transaction_cost, transaction_value) as b3
    group by bank_id) as b4

```

```
group by bank_id/10000
order by result desc
```

|         |       |
|---------|-------|
| ● 1     | 31.3% |
| ● 2     | 18.2% |
| ● 0     | 18.1% |
| ● Other | 32.4% |




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- **transaction\_cost**

- 

```
select bank_id, swtc total
from(
  select bank_id, sum(transaction_value) swtv, sum(transaction_cost) swtc
  from(
    select bank_id, sum(new_count) wight, transaction_cost, transaction_va
    from(
      select *
      from(
        select bank_id, count(count) new_count, transaction_cost, tran
        from data_dataset
        where count = 0
        group by bank_id, transaction_cost, transaction_value) as b0

      union all
      select *
      from(
        select bank_id, count new_count, transaction_cost, transaction
        from data_dataset
        where count != 0) as b1) as b2
    group by bank_id, transaction_cost, transaction_value) as b3
  group by bank_id) as b4-- ) as b5
order by total desc
```



|        |        |
|--------|--------|
| 31,549 | 33.03% |
| 57,218 | 6.18%  |
| 15,169 | 4.84%  |
| 24,940 | 4.18%  |
| Other  | 51.76% |

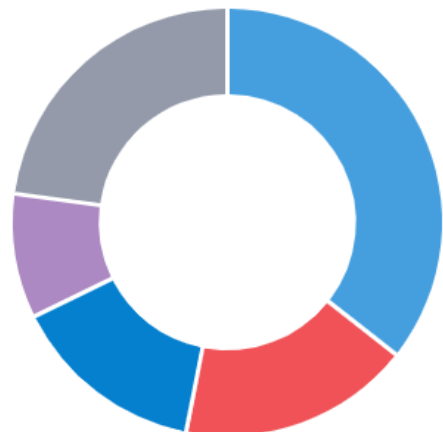


• 10000

```
select bank_id/10000 bank_id, sum(swtc) result
from(
  select bank_id, sum(transaction_value) swtv, sum(transaction_cost) swtc
  from(
    select bank_id, sum(new_count) wight, transaction_cost, transaction_value
    from(
      select *
      from(
        select bank_id, count(count) new_count, transaction_cost, transaction_
        from data_dataset
        where count = 0
        group by bank_id, transaction_cost, transaction_value) as b0

      union all
      select *
      from(
        select bank_id, count new_count, transaction_cost, transaction_value
        from data_dataset
        where count != 0) as b1) as b2
    group by bank_id, transaction_cost, transaction_value) as b3
  group by bank_id) as b4
group by bank_id/10000
order by result desc
```

|       |        |
|-------|--------|
| 3     | 35.85% |
| 1     | 17.42% |
| 0     | 14.58% |
| 5     | 9.25%  |
| Other | 22.90% |



• transaction\_cost

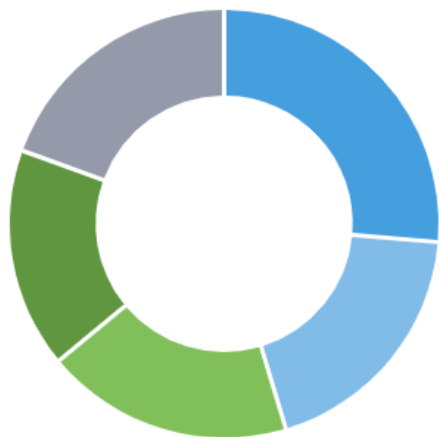
```

select bank_id, sum(transaction_cost)/sum(wight) result
from(
  select bank_id, sum(new_count) wight, transaction_cost, transaction_va
  from(
    select *
    from(
      select bank_id, count(count) new_count, transaction_cost, tran
      from data_dataset
      where count = 0
      group by bank_id, transaction_cost, transaction_value) as b0

    union all
    select *
    from(
      select bank_id, count new_count, transaction_cost, transaction
      from data_dataset
      where count != 0) as b1) as b2
  group by bank_id, transaction_cost, transaction_value) as b3
group by bank_id
order by result desc

```

|           |       |
|-----------|-------|
| ● 22,601  | 26.5% |
| ● 37,387  | 19.0% |
| ● 1,541   | 18.6% |
| ● 197,886 | 16.5% |
| ● Other   | 19.4% |



• 10000

```

select bank_id/10000 bank_id, sum(result) result
from(
  select bank_id, sum(transaction_cost)/sum(wight) result
  from(
    select bank_id, sum(new_count) wight, transaction_cost, transaction_va
    from(
      select *
      from(
        select bank_id, count(count) new_count, transaction_cost, tran
        from data_dataset
        where count = 0
        group by bank_id, transaction_cost, transaction_value) as b0

      union all
      select *
      from(
        select bank_id, count new_count, transaction_cost, transaction
        from data_dataset
        where count != 0) as b1) as b2
    group by bank_id, transaction_cost, transaction_value) as b3

```

```

    group by bank_id) as b4
group by bank_id/10000
order by result desc

```

|         |        |
|---------|--------|
| ● 2     | 29.95% |
| ● 0     | 24.57% |
| ● 3     | 19.61% |
| ● 19    | 18.89% |
| ● Other | 6.99%  |




---

- **transaction\_value**

- 

```

select bank_id, sum(transaction_value)/sum(wight) result
from(
    select bank_id, sum(new_count) wight, transaction_cost, transaction_va
    from(
        select *
        from(
            select bank_id, count(count) new_count, transaction_cost, tran
            from data_dataset
            where count = 0
            group by bank_id, transaction_cost, transaction_value) as b0

        union all
        select *
        from(
            select bank_id, count new_count, transaction_cost, transaction
            from data_dataset
            where count != 0) as b1) as b2
    group by bank_id, transaction_cost, transaction_value) as b3
group by bank_id
order by result desc

```

|         |        |
|---------|--------|
| 203,393 | 3.77%  |
| 204,717 | 2.87%  |
| 61,424  | 2.70%  |
| 8,111   | 2.25%  |
| 199,251 | 2.24%  |
| 29,551  | 2.03%  |
| Other   | 84.14% |

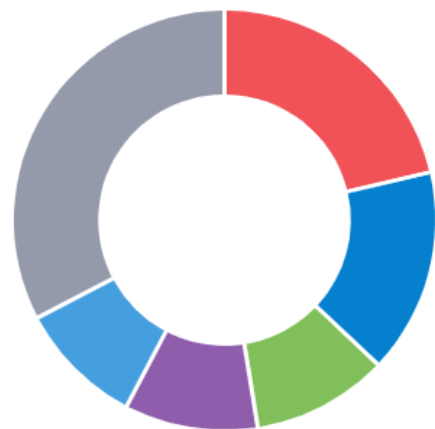


• 10000

```
select bank_id/10000 bank_id, sum(result) result
from(
  select bank_id, sum(transaction_value)/sum(wight) result
  from(
    select bank_id, sum(new_count) wight, transaction_cost, transaction_va
    from(
      select *
      from(
        select bank_id, count(count) new_count, transaction_cost, tran
        from data_dataset
        where count = 0
        group by bank_id, transaction_cost, transaction_value) as b0

      union all
      select *
      from(
        select bank_id, count new_count, transaction_cost, transaction
        from data_dataset
        where count != 0) as b1) as b2
    group by bank_id, transaction_cost, transaction_value) as b3
  group by bank_id) as b4
group by bank_id/10000
order by result desc
```

|       |        |
|-------|--------|
| 20    | 21.40% |
| 0     | 15.71% |
| 2     | 10.31% |
| 4     | 10.09% |
| 3     | 9.51%  |
| Other | 32.97% |



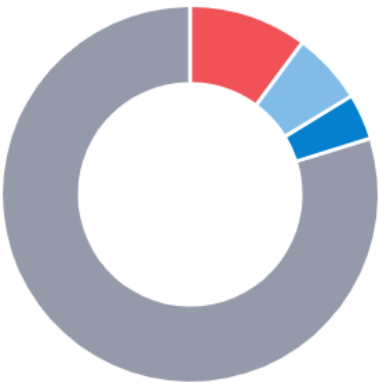
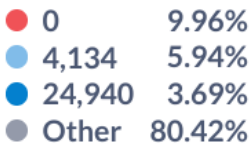
transaction\_type\_chain

•

• s

• transaction\_type\_chain s bankid

```
select bank_id, count(*) tedad
from data_dataset
where transaction_type_chain like '%s%' and transaction_type_chain not like '%p'
group by bank_id
order by tedad desc
```

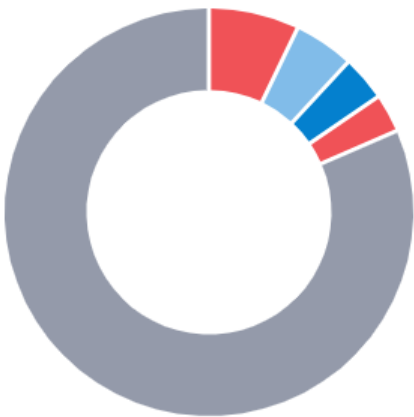


• bankid

```
select bank_id, transaction_type_chain, count(*) tedad
from data_dataset
where transaction_type_chain like '%s%' and transaction_type_chain not like '%p'
group by bank_id, transaction_type_chain
order by tedad desc
```

| bank_id | transaction_type_chain | tedad |
|---------|------------------------|-------|
| 0       | 6s                     | 1,531 |
| 4,134   | 6s                     | 1,000 |
| 24,940  | 6s                     | 735   |
| 0       | 3501s                  | 614   |

- 0 6.94%
- 4,134 4.53%
- 24,940 3.33%
- 0 2.78%
- Other 82.41%



| bank_id | tedad |
|---------|-------|
| 31,549  | 1     |

- bankid
- .
- p
- .

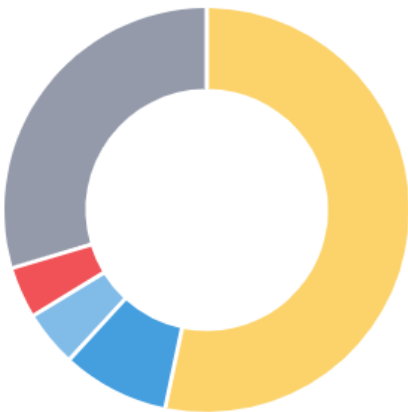
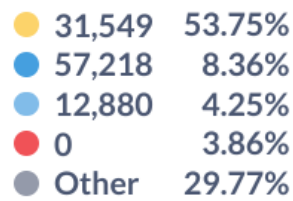
- c
- .
- m
- .

- .

- s, p

- transaction\_type\_chain bankid

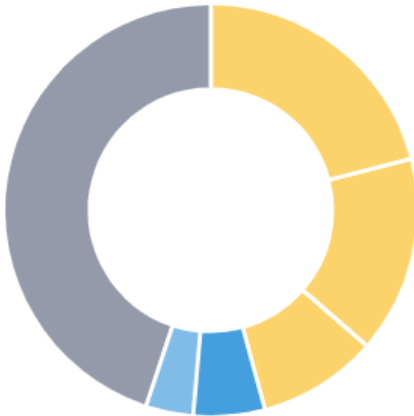
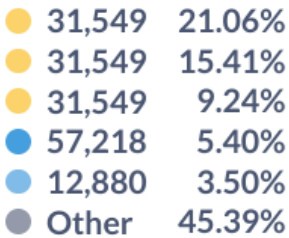
```
select bank_id, count(*) tedad
from data_dataset
where transaction_type_chain like '%p%' and transaction_type_chain like '%s%' and
group by bank_id
order by tedad desc
```



bankid

```
select bank_id, transaction_type_chain, count(*) tedad
from data_dataset
where transaction_type_chain like '%p%' and transaction_type_chain like '%s%' and
group by bank_id, transaction_type_chain
--order by bank_id, tedad desc, transaction_type_chain
order by tedad desc
```

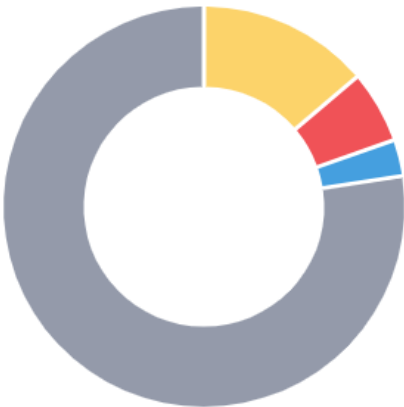
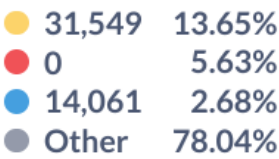
| bank_id | transaction_type_chain    | tedad  |
|---------|---------------------------|--------|
| 31,549  | 27459p;3501s              | 45,029 |
| 31,549  | 27459p;17s                | 32,958 |
| 31,549  | 27459p;6s                 | 19,767 |
| 57,218  | 27459p;17s                | 11,538 |
| 12,880  | 27459p;601p;617s;17s;617s | 7,482  |
| 13,335  | 28392p;28691p;6s          | 3,269  |



bankid

```
select bank_id, count(transaction_type_chain) tanavo
from(
    select bank_id, transaction_type_chain, count(*) tedad
    from data_dataset
    where transaction_type_chain like '%p%' and transaction_type_chain like '%s%'
    group by bank_id, transaction_type_chain) as b
group by bank_id
order by tanavo desc
```

| ▼ bank_id | ▼ tanavo |
|-----------|----------|
| 31,549    | 657      |
| 0         | 271      |
| 14,061    | 129      |
| 24,940    | 92       |
| 61,173    | 74       |
| 16,276    | 64       |

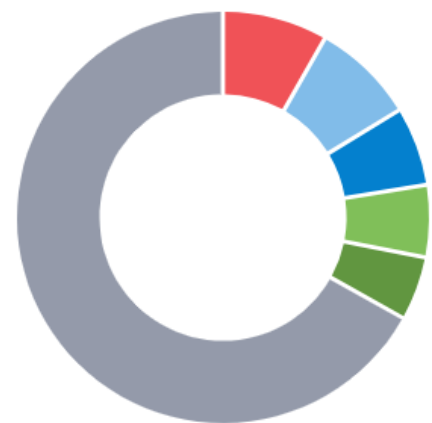
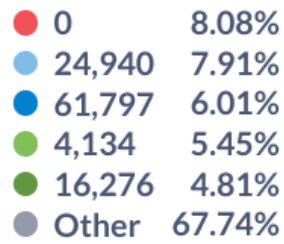


• s,m

• transaction\_type\_chain bankid

```
select bank_id, count(*) tedad
from data_dataset
where transaction_type_chain like '%s%' and transaction_type_chain like '%m%' and
group by bank_id
order by tedad desc
```

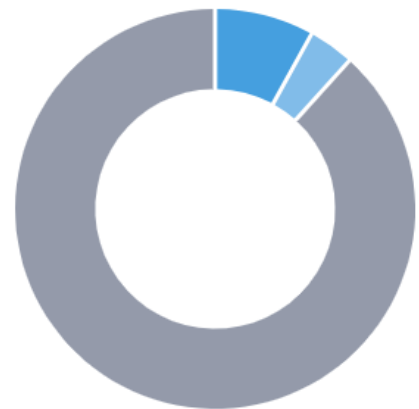
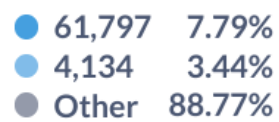




• bankid

```
select bank_id, transaction_type_chain, count(*) tedad
from data_dataset
where transaction_type_chain like '%s%' and transaction_type_chain like '%m%' and
group by bank_id, transaction_type_chain
--order by bank_id, tedad desc, transaction_type_chain
order by tedad desc
```

| bank_id | transaction_type_chain   | tedad  |
|---------|--------------------------|--------|
| 61,797  | 17s;28391m               | 12,837 |
| 4,134   | 6s;27714m                | 5,670  |
| 4,134   | 17s;28391m;27714m;28391m | 4,048  |
| 0       | 6s;27714m                | 2,282  |
| 61,317  | 17s;28391m;27714m;28391m | 1,816  |
| 4,837   | 6s;27714m                | 1,698  |



• bankid

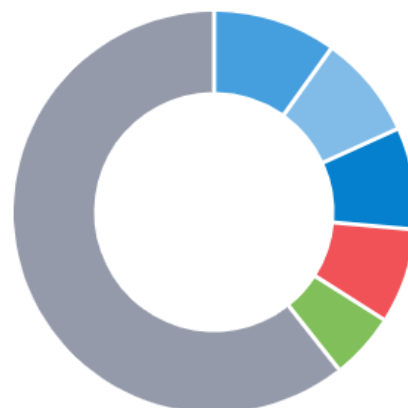
- .
- s, c
- 
- p, c
- 
- m, c
- 
- p, m
- 

- s, p, m

- transaction\_type\_chain bankid

```
select bank_id, count(*) tedad
from data_dataset
where transaction_type_chain like '%p%' and transaction_type_chain like '%s%' and
group by bank_id
order by tedad desc
```

|        |        |
|--------|--------|
| 13,335 | 9.76%  |
| 15,169 | 8.19%  |
| 16,509 | 8.06%  |
| 0      | 7.45%  |
| 24,940 | 5.14%  |
| Other  | 61.41% |

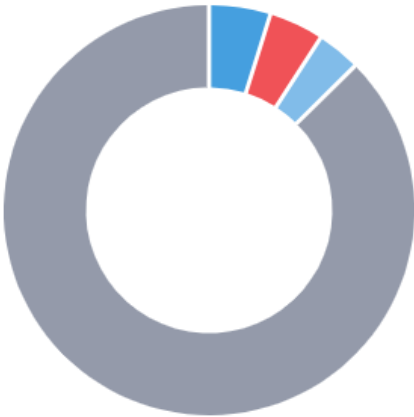
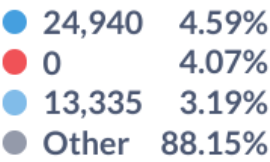


- bankid
- .
- bankid

```
select bank_id, count(transaction_type_chain) tanavo
from(
    select bank_id, transaction_type_chain, count(*) tedad
    from data_dataset
    where transaction_type_chain like '%p%' and transaction_type_chain like '%s%' and
    group by bank_id, transaction_type_chain) as b
```

```
group by bank_id
order by tanavo desc
```

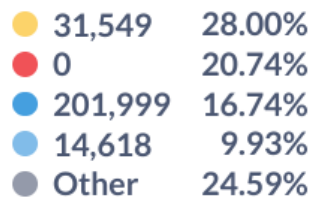
| ▼ bank_id | ▼ tanavo |
|-----------|----------|
| 24,940    | 1,925    |
| 0         | 1,708    |
| 13,335    | 1,339    |
| 14,061    | 1,103    |
| 15,169    | 1,004    |



- s, p, c

- transaction\_type\_chain bankid

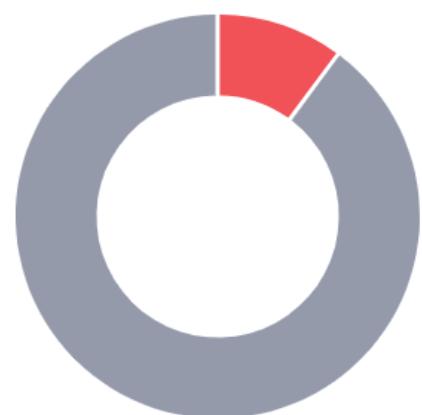
```
select bank_id, count(*) tedad
from data_dataset
where transaction_type_chain like '%p%' and transaction_type_chain like '%s%' and
group by bank_id
order by tedad desc
```



• bankid

```
select bank_id, transaction_type_chain, count(*) tedad
from data_dataset
where transaction_type_chain like '%p%' and transaction_type_chain like '%s%' and
group by bank_id, transaction_type_chain
--order by bank_id, tedad desc, transaction_type_chain
order by tedad desc
```

| bank_id | transaction_type_chain               | tedad |
|---------|--------------------------------------|-------|
| 0       | 27459p;6s;1122s;27738c;27738p        | 67    |
| 31,549  | 27459p;6s;676s;27738c;27738p         | 53    |
| 14,618  | 27459p;27029p;6s;1122s;27738c;27738p | 48    |
| 31,549  | 27459p;6s;1122s;27738c;27738p        | 44    |
| 201,999 | 27459p;6s;1122s;27738c;27738p        | 33    |
| 201,999 | 27459p;6s;676s;27738c;27738p         | 26    |

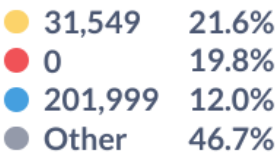


• bankid

```
select bank_id, count(transaction_type_chain) tanavo
from(
  select bank_id, transaction_type_chain, count(*) tedad
  from data_dataset
where transaction_type_chain like '%p%' and transaction_type_chain like '%s%' and
```

```
group by bank_id, transaction_type_chain) as b
group by bank_id
order by tanavo desc
```

| bank_id | tanavo |
|---------|--------|
| 31,549  | 36     |
| 0       | 33     |
| 201,999 | 20     |
| 61,173  | 15     |

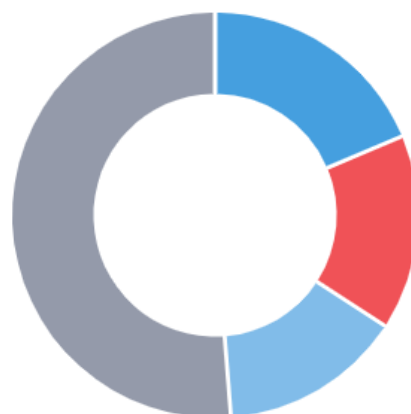


• s, c, m

• transaction\_type\_chain bankid

```
select bank_id, count(*) tedad
from data_dataset
where transaction_type_chain like '%s%' and transaction_type_chain like '%m%' and
group by bank_id
order by tedad desc
```

● 20,473 18.6%  
 ● 0 15.5%  
 ● 48,430 14.4%  
 ● Other 51.5%



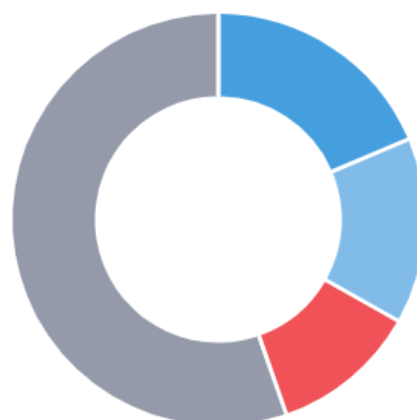
• bankid

```

select bank_id, transaction_type_chain, count(*) tedad
from data_dataset
where transaction_type_chain like '%s%' and transaction_type_chain like '%m%' and
group by bank_id, transaction_type_chain
--order by bank_id, tedad desc, transaction_type_chain
order by tedad desc
  
```

| ▼ bank_id | transaction_type_chain ▼                   | ▼ tedad |
|-----------|--------------------------------------------|---------|
| 20,473    | 6s;27714m;847s;28391m;27172c               | 18      |
| 48,430    | 6s;676s;28391m;27000c                      | 14      |
| 0         | 6s;676s;28391m;28478m;27000c;28391m        | 11      |
| 852       | 6s;27714m;676s;28391m;27000c               | 6       |
| 58,132    | 6s;27714m;676s;28391m;27000c               | 3       |
| 16,276    | 6s;27714m;676s;28391m;27412m;27000c;28391m | 3       |

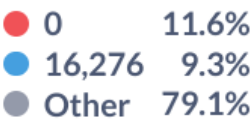
● 20,473 18.6%  
 ● 48,430 14.4%  
 ● 0 11.3%  
 ● Other 55.7%



• bankid

```
select bank_id, count(transaction_type_chain) tanavo
from(
    select bank_id, transaction_type_chain, count(*) tedad
    from data_dataset
    where transaction_type_chain like '%s%' and transaction_type_chain like '%m%'
    group by bank_id, transaction_type_chain) as b
group by bank_id
order by tanavo desc
```

| bank_id | tanavo |
|---------|--------|
| 0       | 5      |
| 16,276  | 4      |
| 58,132  | 3      |



• p, c, m

•

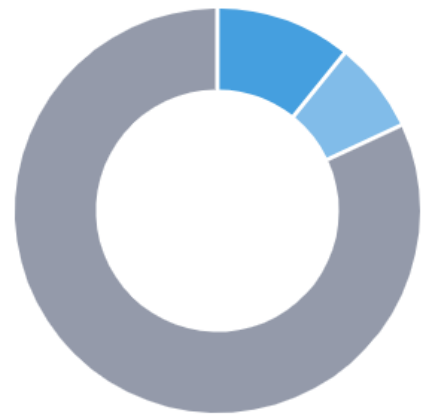
•

• p, c, m, s

• transaction\_type\_chain bankid

```
select bank_id, count(*) tedad
from data_dataset
where transaction_type_chain like '%p%' and transaction_type_chain like '%m%' and
group by bank_id
order by tedad desc
```

- 714 10.59%
- 24,940 7.06%
- Other 82.35%



• bankid

```
select bank_id, transaction_type_chain, count(*) tedad
from data_dataset
where transaction_type_chain like '%p%' and transaction_type_chain like '%m%' and
group by bank_id, transaction_type_chain
--order by bank_id, tedad desc, transaction_type_chain
order by tedad desc
```

| bank_id | transaction_type_chain                                                 | tedad |
|---------|------------------------------------------------------------------------|-------|
| 714     | 28392p;27332p;6s;27714m;1122s;28391m;21122p;27738c;27738p              | 2,322 |
| 714     | 28392p;27332p;6s;27714m;1122s;28391m;21122p;27738c;27738p;1187c;27738c | 2,201 |
| 3,356   | 28392p;600p;617s;17s;28391m;27465c;27465p;617s                         | 1,788 |
| 8,075   | 28392p;6s;27714m;1122s;28391m;27738c;27738p                            | 1,393 |

- 714 3.98%
- 714 3.77%
- 3,356 3.07%
- 8,075 2.39%
- Other 86.79%



• bankid

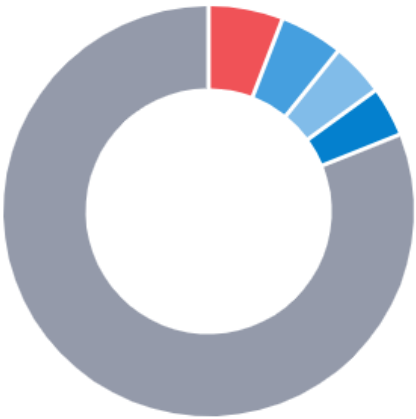
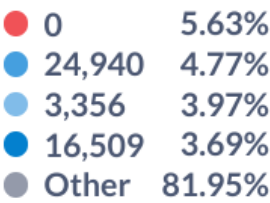
```
select bank_id, count(transaction_type_chain) tanavo
from(
select bank_id, transaction_type_chain, count(*) tedad
from data_dataset
where transaction_type_chain like '%p%' and transaction_type_chain like '%m%'

```



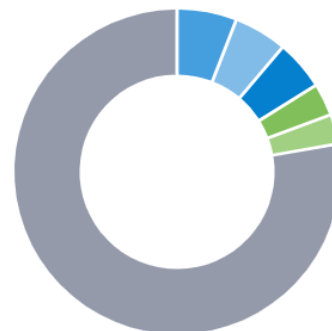
```
group by bank_id, transaction_type_chain) as b
group by bank_id
order by tanavo desc
```

| bank_id | tanavo |
|---------|--------|
| 0       | 443    |
| 24,940  | 375    |
| 3,356   | 312    |
| 16,509  | 290    |



```
select transaction_type_chain, count_chain
from(
    select transaction_type_chain, count(*) count_chain from dat.
    group by transaction_type_chain) as b0
order by count_chain desc limit 5
```

|                          |        |
|--------------------------|--------|
| 27459p;3501s             | 5.72%  |
| 27459p;17s               | 5.07%  |
| 6s;27714m                | 4.74%  |
| 17s;28391m;27714m;28391m | 2.99%  |
| 27459p;6s                | 2.70%  |
| Other                    | 78.78% |



transaction\_type\_chain ▾

▾ count\_chain

|                          |        |
|--------------------------|--------|
| 27459p;3501s             | 52,255 |
| 27459p;17s               | 46,380 |
| 6s;27714m                | 43,351 |
| 17s;28391m;27714m;28391m | 27,363 |
| 27459p;6s                | 24,672 |

```
select bank_id, transaction_type_chain, count(*) tedad_in_bank f
where transaction_type_chain in ('27459p;3501s', '27459p;17s', '
group by bank_id, transaction_type_chain
order by tedad_in_bank desc
```

▾ bank\_id

transaction\_type\_chain ▾

▾ tedad\_in\_bank

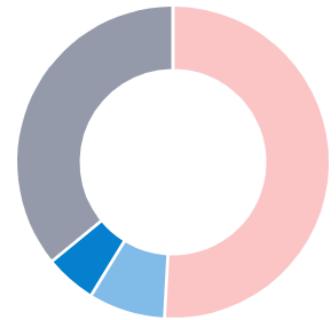
|        |                          |        |
|--------|--------------------------|--------|
| 31,549 | 27459p;3501s             | 45,029 |
| 31,549 | 27459p;17s               | 32,958 |
| 31,549 | 27459p;6s                | 19,767 |
| 57,218 | 27459p;17s               | 11,538 |
| 4,134  | 6s;27714m                | 5,670  |
| 4,134  | 17s;28391m;27714m;28391m | 4,048  |

|        |        |
|--------|--------|
| 31,549 | 23.95% |
| 31,549 | 17.53% |
| 31,549 | 10.52% |
| 57,218 | 6.14%  |
| 4,134  | 3.02%  |
| Other  | 38.84% |



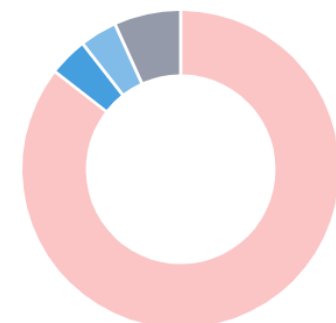
```
select bank_id, count(*) tedad_in_bank from data_dataset
where transaction_type_chain in ('27459p;3501s', '27459p;17s', '
group by bank_id
order by tedad_in_bank desc
```

|        |        |
|--------|--------|
| 31,549 | 51.15% |
| 57,218 | 7.71%  |
| 4,134  | 5.09%  |
| Other  | 36.06% |



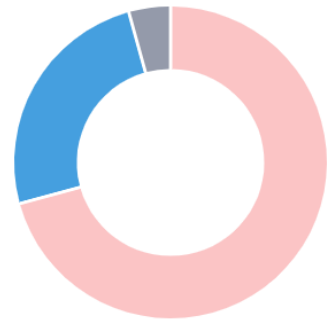
```
select bank_id, transaction_type_chain, count(*) count_bank from
where transaction_type_chain like '27459p;3501s'
group by bank_id, transaction_type_chain
order by count_bank desc
```

|        |        |
|--------|--------|
| 31,549 | 86.17% |
| 58,256 | 3.73%  |
| 57,218 | 3.54%  |
| Other  | 6.56%  |



```
select bank_id, transaction_type_chain, count(*) count_bank from
where transaction_type_chain like '27459p;17s'
group by bank_id, transaction_type_chain
order by count_bank desc
```

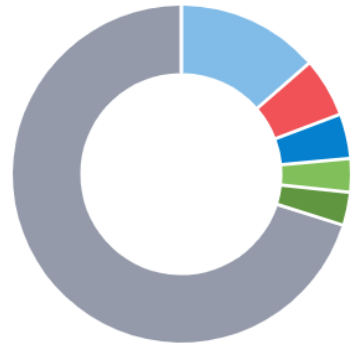
|        |        |
|--------|--------|
| 31,549 | 71.06% |
| 57,218 | 24.88% |
| Other  | 4.06%  |



•

```
select bank_id, transaction_type_chain, count(*) count_bank from
where transaction_type_chain like '6s;27714m'
group by bank_id, transaction_type_chain
order by count_bank desc
```

|       |        |
|-------|--------|
| 4,134 | 13.56% |
| 0     | 5.46%  |
| 4,837 | 4.06%  |
| 4,812 | 2.97%  |
| 4,808 | 2.92%  |
| Other | 71.03% |



•

```
select bank_id, transaction_type_chain, count(*) count_bank from
where transaction_type_chain like '17s;28391m;27714m;28391m'
group by bank_id, transaction_type_chain
order by count_bank desc
```

|        |        |
|--------|--------|
| 4,134  | 15.13% |
| 61,317 | 6.79%  |
| 4,837  | 4.08%  |
| 4,808  | 3.40%  |
| 4,812  | 3.12%  |
| Other  | 67.48% |



•

```
select bank_id, transaction_type_chain, count(*) count_bank from
where transaction_type_chain like '27459p;6s'
group by bank_id, transaction_type_chain
order by count_bank desc
```

