

# Telecom: Finding Clients With Non-Optimal Plans

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Tel-Aviv, January 2021

# General conclusions:

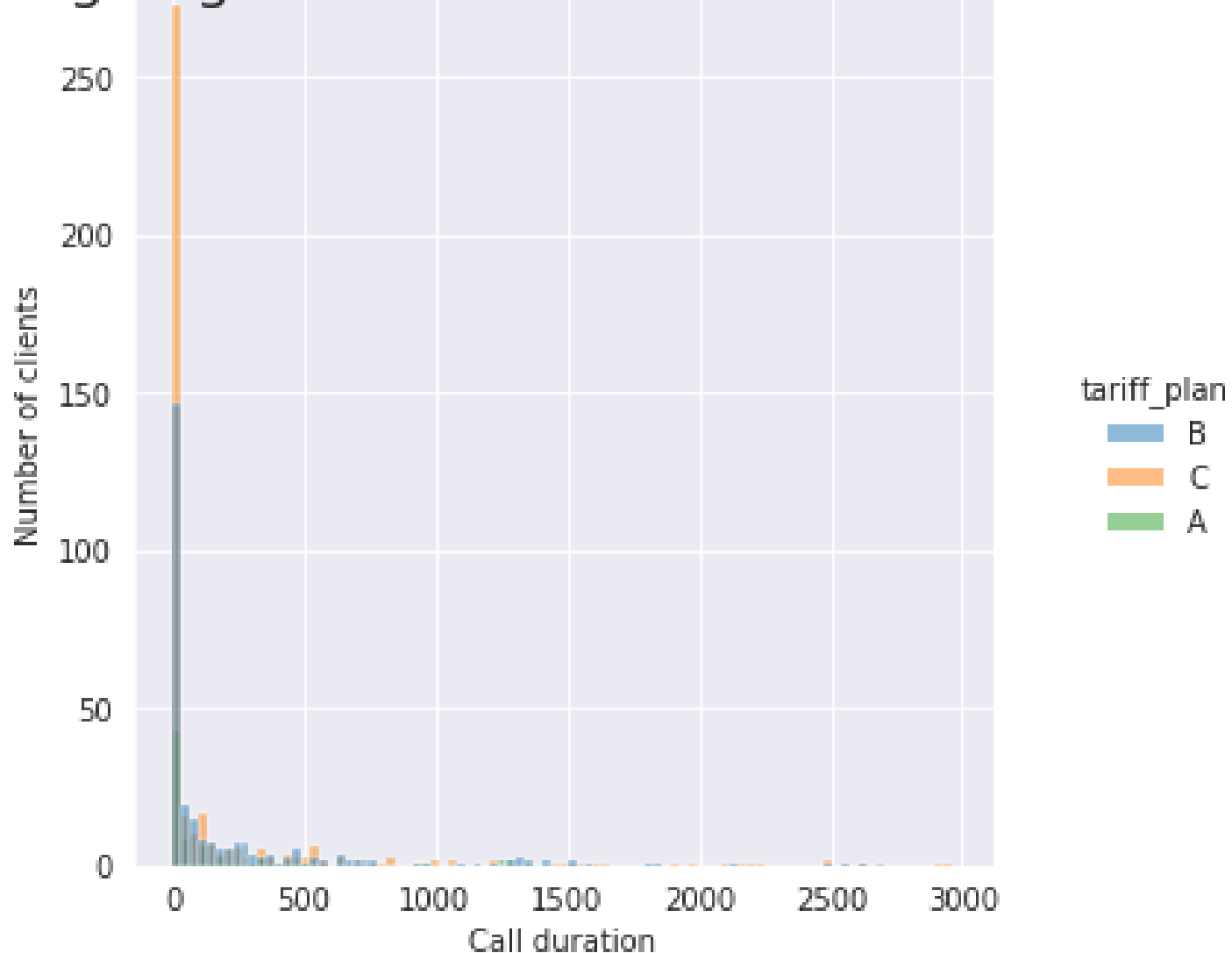
## General Rule:

- Tariff A is optimal for clients who use more than 30000 minutes of external outgoing call a month,
- Tariff B is optimal for clients who use between 5000 and 30000 minutes of external outgoing calls a month,
- Tariff C is optimal for clients who use less than 5000 minutes of external outgoing calls a month.

## What do we know from our dataset?

- No clients exceed free 2000 minutes limit for internal calls.
- 98% of clients use less than 5000 minutes a month.
- More than 95% of tariffs A and B users are overpaying.
- Overpaying users mostly overpay from 40 to 60% of their actual payment.

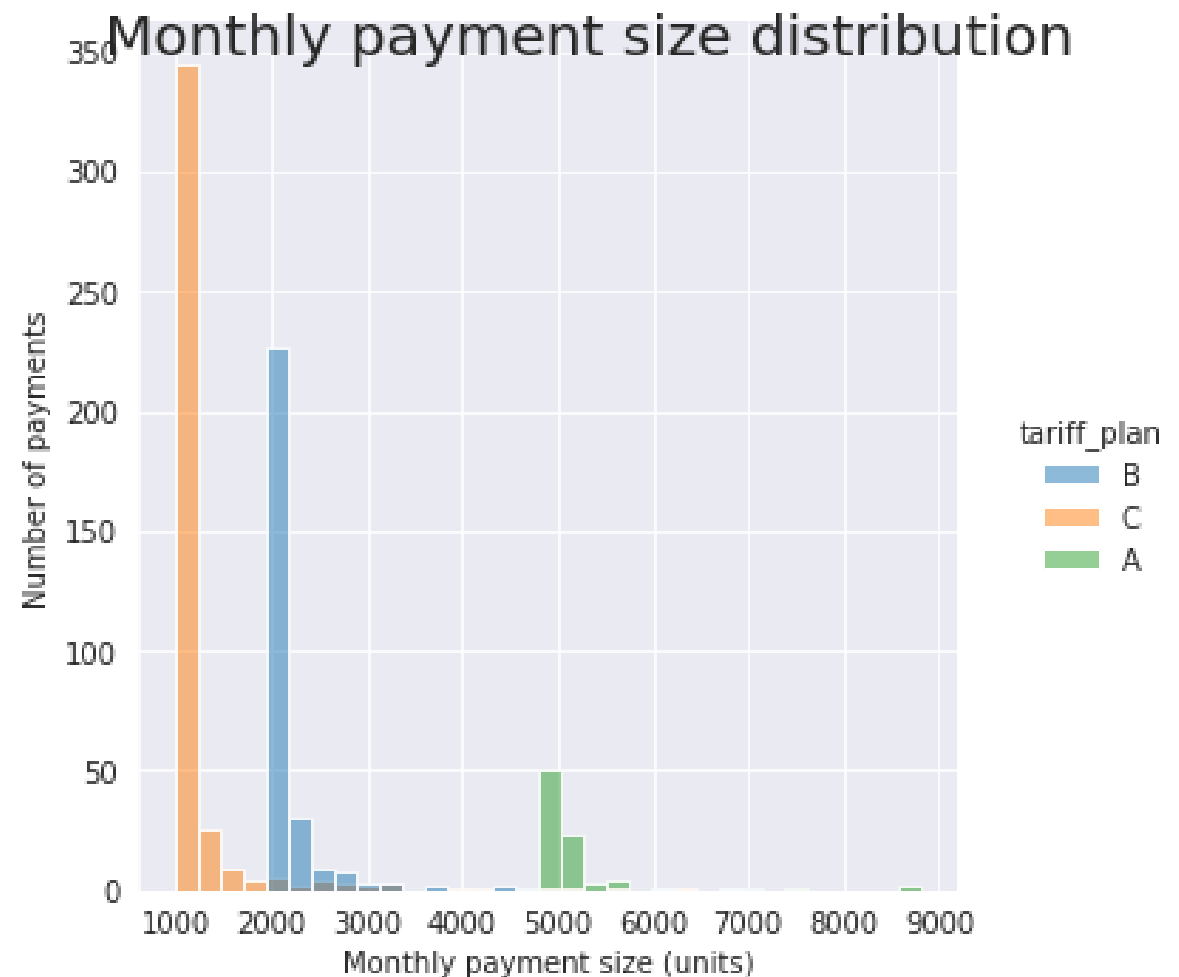
## Outgoing external call duration distribution



Most of clients don't even use external outgoing calls, their monthly duration is 0. For such clients, tariff C is optimal.

Clients who speak more than 3000 minutes are so rare you don't even see them on this graph.

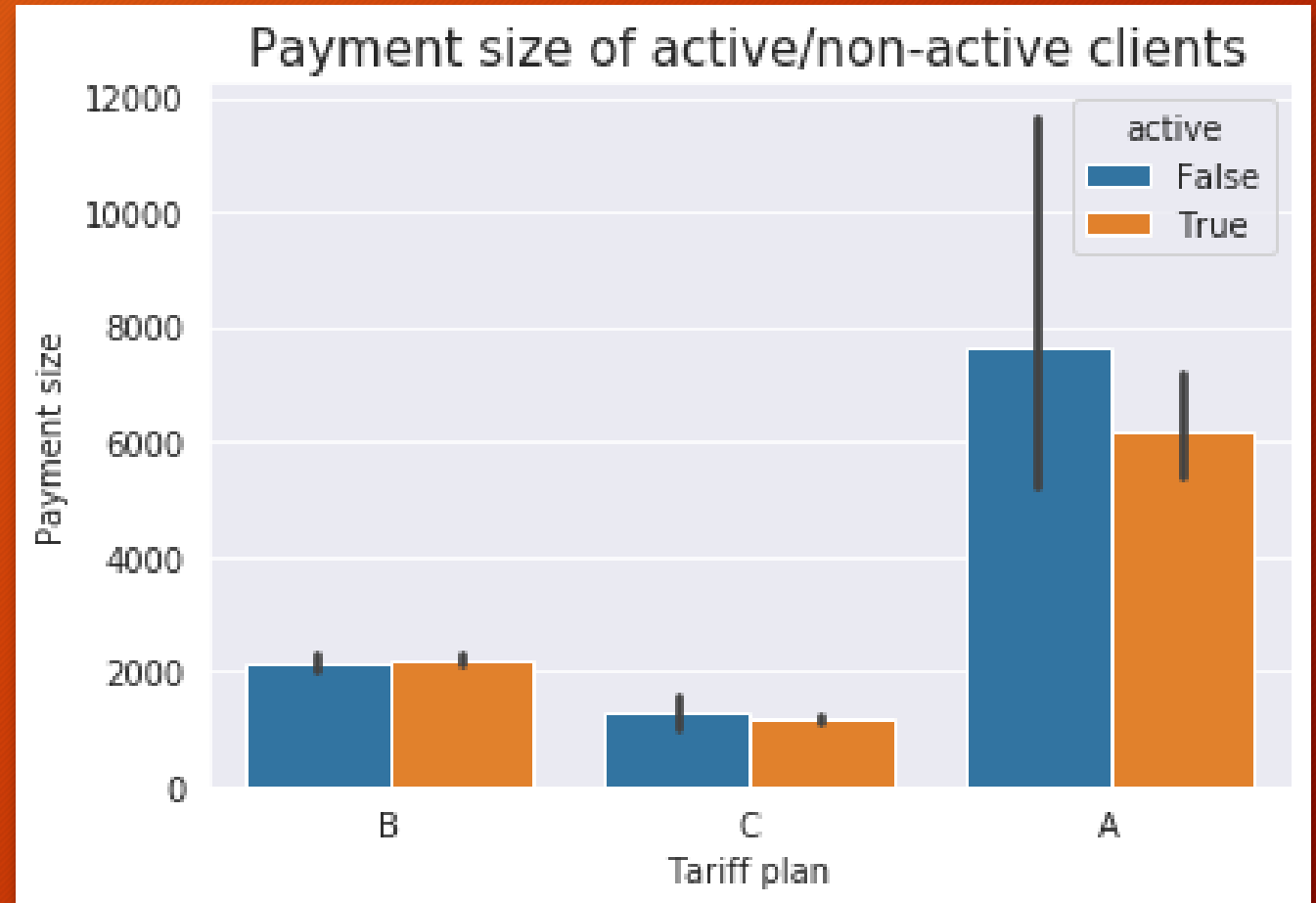
Most of clients don't  
pay more than a basic  
plan cost.  
Could they pay even  
less?



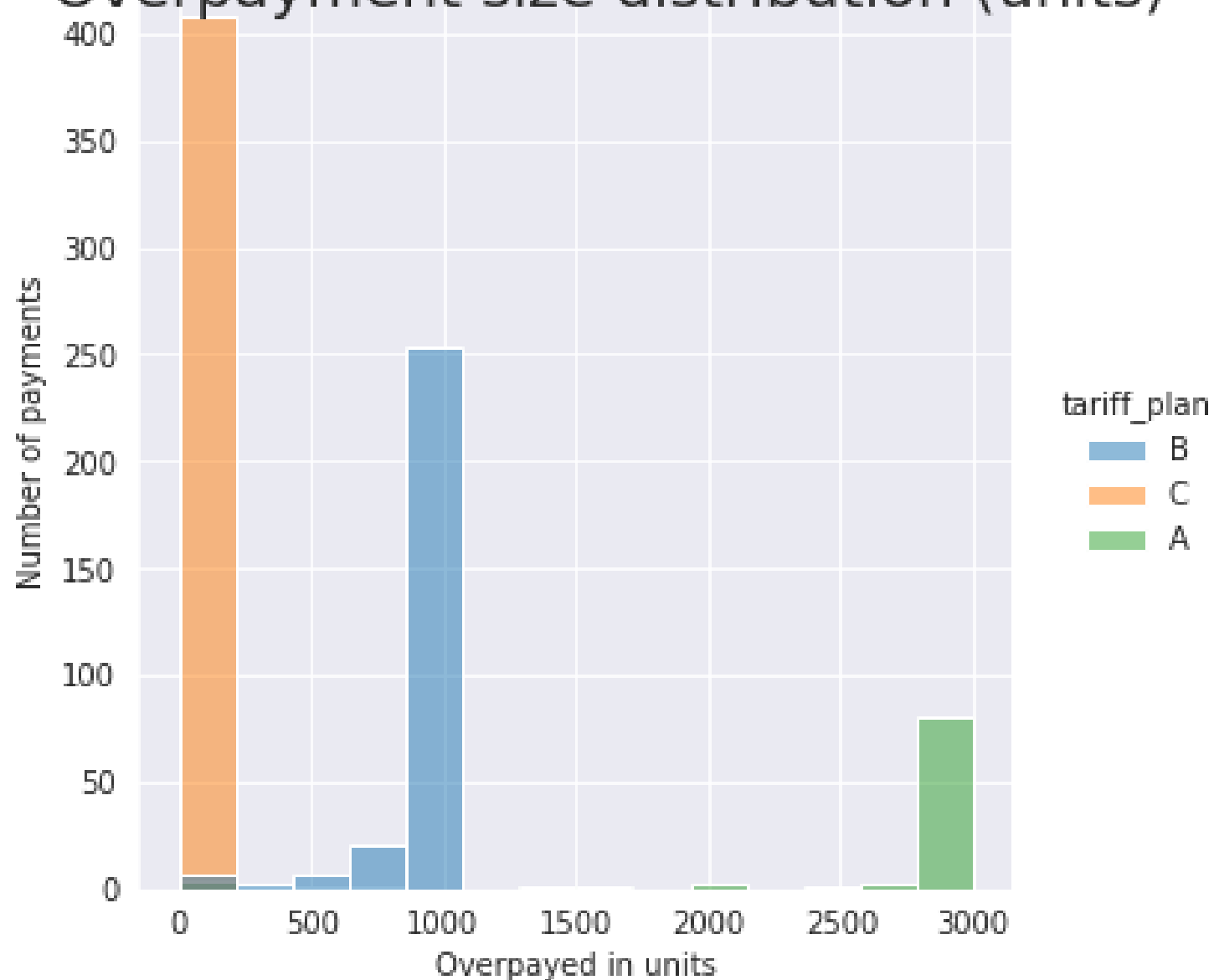
# Why clients leave?

Some clients weren't active in November, meaning they probably won't return. Why did we lost them?

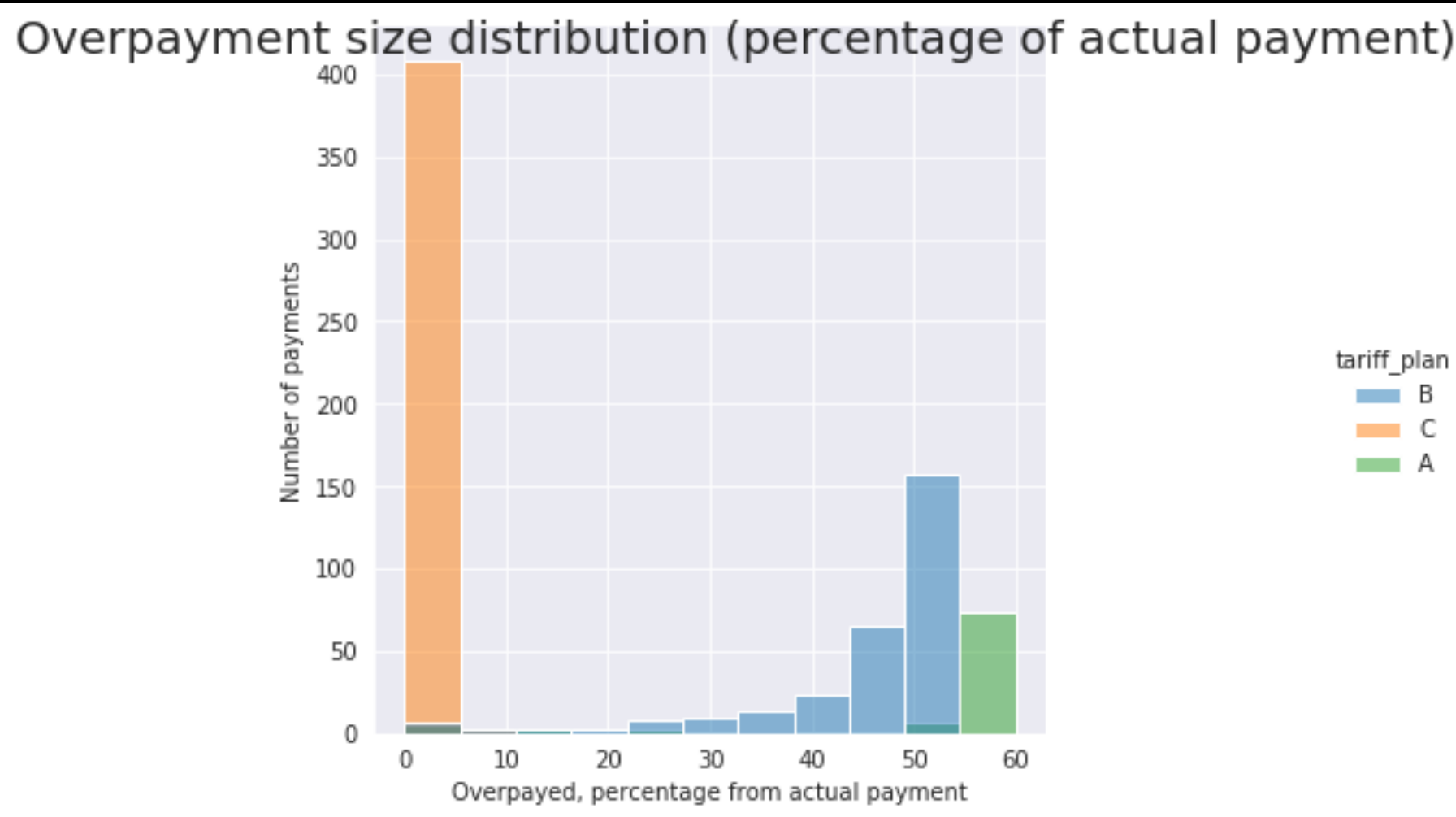
We see that their payment size is bigger than payment size of active clients. What can we say about it? No one wants to pay extra, and when overpaying client finds cheaper company, he just fades away.



## Overpayment size distribution (units)



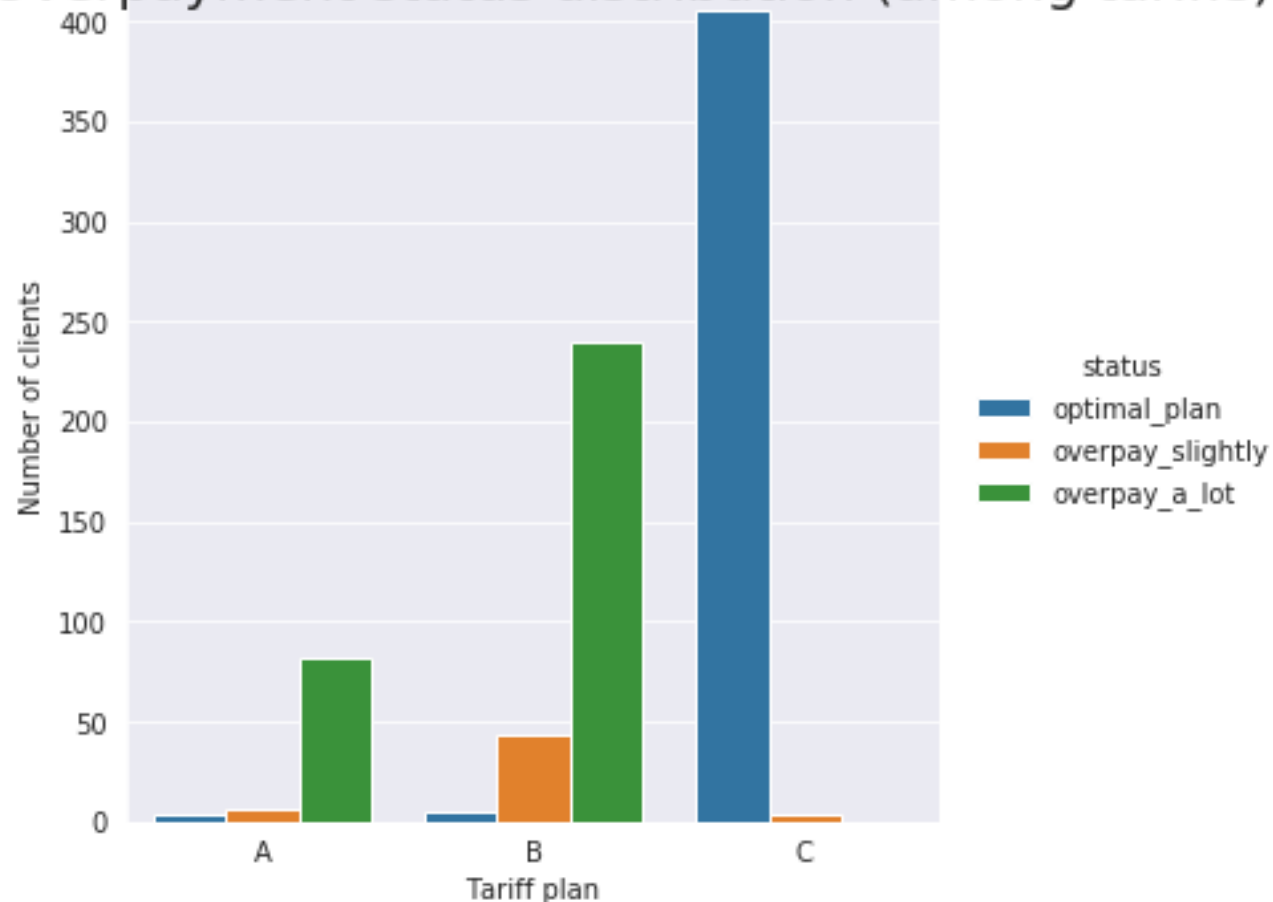
- Tariff C users usually don't overpay.
- Tariff B users overpay up to 1000 units, mostly 1000 units.
- Tariff A users usually overpay up to 3000 units



We consider overpaying between 40 to 60% of actual payment as overpaying a lot, and overpaying up to 40% as overpaying slightly.

- 99% of tariff C users have optimal plan. 1% of them needs bigger plan.
- 83% of tariff B users overpay a lot, and 15% overpay slightly
- 88% of tariff A users overpay a lot, and 7.5% overpay slightly

Overpayment status distribution (among tariffs)





# What can and what should be done?

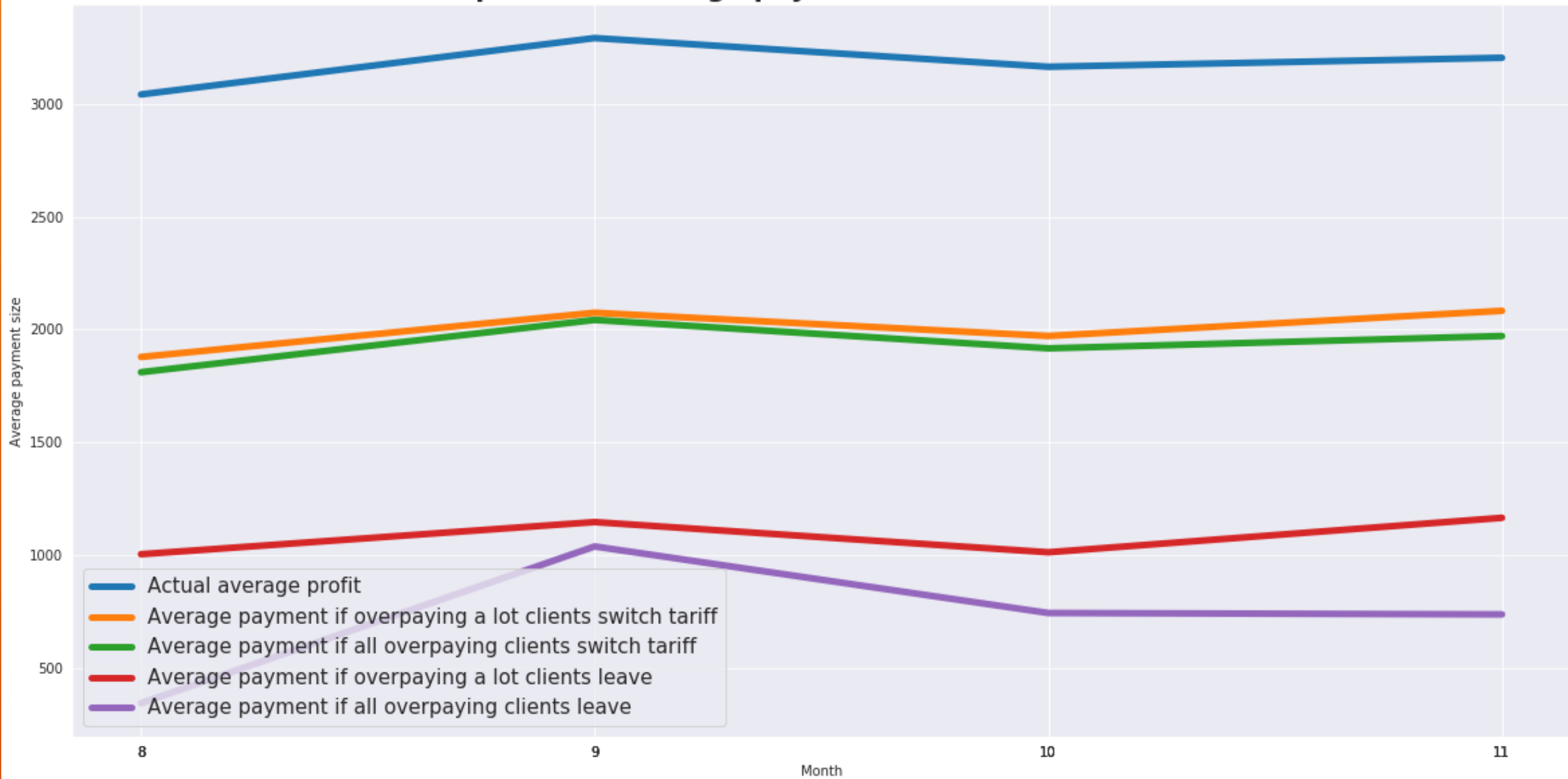
If we will switch overpaying users to optimal tariff, company will lose some profit, but gain customers' loyalty, which is crucial for increasing LTV and company's profit in long term.

If we won't switch tariff for such users, company will keep its current profit, but eventually overpaying users will leave and the company will lose all profit from them in long term.

How can we reduce the loss in profit? We could switch tariff only for those users who overpay a lot, that would save some profit, but this option is a little risky, because there are still clients who overpay, and the difference in profit won't be that significant.

On the next graph we'll see average monthly payment size: actual one and hypothetical ones. This will help us make a decision.

**Actual and potential average payment size with different conditions**



# General recommendations:

Keeping existing client is cheaper than acquiring new one.  
Investment in loyalty will return; being a company that offers honest pricing is good for overall image.

My recommendation is to switch overpaying clients to their optimal tariff and possibly rethink the tariffs boundaries since we found out that for 98% of our clients tariff C is the optimal one.

Thank you very  
much for your  
attention!