

Synergy potential in Swiss cash infrastructure

AT A GLANCE



The number of cash withdrawals and deposits at ATMs throughout Switzerland is falling. It is becoming increasingly difficult for financial institutions to ensure efficient ATM operations with reasonable cost/benefit conditions.



A study by SIX in collaboration with Senozon¹ shows that the current number of withdrawals and deposits at ATMs could be handled with just a third of the machines currently installed in Switzerland – thanks to resizing and without restricting access to cash.



A look beyond Switzerland's borders shows that ATM pooling represents a potential successful approach for reorganizing and securing the supply of cash for the population on a long-term basis.



In the next step, SIX will conduct a detailed GAP analysis of the results of the study to identify further insights for the real arrangement of an optimally sized ATM landscape in Switzerland. On this basis, possible courses of action for the further arrangement of cash management are to be developed together with the financial institutions.

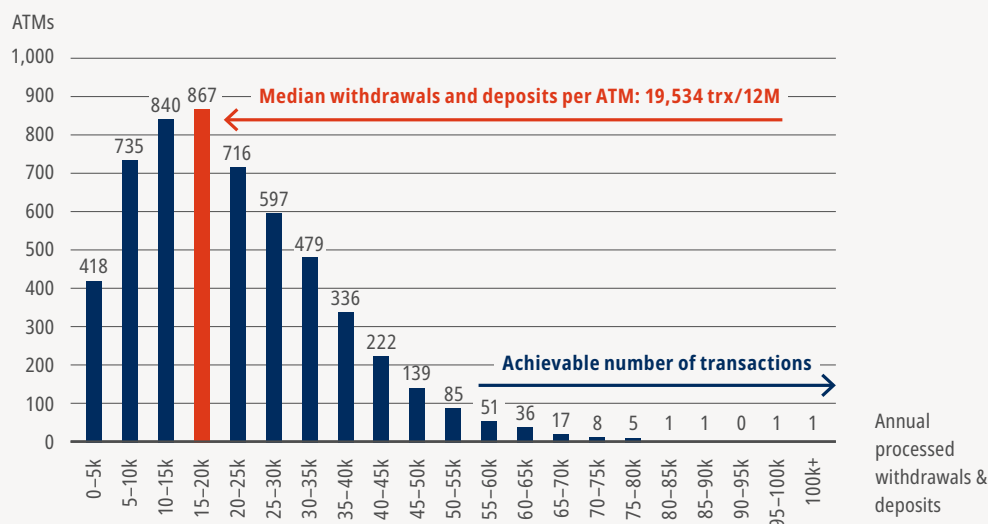
Fewer transactions and increasing inefficiency in utilization of machines

Looking back at the period from 2014 to 2019, the number of cash transactions at ATMs in Switzerland has been decreasing by around 4.5% each year. The abrupt decline in the use of cash as a payment means in the pandemic year 2020, driven by hygiene concerns and recommendations by retailers to use contactless payment where possible, made the starting situation still more difficult for ATM operators. When the number of transactions decreases, the costs per transaction rise. The 6,000 ATMs in the SIX network alone cost the operating banks an estimated CHF 180 million each year. Given that transaction numbers were already falling before the coronavirus, SIX also does not expect them to reach the pre-pandemic level after the coronavirus crisis.

¹ Senozon is a consultancy specializing in sociodemographic mobility models

The trend toward fewer cash transactions at ATMs will instead intensify. This is backed up by the latest survey on payment methods by the Swiss National Bank (SNB) from 2020. The survey reveals significant changes in the use of different payment methods as compared to the previous survey from 2017, with striking shifts from cash to cashless payment methods². Use of cash is very likely to settle at a stable level, as there will still be a need for cash in the medium term – for example, for making payments at a farmers' market or disbursing military pay. According to the SIX white paper "Future of Money," the most likely future scenario is that cash will be perceived as a "store of value" and used widely in the long term. Nonetheless, cash holdings will decrease by between 40% and 60% in this scenario, too. This is chiefly due to the decline in cash as a payment method by an estimated 40% to 70%.

Whichever forecast materializes, cash is becoming less important in Switzerland. This has an impact on the country's cash infrastructure. The number of ATMs in Switzerland is already far higher than what is needed, as shown by investigations by SIX. The majority of the ATMs in the SIX network process fewer than 30,000 transactions per year, with the median level at around 20,000. However, the capacity of an ATM is considerably higher: Just a few years ago, some machines were processing up to 180,000 transactions per year. Each ATM costs the operating banks roughly CHF 30,000 a year. Around 60% of this is attributable to fixed costs such as rent, depreciation, insurance, etc. Each ATM thus causes significant costs, so it matters a great deal that, for example, around 1,000 ATMs process only one transaction per hour on average.



Calculated using transaction figures for Sept. 2020 – June 2021 and extrapolated for 12 months based on 5,555 ATMs.

Up to 180,000 transactions per year were actually processed by each ATM in the past. Nowadays, the reality is different, with most ATMs processing fewer than 30,000 transactions per year – far fewer than in most other countries. According to an RBR study, the average number of withdrawals per ATM in the 32 countries analyzed came to 34,750 in 2019.⁴

² https://www.snb.ch/en/iabout/cash/cash_paytrans_surveys/id/paytrans_survey_2020_2

³ <https://www.six-group.com/future-money>

⁴ According to "Global ATM Market and Forecasts to 2025" by the research and consulting service provider RBR

In collaboration with Senozon, SIX has conducted a study on a potential demand-based distribution of ATMs in Switzerland with a view to ensuring an efficient cash supply in Switzerland in the long term. It comes to the conclusion that if the financial institutions take joint action, then the ATM withdrawals and deposits processed by SIX can also be covered by up to two-thirds fewer ATMs. This new, optimized distribution places more ATMs at very busy locations and reduces the number of them at places with a lower frequency. This optimized distribution is adapted to the changed customer requirements and thus improves access to cash, as it ensures that each ATM can be reached by the vast majority of the population within 20 minutes on foot or by public transport.



Joint action provides better quality of service

The forms of cash management are changing all around the world – including in Switzerland. SIX offers solutions to provide optimal support for banking business. For example, some banks are starting to completely outsource cash management and ATM support. However, the savings are limited due to the high fixed costs involved in operating ATMs. Only a withdrawal from this area leads to significant savings. However, many banks see providing access to cash services as an integral part of what they do. Nationwide cash supply therefore cannot be organized efficiently by individual banks. This can also be confirmed by looking at other countries such as the Netherlands and Belgium, which pursue a successful approach with interbank ATM pooling. In this context, SIX has examined what an efficient cash supply with ideal positioning and utilization of ATMs in Switzerland would need to be like.



Sociodemographic mobility model shows considerable optimization potential for cash services

The study commissioned by SIX examines what the optimal sizing of the ATM infrastructure for Switzerland would need to be like, taking account of sociodemographic and mobility factors. The results of the study by the renowned consulting and technology company Senozon, which specializes in location planning and assessment as well as transport and infrastructure planning, establish a well-founded data base by examining every developed hectare of Switzerland. This shows the quantitative potential of each ATM location and offers a basis for assessing it. On this basis, it can be derived how the nationwide cash supply in Switzerland can be secured efficiently and on a long-term basis.

The study is based on data from the ATMs in the SIX network. It thus includes around 6,000 geocoded locations throughout the country. The transaction volume (deposits and withdrawals) for the period from November 2019 to October 2020 was examined. First, the nationwide transaction potential per hectare (deposits, withdrawals, and total) was calculated. In the next step, the number and positioning of the ideal locations to optimally meet the population's changed needs with regard to transactions (transaction potential) was determined. And finally, the necessary number and positioning of the ideal locations to reach as many Swiss residents as possible was determined.



2,161 ATMs at 1,159 locations cover cash demand at ATMs and ensure access to cash for the Swiss population

The results of the study showed that only this combined approach is expedient. If the only basis used is the ability to reach an ATM within 20 minutes on foot or by public transport, then just 651 locations would be enough for this combined approach. But it is clear that this approach would reflect the real needs only to a limited extent, as it does not include demand potential. The selected locations are of course not automatically at very busy locations with corresponding transaction volumes. It is therefore important for the approach to take account of the optimization of transaction potential, too. However, the study was based on 120,000 transactions per ATM per year rather than the previously recorded 180,000 transactions, as this provides a larger buffer for periods of frequent use and thus helps avoid long queues for the ATMs. If the forecast for a location was more than 120,000 transactions, then multiple ATMs were planned there.

This enhanced approach led to the following conclusion: With an ideal distribution, 2,161 ATMs at 1,159 locations would be enough to meet the demand for cash transactions at ATMs throughout Switzerland.⁵ The average per ATM per year would be around 80,000 transactions⁶. This means that by optimizing the cash infrastructure as outlined above, Swiss ATM operators can ensure cash services and make them more reachable with around two-thirds fewer ATMs.



Study shows the ideal distribution of ATM locations in Switzerland

⁵ This must be qualified by saying that a micro-location assessment is required for the exact positioning of the ATMs. In addition, the described annual decrease in transactions and other output points have not been taken into account in this approach.

⁶ Based on the same total number of deposit and withdrawal transactions as at the time of the study

Joint solution for the Swiss financial market

SIX is already the central and most important infrastructure service provider for Swiss financial institutions. With this self-perception, SIX engages in regular dialog with the banks and is interested in developing possible courses of action together for the future arrangement of cash management for the Swiss financial center and playing an active and central role here. SIX sees potential approaches in the internationally established models of ATM as a service (ATMaaS) and cash as a service (CashaaS):

	ATM as a Service	Cash as a Service
DEFINITION	ATMaaS is a comprehensive ATM outsourcing approach (BPO) . The bank still defines the location of the ATM but no longer owns the ATM or its operations. The ATM model and the configuration are selected from a predefined catalog and marked with the bank's logo.	CashaaS is an ATM pooling approach . A pooling provider owns and manages the ATM network under a shared, neutral brand. All decisions are made by the pooling provider and are geared toward cost, efficiency, standardization, and optimization.

These models are already successfully implemented in places such as Belgium, the Netherlands, the UK, and Scandinavia.

In the next step, SIX will conduct a GAP analysis of the results of the study and thereby identify further insights for the real arrangement of an optimally sized cash infrastructure in Switzerland.

