

### IT cost survey for Swiss banks 2019

Evaluation report (based on 2018 effective data and 2019 budget data)

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## itopia is an IT and management consulting boutique focusing on the banking ecosystem

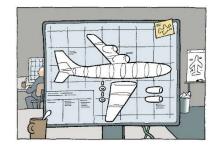


#### **Imagining**



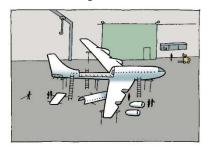
- Digitalization & Technology Strategy
- Target Operating Model & IT Governance
- Project Portfolio Optimization
- Technology Due Diligence
- Benefit Planning & Proof of Value

#### Fleshing Out



- Project Management
- Partner Evaluation
- Risk Management Strategy
- Toll Gate Assessments

#### Constructing



- Project Management
- Risk Management
- Project Management Office
- Synthetic Test Data
- Data Migration

#### Taking Off



- Rollout Concept
- Rollout Management
- Rollout Assessment



### **Key conclusions 2019**

#### 1 - Rising iR<sub>adi</sub> and diverging profitability trends for retail and private banks

The following results are particularly worth mentioning in the context of our regular IT cost benchmarking:

- 1. For the first time in many years, the itopia IT cost index iR<sub>adi</sub> rises on average of all banks from 1.07 to 1.14.
- 2. In 2018, IT costs per bank employee increased again considerably by 9.4% at retail banks and by 2.7% at private banks. This was following even stronger growth in 2017 with 12.1% for retail banks and 14.7% for private banks.
- 3. The profitability of the banks has developed differently: while the cost-income-ratio of retail banks continued to improve, the profitability of the private banks deteriorated.

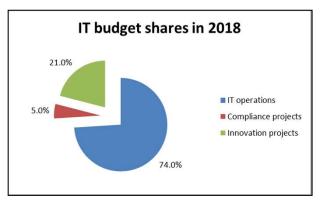
#### 2 - The maturity of the IT (cost) governance has improved slightly vs. 2013, but is still at low levels

Accounting/Controlling often seem to lack data needed for an actively managed IT cost cockpit. 62% of the IT cost figures are still based on (rough) estimates. As IT costs account for a sizeable 19% of operating costs, increased transparency and adequate accuracy is critical to managing IT efficiently and effectively as a business enabler.

**3 - Innovation oriented IT spending has increased considerably** (From 14.4% to 21.0%, at the expense of compliance projects with a decrease from 12.3% to 5%)

#### The RTB cost block has remained stable overall

(Slight increase from 73.3% to 74.0%; whereas underlying trends may result in lower costs for traditional sourcing, but shifts from capital to operational expenditure due to the adoption of pay-as-you-go services like Cloud add to RTB. A closer look reveals that this changes to the RTB share correlate substantially with bank type, bank size and IT policy.)





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### Introduction

#### IT cost survey

- Performed on a yearly basis since the year 2000, with more than 12'000 data points
- Participants are smaller (< 300 FTEs) to bigger (> 900 FTEs) retail and private banks
- Pragmatic approach: questionnaire with nine raw data and profile for bank complexity

### Participants 2018/2019

- 36 banks: 23 (rather) retail banks, 13 (rather) private banks
- High constancy and comparability: 3/4 of year 2000 participants are still participating today

#### iR = itopia Ratio

- Main coefficient used in the itopia IT cost report
- Based on IT costs, balance sheet total and assets under management
- We consider this coefficient to be better than volatile earning-based ratios (e.g. cost-income-ratio)

#### Cost for data feed

Data feed expenses are considered "business costs". Therefore, these costs are reported in an own section and they are not included in the IT costs in all IT cost related analyses.

$$iR_{raw}$$

$$iR_{raw} = \frac{IT\ costs\ _{excl.\ data\ feed}}{1.1\times (balance\_assets) + 0.3\times (assets\_under\_management)}$$

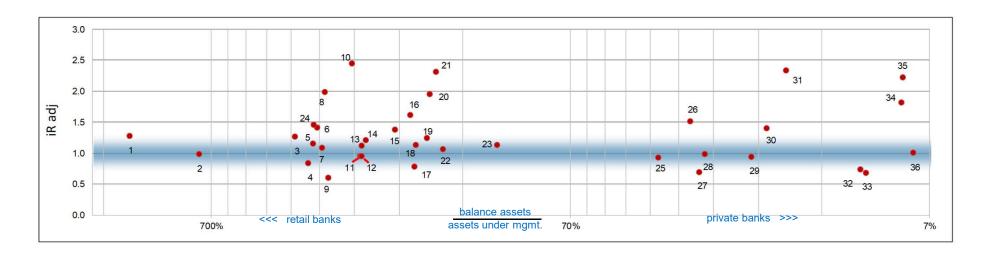
 $iR_{adi}$ 

- To allow comparability of banks, the bank complexity (f<sub>Bank</sub>) was taken into account
- Bank complexity is derived from a profile assessed by the bank itself

$$iR_{\text{ adj}} = \frac{IT \text{ costs }_{\text{excl. data feed}}}{1.1 \times (balance\_assets) + 0.3 \times (assets\_under\_management)} \times \frac{1}{f_{\text{Bank}}}$$

# Year 2018 IT cost coefficient $iR_{adj}$ (grouped along business model)

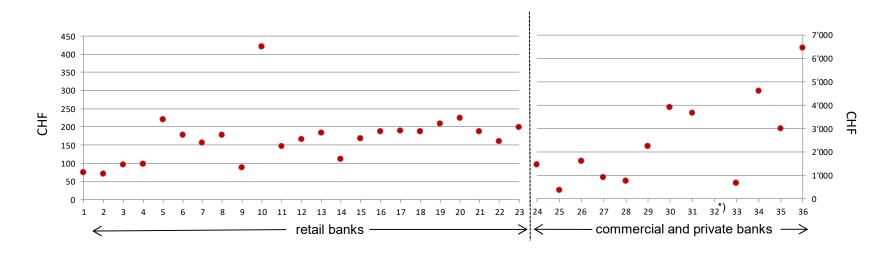




- The sorting criterion on this slide is **balance assets divided by assets under management**. The horizontal distance is measured in percentage. Thus the closer two banks are, the more similar is their ratio of balance assets to assets under management, and consequently their business model.
- The red dots represent the adjusted IT cost coefficient iR<sub>adj</sub>.
   The blue band represents the target zone for iR<sub>adj</sub>: an ideal-typical bank would have an iR<sub>adj</sub> of 1.0 in the long run.
   A bank with an iR<sub>adj</sub> of 2.0 spends +100% more on IT than an ideal-typical bank with an iR<sub>adj</sub> of 1.0.
- 13 banks (6 retail, 7 private banks) have an  $iR_{adj}$  of at or below 1.0. The previous year showed 15 banks (7 retail, 8 private banks) in that band. I.e. the  $iR_{adj}$  is continuing to rise for some banks, as in 2017.
- 4 banks have an iR<sub>adj</sub> of 2.0 or above (2 retail, 2 private banks). Compared to the previous year, this represents a stable situation (in 2017 5 banks were above an iR<sub>adj</sub> of 2.0: 3 retail, 2 private banks).

### Year 2018 IT costs per customer - retail banks vs. private banks



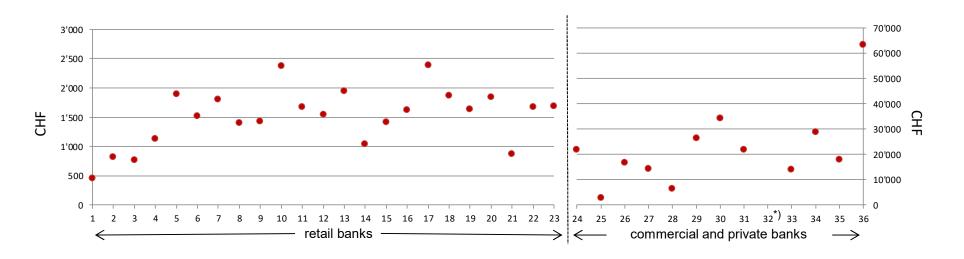


- IT expenses per active customer are significantly lower at retail banks, compared to private banks.
- Among retail banks the IT costs per active customer vary between almost CHF 70 and approx. CHF 420.
   Most retail banks spend around CHF 170 (average) per year and active customer on IT.
- Among private banks the IT costs per active customer vary between CHF 380 and more than CHF 6'400. This spread is immense: half of the private banks, however, spend less than CHF 2'000 per year and active customer on IT, with an overall average of CHF 2'500.
- This large difference between retail and private banks exists also on the revenue side per active customer on the next slide.

<sup>\*)</sup> Bank ID 32 has not provided its number of customers.

# Year 2018 Operating income per customer - retail banks vs. private banks



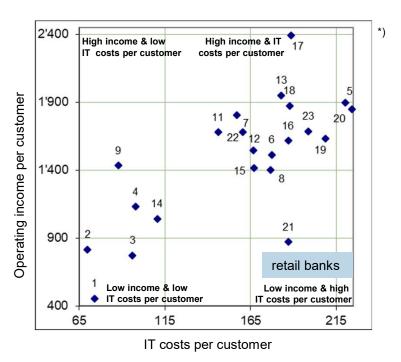


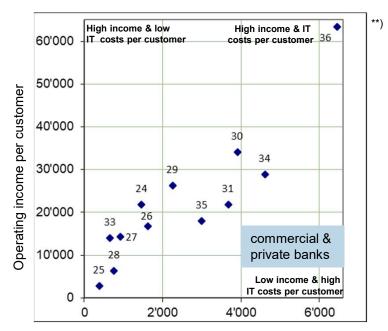
- The operating income per active customer shows a similar pattern as the IT costs per customer on the previous slide.
- Operating income per active customer is significantly lower for retail banks than for private banks.
- Among retail banks, the operating income per active customer ranges between CHF 455 and CHF 2'400. Most retail banks earned around CHF 1'000 to 2'000 per year and active customer. The average operating income per active customer in retail banks is CHF 1'500.
- Among private banks, the operating income per active customer varies between CHF 2'850 and CHF 63'300. The spread is vast as well: while half of the private banks earn below CHF 20'000 per year and active customer, with an overall average of CHF 22'400.
- A consolidated view on operating income and IT costs per customer can be found on the next slide.

<sup>\*)</sup> Bank ID 32 has not provided its number of customers.

# Year 2018 Operating income in relation to IT costs per customer







IT costs per customer

These charts show **operating income** in relation to **IT expenditure** of the bank, both **per active customer**.

Room for strategical and/or tactical improvements have banks with **low income** and **high IT costs per active customer**. This may result from missing IT initiatives driving product innovation and customer profitability.

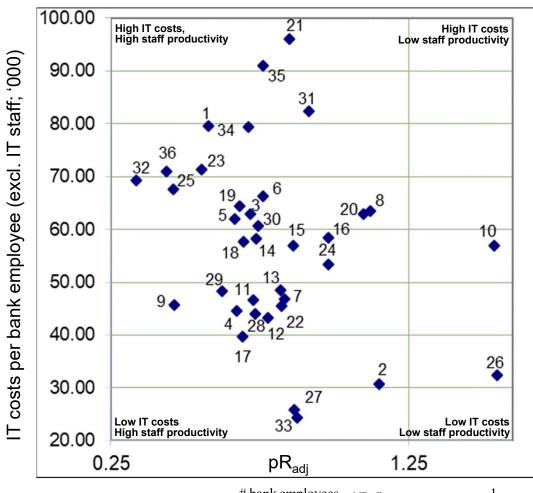
Banks that achieve **high operating income** while incurring **high IT costs per active customer** are performing well. However, active management of IT expenditure can contribute to even higher overall profitability.

<sup>\*)</sup> Bank ID 10 is out of range; values are operating income per customer: CHF 2'275 / IT costs per customer: CHF 420.

<sup>\*\*)</sup> Bank ID 32 has not provided the number of customers.

# Year 2018 IT costs per bank employee (excl. IT staff) in relation to $pR_{adi}$





 $pR_{adj} = \frac{\text{\# bank employees }_{excl.\,TTstaff}}{30 \times (balance\_assets) + 10 \times (assets\_under\_management)} \times \frac{1}{f_{Bank}}$ 

This chart shows IT costs per bank employee in relation to the bank's staff productivity  $pR_{adi}$ .

Banks that have room for strategic and/or tactical improvements:

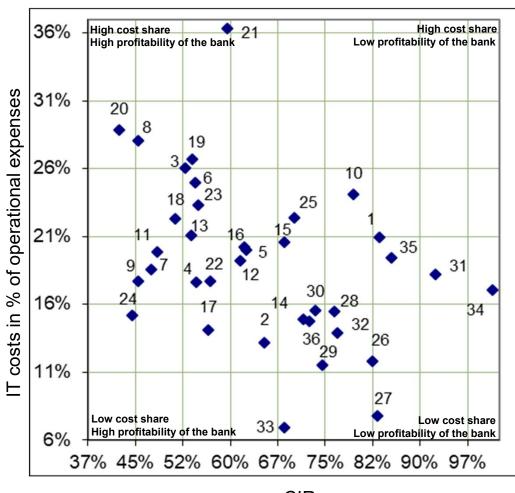
- High IT costs per bank employee and low staff productivity. IT investments may not effectively target productivity levers.
- Low IT costs per bank employee and low staff productivity. IT may not receive sufficient management attention and funding to support the bank's overall operational excellence ambitions.

Ideally, automation and digitalization initiatives will result in above-average staff productivity that more than compensates for higher IT costs. Still, cost savings can be achieved by adjusting the quality of IT services [provided vs. needed] and avoiding redundancy.

A few banks have **low IT costs per bank employee** and **high staff productivity**. While this may look like an attractive position, such banks should be vigilant and monitor both operational risks as well as market shifts specifically in the area of digitalization.

## Year 2018 IT costs in % of operational expenses in relation to CIR





This chart presents IT costs as a percentage of operating expenses OPEX in relation to the bank's cost-income-ratio CIR.

These banks have room for strategic and/or tactical improvements:

- High cost share and low profitability of the bank: Investments in IT do not contribute to profitability or the bank is in the middle of an investment cycle (check the time course of this ratio with a shift of 3-4 years between the figure series to confirm investment profitability).
- Low cost share and low profitability of the bank: too little investment is made in IT; the bank may be in a consolidation phase. If not, consider increasing IT investments to boost the bank's profitability.

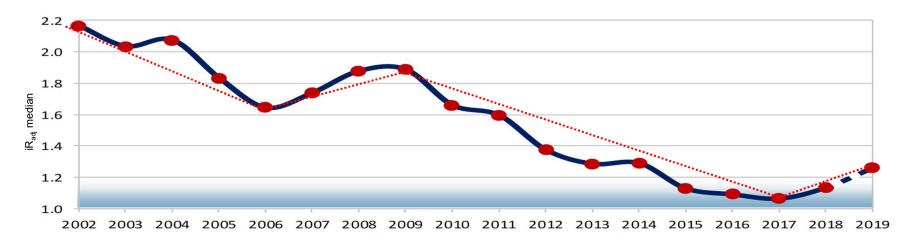
Banks that invest effectively in their IT have a **high cost share**, but **are profitable**.

Banks that have a **low cost share** but are nevertheless **highly profitable** have the best opportunities to allocate additional resources to IT investments, e.g. to enter new markets.

**CIR** 

# Time series IT cost coefficient $iR_{adj}$ – medians of all participants

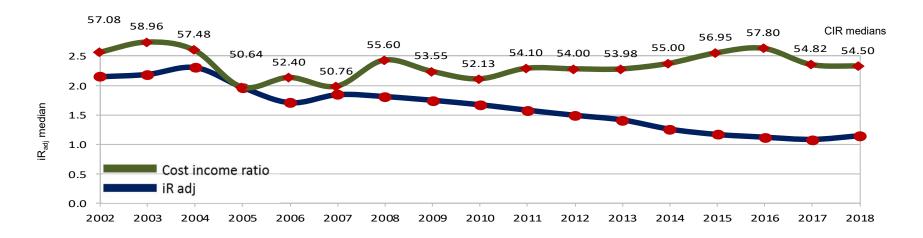




- Red dots: adjusted IT cost coefficient iR<sub>adj</sub> calculated as median for all participating banks, with an outlook into 2019 based on available budget figures.
- 2002 to 2006 and 2009 to 2016 were periods with an accelerated improvement of the iR<sub>adj</sub> by about 6% p.a. on average.
   In 2017, iR<sub>adj</sub> fell from 1.09 to 1.07, now at a slower pace.
   Between 2007 and 2008 the downward trend was interrupted, and the IT cost efficiency iR<sub>adj</sub> deteriorated.
- For the first time in many years, the median of the itopia IT cost index iR<sub>adj</sub> rises from 1.07 to 1.14. Based on the reported budget 2019 figures, we expect the IT cost index iR<sub>adj</sub> to rise even higher to 1.26 in 2019. It remains to be seen whether our IT cost benchmark can confirm this trend next year.
- 8 retail banks and 8 private banks still have a rising iR<sub>adj</sub> value compared to 2017. 15 retail banks and 5 private banks managed to lower their iR<sub>adi</sub> again in 2018 or to remain at the same level.

### Time series IT cost coefficient & cost income ratio – retail banks



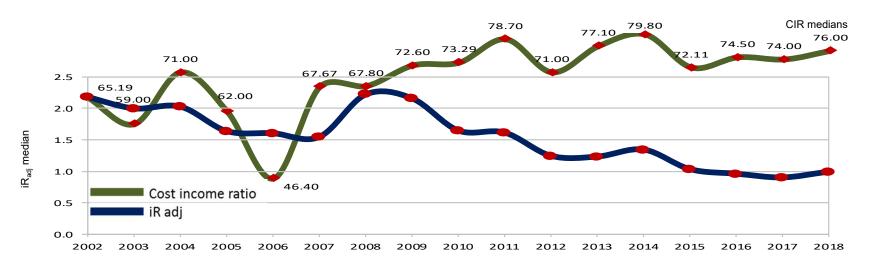


- For retail banks, the IT cost coefficient iR<sub>adj</sub> and the cost income ratio CIR were positively correlated until 2009 (at 0.70). In other words, well-managed IT costs<sup>\*)</sup> were correlated with well-managed total operational costs and ultimately had a positive impact on bank's bottom line.
- From 2010 to 2016, the median CIR of retail banks rose from 52% to almost 58%. In 2017, this trend reversed to a CIR median of 54.82%. This trend continued to a lesser extent in 2018.
   A contrasting trend can be observed in the CIR development of private banks (see next slide).

<sup>\*)</sup> an IT governance is implemented that economically meets the business requirements.

## Time series IT cost coefficient & cost income ratio – private banks

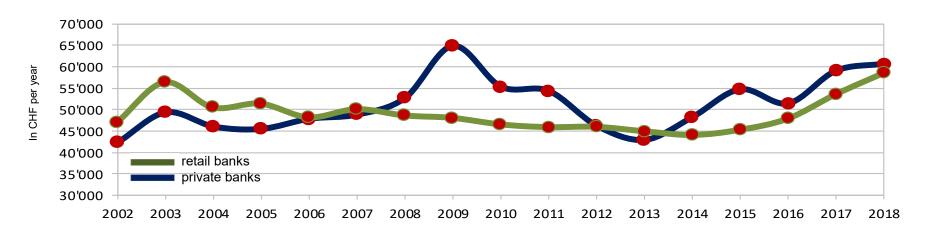




- For private banks, the IT cost coefficient iR<sub>adj</sub> and the cost income ratio CIR were loosely correlated over the entire period under review. On the contrary, iR<sub>adj</sub> and CIR developed differently from 2008 onwards.
- From time to time, private banks succeeded in significantly improving their CIR, e.g. in 2006, 2012 and 2015. However, after each decline in the CIR, which was accompanied by slight declines in iR<sub>adj</sub>, the CIR of the private banks returned to its previous level.
- Figures for 2018 show that the CIR increased from 74.00% to 76.00%, in line with the IT cost coefficient iR<sub>adj</sub>, which also increased from 0.90 to 0.99 over the same period.

# Time series IT costs per bank employee – retail banks vs. private banks

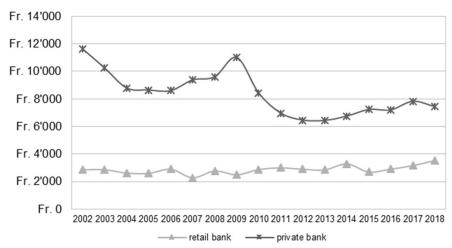


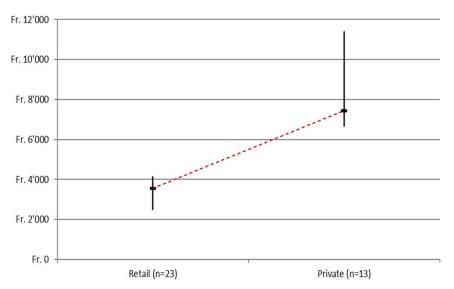


- Until 2006, IT costs per bank employee were significantly higher for retail banks than for private banks (up to 10%). After 2007, this trend reversed dramatically when private banks spent up to 30% and more on IT per bank employee than retail banks.
- In 2012, both bank types had roughly the same value of IT costs per bank employee, but almost 10% less than in 2007. 2012 and 2013, IT costs per bank employee began to rise faster at the private banks.
- The figures for 2016 show the convergence of IT costs per bank employee for both bank types.
- In 2018, both retail banks and private banks continued to invest significantly more in IT.
   In the case of retail banks, the increase of IT cost per bank employee is 9.4% compared to 2017, and 2.7% in the case of private banks.
- This is remarkable and may at best indicate a short-term trend of rising IT costs for both bank types, as both retail banks (+12.1%) and private banks (+14.7%) spent also significantly more on IT per bank employee in 2017.

### Time series Costs for data feed per bank employee in relation to bank type







itopia considers the cost for the data feed as "business costs".

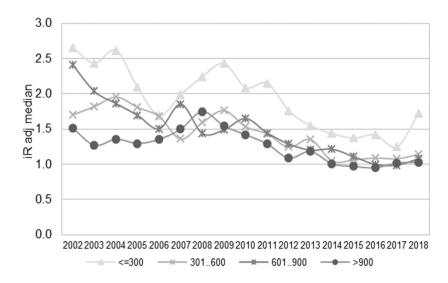
- At retail banks, the costs for the data feed per bank employee continue to rise. One reason for this could be the increased innovation and growth focus of retail banks on investment products and asset management services. At the private banks, on the other hand, the costs for the data feed per bank employee are falling for the first time in many years. This indicates that the private banks have begun to optimize their data feed costs.
- Retail banks spent approx. CHF 3'560 (+ 12.1% compared to 2017) on the data feed per bank employee in 2018, while private banks spent around CHF 7'440 (– 4.9% compared to 2017).
- Compared to retail banks, private banks show a significantly higher variance in their data feed costs.
   Compared to last year, the variance has increased even more.

#### This is because of

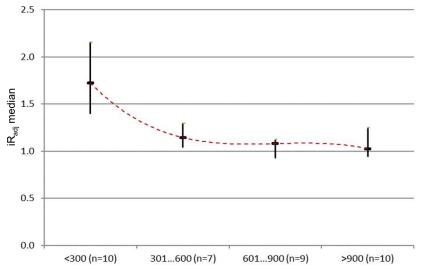
- rather similar business orientation of retail banks, and
- the extent of international reach at private banks.

# Time series IT cost coefficient $iR_{adj}$ in relation to bank size





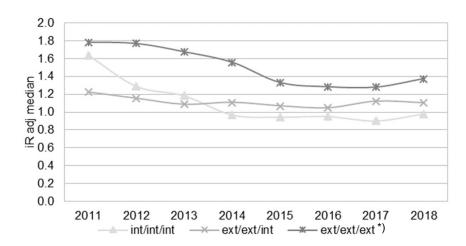
- In 2018, banks with a size >300 bank employees/FTE managed to remain at similar iR $_{\rm adj}$  levels, with class 300-600 now at 1.14 (up from 1.08 in 2017), and class 601-900 now at 1.08 (up from 0.99 in 2017). The largest banks with >900 bank employees/FTE achieved a stable iR $_{\rm adj}$  of 1.02.
- Small banks experienced a significant deterioration (i.e. increase) in IT cost efficiency compared with the previous year's observations. The iR<sub>adj</sub> increased considerably from 1.25 in 2017 to 1.72, .



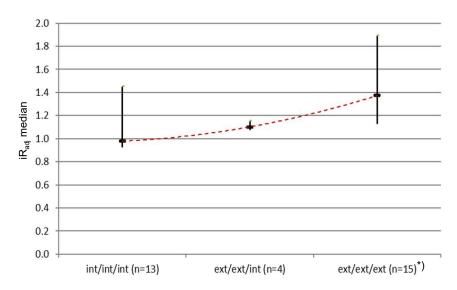
- Comparing all classes (except <300 bank employees/FTE) for 2018, the potential for economies of scale at iR<sub>adj</sub> = 1.00 appears to be weakening.
- The most IT cost efficient banks are now those in the >900 FTE category, with an  $iR_{adi}$  of 1.02.
- Large banks seem to manage their rather complex structures and processes more effectively by leveraging the economies of scale. One more reason may also be that large banks manage their IT internally.
- Compared to 2017, the variances decreased in all categories.

# Time series IT cost coefficient $iR_{adj}$ in relation to IT policy





- Compared to 2017, in 2018, we see a different situation for all\*\*) classes, as follows:
  - Class "int/int/int" :  $iR_{adj} \ of \ banks \ insourcing \ IT \ increased \ from \ 0.90 \ to \ 0.98$
  - Class "ext/ext/int":
     iR<sub>adj</sub> of banks outsourcing infrastructure and application operations decreased from 1.12 to 1.10
  - Class "ext/ext/ext":
     iR<sub>adj</sub> of banks outsourcing all IT increased from 1.28 to 1.37



- "int/int" continues to lead in terms of lowest  $iR_{adj}$ , but with a greater variance (0.53 in 2018 compared to 0.46 in 2017).
- The sourcing policy "ext/ext/int" continues to remain within the variance of "int/int" in 2018.
- Banks seeking a low iRadj in the outsourcing of their entire IT need to focus on excellent IT governance to be costefficient.
- \*) Classes: "int" internally managed, "ext" outsourced
- 1st sourcing object: Infrastructure operations (ITO)
- 2<sup>nd</sup> sourcing object: Application operations (AO)
- 3<sup>rd</sup> sourcing object: Application management (AM)

<sup>\*\*) 4</sup> banks have other IT policies with low occurrences, and are not included

### RTB vs. CTB IT costs (revisited 5 years later) Summary of the results



The maturity of the IT cost governance has improved slightly vs. 2013, but is still at low levels.

The feedback from the participating banks leads to the conclusion that either the accounting/controlling department cannot provide the figures required for an actively managed IT cost cockpit to the desired extent, or that corresponding requirements are not even requested by the IT management.

62% of the IT cost blocks are still based on rough estimates.

The IT cost blocks are only in part actively monitored. Without such control, a focused steering and allocation of the IT budget is a matter of coincidence.

As IT costs account for a significant 19% of operating costs, management's attention to stringent IT (cost) governance is likely to increase further in the future.

The share of IT spending for IT driven innovation has increased considerably at the expense of compliance projects.

But RTB cost block share increased slightly as well, which is somewhat against the market trend, while the IT sourcing service prices are under pressure.

A closer look reveals that that this overall picture does change slightly to substantially dependent on bank type, bank size and IT policy:

- Private banks seem to have considerably higher discretionary CTB IT expenses, taking into account the lower RTB IT cost share of 60% vs. 78% and the fact that costs for compliance projects are mostly roughly estimated.
- Big banks (>900 FTEs) have substantially improved their IT cost allocation towards innovation from 13% to 26%, while small/medium-sized banks have significantly increased their RTB IT cost block from a range of 71%-80% to 80%-83%.
- Different IT policies continue to dominantly influence the ratio of CTB IT expenses: The larger the proportion of internal IT management, the smaller the RTB IT cost block and in consequence, the larger the IT resources to support innovation and business.

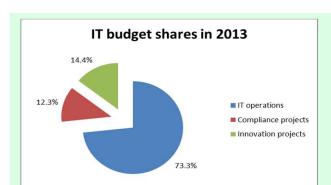
### Focus: Run-the-Bank (RTB) vs. Change-the-Bank (CTB) IT costs (revisited 5 years later)

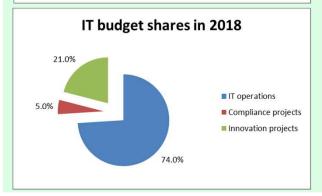


### We had expected an increasing maturity of IT management with

- a more stringent IT cost governance is in place,
- decreasing intensity of compliance project implementations,
- IT sourcing service prices being under competitive pressure.

And that the share of IT spending on IT driven innovation and business support would increase at the expense of the RTB cost block.





This hypothesis was not confirmed by 2018 data.

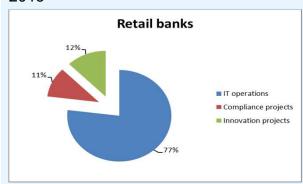
- The share of innovation projects within the IT budget has increased over the last 5 years considerably from 14.4% to 21.0%. This is good news.
- However, the RTB cost block of the IT budget has remained at similar levels (now at 74%, up from 73.3% in 2013). This is rather bad news.
- It should also be noted that most banks are unable to correctly isolate their compliance project expenses so that the low value of 5% supports on one hand our hypothesis but on the other hand could also be higher at the expense of the CTB (innovation projects) and/or RTB IT budget (IT operations).

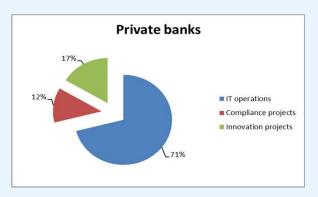
The following slides show a differentiated picture, as the findings vary slightly to substantially dependent on bank type, bank size and IT policy.

### RTB vs. CTB IT costs (revisited 5 years later) Bank type related observations



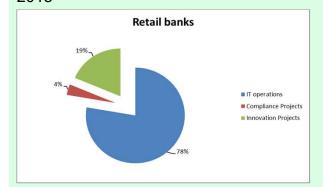
#### 2013

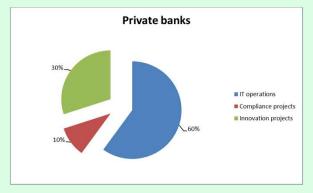




Private banks seem to have a higher discretionary CTB IT expenses of 17% than retail banks with 12%.

#### 2018





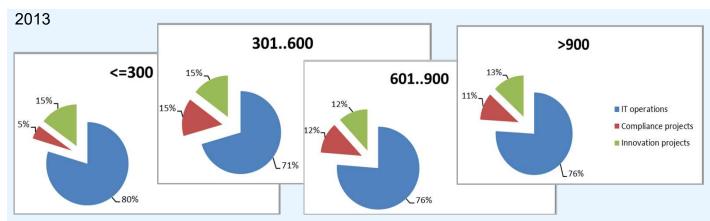
Private banks continue to have considerably higher discretionary CTB IT expenses, with lower RTB IT cost share of 60% vs. 78% at the retail banks, but higher costs for compliance projects, which was expected.



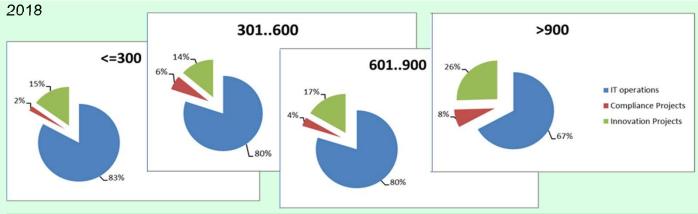
The very fact that IT sourcing service prices are being under competitive pressure have not been able to push down the RTB IT budget share overall. Underlying trends may result in lower costs for traditional sourcing, but shifts from capital to operational expenditure due to the adoption of pay-as-you-go services like Cloud add to RTB.

### RTB vs. CTB IT costs (revisited 5 years later) Bank size related observations





Smaller banks (<600 bank FTEs) seem to have a slightly higher discretionary CTB IT expenses of 15% than bigger banks (>601 bank employees/FTE) with 12% respective 13%.



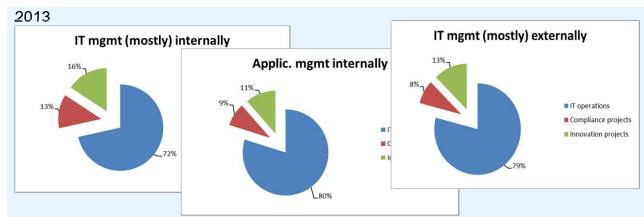
Big banks (>900 FTEs) have substantially improved their IT cost allocation towards innovation, while small/medium-sized banks have increased their RTB IT cost block.

Large banks are in a position to influence the required level of IT operating expenses directly, since they almost all operate their own IT. This results in a larger IT budget for innovation and business support.

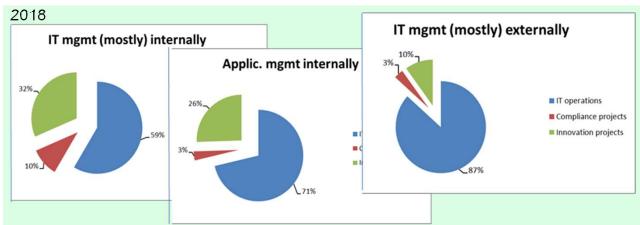
Smaller banks usually outsource their IT to varying degrees. They can benefit from jointly financed e.g. compliance projects, but for an overall higher RTB IT cost block and a smaller CTB IT share to drive innovation and business support.

## RTB vs. CTB IT costs (revisited 5 years later) IT sourcing policy related observations





Different IT policies seem to influence the ratio of CTB IT expenses considerably. Whereas banks with fully internal managed IT have a higher discretionary CTB IT expenses of 16%, fully outsourcing banks have 13%, but mixed sourcing banks have only 11%.



Different IT policies continue to dominantly influence the ratio of CTB IT expenses: The larger the proportion of internal IT management, the smaller the RTB IT cost block and in consequence, the larger the IT resources to support innovation and business.

Leveraging discretionary CTB IT spending depends on knowledge-based stringent cost control and proactive management of both internal and, above all, external service providers, or simply on excellence in IT governance. As shown on slide 19, out of the banks that outsource their IT some manage to be almost as IT cost efficient as banks that manage their IT internally. Interesting, that out of this group, the smallest banks have the lowest iR<sub>adj</sub>.



### Thank you.

