

IT Cost Survey for Swiss Banks 2024

Evaluation report based on effective data 2023 and budget figures 2024

Zurich, 31 May 2024

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Key findings 2024

1 – IT cost efficiency continues to fall

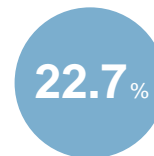
Out of a total of 43 participating institutions, only eight managed to improve their IT cost coefficient iRadj last year compared to the previous year. The actual deterioration in the IT cost coefficient of 13% across all participants corresponds exactly to the expectations based on the budget values reported in 2023.

2 – Market situation helped the retail banks

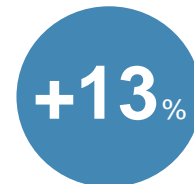
While the private banks were faced with a 10% decline in operating income per customer, the retail banks were able to increase this figure by 19.4%. Customer numbers hardly changed and IT costs per bank customer rose by 5% at retail banks. The private banks, on the other hand, were able to maintain their level of IT costs per customer.

3 – Smaller institutions, and banks with purely internal IT under pressure

Banks with more than 300 employees once again have a clear advantage over smaller institutions in terms of IT cost efficiency. Outsourcing IT infrastructure and application operation also remains more cost-effective as long as the responsibility for application development remains with the bank.



... IT share of the bank's total expenses



... cost increase in relation to business volume



... of banks with higher IT costs

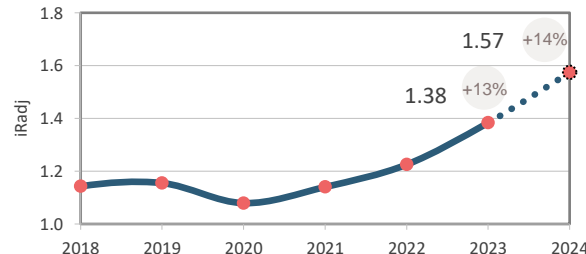




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Introduction

itopia IT cost survey

- Conducted on an annual basis since the year 2000, with more than 20,000 data points¹⁾
- Participants are smaller (< 300 FTE²⁾) to larger (> 900 FTE) retail and private banks.
- Pragmatic approach: questionnaire with nine bank key figures and a bank complexity profile (self-assessment)

Participants 2023/2024

- 43 banks: 29 retail banks, 14 private banks (previous year: 39 banks: 27 retail banks, 12 private banks)
- High consistency and comparability: ¾ of the participants from 2000 are still taking part today

iR (itopia ratio)

- Main coefficient used in the itopia IT cost survey evaluation 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)

iR_{raw}

$$iR_{\text{raw}} = \frac{\text{IT costs}}{1.1 \times (\text{balance sheet total}) + 0.3 \times (\text{assets under management})}$$

iR_{adj}

- The “bank complexity” factor (f_{Bank}) is used to facilitate comparability of banks
- Bank complexity is derived from a profile assessed by the bank itself

$$iR_{\text{adj}} = \frac{\text{IT costs}}{1.1 \times (\text{balance sheet total}) + 0.3 \times (\text{assets under management})} \times \frac{1}{f_{\text{Bank}}}$$

pR_{adj}

- The Bank's employee productivity is assessed via the ratio pR_{adj}
- This ratio is calculated on the basis of bank employees, total assets, assets under management and bank complexity.

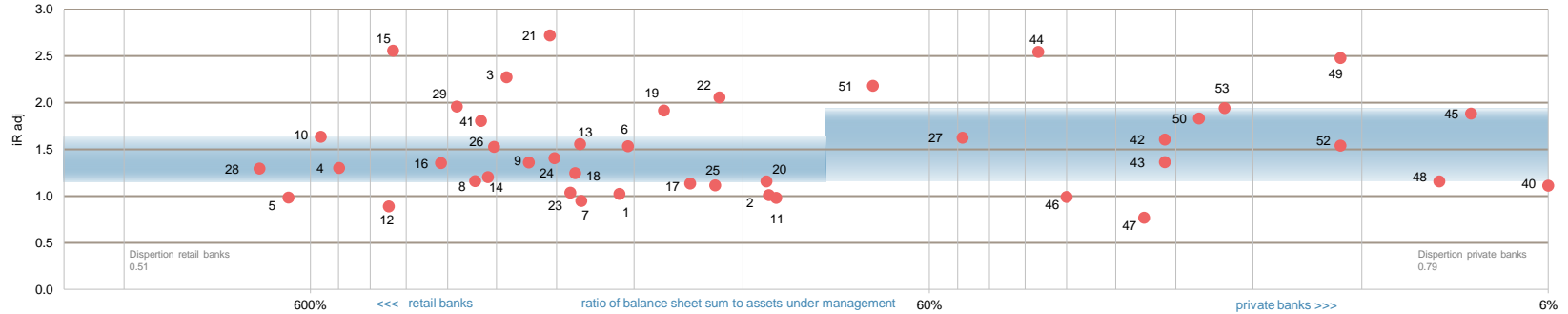
$$pR_{\text{adj}} = \frac{\# \text{ bank employees (excl. IT staff)}}{30 \times (\text{balance sheet total}) + 10 \times (\text{assets under management})} \times \frac{1}{f_{\text{Bank}}}$$

¹⁾ Historical values may vary due to subsequently reported corrections

²⁾ Full-time equivalent

Data basis 2023

IT cost coefficient iR_{adj} grouped by business model



- A cost coefficient iR_{adj} of **1.0** is generally considered ideal. On the other hand, a bank with an iR_{adj} of 2.0 spends 100% more on IT than an ideal bank with an iR_{adj} of 1.0.
- For 2023, the **number of banks that achieve an iR_{adj} of 1.0 or less is lower than in 2022** (6 out of 43: 4 retail and 2 private banks). **Seven banks now have an iR_{adj} of 2.0 or higher** (4 retail banks, 3 private banks): A significant increase compared to 2022 (2 retail banks, 1 private bank).

- Compared to 2022, a total of **29 banks** (20 retail banks and 9 private banks) **have a higher iR_{adj} again in 2023**; 13 of them with an increase of over 10%.
- **7 retail banks and 1 private bank** were able to **reduce their iR_{adj} in 2023**.
- While the spread for retail banks remained unchanged, it is now higher for private banks at 0.79 than in the previous year (0.67).



Observation

As IT costs rise, so does the interest in benchmarking: at the low point of the iR_{adj} (2017), 36 institutions took part in the survey. Despite the declining number of banks in the market, the number of participants has increased by almost 20% since then.

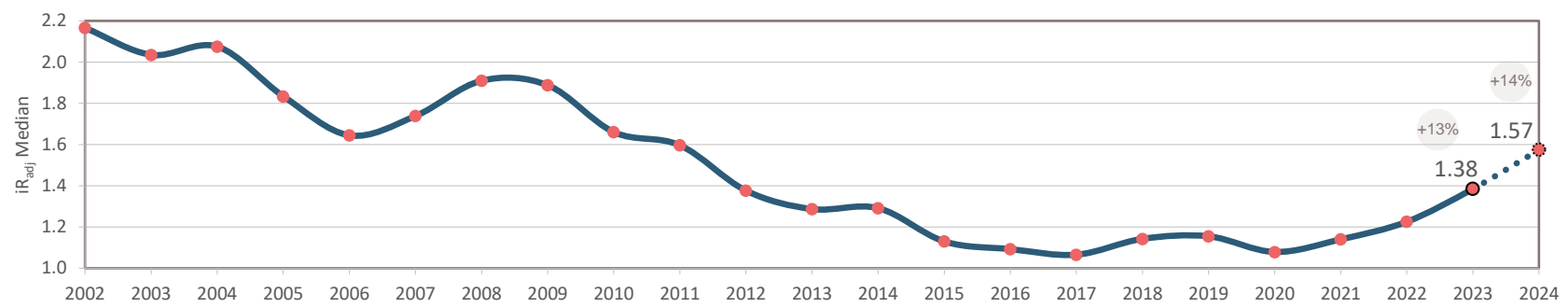


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Development over time 2002 – 2024

IT cost coefficient iR_{adj} – median of all participants



- In 2023, the median of iR_{adj} across all participating banks rose by 13% from 1.22 (2022) to 1.38 (2023).
- The forecast quality was again very high: the increase of 13% assumed in spring 2023 on the basis of budget values corresponds to the actual value.
- Based on the budgets, the iR_{adj} could rise even more sharply to 1.57 in 2024.

- From 2002 to 2017, the IT cost ratio improved continuously. The increase in 2007 and 2008 was a consequence of the financial crisis.
- Compared to 2020, the iR_{adj} has increased by almost 28%, although almost 4/5 of the banks recorded an increase in their business volume at the same time.
- Banks participating on a recurring basis since 2020 spent 21% more money on their IT in absolute terms in 2023.

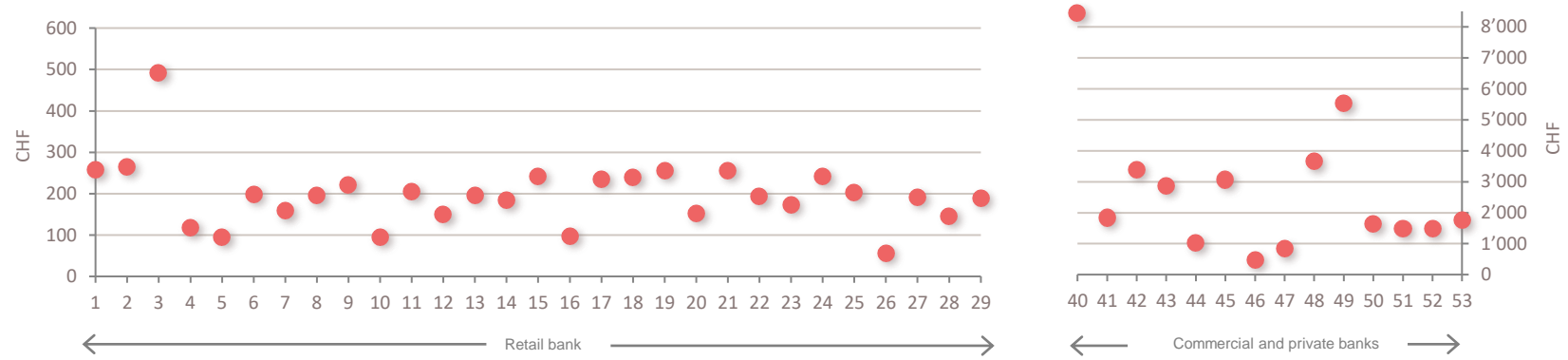
? The question of causes

Banks must assess individually whether the main cause of rising costs is new investments in digitalisation, the operating costs of the new applications, or possibly the (ageing) core banking solution.




Data basis 2023

IT costs per customer – retail banks vs. private banks



- At the **retail banks**, IT costs per active customer vary considerably **between CHF 57 and CHF 265**, with one exception of over CHF 450. The **median IT costs per customer is CHF 195**.
- At the **private banks**, IT costs per active customer vary between **CHF 470 and CHF 5'540**, with one exception at CHF 8'452. The **median for private banks is now CHF 1'752**.

- For **retail banks**, **IT costs per customer have increased by 5%** compared to 2022. This continues the **trend** of rising IT costs per customer since 2020.
- At the participating **private banks**, **IT costs per customer are stable** compared to the previous year.
- The number of customers at all banks is mostly stable; one private bank was able to increase its customer base by more than 10%.

 **Observation**

The investments made in IT in recent years do not appear to be having an impact on the number of customers, but there is also no evidence of a migration of customers towards neobanks.

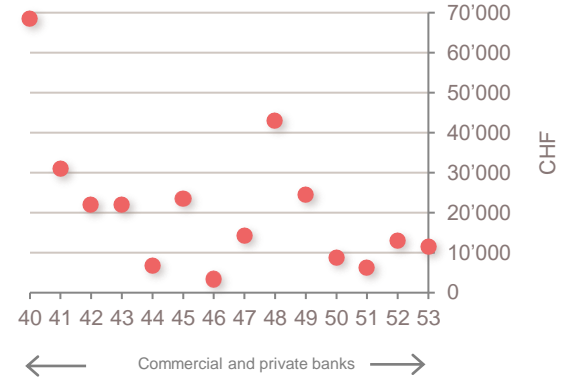
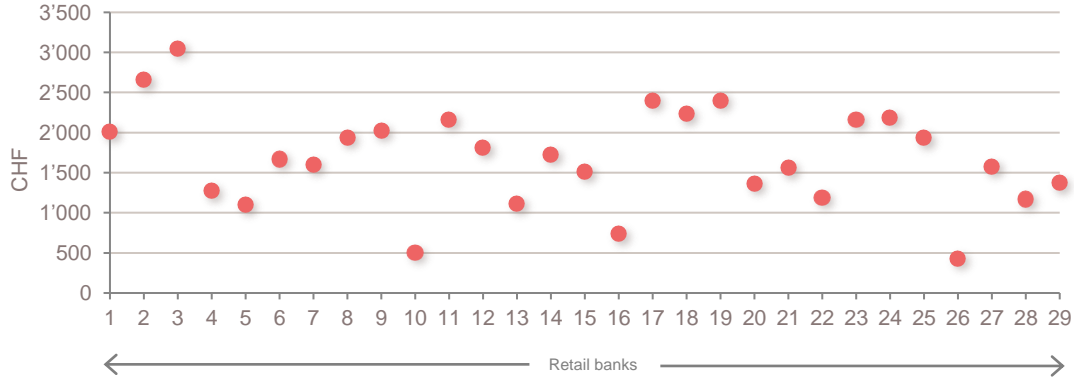


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Data basis 2023

Operating income per customer – retail vs. private banks



- For retail banks, operating income per active customer is between CHF 427 and CHF 3'546, with half achieving between CHF 1'274 and CHF 3'046 per year and active customer. **The median for the retail banks is CHF 1'667.**
- At private banks, operating income per active client varies between CHF 3'327 and CHF 68'520. Half achieve an operating income of between CHF 8'803 and CHF 24'474. **The median for the private banks is CHF 14'240.**

- With a stable customer base, **operating income per customer at retail banks increased by 19.4%** compared to the previous year.
- At the participating **private banks, operating income per customer decreased by 10%.**



Interpretation

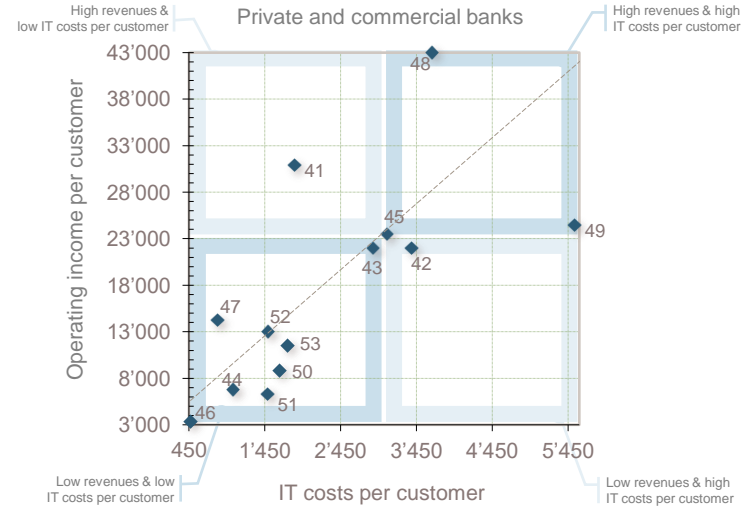
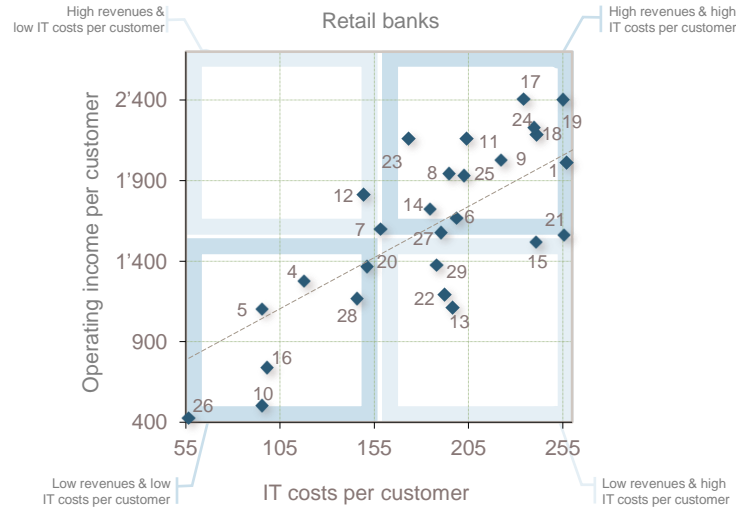
The improved interest rate situation resulted in higher operating income at the retail banks.

The difficult stock market year was the reason for the reduction in operating income at private banks.



Data basis 2023

Operating income per customer – retail vs. private banks



- At the **retail banks**, the **correlation** between IT costs and operating income per customer **is the same as in the previous year (0.81)**.
- At the **private banks**, the **correlation (0.87) is lower than in the previous year (0.96)**.
- The correlation values for both retail and private banks remain at a high level.

Interpretation

Only a few banks with comparatively low IT costs achieve above-average operating income per customer. The higher operating income per customer is presumably often due to a broader product portfolio so that customers can be served comprehensively. This in turn results in a greater need for IT support.



Data basis 2023

IT costs per bank employee in relation to pR_{adj}



Ideally, the **effective utilisation of IT leads to improved employee productivity**, which more than compensates for the higher IT costs.

- **IT costs per employee:**
These have **risen by 4.5% in the retail banks** compared to the previous year and, according to budget figures, **will rise by a further 12.8% next year**. At the **private banks**, they have **risen by 13.2%** and will **increase by a further 6.5% next year**.
- **Employee productivity (pR_{adj}):**
Productivity at the **retail banks** is **unchanged** compared to the previous year (0.71) **despite higher balance sheet totals**. At the **private banks**, **productivity deteriorated** from 0.72 to 0.81, and this is only partly due to the market situation.



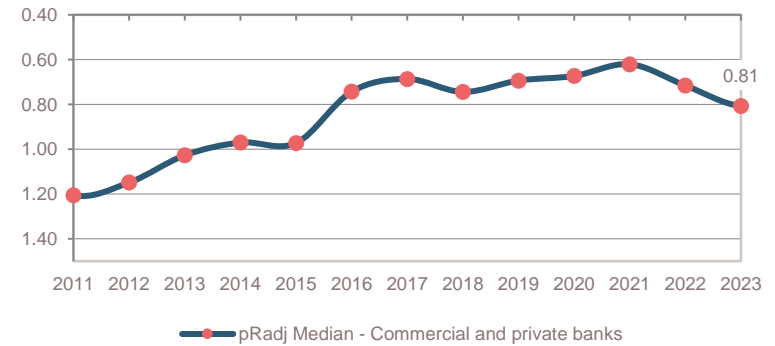
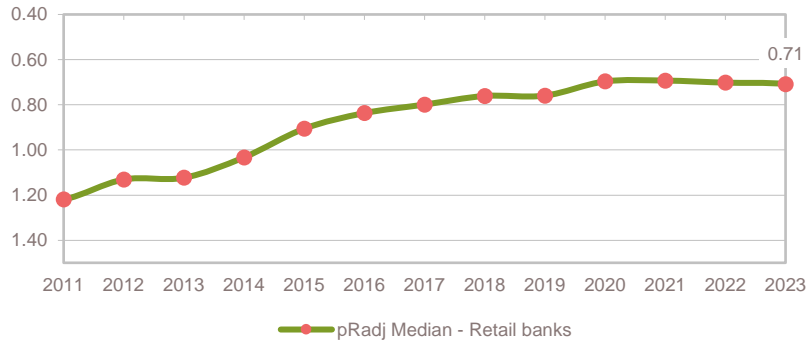
Interpretation

IT costs per bank employee are largely determined by a bank's operating model and are often not directly comparable. However, the trend of a bank in this respect compared to other participants is important.

Rising IT costs with stable or even declining employee productivity are in any case a reason to review the IT investment focus and the long-term measures for realising benefits.

Development over time 2011 – 2023

Employee productivity over time



- Employee productivity measured in terms of total assets and assets under management per bank employee **improved continuously at retail banks until 2020**.
- The median pR_{adj} for retail banks remained more or less stable in 2023 (previous year 0.69):
Employee productivity has not improved any further since 2020.

- In the case of **private banks**, employee **productivity has fluctuated considerably** over time in some cases.
- In 2023, the **median pR_{adj} of 0.81 for private banks deteriorated significantly** compared to the previous year (0.71).



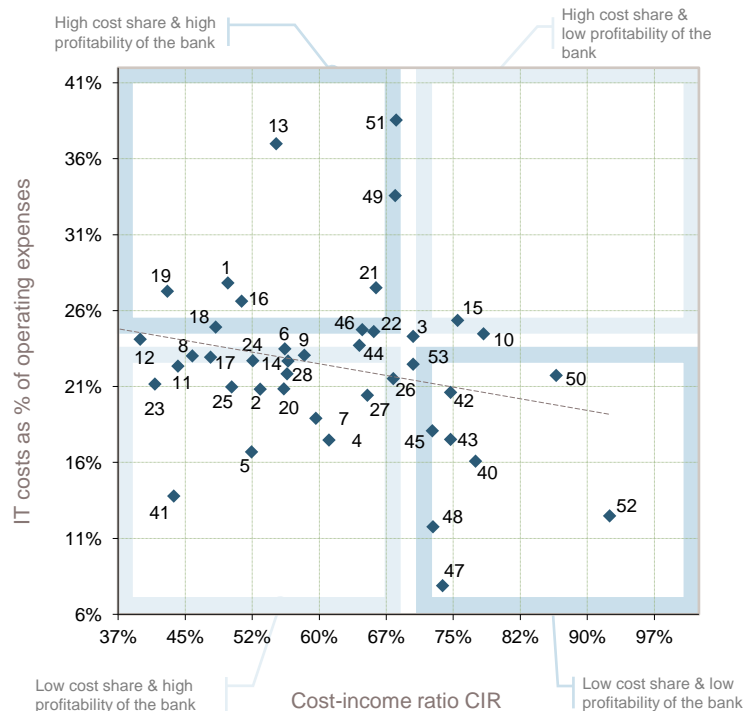
Interpretation

The investments prioritised by some banks in the customer experience or cyber security are not leading to an improvement in employee productivity. It is also conceivable that previous IT approaches to automation have reached their limits.

It is possible that AI-based solutions will enable productivity increases again in the future.

Data basis 2023

IT costs as % of operating expenses in relation to CIR



- In 2023, IT costs as a proportion of operating expenses remained stable at 23% for retail banks.
- The median for regularly participating private banks increased from 14.8% to 17.8%.

Experience over the last few years shows that banks that invest effectively in their IT can ultimately be more profitable despite a higher proportion of IT costs.

However, as with employee productivity, the impact of IT initiatives on overall profitability only becomes apparent after 3 to 4 years.

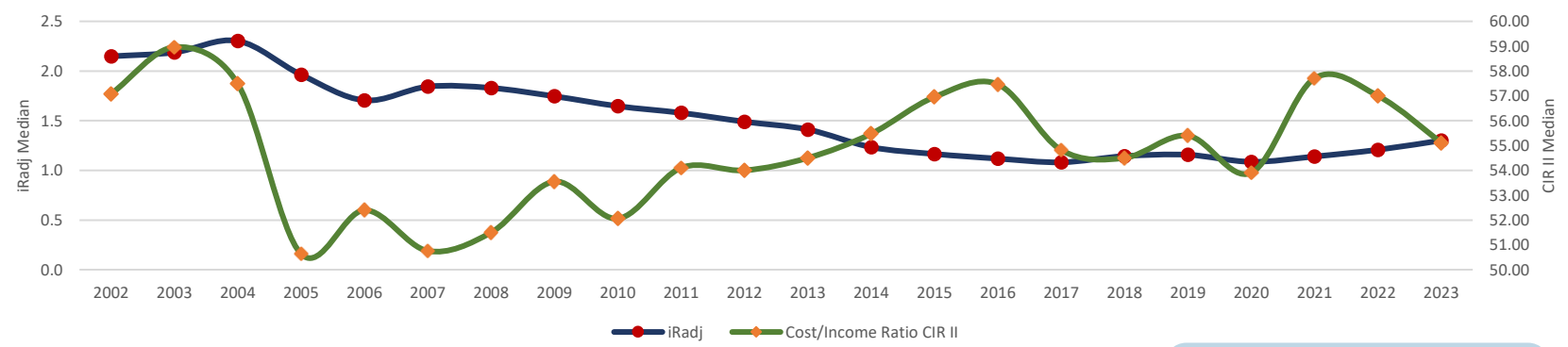
Interpretation

The fact that the IT share of the banks' total costs did not increase any further is due to the general cost increases in 2023.

Increasing digitalisation will presumably result in a further shift of costs towards IT in the future.




Development over time 2002 – 2023 IT cost ratio iR_{adj} & CIR – median retail banks



- There is no clear correlation between the development of iR_{adj} (as an indicator of IT costs) and the CIR (as an indicator of overall bank profitability) over a long observation period.
- After the CIR median was between 54.50% and 55.40% from 2017 to 2019 and fell again in 2020, 2021 saw an increase to a high of 57.70%. In 2022, the value fell to 56.56% and in 2023 to 55.45%. This corresponds to the 2019 level.

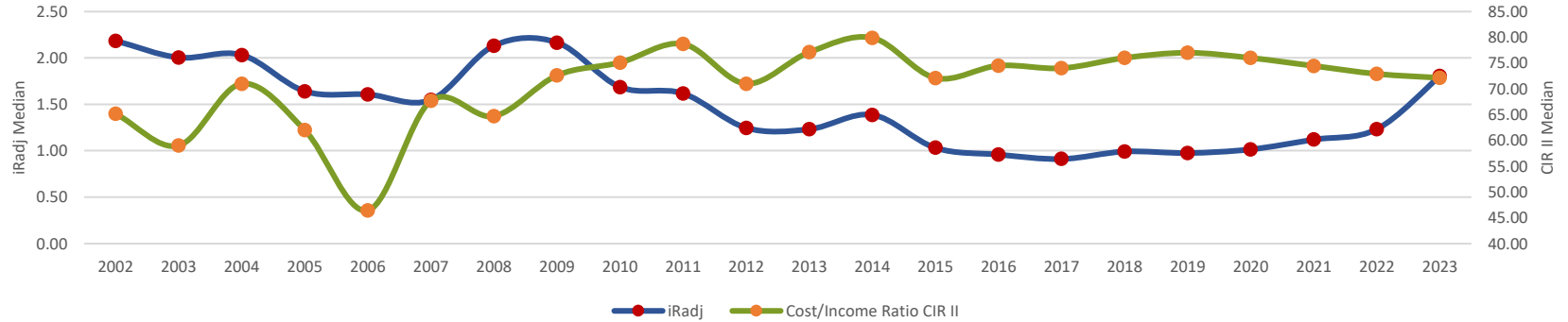
- The development of the IT cost indicator iR_{adj} is less volatile. Improvements in the governance of core IT areas had an impact from 2004 to 2017.

 **Observation**

In recent years, it has once again become increasingly apparent that the IT cost/income ratio is not suitable for long-term IT management: it is subject to the highly volatile earnings side of banks, which is characterised by the market.



Development over time 2002 – 2023 IT cost ratio iR_{adj} & CIR – median private banks



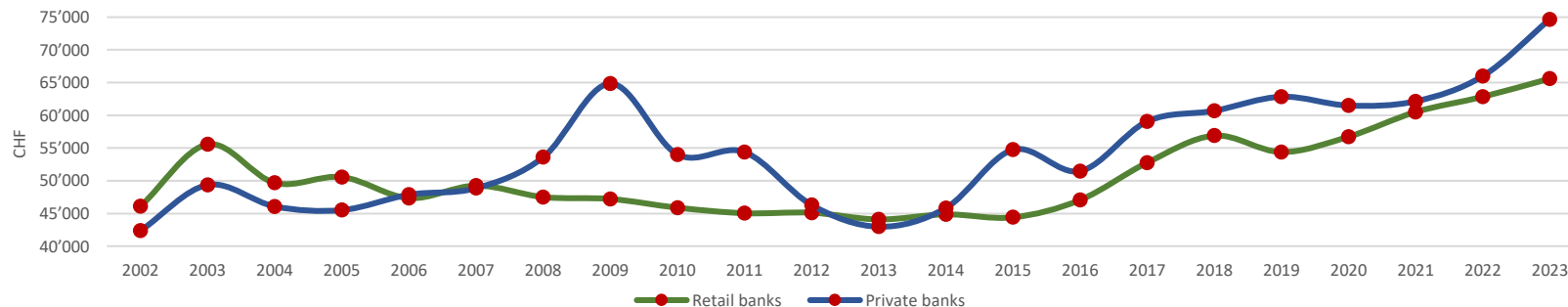
- Private banks **had more room for improvement** in IT management than retail banks: **between 2009 and 2015** in particular, the IT cost efficiency of **private banks improved even more than that of retail banks**. More stringently managed IT helped the banks to stabilise overall profitability.
- The results show **slightly lower CIR** values for the participating private banks **since 2019**. A decline from 77% to 72.1% has been recorded since 2019.
- The **IT cost coefficient iRadj rose from 1.02 to 1.80** over the period **from 2019 to 2023**.

Note

The sharp increase in 2023 does not allow any general conclusions to be drawn. The increase shown is partly due to an expanded group of participants: The median iR_{adj} of the private banks that participated in both 2022 and 2023 rose from 1.22 to 1.58 (+29.5%). Furthermore, part of the increase is a consequence of the substantially lower assets under management (due to the market situation).

Development over time 2002 – 2023

IT costs per bank employee – retail & private banks



- Over the period 2013 to 2023, IT costs per employee increased for both business models (retail banks: +49%, private banks: +74%).
- For **private banks**, IT costs per bank employee continued to **increase significantly by 13.2% from 2022 to 2023** and for retail banks by **4.4%**.
- For both retail and private banks, the values in 2023 are **at the highest level in the respective overall time series**.

- The increased costs at retail banks could be an effect of the ongoing digital transformation, possibly exacerbated by increasing costs in the area of risk and compliance due to data protection requirements and cloud initiatives.
- The increasing sourcing of business processes and products could also explain higher IT costs per employee.



Observation

Overall, the trend is consistent with the other indicators and points to higher IT costs.

However, IT costs per employee can only be conclusively assessed by taking into account the specific operating model or sourcing solution.

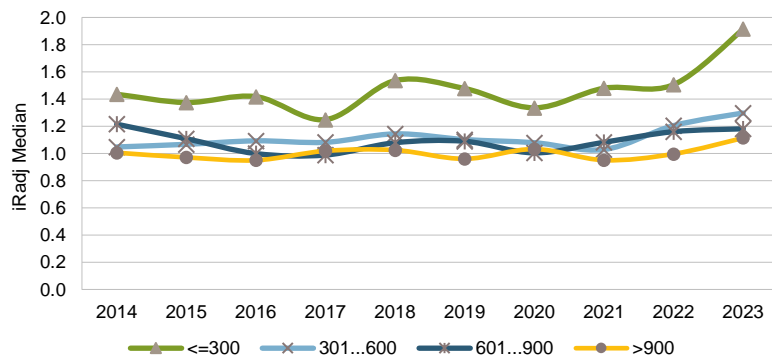


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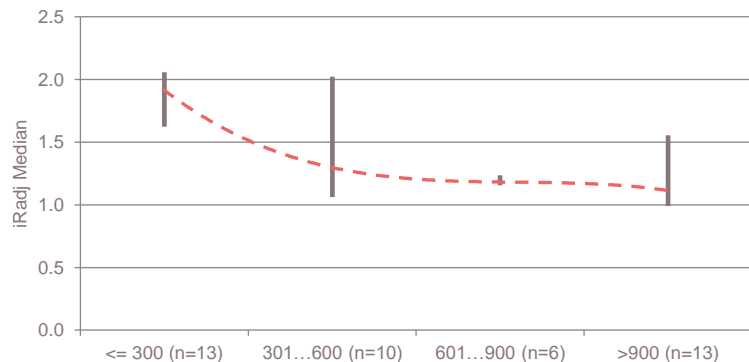
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Development over time 2014 – 2023

IT cost coefficient iR_{adj} depending on bank size



- With an iR_{adj} value of **1.91** (+26%), the **small banks category** (≤ 300 banking FTEs) has **deteriorated significantly** compared to 2022. IT costs in relation to business volume remain the highest compared to other size classes.
- The iR_{adj} for banks with **301-600 full-time equivalents** has also **risen by 7.7%** year-on-year basis to **1.30**.
- Banks with **601-900 full-time equivalents** were able to almost **maintain their efficiency** with a median iR_{adj} of 1.18 (previous year: 1.16).
- For banks in the **largest category** (**>900 full-time equivalents**), the iR_{adj} also **increased by 7.7%** year-on-year basis to 1.11.



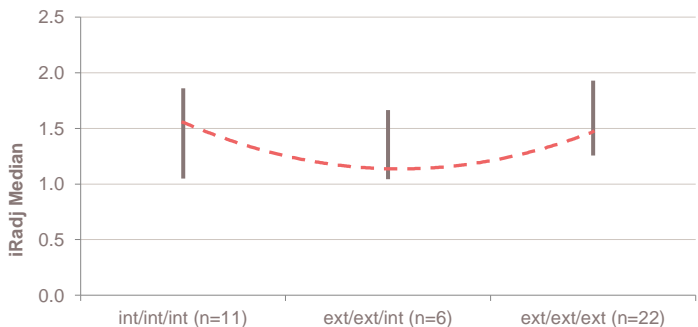
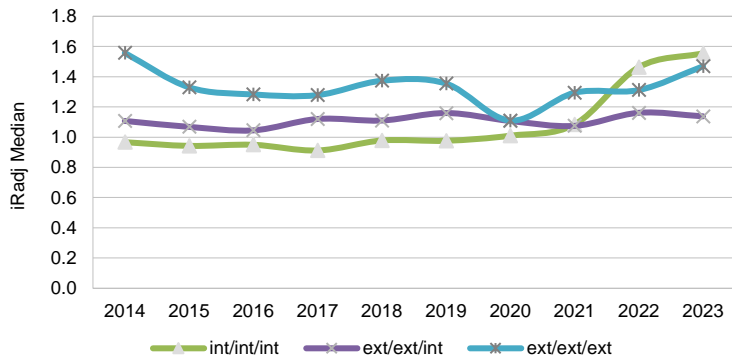
Interpretation

The basic costs for the provision of IT are increasing. These are high for smaller banks compared to the volume of business and it is important to keep an eye on other comparative values (e.g. IT costs and income per customer). If the sourcing model is reviewed, alternatives are available on the market.



Development over time 2014 – 2023

IT cost coefficient iR_{adj} dependent on IT procurement policy



- The diagrams show the influence of the IT sourcing model on IT cost efficiency. Three areas are differentiated with regard to provision: (1) infrastructure operation (ITO), (2) application operation (AO), (3) application management (AM)
- The comparison is only made for the three predominant combinations:
 - Fully internal provision of IT (int/int/int)
 - External infrastructure and application operation (ext/ext/int)
 - Complete outsourcing (ext/ext/ext) of the core banking solution
- The class of banks with **fully internal IT (int/int/int)** has **deteriorated further** in terms of its cost coefficient iR_{adj} (1.46 to 1.55 in 2023)
- The class with **fully external procurement** of IT services (**ext/ext/ext**) has also **deteriorated** in terms of its cost coefficient iR_{adj} (1.31 to 1.47 in 2023)
- Banks with **external infrastructure and application operation and internal application management (ext/ext/int)** improved slightly.



Interpretation

Outsourcing undifferentiated services is increasingly the more cost-effective choice. In terms of applications, standardised, cloud-native SaaS solutions have not yet established themselves in the core banking sector, and traditional applications are most efficiently managed by the bank's own IT staff.



Disclosure of IT cost ratios

Banks that have agreed to disclose their data

| Bank # | Bank name | Core application | IT procurement policy in relation to core application ^{*)} , ext. partner |
|---|-----------|------------------|--|
| <p>If the participating bank agrees to the disclosure of its data, the following information will be provided to those banks that have in turn agreed to the disclosure:</p> <p>Bank number, bank name, core application (package name), IT procurement policy^{*)}, ext. partner</p> <p>Currently, 15 banks have agreed to exchange their data.</p> | | | |

^{*)} IT sourcing policy
 Outsourcing
 In-house
 IT Operations
 Ext. Applic.Mgmt.
 Int. Applic.Mgmt.

Infrastructure operations
 external
 internal
 internal
 internal
 external

Application operations
 external
 internal
 external
 internal
 external

Application management
 external
 internal
 external
 external
 internal



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ANNEX: Methodological notes and guidance for understanding the report

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Introduction IT cost coefficient iR_{adj} and data basis, evaluation iR_{adj} grouped according to business model

Introduction iR_{adj}

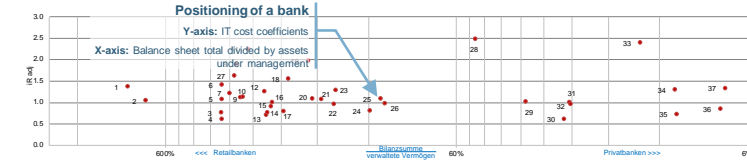
- $iR =$ itopia Ratio**
- Main coefficient used in the itopia IT cost survey evaluation report
 - Based on IT costs, balance sheet total, and assets under management
 - We consider this coefficient to be better than volatile earning-based ratios (e.g. cost/income ratio)

$$iR_{raw} = \frac{IT\ costs}{1.1 \times (balance\ sheet\ total) + 0.3 \times (assets\ under\ management)}$$

- iR_{adj}**
- The “bank complexity” factor (f_{Bank}) is used to facilitate comparability of banks
 - Bank complexity is derived from a profile assessed by the bank itself

$$iR_{adj} = \frac{iR_{raw}}{f_{Bank}} = \frac{IT\ costs}{1.1 \times (balance\ sheet\ total) + 0.3 \times (assets\ under\ management)} \times \frac{1}{f_{Bank}}$$

Evaluation iR_{adj} grouped by business model



- The sorting criterion on this chart (**X-axis**) is the balance assets divided by assets under management. The horizontal distance is measured in percentages.
- **The Y-axis shows the IT cost coefficient iR_{adj} .** The red dots show the positioning of a bank.
- The **closer two banks are positioned on the X-axis**, the more similar their ratio of balance sheet assets to assets under management and thus also their business model. Deviations on the Y-axis, on the other hand, show different cost structures. This particularly affects retail banks between 300-400%.
- A bank with an iR_{adj} of 2.0 spends 100% more on IT than an ideal-typical bank with an iR_{adj} of 1.0.

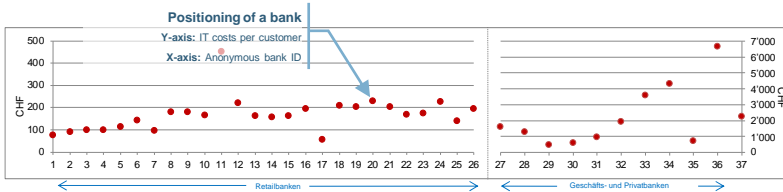


Data basis evaluations with focus on "customer"



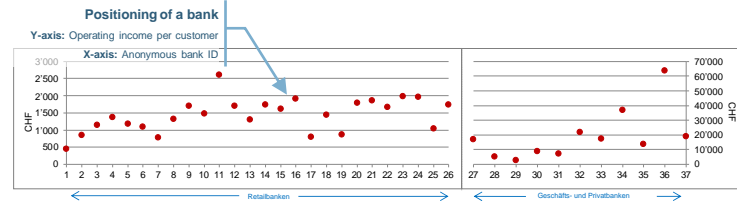
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IT costs per customer – retail banks vs. private banks



- On the **X-axis**, the participating banks are listed with their anonymous ID.
- **The Y-axis** shows the IT costs per customer.
- IT expenses per active customer are *generally* significantly lower for retail banks compared to commercial and private banks: The presentation is therefore made with *different scales* for the two bank classes.

Operating income per customer – retail banks vs. private banks



- The operating income per active customer (**Y-axis**) is significantly lower for retail banks compared to commercial and private banks (**X-axis**): The presentation is therefore made with a *different scale* for the two bank classes.
- A consolidated view of operating income and IT costs per customer is also included in the standard report.
- **The development of operating income per active customer is an important topic** for the banks. This key figure is important, for example, in order to consistently assess **IT investments in digitalisation** in terms of their potential to generate **additional income or lower costs per customer**.



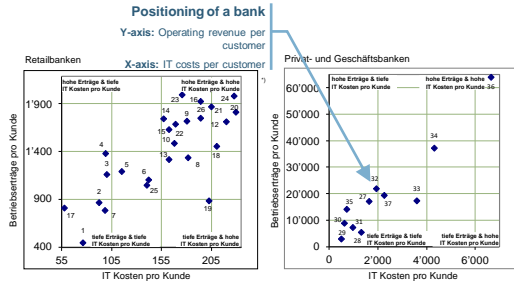
Data basis evaluations with focus on "IT costs"



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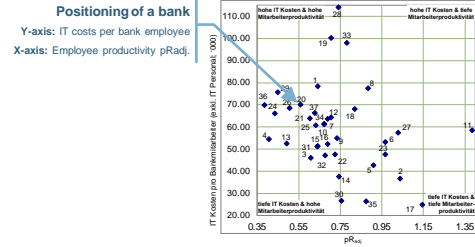
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Operating income in relation to IT costs per customer



- These charts show the operating income per customer (Y-axis) in relation to the bank's IT expenditure (X-axis), both per active customer.
- As a rule, attention is paid here to the correlation. This is more or less high, depending on whether they are **retail banks** or **private banks**.
- Ideally, a bank can convert its IT expenditure into at least a proportional increase in business value, in this case operating profit.

IT costs per bank employee in relation to pR_{adj}

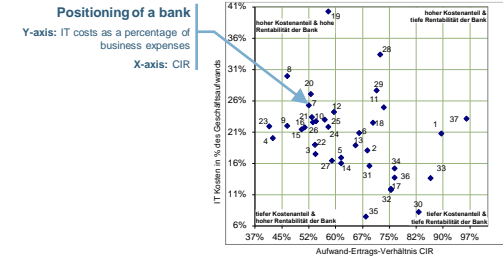


- This chart shows the **IT costs per bank employee** (excl. IT staff) (Y-axis) in relation to the **bank's employee productivity, assessed via the ratio pR_{adj}** (X-axis) .

$$pR_{adj} = \frac{\# \text{ bank employees (excl. IT staff)}}{30 \times (\text{balance sheet total}) + 10 \times (\text{assets under management})} \times \frac{1}{F_{Bank}}$$

- The goal is for IT to support employee productivity. Low employee productivity combined with high IT costs indicates that IT investments may not be effectively targeting productivity levers.

IT costs as % of operating expenses in relation to CIR

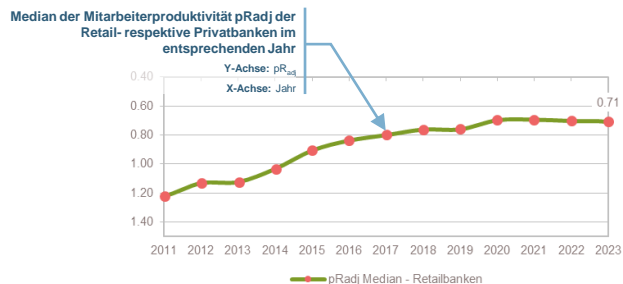


- This chart shows **IT costs as a percentage of operating expenses** (Y-axis) in relation to the bank's **cost-income ratio CIR** (X-axis).
- Banks that understand how to use IT to tap into new market opportunities have higher IT costs but are profitable.
- Banks that balance all costs well while achieving high profitability are best in class.



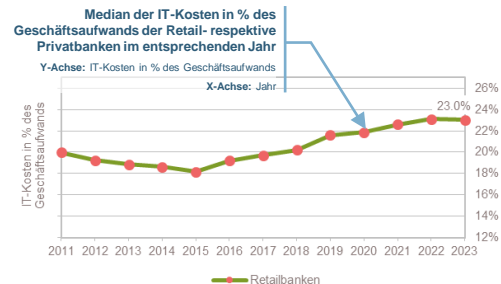
Development over time of employee productivity and IT costs as a percentage of operating expenses

Employee productivity retail and private banks



- **Employee productivity pR_{adj} (Y-axis)** is shown as the median of the retail and private banks **over the years (X-axis)**
- Lower values represent higher productivity: For ease of reading, the scale for employee productivity (Y-axis) is shown in reverse
- In particular, the relative development of an individual bank to the median is helpful in assessing the impact of IT investments on employee productivity.

IT costs as % of business expenses



- **IT costs as a percentage of operating expenses (Y-axis)** are shown as a median for retail and private banks **over the years (X-axis)**
- Increasing values show a shift from other production factors (employees, branch network) to digital service provision
- Due to the higher volatility of personnel costs over the years, the comparison with peer banks is particularly valuable for private banks



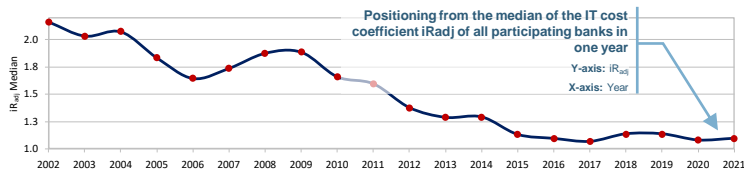
Development over time IT cost coefficient iR_{adj} and IT cost coefficient iR_{adj} & CIR – medians



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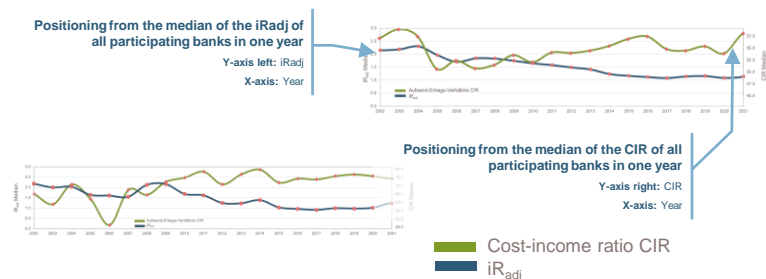
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IT cost coefficient iR_{adj} – median of all participants



- The **IT cost coefficient iR_{adj} (Y-axis)** is calculated as the median of all participating banks over the years (**X-axis**), with an outlook for the following year based on available budget figures.
- The graph gives an indication of the development of the banks' IT costs over time.

IT Cost Coefficient iR_{adj} & CIR – median retail banks and private banks

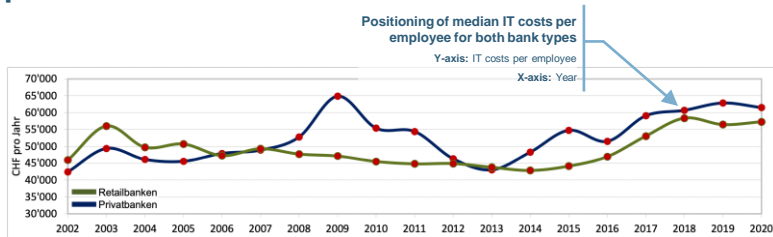


- The charts shows the development of the cost-income ratio CIR (**Y-axis, right**) compared to the development of the itopia IT cost coefficient iR_{adj} (**Y-axis, left**) for retail and private banks. This is also a temporal progression over the years (**X-axis**).
- Due to the lagged effect of IT investment decisions, iR_{adj} is more meaningful than more volatile metrics such as IT costs compared to CIR.



Development of IT costs per bank employee over time

IT costs per bank employee – retail banks & private banks



- The chart shows the development of IT costs per bank employee (**Y-axis**) for the two groups of participating banks over the years (**X-axis**).

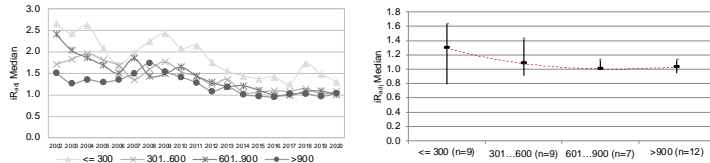


Development over time iR_{adj} and bank size or IT sourcing policy



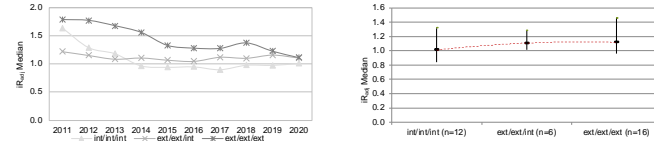
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IT cost coefficient iR_{adj} dependent on bank size



- The graphs show the development of the **itopia IT cost coefficient iR_{adj}** for banks of different **size classes (y-axis)**:
 - Banks with up to 300 full-time employees
 - Banks with 301 to 600 full-time employees
 - Banks with 601 to 900 full-time employees
 - Banks with over 900 full-time employees
- The first graph is a chronological progression over the years (X-axis).
- In the second graph, the focus is on the current evaluation year. The **size classes** are shown on the **X-axis**.

IT cost coefficient iR_{adj} dependent on IT sourcing policy



- The illustrations show the influence of the IT sourcing model on IT cost efficiency.
- Three areas are distinguished, which can be provided internally or externally:
 - Area 1: Infrastructure Operations (ITO)
 - Area 2: Application Operation (AO)
 - Area 3: Application Management (AM)
- The comparison is only made for the three predominant combinations:
 - **Fully internal sourcing of IT (int/int/int)**
 - **External infrastructure and application operation (ext/ext/int)**
 - **Complete outsourcing (ext/ext/ext)** of the core banking solution
- Banks with different IT sourcing policies may be represented in too small a number and are not shown for statistical reasons.
- The first graph is a chronological progression over the years.
- In the second graph, the focus is on the current evaluation year. The **size classes** are shown on the **X-axis**.



Additional explanatory notes

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Dispersion measure

- The interquartile range (IQR) is used as the basis for making a statement regarding dispersion. This indicates the range in which the middle 50% of participants lie.

Handling of data modifications

- Newly participating and existing banks can submit retrospective data from previous years to supplement their history:
Such data is only shown in the individual analyses of these banks (so-called one-pagers), but it is not included in updated timeline analyses.
- Banks can correct data retrospectively:
If the correction relates to data points that were used in a published analysis, the timelines are recalculated with corrected data in the following year. This means that the timelines at the time of publication are always based on the data last reported to itopia. In individual cases, for example, the median of earlier years may change compared to the originally published values.

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