

# IT cost survey for Swiss banks 2016

**Evaluation report (based on 2015 effective data and 2016 budget data)**

*Zurich, May 2016*

[ferhat.geyran@itopia.ch](mailto:ferhat.geyran@itopia.ch)

[rene.stierli@itopia.ch](mailto:rene.stierli@itopia.ch)



# Agenda

	slide/page
<b>Introduction</b>	3
<b>Year 2015 evaluations</b>	
– IT cost coefficient (iR adj)	4
– IT costs per bank employee (excl. IT staff) in relation to pR adj	5
– IT costs in % of operational expenses in relation to ITCIR	6
– Operating income / IT costs - per bank employee (excl. IT staff)	7
– iR adj in relation to cost income ratio CIR	8
– IT costs per customer - retail banks vs. private banks	9
– Operating income per customer - retail banks vs. private banks	10
– Operating income in relation to IT costs per customer	11
<b>Time series evaluations</b>	
– IT cost coefficient – medians of all participants	12
– IT cost coefficient & cost income ratio – retail & private banks	13-14
– IT costs per bank employee – retail banks vs. private banks	15
– Costs for data feed in relation to bank type	16
– IT cost coefficient in relation to bank size	17
– IT cost coefficient in relation to IT policy	18

## Introduction

- itopia
- Small independent Swiss consulting company with 15 professionals
  - Specialized in IT governance, project services and risk management
- IT cost survey
- Performed on a yearly basis since 2000 with more than 12'000 data points
  - Participants are small to medium-sized retail and private banks
  - Pragmatic approach: questionnaire with nine raw data and profile for bank complexity
- participants  
2015/2016
- 34 banks: 22 (rather) retail banks, 12 (rather) private banks
  - High constancy and comparability:  $\frac{3}{4}$  of year 2000 participants are still participating today
- iR = itopia Ratio
- Main coefficient used in the IT cost survey
  - Based on IT costs, balance assets and assets under management
  - We consider this coefficient to be better than volatile earning-based ratios (e.g. cost-income-ratio)

iR<sub>raw</sub>

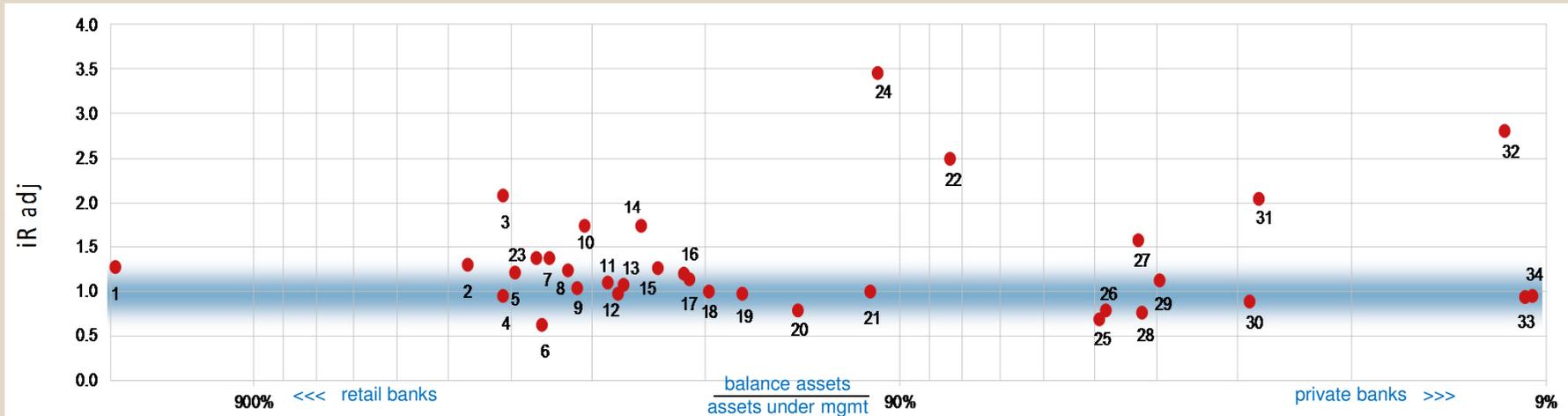
$$iR_{raw} = \frac{IT\ costs\ excl.\ data\ feed}{1.1 \times (balance\_assets) + 0.3 \times (assets\_under\_management)}$$

- iR<sub>adj</sub>
- To allow comparability of banks, the bank complexity ( $f_{Bank}$ ) has to be considered in the formula
  - Bank complexity is derived from a profile assessed by the bank itself

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

Year 2015

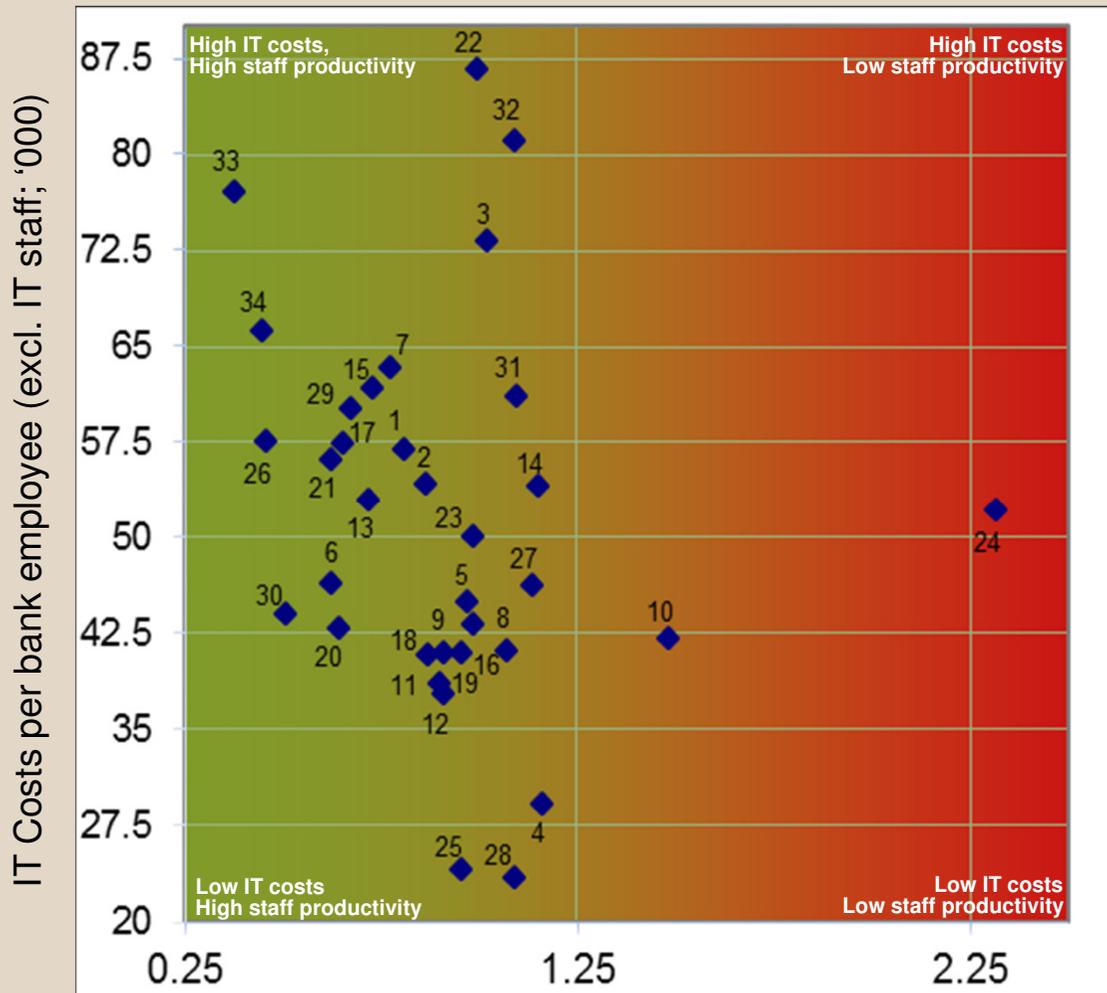
# IT cost coefficient iR adj (grouped along business model)



- The sorting criteria on this slide is balance assets / 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 / assets under management, and consequently their business model.
- The red dots represent the adjusted IT cost coefficient (iR adj) excl. costs for data feed. The blue band represents the target zone for iR adj: an ideal-typical bank would have an iR adj = 1.0. A bank with an iR adj of 2.0 spends +100% more in IT costs than an ideal-typical bank with iR adj = 1.0
- 13 banks (7 retail, 6 private banks) have an iR adj of at or below 1. Last year, only 14 banks (7retail, 7private banks) had this value. This indicates no considerable change in banks with an iR adj of at or below 1.
- 5 banks have an iR adj of at or above 2 (2 retail, 3 private banks). Compared to last year, this represents no major change (6 banks: 3 retail, 3 private banks).

Year 2015

# IT costs per bank employee (excl. IT staff) in relation to pR adj



This heatmap sets the **IT costs per bank employee** (excl. IT staff) in relation to the **staff productivity pR adj** of the Bank.

Those Banks have room for strategic and/or tactical improvements, that have

- **High IT costs** and a **low staff productivity**. Effective operations might not be well supported by IT.
- **Low IT costs** and **low staff productivity**. The number of employees might not be adequate and therefore, the IT's capabilities to support operational excellence.

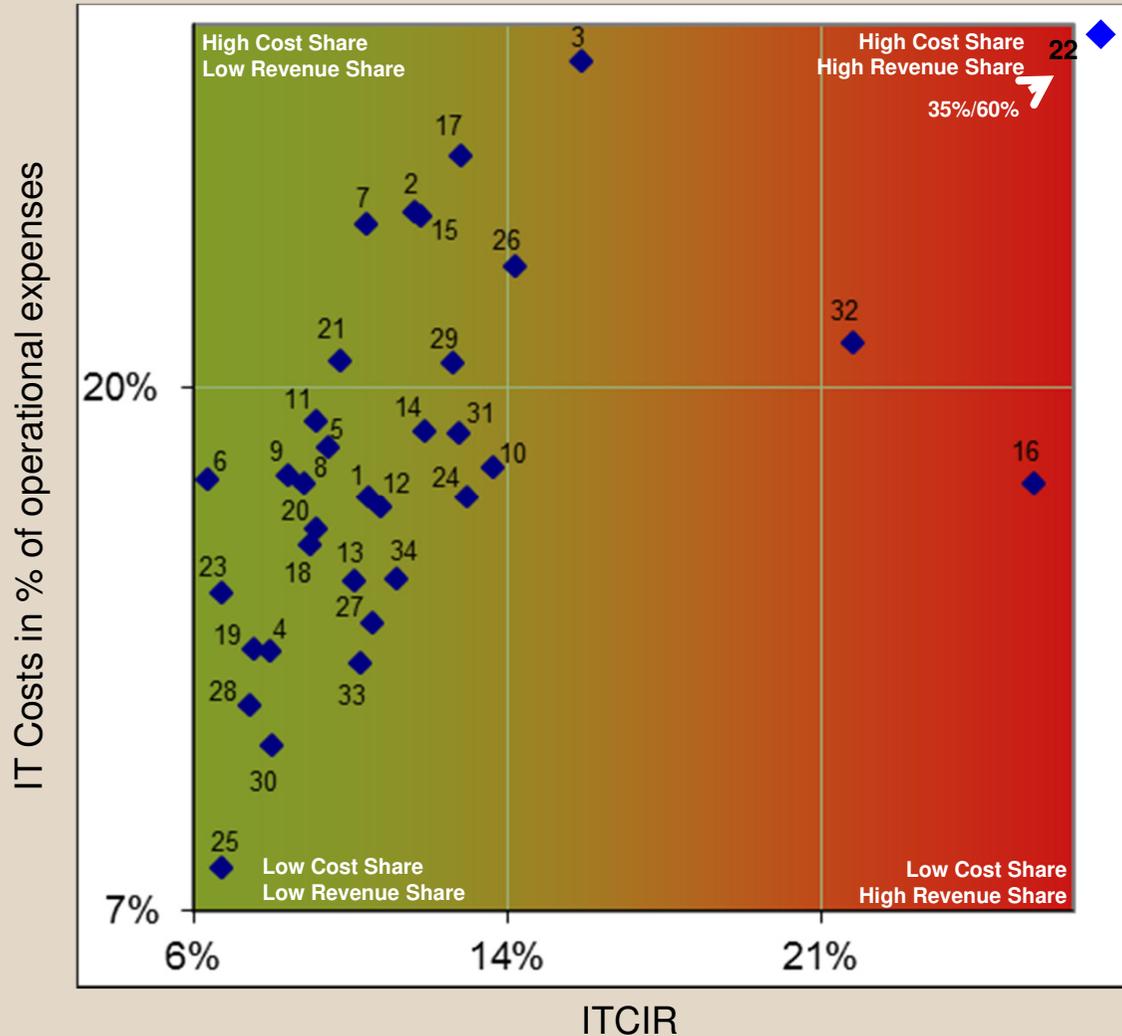
Some banks invest in their IT above-average and have therefore **high IT costs**. At the same time, they are also experiencing **high staff productivity**. There might be potential in adjusting the degree of quality [installed vs. desired] and discovering unwanted redundancy.

Some banks have **low IT costs** and at the same time a **high staff productivity**. That seems to be the silver bullet. However, banks should not get too comfortable in this position and keep an eye on potential operational risks, as well as market trends.

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

Year 2015

# IT costs in % of operational expenses in relation to ITCIR



This heatmap sets the **IT costs in percentage of operational expenses OPEX** in relation to the **IT cost income ratio ITCIR** (IT costs in % of operating income) of the bank.

Those banks have room for strategical and/or tactical improvements, that have IT costs taking up a

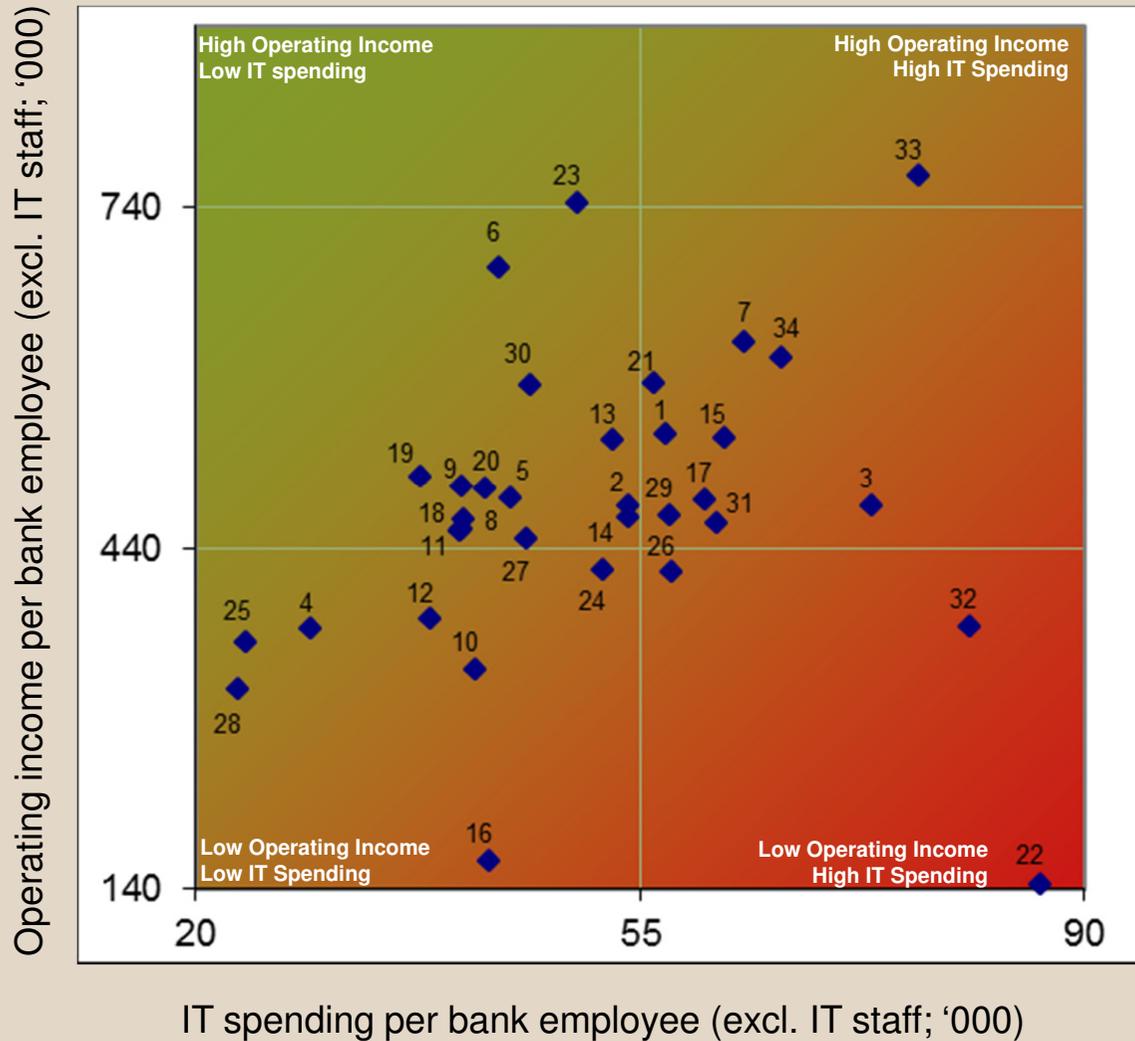
- **High share of both, OPEX and net revenues** (due to, for example, a lack of automatization and therefore a low profitability)
- **Low cost share and a high revenue share** (IT might not fulfil its role as a enabler for new business revenues adequately)

Banks that invest profitably in their IT have a **high share of costs, but a low share of revenues.**

Banks that have a **low share of both, OPEX and net revenues** have the best opportunities to allocate more resources for additional investments.

Year 2015

Operating income / IT costs - per bank employee (excl. IT staff)



This heatmap presents a more detailed correlation analysis of **IT spending and business-value generation** (both income and cost efficiency).

Ideally, a bank can transform its IT expenditure into an at least proportional increase in business value.

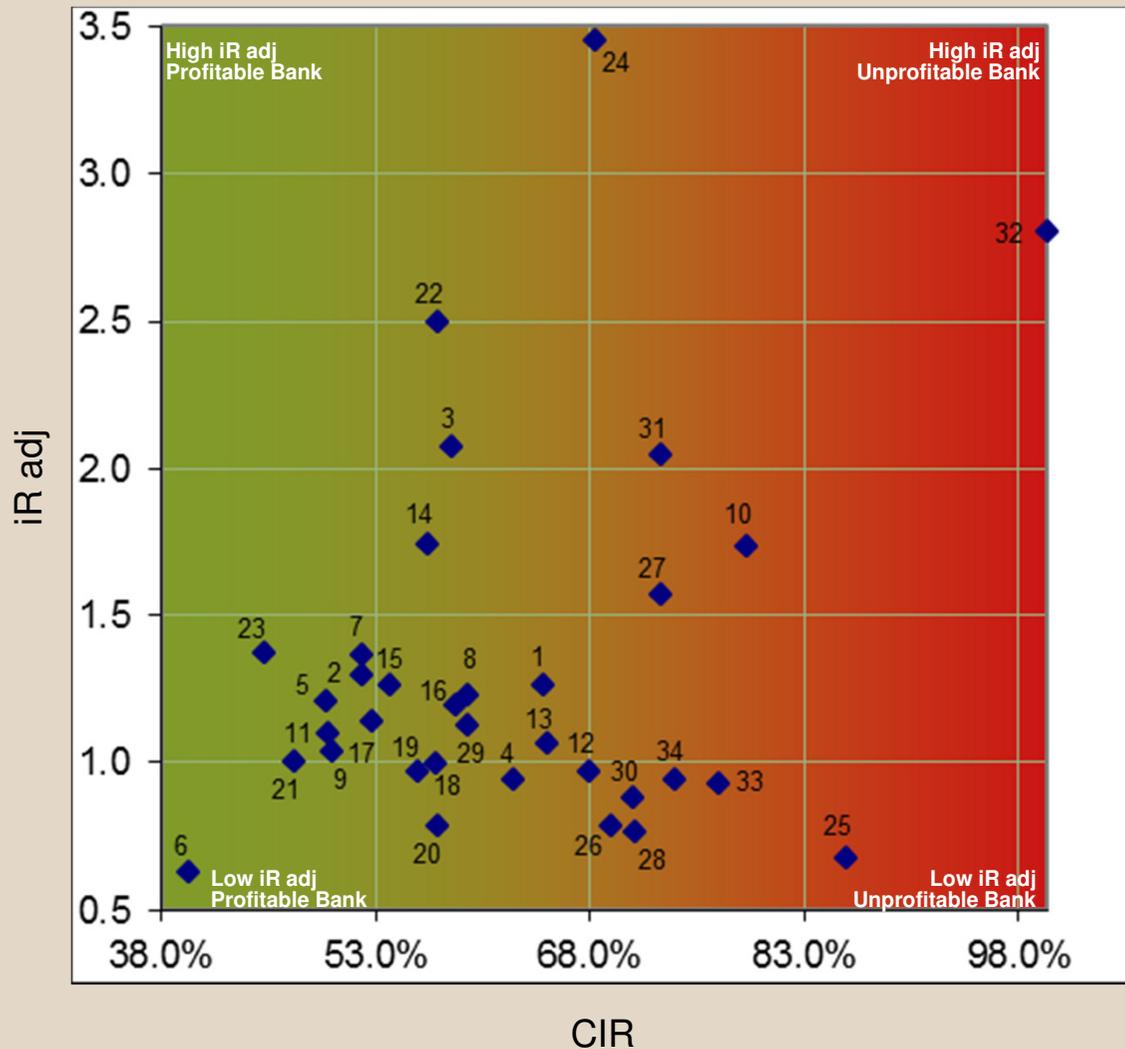
The difference of return in IT spending between the highest and the lowest value is large.

For example: For every 1 CHF spent in IT per bank employee, bank #6 manages to increase revenues by 16 CHF. Bank #22 only manages to increase revenues by less than 2 (in '000 CHF.).

Although this large difference cannot be explained by only looking at the clever use of technology, it is a clear indication of the significant potential of IT as a business enabler.

Year 2015

# iR adj in relation to cost income ratio CIR



This heatmap sets the IT efficiency **iR adj** in relation to the **cost-income ratio** of the Bank.

Those Banks have room for strategic and/or tactical improvements, that have a

- **High iR adj** and a **high CIR** (due to, for example, missing IT projects which contribute to an increase in effectiveness and efficiency)
- **Low iR adj** and a **high CIR** (although IT is efficient in itself, it might not fulfil its role as an enabler for new business revenues adequately)

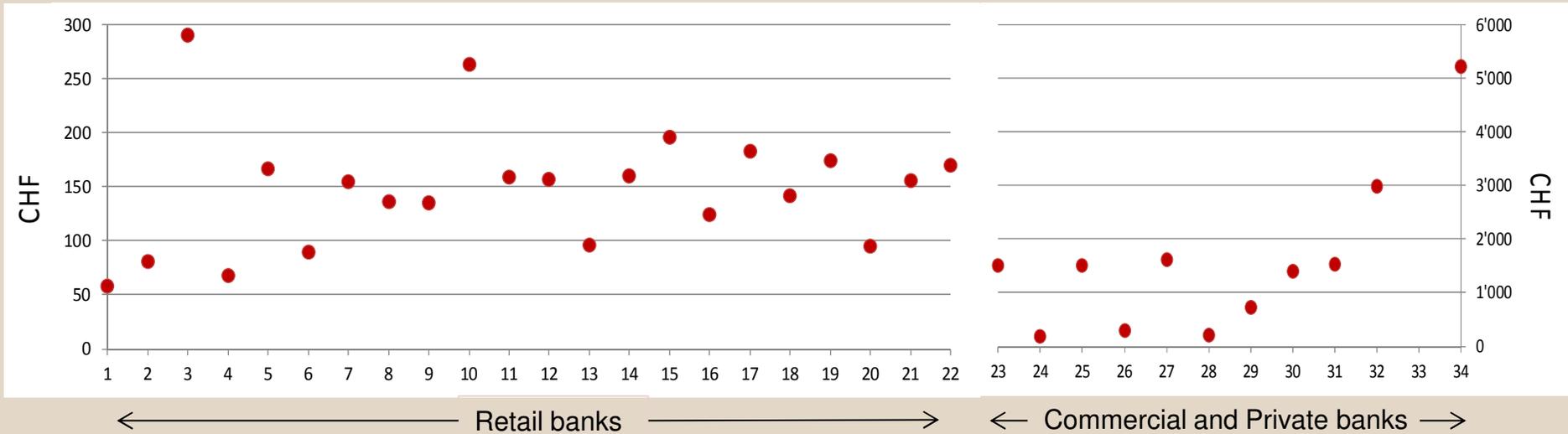
Banks that know how to use IT as an enabler for new business revenues might have high IT costs, but are profitable at the same time.

Banks that balance all costs well with a high profitability at the same time are among the best in class.

However, the comfortable financial situation may hide potential operational risks or the bank may neglect to proactively monitor the trends of the market for new opportunities.

Year 2015

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

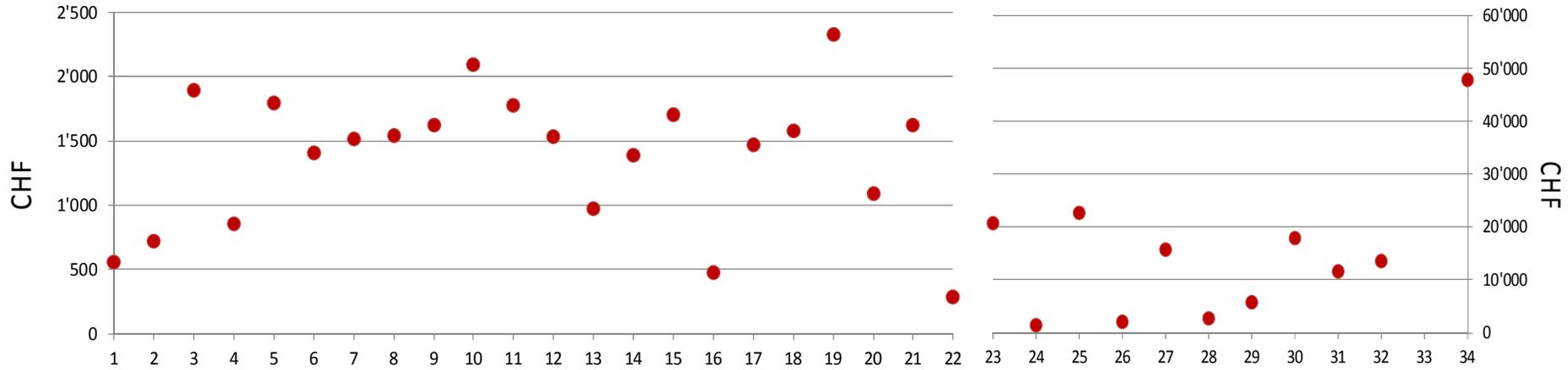


- IT costs per active customer are considerably lower at retail banks, compared to private banks.
- Among retail banks the IT costs per active customer vary between CHF 50 and approx. CHF 300. Most retail banks spend around CHF 150 on IT per year and active customer.
- Among private banks the IT costs per active customer vary between under CHF 200 and over CHF 5'000. The spread is huge. However, most private banks spend around CHF 1'500 on IT per year and active customer.
- This huge difference between retail and private banks needs to be understood by looking at the revenues per active customer on the next slide.

\*) Bank ID 33 have not provided number of customers

Year 2015

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



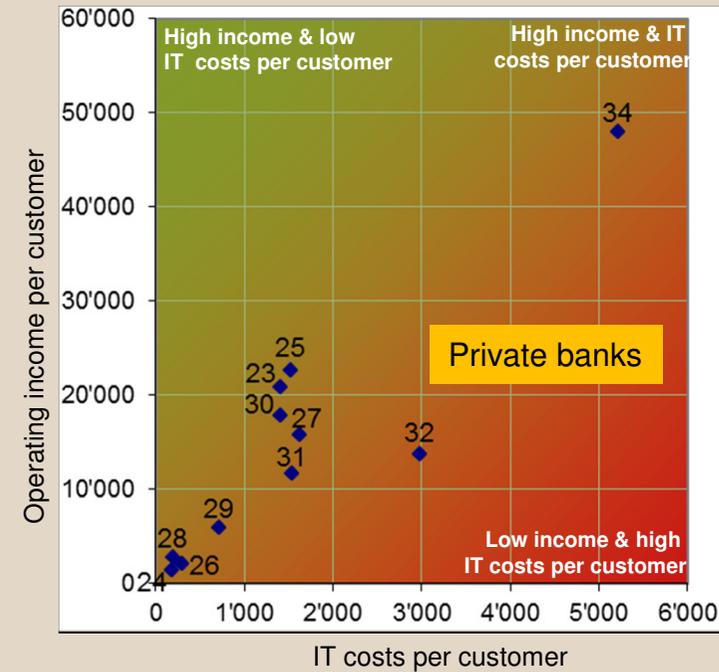
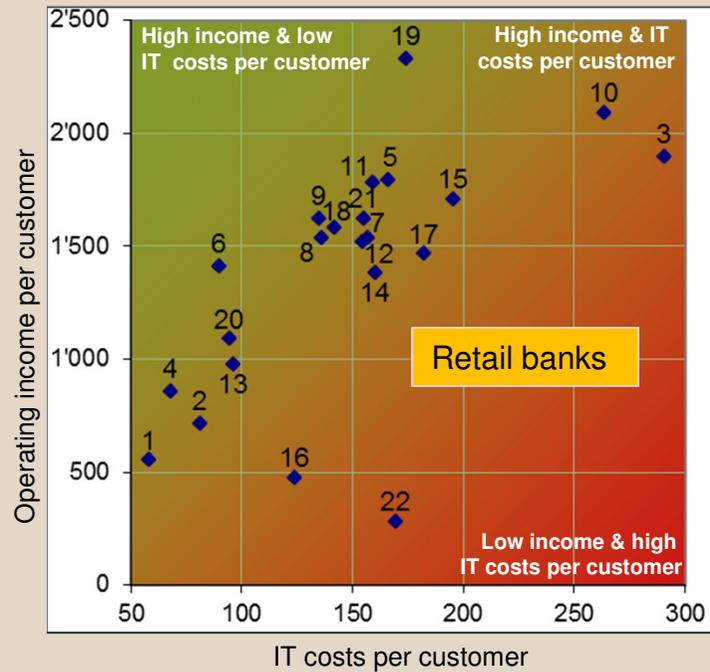
← Retail banks →      ← Commercial and Private banks →

- Referred to previous slide, we have here a very similar picture, but regarding the operating income per active customer.
- Operating income per active customer are considerably lower at retail banks, compared to private banks.
- Among retail banks the Operating income per active customer vary between under CHF 300 and under CHF 2'500. Most retail banks earned around CHF 1'500 per year and active customer.
- Among private banks the Operating income per active customer vary between under CHF 2'000 and under CHF 50'000. The spread is huge. However, most private banks earn around CHF 15'000 per year and active customer.
- The last 2 slides will be merged into a heat map on the next slide.

\*) Bank ID 33 has not provided number of customers

Year 2015

## Operating income in relation to IT costs per customer



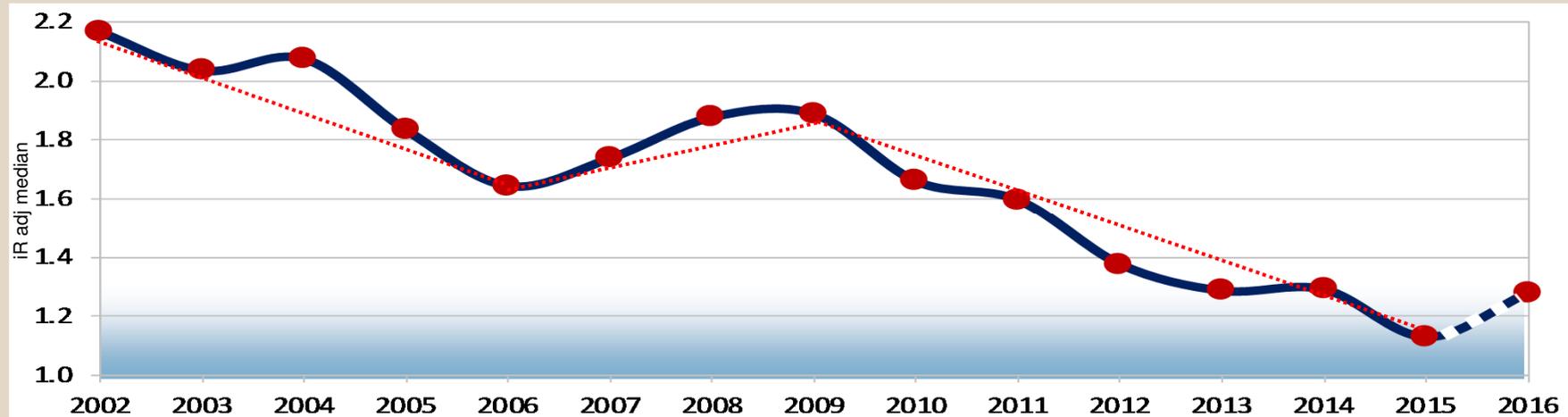
This heatmap sets the **operating income** in relation to the **IT costs** of the Bank, both **per active customer**.

Those Banks have room for strategical and/or tactical improvements, that have a **low income** and **high IT costs per active customer** (due to, for example, missing IT projects which contribute mainly to customer profitability).

Banks that have a **high income** and at the same time **high IT costs per active customer** be doing well. However, actively managing the IT costs may contribute to a higher overall profitability.

Not surprisingly – although this needs to be confirmed in the coming years – on average or in most cases in our survey, **operating income grows** with **additional IT spending** per custodian. This is valid for retail as well as private banks.

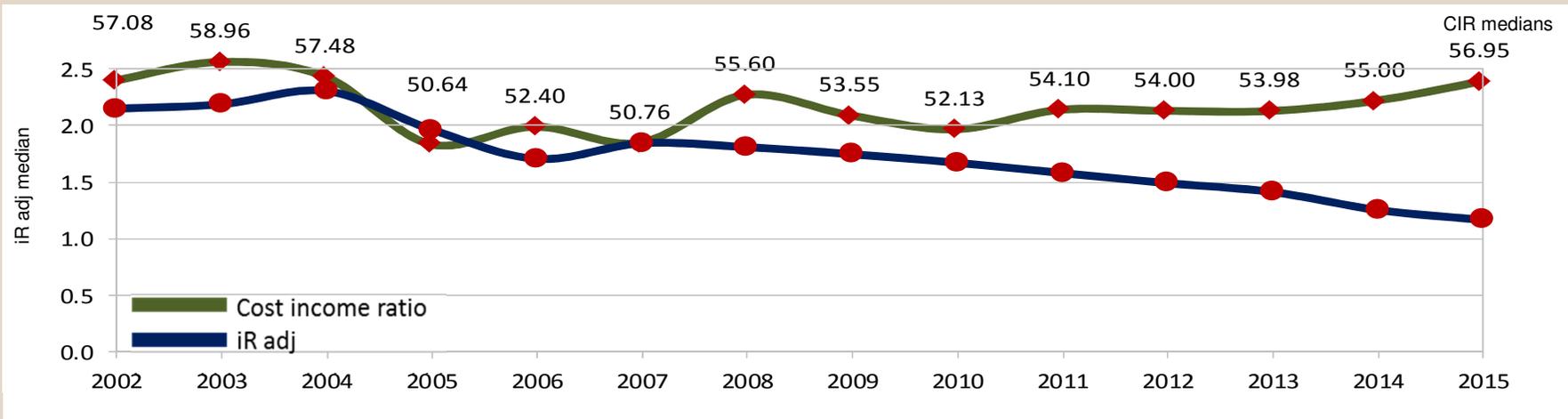
## Time series IT cost coefficient iR adj



- Red dots: adjusted IT cost coefficient (iR adj) calculated as medians for all participating banks, with an outlook into 2016 based on available budget figures
- 2002 to 2006 and 2009 to 2015 were time periods with accelerated improvement of the iR adj at an average of approx. 6% p.a. and 6.7% respectively.  
Between 2007 and 2009 the downward trend was interrupted, and the IT cost efficiency (iR adj) increased.
- Even though the iR adj value for 2015 decreased to 1.13, from 1.29 in 2014, the trend for 2016 is decreasing to an iR adj of 1.28, based on available budget 2016 figures.
- Only 5 out of 22 retail banks, but a considerable 6 out of 12 private banks have a rising iR adj value compared to 2014. The majority of the participating banks have managed to lower again their iR adj in 2015.

# Time series

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

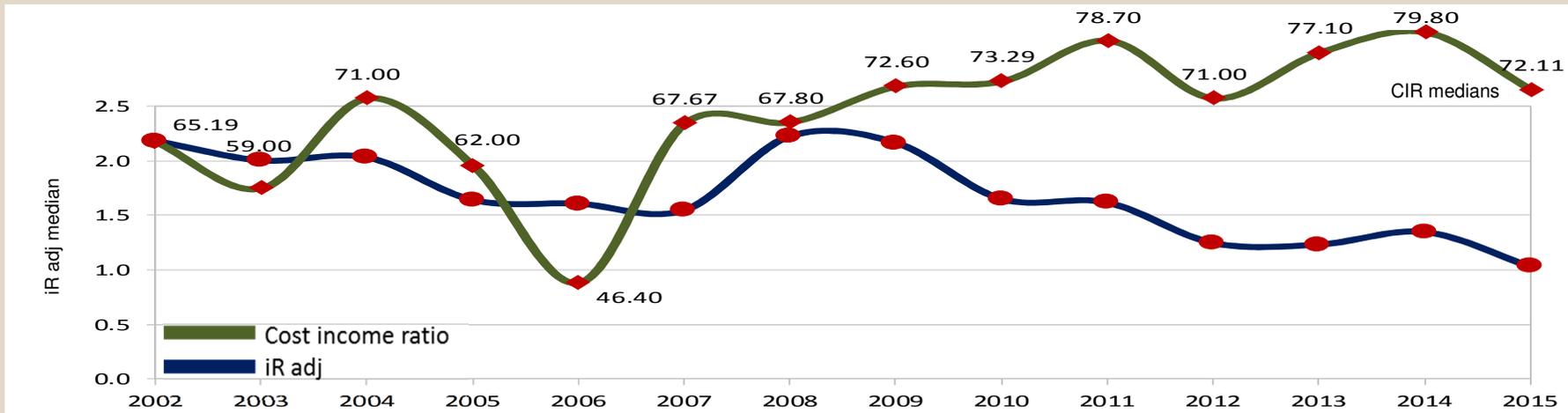


- For retail banks the IT cost coefficient iR adj and the cost income ratio were positively correlated until 2009. That suggests: “well managed IT costs”) implies well managed overall operational costs and positively influences the bottom line of the bank’s financial results”
- After 2009 until 2013 the median of the cost income ratio of retail banks rose to 54%. In 2015 this trend has been confirmed with an increase of almost 2 basis points from 55% to 56.95%, in contrast to private banks (see next slide).
- As the cost income ratio (CIR) is also about income, the deteriorating margins in almost all banking products and services seem to have a more dominant impact than the efforts for effective IT governance.
- This seems to be continuously true for retail banks, even though they managed again to decrease their IT cost coefficient iR adj to 1.17 (- 7% compared to 2014); once again after 2013, but lower than private banks (see next slide).

\*) an IT governance is implemented that satisfies business demand in an economical way

## Time series

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



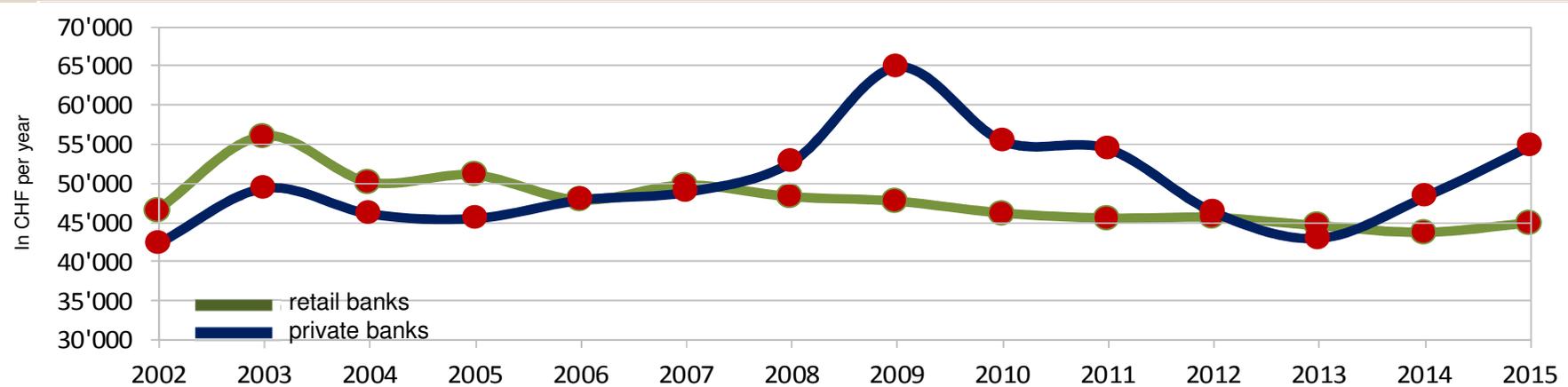
- For private banks the IT cost coefficient iR adj and the cost income ratio were loosely correlated until 2008
- From 2008 to 2013 the correlation was strongly negative. This can be explained with the phase of deteriorating margins in almost all banking products as well as decreasing assets under management, that drained off to mainly retail banks
- In 2012, private banks seem to have done their home work as their cost income ratio decreased to 71% (-9.8%), and with an even faster pace their IT cost coefficient iR adj decreased to 1.25 (-22.9%).

However, this might have been a one time observation, as in 2013 the previous trend of increasing cost income ratio continues to 77.10 %. In contrast the median iR adj ratio decreased to 1.23 from 1.25, a minimal 1.2%.

- 2015 figures show a considerable decline of the cost income ratio from 79.8% to 72.11%, and at the same time even a dramatic decline in IT cost coefficient iR adj from 1.35 to 1.03 (-23.3%).

## Time series

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

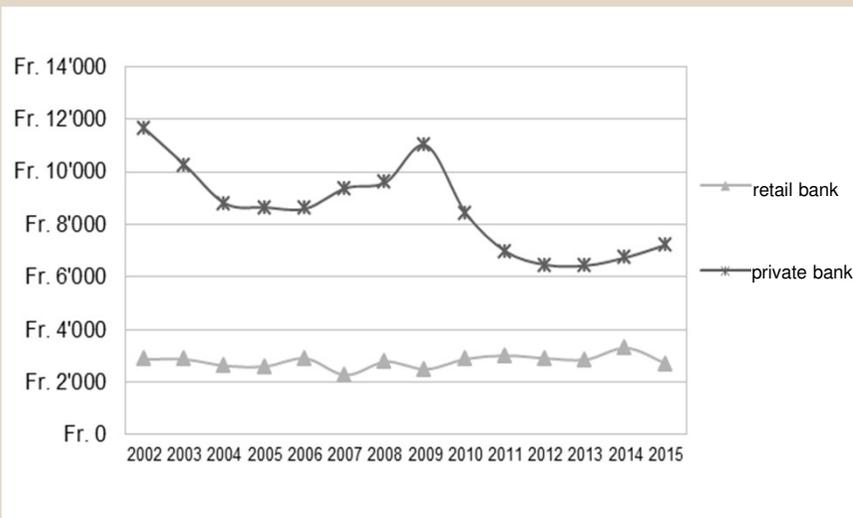


We consider cost for data feed as “business costs” and therefore these costs are not included in the time series presented above (see slide 16 “Costs for data feed in relation to bank type”).

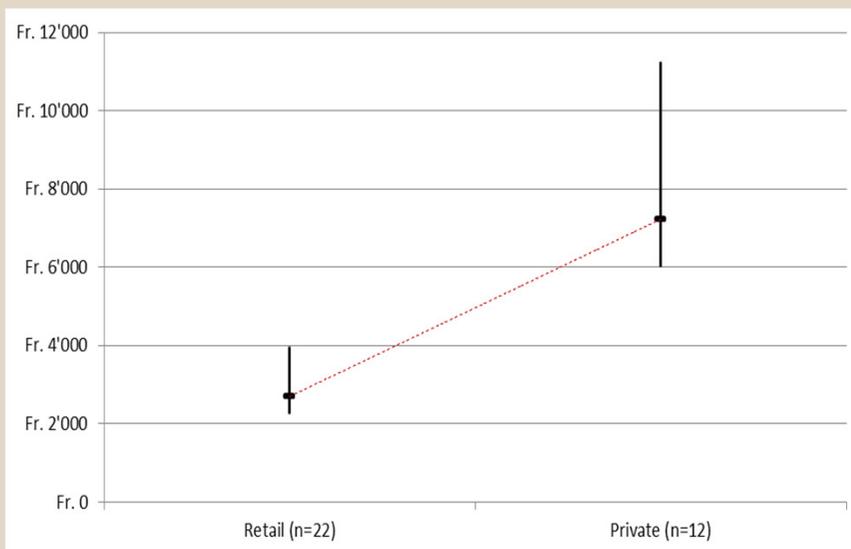
- Until 2006 IT costs per bank employee were considerably higher at retail banks than at private banks (up to 10%).
- After 2007 this trend reversed dramatically, when private banks spent 30+% more for IT per bank employee than retail banks.
- In 2012 both bank types had roughly the same value of IT costs per bank employee, but almost 10% lower than in 2007.
- 2015 figures show a continued increase for private banks (+13.4%), whereas at retail banks IT costs per bank employee increased only slightly by 2.8%, after moderately declining in previous years.

# Time series

## Costs for data feed in relation to bank type

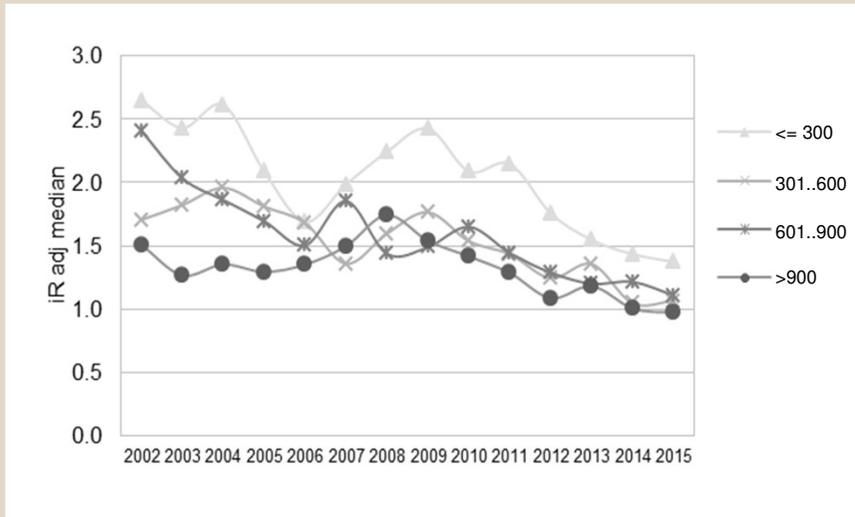


- Retail banks spend approx. CHF 2'700 in 2015 (-18.2% versus 2014) per bank employee for data feed, whereas private banks spend approx. CHF 7'250 (increasing 7.1% compared to 2014, in contrast to retail banks)
- This diverging trend between retail banks and private banks needs to be observed closely in the coming years.

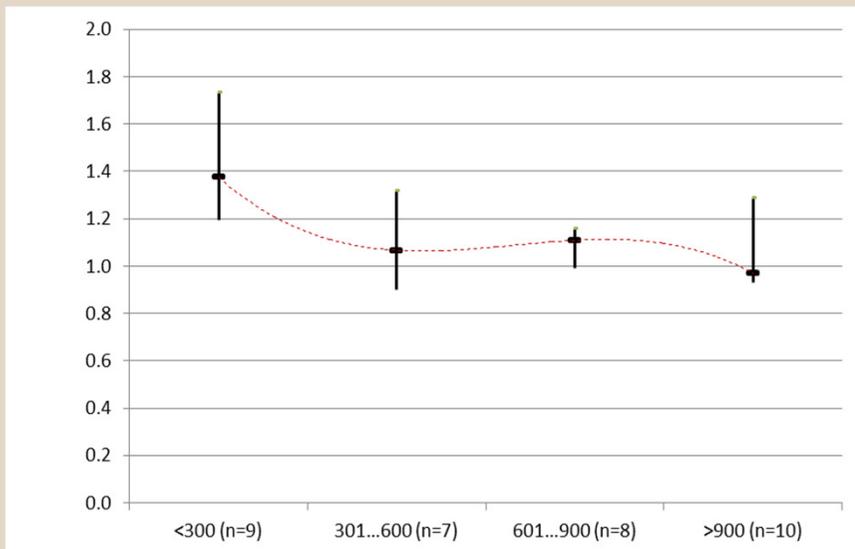


# Time series

## IT cost coefficient iR adj in relation to bank size



- In 2015 the improvement of the IT cost efficiency is unanimous for all bank sizes except for the class of 301-600 FTEs
- Small banks (<300 bank employees/FTE) managed to improve their iR adj from 1.43 in 2014 to 1.37 in 2015, the 601-900 class from 1.22 in 2014 to 1.11 in 2015 and big banks (>900 bank employees/FTE) from 1.01 in 2014 to 0.97 in 2015
- Banks with employees between 301 and 600 employees/FTE could not improve their iR adj: a minor increase can be observed from 1.05 in 2014 to 1.07 in 2015



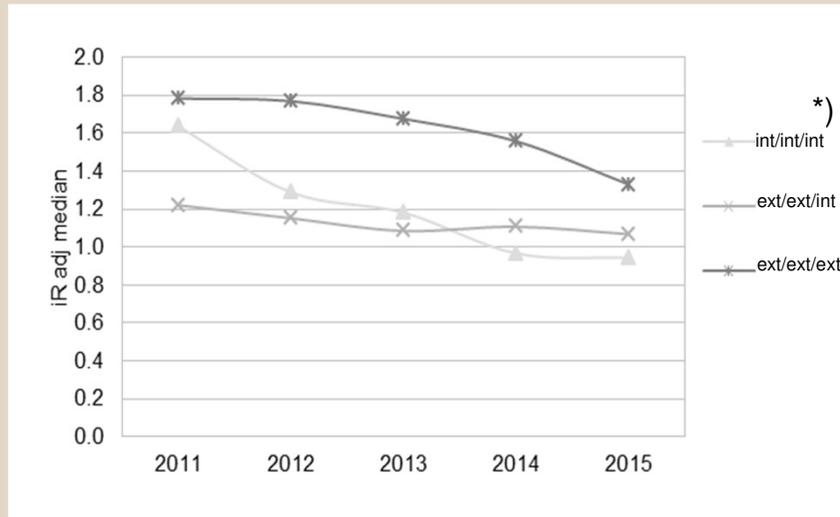
- Comparing all classes for the year 2015, the potential of the economies of scale seem to level off at iR adj = 1.00
- The most IT cost efficient banks are still those in category >900, with an iR adj of 0.97

Larger banks seem to be better able to manage their more complex structures and processes

In addition, the variance has also come down from a 0.91 – 1.66 in 2014 to 0.93 – 1.29

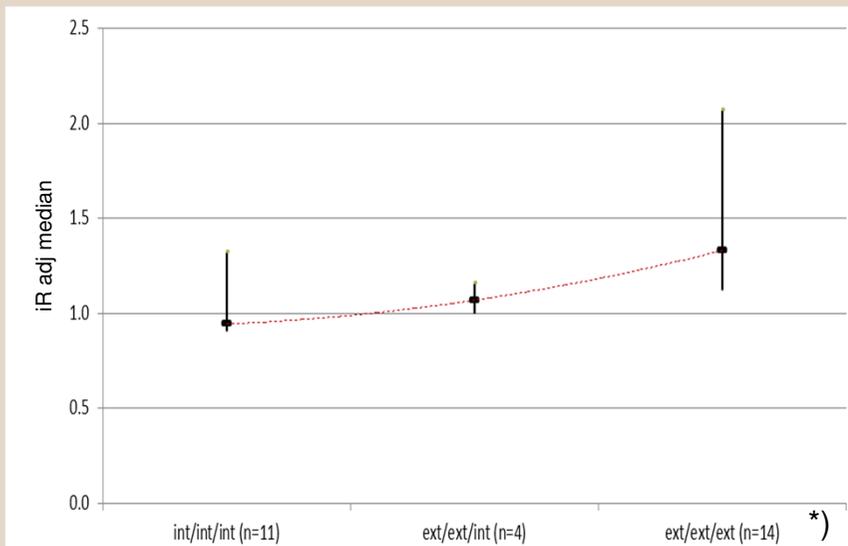
# Time series

## IT cost coefficient iR adj in relation to IT policy



- Compared to 2014, in 2015 all\*\*) classes managed to lower their iR adj, as follows:

- “int/int/int” class: from 0.97 in 2014 to 0.94 in 2015
- “ext/ext/int” class: from 1.11 in 2014 to 1.07 in 2015
- “ext/ext/ext” class: from 1.56 in 2014 to 1.33 in 2015



- “int/int/int” continues to lead in terms of lowest iR adj

- However, both ends of the “int/int/int”'s variance is exceeding the median value of both, “ext/ext/int” and “ext/ext/ext”

- It is remarkable that a “fully-fledged” outsourcing as IT operation sourcing policy seems not to be a favourable option, if a low iR adj is targeted

\*)

- 1st sourcing object: Infrastructure operations (ITO)
- 2nd sourcing object: Application operations (AO)
- 3rd sourcing object: Application management (AM)
- classes: int: internally managed, ext: outsourced

\*\*) 5 banks have **other** IT policies with occurrences of 1 to 2, and are not included

Thank you

