GIPS: composites, reporting and verification

Performance Measurement

1 A story: the bakery window

- A bakery window shows only the best cakes
- A composite shows the whole tray
- Same mandate, objective or strategy
- It shows what a new client would have got

IN THE LESSON

- Picture a bakery with a lovely window.
- The baker puts out only the six best cakes, the ones that rose perfectly.
- A customer sees the window, buys a cake from the shelf, and gets something rather different.
- A performance record can play the same trick.
- To stop it, the G I P S standards use composites.
- A composite gathers all the portfolios a firm runs to the same mandate, objective or strategy, and reports them as one group.
- Its record is meant to show what a prospective client for that strategy would have received.
- Meet Tessa Lindgren, compliance head at Kestrel Bay Investments.
- Her first job is to decide what the firm's composites are.

2 Who must be in a composite

Who must be in

Real, fee-paying account → Firm has discretion → In, good or bad

IN THE LESSON

- Who has to be in?
- Follow the boxes across.
- First, the portfolio must be real: an actual account holding client money, where the client pays a fee.
- Second, the firm must have discretion, which means it is free to run the strategy without asking permission for each trade.
- Third, once a portfolio is real, fee paying and discretionary, and it fits a composite definition, it must go into that composite.
- The best and the worst alike.
- The same goes for any pooled fund that meets the definition.
- That is what stops a firm showing only its best accounts.
- The definition decides who is in.
- The firm does not decide it after looking at the returns.

3 What goes into a definition

Kestrel Bay's core composite, in layers

Layer	Example
Asset class	US equity
Style or benchmark	Large growth
Risk and instruments	Unlevered
Material constraints	Tax-exempt

IN THE LESSON

- So what goes into a definition?
- Firms usually build it in layers, and the table shows Kestrel Bay's.
- The first layer is the asset class, here United States equity.
- The second is the style or benchmark, here large cap growth.
- The third is the risk and return target and the instruments allowed, such as leverage or derivatives.
- Kestrel Bay's core strategy uses neither.
- The fourth is any material constraint, such as tax status or an ethical screen.
- Tessa writes all of this down.
- The definition is documented, and it is applied the same way every time.
- A definition that bends to fit the results is not a definition at all.

4 Example 1: fourteen accounts, three composites

14 discretionary accounts, US large-cap growth (illustrative)

Tax-exempt, unlevered	$50m to $500m, same holdings	**9 accounts**
Taxable, tax-aware	tax changes what is held	**3 accounts**
Levered 1.3 times	leverage changes risk	**2 accounts**
Composites needed	one per real difference	**3**
Accounts placed	9 + 3 + 2	**14**

IN THE LESSON

- Now Tessa sorts the firm's fourteen discretionary accounts.
- All of them run United States large cap growth, but not in the same way.
- Nine are tax exempt and unlevered, ranging from fifty million to five hundred million dollars, and all hold the same kind of portfolio.
- Three are taxable accounts with tax aware trading, which defers gains and harvests losses, so they hold different positions.
- Two are levered one point three times, and leverage changes both risk and return.
- Each difference changes how the money is managed.
- So Tessa creates three composites, and nine, three and two make fourteen.
- Every account is placed.
- None is left outside.

5 Too broad, too narrow

Three ways to draw the composites

Design	Verdict
One composite for all 14	Too broad
Split the 9 by size: 5 and 4	Too narrow
Split by tax and leverage: 9, 3, 2	Right

IN THE LESSON

- There are two ways to get the width wrong.
- Look at the first row.
- Putting all fourteen accounts in one composite is too broad.
- It blends three strategies, so its return is one that no actual client received.
- Look at the second row.
- Splitting the nine tax exempt accounts into five and four by account size is too narrow.
- Size did not change how they are run, so Tessa would just create more composites, each with fewer portfolios, and noisier records.
- The third row is the right answer.
- Split where the management really differs, by tax and by leverage, and nowhere else.
- That gives groups of nine, three and two.

6 The trap: size is not a strategy

- Ask: does it change how the money is managed?
- Size alone is not a reason to split
- Never blend unlike strategies to look bigger
- Document the definition, apply it every time

IN THE LESSON

- Here is the exam trap.
- A question describes accounts of very different sizes, and the tempting answer is to give each size band its own composite.
- Check one thing first: does size change how the portfolios are managed?
- If the holdings and the process are the same, size alone is not a valid reason to split.
- The valid reasons are real differences in mandate, objective or strategy: asset class, style, risk target, instruments or a material constraint.
- Equally, never lump unlike strategies together just to look bigger.
- A composite should describe one strategy honestly.
- And in a written answer, justify each split by how it changes the way the portfolios are managed.

7 The life of an account in a composite

Joining

Funded → Fully invested → Joins next full period

Leaving

Mandate changes → Moves, history stays → Closed, kept to the end

IN THE LESSON

- Once the composites exist, the next question is the life of each account inside one.
- The top row is joining.
- An account is funded, then it becomes fully invested the way the strategy intends, and then it joins at the start of the first full measurement period after that, under a documented policy applied consistently.
- The bottom row is leaving.
- If the client changes the mandate, the account moves to the new composite, with documentation, and its past stays behind.
- If the account is terminated, it stays in the composite up to its last full period under management.
- Notice that every step is triggered by an event, never by performance.

8 Example 2: one account, three dates

Policy: join at the first full month after fully invested

Funded 12 Mar, invested 25 Mar	joins growth on 1 Apr	**April**
Switch to value on 15 Jul	July is in neither composite	**gap**
Repositioned by 31 Jul	joins value on 1 Aug	**August**
Terminated 10 Nov	kept to the last full month	**31 Oct**
Months kept in each composite	growth 3, value 3	**6**

IN THE LESSON

- Let us follow one Kestrel Bay account.
- The policy is to add an account at the start of the first full month after it is fully invested.
- It is funded on the twelfth of March and fully invested by the twenty fifth.
- March is not a full month under management, so it joins the growth composite on the first of April.
- On the fifteenth of July the client switches it from growth to value.
- It is repositioned by the thirty first of July, so July belongs to neither composite.
- It joins the value composite on the first of August.
- On the tenth of November it is terminated, so it stays in value up to the end of October.
- That gives three months in growth and three in value.

9 What never moves an account

- Never move an account for its returns
- Its past results stay in the old composite
- Minimum size or big cash flow rules are allowed
- Set in advance, never applied after the fact

IN THE LESSON

- Three more rules protect the record.
- First, an account may never be moved between composites because of its performance.
- Imagine a manager who shifts a poor performer out of the flagship composite and into a minor one.
- The flagship would look better, and the move would be a trick.
- Second, when an account does move for a proper reason, its past results stay in the original composite.
- History does not travel with it.
- Third, a firm may set a minimum asset level, or a policy for large cash flows that temporarily takes an account out.
- These are allowed, but they must be defined in advance and applied the same way every time.
- They may never be applied after the fact.

10 Example 3: the cost of dropping the dead

10 equal accounts; six survive, four close (illustrative)

Six survivors, average return	6 accounts	**9.0%**
Four closed accounts, average	4 accounts	**2.0%**
True composite return	(6 × 9 + 4 × 2) ÷ 10	**6.2%**
Survivors only	drops the closed four	**9.0%**
Overstatement	9.0 − 6.2	**2.8 points**

IN THE LESSON

- Now the rule about terminated accounts, with numbers.
- One Kestrel Bay composite held ten accounts of equal size over a year.
- Six survived the whole period, and their average return was nine per cent.
- Four were terminated by their clients, and in the periods they were managed they averaged two per cent.
- The true composite return is six times nine, plus four times two, all over ten, which is six point two per cent.
- Now imagine the firm removes the closed accounts from the history.
- Only the six survivors remain, and the record shows nine per cent.
- That overstates the truth by two point eight percentage points.
- The gap has a name, survivorship bias.

11 Survivorship bias, as a picture

Composite return (%)



Same ten accounts, two records

IN THE LESSON

- Here are the same numbers as bars.
- The vertical axis is the composite return, in per cent.
- The tallest bar is the survivors only, nine per cent.
- This is the record a firm would show if it quietly deleted the accounts that closed.
- The middle bar is the honest record, with all ten accounts for the periods they were managed, six point two per cent.
- The short bar is the four closed accounts, two per cent.
- Look at the gap between the tall bar and the middle one.
- That gap is flattery, paid for by erasing the awkward accounts.
- This is why terminated portfolios stay in the history up to their last full period, and why removing them is never allowed.

12 A story: the nutrition label

- Every maker lists the same items
- That lets you compare two packets
- Reporting rules make firms comparable
- How many years, which numbers, which words

IN THE LESSON

- Think of the label on a packet of food.
- Every maker must list the same items in the same order, so that you can compare two packets on a shelf.
- The G I P S reporting rules do the same job for performance.
- A compliant report must carry certain numbers and certain statements, laid out so that a prospective client can set one firm beside another.
- The rules are about fair comparison, not about making the returns look good.
- Tessa now has to turn the Kestrel Bay growth composite into a compliant report.
- There are three questions to answer: how many years to show, which numbers to show each year, and what words to add.

13 How many years to show

Years of compliant history

Show at least 5 → Add a year each year → Stop adding at 10

IN THE LESSON

- First, how many years.
- A compliant report shows at least five years of compliant performance, or since the composite began if that is shorter.
- So a young composite shows whatever it has.
- Each year the firm then adds another year, so a report grows from five years to six, to seven, and on.
- It stops adding at ten.
- From then on, the oldest year drops off as a new one arrives, and the report always shows the latest ten.
- Do not confuse this with the history the firm keeps.
- The firm keeps all of its records, and only the report shows ten years at most.

14 Numbers every year must show

Every annual period of the report

Item	When
Composite and benchmark returns	Each year
Composite assets	Each year
Firm assets or composite share	Each year
Three-year deviation	After 36 months

IN THE LESSON

- Second, which numbers.
- For each annual period, the report shows the composite return and the benchmark return, so the client can see how the strategy did against its yardstick.
- It shows the composite assets, so the client can see how big the strategy is.
- And it shows the total firm assets, or the composite's share of them, so the client can see how much of the firm this strategy is.
- The fourth row is a risk number, the three year standard deviation, which needs thirty six months of history before it can be shown.
- A composite that is two years old cannot show it yet, and that is correct, not a gap in the report.

15 Thresholds that switch items on

Counted carefully

Threshold	Needs
Portfolio count, at year end	6 or more
Dispersion, present all year	6 or more
Three-year deviation	36 months
Years shown, at most	10

IN THE LESSON

- Some items are switched on by thresholds, and exams love them.
- The number of portfolios must be shown when the composite holds six or more at year end.
- Fewer than six, the count is optional.
- Internal dispersion, which measures how widely the individual portfolios spread around the composite return, must be shown when at least six portfolios were present for the whole year.
- Again, fewer than six, it is not required.
- The three year deviation needs thirty six monthly returns.
- And the report shows at most ten years.
- Notice the difference between the first two rows.
- One is counted at year end, the other needs the portfolios present all year long.

16 Three-year risk from monthly returns

Annualised SD = monthly SD × √12 (needs 36 monthly returns)

Monthly deviation	From 36 monthly returns
Annualising factor	Square root of 12, about 3.46
Annualised deviation	Shown: 2% × 3.464 = 6.93%
Months needed	Fewer than 36: do not show

IN THE LESSON

- One risk number deserves a formula.
- The three year ex post standard deviation is calculated from the last thirty six monthly returns of the composite, and again for the benchmark.
- Ex post means it looks backwards, at returns that have already happened.
- First find the standard deviation of the monthly returns.
- Then annualise it by multiplying by the square root of twelve, about three point four six.
- The annualised figure is what the report shows, next to the benchmark's.
- This is the same square root of time idea you met earlier.
- Suppose the composite's monthly deviation is two per cent.
- Multiply by three point four six four and the report shows six point nine three per cent.
- That is the figure a client would read.

17 Example 4: fixing Kestrel Bay's draft

Began Jan 2021; report end 2025; portfolios 3, 5, 7, 8, 9

Years shown	2021 to 2025, since inception	**5**
3-year deviation shown for 2022	only 24 months	**remove**
3-year deviation starts	36 months reached end 2023	**2023**
Portfolios at end 2023	6 or more: show the count	**7**
Dispersion required from	6 present all year	**2023**

IN THE LESSON

- Tessa's first draft is wrong in several places, so let us repair it.
- The composite began in January of twenty twenty one, and the report is for the end of twenty twenty five.
- That is five years, all shown.
- The draft shows a three year deviation for twenty twenty two, but by then there were only twenty four months of returns, so it has to go.
- Thirty six months are first reached at the end of twenty twenty three, so the figure starts there.
- The portfolios numbered three, five, seven, eight and nine over the years, so the first year with six or more is twenty twenty three, with seven at year end.
- Taking those portfolios as present all year, that is when the count and the dispersion become required.
- The draft also left out the fee schedule.

18 Words that travel with the numbers

- Compliance statement, firm and composite descriptions
- The benchmark, and why it was chosen
- The fee schedule
- Gross or net of fees, and the currency

IN THE LESSON

- Third, the words.
- Numbers alone are not a report.
- Beside them the firm must give a compliance statement, saying that it claims compliance with the standards.
- It must describe the firm and describe the composite, including its definition.
- It must name the benchmark and say why it was chosen.
- It must give the fee schedule, so that a client can see what the returns cost.
- And it must say whether returns are gross or net of fees, and in which currency.
- Tessa's draft left out the fee schedule, so that is the last repair.
- From next year the report adds a row, and keeps adding one every year until it reaches the limit.

19 Mistakes to avoid so far

- Splitting a composite by size alone
- Leaving out the accounts that did badly
- Moving or deleting accounts to flatter returns
- Showing 3-year risk before 36 months exist
- Mixing up count at year end and full-year dispersion

IN THE LESSON

- Let us collect the common mistakes from the first three topics.
- One: splitting a composite by account size alone, when size changes nothing about how the money is managed.
- Two: leaving out accounts that did badly, which defeats the whole purpose of a composite.
- Three: moving an account between composites because of its returns, or deleting terminated accounts, which creates survivorship bias.
- Four: showing a three year deviation before thirty six months exist.
- And five: mixing up the two six portfolio tests, the count at year end and the dispersion for the full year.
- Check each of these when you read a vignette.

20 A story: the chef who changes restaurants

- A chef moves to a new restaurant
- Can it advertise the old restaurant's awards?
- Only if the chef, recipes and proof all moved
- Portability: whose record is it now?

IN THE LESSON

- A famous chef leaves one restaurant and opens another.
- Can the new restaurant advertise the old one's awards?
- Only if the chef really brought the cooking with her: the same chef, the same recipes, the same kitchen methods, and the old reviews on file to prove it.
- If the chef stayed behind, or the new owner changes the menu, the awards belong to the old place.
- Performance records work the same way.
- Portability is the question of when a new or acquiring firm may link to, or show as its own, the record of a prior firm.
- Kestrel Bay is about to hire a team and buy another firm, so Tessa needs the answer.

21 Three things must travel together

All three conditions

People moved → Process intact → Records held

Result

All three hold → Link and disclose → Else supplemental only

IN THE LESSON

- There are three conditions, and all three must hold together.
- First, substantially all of the people who made the investment decisions must now work at the new or acquiring firm.
- Second, the decision making process must remain substantially intact and independent there, not folded into the buyer's own method.
- Third, the new firm must hold the records that document and support the historical results.
- If all three hold, the firm may link to the old record, and it must disclose that the link was made.
- If any one fails, the old record cannot be presented as the new firm's own.
- It may still appear, but only as supplemental information.

22 Example 5: four teams

Four teams join new firms (illustrative)

Team A: people, process, records	all moved, kept intact	**link**
Team B: lead manager stayed	key decision-maker missing	**no link**
Team C: process absorbed	no longer independent	**no link**
Team D: records left behind	nothing to support history	**no link**

IN THE LESSON

- Now four teams join new firms, and the details are illustrative.
- Team A brings all of its decision makers, keeps its process as a separate unit, and brings the full records.
- All three conditions hold, so the firm may link and must disclose it.
- In Team B, the lead portfolio manager stays behind.
- Much of the decision making belonged to someone who is not there, so no link.
- In Team C, everyone moves, but the buyer merges the team into its own process.
- The people came but the method changed, so no link.
- In Team D, everyone moves intact but the records stay with the old firm.
- Without proof, the claim cannot be supported, so no link.
- Each failure breaks a different connection.

23 Example 6: counting a linked record

Team A's record (illustrative)

Years at the old firm	linked and disclosed	**6**
Years at Kestrel Bay	its own record	**4**
Years in the linked record	6 + 4	**10**
Years the report may show	capped at ten	**10**
If a 2-year gap separates them	cannot link across a break	**no link**

IN THE LESSON

- Let us put numbers on Team A.
- At its old firm it built six years of compliant history.
- Since joining Kestrel Bay it has four more years.
- The two periods follow one another with no gap, so the firm links them and discloses the link.
- That gives a ten year record.
- The report shows up to ten years, so all ten appear, and the first six are labelled as the prior firm's.
- Now suppose there had been a two year gap between the jobs, when the team ran no money.
- A record cannot be linked across a break in the track record.
- The firm would show only the four years since joining, and might present the earlier six as supplemental information.

24 Acquisitions and breaks

What the rules say

Case	Result
Break in the track record	No link
Records not held	No link
Acquired firm not compliant	One year
Link made	Disclose it

IN THE LESSON

- Here is a quick table of the remaining cases.
- A break in the track record, a stretch when nobody was running the strategy, means the two sides cannot be linked.
- If the new firm does not hold the records, there is nothing to support the history, so no link.
- When a compliant firm acquires or joins a firm that is not compliant, the acquirer has one year to bring those assets into compliance, rather than being in breach on the first day.
- And whenever a link is made, the firm must disclose it.
- The exam favours a short answer: name the condition that fails, then say how the old record may still be shown, as supplemental information only.

25 A story: the independent inspector

- An outsider checks the kitchen
- Independent third party, no stake in the result
- Recommended, not required
- Why seek it, what it covers, how it works

IN THE LESSON

- Think of a restaurant with a health inspector.
- The owner may say the kitchen is spotless.
- The sign in the window means more when an outsider with no stake in the restaurant has checked it.
- That is verification.
- It is a review by an independent third party of whether a firm really follows the standards.
- It is a way of earning trust from clients who cannot check the work themselves.
- Tessa has proposed that Kestrel Bay seek it.
- Verification is recommended, not required, so the board will want to know why to do it, what it covers and how it is done.

26 What the verifier tests, and how

What is tested

Firm and its assets → Composite definitions → Policies and procedures

How

Sample portfolios → Recalculate, review → Verification report

IN THE LESSON

- So what does the verifier actually do?
- The top row is what is tested, and it is firm wide.
- Has the firm met all the requirements for building and maintaining its composites and pooled funds, and are its policies and procedures for calculating and presenting performance designed and applied in line with the standards?
- That covers the definition of the firm, the total firm assets, and the composite definitions and membership.
- The bottom row is how.
- The verifier samples portfolios, recalculates returns, reviews records, and, when satisfied, issues a verification report.
- The period covered must be at least one year, or since inception if shorter.

27 Verification is not an examination

What verification does and does not do

Verification	Answer
Covers the whole firm	Yes
Certifies one composite	No
Required by GIPS	No
Minimum period	One year

IN THE LESSON

- There is one point that trips up many candidates.
- Verification covers the whole firm.
- It does not certify any single composite report, or the accuracy of any single composite's returns.
- Checking a specific composite is a different, optional engagement called a performance examination, which is done alongside or after verification.
- So here are the facts.
- It covers the whole firm, yes.
- It certifies a single composite, no.
- It is required by the standards, no, it is recommended.
- And the minimum period is one year, or since inception if shorter.
- Keep verification and performance examination apart, and many exam questions become easy.

28 Example 7: Kestrel Bay's first verification

Covers 2023 to 2025; marketing drafts a claim (illustrative)

Coverage	2023 to 2025, whole firm	**3 years**
Accounts outside composites	found in testing	**3**
Report issued	only after correction	**firm-wide**
Claim: composite returns verified	not what verification says	**wrong**
What would back that claim	a performance examination	**separate**

IN THE LESSON

- Now Kestrel Bay's first verification, covering twenty twenty three to twenty twenty five.
- That is three years of the whole firm, well above the one year minimum.
- During testing the verifier finds three discretionary, fee paying accounts that sit outside any composite.
- That is a failure of composite construction, so the verifier will not issue a report until they are placed correctly.
- Once the report is issued, it speaks about the firm's policies and procedures.
- Now look at the marketing line: our Global Equity composite returns have been verified.
- That claim is wrong.
- Verification does not vouch for one composite's returns.
- That would need a performance examination.

29 Why firms seek verification

- Credibility with prospective clients
- Tighter internal controls and written policies
- A way to stand out when managers are compared
- Whole firm, stated only for the periods covered

IN THE LESSON

- So why would a firm choose to do it?
- First, credibility.
- Prospective clients, especially large institutions, can rely more on a record that an independent expert has tested.
- Second, discipline.
- Preparing for verification forces the firm to write down its policies and tighten its internal controls, so errors are caught early.
- Third, it can help the firm compete when clients compare managers side by side.
- The cost is time and fees, and the benefit is trust.
- Remember the limits, though.
- It is the whole firm that is verified, not each composite, and the firm may state that it has been verified only for the periods the verifier actually covered.

30 Recap: the lesson in five lines

- Composite: one strategy, every qualifying account
- Join by policy, move on mandate, keep the dead
- Five years to ten; thresholds at 6 and 36
- Link a record only if people, process, records moved
- Verification is firm-wide, not a composite check

IN THE LESSON

- Let us pull the lesson together.
- First, a composite gathers every real, fee paying, discretionary portfolio run to one strategy, and size alone is not a reason to split it.
- Second, accounts join under a documented policy, move only when the mandate changes, and stay in the history after termination, so there is no survivorship bias.
- Third, a report shows at least five years, adds a year until ten, and switches items on at six portfolios and thirty six months.
- Fourth, a record can be linked only if the people, the process and the records all moved.
- Fifth, verification tests the whole firm, and it is not an examination of one composite.

31 Try three quick questions

1. Composite has 12 years of compliant history. Years shown?
   Answer: 10. Add a year each year until ten, then stop.
2. Lead manager stays behind. May the new firm claim the record?
   Answer: No. One condition fails: supplemental information only.
3. Verified firm claims its Global Equity returns are verified?
   Answer: No. Verification is firm-wide; that needs an examination.

IN THE LESSON

- Now try three quick questions yourself.
- Pause after each one.
- Question one.
- A composite has twelve years of compliant history.
- How many annual periods does its report show?
- Ten.
- The report adds a year each year until ten are shown, then stops adding.
- Question two.
- The lead portfolio manager of a team stays at the old firm, while the rest of the team moves.
- May the new firm present the old record as its own?
- No.
- A key decision maker did not move, so one condition fails, and the record can be shown only as supplemental information.
- Question three.
- A verified firm wants to say its Global Equity composite returns are verified.
- May it?
- No.
- Verification covers the whole firm, and checking one composite needs a performance examination.