University and College Union

University of Nottingham's rightsizing approach and use of student-staff ratios

Submitted by the University and College Union (UCU)

Main report

The University of Nottingham's "rightsizing" method places the student-staff ratio (SSR) at the centre of decisions on course viability, workforce reduction and identifying "over-staffed" areas. A target band of 18–22 students per academic staff member is proposed as the benchmark for scaling back the academic workforce. This metric is then used to identify areas for contraction and to underpin potential course closures and redundancies.

Although the University concedes that "SSR is an imperfect measure of academic capacity," it nevertheless elevates SSR to the principal tool for determining staffing levels. This approach is analytically flawed, operationally risky, and **strategically catastrophic**. As our analysis will show, it presents an existential risk to Nottingham's status as a research-intensive, Russell Group institution.

Why a blanket SSR target is fundamentally misconceived

SSR reduces the entire complexity of academic work into a single crude number. It takes no account of:

- variations in teaching intensity (labs, studios, clinical provision, PSRB requirements, fieldwork, placements);
- assessment volume and modes of delivery;
- pastoral, welfare and safeguarding duties;

- the uneven distribution of administrative and leadership responsibilities;
- the reality that some programmes are structurally far more staff-intensive than others.
- budgeted vacancies
- staff on study leave or secondment
- casually employed staff

The premise that a uniform SSR target of 18–22 represents “appropriate” provision across all disciplines is fundamentally incorrect. Many subjects cannot credibly or safely operate at these levels. The SSR metric is therefore not an indicator of academic capacity; it is simply a headcount ratio that obscures the real labour required to deliver high-quality teaching.

Generic SSR targets take no account of the staffing requirements set by PSRBs, clinical regulators, lab safety frameworks and accreditation bodies. As a result, the proposed approach creates not only compliance risks but also direct risks to the safe operation of laboratory and clinically governed teaching.

A case study in Physics & Astronomy

A subject-level look at the *Guardian* 2026 data for Physics shows very clearly why a uniform SSR target of 18–22 across the University is neither realistic nor compatible with maintaining a research-intensive profile. Physics & Astronomy at Nottingham is a Nobel Prize winning school, with a world leading research profile in many areas, ranging from medical physics to cosmology.

Across the 44 UK institutions listed for Physics in the *Guardian* 2026 table, student-staff ratios cluster tightly in the 9–11 range, with a median of 10.6 and an upper quartile of 11.4. Values above 14 are already outliers, and anything approaching 18–22 is almost entirely absent from the physics landscape.

Within the Russell Group, the picture is even more striking. Physics SSRs for Russell Group universities are as follows (*Guardian* 2026):

- Cardiff: 7.6
- Exeter: 8.1
- Newcastle: 8.5
- Birmingham: 9.0
- Liverpool: 9.1
- Queen Mary: 9.2
- Oxford: 9.3
- Warwick: 9.5
- Southampton: 9.5
- Leeds: 10.1
- Durham / Glasgow: 10.6
- Edinburgh / UCL / Imperial: 10.7–10.8
- Queen’s Belfast / Sheffield: 11.0

- Nottingham: 11.3
- King's College London: 11.4
- Bristol: 11.8
- Cambridge: 12.1
- Manchester: 14.2

Physics at Nottingham already has one of the highest SSRs in the Russell Group. Only KCL, Bristol, Cambridge and Manchester operate with a higher SSR in this subject. In other words, Nottingham Physics is already at the "thin end" of Russell Group staffing, even before any proposed "rightsizing".

Pushing physics at Nottingham to an SSR in the 18–22 range would therefore be totally out of step with research-intensive norms. In the 2026 physics table, the only universities with SSRs approaching these levels are non-Russell Group institutions with very different profiles:

- Around 18–19: Sheffield Hallam (18.8)
- Above 20: Hull (23.4)

There are no traditional Russell Group physics departments operating with SSRs anywhere close to 18–22. At those levels, Nottingham Physics would no longer resemble its current peer group (Oxford, Imperial, Durham, Leeds, etc.) but rather a cluster of institutions that do not share its research reputation, funding base, or mission.

This has three key implications:

1. **Physics is already "high SSR" within the Russell Group**
   Imposing a generic university-wide target of 18–22 would hit Physics particularly hard, because it is starting from a position where SSR is already stretched relative to its research-intensive peers. There is simply less headroom to cut without damaging quality.
2. **A blanket target ignores the structural realities of Physics**
   Physics is a lab-intensive, equipment-heavy discipline with small-group teaching, practical classes, project supervision and significant safety responsibilities. As we argue elsewhere, SSR is a crude number that takes no account of:
   - lab and practical contact time;
   - project and dissertation supervision;
   - specialist equipment and safety oversight;
   - the high level of staff input required to deliver problem-based learning and mathematical skills support.

   An SSR of 18–22 in Physics is not simply "leaner delivery"; it is a fundamental redefinition of what Physics teaching looks like, and one that is incompatible with elite research-active provision.

3. **Ratcheting Physics up to 18–22 would reposition Nottingham out of the research-intensive cohort**
   At these SSR levels, Nottingham's physics provision would statistically sit alongside

> institutions such as Sheffield Hallam and Hull, not alongside Oxford, Imperial, or even mid-ranking Russell Group departments. That is not a marginal adjustment; it is a change in sector identity for the subject.

In short, the *Guardian* Physics data demonstrate that you cannot impose a blanket SSR target of 18–22 across all disciplines without doing severe, disproportionate damage to laboratory-based, research-intensive subjects like Physics. Physics at Nottingham is already operating with one of the highest SSRs in the Russell Group; forcing it towards 18–22 would move it out of the research-intensive peer group altogether and align it with institutions that do not share its elite research reputation or mission.

Problems with the data being used

The staff FTE snapshot overstates real teaching capacity

The University relies on TRAC data based on a single July payroll snapshot. While there has been little hiring, many colleagues have left, and vacancies arising throughout the year are not reflected in this single-point measure. This means the TRAC snapshot can overstate the real teaching capacity available in Schools.

At a time when many units have seen a steady erosion of staff numbers, using a static snapshot produces an inflated impression of “surplus capacity” that is out of line with lived reality.

Student numbers rely on methodologically allocated, not actual, teaching demand

Student FTEs are drawn from the Latest Revised Forecast (LRF), which incorporates methodological allocations, including allocating activity to Budget Units using a partially-historic Load Matrix rather than using contemporaneous teaching loads. These numbers lag curriculum change, elective choice patterns, programme redesign, and variations in actual semester-by-semester teaching intensity.

The combination of methodologically allocated student numbers and single-point staff snapshots produces an internal SSR metric that is not measuring real capacity or demand, but a modelled approximation. Using that approximation to drive possible redundancies is reckless. Furthermore, the internal SSR metric uses different snapshot dates and datasets to the league table providers, meaning that the data which is being used to make decisions internally does not match the data that we are being benchmarked against externally. The lagged release of both the internal and league table SSR calculations also means that they are not a reliable indicator of current teaching load.

Strong research areas risk being disproportionately targeted

SSR is blind to research buy-out. In research-active Schools:

- grant-funded colleagues appear in the SSR denominator even though they are not available to teach;
- this inflates apparent staffing levels;
- successful research units then look “over-staffed” compared with teaching-only units.

The policy references RKE “deciles” as a contextual analysis, but makes clear that these rankings are indicative only and do not protect units from SSR-driven cuts. The result is a system where research-intensive Schools — those contributing most to REF performance, doctoral education, external income and global reputation — are paradoxically the most exposed to workforce reduction.

It is also worth noting that small research units such as Music can be disproportionately affected by the current methodology. In addition to Teaching Associate cover, they have also been allocated NRF and ECR staff FTE by the Faculty; in a department as small as Music (just over 10 FTE), even a single additional FTE significantly shifts their SSR, making them appear less efficient despite the fact that this staffing reflects genuine research commitments rather than surplus capacity.

We recommend that all externally funded FTE time be removed from internal SSR calculations.

The University’s reversal on SSR direction

The University’s own data shows that, over several years, Schools were encouraged — and pressured — to drive SSRs downwards in order to improve league-table performance and enhance student experience. This was achieved through “improved” reporting, including staff who may only have a minimal teaching load due to research buy-outs.

The new policy abruptly reverses that direction, reclassifying previously “good” SSRs as signs of over-staffing. This inconsistency is not only unfair; it exposes Schools to structural penalties for following institutional strategy.

Modelling risks to the University rankings

The University’s rightsizing proposals present a series of profound strategic risks that have not been adequately recognised in the institutional analysis. Our modelling demonstrates that the decision to raise SSR across the University—particularly to the level implied by the proposed 18–22 benchmark—has consequences far beyond those acknowledged in the University’s own documentation. The scale of the impact on national and international rankings is significantly greater than the institution appears to realise, and threatens to destabilise the University’s global standing, research reputation, and long-term viability as a research-intensive, Russell Group institution.

While the University notes that higher SSRs will negatively affect league-table performance, its mitigation rests on the assumption that sector-wide deterioration will offset this impact. This

assumption does not withstand scrutiny. Our analysis shows that Nottingham is front-running towards a steep and avoidable decline, taking disproportionately severe action ahead of peers. Other institutions are unlikely to replicate this approach at the same scale—indeed, they may observe its adverse consequences and avoid following altogether. Even if some domestic competitors were to raise their SSRs in line with Nottingham, our preliminary modelling shows that this would offer only negligible protection in global rankings. UK universities would still be competing against international institutions that continue to invest in low SSRs as a core element of student experience and research excellence.

The modelling presented in this section shows clearly that the proposed SSR increase would drop Nottingham **more than 20 places** in the QS World University Rankings, driving it well outside of the top 100. Such a fall would have catastrophic effects on international student recruitment, global partnerships, high-value collaborations, and the University's overall brand identity. We have also modelled the impact of reduced research time on global rankings and found even more dramatic falls in the global rankings.

The outlook for national league tables is equally bleak, with the University again expected to fall more than 20 places in the *Guardian* league table. The idea that raising entry tariffs could compensate for this decline in national rankings is similarly flawed: our data **explicitly shows that tariff uplift cannot realistically counteract the negative effects** of sharply rising SSRs in the metrics used by the *Guardian*. We also expect a negative effect on teaching provision and pastoral care due to staffing limitations, resulting in worsening NSS scores, although we have not included this in our modelling. In addition, the University also consistently underperforms in the spend per student and value added score measures, neither of which can be remediated by an increase in entry tariff.

Beyond the immediate numerical impacts, the rightsizing strategy accelerates a structural drift away from a research-intensive model. Increased SSRs diminish academic presence, reduce time for research, depress grant capture, and fragment research groups. Over time, this pushes the University towards a teaching-intensive profile, undermining its REF performance, doctoral training capacity, and international competitiveness. The cumulative effect represents a direct threat to Nottingham's Russell Group status, its ability to recruit top staff and students, and its long-term reputation as a leading research university.

The sections that follow present the detailed modelling behind these conclusions. They make clear that the University's approach is not a manageable adjustment but a strategic miscalculation with existential implications.

The fact that the University has rushed into targeting higher SSR to address financial problems without modelling the potential risks is highly negligent. Whilst our work goes far beyond what the University has presented so far, it should not be seen as a complete analysis. It is clear that a much more thorough and mathematically robust investigation is required to properly understand the implications of raising the SSR to such dangerously high levels.

QS World University Rankings

The University's proposal to increase the staff–student ratio from its current level to a target range of 18–22:1 represents far more than a simple operational adjustment. Because SSR feeds directly into the *Faculty–Student Ratio* (FSR) component of the QS World University Rankings—and indirectly into the University's research capacity through reduced time available for scholarship—this change has major implications for Nottingham's global standing.

At present staffing levels, academic workload allocations allow for roughly **33% protected research time** in most areas. Under the proposed rightsizing model, that figure falls to approximately **25%**, a reduction that will weaken grant capture, publications, doctoral supervision and the overall research environment. Combined with the mathematical deterioration of the FSR indicator itself, this creates a dual pressure on Nottingham's QS position: a direct hit to FSR and an indirect hit to Citations per Faculty (CPF), Academic Reputation, and Employer Reputation over the medium term.

To understand the scale of this risk, it is essential to examine the structure of the QS methodology. Far from being a marginal or easily absorbed component, the FSR metric carries a 10% weighting, and CPF an even larger 20%. Both are highly sensitive to reductions in staffing, increases in SSR, and declines in research intensity. Nottingham's current strategy underestimates this sensitivity and assumes that sector-wide deterioration will neutralise the impact. In reality, where many global competitors continue to invest in low SSRs and high research capacity, Nottingham's proposed move represents a unilateral, self-inflicted disadvantage.

The QS World University Rankings assess universities across a broad set of indicators, each contributing to the overall score:

- Academic Reputation (30%)
- Citations per Faculty (20%)
- Employer Reputation (15%)
- Faculty–Student Ratio (10%)
- International Faculty Ratio (5%)
- International Student Ratio (5%)
- International Research Network (5%)
- Employment Outcomes (5%)
- Sustainability (5%)

Nottingham currently performs strongly on measures of internationalisation and research network breadth, and solidly in academic and employer reputation. However, its FSR score is already relatively weak, and its CPF score is highly vulnerable to any reduction in research time. In the 2026 QS World University Rankings, Nottingham sits at 97th place, with an overall QS score of 69.3—a position that depends critically on the delicate balance of these indicators, and as demonstrated by achieving ranking positions within the Top 100 in only two out of the most recent 5 iterations.

The analysis that follows demonstrates that the proposed SSR increase would break this balance. Raising SSR into the 18–22 range would sharply worsen the FSR metric and, through diminished research intensity, depress CPF and reputation-based indicators. Our modelling shows that this combination would push Nottingham **significantly outside the top 100**, with a fall of sufficient scale to threaten international recruitment, diminish the value of global partnerships, and pose an existential risk to the University's status as a research-intensive, Russell Group institution.

Although SSR is a prominent indicator in the *Guardian* league tables, it does **not** appear explicitly in the QS World University Rankings. This makes direct comparison difficult and highlights the need to understand how changes in SSR affect the broader ecosystem of QS indicators.

To investigate this relationship, we analysed data from the *Guardian* University Guide 2026 and the QS World University Rankings 2026, examining how the relevant indicators correlate across UK institutions. Figure 1 presents the resulting correlation matrix, incorporating the *Guardian* SSR alongside all major QS metrics.

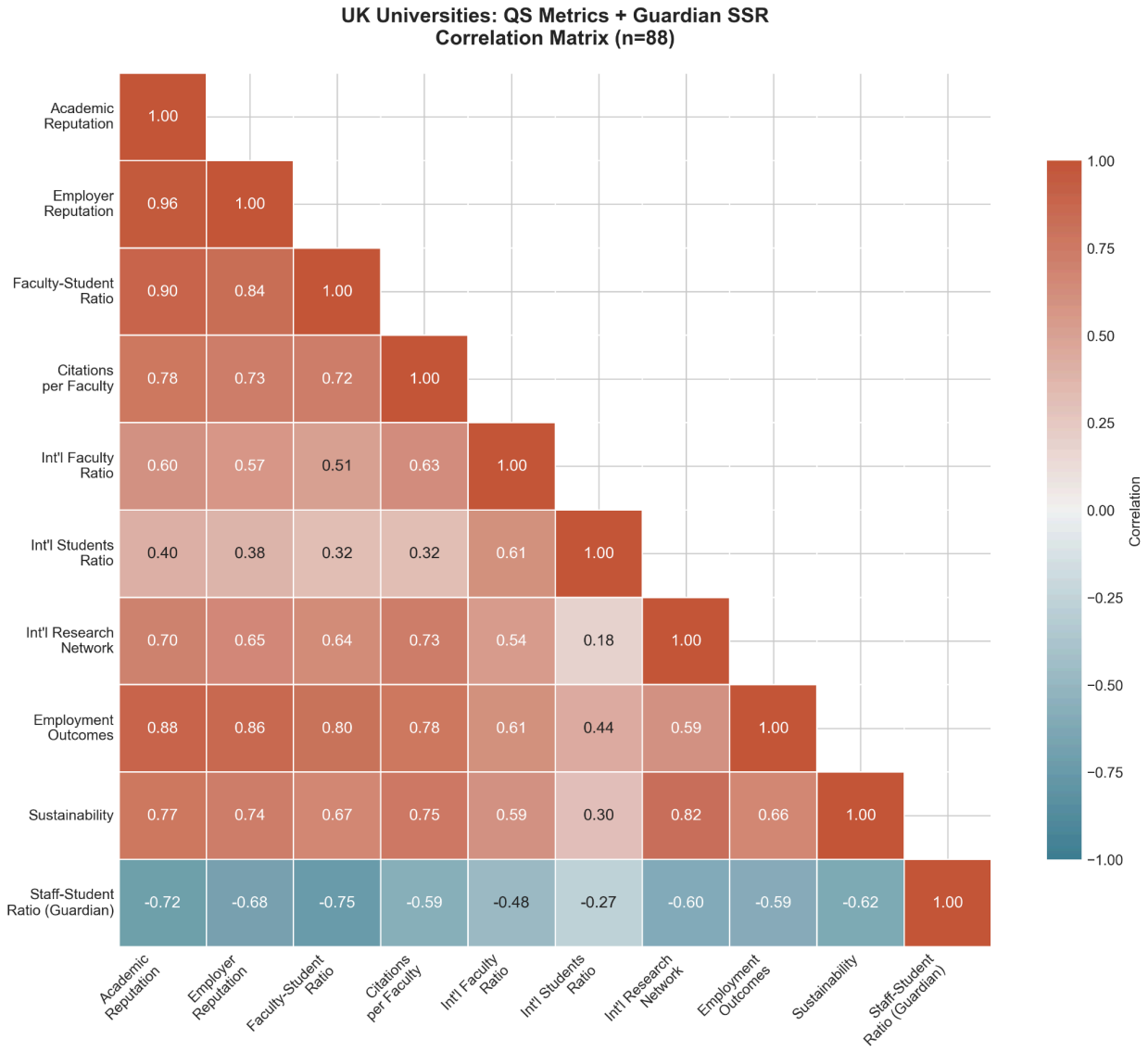


Figure 1: Correlation matrix for 88 UK universities showing QS indicator scores and *Guardian* Student-Staff Ratio. All indicators show strong negative correlation with SSR, demonstrating tight coupling between staffing levels and ranking performance.

The pattern is striking: SSR is negatively correlated with every QS indicator. In plain terms, universities with higher SSRs consistently perform worse across the board. This is entirely consistent with what these metrics are measuring. The QS indicators—Academic Reputation, Citations per Faculty, Employer Reputation, FSR, and others—are all, in different ways, reflections of institutional staffing capacity and the academic environment it enables.

The implication is clear: **raising SSR does not only depress the FSR metric—it tends to pull down all of the QS indicators simultaneously**. No institution can meaningfully increase SSR without triggering declines across the major components of the QS ranking system.

This analysis provides the basis for the two complementary modelling approaches described in detail in the appendix. In both cases, we begin with the current position: an SSR of **13:1** (*Guardian* University Guide 2026) and a QS World Ranking of **97** (QS 2026). We then model the effect of increasing SSR across the range proposed in the rightsizing plan.

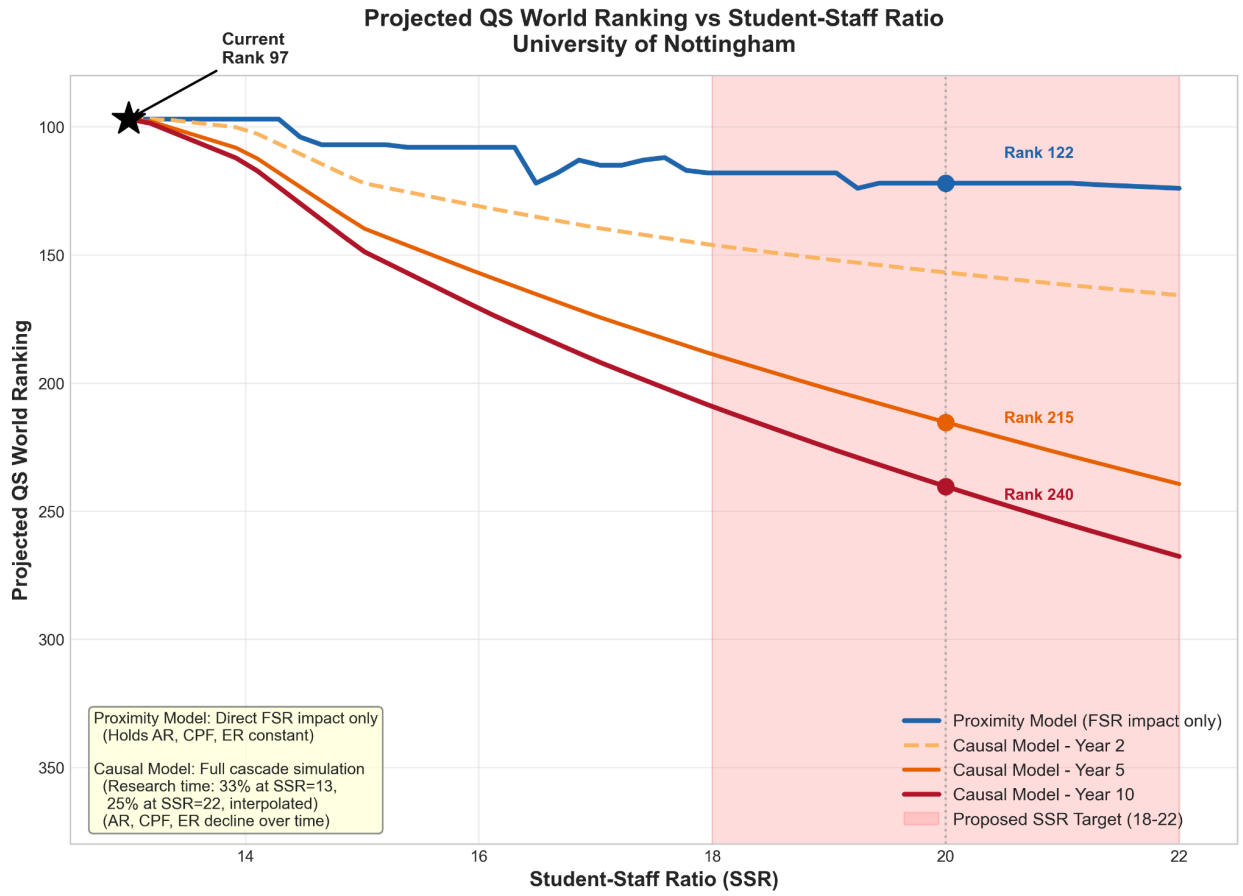


Figure 2: Projected QS World Ranking vs Student-Staff Ratio. The proximity model (blue) shows direct FSR impact only. The causal model (orange/red) shows full cascade effects at years 2, 5, and 10.

The results, shown in Figure 2, are stark. **Moving towards an SSR in the 18–22 range produces catastrophic declines in Nottingham's QS position.** Even under the most conservative assumptions, an SSR of 18 drives the University down to a QS rank of 118, while an SSR of 20 pushes it further to 122.

Remarkably, the conservative model is unable to properly predict a ranking for an SSR of 22, so we had to extrapolate. This is because its methodology relies on comparison with peer institutions—and no credible comparator universities operate at such a high SSR within the global research-intensive sector. The model cannot operate in a space where Nottingham would no longer resemble institutions of similar status.

University management has suggested that other institutions are likely to follow Nottingham's policy and move towards higher SSRs. We are sceptical of this claim, but have nonetheless

performed an analysis of its potential impact. Using our most conservative assumptions, we simulated a scenario in which all UK universities shift to an SSR of 20. Even under this highly favourable premise, Nottingham's QS ranking still falls—from **97 to 120.** In other words, **a universal SSR increase across the UK sector would mitigate Nottingham's decline by only two places.** The scale of international competition ensures that Nottingham's ranking would still deteriorate sharply.

The clear implication is that raising SSR into the proposed range would push Nottingham decisively out of the global research university cohort and into territory occupied by institutions with fundamentally different missions and reputations.

Further details on the modelling of QS World Rankings are given in Appendix A.

Guardian University League Tables

The *Guardian* University Guide is one of the most influential domestic rankings for undergraduate recruitment in the UK. Unlike international frameworks such as QS, it focuses almost entirely on the teaching and student-experience environment, with no weighting for research. This makes the *Guardian* particularly sensitive to staffing levels, contact time, feedback quality and student satisfaction—all of which deteriorate when SSR rises.

Crucially, the *Guardian* assigns 15% of its total score directly to the student-staff ratio, a weighting 50% higher than the equivalent FSR component in QS. SSR also indirectly affects multiple other indicators, including continuation, career outcomes, value added, and even NSS responses, because these metrics deteriorate as teaching capacity becomes stretched. For a university operating close to the boundary of the Russell Group's teaching-intensive tolerance, increases in SSR have amplified, system-wide effects across the *Guardian* methodology.

Nottingham's current position—51st, with an SSR of 13:1—already places it at the upper end of the Russell Group range. It is worth noting that the rise of 11 places from our 2025 ranking (62nd) was largely driven by the decrease in our SSR measure (which was 15.7:1 in 2025). Our analysis of all 123 institutions in the *Guardian* 2026 dataset shows that no traditional Russell Group university operates above 14.3, and most cluster between 12.0–13.5. Moving Nottingham to an SSR of 18–22 would immediately push it into a group of universities that are not research-intensive, do not operate at Russell Group levels of academic intensity, and serve fundamentally different student markets.

The implications of this shift are severe. At SSRs of 18 and above, Nottingham's academic profile becomes directly comparable with institutions such as Manchester Metropolitan, Ulster, Bradford, Westminster, Roehampton, and Wrexham—**not** with Leeds, Birmingham, Exeter, Sheffield or York. This is a wholesale repositioning of the University in the domestic market.

Moreover, the University's belief that increases in entry tariffs could offset the decline is completely unrealistic, as our analysis will show. The *Guardian* allocates only **15%** weighting to tariff, and our modelling shows that the **tariff uplift required to counteract the damage from**

an SSR rise to 18–22 would be implausibly large, far beyond what Nottingham could achieve within a competitive UCAS environment. No feasible increase in selectivity can compensate for a structural decline in teaching capacity.

Finally, the argument that the sector will "all move together" towards higher SSRs is dangerously optimistic. The magnitude of the rise proposed at Nottingham—jumping from 13 to 18–22—far exceeds any sector-wide drift currently visible. Even if some universities modestly raise SSR in response to financial pressures, **none are moving at this scale**. Nottingham would therefore be **front-running into a catastrophic repositioning**, not sheltered by collective behaviour. And even if a slow domestic drift did occur, it would **do nothing to mitigate the University's decline relative to global competitors** not raising SSR and who dominate reputation-based measures among prospective international students.

In summary, the *Guardia*n League Table is structurally sensitive to staffing levels, and the proposed SSR increases would place Nottingham far outside the norms of research-intensive institutions, collapse its comparative profile, and require implausibly large tariff increases to mitigate. The modelling that follows demonstrates how stark and destabilising this shift would be.

We analysed three different modelling scenarios. In the **most conservative** model, we adjust only the SSR value and recalculate the resulting *Guardian* rank. In the two **cascading** models, we incorporate additional negative effects that are highly likely to accompany a rise in SSR. These include:

- declines in teaching satisfaction due to larger class sizes and reduced contact time;
- weaker career outcomes as students receive less staff support, guidance and networking;
- reductions in value-added scores, which depend on close academic engagement and personalised learning.

Together, these models provide an alarming picture of what will happen to Nottingham's ranking as SSR increases. The results are presented in the table below:

Scenario	**SSR 18**	**SSR 20**	**SSR 22**
Direct SSR only	74	82	92
Moderate cascade	86	100	107
Severe cascade	94	105	119
Range	74–94	82–105	92–119

We see that even in the most conservative scenario (Direct SSR only) a move towards an SSR of between 18 and 22 will result in a fall of between 23 and 41 places in the *Guardian* league table.

We also examined the role of entry tariff, in light of the University's claim that tariff increases could offset the negative effects of a rising SSR. Using the Direct SSR scenario—the most conservative of our models—we calculated the minimum average entry tariff required for Nottingham to maintain its current 51st place in the *Guardian* league table while raising SSR.

At present, Nottingham sits at 51st, with an SSR of 13 and an average entry tariff of 151. The table below shows the tariff levels that would be required to *stand still* at rank 51 if SSR were increased. For context, the University of Oxford, ranked first in the *Guardian* league table, has an average entry tariff of 197.

SSR score	Required tariff to stand still
13 (current)	151
18	193
19	202
20	210
21	210
22	210

These comparisons make clear that the tariff increases required to compensate for the proposed SSR rise would be **unrealistically high** and far beyond anything achievable in Nottingham's current recruitment market.

Further details on the modelling of *Guardian* league tables are given in Appendix B.

Conclusions

The evidence presented in this report makes one conclusion unavoidable: **the proposed use of a generic SSR target of 18–22 as the core instrument for "rightsizing" is analytically indefensible, strategically reckless, and institutionally self-destructive**. The metric is too crude, the data underpinning it too weak, and the consequences of implementing it far too severe for it to serve as the basis for any credible workforce strategy.

Across every dimension we have analysed—teaching quality, research capacity, regulatory compliance, national league tables, global rankings, recruitment markets, and long-term institutional identity—the conclusions all converge on the same point: **raising SSR to the proposed levels would inflict lasting, possibly irreversible damage on the University of Nottingham.**

1. SSR is not an appropriate tool for sizing academic activity

SSR collapses the complex realities of academic work into a single headcount ratio that bears no meaningful relationship to actual workload or academic capacity. It ignores discipline-specific teaching intensity, laboratory and clinical requirements, PSRB constraints, supervision loads, and uneven task distribution. In the case of subjects like Physics & Astronomy, forcing SSRs

into the 18–22 range would move Nottingham out of the research-intensive sector entirely and into a comparative group of teaching-focused institutions with fundamentally different missions. This would undermine both quality and safety.

2. The modelling shows catastrophic impacts on rankings

Our QS modelling demonstrates that an SSR increase to 18–22 would push Nottingham far outside the top 100 globally, with conservative long-term outcomes around rank 120+. Modelling also suggests that reputation declines would continue for five to ten years due to lagged effects in citations and academic visibility.

The *Guardian* analysis shows Nottingham falling from **51st** into the **74–119** range even under conservative assumptions, placing it squarely among post-1992 institutions. No feasible increase in entry tariffs can compensate for the ranking collapse induced by higher SSR.

Together, these outcomes represent a dramatic erosion of the University's domestic and international competitiveness.

3. The policy undermines the University's research-intensive identity

Raising SSR by reducing staff numbers cuts directly into research time. Even modest increases in SSR produce large declines in protected research time, which in turn depress grant activity, publications, doctoral supervision, collaboration networks, and academic reputation. Over the medium term, these effects shift Nottingham structurally towards a teaching-intensive profile.

This is incompatible with maintaining REF performance, sustaining research groups, or preserving the University's standing within the Russell Group. It is also inconsistent with the University's stated mission and international positioning.

4. The University's modelling is insufficient, and the risks are unassessed

The University has not presented any serious modelling of the consequences of raising SSR across different disciplines, league tables, or research indicators. That omission is not merely a technical oversight: it is a fundamental failure of governance.

Our analysis goes considerably further, but even this should not be taken as complete. A change of this magnitude requires mathematically robust scenario analysis, full risk assessment, and extensive consultation. None of this has occurred.

5. Sector-wide "drift" offers no protection

Some argue that other universities will raise SSR and thus soften the competitive impact. However, the scale of Nottingham's proposed increase—jumping from 13 to 18–22—is far beyond anything happening elsewhere in the sector.

Even if domestic competitors raised SSR slightly, it would not mitigate global reputational losses, where Nottingham competes against institutions with stable or falling SSRs. The University would be front-running into a decline that others are unlikely to follow.

6. Maintaining academic staff levels is essential to institutional success

Every piece of analysis in this report—on teaching, research, reputation, rankings, and compliance—points to the same overarching conclusion: preserving academic staffing capacity is not optional, but foundational.

Staff numbers underpin research time, student experience, safety, intellectual community, innovation, and external engagement. They determine the University's ability to attract talent, secure funding, and maintain its international position. Cutting academic staff to raise SSR is therefore not a path to financial sustainability—it is a strategy that accelerates decline.

Final Recommendation

Given the scale and severity of the risks, and the absence of any evidence that raising SSR can be done safely or strategically, we recommend:

1. The University should immediately abandon the use of SSR as a rightsizing tool.

It is not fit for purpose, cannot reflect discipline-specific realities, and produces perverse and damaging outcomes.

2. The University should commit to maintaining academic staff capacity at levels compatible with a research-intensive institution.

This is essential to protect the University's reputation, performance, and long-term sustainability.

3. Any workforce planning exercise should be rebuilt from first principles.

It must be evidence-based, discipline-sensitive, financially transparent, and developed collaboratively with academic staff expertise.

The findings of this report are clear: **SSR-driven rightsizing is not a strategy for stabilisation—it is a mechanism for accelerated institutional decline.**
Protecting the University's excellence, reputation, and sustainability requires maintaining—and where necessary, rebuilding—academic capacity, not dismantling it.

Appendix A: Modelling QS World Rankings

The University of Nottingham is considering policy changes that would increase the staff-student ratio (SSR) from 13:1 to a target range of 18–22:1. This increase in SSR is inherently linked to a

reduction in allocated research time, from approximately 33% at current staffing levels to 25% at the proposed staffing levels.

These changes have significant implications for the university's position in the QS World University Rankings, which evaluates institutions across multiple weighted indicators.

The QS Ranking Methodology

The QS World University Rankings employs the following indicator weights:

Indicator	Description	Weight
Academic Reputation (AR)	Global survey of academics	30%
Citations per Faculty (CPF)	Research impact normalised by faculty	20%
Employer Reputation (ER)	Global survey of employers	15%
Faculty-Student Ratio (FSR)	Teaching capacity proxy	10%
International Faculty Ratio (IFR)	Staff internationalisation	5%
International Students Ratio (ISR)	Student internationalisation	5%
International Research Network (IRN)	Research collaboration breadth	5%
Employment Outcomes (EO)	Graduate employability	5%
Sustainability (SUS)	Environmental and social impact	5%

QS World University Rankings Indicator Weights (2026)

Current Position

As of the 2026 QS World University Rankings:

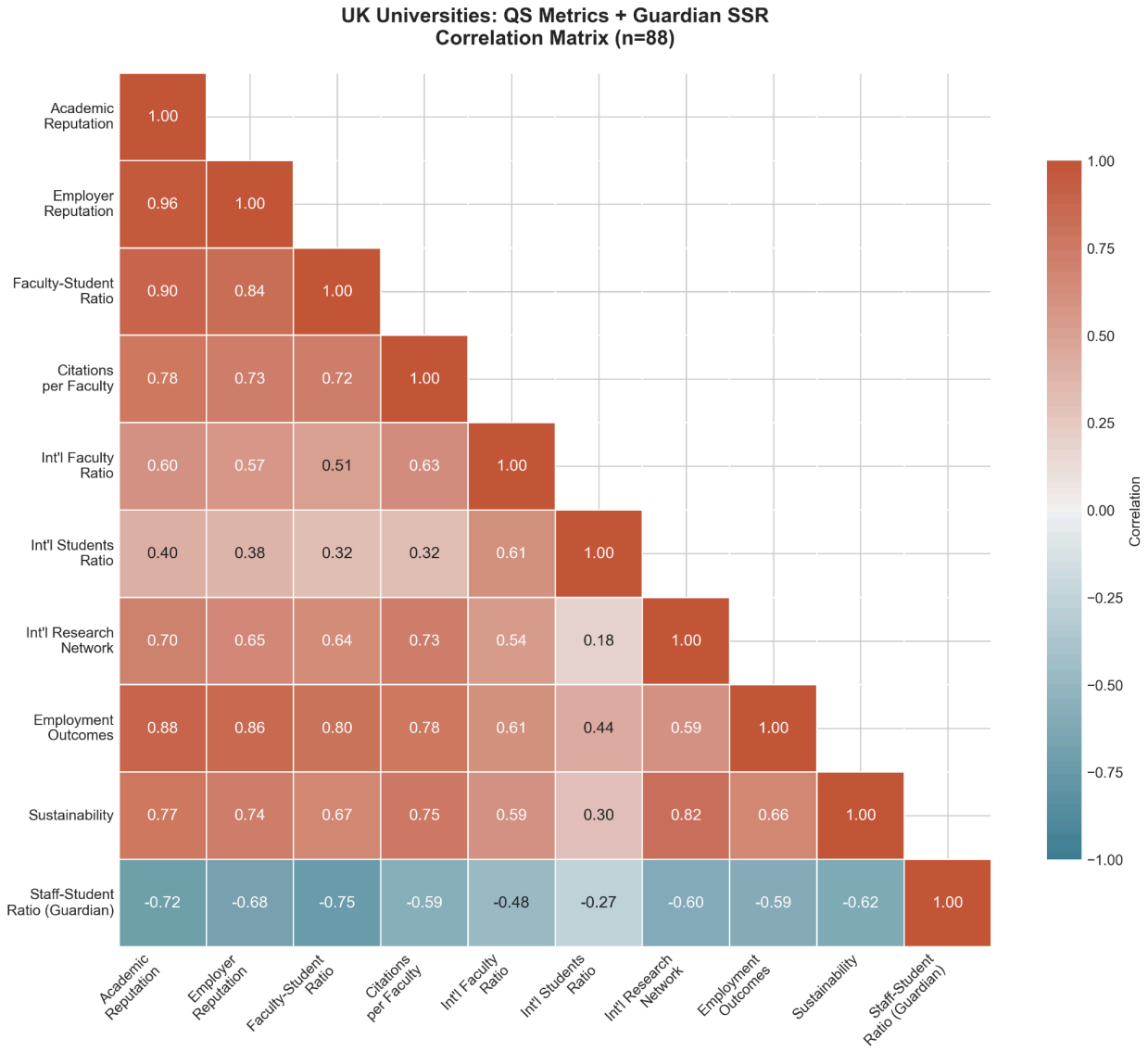
Indicator	Score	Weighted Contribution
Academic Reputation (AR)	75.4	22.62
Employer Reputation (ER)	78.4	11.76
Faculty-Student Ratio (FSR)	44.5	4.45
Citations per Faculty (CPF)	48.6	9.72
International Faculty (IFR)	92.7	4.64
International Students (ISR)	78.5	3.93
International Research Network (IRN)	97.4	4.87
Employment Outcomes (EO)	53.7	2.69
Sustainability (SUS)	92.9	4.65

Overall Score	**69.3**	—
World Rank	**97**	—

University of Nottingham: Current QS Metrics

Indicator Coupling Analysis

Before modelling the impact of SSR changes, it is essential to understand how the QS indicators are correlated. The figure below (Figure 1 in main text) shows the correlation matrix for UK universities, including the Guardian SSR alongside QS metrics.



The correlation analysis reveals critical relationships:

Indicator	Correlation with SSR
Faculty-Student Ratio (FSR)	−0.75

Academic Reputation (AR)	−0.70
Employer Reputation (ER)	−0.65
Employment Outcomes (EO)	−0.56
Citations per Faculty (CPF)	−0.57
Int’l Research Network (IRN)	−0.56
Sustainability (SUS)	−0.56
Int’l Faculty Ratio (IFR)	−0.45
Int’l Students Ratio (ISR)	−0.22

Correlation of QS Indicators with Guardian SSR (UK Universities)

SSR, AR, and FSR are highly correlated because they all reflect the same underlying factor—staffing levels. Universities cannot increase SSR without expecting declines across all major QS indicators.

QS indicators vs SSR

The figure below shows scatter plots of all QS indicator scores against Student-Staff Ratio for UK universities. Each plot includes Nottingham's current position (star), a regression line, and the proposed SSR target range (18--22, shaded red). These relationships are central to understanding the impact of the proposed policy changes.

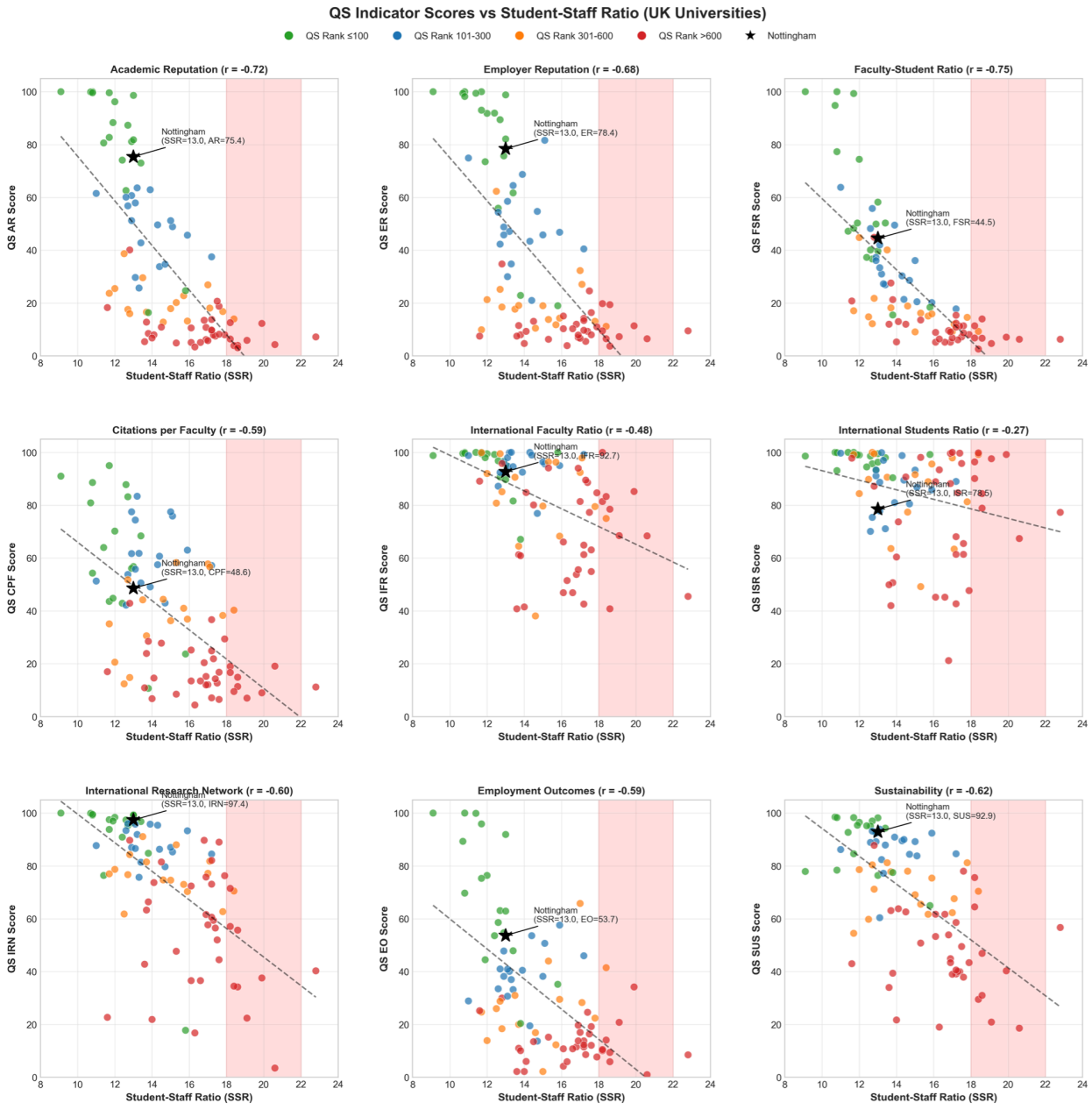


Figure: QS indicator scores vs Student-Staff Ratio for UK universities:. all indicators show negative correlation with SSR. Points coloured by QS rank band (green: top 100, blue: 101--300, orange: 301--600, red: >600). Nottingham's current position is marked with a star. The shaded region indicates proposed SSR target range of 18--22.

The scatter plots reveal several important patterns:

- FSR (r = -0.75): The strongest correlation. Universities in the proposed SSR range (18--22) consistently have FSR scores below 15, compared to Nottingham's current 44.5.
- AR (r = -0.72): Strong negative correlation. High-SSR universities cluster at AR scores of 10--40, while Nottingham currently scores 75.4.

- ER (r = -0.68): Similar pattern to AR, reflecting the link between staffing levels and employer perceptions.
- SUS, IRN, CPF, EO (r approximately -0.60): Moderate correlations, indicating broader impacts of reduced staffing on research output, collaboration, and outcomes.
- FR (r = -0.48): Weaker correlation, suggesting international faculty recruitment is less directly tied to SSR.
- ISR (r = -0.27): Weakest correlation, as international student recruitment depends more on other factors.

This tight coupling justifies our use of two complementary models:

1. Proximity Model: Directly estimates FSR impact using comparator universities
2. Causal Model: Simulates cascading effects through the interconnected indicator system

Methodology: Proximity-Weighted Comparator Model

Theoretical Basis

The proximity-weighted comparator method estimates FSR scores by analysing universities with similar SSR values, weighted by their proximity to Nottingham in the current rankings. This approach captures the empirical relationship between SSR and FSR as observed in actual QS scoring.

The method is based on the hypothesis that QS applies stabilisation factors to FSR scores based on peer institutions. Universities at similar ranks receive similar treatment, so their FSR scores provide information about what Nottingham might receive at different SSR values.

Mathematical Formulation

For a target SSR value S_{target}, the estimated FSR is:

$$\text{FSR}_{\text{estimated}} = \frac{\sum_{i \in C} w_i \cdot \text{FSR}_i}{\sum_{i \in C} w_i}$$

where the comparator set is:

$$C = \{i : |S_i - S_{\text{target}}| \leq 0.5\}$$

and the proximity weights are:

$$w_i = \frac{1}{(r_i - r_{\text{Nottingham}})^2}$$

where r_i is the QS rank of university *i*.

FSR Lookup Results

SSR	Est. FSR	*n*	Top Comparators (by proximity weight)
13 (current)	45.6	20	Sheffield (50.3), Southampton (40.1), Leeds (39.7)
15	24.3	8	Bath (20.5), Bucks New (36.1), Swansea (28.6)
18	10.2	9	Bradford (9.3), Stirling (14.6), Ulster (11.4)
20	7.1	1	Westminster (7.1)
22	6.0*	0	(extrapolated—no comparators)

Proximity-Weighted FSR Estimates by SSR

*SSR=22 value extrapolated; no UK universities in QS dataset operate at this SSR.

Rank Impact (FSR Only)

Using the proximity model with FSR changes only (holding all other indicators constant):

SSR	FSR Score	*Δ* Overall	Projected Rank
13 (current)	45.6	—	97
15	24.3	−2.1	107
18	10.2	−3.5	118
20	7.1	−3.9	122
22	6.0	−4.0	124

Proximity Model: Projected Rankings (FSR Impact Only)

Key finding: The proximity model shows that FSR changes alone would move Nottingham from rank 97 to approximately rank 122 at SSR=20. This represents the **minimum expected impact**—the floor of the ranking decline.

What if all UK universities increased SSR to 20?

A potential counter-argument is that other UK universities facing similar financial pressures might also increase their SSR, thereby reducing the relative impact on Nottingham. We analyse this scenario using **actual SSR data** from the *Guardian* University Guide for each UK university, calculating individual FSR drops when moving from their current SSR to 20.

UK Universities Moving to SSR = 20 Actual SSR Data

University Name	Current SSR	ΔSSR	FSR Drop	Current Rank	New Rank
Imperial College London	11.7	8.3	92.2	2	20

University of Oxford	9.1	10.9	92.9	4	25
University of Cambridge	10.8	9.2	92.9	6	29
University College London	10.7	9.3	87.7	9	32
King's College London	12	8	67.3	31	49
The University of Manchester	13	7	51.1	35	51
University of Edinburgh	10.8	9.2	70.2	34	55
University of Bristol	12.7	7.3	29.6	51	60
London School of Economics and Political Science (LSE)	11.4	8.6	40.1	56	67
The University of Warwick	11.7	8.3	41.2	74	86
University of Birmingham	12.9	7.1	42.8	76	91
University of Glasgow	11.9	8.1	43.2	79	94
University of Leeds	13	7	32.6	86	95
University of Southampton	12.6	7.4	33	87	98
Durham University	12.4	7.6	30.2	94	106
The University of Sheffield	13.4	6.6	43.2	92	109

The University of Nottingham	**13.8**	**6.2**	**37.4**	**97**	**120**
Queen Mary University of London (QMUL)	13.2	6.8	23.9	110	130
University of Bath	15.1	4.9	13.4	132	142
University of St Andrews	11	9	56.7	113	158
Newcastle University	13.9	6.1	42.4	137	163

Key findings from the actual SSR analysis:

1. **Nottingham drops 23 places globally** (97 → 120) with an SSR increase of 7.0 (from 13.0 to 20) and an FSR drop of 38.5 points.
2. **Top universities face larger FSR drops:**
   Oxford, Cambridge and Imperial have an FSR drop of 90+ points.
3. **Universities already at high SSR are less affected:**
   Bath (SSR 15.1) has a smaller FSR drop of 13.4 points.
4. **UK universities in the global top 100 fall from 17 to 14** — the entire UK sector becomes less internationally competitive.
5. **Nottingham's position is not protected:**
   Even though other universities also fall, Nottingham still drops out of the top 100. The “others will drop too” argument provides no comfort for international competitiveness.

This analysis demonstrates that even if all UK universities increased SSR to 20, Nottingham would still fall significantly in the global rankings. The key insight is that **the absolute global rank matters** for international student recruitment and research partnerships — relative UK position is secondary.

Methodology: Causal Simulation Model

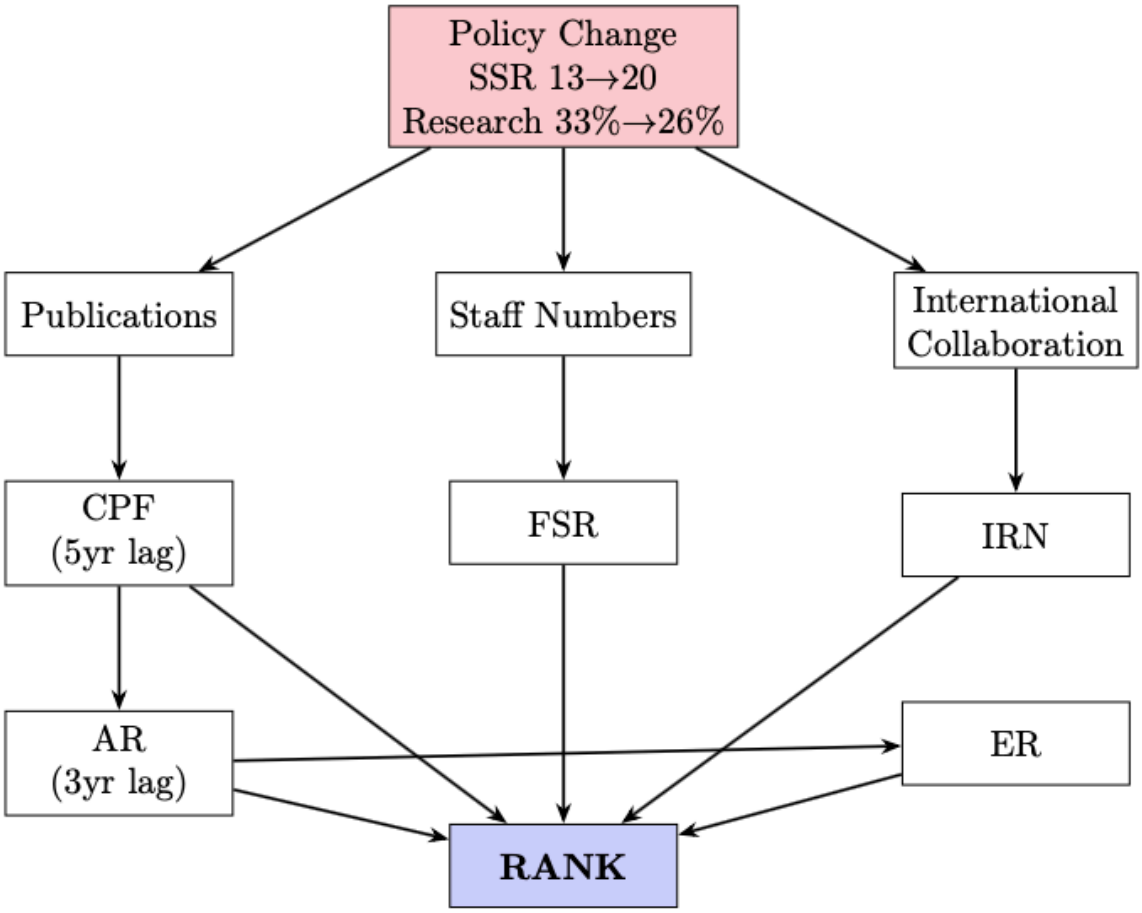
Theoretical Basis

The causal model recognises that SSR changes do not occur in isolation. Increasing SSR requires reducing academic staff, which in turn:

- Reduces research output → lower CPF

- Reduces academic visibility → lower AR
- Reduces employer engagement → lower ER
- Reduces international collaboration → lower IRN

Causal Structure



Model Equations

The model assumes that SSR changes are implemented over a 1-year period. The effective SSR at time t is:
$S_{eff}(t) = S_0 + (S_{target} - S_0) \times \min(1, t)$

where $S_0 = 13$ is the current SSR and S_{target} is the policy target.

This assumption reflects rapid implementation through staff reductions. In practice, the actual timeline would depend on:

- Whether reductions occur through voluntary severance, natural attrition, or redundancies
- Any phasing of changes across departments or faculties
- Contractual and regulatory constraints

A longer implementation period would delay the initial FSR impact but would not significantly change the long-term equilibrium rankings, as these are determined by the CPF and AR lags (5 and 3 years respectively).

Research Time as a Function of SSR

Research time is inherently linked to SSR. At current staffing levels (SSR=13), we model research time at 33%. As SSR increases to 22, research time is reduced to 25%. We model this relationship as linear interpolation:

$$R(S) = \begin{cases} 0.33 & \text{if } S \leq 13 \\ 0.33 - 0.15 \cdot \dfrac{S - 13}{22 - 13} & \text{if } 13 < S < 22 \\ 0.25 & \text{if } S \geq 22 \end{cases}$$

This gives research time of 31% at SSR=15, 28% at SSR=18, and 26% at SSR=20. Maintaining SSR=13 preserves 33% research time.

Citations per Faculty (CPF)

CPF is based on a five-year rolling window, which means changes in research capacity affect this metric gradually rather than immediately. When research time is reduced—such as through an increase in SSR—CPF falls toward a new, lower equilibrium value determined by the reduced research intensity.

We model this using:

$CPF(t) = CPF_0 - (CPF_0 - CPF\_eq(t)) \times \min(1, t/5)$

where:

- **CPF_0** is the current CPF value,
- **CPF_eq(t)** is the equilibrium CPF at the *effective* research time after the SSR increase,
- The factor **min(1, t/5)** ensures that the adjustment unfolds over five years, matching the rolling window used by QS.

The equilibrium value itself is modelled as:

$CPF\_eq(t) = CPF_0 \times (R(S\_eff(t)) / R_0)$

where:

- **R(S_eff(t))** is the research-time allowance associated with the effective SSR at time *t*,
- **R_0** is the current baseline research time allowance.

This formulation captures the key insight: **reduced research time progressively suppresses citation output**, and thus Nottingham's CPF score declines toward a lower long-term value even if short-term citations remain temporarily buoyed by legacy outputs.

Academic Reputation (AR)

Academic Reputation depends on both *current research strength* (proxied by CPF) and the University's *historical brand premium*—a reputational advantage that persists but gradually declines when research visibility weakens.

We model AR as:

AR(t) = max(35, (−2.6 + 0.93 × CPF(t)) + 33 × exp(−0.08 t))

where:

- The **CPF-dependent term** (−2.6 + 0.93 × CPF) reflects reputation attributable to current academic performance.
- The **exponential decay term** (33 × e^(−0.08t)) represents Nottingham's accumulated brand premium, which diminishes over time if research outputs and visibility fall.
- The **floor value of 35** prevents the model from producing unrealistically low AR scores.

This structure reflects two well-observed realities of global reputation metrics:

1. **Reputation lags performance**, so decline unfolds over years rather than immediately.
2. **Once research activity is weakened, brand value decays**, and institutions rarely recover quickly.

The combination of weakened CPF and decaying brand strength means that reductions in research time (caused by higher SSR) lead to **significant long-term losses in Academic Reputation**, further compounding declines in QS rank.

Faculty-Student Ratio (FSR)

FSR is determined directly from the proximity model lookup table based on the effective SSR: FSR(t) = $f_{SSR}(S(t))$ where f_{SSR} is the proximity-weighted FSR estimate from comparator universities.

Employer Reputation (ER)

ER is modelled as following AR directly. This is justified by the correlation matrix (Figure [correlation]), which shows ER and AR are very highly correlated (**r = 0.96**):

ER(t) = ER_0 × (AR(t) / AR_0)

This means ER experiences the same proportional change as AR.

International Research Network (IRN)

IRN declines with reduced research collaboration. The scatter plot analysis (Figure [scatter_grid]) shows IRN is moderately correlated with SSR (**r = –0.60**), and we model this through the link to research time:

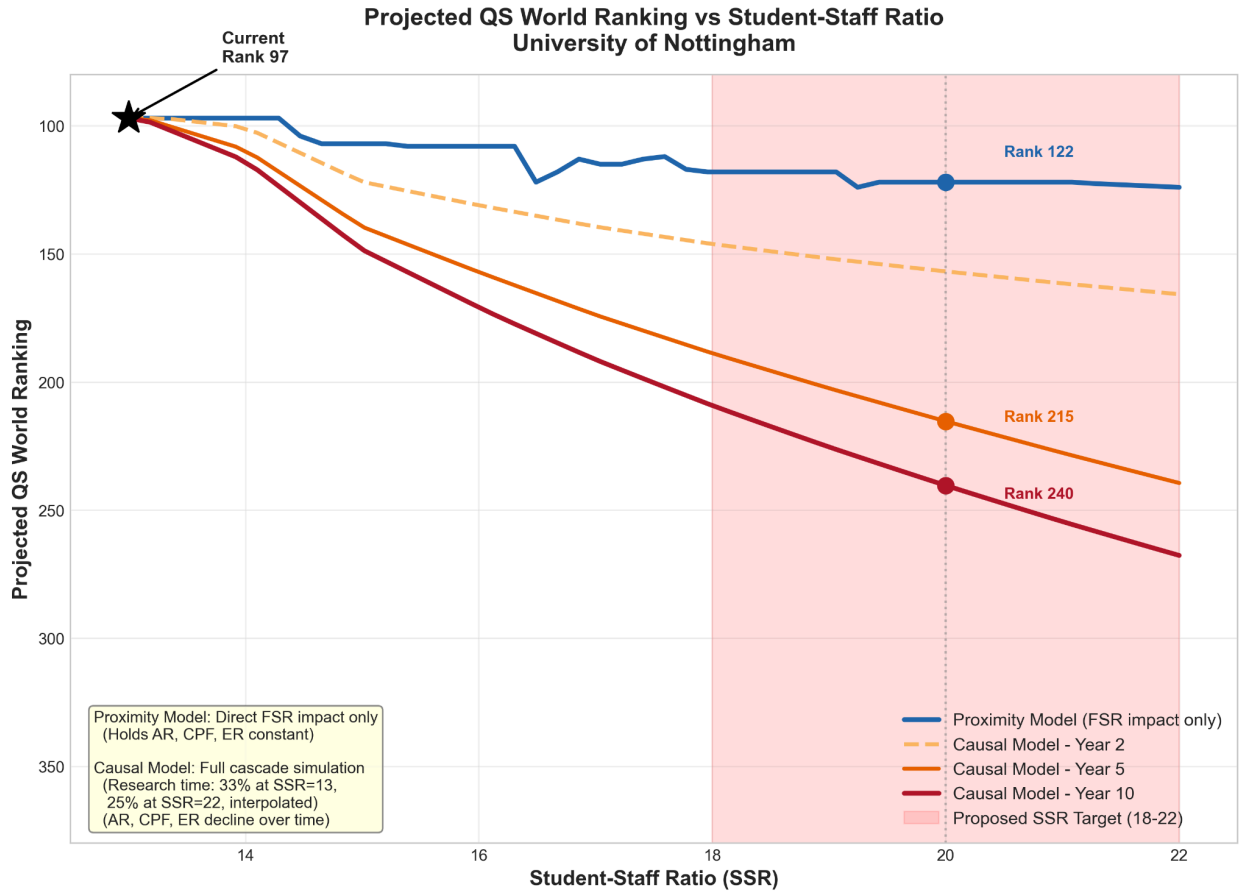
$IRN(t) = IRN_0 \times (0.6 + 0.4 \times (R(S_{eff}(t)) / R_0))$

The 60/40 split is calibrated to match the observed relationship:
At SSR = 20 (research time = 26%), the model predicts IRN declining from **97.4 to 89.8** (–8%). This is consistent with the scatter plot, where universities at SSR = 20 typically have IRN scores in the **60–90** range, compared to **85–100** for universities at SSR = 13.

Results: Model Comparison

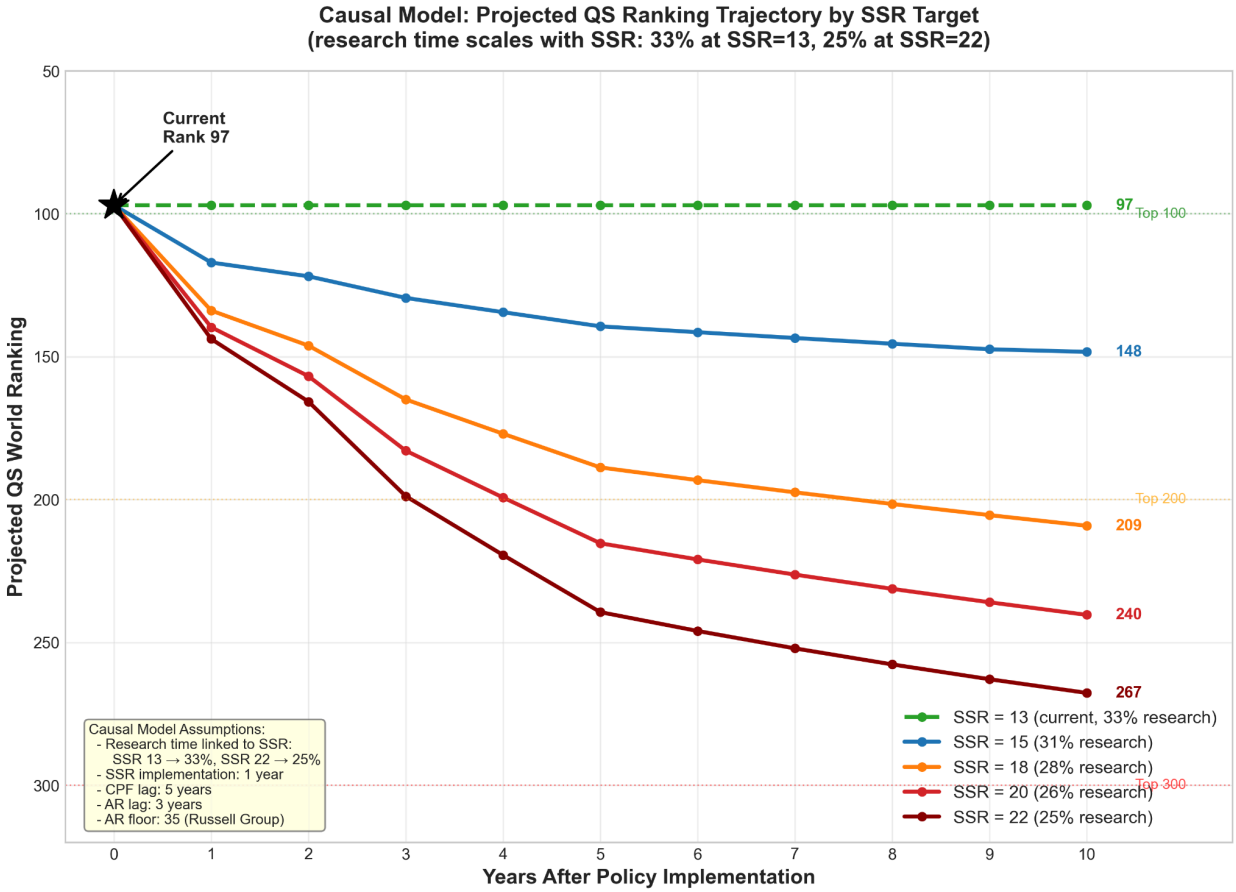
Projected Rankings by SSR

The figure below (Figure 2 in the main text) shows the projected QS ranking as a function of SSR for both models.



Ranking Trajectory Over Time

The figure below shows how the projected QS ranking evolves over a 10-year period for different SSR targets under the causal model.



Key observations:

- **Baseline (SSR=13)**: With no policy change, the ranking remains stable at 97
- **Years 0–2**: Initial decline driven by FSR reduction as SSR increases
- **Years 2–5**: Accelerating decline as AR and CPF effects begin to materialise
- **Years 5–10**: Gradual stabilisation as indicators approach equilibrium values
- **Impact of SSR increase**: At Year 10, SSR=20 results in rank ~240, representing a drop of ~143 places compared to the baseline (SSR=22 would result in rank ~268)

Summary Comparison

Model	SSR=13	SSR=18	SSR=20	SSR=22
	(33%)	(28%)	(26%)	(25%)

Proximity (FSR only)	97	118	122	124
Causal (Year 2)	97	146	156	165
Causal (Year 5)	97	188	215	239
Causal (Year 10)	97	209	240	268

Projected Rankings: Proximity vs Causal Model (research time linked to SSR)

Model Interpretation

Proximity Model (Lower Bound):

- Captures direct FSR impact only
- Assumes AR, CPF, and other indicators remain constant
- Represents the **minimum** expected ranking decline
- Projected rank at SSR=20: **122**

Causal Model (Full Impact):

- Captures cascading effects through all interconnected indicators
- Includes time dynamics (lags in CPF and AR)
- Represents the **realistic** expected trajectory

1• Projected rank at SSR=20: **156** (Year 2), **215** (Year 5), **240** (Year 10)

Key Findings

FSR Collapse

Increasing SSR from 13 to 20 causes FSR to fall from 44.5 to approximately 6–8:

- This represents an **82–87% reduction** in FSR score
- The FSR contribution to overall score drops from 4.45 to approximately 0.7 points
- No Russell Group university currently operates at SSR > 14.3

Cascading Effects Dominate

The causal model reveals that direct FSR impact is only the beginning:

- **Year 2**: Ranking falls to ~156 (59 places) as FSR collapses
- **Year 5**: Ranking falls to ~215 (118 places) as AR begins declining
- **Year 10**: Ranking falls to ~240 (143 places) as AR reaches floor

Time Lag Creates False Reassurance

The 3–5 year lags in CPF and AR create a period of apparent stability:

- Initial rankings may appear better than long-term trajectory

- AR decline is delayed but inevitable once research output falls
- By the time AR decline is visible in rankings, reversal is difficult

Summary Projections

If the University of Nottingham proceeds with SSR 18–22 (with linked research time reduction to 25%):

	Current	Year 2	Year 5	Year 10
FSR Score	44.5	14–16	10–12	8–10
AR Score	75.4	~70	~60	~55
Overall Score	69.3	~65	~58	~55
Rank (SSR=20, 28%)	**97**	**156**	**215**	**240**
Rank (SSR=22, 25%)	**97**	**165**	**239**	**268**
Rank (SSR=13 baseline)	**97**	**97**	**97**	**97**

The baseline scenario (SSR=13, 33% research time) maintains the current rank of 97. The SSR increase from 13 to 20 accounts for a **decline of 143 ranking places** (from 97 to 240 at year 10), while SSR=22 results in a decline of 171 places.

Final Assessment

The proposed policy changes will fundamentally transform the University of Nottingham from a top-100 research-intensive institution to a mid-tier university ranked 250+.

1. **FSR collapse is immediate and severe**: The 82–87% reduction in FSR score is the direct, measurable consequence of reducing academic staff numbers.
2. **Cascading effects amplify the damage**: Staff reductions trigger declines in research output, citations, and academic reputation that compound the initial FSR impact.
3. **No Russell Group university operates at SSR > 14.3**: The proposed targets would place Nottingham outside the operating range of any comparable research-intensive institution.
4. **Effects are lagged but inevitable**: The 3–5 year lags create false reassurance; by the time the full impact is visible, reversal would require years of sustained reinvestment.

The staff reductions implicit in the SSR increase are the primary driver of this decline, both directly (through FSR) and indirectly (through reduced research capacity affecting AR and CPF). These effects are predictable, measurable, and—once initiated—largely irreversible without substantial reinvestment in academic staff.

Concluding Remarks

In this more discursive account, we have situated the QS modelling exercise within a broader interpretative framework. The analysis demonstrates that rankings are not neutral measurements but structured outputs shaped by modelling choices, implicit value judgements, and the interplay of incomplete data. Recognising these factors is crucial for using rankings responsibly in institutional strategy and communications.

Appendix B: Modelling Guardian league tables

The Guardian University Guide is one of the UK's most influential domestic university rankings, published annually since 1999. Unlike international rankings such as QS, the Guardian focuses exclusively on the undergraduate student experience and does not include research metrics.

The Guardian ranking is particularly important because:

- It directly influences domestic undergraduate recruitment
- Prospective students and parents frequently consult it during university selection
- It emphasises teaching quality and student outcomes over research prestige
- SSR receives a higher weight (15%) than in QS rankings (10%)

Guardian Methodology

The Guardian University Guide uses the following weighted indicators:

Indicator	Description	Weight
Satisfied with teaching	NSS Q1–4	10%
Satisfied with feedback	NSS Q5–8	10%
Student-staff ratio	**HESA staff:student ratio**	**15%**
Spend per student	Academic spend per FTE	5%
Average entry tariff	UCAS points of entrants	15%
Value added	Expected vs actual outcomes	15%
Career outcomes	Employment/study at 15 months	15%
Continuation	First-year retention rate	15%

Guardian University Guide Indicator Weights (2026)

Key observation: The *Guardian* assigns 15% weight directly to SSR, compared to 10% for the Faculty-Student Ratio in QS rankings. This means the Guardian ranking is 50% more sensitive to SSR changes than the QS ranking's direct FSR component.

Current Position

The University of Nottingham's current *Guardian* league table position:

Indicator	Value
Guardian Rank	51
Guardian Score	57.5
Satisfied with teaching	85.5%
Satisfied with feedback	74.9%
Student-staff ratio	**13.0**
Spend per student	6.1 (/10)
Average entry tariff	151
Value added	3.7 (/10)
Career outcomes	85%
Continuation	95.0%

University of Nottingham: Guardian 2026 Metrics

SSR Analysis: UK Context

SSR Distribution

Analysis of the 123 UK universities in the *Guardian* 2026 rankings:

Statistic	All Universities	Russell Group
Minimum	9.1 (Oxford)	9.1 (Oxford)
Maximum	23.0 (Wrexham)	22.8 (Glasgow Caledonian)
Mean	15.2	14.2
Median	15.1	13.0

SSR Statistics Across UK Universities

Russell Group Comparison

The proposed SSR target of 18–22 would place Nottingham outside the typical Russell Group operating range:

University	SSR	Rank	University	SSR	Rank
Oxford	9.1	1	Leeds	13.0	28
UCL	10.7	10	Manchester	13.0	35
Cambridge	10.8	3	Exeter	13.1	17
Edinburgh	10.8	13	Queen Mary	13.2	72

Imperial	11.7	6	Sheffield	13.4	16
Warwick	11.7	7	Newcastle	13.9	81
Glasgow	11.9	24	Queen’s Belfast	14.3	45
King’s College	12.0	21			
Durham	12.4	5			
Southampton	12.6	20			
Cardiff	12.6	37			
Bristol	12.7	15			
York	12.7	38			
Liverpool	12.9	22			
Birmingham	12.9	28			
Nottingham	**13.0**	**51**			.

Russell Group Universities by SSR (Ranked)

Critical observation: No traditional Russell Group university operates with an SSR above 14.3. The proposed target of 18–22 would make Nottingham an outlier among research-intensive institutions.

Universities at Target SSR Values

At the proposed SSR targets, Nottingham would be compared with fundamentally different institutions:

SSR Range	Universities
17–18	Manchester Met (17.6), Plymouth (17.2), Aston (17.1)
18–19	Ulster (18.2), East London (18.4), Bradford (18.4)
19–20	Westminster (19.9), York St John (19.4), London Met (19.1)
20–21	Staffordshire (20.5), Roehampton (20.9), Queen Margaret (20.6)

21–22	Abertay (22.4), Glasgow Caledonian (22.8), Wrexham (23.0)

Universities at Target SSR Values

Impact Modelling

Methodology: Min-Max Scaling

The Guardian League Table uses min-max scaling for each metric:

- For metrics where higher is better: scaled = 100 * (value – min) / (max – min)
- For SSR (where lower is better): scaled = 100 * (max – value) / (max – min)

The overall Guardian score is then calculated as a weighted sum of scaled scores.

SSR Scaling Parameters

From the 2026 Guardian data:

- Minimum SSR: 9.1 (Oxford) → scores 100 on SSR component
- Maximum SSR: 23.0 (Wrexham) → scores 0 on SSR component

Nottingham's current SSR analysis:

- Raw SSR: 13.0
- Scaled SSR score: 100 * (23.0 – 13.0) / (23.0 – 9.1) = 71.9 out of 100
- SSR contribution to Guardian score: 0.15 × 71.9 = 10.79 points (of maximum 15)

Correlation Analysis

The correlation between SSR and Guardian score is strongly negative:

r(SSR,Guardian Score) = −0.657

This confirms that higher SSR is strongly associated with lower Guardian rankings across UK universities.

Results

Scenario 1: Direct SSR Impact Only

Assuming only SSR changes (all other factors held constant):

SSR	SSR Scaled	Score	Change	Rank
13 (current)	71.9	57.5	—	51
15	57.6	55.3	−2.2	57
18	36.0	52.1	−5.4	74
20	21.6	49.9	−7.6	82
22	7.2	47.8	−9.7	92

Direct SSR Impact Projections (Min-Max Model)

Scenario 2: SSR Change with Cascading Effects

Staff reductions will likely affect other Guardian indicators:

- **Teaching satisfaction**: Larger class sizes typically reduce NSS scores
- **Feedback satisfaction**: Less individual attention for assessment feedback
- **Value added**: Reduced support may lower value-added outcomes
- **Career outcomes**: Less careers support and networking opportunities

Moderate cascading scenario (Teaching −3, Feedback −3, Career −3, Value added −0.4, scaled proportionally to SSR increase):

SSR	Score	Change	Rank	*Δ* Rank
13 (current)	57.5	—	51	—
18	48.9	−8.6	86	+35
20	45.4	−12.1	100	+49
22	42.0	−15.5	107	+56

Impact with Cascading Effects (Moderate Scenario)

Severe cascading scenario (Teaching −5, Feedback −5, Career −5, Value added −0.5, scaled proportionally to SSR increase):

SSR	Score	Change	Rank	*Δ* Rank
13 (current)	57.5	—	51	—
18	46.9	−10.6	94	+43
20	42.7	−14.8	105	+54
22	38.5	−19.0	119	+68

Impact with Cascading Effects (Severe Scenario)

Summary of Projections

Scenario	SSR 18	SSR 20	SSR 22
Direct SSR only	74	82	92
Moderate cascade	86	100	107
Severe cascade	94	105	119
Range	**74–94**	**82–105**	**92–119**

Summary: Guardian Ranking Impact by Scenario

Comparison with QS Rankings Impact

Factor	Guardian	QS World Rankings
SSR/FSR Weight	15% (direct)	10% (indirect via FSR)
Current Rank	51 (UK)	97 (Global)
Projected Rank (SSR=20)	82–105	215–240
Rank Change	+31 to +54	+118 to +143
Research Metrics	None	50% (AR + CPF)
Geographic Scope	UK only	Global

Comparison: Guardian vs QS Ranking Impact

Key differences:

1. The *Guardian* ranking decline appears smaller in absolute terms, but:
2. Moving from 51st to 82–105 in the UK represents a drop from the top 40% to the bottom third
3. The *Guardian* has no research metrics to offset the SSR impact
4. The impact is immediate—no time lag as with QS reputation metrics

Key Findings

Direct Impact

1. SSR carries 15% weight in Guardian—50% higher than the QS FSR component (10%)
2. Moving from SSR 13 to 20 costs 7.6 Guardian points—reducing the SSR scaled score from 71.9 to 21.6
3. No Russell Group university operates at SSR > 14.3—the target of 18–22 would make Nottingham an outlier

Ranking Implications

1. Current position: Rank 51 places Nottingham in the top half of UK universities
2. Projected position (SSR=20): Rank 82–105 would place Nottingham in the bottom third
3. Peer group shift: Nottingham would move from competing with Russell Group peers to competing with post-1992 universities

Cascading Effects

1. Teaching satisfaction will likely decline with larger class sizes
2. Career outcomes may suffer from reduced staff support and networking
3. Value added scores depend on individual attention—less staff means lower scores
4. These effects compound the direct SSR impact by an additional 20–40%

Conclusions

The proposed increase in SSR from 13:1 to 18–22:1 will have severe and immediate consequences for the University of Nottingham's Guardian League Table position.

Summary Projections

	Current	SSR=18	SSR=20	SSR=22
Guardian Score	57.5	47–52	43–50	39–48
Guardian Rank	51	74–94	82–105	92–119
Rank Change	—	+23 to +43	+31 to +54	+41 to +68
UK Percentile	Top 41%	60–76%	67–85%	75–97%

Final Assessment

The staff reductions implicit in the proposed SSR increase will:

1. Immediately reduce Nottingham's Guardian score by 5–15 points (depending on cascading effects)
2. Drop Nottingham's ranking from 51st to approximately 82–105th—from the top half to the bottom third of UK universities
3. Move Nottingham outside the Russell Group SSR range—no comparable research-intensive university operates at SSR > 14.3
4. Affect domestic recruitment—the Guardian ranking directly influences prospective undergraduate students' choices

These effects are immediate and do not have the time lag associated with QS reputation metrics. The ranking damage will be visible in the first year following implementation.

Concluding Reflections

By expanding the technical material with additional explanation and interpretation, this version of the report illustrates how the GLT model embodies a particular view of institutional performance. League tables, including the GLT, are not neutral summaries of data but structured frameworks shaped by methodological design. Understanding these design choices is key for making responsible use of rankings in strategic planning, communication, and evaluation.