

Individual Provider - MD115 and Onshore Commission Ban: Dynamic Walkthrough

A guided run of the validated simulator

iMORSE

Archetypal demonstrator - read shapes, not points.

A guided run of the MD115 and commission-ban simulator

This is a guided run, not a tour. It teaches the technique through the model: at each step you set the scenario, predict what should happen, watch what does, and let the gap teach the feedback structure. Numbers are quoted from the validated engine; read shapes and turning points, not precise levels, because the calibration is archetypal.

Complex systems behave according to a combination of one or more standard behaviour patterns known as 'archetypes'. It is the interplay of these that makes situations and decisions complex. The archetypes identified in this model are:

- **Limits to growth.** A growth engine eventually meets a brake that has been quietly tightening. Here, the recruitment engine runs into the MD115 throttle as intake approaches the NOSC cap.
- **Shifting the burden.** A quick fix relieves the symptom and slowly weakens the system's ability to address the cause. Here, cost-cutting protects cash but starves the recruitment and reputation that bring students back.
- **Tragedy of the commons.** Each actor's rational choice degrades the shared resource everyone depends on. Here, offshore commencements and onshore transfers both draw the one NOSC allocation, so filling it through either channel slows the provider's own processing.
- **Growth and underinvestment.** Capacity is not built in time, performance softens, and the case for investment evaporates. Here, as cash tightens, the provider underinvests in recruitment just as the throttle bites.

Terms and definitions

Every lever, preset strategy and index used below, defined before first use.

- **NOSC allocation (annual cap).** The provider's annual indicative allocation of new overseas commencements, in students per year. The natural intake is about 850-900 a year, so values below that bind the cap and trigger the throttle; above it gives headroom. The primary lever.
- **Domestic share of cohort.** The fraction of the total cohort that is domestic; domestic revenue is a cash cushion not exposed to either policy.
- **Offshore market demand.** An index of underlying offshore demand around a baseline of 1.0; more demand fills the applications pipeline.
- **Recruitment and marketing spend.** The quarterly recruitment budget in dollars; it funds agent effort but is also a cost.
- **International tuition fee.** Tuition per international student per quarter, in dollars.
- **Operating cost base.** The quarterly operating cost before austerity, in dollars; lower costs lengthen the cash runway.
- **Commission ban strength.** How much agent-driven onshore transfer activity the ban removes from Q2; higher removes more inflow but also suppresses poaching.
- **Agent confidence (index 0-1).** 1 means full confidence and hard agent effort; 0 means collapsed. It falls fast on a slowdown and rebuilds slowly. Higher is better.
- **Processing speed (index 0-1).** Offshore visa processing speed relative to Priority 1: 1.0 is fastest (1-4 weeks), about 0.38 is Priority 2 (5-8 weeks), about 0.15 is the Priority 3 slow lane. Higher is faster; a falling line means MD115 is throttling.
- **Allocation utilisation (fraction of cap).** Share of the NOSC allocation in use: below 0.80 is Priority 1, 0.80-1.15 is Priority 2, and above 1.15 is Priority 3. Higher means closer to or over the cap, which slows processing.
- **Preset - Hold the line.** Do nothing; the near-cap baseline runs on.
- **Preset - Stay under the cap.** Lift the allocation to 1,600/yr so the throttle releases.
- **Preset - Diversify to domestic.** Raise the domestic share to 0.5 as a cash cushion.
- **Preset - Chase offshore demand.** Push demand to 1.4 while the cap still binds.
- **Preset - Mid-stress.** A tighter cap, lower fee and higher cost; the runway runs out.
- **Preset - Cliff edge.** Over the cap, lowest fee, highest cost, no domestic cushion; the death spiral.
- **Preset - Recovery push.** Cap headroom, stronger demand and a domestic cushion together.

Step 1. Read the validation (backcast) first (10 minutes)

Settings: open on the Validation tab; no levers are live here - the backcast is locked.

Start in the validation view. This is the locked run that reproduces a representative history for an at-/near-cap provider, and it earns trust before any forward number is shown: a model that reproduces known shapes is one you can believe forward. Look at the historical shapes the model had to match - international enrolment easing off its peak, allocation utilisation sitting up near the 0.80-0.83 band where the throttle engages, processing speed dropping below 1.0, and

agent confidence dipping then steadying. The dashed vertical line is the calibration anchor - today, about Q2 2026, when the commission ban takes effect. Everything to the left is the locked validation window; the curve to the right of the dashed line is the base-case forward projection, not part of the locked history.

What to take from this: the model does not assume disaster. It reproduces a provider that has grown into its cap as MD115 and the ban arrive, and only then asks what happens next.

Step 2. Read the forward baseline trajectory carefully (12 minutes)

Settings: Forward tab, Hold the line (baseline) - NOSC allocation 850/yr, domestic share 0.2, offshore demand 1.0, marketing A\$600k/qtr, fee A\$8,000/qtr, cost base A\$15.2M/qtr, commission-ban strength 0.85.

The forward charts open at the anchor (today), not the start of history. At the anchor the provider sits at about 1,748 enrolled, cash about A\$30.5M, agent confidence about 0.69, utilisation about 0.83 and processing speed about 0.69 - confidence and speed are already part-way through the throttle's bite, because the cap engaged just before today. Run it forward and read four things. First, the turning point in confidence: it has just troughed near 0.69 and climbs only slowly back to about 0.78 by Q12 - the asymmetry at work, a fast fall and a slow rebuild. Second, the throttle: utilisation holds about 0.81 and processing speed sits about 0.88, suppressing offshore commencements (about 166/quarter against the relief case's 188). Third, the commission ban: onshore transfer-in has stepped down to about 6/quarter, the agent-driven channel largely gone. Fourth, the viability signal: cash erodes about 15.6% to about A\$25.8M - a gentle bleed, not yet a crisis.

What to take from this: the do-nothing path is a slow decline, enrollment off about 5% to 1,657, cash off about 16%. Nothing dramatic - which is exactly why the next steps matter.

Step 3. Walk the preset scenarios (10 minutes)

Settings: Forward tab; click each preset in turn (each resets to baseline then applies its own levers). Endpoints are read at Q12.

Strategy	What it changes	Enrolment Q12	Cash Q12	Confidence Q12
Hold the line (baseline)	nothing - the near-cap baseline	1,657	\$25.8M	0.78
Stay under the cap	allocation 1600/yr	1,745	\$29.6M	0.85
Diversify to domestic (defend viability)	domestic share 0.5	1,657	\$79.8M	0.78
Chase offshore demand (the fix that fails)	demand 1.4	1,688	\$27.2M	0.61
Mid-stress - partial insolvency	allocation 700/yr; fee A\$6000/qtr;	1,009	-\$6.3M	0.74

	cost A\$17M/qtr			
Cliff edge - insolvency	allocation 700/yr; fee A\$5000/qtr; cost A\$18M/qtr; domestic share 0.0	839	-\$39.9M	0.71
Recovery push (reach pre-MD115)	allocation 1600/yr; demand 1.3; domestic share 0.4	2,065	\$71.8M	0.86

Stay under the cap. Lifting the allocation to 1,600/yr releases the throttle - processing speed returns to 1.00 and utilisation falls to about 0.47 - and enrolment holds near 1,745 with confidence recovering to about 0.85. Managing intake within the allocation is the cleanest defence.

Diversify to domestic. Raising the domestic share to 0.5 leaves enrolment unchanged at about 1,657 but lifts cash to about A\$79.8M. Viability and enrolment are different problems with different levers.

Chase offshore demand. Pushing demand to 1.4 while the cap binds barely moves enrolment (about 1,688) and drives confidence down to about 0.61 and speed to about 0.60. More demand into a binding cap is a trap, examined in Step 5.

Cliff edge. A tight cap with the lowest fee, the highest cost and no domestic cushion collapses cash to about -A\$39.9M and enrolment to about 839 - the model's full non-linear range, a genuine death spiral rather than a gentle slide.

Recovery push. Only the combination - allocation 1,600/yr, demand 1.3 and domestic share 0.4 - carries enrolment to about 2,065, past the pre-MD115 level, with cash about A\$71.8M.

Takeaway: the strategies span insolvency to recovery, and the interesting ones are combinations - which is the point of the next two steps.

Step 4. Use the A/B comparison to surface the signature dynamic (10 minutes)

Settings: snapshot A = Hold the line (baseline, demand 1.0); set B = Chase offshore demand (demand 1.0 -> 1.4, every other lever at baseline). On every chart a solid line is scenario A and a dashed line is scenario B.

Read it cause then effect. B pushes more applications into the pipeline, so you might expect more students. Watch instead the utilisation and processing-speed charts: B's dashed utilisation line rises and its processing-speed line falls to about 0.60 against A's 0.88. Now the confidence chart: B's confidence falls to about 0.61 against A's 0.78. Finally the enrolment chart: B ends at about 1,688 against A's 1,657 - a gain of only about 31 students for all that extra demand.

Why this happens: the extra demand raises utilisation, which trips the MD115 throttle harder, which slows processing and drains agent confidence - the gain is eaten by the brake it triggers. This is the model's signature: under a binding cap, pushing the accelerator pushes the brake.

Step 5. Find the structural trap (15 minutes)

Two experiments make the structure visible. Each sweeps one lever under two regimes; the numbers are real runs on the validated engine.

Experiment 1 - the commons trap (demand under two cap regimes). Start with the baseline.

Settings: sweep offshore demand 1.0 -> 1.4 twice - once with cap headroom (allocation 1,600/yr), once with the cap binding (allocation 850/yr); all other levers at baseline.

Cap regime	Offshore Demand	Enrolment Q12	Confidence Q12	Speed Q12
Headroom (1,600/yr)	1.0	1,745	0.85	1.00
Headroom (1,600/yr)	1.4	2,173	0.86	1.00
Binding (850/yr)	1.0	1,657	0.78	0.88
Binding (850/yr)	1.4	1,688	0.61	0.60

With headroom (i.e., a high NOSC cap), demand is a clean growth lever: enrolment rises from 1,745 to 2,173. With the cap binding, the same lever adds only 31 students (1,657 to 1,688) and craters confidence from 0.78 to 0.61 and speed from 0.88 to 0.60. The structural finding: the cap converts a growth lever into a confidence-destroying trap - the shared NOSC resource is the commons, and crowding it degrades the provider's own processing.

Experiment 2 - the cash gate (a cushion on the cliff). Settings: take the Cliff edge scenario (allocation 700/yr, fee A\$5,000/qtr, cost A\$18M/qtr) and sweep domestic share 0.0 -> 0.5.

This is easiest to see if you set Scenario B to be Cliff Edge, then go back to Scenario A, also Cliff Edge – and then make the sweep for domestic share on A.

Domestic share	Enrolment Q12	Cash Q12
0.0 (cliff config)	839	-\$39.9M
0.5 (cushion added)	1,283	\$11.3M

With no cushion, cash collapses to about -A\$39.9M and enrolment to 839. Add a 0.5 domestic share and cash holds positive at about A\$11.3M and enrolment recovers to about 1,283 - because once cash survives, it keeps funding recruitment instead of the death spiral starving it. The structural finding: cash is a gate, not a scoreboard. Three governance implications follow: watch the cash runway as a leading indicator, not enrolment alone; protect the recruitment budget through a downturn because cutting it is the fix that fails; and treat a domestic cushion as a viability instrument, not just a revenue line.

Step 6. Reflect (8 minutes)

Five questions to take to a board. Where does this provider actually sit relative to its cap, and how confident are we? How fast would our agents' confidence fall if processing slowed - and how long to rebuild it? Are we managing intake to stay under the 0.80 threshold, or drifting over it? Is our cash runway long enough to fund recruitment through the bite, or will austerity starve the recovery? And what domestic mix would make us robust without changing who we are?

When system dynamics is the right tool: when the question is about behaviour over time, driven by accumulations and feedback, with delays and non-linear thresholds - exactly the MD115-plus-ban problem, where a brief throttle leaves a lasting slump and pushing one lever trips another. A spreadsheet projects; this explains.

Two closing observations from this engagement. The model is archetypal - the levels are illustrative and the policy mechanics firm - so the natural next step for any provider is to recalibrate it to its own enrolment and financial records. And the most valuable findings here are the counterintuitive ones: chasing demand can backfire, and viability can be defended without recovering enrolment.