Executive Summary
This paper explores the key public policy assumptions underlying three of the four sequential and overlapping phases of higher education and university research in Australia:

(i) the academic-elite phase (1945 – 1985)
(ii) the state-mass phase (1985 – 2005)
(iii) the market-universal phase (post-2005).

The pre-1945 phase, which largely pre-dated Australian government involvement in higher education, is not explored in this paper, except to the extent of its academic-elite and market legacies. The post-2005 phase is emergent, as uncertainties remain about the trajectory of future development, the survival of recent innovations, and the resilience of established institutions. This analysis works from the premise that conventional modes will continue to co-exist with contemporary technologies.

The comparative analysis suggests that some features of earlier phases fade or end as a newer phase gains momentum, and that amid the change there are also aspects, at times modified, of all three phases that continue concurrently, albeit in uncomfortable interaction. The co-existence of the three phases, on the one hand, and the non-recognition of modified or terminating aspects, on the other hand, give rise to varying perceptions and expectations which intrude into and can confound debates about future directions for higher education policy and financing.

The paper outlines the distinguishing, ideal-type features in each phase across twenty policy domains.

Phase 1: academic-elite (1945-1985)

i. Context: Higher education demand and supply were shaped largely by local (subnational) circumstances. Initially student demand was modest. The influence of national requirements increased gradually as the Australian post-war population grew and more highly qualified workers were required. A high level of public trust was placed in expert knowledge and universities as sources of expertise. Social valuing of the indirect and shared benefits of higher education saw general taxpayers meeting most of its costs. The physical campus provided the commons for learning and scholarship. Academic communication was mostly paper-based.

ii. Purpose: The societal purposes of higher education focused on education of ‘the able young’ for civic roles and the supply of graduate ‘manpower’ for the professions. Universities were valued as ‘cultural’ as well as ‘vocational’ institutions and supported to discover, transmit and preserve knowledge.
iii. Orientation: Public policy reflected a supply-side planning approach to the provision of higher education through colleges, institutes and universities, alongside respect for the academic independence of universities. The establishment of institutions was seen as a social and economic investment in itself.

iv. Scale: While Australian higher education had long enrolled adults, participation was dominated by young people, mostly teenage school leavers, but representing less than 15% of that age cohort. Access to higher education was a privilege. Gradual expansion of supply widened access for adult learners, but, typically, within a ‘front-end’ model of higher education as once-off preparation for professional employment or self-employment.

v. Structure: The academic-elite phase had a public binary structure, with no private institutions and a sharp demarcation between universities and institutions with more practical emphases and vocation-specific missions (e.g. teachers colleges).

vi. Culture: This phase assumed that pursuit of knowledge is best achieved in single-focused academic environments. Knowledge had intrinsic worth and quality was internally referenced. Theoretical knowledge was regarded as superior to practical know-how. Expertise was identified and validated by academic peer review. The university offered the space to foster excellence.

vii. Student access: Student admission to higher education was rationed on meritocratic (ability-to-benefit’) criteria, normally based on senior secondary school attainment which was seen as predominantly reflecting pre-requisite subject knowledge and cognitive readiness. Students were enrolled in a sequential program of packaged study leading to award of a qualification.

viii. Student experience: Higher education was seen as a ‘post-experience good’ and students were regarded as scholarly apprentices. Individual students were responsible for achieving learning. Complemented by tutorials and laboratory sessions, the lecture was the main form of knowledge transmission. Student clubs and societies were important for extra-curricular learning experiences and formation of social networks.

ix. Teaching: The teaching domain was not one where Government policy had any role; academic affairs were seen to be matters for academic communities. Typical degree programs were organised on the basis of a discipline-based sequential curriculum with a ‘just-in-case’, bundled approach to knowledge coverage, over three terms per year. Professional academic judgement was learned on-the-job.

x. Learning: Learning was a process of recall and application of concepts. Students were expected to accept expert definitions and constructs and were guided to develop academic literacy and awareness of academic conventions. Learning was teacher-designed and pedagogy teacher-centric, with the teacher as a major source of knowledge and teaching as a process of information transmission. There was also structured, interactive learning through tutorials, seminars and laboratory sessions.

xi. Educational qualifications: Self-accrediting universities awarded academic credentials, with equivalence (parity of esteem) of qualifications awarded by similar mission-differentiated types. Graduates were qualified to practise in their professions (in some fields after practical work). Where and how a qualification was obtained mattered.

xii. Educational assessment: Assessment was a form of hierarchical judgement. Cultural norms relating to performance expectations were passed on tacitly through socialisation of full-time tenured academics rather than by codification. Assessment was mostly summative and norm-referenced, and commonly made via scheduled assignments and/or end-of-term/year exams.

xiii. University research: Excellence was seen to derive from individual stars around whom small groups are built in single universities. Scholarship was an integral academic function. Research was a
function of scholarship in fields where students were taught. Researcher-driven research typically addressed long-term, fundamental questions and was geared to discovering new understandings. It was assumed that government should fund research that industry will not fund.

xiv. University engagement: ‘Outreach’ was a supply-driven service to local communities, with universities reaching out to the civic and business communities that sustained them. Funding for outreach was embedded in block grants for teaching-related purposes.

xv. Academic workforce: In the universities, the academic-elite phase saw the ‘integrated academic’ performing teaching, research and service, with continuous, often tenured, appointment on an upward linear career progression through the academic ranks. Research was essential to academic promotion. There was limited movement between academic and administrative roles, and between academic employment and work outside the academy. In the colleges and institutes, in contrast, academic staff were engaged mostly on permanent appointment. Research was much less important if done at all. The majority of academics had teaching-only appointments with many having little if any community outreach role.

xvi. Workplace relations: The determination of academic salaries became effectively centralised (representing two thirds of operating costs on average) via national replication of decisions of the Academic Salaries Tribunal. There was limited pay point variation within an academic rank and a limited range of academic ranks.

xvii. Student financing: A basic policy assumption was that the most promising students should be subsidised by government. Most students were sponsored by government or employer scholarships with some up-front costs met by students or parents. From 1974 to 1988, all domestic students were sponsored free by the national government and means-tested grants were provided for student living expenses.

xviii. Institutional financing: Funding was provided on the core assumption that the costs of teaching, research and service are a function of student enrolments. Until 1974, institutions obtained a mix of state and private financing (domestic students and employers). Tuition prices were centrally controlled from 1974. General-purpose operating grants were paid for a centrally-set number of enrolments, allocated by formula by an independent commission. The institutional business model was to fill its enrolment quota and spend its allocated revenue.

xix. Governance: University self-regulation was exercised through the collegial model of the ‘republic of scholars’ with a large elected governing council representative of academic and administrative staff and students. Professorial self-regulation and representative democracy operated in the context of constrained executive management in universities, with a strong role for the Academic Board, in contrast to the bureaucratic management of colleges and institutes. Universities were ‘loosely-coupled organisations’ with focused missions and authority based in professors and department heads while vice-chancellors were primi inter pares.

xx. Regulation: The regulatory localism of the pre-1985 phase had two dimensions. On the horizontal dimension respect for university autonomy and responsible academic freedom reflected a trust-based approach. The implicit assumption was that only scholars themselves can judge the quality of scholarly work. On the vertical dimension state-based regulations related to institutional functions, powers and accountabilities. These regulations, functional restrictions and reporting requirements were handled more tightly for colleges and institutes than for universities, except in such matters as commercial uses of property of interest to regional governments.
Phase 2: state-mass (1985-2005)

i. Context: National policy interests dominated higher education demand and supply, including expansion of graduate output to meet labour market requirements and rapid growth in international education as a services export. Public trust in traditional institutions waned. Mixed modes of learning (distance, virtual and on-campus-based) developed. Campus infrastructure for teaching and research expanded and embraced information and communication technologies.

ii. Purpose: The economic purposes of higher education dominated, with a focus on production of graduates with advanced knowledge and skills. Higher education was seen both as enabling individual opportunity and reproducing social inequality.

iii. Orientation: This phase saw the evolution of a quasi-market approach to higher education supply, operating within a central planning model, with tighter reference to national interests and goals.

iv. Scale: The massification of higher education involved higher rates of age cohort participation including greater participation by adult learners, including part-time and distance students, involving both ‘front-end’ and ‘topped-up’ models. Higher education came to be seen more as a right than a privilege, with policy measures designed to encourage greater participation by under-represented social groups. Additional enrollment growth resulted from the opening of Australian higher education to fee-paying international students.

v. Structure: The state-mass phase had a public unitary structure, with only a few private (mostly faith-based, not-for-profit) institutions and an undifferentiated quasi-egalitarian university sector. Policy effort was directed to widening pathways for learners across qualification levels and institutional types.

vi. Culture: It was assumed that the pursuit of knowledge is best achieved in academic environments that connect with practical players and challenges. Theoretical and practical knowledge were valued commensurately. Universities were seen as needing to develop service-oriented responsiveness to students and external communities.

vii. Student access: Merit-based access was extended to take account not only of school attainment (subject matter and cognitive readiness) but also student aptitudes and interests. Some secondary schooling prerequisites (e.g. advanced mathematics for Engineering) were dropped. Compensatory programs and special support services were offered to students with readiness deficits. Students enrolled normally in an award program with a required core plus elective units of study, the latter not necessarily being sequentially structured.

viii. Student experience: Higher education was largely a credentialing process. Students mostly wanted passports to jobs. They were seen as clients with limited knowledge competence, and teachers were tasked with more responsibility for student learning. There was increased reliance on large lectures, seminars and laboratory sessions. A whole-of-institution approach was taken to management of the student experience, with increased availability and professionalisation of student support and mentoring services. Student involvement in campus-based extra-curricular activities declined.

ix. Teaching: Government policy played an increasingly interventionist role via requirements for external quality assurance, student evaluation of teaching, rewards for good teaching, funding innovation and disseminating good practice. This approach promoted greater standardisation. There was generally a sequenced core curriculum and approved electives, with typically 2 credit-based semesters per year and a summer semester option.

x. Learning: Learning was teacher-mediated. Students were expected to digest set texts and other recommended learning materials. The pedagogy was mainly passive, with often large-group lectures, especially in the first year classes of a degree program. Time in tutorials was reduced and the size of
Executive Summary

seminar groups increased. There was strong focus on assessable tasks, including group assignments and group assessments.

xi. Educational qualifications: Governments established a common national template (AQF) as a descriptive reference. AUQA accreditation of courses of study was required for degrees by non-university providers. What mattered was the credential, wherever and however it was gained.

xii. Educational assessment: Assessment was a measure of academic effectiveness in enabling student learning. The breakdown of staffing continuity for passing-on cultural norms saw the development of codified standards. Formative and summative assessments were made commonly at set periods.

xiii. University research: Research was a function of scholarship in fields of education and stand-alone research centres. Strength was seen to result from research teams and centres within single universities and linked with other knowledge producers and end-users. The main approach was one of 'selectivity' in funding the best wherever found. Typically researchers and projects were funded via competitive schemes for 3-5 year periods. Publicly funded research was increasingly directed to practical problem solving through both fundamental ('strategic basic') and 'applied' inquiry. Efforts to commercialise research were formalised and professional development was provided for academics in research roles. It was assumed that government and industry should co-fund university research.

xiv. University engagement: ‘Service’ was seen as university participation in social and economic affairs. Funding for service was embedded in block grants for teaching-related purposes, with some revenues from contract research, consultancies, licensing and spin-offs. Research commercialisation and technology transfer became professional functions at whole-of-institution level. An internationalisation agenda also arose with partner institutions around the world, primarily via student and staff mobility.

xv. Academic workforce: With the melding of college academics into the university culture, there was a major exercise to upgrade their qualifications and provide support for their scholarship and research. Within the post-1985 universities there was a large expansion and feminisation of casual appointments alongside greater specialisation. Many roles (e.g. student services) became more professionalised but others not (e.g. teaching). Research performance continued to be the key to academic promotion in the universities.

xvi. Workplace relations: This phase saw a transition from centralised to enterprise-based bargaining. In that context, the indexation of operating grants to meet salary rises ceased. There was a general expectation of comparability in academic staff remuneration and conditions, reinforced by a tendency to pattern bargaining by staff unions.

xvii. Student financing: The policy assumption was that individual beneficiaries should make a fair contribution to the costs of their higher education, as it is regressive for general taxpayers to meet all costs. It was also assumed that the most needy (financially and educationally deficient) students should be subsidised by government, whether through equity loadings to operating grants, tuition fee discounts or means-tested stipends. International and some domestic students paid full fees up-front. Most domestic students (in public institutions) were able to access income-contingent loans.

xviii. Institutional financing: The national government purchased a set of services (via principal-agent contractual relationships). The legacy assumption was that the costs of teaching, research and service are a function of student enrolments. Policy also aimed to arrive at a level playing field in the structure of institutional incentives, with apparent even-handedness inducing imitation and sameness. General-purpose operating grants were paid for a quota of enrolments funded on weighted units of study basis. Performance-based grants were also made for specific teaching-related purposes, with high
conditionality. Separate performance-based, formulaic allocations were made for researchers, research projects and research infrastructure. Gradually, market-based priced offerings were extended to international students and domestic postgraduate students. The institutional business model was to cross-subsidise high-cost fields of teaching and research from surpluses from high-volume, low-cost teaching fields.

**xix. Governance:** The governance of universities in the ‘unified national system’ blended the collegial and corporate models of a ‘stakeholder organisation’, with a larger external, non-academic council alongside representatives of academic and administrative staff and students. The university mission multiplied. Managerialism was expressed in stronger executive management of multi-million dollar enterprises, with greater use of performance indicators. Vice-Chancellors became strategy setting chief executives. A stronger role arose for Finance Committee of Council/Senate. More authority was vested in Deans, DVCs/ PVCs, with tightened ties between different institutional parts.

**xx. Regulation:** The regulatory nationalisation of the post-1985/pre-2005 phase saw stronger Commonwealth regulations being layered on top of the state and territory regulations relating to institutional functions, powers and accountabilities. Alongside the gradual loosening of input and process controls to enable the universities to be more enterprising was a tightening of demands relating to educational quality on a ‘fitness-for-purpose’ model, equity of enrolment mix, and more efficient use of resources. The nation-centred regulation was compliance-driven, within a tight policy reform agenda by the government of the day.


**i. Context:** Global factors play an increasing role. The scale and shape of higher education and university research are affected by the unprecedented power and reach of information and communication technologies. Student demand outstrips the supply capacity of developing economies and requires more cost-effective modes of provision, including wider use of cyber-technology. The increasing complexity and cost of research requires more concentrated investments.

**ii. Purpose:** While a larger tertiary educated proportion of the population is seen to enable societal adaptation to change, the individual purposes and benefits of higher education gain ascendancy. Established institutions are seen as means rather than ends in themselves and universities compete with other service supply businesses in education, assessment of learning, credentialing and knowledge provision.

**iii. Orientation:** A demand-side market approach is a key feature of this phase for domestic and international undergraduate and graduate students.

**iv. Scale:** More than half the eligible population has experience of higher education. Higher education participation, which spans a person’s lifetime, is seen as an obligation. Growth in international education occurs increasingly through study offshore and on-line as well as study-in-Australia.

**v. Structure:** The market-universal phase sees growth of commercial providers, mostly in the non-university sector. Mergers and buy-outs take place, including within the public university sector, alongside increasing informal differentiation among institutions.

**vi. Culture:** It is assumed that the pursuit of knowledge is best achieved in multiple and mixed environments. Directly applicable knowledge and know-how are valued more than theoretical and broad content knowledge. Universities contest with other knowledge purveyors in an open science, open data and open source approach to knowledge generation and preservation.
vii. Student access: There is open access to higher education, with students assessed more for the results they can achieve from their higher education experience than from the prior learning assets they might bring. Admission reflects diverse (and more opaque) criteria, including weights to promote inclusion of under-represented social groups. Enrolments can be in award programs or in units or modules of study which may (or may not) be aggregated by students in an open market for distributed content and assessment services.

viii. Student experience: The emphasis is on the exchange value of higher education, with students purchasing sets of knowledge skills and credentials they can trade on the labour market. Higher education can be separated from assessment and credentialing. Students are seen as customers with sufficient knowledge to exercise choice and construct their own learning. There is greater specification of multi-functional skills to be developed. Teaching and learning involve mixed modes: in the classroom, on-line, from home and work-based. Student attendance on campus is variable and there is very limited student participation in clubs and societies. Of increasing importance is learning and socialisation in non-academic settings.

ix. Teaching: Government policy assumes a standards-setting role, with regulation seen as necessary to safeguard minimum acceptable standards. Transferable skills are regarded as more important than subject knowledge. Teaching aims to develop job-ready competencies, with work placements embedded in courses. The bundled, sequential curriculum gives way to ‘just-in-time’ modularisation of learning offerings.

x. Learning: Learning is technology-enriched, and the new information and communication technologies allow for both more customised learning offerings by providers and learner-constructed learning from diverse supply sources. Facilitated networks of shared data about individual students’ learning enable documentation of learning throughout a person’s lifetime.

xi. Educational qualifications: All nationally-accredited higher education providers are referenced to national standards expressed as expected (minimum) learning outcomes for each level of award. Priority is given to graduate employment outcomes. Competence is learned by doing and work experience: what you can show you can do matters more than what qualifications you have and where and how you got them. Unbundled credentialing in bite-size chunks of learning with specific competencies are recognised through digital badges. Accreditation can be obtained from multiple sources, some beyond national regulatory reach. Concurrently, qualitative differences among providers widen and self-selecting global networks of comparable institutions form.

xii. Educational assessment: Assessment is independent validation of graduate capabilities. Competency-driven, criterion-referenced assessment can be separated from course design and delivery. The validation of learning becomes decontextualised from the places, subject matter and means of learning. Innovations include ‘just-in-time’ assessments, external assessment-only houses and ‘open badging’.

xiii. University research: Two concurrent trends are evident: one, that large group productivity is necessary for big scientific breakthroughs; two, that ICT developments allow more distributed research via linked-up networks of smaller groups and individuals. Generally, the higher costs and longer research periods required for big science exceed the normal (3-5 year) bounds of the research funding agencies. Greater concentration of investment, not selectivity alone, is required to build areas of strength. University research is becoming a more independent function, not necessarily related to fields of student enrolment. Basic and applied research modes overlap. Open science (data, methods and access to pre-publications) accelerates and broadens research dissemination. Governments seek to prioritise research areas and research promising demonstrable short-term impacts. It appears to be assumed that government should fund university research of utility to industry.
xiv. **University engagement:** ‘Engagement’ is seen as a reciprocal benefit for universities, communities and commercial firms. It enables access to knowledge, know-how, suppliers and customers, and responsiveness to the needs of partners. Universities are expanding their outreach to schools and socially excluded communities to raise awareness and aspirations and attract new customers. The internationalisation agenda is also expanding via curriculum enrichment, learning experiences abroad, and researching complex global problems.

xv. **Academic workforce:** The ‘integrated academic’ is in the minority on campus. Academic and professional staffing functions are unbundling. Academic career paths may go in multiple directions, whether in upwards progression or down, or sideways through change of role across academic and administrative positions. There is a ‘race to the bottom’ in teaching loads for research stars in prestige-seeking universities and a protracted post-Doc treadmill for early career researchers. The further emergence of this phase promises to see greater personnel mobility between industry and academe, including joint appointments. Expectations rise for higher education teachers to have (a) practical work experience in their field and (b) qualifications to teach.

xvi. **Workplace relations:** Enterprise-specific bargaining over remuneration and work conditions continues. There is wider pay point variation within an academic rank (through market loadings, bonuses and performance rewards), and a broader range of ranks. Individuals may work concurrently for multiple higher education supply organisations.

xvii. **Student financing:** The basic policy assumption is that the most promising and/or needy students should be subsidised by higher education providers rather than government. Individual beneficiaries should normally pay their costs on a deferred basis after completing their studies and gaining an income premium. Institutional profits from the sale of education services should be dedicated in part to expanding opportunity for disadvantaged students. Domestic students become eligible for income-contingent loans and tuition subsidies with all accredited providers (private & public).

xviii. **Institutional financing:** The policy tendency is for student consumers and government purchasers to buy separate services that should be paid for at cost when actually delivered. Enrolment quotas for domestic undergraduate education are removed. Competitive neutrality prevails for ‘public’ and ‘private’ providers in terms of eligibility for student grants and loans. Tuition prices are competitively set in the market for services, traded off against relevance, quality and convenience for learners. Institutional revenue diversifies and grows from investments, commercial activities, philanthropy, and sales of services to firms and communities, with providers needing to be more responsive and accountable to new stakeholders. The emerging business model is to sell value added services in bits and packages at prices the market can bear.

xix. **Governance:** The enterprise model of public universities is one of a lean governing body of trustees with a balance of internal and external appointments. Universities focus more on raising revenue from diverse, non-government sources. There is greater specialisation of administrative functions. The span of executive management has widened with the appointment of Executive Deans and Provosts.

xx. **Regulation:** The regulatory framework for privatisation has involved a government-established national agency for accreditation of university programs and use of university title via provider licensing threshold standards and external quality assurance requirements. There are tighter requirements for greater transparency of information to guide student choice, including a mandated set of data provisions hosted on a national portal. Peer assessment and external evaluation has been aimed to verify the claims of providers to external stakeholders, including prospective students. These tighter arrangements for provider licensing, market information and consumer protection suit a more competitive market in higher education services and an expansion of private provision.
**General Observations**

Sometimes policy change has been a driver of innovation in practice (e.g. the opening of education services to commercial trade in the late-1980s). At other times, and presently, policy lags behind change in the practice of higher education and university research. Policies formulated for conditions and challenges of one phase can become not only redundant but also obstructive in later phases. The present policy impasse over tuition pricing and structural diversification is a case in point.

The model of funding universities at a common rate per student unit, weighted by field, arose, for instance, in the post-1974 context of centrally controlled student numbers and common academic salaries for integrated academic roles when most of the students and most of the academic staff were engaged full-time on campus, and the national government paid most of the costs. Additionally, university-awarded degrees were regarded as equivalent irrespective of source institution, in part because the entry standards for students in the elite period of participation were broadly commensurate (often based on matriculation exams) and continuity of academic staffing permitted the socialisation of academic norms and expectations of degree quality. Those assumptions were not extended to the Colleges of Advanced Education which became absorbed in an enlarged post-1985 university sector.

Those assumptions no longer fit the much bigger and more competition exposed post-2015 condition of Australian higher education, where the research and engagement functions are much more expansive and not necessarily connected to the teaching function, academic roles have unbundled, staff employment patterns and conditions vary markedly and students, who come from more diverse backgrounds and with differing needs and interests, have wider options than the sequential curriculum-based degree awarded by a single institution.

The current higher education policy framework in Australia can be seen to be at odds with the trend of practice with regard to continuing assumptions of (a) comparable higher education experience and parity of esteem of an award, (b) similar contributions of all Australian universities to national innovation, and (c) a nexus and inter-institutional equivalence between academic functions and salaries and per student funding rates. Falling government funding per-student alongside the risk-exposed dependency on international student fees to cross-subsidise areas of high-cost teaching and under-funded research does not provide a reliable platform for future progress.

Unless the underlying problems in Australian higher education are addressed Australia could well see its higher education export industry going the way of its car industry casualty: overly-protected supply of a limited range of high-cost models spurned by savvy consumers buying better value for money alternatives.

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**Endnotes**

1 This paper is based on an address to the graduating class of Master of Tertiary Education Management, 21 July 2015, LH Martin Institute, The University of Melbourne.