

AFRICAN HISTORIES AND MODERNITIES

THE TRANSFORMATION OF GLOBAL HIGHER EDUCATION, 1945-2015

Paul Tiyambe Zeleza



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Paul Tiyambe Zeleza
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PREFACE

I have been in universities from the age of 17 when I first went to the University of Malawi as an undergraduate student. Since then I have traversed three continents and been located at nearly a dozen universities either as a student or as a faculty member or as an administrator. In my long, circuitous academic journeys I have witnessed vast changes and institutional differences in the landscapes of higher education. It was to make sense of the diversities and transformations I lived through that this book owes its genesis.

More concretely, my interest in higher education as a field of study was triggered and nourished by fascination with intellectual history both in terms of the history of ideas and of knowledge producing institutions. The first dates back to my introduction to historiography and critical theory as a joint History and English major, the realization that concepts, analytical frameworks, and research methodologies are constructed in specific intellectual, institutional, and ideological contexts and carry with them the baggage of their historical and epistemological formations. This lesson permeated the air of the newly established postcolonial university many African scholars of my generation attended that were struggling to decolonize the Eurocentric knowledges they inherited.

My interest in intellectual history blossomed in the effervescent cosmopolitan and radical Pan-African encounters of graduate school in Britain and Canada in the late 1970s and at the turn of the 1980s. In hindsight, the world was on the cusp of the fraught transition to neoliberalism and witnessing the impending demise of settler colonialism in the apartheid laagers of Southern Africa thus bringing decolonization, the twentieth

century's most significant political movement, to a close. As a newly minted faculty member at the University of the West Indies, and later Kenyatta University, I faced the changing institutional contexts of higher education and intellectual dynamics of knowledge production wrought by neoliberalism or what in Africa came to be called structural adjustment programs (SAPs).

The dreaded SAPs severely eroded the social contract of the postcolonial developmentalist state in the global South and the welfare state in the global North. Higher education did not escape the ruthless clutches of neoliberalism, which ushered a new era of privatization and globalization. I added globalization to my growing list of research fields and wrote extensively on the subject. Africa's once proud public universities struggled for survival as many of their beleaguered academics sought refuge in greener pastures at home and abroad. I was one of them. Thus began my 25-year sojourn in Canada and the USA, where my intellectual and institutional horizons widened further. The disastrous effects of SAPs on African universities kindled my curiosity about the history of knowledge producing institutions, which complemented my old interest in intellectual history.

As I rose in academic rank and assumed higher administrative positions as a residential college principal, an African studies center director and department chair, and later as a college dean and an academic vice president, my twin interests in intellectual history became ever more interwoven and mutually reinforcing. As center director, I delved into the history of African and area studies in the American academy, the construction of knowledges about Africa in the major disciplines and several interdisciplinary fields and in various world regions, as well as the development of African universities. This opened avenues to a major project on a global dictionary on the history of ideas and consultations with several American foundations on African higher education.

My intertwined interests in the history of academic ideas and institutions broadened and deepened as dean and vice-president. First, I became more exposed to fields beyond my own areas of expertise and interest in the social sciences and humanities and especially to the STEM disciplines and various professional fields. Second, I became acutely aware of the massive challenges facing American higher education because of disruptive internal and external forces. The idea of this book was born. I wanted to investigate and provide a comprehensive overview of the development of

higher education across different world regions from the end of World War II to the present.

The project assumed greater urgency following two new developments in my professional life. One, I was asked to write the framing paper for the *1st African Higher Education Summit: Revitalizing Higher Education for Africa's Future*, and second, I was appointed a university vice chancellor (president) at the United States International University-Africa in Nairobi that is dually accredited in both Kenya and the USA, the only one with such distinction in the region. In the meantime, I was quite fortunate that I received a fellowship at the Hutchins Center for African and African American Research at Harvard University for Fall 2015, which facilitated the research and writing of this book.

The book seeks to identify the main trends in the transformation of global higher education, their manifestation within and among countries, and their impact on the diversification and differentiation of higher education institutions around the world. Its main focus is on the ways in which the higher education systems of the twentieth century that emerged after 1945 are undergoing profound shifts in the twenty-first century. It is the culmination of a long search to understand the development of the one institutional sector I have been immersed in since I was a teenager. I hope you will derive some of the intellectual pleasure I had in writing it.

Paul Tiyambe Zeleza
Nairobi
February 14, 2016

ACKNOWLEDGMENTS

As a project that had such a long gestation, although the proposal itself was conceived and submitted in late 2014, I am grateful to many people I have met and discussed the ideas contained in this book in various contexts, as colleagues in the institutions I studied and worked, and at conferences, as well as through the ubiquitous online media of contemporary academic communication. It is, therefore, quite difficult to single out individuals. The few I will mention are associated with the institutions through which the issues addressed in this book germinated in myriad intellectual encounters and engagements. They include several of my fellow students and teachers at the University of Malawi, where I did my undergraduate studies, the University of London where I studied for my masters, and Dalhousie University where I pursued my doctorate.

I will always cherish the years I spent as a young lecturer at the University of the West Indies and Kenyatta University with their illustrious scholars several of whom generously mentored me and served as role models. At UWI there were my seniors such as my then department chair Patrick Bryan, the exemplary historian Barry Higman, and my age-mate who joined and left the department at the same as I did, the prodigious scholar and public intellectual, and now the university's vice chancellor, Hilary Beckles. At Kenyatta, I learned from the very best. My most important mentor was the incomparable historian, intellectual, and public servant Bethwell Alan Ogot, and I also benefited from my engagements with the late William Ochieng', an iconoclastic and provocative scholar who served as my department chair, Michael Darkoh, an eminent geographer who opened my eyes to environmental studies, and Tabitha Kanogo,

then a young historian who has been an illustrious history professor at the University of California, Berkeley, for more than 25 years.

It is Trent University that taught me the pleasures of academic administration when I served as college principal and acting director of the international program. This came as a surprise as I never thought administration was in my career path. My finest colleagues included Douglas McCalla, a leading economic historian of Canada who took a keen interest in my research on African economic history, and Joan Sangster, an eminent labor and feminist scholar who I collaborated with on an article on academic freedom in Canada. I matured as a scholar and honed my administrative skills in the eight years I served as director of the center for African studies at the University of Illinois at Urbana Champaign, a period I recall with great fondness. It was one of the most intellectually productive periods of my life. The center had more than 80 Africanists, many of them leading scholars in their areas of specialization. It was through the numerous conferences, seminars, public lectures, and courses the center hosted that I became wedded to the infinite intellectual pleasures of interdisciplinary scholarship. It was while at UIUC that I became friends with Ilesanmi Adesida, a brilliant scientist who later served as dean of the university's college of engineering and vice chancellor for academic affairs and provost. He also read the manuscript and offered insightful observations.

At the Pennsylvania State University I worked with some wonderful colleagues. They include two who commented incisively on the book manuscript, Ben Vinson III, a prominent historian of Afro-Mexico and Latin America, who currently serves as dean of the Columbian College of Arts and Sciences at George Washington University, and Tiyanjana Maluwa, a leading international lawyer, endowed professor of law, and associate dean of international affairs. Tiya and I have known each other since 1968 when we both enrolled at St. Patrick's Secondary School and later the University of Malawi. At the University of Illinois at Chicago I was privileged to serve as head of the department of African American studies and worked with some amazing colleagues such as Barbara Ransby, a renowned historian, who brilliantly combines scholarship and public engagement in the hallowed tradition of Pan-African scholar-activists.

My academic and administrative horizons widened immeasurably as dean of the college of liberal arts at Loyola Marymount University, where I worked with a dedicated and inspiring team of administrators from department chairs to the two university presidents I served under, not to mention hundreds of faculty, from who I learned much about the

growing challenges facing American higher education. I benefited from the robust conversations with my administrative team in the dean's office, especially Cheryl Grills, a prominent professor of psychology, public intellectual, and past president of the U.S. Association of Black Psychologists. From my short tenure as vice president of academic affairs at Quinnipiac University I recall the vigorous discussions I held with my direct reports in our regular planning meetings and informally especially William Kohlepp who transitioned from associate vice president of academic affairs to dean of the School of Health Sciences at the same time I left the university.

This book would not have been written without the fellowship I received at the Hutchins Center for African and African American Research at Harvard University that enabled me to spend Fall 2015 using the university's immense library resources and to meet and have conversations with some of the world's finest minds. I am particularly thankful to Emmanuel Akyeampong, professor of history at Harvard and one of Africa's most distinguished scholars, who facilitated the fellowship application and read this manuscript, and the director of the Hutchins Center, Professor Henry Louis Gates, the celebrated scholar, administrator, public intellectual, and committed Pan-Africanist.

I have been extremely fortunate in my academic career in the opportunities I have had to develop a global network of colleagues. Pride of place goes to the Council for the Development of Social Science Research in Africa, where I met many of my closest intellectual associates. Among them is Tade Aina, a steadfast personal friend and intellectual collaborator since the early 1990s when he served as Deputy Executive Director of CODESRIA. Later in his capacity as the regional representative of the Ford Foundation in Eastern Africa and program director of higher education and libraries in Africa for the Carnegie Corporation of New York, Tade became a central figure in global efforts to revitalize African higher education, a passion he continues to pursue in his current role as Executive Director of Partnership for African Social and Governance Research based in Nairobi. His insights on higher education and review of the book manuscript were invaluable.

There are of course many more networks and friends and colleagues I thank for their commitments to the African and global academy that influenced and even shaped my thinking on the issues covered in this book. One that deserves special mention is Toyin Folala, the prolific and influential historian and eminent scholar at the University of Texas at Austin

who has been a friend for more than two and half decades. He kindly introduced me to the publishers.

I apologize in advance to my other long-term intellectual comrades for not mentioning them here. But I trust they know I am indebted to their generosity in sharing their ideas and perspectives over many years in all manner of contexts in our collectively privileged lives of the mind.

Above all, I am eternally grateful to my closest friend and life partner, Cassandra Rachel Veney, for sharing a life of the mind and marriage, with all their demands and joys. As always, she was the first reader of the manuscript, indeed, the person who witnessed its birth from inchoate ideas to the long days and nights of research, reflection, writing, and revisions, with the magical smile and wiry sense of humor only she possesses. She knows how much this book means to me as a prolonged reflection on the academy. I want her to know how much her precious support on this project, and many others before, means to me.

CONTENTS

1	The Postwar Boom: The Universalization of Higher Education	1
2	Money Matters: Economic and Occupational Disruptions	67
3	Disciplining Knowledges: Ruptures in Academic Systems	139
4	Global Village: The Competitive Challenges of Internationalization	213
5	Quality Control: Struggles for Accountability and Value	297
	Index	369

LIST OF TABLES

Table 1.1	Growth of Universities by World Region Numbers	6
Table 1.2	Growth of Universities by World Region Average Percentage Rate	7
Table 1.3	Gross Tertiary Enrollments (millions)	14
Table 1.4	Gross Enrollment Ratios by Levels of Development	18
Table 1.5	Gross Tertiary Enrollment Ratios by Region, Both Sexes (%)	19
Table 1.6	Gross Female and Male Enrollment Ratio by Region, 1970–2013	23
Table 1.7	Gross Female Enrollment by Region in Millions, 1970–2013	24
Table 1.8	Gross Female Enrollment Ratio by Levels of Development, 1970–2013	26
Table 1.9	Gender Parity Index by Region, 1970–2013	27
Table 1.10	Gender Parity Index by Level of Development, 1970–2013	27
Table 1.11	Distribution of Enrollment by Academic Programs and Number of Countries, 2000–2013	29
Table 1.12	Enrollments by Race in the USA, 1976–2013	35
Table 1.13	Educational Attainment of adults ages 25 and over, Percentage Distribution, 1996–2008	37
Table 1.14	Enrollment by Race in South Africa, 2004–2013	39
Table 1.15	Percentage Distribution of Enrollment by Race and Institutional Type, 2008–2013	40
Table 1.16	Progress in Enrollment Ratios in Indian Higher Education by Caste	43
Table 1.17	Growth of World Population, 1950–2100	49
Table 2.1	Growth of private universities as percentage of total number of universities, 1945–2015	69
Table 2.2	Growth of the number of private universities, 1945–2015	71

Table 2.3	Patterns of Government expenditure on education as % of GDP and expenditure on tertiary education as % of total government expenditure	81
Table 2.4	Patterns of expenditure on tertiary education as % of Government expenditure on education and Government expenditure per tertiary student in constant \$PPP	82
Table 2.5	Tuition fee policies for public higher education institutions, 2011	88
Table 2.6	Growth of the World economy by region, 1980–2015 in \$billions	95
Table 2.7	Structure of World output 2000–2014, by regional levels of development, percentage	98
Table 3.1	Gross domestic expenditure on research and development (GERD) by world region, 1994–2013, in \$billions	142
Table 3.2	Gross domestic expenditure on research and development (GERD) by world region as percent of GDP and per capita, 1994–2013	143
Table 3.3	Researchers by world region	144
Table 3.4	Publications by world region, 2002–2014	146
Table 3.5	Number of researchers by field, region, and percentage 2013 or closest year	184
Table 3.6	Regional share of scientific publications by field, 2002–2008	186
Table 3.7	Publications by field in select countries, 2008–2014, percentage	188
Table 3.8	Female researchers by field and number of countries, 2013	189
Table 4.1	Outbound tertiary students studying abroad by region, 2000–2013	221
Table 4.2	Outbound students studying abroad according to levels of development, 2000–2013	222
Table 4.3	Students studying abroad as a percentage of their region's enrollment, 2000–2013	224
Table 4.4	International students as percentage of total tertiary enrollment in host region by gender, 2000–2013 (Mobility Index)	226
Table 4.5	Outbound students studying abroad in various world regions, 2000–2013	227
Table 4.6	Trends in scientific publications for select countries, 2008–2014	269

The Postwar Boom: The Universalization of Higher Education

INTRODUCTION

The history of higher education goes back centuries and in a few African, Asian, and European countries for more than millennia. But the bulk of the world's universities were established in the twentieth century, the vast majority since 1945. Before World War II, higher education, where it was available, was largely characterized by elitism and sexism in so far as it was primarily accessible to men from privileged backgrounds. Also, liberal arts education was prized over professional training, and public investment and state intervention remained relatively limited. All this was to change in the face of the profound, complex, and contradictory transformations in national and global political economies wrought by the war and its unpredictable aftermath.

Higher education was characterized by many new developments that will be explored in this book. One of the most immediate and far-reaching was the trend toward massification as demand accelerated, the number of universities and other post-secondary institutions exploded, and public interest intensified in the emerging welfare states and developmentalist states of the developed and developing countries, respectively. Comprehensive universities, which combined, often uneasily and sometimes contentiously, commitments to teaching and research, disciplinary and professional education, and intellectual pursuits and public service

rose to the top of the pecking order in the increasingly diverse, differentiated, and hierarchical domestic and international higher education order.

These changes were facilitated by a wide array of political, economic, social, and cultural forces in the tumultuous postwar world. Key among them was rapid population growth, urbanization, decolonization, and demands from women and other disadvantaged groups for the inclusive opportunities of higher education, which was seen as a desirable public good. The rapid growth of higher education resulted in significant changes in the purpose and rationale of universities, their management and governance, funding sources and models, quality and value, and modes of access and accountability.

There can be little doubt that the dynamics and trajectories of higher education varied enormously within and between countries and different world regions. This book seeks to compare the patterns of growth, processes of change, and the challenges and opportunities encountered by universities as they confronted and negotiated internal and external transformations, and the pressing and conflicting demands of the academy and society for new knowledges, innovation, autonomy, accessibility, affordability, and accountability.

This chapter provides a broad overview of the postwar boom in higher education in different world regions. It is divided into four parts. First, it examines the explosive growth in the number of higher education institutions in every world region. Second, it chronicles and compares the patterns of growth in student enrollments, which turned pre-World War elite education into postwar mass education. Massification had a profound impact on the organization, role, and purposes of higher education. It offered unprecedented opportunities for higher education and social mobility for previously marginalized social groups of low income or racial and ethnic backgrounds, as well as for women. But social inequalities based on gender, class, ethnicity, race, and nationality persisted, and higher education became a powerful force for reproducing old structures of inequality and producing new forms of marginalization. This is the third focus of the chapter. Finally, the chapter outlines some of the key disruptive forces that faced higher education as the twentieth century transitioned into the twenty-first century. Some of the issues are discussed more fully in subsequent chapters, but this chapter looks at the emerging demographic challenges in greater detail, noting two broad global trends. One was the specter of demographic decline haunting not only many of the developed countries, especially Europe and Japan, but also China. The

other trend was the demographic bulge in the developing countries especially in Africa. Both trends had grave implications for the future of higher education institutions and the economy in these countries.

INSTITUTIONAL EXPLOSION

In 1945, higher education was largely confined to what were called in the development discourse of the postwar world, the developed countries and some of the major developing countries. Large swathes of colonial territories and recently independent countries did not even have a single university. Altogether, in 1944, the world had 3703 degree-granting higher education institutions, a fifth of the number in 2015.¹ Thus, over the next 70 years, higher education institutions grew by a staggering 408 %, or at annual rate of 5.83 %.

The expansion resulted from several interlocking developments, including the creation of entirely new institutions, the conversion of existing constituent colleges or branch campuses into autonomous institutions, amalgamations of assorted institutions into new institutions, and the upgrading of lower-level institutions into higher education institutions. These processes played themselves out in various ways in different countries, but they were evident in one or the other almost everywhere.

The USA was the undisputed colossus of global higher education in 1944. The country's 1327 higher education institutions represented more than a third of the world's total. Overall, North America claimed 39.2 % of the world's higher education institutions, followed by Europe with 32.2 %, Asia 21.2 %, and trailing further behind was Latin America and the Caribbean with about 4.0 %, Africa with a mere 0.83 %, and Oceania with 0.62 %. There were glaring discrepancies among countries in the number of institutions within each region at the end of World War II. In North America, Canada and Mexico had a handful of higher education institutions in 1944, numbering 60 and 63, respectively, less than 10 % of the US total.

In Europe, Russia dominated; its 320 higher education institutions represented a quarter of Europe's 1266 institutions at the end of 1944. The next leading countries with 20 or more institutions included the UK (177), France (131), Ukraine (127), Germany (99), Poland (41), Italy (40), Spain (34), Belgium (24), Ireland (21), and Hungary (20). They were followed by two, Austria and Belarus, which had 18 institutions each, then Switzerland with 14, and Azerbaijan, Czech Republic, Holy

See, and Sweden each of which had 13. Five countries had between 10 and 12 institutions. For the remaining ones, nine had five or more institutions, five had one institution, and seven had none.

The hierarchy in Asia was led by the Philippines with 185 institutions, followed by China (177), Japan (173), India (50), Republic of Korea (35), Thailand (33), Uzbekistan (19), Taiwan (17), and Kazakhstan and Pakistan, each with 16. Combined, the ten countries claimed the lion's share, 67.9 %, of contemporary Asia's 45 countries. Sixteen countries did not have a single higher education institution, including most in the contemporary Middle East, such as Bahrain, Iraq, Jordan, Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates, and Yemen. Five countries had four institutions each, another five had three each, four had two each, two had one each, another two, Israel and Iran, had seven each, and one, Lebanon, had six.

The distribution of higher education institutions in Latin America and the Caribbean reflected the Asian pattern in so far as higher education institutions were either non-existent or very limited in scope in the colonial territories or recently independent countries. In 1944, there were no higher education institutions in eight countries, and one each in ten. In five, there were two institutions, another two, Bolivia and Ecuador, had seven each, and Argentina and Peru had ten each. Only in three countries were there more than ten institutions, led by Brazil with 49, Colombia with 38, and Chile with 12. In the Caribbean islands, there were eight institutions altogether led by Haiti and Jamaica with two each, while Cuba, Dominican Republic, Martinique, and Trinidad and Tobago had one each.

The situation in Africa, most of whose 54 countries were still under colonial rule in 1944, as far as higher education was concerned was the worst among the major world regions. Only 13 countries had institutions of higher education, led by the white settler dominated South Africa with nine, followed by semiautonomous Egypt with six, and French settler Algeria with four. Independent Liberia had two as did Morocco, and the remaining eight countries had one each, namely, today's Congo Democratic Republic, Kenya, Senegal, Sierra Leone, Somalia, Tunisia, and Uganda. Thus in 1944, the entire continent had a grand total of 31 institutions of higher education, far fewer than the number of countries!

The African case captures most poignantly the political economy of global higher education in the first half of the twentieth century, its gross underdevelopment in the colonial and developing world, and its

inaccessibility to large numbers of people even in the industrialized or developed countries. The few colonial universities that existed were modeled on, or were branches of, universities in the European imperial metropolises, which they replicated in institutional structure, instructional practices, and intellectual values. Colonial higher education served a tiny colonial elite comprised mostly of men and in the settler colonies, whites. It intersected with, reproduced, and reinforced other cleavages of colonial society including ethnicity, region, and religion.

Unequal access to higher education was evident in other parts of the world including Europe and North America. In the USA, the country boasting the world's largest higher education system, a distinction it would enjoy for decades to come, opportunities for higher education at the end of World War II remained closed to most racial minorities, women, and the working class. Clearly, the massification of higher education even in the USA was a postwar phenomenon.

The underdevelopment of higher education in Africa and the colonial and recently independent countries of Asia and the Caribbean at the end of World War II underscores the historic importance of decolonization as a catalyst for the explosion of higher education institutions in these countries as part of the construction of the developmental state in the Global South more generally including Latin America. Decolonization occurred in the context of a global economic boom that brought to an end the devastations of the Great Depression and World War II itself. In the Global North, this was facilitated by and reflected in the construction of the Keynesian welfare state in which the expansion of higher education was increasingly seen as imperative for national economic growth and competitiveness, reintegration of millions of returning servicemen, and social mobility and well-being for the general population anxious to put the hardships of the 1930s and 1940s behind them.

The exponential growth of higher education in all world regions is evident in Table 1.1. In the three decades after World War II, more universities were established than existed before the war. The 1990s and 2000s registered exceptionally rapid growth as more than 3000 new universities were established in each decade, which was only slightly lower than the total number of universities in 1944. The growth in Asia was particularly impressive so that by 2015, the continent had the largest number of universities in the world; it had one-and-half times as many universities as Europe, 1.6 times more than North America, almost twice as many as Latin America and the Caribbean, and 3.7 times as many as Africa.

Table 1.1 Growth of Universities by World Region Numbers

<i>Region</i>	<i>Year</i>								
	<i>Before 1944</i>	<i>1945– 1959</i>	<i>1960– 1969</i>	<i>1970– 1979</i>	<i>1980– 1989</i>	<i>1990– 1999</i>	<i>2000– 2010</i>	<i>2010– 2015</i>	<i>Total</i>
World	3703	1732	1496	1629	1694	3454	3207	1895	18,808
Asia	786	1034	625	480	778	1041	1072	284	6100
Europe	1266	295	231	351	187	913	504	295	4042
North America	1450	228	267	324	275	540	249	495	3826
Latin America and Caribbean	147	120	255	336	278	606	730	588	3060
Africa	31	45	94	124	152	338	647	209	1639
Oceania	23	10	24	14	24	16	5	24	140

Source: Data extracted from Worldwide Database of Higher Education Institutions (<http://www.whed.net/home.php>) Accessed September 1–20, 2015

It was in Africa, however, where the magnitude of growth was the largest from a very low base of course. The number of higher education institutions on the continent increased by 52.87 times between 1945 and 2015. Latin America and the Caribbean came second, boasting an increase of 20.67 times. The equivalent figure for Asia was 7.76 times, for Oceania 6.08 times, Europe 3.19 times, and in last place was North America, where the number of higher education institutions grew by 2.63 times.

These trends are confirmed in Table 1.2, which shows the average rate of growth of higher education institutions during this period. It can be seen that worldwide, the average rate of annual growth was 5.83 % between 1945 and 2015. Africa's average rate was a staggering 74.10 %, followed by Latin America with 26.42 %, Asia 9.66 %, Oceania, 7.27 %, Europe 3.13 %, and North America 2.34 %. There were fluctuations from one decade to the next but for the world as a whole, the fastest rate of growth between decades was experienced from 1990 to 2000. This was true for North America and Africa, whereas for Asia, the fastest rate of growth was in the 1980–1990 decade as it was for Oceania; and for Latin America, it was the decade from 1960 to 1970.

The expansion of higher education institutions was uneven within regions in both temporal and spatial terms. As shown in Table 1.1 above, in Asia, the largest growth occurred in the 2000s, followed by the 1990s,

Table 1.2 Growth of Universities by World Region Average Percentage Rate

<i>Region</i>	<i>Year</i>							
	<i>1945– 1960</i>	<i>1960– 1970</i>	<i>1970– 1980</i>	<i>1980– 1990</i>	<i>1990– 2000</i>	<i>2000– 2010</i>	<i>2010– 2015</i>	<i>1945– 2015</i>
World	3.12	8.63	10.88	10.39	20.39	9.28	5.91	5.83
Asia	8.77	6.04	7.68	16.21	13.38	3.00	2.65	9.66
Europe	1.55	7.83	15.19	5.33	14.82	5.52	5.85	3.13
North America	1.05	8.08	12.13	8.49	19.63	4.16	19.88	2.34
Latin America and Caribbean	5.44	21.25	13.18	8.27	21.00	12.05	8.05	26.42
Africa	9.68	13.93	13.19	12.26	22.24	19.14	3.23	74.10
Oceania	2.90	24.00	5.83	17.14	6.67	3.13	48	7.27

Source: Percentages Calculated from Table 1.1 above

then the immediate postwar years. The 1970s registered the lowest number of new institutions. Five countries accounted for 68.2 % of the 5314 institutions established between 1945 and 2015, and 69 % of the region's total by 2015. The Philippines founded 1170 new institutions to reach a total of 1355, China 733 for a total of 910, Japan 601 for a total of 774, India 576 for a total of 626, and Indonesia 543 for a total of 546. The largest expansion for the Philippines and China occurred between 1945 and 1969 when 274 and 336 new institutions were set up, respectively. For Japan and India, it was between 2000 and 2009, which saw the creation of 113 and 181 institutions, respectively, while for Indonesia, it took place between 1980 and 1989 with the formation of 183 new institutions.

No other Asian country came close to these five in the number of institutions. The next cohort consisted of five countries with 100–200 institutions by 2015. They included the Republic of Korea with 192, of which 157 were established between 1945 and 2015; over two-fifths immediately after World War II and more than a quarter in the 1990s. Thailand had 150 institutions in 2015, 117 started since 1945, 34 in the 1980s, and another 30 in the 1990s. Iran maintained 146 institutions all but seven formed since 1945 including 57 initiated in the 1980s, 32 in the 1970s, and 27 in the 2000s. Pakistan possessed 125, 109 of them newly instituted, 44 in the 2000s, and 22 in the 1990s. Finally, there was Kazakhstan

with 116 institutions, 100 of them constructed after 1945, more than two-thirds in the 1990s and 2000s.

The rest included five countries with 50–99 institutions (Myanmar 99, Vietnam 70, Democratic People’s Republic of Korea 72, Uzbekistan 64, and Malaysia 51). Another seven had between 25 and 49 institutions (Saudi Arabia 48, Israel 41, Cambodia 37, Lebanon 37, Afghanistan 35, Iraq 32, Jordan 30, and Palestine 26). Eight countries had between 10 and 24, and six less than 10. As with the countries with the larger systems, the establishment of new institutions of higher education tended to vary, but was concentrated in the early postwar or post-independence years and in the 2000s. For example, Afghanistan, Saudi Arabia, and Cambodia set up 18, 32, and 24 institutions, respectively, between 2000 and 2009.

Similar patterns can be seen in Africa. The bulk of contemporary Africa’s 1639 higher education institutions were established from 1980; 152 in the 1980s, 338 in the 1990s, and 647 in the 2000s. The institutions created between 2000 and 2009 alone represented a staggering 39.5 %, or more than one-and-a-half times the number created up to 1989. No African country came close to the leading Asian countries, but there were five with more than a hundred institutions by 2015. They included Morocco with 149, South Africa with 147, Nigeria with 129, Egypt with 127, and Senegal with 113. Forty-five of Morocco’s 147 institutions were established since 1945; 33 were created in the 1990s and 45 in the 2000s.

For South Africa, 68.38 % of the post-1945 higher education institutions came on stream in the 2000s. The figure was even higher for Senegal, where 73.21 % of the 112 institutions established since 1945 were founded between 2000 and 2009. For Nigeria, where the first and only colonial higher education institution was created in the late 1940s, 61 were developed in the 2000–2009 period, representing 47.28 % of the country’s total. For Egypt, the 1990s witnessed the largest number of institutional formation, accounting for 44 compared to 19 in the 2000s, which constituted 36.36 % and 15.70 %, respectively, of the 121 institutions acquired since 1945.

There were five other countries whose higher education institutions by 2015 numbered between 50 and 99. They were Algeria with 76, Ethiopia 69, Congo Democratic Republic 68, Sudan 66, and Tanzania 50. Next came eight countries with between 25 and 49 institutions, such as Kenya with 49, Uganda 43, Ghana 42, Mauritius 40, and Tunisia, Somalia, and Mozambique with 36 each, and Liberia 33. A much larger group comprising 17 countries held between 10 and 24 institutions, and an

equal number had less than ten including six that boasted only one or two institutions.

The patterns of growth in Latin America and the Caribbean straddled those between Asia and Africa in so far as the region had countries that had been politically independent for a long time and others especially in the Caribbean that had only recently been decolonized. Also, some countries supported relatively large higher education systems as in Asia, and others much smaller ones as in Africa. The region as a whole had almost two times as many higher education institutions as Africa. In fact, in 2015, Brazil alone had more institutions than the entire African continent. Brazil ranked second to USA in the total number of higher education institutions, 1879 compared to 2155 for the USA. Brazil accounted for 61.41 % of the total number of higher education institutions in Latin America and Caribbean.

Because of Brazil's overwhelming institutional weight, developments in the country dominated trends in the region. A third, or 624 of Brazil's higher education institutions, were established between 2000 and 2009. For the region as a whole, 23.86 % of the institutions were created during this decade. When only the 2916 institutions founded since 1945 are included, the relative proportions for Brazil and the region are 19.71 % and 25.03 %, respectively. The 606 institutions opened in the 1990s, the decade with the second-highest rate of institutional growth, eclipsed the total number of institutions created in the region's history up to 1970.

Four other countries in the region hosted more than a hundred institutions of higher education by 2015, led by Colombia with 232, Peru 140, Chile 107, and Argentina 103. For Argentina, the largest number of institutions, 25, were set up in the 1990s; for Colombia, it was in the 1970s which saw the establishment of 40 new institutions; for Chile, it was in the 1980s with 46; and for Peru, the 2010s with 39. Another four countries held between 50 and 100 institutions. They included Venezuela with 80, Costa Rica 74, Bolivia 59, and Cuba 50. In Bolivia, nearly half of the country's 53 institutions created since 1945 came into being in the 1990s, almost the same for Costa Rica's 73 institutions, while for Cuba, more than a quarter of the 49 new institutions emerged in the 1970s. For Venezuela, the creation of the 77 new institutions was more spread out from the 1970s.

The North American countries stood in a league of their own enjoying the highest concentration of higher education institutions in the world. By 2015, the USA possessed more than half of Europe's total, while

Mexico's 1529 institutions comprised more than a third. With its 142 institutions, Canada's story was far less remarkable. But for the USA, institutions increased at a much slower pace than many countries in Asia, Latin America and the Caribbean, and Africa. The 828 new institutions created over the next 70 years, while obviously impressive accounted for only 38 % of the total. Thus, much of the institutional growth of American higher education occurred before the end of World War II. In fact, many trace their origins to the second half of the nineteenth century and the early twentieth century (Rudolph 1990; Thelin 2004). The period of fastest growth after the war was between 1945 and 1959 during which 167 new institutions were founded, followed by the 1960s with 138, which petered out to 72 in the 1980s, 83 in the 1990s, and 42 in the 2000s.

It was quite a different story in Mexico. To begin with, 97.06 % of its higher education institutions were developed after 1945. Momentum began to gather in the 1960s, which witnessed the emergence of 179 new institutions, accelerating to 200 in the 1980s and 446 in the 1990s. It continued into the new century with the establishment of 526 institutions between 2000 and 2015. Canada resembled the USA in that many of its higher education institutions, 60 or 42.25 %, had pre-World War II origins, some dating back to the nineteenth century. Thirty-seven new institutions came into being in the 1960s, and another 18 in the 1970s; combined, the two decades accounted for about half of the country's institutions of higher education, and three-fifths of those started since 1945.

The American and Canadian trajectories in which large numbers of higher education institutions predate the postwar era is quite pronounced in many European countries. For the region as a whole, 31.32 % of the 4042 higher education institutions were created before 1944, many going back centuries and a few more than a millennium (Ridder-Symons 1992, 2003; Rüegg 2004, 2011). The largest batch, 913 or 22.59 % of the total and 32.89 % of the institutions introduced after World War II, came in the 1990s. The next most dynamic decade for the growth of European higher education institutions was the 2000s that witnessed the rise of 504 new institutions. The 1970s came third with 351 new institutions. The slowest were the 1960s, whose 231 institutions were even below the 295 created in the decade and half immediately after the war.

As was the case in other world regions, there were wide discrepancies in the patterns of growth within the region. On one end was the Russian Federation with 837 higher education institutions in 2015 and on the other end were Luxembourg and San Marino with one institution

each. Altogether, 520 new institutions were established in the Russian Federation between 1945 and 2015, the largest number 236 or 45.38 %, in the 1990s, followed by the 1945–1959 period during which 77 new institutions were created. The new institutions in the Russian Federation accounted for nearly a fifth of Europe’s total, and overall more than a fifth of the region’s higher education institutions.

Eight other countries had more than a hundred higher education institutions each by 2015. Next to Russia came Poland with 414 institutions, 373 of which were established after 1945, mostly in the 1990s and 2000s when 161 and 134 institutions, respectively, were set up. France created 238 new institutions to reach a total of 369 by 2015. Save for the 1970s when 80 new institutions came on stream, the pattern of growth was more even in France ranging from 37 institutions established in the late 1940s and 1950s to 29 in the 1960s to 31 in the 1990s. On top of its existing 99 institutions in 1944, over the next 70 years, Germany created 254 new institutions, the largest number, 70, in the 1970s, then 58 in the 1990s, and 38 in the 2000s.

The UK, which had the fifth-highest number of higher education institutions in Europe, 254 by 2015, established only 76 new institutions, 31 of them in the 1960s and 18 in the 1970s. After that, only 15 new institutions were formed. Similarly, the Ukraine, next in line, with its 229 institutions, started 102 new institutions after 1945, most of them, 42, in the 1990s, another 19 in the 1960s, and 13 between 1945 and 1959. In Turkey, where only nine of its 164 institutions were in existence before 1945, established nearly two-thirds of its new institutions in the 1990s and 2000s, 42 and 55, respectively. In Portugal, with its 115 institutions in 2015, out of which 109 developed in the postwar era, most of the new institutions emerged in the last two decades of the twentieth century, 31 in the 1980s and 34 in the 1990s. Finally, in Spain, with its 108 institutions, 78 of which were postwar, introduced 30 new institutions in the 1990s and 11 in the 2000s.

The rest of the European countries followed the varied patterns of the countries discussed above. They included eight that had between 50 and 100 institutions by 2015, namely, Armenia with 69 (50 postwar), Austria 53 (35 postwar), Belarus 51 (33 postwar), Belgium 64 (40 postwar), Ireland 63 (42 postwar), Italy 97 (57 postwar), and the Netherlands 60 (49 postwar). Another 14 countries had between 25 and 49 institutions, and the rest had less than 25 including seven with less than ten.

Among the countries of the Oceania region, where Australia's dominance was overwhelming, 117 new higher education institutions were established to bring the total to 140 by 2015. Australia's share of the new postwar institutions was 64.96 %, and 64.29 % of the total. The creation of new institutions in the country was relatively evenly spread out, ten in the 1945–1959 period, 12 in the 1960s, seven in the 1980s, 14 in the 1980s, and ten in the 1990s. New Zealand, with its 28 institutions in 2015, and 20 since 1945, came in second place. Seven of the new institutions were formed in the 1960s, four each in the 1970s and 1980s, and five in the 1990s. Papua New Guinea had nine, all postwar institutions, four created in the 1960s, one each in the 1980s and 1990s, and three in the 2010s. The remaining 13 were distributed between Fiji with five, Solomon Islands three, Samoa two, and French Polynesia, New Caledonia, and Tonga with one each.

DEGREES OF MASSIFICATION

The number of institutions a country had often correlated with the number and proportion of students who attended higher education institutions, although that was not always the case as evident in the United Nations Educational, Scientific, and Cultural Organization (UNESCO) data on gross tertiary enrollments and enrollment ratios discussed in this section. For example, while the number of higher education institutions worldwide between 1970 and 2013 grew by 119 %, or at annual rate of 2.79 %, the number of student enrollment rose by 509 %, or at annual rate of 11.84 %. Another example is that of the USA. While the country still had the world's largest number of higher education institutions in 2015, more than twice as many as China, the latter had overtaken the USA in terms of gross enrollments, but not in the enrollment ratio.

In 1939–1940, the USA, which for decades to come would boast the world's largest and most diversified higher education system had 1.5 million students enrolled in its colleges and universities. Within a decade, the number grew by 80 % to reach 2.7 million. Enrollments grew by an additional 900,000 in the 1950s to reach a total of 3.6 million in 1960 (Thelin 2011: 261). Growth further exploded in the 1960s to reach 8.5 million in 1971, which represented 47.1 % of the college-age population. By 1980, the figure had risen to 11.6 million, which translated into a gross enrollment ratio of 53.5 %. In second place was the Russian Federation, with 5.7 million tertiary students, although the rate of growth was minimal, as the

numbers had only risen from 5.2 million in 1970; in terms of the enrollment ratio, the increase was from 45.2 % to 45.3 %.

Altogether, the number of students enrolled in higher education institutions worldwide rose by more than six times from 32.6 million in 1970 to 198.6 million in 2013. The fastest growth was recorded between 2000 and 2010 followed by the 1970s as shown in Table 1.3. The 1980s and 1990s experienced lower growth rates. By 2013, Asia claimed the largest number of students in tertiary education, more than that of the rest of the world combined. This was a remarkable development. In 1970, Europe had nearly twice as many students as Asia; and the later had fewer students than North America. The tide began to turn in the 1980s. By 1990, Asia had overtaken the two regions. This phenomenal development was captured in a series of publications, best captured in a collection by the Institute for International Education, *Asia: The Next Higher Education Superpower?* (Bhandari and Lefébure 2015), and a book entitled *Palace of Ashes: China and the Decline of American Higher Education* (Ferrara 2015).

The rapid growth of higher education in Asia was not an isolated phenomenon. Africa and South America also experienced explosive growth. In fact, between 1970 and 2013, enrollments in Africa grew faster than in any other region, although from a low base so that by 2013, the continent still had the lowest number of tertiary students outside of Oceania.² South America enjoyed the second-fastest rate of growth during this period, followed by Asia, while Europe had the lowest, trailed by North America.

There can be little doubt that the developing countries of Africa, South America, and Asia were playing catch up with the developed economies of Europe and North America. These regions also continued to experience a demographic bulge and increasing demand for higher education by their rapidly growing middle classes. In the meantime, for Europe and North America, the postwar demographic boom had long run its course as can be seen in the enrollments in 2013, which were lower than in 2010.

The shifting terrain of global higher education is evident when we examine the changing composition of countries with the largest enrollments between and within regions. In 1970, for countries that had data, there were only 11 with tertiary enrollments of more than 50,000, and only two with more than a million, the USA and the Russian Federation. Chile, Columbia, and South Africa had enrollments of 50,000–99,999; another five countries enjoyed enrollments of 100,000–249,000, namely,