Literature Review on Equity and Access to Tertiary Education in the East Asia Region

This literature review on equity in East Asian tertiary education has been produced as a background note for the overall World Bank “Equity of access and success in tertiary education” study.
Introduction

Existing literature shows that inequity in tertiary education in the East Asia region has long been a major policy issue. Despite some progress, tertiary education inequity still exists to varying degrees in East Asian countries. The following literature review proceeds as follows. The next section provides an overview of the trends of educational inequality among educational inequality, and a stocktaking of tertiary education equity for two principal target groups: ethnic minority people and females. Although inequity can in general be seen from in three aspects of admission/access, participation, and completion, available literature focuses primarily on the first two. Section three examines monetary and non-monetary barriers to entry into tertiary education. Section four explores what East Asia countries have done to address and improve tertiary education equity.

Status of tertiary education equity

This section will look at the overall trend of the countries’ educational inequality using the education Gini coefficient (EGC), the derivation of which was described in (Castelló and Doménech 2002). Then I will examine tertiary education inequity based on two major social characteristics, namely ethnicity and gender.

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1 The East Asian countries reviewed with available literature include Cambodia, China, Indonesia, Korea, the People's Democratic Republic of Lao (LaoP DR), Malaysia, the Philippines, Thailand, and Viet Nam. Other East Asian countries, namely Fiji, Kiribati, Marshall Islands, FS Micronesia, Mongolia, Palau, Papua New Guinea, Samoa, Solomon Islands, Timor-Leste, Tonga, and Vanuatu have limited or no relevant literature. Therefore, East Asia in this paper refers mostly to the countries with available literature.

2 Access is herein used as a generic term unless explicitly stated otherwise.

3 Details of the method are presented in my short note on indicators of tertiary education.
**Overall trends of education equity:**

Several studies compute the EGC to measure the inequality of educational attainment for all levels of schooling, not just tertiary education. All of them report a declining trend of educational inequality among East Asian countries. Saccone (2008) and Zhang, Huan, and Li (2007) find that education equity in China has improved over time between 1974 and 2004; the Gini coefficient of 0.57 in 1978 went down to 0.26 in 2004. However, they note that the declining rate of EGC has been slower and slower and it could be due to the government’s abandonment of the 1950 “Low Focus” strategy in which lower levels of education received more resources than tertiary education.

Thomas, Wang, and Fan (2000) report a declining trend of educational inequality of Korea and Thailand between 1960 and 2000. However, while Thailand’s EGC shows a flatter decreasing trend, Korea had the fastest decline in EGC from 0.55 to 0.22 in 30 years. Similar to Korea’s EGC, Viet Nam and the Philippines also have relatively equal EGCs of 0.23 (Holsinger 2005) and around 0.24 (Mesa n.d.), respectively. However, Holsinger (2009) finds that the inequality of education attainment becomes visible at more disaggregated levels in Viet Nam. The more disaggregated the level of analysis, the greater the inequality. For instance, the difference between the national EGC and that of commune Ho Quang Phin is as much as 17 percent.

Educational inequality may vary by geographical areas. Wahyuni and Ethicawati (2003) find that education in Indonesia is more equal in rural areas than in urban ones. Unlike Indonesia, urban is much more educationally equal than rural in Thailand (Sinnathambu 2003).
Ethnicity:

Almost all East Asia countries have varying degrees of ethnicity-based inequity in tertiary education. The cross-country differential in the degree of the current equity depends not only on historical and cultural legacies but on the equity-enhancing policies, both of which will be discussed at greater lengths in succeeding sections. The common pattern among these countries is that students from majority ethnicities in some countries tend to be proportionally over-represented in educational institutions relative to their peers with ethnic minority backgrounds (Lee 2007).

More specifically, while the ethnic majority of Lao Lung represents only 67 percent of Laos’s total population, Ogawa (2009) finds that about 93 percent of the students at the National University of Laos (NUOL), the oldest and largest public university in Laos, are Lao Lung compared to 5 percent of Lao Sung and 2 percent of Lao Theung – the other two minorities. In Viet Nam, the lower secondary enrollment rate was 75.9 percent for ethnic majority people, namely Kinh and Chinese, relative to 48 percent for ethnic minority people in 2002 (Gill and Kharas 2007). For China, where the 104.49 million ethnic minority people account for 8.41 percent of the nation’s total population in 2005 (Joseph 2008), minorities’ representation in tertiary education has not yet been commensurate to their population proportion. Minority students accounted for 6.64 percent of the total tertiary education enrollment in 1990 (Hannum 1999). In his recent survey at ten Chinese universities, Jacob (2006) finds that minority students account only for over 5 percent of total tertiary enrollment.

However, countries have made substantial progress to tertiary education equity among ethnic groups. For instance, relative to minorities’ 1990 enrollment rate of 6.64 percent, the

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4 Two other public universities are Souphanouvong University and Champasak University.

5 In fact, the Chinese in Viet Nam are still in the minority, but they are still much economically better than the remaining 52 ethnic minority groups.
tertiary education enrollment of Chinese minority students in 1950 was only 1,285 or less than one percent of the total tertiary education students (Min 1997). Suryadarma et al. (2006) do not find evidence that Indonesians are discriminated against on the basis of their ethnic background on various indicators including education. Of all East Asian countries, Malaysia has made the most substantial progress to address inequity in access to tertiary education. Unlike the majority population in other countries, the majority Malays that make up 50.4 percent of Malaysia’s total population are economically and educationally worse than other non-Malay minorities.

Dissatisfaction about inequalities between the Malays and other ethnic groups led to extensive rioting in 1969 and to the 1970 creation of the New Economic Policy (NEP). The NEP has in fact overshot one of its major objectives in increasing tertiary education equity. Between 1969 and 1985, the proportion of the university enrollment among Malay students increased from 35.6 percent to 63 percent (Pe Symaco 2006), which is higher than their population proportion.

**Gender:**

East Asian countries provide a mixed picture of gender gaps in access to tertiary education. In many countries, females have been under-represented in tertiary education, but their representation has much improved over time. In Indonesia, although female students accounted for only 32 percent of the total tertiary enrollment in 1994 (Lee 1998), the numbers of male and female students are almost balanced in diploma/polytechnic programs (52 percent male and 48 percent female) in recent years (Nizam 2006). The gender parity of participation in tertiary education in Indonesia can be partly explained by equal participation rates of females and males in secondary education (Wicaksono and Friawan 2008). Also, the gap between sexes in terms of
gross tertiary enrollment rates is relatively lower in the low income group rather than high income group (Wicaksono and Friawan 2008).

Like Indonesia, other countries have also made great progress in promoting gender equity in tertiary education. The representation of Laotian female tertiary students increased from 22.9 percent in 1997 to 29.8 percent in 2000 to 46.7 percent in 2007 (Khamphone 2006, 2008). In Korea, the proportion of female university students increased from 27 percent in 1970 to 43 percent in 1998 (Park 2007). Also, more and more female high school students in Korea move on to tertiary education; the male/female ratio of advancement from high school to higher education institutions dropped from 1.83 in 1980 to 1.2 in 1990 (Oh and Pang 2000).

In China, while only 23.4 percent of tertiary education students were female in 1980, the proportion of female students went up to 37.3 percent in 1997 (Hannum 1999) to 44 percent in 2002 (Mak 2007). However, these students tend to be concentrated in particular types of institutions, such as teacher training colleges, and departments such as humanities, while men outnumber them in scientific and engineering fields with upward occupational and political mobility (Broaded and Liu 1996). Also, the regression result from Zhou, Moen and Tuma (1998) indicates that females still have significantly lower odds of entering college.

Several East Asian countries have even witnessed the over-representation of females in TEIs. The Philippines has female dominance in the tertiary education enrollment with a male-female ratio of 44.8 to 55.2 in 2003-2004 (Gonzalez 2006). The percentage of female university students went from 29.1 in 1970 to 56.2 in 2000 in Malaysia (Kamogawa 2003) to as high as 65 in 2001 (Morshidi 2006). Li (2008) reports that male dominance in Thailand’s tertiary education in the 1970s abated in the 1990s; specifically, 51.4 percent of the total university enrollment was female in 1996.
Unlike those countries, Cambodia still has significant gender disparities (Chealy 2009). Specifically, female students in higher education institutions comprise only about 22 percent of the total enrollment (Lee 2007). The disparities could be traced back to earlier levels of schooling. Velasco (2004) argues that dropout rates of girls in Cambodia are higher than boys at all levels of education, which limits the pool of female candidates to enter higher education.

**Barriers to access to tertiary education**

This section analyzes monetary and non-monetary barriers to entry into tertiary education.

*Monetary barriers:*

Studies on tertiary education equity in developed countries categorize monetary barriers into three types: the cost-benefit barrier, the cash-constraint or liquidity barrier and the internalized liquidity constraint or the debt aversion barrier (Salmi 2009). However, the discourse on tertiary education equity in East Asian countries does not explicitly use those terms or separate those three types. Rather, the studies on East Asia just examine how income affects the equity of tertiary education. In general, studies find that income, or more specifically family income, is a major determinant of access to tertiary education in all East Asian countries.

Students from better economic backgrounds have better access to tertiary education than their poorer peers. For instance, a recent national economic survey in Indonesia indicates that only 3.3 percent of students from the lowest 20 percent of income groups and only 4.8 percent from the next quintile enroll in universities, a striking contrast to the 30.9 percent from the highest income quintile (Nizam 2006). In Viet Nam, discrepancies in access in higher education among students from rich and poor families are significant. While the tertiary enrollment of students from the lowest income quintile accounts for about 12 percent, the highest-income
quintile students constitute more than 40 percent (Nguyen 2008). Nearly 70 percent of higher education students in Thailand are from high-income families (Kirtikara 2001).

Hannum (2002) argues that disparities in tertiary education are translated from those in general education. The sorting process of students in tertiary education begins much earlier in life (Broaded and Liu 1996; Zhang, Huan, and Li 2007). Rural students in Viet Nam who are poorer than urban ones have limited access to quality secondary education and are thus are seriously disadvantaged in terms of opportunities for higher education (Fry 2009). Even if poorer students can access secondary education, their financial difficulties may force them to drop out. In fact, Welch (2009) noted that many students in Indonesia, Malaysia, the Philippines, Thailand, and Viet Nam, who do not complete secondary schooling, thereby rendering themselves ineligible for higher education, are from the poor. In China, because rural residents cannot shoulder the financial burden of general education, 80 percent of rural school-aged children drop out of secondary and even primary schools, thus missing the opportunities to compete for university entrance examination (Yang 2007). More specifically, the average years of educational attainment in Thailand are 8.5 and 6.2 in urban and rural areas respectively (Sinnathambu 2002). If poorer higher school students do not drop out, they are still not on an equal footing with their wealthy peers who can financially afford extra preparatory classes for competition in university entrance exams (Nizam 2006).

Poor students’ unequal access to tertiary education is compounded by increasingly high costs of pursuing tertiary education in East Asian countries. Cost-sharing or higher-tuition policies have been adopted in many countries (Salmi and Hauptman 2006) including Mongolia and China, which have introduced tuition fees on a national scale (Steier 2003). For instance, the average university tuition fee in China of about 5000 RMB per year makes it a heavy burden for
many families to support a university student (Zha and Ding 2007). Plus, students need to pay not only for tuition fees but also for books, other educational and living expenses including lodging, food, and transportation. In Indonesia, the total cost incurred by a university student of first degree in 2004-2005 was quite high and ranged from 6.8 to 31 million rupiah depending on the public and private TEIs (Wicaksono and Friawan 2008). In addition to actual educational costs, opportunity costs can also be a barrier, too because as Suryadarma et al. (2006) note, prospective students can be an extra income earner for their family. Therefore, parents may want their school-aged children to work for extra family income, rather than let them go to school or college.

Non-monetary barriers:

The following section examines three major non-monetary barriers to tertiary education access, namely family characteristics, place of residence, and cultural factors. Existing literature does not address other non-monetary barriers such as academic ability, information access, and motivation.

Family backgrounds:

Similar to studies on tertiary education equity in developed countries (Finnie, Laporte, and Lascelles 2004), multiple studies look into how family backgrounds, which are primarily either parental education or occupation, affect access to tertiary education in East Asian countries. What they have found is that family backgrounds tend to be a major determinant of access to tertiary education. Students whose parents are better educated or have professional occupations have better access to tertiary education. The fathers of 58 and 77 percent students at the
University of the Philippines, the largest public TEI, are college-educated, and professionals or administrators respectively (James 1991). While Agadjanian and Liew’s (2005) logistic regression shows that parental education has no significant effect on transition to tertiary education in Malaysia, Park (2004) finds that father’s education is highly related to the transition to the university in Korea.

Based on the data from the 37 institutions between 1994 and 1997, Zhang and Liu (2006) report that the opportunity ratios for peasants to send their children to ordinary Chinese universities in comparison to workers, civil servants, businesspeople and professionals were on average 1: 2.5 : 17.8 : 12.8 : 9.4 respectively. Analyzing the educational experiences of a representative sample of urban residents in 20 cities in China from 1949 to 1994, Zhou, Moen, and Tuma (1998) find that access to tertiary education depended on both family-class background and father’s occupation. Similarly, Ding (2007) finds empirical evidence from his logistic regression that students whose fathers have administrative or professional jobs, and who are from high-income households have a higher chance of entry into tertiary education. However, according to Huang (2005), father’s educational attainment and occupation are found to have a weakly negative effect on student academic achievement.

**Place of residence:**

Students’ place of residence can also have a substantial impact on tertiary education equity. Relative to their peers from wealthy urban areas, students from rural regions tend to be poorer and thus are under-represented in tertiary education. In China, for instance, the chance of a

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6 The income-related family class backgrounds are (1) worker-poor peasant, (2) cadre-military, (3) middle class (small-business owners, middle-rich peasants, and intellectuals), (4) the ”exploiting class” (large business owners, landlords, and so forth), and (5) others.
student living in an urban area entering a Tier 1 institution is 1.48 times higher than that of a rural student (Ding 2007). Studies also find that the more prestigious the TEI, the lower the percentage of rural students. Specifically, the proportion of rural students seldom exceeds 20 percent in the two most prestigious universities (Tsinghua and Beijing) while they constitute around 39.2 percent in other eight universities in Chongqing (Zhang and Liu 2006). In 2001, 18 percent of students enrolled at Tsinghua were from Beijing, while Beijing’s population was only 0.9 percent of the national (Yang 2007).

Although rural-urban inequity in access to tertiary education can be explained by the disparity in family incomes between rural and urban areas, some studies provide another explanation. The inequity could result from the unequal distribution of TEIs with a concentration of TEIs in urban cities (Harman 1994). Students from rural areas with a disproportionate small number of educational institutions are discouraged from participating. Almost all TEIs in Cambodia are situated in the capital city of Phnom Penh (Chamnan and Ford 2004). Most of the TEIs in Viet Nam are distributed in main cities and provinces such as Ha Noi, Ho Chi Minh City, Hue, Hai Phong, Da Nang, Thai Nguyen and Can Tho (Lam 2004). Nearly half (44%) of the Thai TEIs are located in and around Bangkok, which may negatively affect access of provincial students to quality lecturers (Kirtikara 2001). Such an unequal distribution of TEIs in Thailand is a product of political and other influences that have dictated the location of new universities in the past (Suwanwela 2006).

The unequal distribution of academic institutions can even happen at lower levels of education. Suryadarma et al. (2006) argue that inequality in access to junior secondary level education in Indonesia is very much related to school availability. In 2000, while 83 percent of the population in Yunnan, China was in rural areas, only 12 percent of senior secondary schools
were; the bulk of upper secondary school provision is in urban cities, and provincial or county cities and towns (Lamb and Guo 2007).

Cultural factors:
The under-representation of female and ethnic minority students in tertiary education can come from cultural and social factors. Sometimes, equity groups, namely females and ethnic people, may have unequal educational opportunities because of unfavorable age-old traditions maintained in rural areas or among minority ethnic groups. For instance, Madurese in Pontianak, Indonesia, traditionally arrange their daughters to be married as soon as they finish primary school (Suryadarma et al. 2006). At other times, tertiary education inequity for females or ethnic people may originate in political ideology, government policies, or social stereotypes. In China, the legacy of Mao’s socialist government, which promoted the contribution of women to productive activities, persists today (Short and Sun 2004). The one-child policy in China has led to the preference of sons who can carry the family lineage. In China where son preference is still prevalent, females are discriminated against and not provided with equal educational opportunities by their parents (Croll 2000; Wang 2005).

Gender stereotypes are also common in East Asian countries. People have pre-conceived ideas or beliefs about of women’s physical characteristics, personality traits, abilities and roles in society. In Viet Nam, these stereotypes are even reinforced in school textbooks in which women are supposed to take care of housework and do manual work (Do 2001). Plus, there is still a negative connotation associated with tertiary education as Asian parents fear that “too much” education will prevent their daughters from marriage (Mak 2007). Parents also tend to have higher educational expectations for boys than for girls in rural China (Li and Tsang 2003).
Stereotypes can influence the gender-based choice of study fields. The Asian way of thinking is that arts and teaching are suitable for women whereas that science and technology are more suitable for men. Therefore, male students dominate scientific and technological fields of study, and females are over-represented in arts and educational courses (Gonzales 2006; Kamogawa 2003).

**Equity improving efforts**

Given the existing inequity in tertiary education, East Asia countries have adopted some programs to reduce it. Indonesia embarked on the new paradigm of higher education in 1994. Unlike Thailand, which enacted a major integrated educational reform in 1999 with its new National Education Act, Viet Nam’s reforms have occurred gradually over time (Fry 2009). China’s most recent reform in tertiary education has started since 1997 (Huang 2005). Malaysia attempted to increase tertiary education equity via its previously mentioned NEP in 1970. In general, measures often employed include quota systems, special admission criteria and processes, special financial assistance, and expansion of tertiary education via new institutional forms to assist and encourage disadvantaged students.

**Quota systems:**

Quota systems are compensatory measures in which the number of tertiary education seats is allocated to students on the basis of equity factors. Specifically, a quota can be reserved for students of specified ethnicity, proportional to the percentage of the group in the total population. In Thailand, the quota system for students in the region where the universities are located has helped to provide better chances for students in the region (Kirtikara 2001; Suwanwela 2006). Malaysia also adopted preferential quota policies within the framework of the NEP that favor
ethnic Malays over the other two ethnic groups – Chinese and Indians (M. Lee 2004). Under this policy, all public tertiary educational institutions are legally mandated to reserve 55 percent of their places for Malay students (Pong 1993). Agadjanian and Liew (2005) find with survey 1999 data that these preferential policies reduced inequalities in tertiary education for both females and ethnic Malays.

However, quota systems may have problems. First, they can create a “reverse” discrimination for once-dominant student groups. Chiu (2000) recognizes that the introduction of Malaysia’s preferential policies have denied a large number of qualified non-Malays, especially Chinese, university admission because the Malaysian language examinations are a requirement for tertiary education. More specifically, between 1969 and 1985, the proportion of the university enrollment among Malay students increased to 63 from 35.6 percent, while the number of Chinese students has dropped to 29.7 from 52.9 percent (Pe Symaco 2006). Second, quota systems may do a poor job of targeting. Tzannatos (1991) argues that Malaysia’s quota system in higher education has benefited the already better-off Malays without helping the poor Malays.

Some countries have discontinued quota systems. For instance, available seats to tertiary education in Viet Nam were allocated on the basis of a number of factors such as ethnic nationality, social class, an individual’s life history and loyalty to the party, gender, geographic area of residence, and other similar factors. Fry (2009) claims that this former quota system was probably much more equitable than the current meritocratic system of objective examinations.

Special admission criteria or processes:

East Asian countries also adopt special admission criteria or processes to address tertiary education equity. To reduce inter-ethnic differences in educational attainment, the government of
Malaysia introduced various programs (such as the pre-university matriculation ones) to prepare Malay students for the professional and technical fields (Joseph 2008). As a replacement of the quota system of admission, Viet Nam has adopted differential admission scores. Based on national higher education institution entrance examinations, admission scores vary according to a student’s regional categories: big cities, suburbs and towns, rural, and mountainous areas. The admission scores are a half mark apart between two adjacent categories (Ngo 2006).\(^7\) Also, the admission scores for children of war martyrs or veterans and ethnic minority students are one mark lower than the scores for other children. Under a special admission policy, children from remote mountainous areas can be admitted into some higher education institutions without taking entrance examinations. During the period of 1999-2004, a total of 4,284 ethnic minority children benefited from this policy (Ngo 2006). In general, these special admission criteria and processes have annually increased access to higher education for students from rural, remote and mountainous areas and those of underprivileged families by about 70 percent (Ngo 2006).

In China, ethnic minorities are given enrollment priority and the admission test scores are lower than the Han majority students (Min 1997). Since 1980, China also has established one- or two-year preparatory special classes to integrate low-scoring ethnic minority students into regular college studies. In addition, the country established special colleges and universities for ethnic minorities. In 1992, the total minority enrollment in these institutions reached 153,000, or 7 percent of the total tertiary education population (Min 1997).

Note that special admission considerations may work against equity values. For instance, some Chinese universities favor students whose parents are university staff, recommended

\(^7\) In other words, the admission score differential for students from big cities and mountainous areas is 1.5 marks.
students, or those with specialties; all of these special considerations deepen the rural-urban divide (Yang 2007).

Special financial assistance:

The third equity-enhancing measure is special financial assistance of various forms to students in equity target groups. The most common form of financial assistance is student loan programs. In 1996, the Thai government established a student loan fund for needy students from poor families. Since its inception in 1996 to 2006, the fund has lent more than THB 237 billion to more than 2.6 million students in high schools, vocational schools and universities, in roughly equal proportions for each of those three school types (Suwanwela 2006). Established in 1999, the Government Subsidized Student Loans Scheme (GSSLS) in China is aimed at poor students enrolled full-time in regular public universities. By the end of 2001, 272,000 students, or over 30 percent of applicants, had received loans from this loan scheme. In 1997, the Vietnamese government introduced a subsidized student loan program (with interest rates at 50 percent of the market rate) to which about 10 percent of students in higher education resorted in 2004 (Ngo 2006). The government of Malaysia, under the Eighth Malaysian Plan (2001–2005), allocated a sum of US$684.2 million to the National Higher Education Fund which provides financial assistance to students (Lee 2007). Cambodia has a national program of scholarships intended to help girls and ethnic minorities from poor, rural and remote provinces get through secondary education and subsequently to post-secondary education (Velasco 2004).

However, the effectiveness of these loan programs in improving tertiary education equity is undermined by several problems. In addition to low funding (Kapur and Crowley 2008; Ziderman 2006), the problem with poor targeting is dominant. Many university committees of the student loan fund in Thailand set the eligibility family-income ceiling so high that many
nonpoor students receive loans (Ziderman 2006). Although the GSSLs is officially acknowledged to cover 20 percent of the enrollment (Johnstone 2005), the actual overall coverage is very low with only 3.8 per cent of students in receipt of a loan (Ziderman 2004). The student loan in Malaysia has no family income condition eligibility and thus has benefited mostly students from wealthy families (Salmi and Hauptman 2006). Only two of the six student loan schemes in Korea directly target the poor (Ziderman 2004).

In addition to student loan programs, East Asian countries have other forms of financial assistance. The government of Malaysia also reserves the majority of governmental scholarships for ethnic Malay students entering Malaysian universities (Pong 1993). In addition to loans, several TEIs in China have adopted financial assistance measures such as scholarships, tuition reductions, exemptions, subsidies, and postponement of tuition payment, but there are several problems undermining their effectiveness such as inadequate or useless scholarships, tuition reductions without regard for high living costs (Huijie 2001). Research shows that low tuition may not always work in favor of equity. Zha and Ding (2007) in their theoretical framework show that contrary to traditional belief, a high-tuition/high-aid financing policy can improve tertiary educational equality more than low tuition policy.

New institutional forms of tertiary education:
Several East Asian countries have addressed the issue of tertiary education equity by expanding their higher education system with the emergence of various forms of TEIs such as private universities, and community colleges. More educational institutions will increase the chances of students in equity groups getting access to tertiary education.
There have been substantial increases in the number of private TEIs in all East Asian countries. The rise of private TEIs has led to large systems of private TEIs such as Philippines (80 percent of the university students matriculate in private TEIs), South Korea (75 percent), and Indonesia (70 percent) (Gonzalez 2000). More specifically, in Korea, the total number of TEIs of all types including private ones increased 16-fold, from 85 in 1960 to 1,321 in 2002 (S. Lee 2004). In 2001, there were 2,235 private tertiary education schools in Indonesia whereas the number of schools managed by the government is 80 (Fahmi 2007). The number of private TEIs in Malaysia increased more than four-fold from 156 institutions in 1992 to 707 in 2002. In 1995, there was no private university in Malaysia but by 2002 there are 12 private universities (M. Lee 2004). In Thailand, the Private Higher education Institution Act in 1979 induced the remarkable emergence of private TEIs. In 1993, there were 29 private TEIs eleven of which were universities (Sinlarat 2004). Although there were no private TEIs before 1997 in Cambodia, 83 percent of the total tertiary education enrollment was through private or fee-paying programs (Chealy 2009). In Laos, the number of 14 private colleges registered from 1992 to 2000 increased to 83 colleges in 2007 with 25,958 students including 8,318 students pursuing bachelor’s degrees (Khamphone 2008).

The expansion of private TEIs can be explicitly or implicitly, though not entirely, driven by equity concerns. As a matter of fact, the government of Malaysia encouraged the emergence of private TEIs to address the equity issue created by the previously discussed quota system in which many qualified non-Malay students are denied access to tertiary education (M. Lee 2004). However, there has been inconclusive evidence about how private TEIs really affect equity in tertiary education. Operating on a cost-recovery basis, these institutions of higher quality tend to

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8 The rising demand for higher education has also played an important role.
charge higher tuition fees than their public counterparts. This generates equity concerns because the wealthy more likely afford to pay for private TEIs. In other words, high quality private TEIs can be restricted only to the wealthy. This is a likely outcome for Indonesia if funding to public TEIs continues to be seriously constrained over the next few years (Welch 2007). In fact, income bias in private TEIs depends on academic selectivity. Nonselective private TEIs have lower academic barriers and are thus more accessible to the poor (James 2001).

Studies provide conflicting arguments on the effect of private TEIs on tertiary education in Viet Nam, where private TEIs are still less prestigious than public TEIs. Pham and Fry (2002) believe that the emergence of private TEIs, which constitute 10.8 percent of the total TEIs in Viet Nam (Pham and Fry 2004), brings more equity because these institutions attract urban and wealthier students leaving more spaces in public universities for students from poorer families. However, Nguyen (2007) doubts this argument by saying that most students from the urban areas with more resources often get the top spots in public TEIs, and leave poor students in less prestigious private TEIs.

Community colleges are another form of alternative TEIs. Many community colleges have been established in East Asian countries. 45 new higher vocational and technical colleges, or community colleges, came into being in China in 1999 (Pretorius and Xue 2003). Malaysia has plans to build community colleges in each of the 193 parliamentary constituencies (M. Lee 2004). Community colleges in general tend to serve as a symbol of equity because they provide access to higher education for the masses in places where access has previously been denied (Raby 2009a). Community colleges can potentially generate positive impacts on tertiary education equity. In 2006, approximately 70 percent of postsecondary students in Kien Giang

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9 Ngo (2006) notes that many of the private TEIs are plagued by poor management, poor teaching and inadequate facilities.
Province, Viet Nam, attended Kien Giang Community College. Many of them were from lower-income groups, and some of the students were from minority groups (e.g., Khmer and Chinese) (Oliver et al. 2009). All the learners at the Nong Bualumpu (NB) Community College in Thailand were NB residents living in this rural community, including housewives, farmers, gardeners, ordinary villagers, and local administrative officers (Punthumasen and Maki 2009). Given the claim that community colleges do not do not necessarily increase tertiary education access for poorest students or those in equity groups (Meek 2003; Raby 2009b), further research is needed on the effect of these institutions on equity.

References:


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Synthesis of Literature on Tertiary Education Equity in East Asia

1. East Asian countries have had a declining trend of educational inequality measured by the Educational Gini Coefficient (EGC).

The greater a country’s educational expansion, the greater the decline in inequality.


The inequality of education attainment can be more visible at more disaggregated levels of analysis.


Educational inequality may vary by geographical areas.


- Additional references


Mesa, Eirene P. *Measuring Education Inequality in the Philippines*. University of the Philippines School of Economics.


2. Every East Asia country has varying degrees of ethnicity-based equity in tertiary education.

Students from majority ethnicities are usually proportionally over-represented in tertiary education institutions (TEIs) relative to their peers from ethnic minority backgrounds.


Additional references


3. East Asian countries provide a mixed picture of gender gaps in access to tertiary education.

In many countries, females have been under-represented in tertiary education, but their representation has much improved over time.


Several East Asian countries have even witnessed the over-representation of females in TEIs.


Unlike other East Asian countries, Cambodia still has still significant gender disparities. Chealy, Chet. 2009. “Higher Education in Cambodia.” In *The Political Economy of Educational Reforms and Capacity Development in Southeast Asia: Cases of*
The gender parity of participation in tertiary education can be partly explained by equal participation rates of females and males in secondary education.

Females tend to be concentrated in particular types of institutions, such as teacher training colleges, and departments such as humanities, while men outnumber them in scientific and engineering fields with upward occupational and political mobility.

Students from better economic backgrounds have better access to tertiary education than their poorer peers.

4. Income is a major determinant of access to tertiary education in all East Asian countries.
Poor students’ unequal access to tertiary education is compounded by increasingly high costs of pursuing tertiary education in East Asian countries. Cost-sharing or higher-tuition policies have been adopted in many East Asian countries.


Students need to pay not only for tuition fees but also for books, other educational and living expenses including lodging, food, and transportation.


Additional references


5. Family backgrounds tend to be a major determinant of access to tertiary education.

Students whose parents are better educated or have professional occupations have better access to tertiary education.


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**Additional references**


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6. Students’ place of residence can also have a substantial impact on tertiary education equity.

Relative to their peers from wealthy urban areas, students from rural regions tend to be poorer and thus are under-represented in tertiary education.


Rural-urban inequity in access to tertiary education can be explained by the unequal distribution of TEIs. TEIs are usually concentrated in urban cities, thereby discouraging rural students from participating in tertiary education.


Lam, Q. Thiep. 2004. “Viet Nam.” In Handbook on Diplomas, Degrees, and Other Certificates in Higher Education in Asia and the Pacific, ed. UNESCO. Bangkok, Thailand: UNESCO.


7. Inequity in tertiary education is caused partly by disparities in lower levels of schooling. Both monetary and non-monetary factors of tertiary education equity also come into play at primary and secondary education levels.

Rural students have limited access to quality secondary education and are thus are seriously disadvantaged in terms of opportunities for higher education.


Even if poorer students can access secondary education, their financial difficulties may force them to drop out.


If poorer higher school students do not drop out, they are still not on an equal footing with their wealthy peers who can financially afford extra preparatory classes for highly competitive university entrance exams.


Unequal rural-urban access to primary and secondary education can be attributed to the unequal distribution of educational distributions in rural and urban areas.


➢ Additional references


8. The under-representation of female and ethnic minority students in tertiary education can come from cultural and social factors.

Equity groups, namely females and ethnic people, may have unequal educational opportunities because of unfavorable age-old traditions maintained in rural areas or among minority ethnic groups.


Tertiary education equity for females or ethnic people originates in political ideology, government policies, or social stereotypes.


Stereotypes can influence the gender-based choice of study fields. The Asian way of thinking is that arts and teaching are suitable for women whereas that science and technology are more suitable for men. Therefore, male students dominate scientific and technological fields of study, and females are over-represented in arts and educational courses.


➢ Additional references


9. To increase equity in tertiary education, several East Asian countries have adopted some type of programs such as quota systems.

To address the issue of equity, several East Asian countries have adopted quota systems, which are compensatory measures in which the number of tertiary education seats is allocated to students on the basis of equity factors.


Quota systems can have problems with a “reverse” discrimination for once-dominant student groups and poor targeting.


**Additional references**


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**10. East Asian countries also adopt special admission criteria or processes to address tertiary education equity.**

Special admission criteria and processes have enabled many disadvantaged students to access higher education.


11. Financial assistance programs such as student loan schemes, scholarships, or low-tuition policies, are aimed at providing financial help for economically disadvantaged students.

The effectiveness of student loan programs in improving tertiary education equity is undermined by low funding and poor targeting. Many loan schemes have either reached a limited number of targeted students or benefited mostly students from wealthy families.


Ziderman, Adrian. 2006. “Student loans in Thailand: From social targeting to cost sharing.” International Higher Education 42.

Other financial assistance forms such as scholarships and low tuition policies may not improve equity substantially because the scholarships are inadequate or useless; tuition reductions are insufficient to cover high living costs.


A high-tuition/high-aid financing policy may theoretically prove to work better than a low-tuition policy.


Additional references


12. Several East Asian countries have addressed the issue of tertiary education equity by expanding their higher education system with the emergence of various forms of TEIs such as private universities and community colleges.

There have been substantial increases in the number of private TEIs in all East Asian countries.


There has been inconclusive evidence about how private TEIs really affect equity in tertiary education. In countries where private TEIs are on average of better quality, high quality private TEIs can be restricted only to the wealthy.


Note that income bias in private TEIs also depends on academic selectivity. Nonselective private TEIs have lower academic barriers and are thus more accessible to the poor.

Studies provide conflicting arguments on the effect of private TEIs on tertiary education in Viet Nam, where private TEIs are still less prestigious than public TEIs.


The effect of the emergence of community colleges in East Asian countries on tertiary education equity is still not conclusive yet and needs further research.


- Additional references

