4. Changes in Phase of Urban Development: Consequences of urbanization and demographic transition

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Introduction

It is widely claimed that the twenty-first century has been turned into “the era of cities.” Behind such an inclination to cities, the advancement of urbanization does exist as a fundamental driver. Nowadays, urbanization is one of the most significant phenomena becoming apparent anywhere on the globe. Estimates presented by the United Nations Department of Economic and Social Affairs (UN-DESA, 2017) show that the world total population will increase from 7.55 billion to 8.55 billion between 2017 and 2030, and keep expanding to 9.77 billion in 2050. It would be easy to imagine that overall population increase has also brought a upsurge of city dwellers. In fact, the rate of urbanization is expected to reach 66% in 2050, which represents that two out of three people will be residing in cities. From a geographic standpoint, an intriguing dimension of ongoing urbanization lies in the traits that developing countries are taking an initiative in promoting such dynamics. According to the World Bank (2016) data on world urban populations, the figure in developed regions recorded a modest increase to 960 million in 2015 from 650 million in 1980. On the other hand, the one in developing as well as emerging regions increased threefold during the same period: approximately 1 billion to 3 billion. These facts described above evidently pose a serious concern on how to deal with rising complications related to “urban.” In conformity with the above-mentioned moves, the term “cities” has gain legitimacy in the discourse of internationally agreed agendas, for instance as manifested in Sustainable Development Goals (SDGs). SDGs’ innovation deserving a special remark here is that, unlike conventional development philosophies primarily focusing on of rural areas and developing countries, renewed attentions to urban issues started to be paid, being incorporated into the ongoing agenda. Most notably, a development goal specialized in urban planning -- Goal 12-- was formulated in response to the growing presence of cities. It is important to remember that urban issues are not stand-alone subjects only open to Goal 12; rather, to realizing a vision of prospective cities should be treated as an overarching topic throughout SDGs in that both developed and developing countries have to be sincerely committed.

Although the need of addressing urban growth and its associated problems has been largely accepted, there might be a certain misunderstanding partly due to a lack of comprehending the reality: what’s going on in third-world cities amid the unprecedented rate of urbanization. Of all possible factors, such a misunderstanding could be well clarified from demographic compositions: who constitute a city. Without having updated population profiles in contemporary city settings, urban planning designed to alleviate complications

would end up with a standardized scheme inappropriate to actual conditions. The point to be highlighted is, despite the same old expression, urban population makeup is not monolithic even in developing countries' cities. In particular, such contemporary urban morphology should be systematically perceived through a movement of fertility transition. Based on several scholars' observations, Wang & Sun (2016) state two points that can tell the significance of conceptualizing fertility trends within the framework of urban studies. First, urbanization has been recognized as a social structural change along with fertility transition; second, an inverse correlation between fertility and urbanization has been detected. In view of those points, conducting an in-depth examination of fertility dynamics must be instrumental in identifying the people who sustain current and future cities.

Table 1: Urbanization rate in selected Southeast Asian countries, 1950 to 2050 (%)

	1950	1975	2000	2025	2050
Southeast Asia	15.5	23.3	38.2	49.7	65.4
Cambodia	10.2	4.4	16.9	26.3	43.8
Indonesia	12.4	19.3	42	50.7	65.9
Malaysia	20.4	37.7	62	80.5	87.9
Myanmar	16.2	23.9	27.8	44.4	62.9
Philippines	27.1	35.6	48	55.4	69.4
Thailand	16.5	23.8	31.1	42.2	60
Vietnam	9.9	14.6	24.3	36.4	54.9

Source: UN-DESA (2010)

Given the above-mentioned line of discussion, Southeast Asia is a preferable example to be investigated. This is because, unlike African and parts of South Asia still keeping high fertility rates, some Pacific Asian countries have arrived at the opposite low-fertility stage, which raises new question for planning economic and social welfare (Jones, Straughan & Chan, 2009a). In other words, even though the huge magnitude of urbanizations has been witnessed throughout Southeast Asia (see Table 1), an interesting mix of fertility situations are found in the region. As is often the case in developing countries, it is generally conceived that initiatives to lower fertility are yet critical to make urban environment livable. This typical scenario essentially relies on the existence of time lag that the death rate usually falls before the birth rate slows down. Because of this time lag, the term "population momentum" comes to the fore and thus massive population growth will eventually come about. Such a classic theory holds the validity to some extent. In reality, despite the relatively slow population growth in Southeast Asia, population in the region is projected to grow by 7 to 8 million a year during 1993 to 2025 (Cole, 1996). That is why the alarmist view warning the crisis of population explosion

remains persistently.[1] In the meantime, another scenario began appearing in some countries. That is, improving fertility is a proposition due to an unprecedented shift to depopulation and aging. As elaborated later in this report, Thailand is a forerunner country experiencing the shift and other countries are few steps behind at this moment. It is estimated that Indonesia, Myanmar and Vietnam are supposed to follow the same path: by 2050, population declines will become more evident in those countries, and the biggest factor causing the declines is lowered fertility rates (Kato et al., 2013). This fact tells that many Southeast Asian countries are approaching to the end of so-called "population bonus" periods[2]. What it means, it will soon require massive reconstructions of institutional and societal arrangement to be suitable to current demographic structures of cities.

Toward the realization of livable cities in the pursuit of SDGs, debates on urbanization must go beyond a mere examination of its phenomenon and associated problems. Instead, more elaborate study on urban transition from a demographic perspective has to be facilitated in order to identify the right place, right people, and right timing. Therefore, understanding how urbanization has influenced the change of urban morphology should serve as a basis of formulating development planning. For the sake of untangling this question, this report attempts to conduct a contextual analysis on demographic transitions in the milieu of prevailing urbanization. Such an analysis offers valuable insights to comprehend a current and future picture of urban inhabitants, helping to lay out forward-thinking policy directions.

Overview of fertility transition in Southeast Asia

Decreased fertility rates have become a global trend characterizing the demography in the 21st century. In fact, statistics reported by UN-DESA (2013) shows that total fertility rates (TFRs) continue to drop from 4.4 in 1970-1975 to 2.5 in 2010-2015. Furthermore, the number of countries with TFRs below the replacement of 2.1 has been on the sharp rise: 55 countries in 1990-1995 to 86 countries in 2010-2015 and 119 countries by 2030-2035. These figures may seem somehow strange due to the stereotyped image that population sizes are mushrooming in developing countries. As stated above, because salient decreases in mortality rates take place before fertility declines, population expansion does emerge.

[1] Such a perspective was stressed at the International Conference of Population and Development (ICPD) in 1994, reflecting the situations of the mid-1990s: 45% of the countries on earth regarded that their fertility levels were far from a satisfactory level (UN, 1994).

[2] In the case of Japan, the end of its population bonus period was between 1990 and 1995, and those years exactly correspond to the era named "a lost decade" in Japan (Sugaya, 2012).

Table 2: Total Fertility Rates in Selected Southeast Asian Countries from 1955 to 2070

	1955 - 1960	1965 - 1970	1975 - 1980	1985 - 1990	1995 - 2000	2005 - 2010	2015 - 2020	2025 - 2030	2035 - 2040	2045 - 2050	2055 - 2060	2065 - 2070
Southeast Asia	6.12	5.91	4.81	3.58	2.69	2.42	2.25	2.11	2.00	1.93	1.88	1.85
Cambodia	6.95	6.70	5.42	5.99	4.25	3.08	2.52	2.27	2.09	1.96	1.87	1.82
Indonesia	5.67	5.57	4.73	3.40	2.55	2.50	2.32	2.12	1.98	1.90	1.85	1.83
Malaysia	6.38	5.38	4.20	3.67	3.13	2.22	2.01	1.86	1.78	1.74	1.74	1.74
Myanmar	6.00	6.10	5.15	3.80	2.95	2.55	2.18	2.00	1.87	1.80	1.77	1.77
Philippines	7.27	6.54	5.46	4.53	3.90	3.30	2.88	2.60	2.39	2.21	2.07	1.96
Thailand	6.14	5.98	3.92	2.30	1.77	1.56	1.46	1.43	1.51	1.59	1.65	1.69
Vietnam	6.16	6.46	5.50	3.85	2.25	1.93	1.95	1.92	1.91	1.90	1.90	1.90

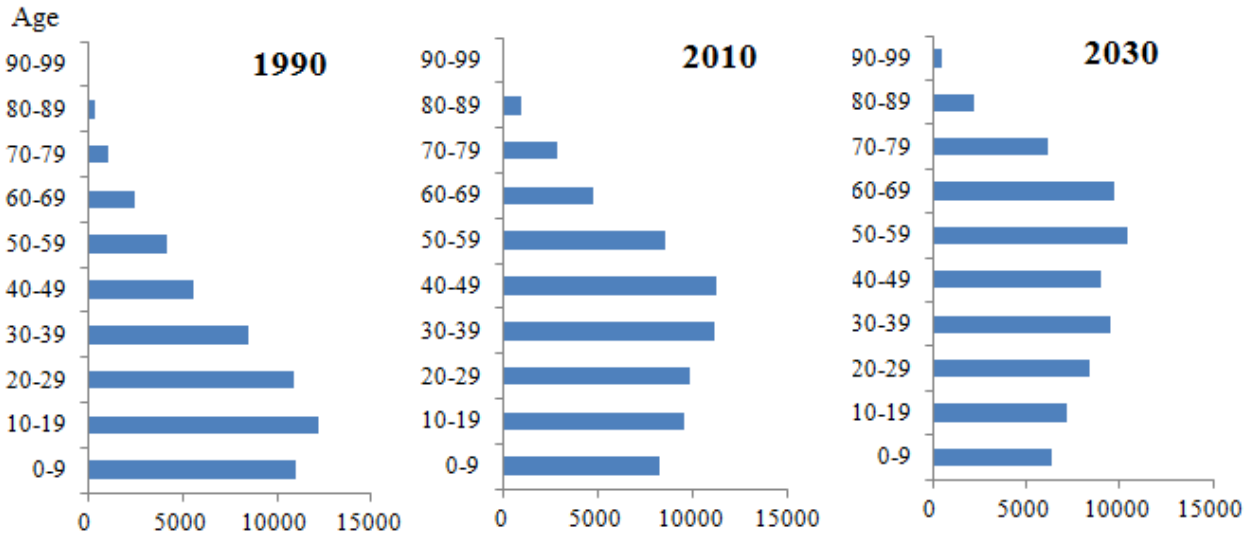
Source: UN-DESA (2017) World Population Prospects: The 2017 Revision.[3]

[3] This source is custom data acquired via UN-DESA website: World Population Prospects: The 2017 Revision. Available at https://esa.un.org/unpd/wpp/.

This line of story has been also applied to Southeast Asian countries. In spite of some exceptions, declines of fertility rates in the region countries are generally on a downward trend. As Table 2 displays, TFRs in the 1950s kept at high levels above 6.0; however by the turn of the century, those numbers sank to below or around the replacement level. By casting a glance at fluctuations over time, it is striking to notice that the trajectory that Thailand has followed is becoming similar to the one of other developed counterparts. A phenomenal drop was marked, reaching below the replacement level as of the late 1990s. No doubt to say, TFRs less than 1.5 were overwhelmingly low compared to most other countries. Interesting to note, those statistics of TFRs considerably overlap with the data showing the start and end of population bonus in the region. In fact, the start of population bonus in Thailand, 1965-1970, was exactly the same as the ones in the Philippines and Malaysia; but the projected end of the bonus in Thailand, 2010-2015, is much earlier than Philippines and Malaysia: 2040-45 and 2035-40 respectively (Oizumi, 2007). It is fair to assume that such differences are an outcome brought by faster fertility declines in Thailand than expected. Even though the timings of the mortality decline would be synchronized across the region, the speed and course of fertility declines were further diverse. That is why the ends of population bonus periods may significantly vary. However, albeit differing in time and pace, fertility declines are the common experience that all the listed countries are going through, as is clear from Table 2. What those facts imply is that an orthodox population myth --more babies in developing countries and fewer babies in developed countries-- is no longer applicable. In developing countries, while almost 50% of governments pursued policies to lower population growth and only 10% launched policies to raise it (UN-DESA 2013), that 10% is projected to be further enlarging. From that point of view, Southeast Asia would be a foreseeable area that signals incoming directions.

Figure 1: Age Cohorts in Thailand, 1990-2030 (thousands)

Source: UN-DESA (2017)[4]



[4] This source is also custom data acquired via UN-DESA website: World Population Prospects: The 2017 Revision. Available at https://esa.un.org/unpd/wpp/.

Accordingly, the scale and profile of productive population have been in change. Data on age cohort in Thailand provides clear signs of the change. As Figure 1 displays, the largest age fraction has been dramatically shifted to middle-age population from teenagers in 1990. As of 2010, it seems that Thailand is in the midst of population bonus, which means the country enjoys the maximum labor productivity because the peaks of the cohort are marked at the two population groups aged from 30 to 49. However, by the year 2030, top two age groups will move up to 50-59 and 60-69. What this transformation represents is that, such a demographic transition gives great impetus to changing the profile of urban inhabitants. Singapore is a pioneer in this field, already adopting pronatalist population policies in the late 1980s to prevent population decline, avoid an unbalanced age structure and sharp aging, and ensure continued increase of the work force (Jones & Leete, 2002). However, most of the cities and countries have been left behind to cope with these demographic changes. In the case of Thailand, it has already started to prepare specific measures against its aging trend around the turn of the twenty-first century (Country Report: Thailand, 2002). Yet such attempts had not been reflected into population policies as a major theme at that time.

With the objective to examine the backgrounds of the change, elucidating conditions favorable to fertility decline is a big analytical question. Variables related to the conditions should cover a broad range of social, economic, cultural, and political settings. Hence, giving a careful scrutiny to the context of fertility transition is quite helpful to digest how fertility transitions have been affected by ongoing urbanistic climates. Based on various associated literatures, a number of notable factors can be spelled out. Generally speaking, the reduction of morality rates should be recognized as the first essential determinant. In part, advances in medical treatment and conclusions of gigantic world-wide wars have brought dramatic impacts on the decrease in death births and infant mortality rates. Given that reason, the need of having other babies is getting less owing to a high survival rate of a delivered baby. Coupled with the decrease of overall mortality rates, many Southeast Asian countries have entered the process of demographic transitions as shown at Table 2 about fertility changes.

Table 3: Contraceptive prevalence rate among women of reproductive age

Country	Year	Contraceptive prevalence rate (%)	
		Any method	Modern method
Cambodia	2000	23.8	18.5
Indonesia	1997	57.4	54.7
Lao PDR	2000	32.2	28.9
Malaysia	1994	54.5	29.8
Myanmar	1997	32.7	28.4
Philippines	1998	46	28.2
Thailand	1996-97	72.2	69.8
Vietnam	1997	75.3	55.8

Source: Gubhaju & Moriki-Durand (2003, p.56)

Apart from such straightforward trigger of improved health conditions, the introduction of governmental schemes such as family planning programs also plays a crucial role. In the case of Southeast Asia, the latter half of the 1960s was the time when the idea of birth control was proposed and adopted in the arena of policy making: Singapore launched its population policy in 1965, Malaysia in 1966, Indonesia in 1968, and Thailand and the Philippines in 1970 (Jones, 1984). Debates over the implementation of family planning programs lead to exploring the efficacy of such government-sponsored approaches. Those public schemes are designed to satisfy both supply-side and demand-side factors. A representative supply-side factor is the widespread of contraception use. This is greatly brought by the invention of technologies in the 1960s, contributing to the creation and supply of various contraceptive measures (Caldwell et al, 2002).[5] The widening scope of choices available to people has been perceived as one of the powerful thrusts reducing TFRs. It is no wonder that rates of contraception prevalence are incredibly high over 70% in the countries such as Thailand and Vietnam (see Table 3) where low TFRs have been achieved in a short period of time. On the other hand, in the countries maintaining high fertility rates like Cambodia and Lao PDR, rates of contraceptive prevalence remains low. As a matter of fact, those data provide additional ground to certify the effects of urbanization onto fertility.

Important to be emphasized here, the efficacy of such public initiatives is intrinsically relevant with the extent of urbanization. A combination of Table 1 and Table 3 shows that the degrees of contraceptive prevalence and the rates of urbanization are actually correlated: countries with higher urbanization rates have records of wider contraceptive uses and vice versa. As is often said, people in cities tend to have better access to subsidized contraceptive methods because it

[5] Measures are such as oral contraceptives, IUD, injectables, implants, and sophisticated sterilization techniques.

is easier to provide such public services in densely populated areas. From the standpoint of policy implementation, focusing on urban areas is a rational choice to make more considerable outcomes. Furthermore, such a gap can be found also within a city between the rich well-informed people and impoverished marginalized people[6]. This raises a question about the purpose of government-driven initiatives since there might be profound disparities. In other words, it can be assumed that urbanization itself has caused social and economic divides in terms of distributing such public resources.

As Hirschman & Bonaparte (2012) assert, articulate, official schemes like family planning programs are contingent upon other external determinants of fertility decline, most notably socioeconomic factors. Investigating the impacts of socioeconomic development onto fertility transitions serves as an underlying theme of this research. As many scholars have argued and reviewed so far, socioeconomic variables do affect women's reproductive behaviors. In fact, many "take-off" countries in Asia have experienced fertility declines during the periods of their startling economic and social development. This is because such development substantially contributes to changing conventional status and norms surrounding women and children. In this regard, a study conducted by Hirschman & Young (2000) is worth noting. In their analysis, socioeconomic determinants are divided into two categories: contextual variables --status of women, economic roles of children, infant mortality rate, and marriage patterns-- or individual-level variables --women's education, husbands' occupation, and migration states. Despite those classifications, however, they are not mutually exclusive. Instead, they are in a certain correlation: for example, women's education affects their working and marriage patterns. By taking that point into consideration, looking more into socioeconomic factors is a key to figure out why fertility transition has been strongly championed in urban areas. Of all, two socioeconomic conditions need to be explored especially in the urban context: (1) changes of industrial structures and (2) expansion of educational systems.

As is commonly claimed, the advancement of urbanization resonates with the promotion of industrialization. To make it short, in parallel with changing settlement patterns from countryside to city, industrial bases in a country have been gone through a transformation to more urbanized sectors. In Southeast Asia, such industrial shifts have occurred intensively for the last several decades. For instance, from 1980s to 2000s when the salient growth of urbanization started to be noticeable, the departure from the primary sector, mainly agriculture, became a dominant feature in major Southeast countries (see Table 4). While some ups and downs are found regarding the ratios of secondary and tertiary sectors out of total, the primary sector has been decaying on average, accounting for just a fraction of a percentage. What this shift means with regard to fertility are at least twofold: (1) increasing a surplus of labor in rural areas and

[6] As for the details about such urban divide concerning reproductive health services, please refer to the research done by Ezeh, Kodzi & Emina (2010).

(2) changing economic roles of children. Both are linked to the shift of industrial structures: the former is a pre-condition but the latter is a consequence. As for a surplus of labor in rural areas, development techniques such as agrarian reforms and agricultural revolution give an impetus to accelerating urbanization in turn, since those techniques contribute to improving productivity while causing the reduction of farmland size. In the aftermath, a number of tenant farmers are squeezed out from what they used to do. Therefore the scale of rural-to-urban migrations gets bigger in that people out of work are driven to move to cities (Sato et al., 2016).

Table 4: Contribution ratios to GDP growth by sector, 1980s to 2000s

	1980s			1990s			2000s		
	Primary	Secondary	Tertiary	Primary	Secondary	Tertiary	Primary	Secondary	Tertiary
Indonesia	12.7	45.2	42.1	8.1	55	36.9	9.5	34.1	56.4
Malaysia	9.6	47.2	81.7	1.4	54.7	43.9	5.1	28	67
Philippines	10.7	7.7	81.7	10.3	31.4	58.3	7.7	29.5	62.8
Thailand	6.9	42	51	3.8	53.5	42.6	4	54.3	41.7

Source: World Bank (2017)

Besides, what is expected to children has been altered in the course of industrial shifts. When agriculture was a key industry, the larger number of children was more desirable to keep extra labor force; but the shift to urbanized sectors like manufacturing and services leads to changing economic roles of children. In accordance people are likely to prefer fewer children as the need of having more children for agricultural work is not that much like before (Uchiyama & Hayashi, 2016). Instead, in order to develop competent and productive labor force who is qualified for non-agricultural, knowledge-based sectors, more investments to children's education are considered further critical. It follows that reproductive decisions to keep fewer children tend to be justified, because the costs of having and raising children get high (Caldwell & Caldwell, 1997). Furthermore, those costs related to children do not only indicate monetary expenditures but also contain the time commitments (Hirschman, 1994). Owing to the industrial shifts, incorporating women as a wage labor is no longer superfluous. Since the percentage of women's work participation multiplies and the time of women has become a commodity within the market economy, the required time commitments to children are also seen as an impediment. All those things result in maintaining a smaller family size as a rational choice especially among urban population.

It is certain that those contextual variables are deeply connected to individual level variables, notably women's educational attainment. In fact, women with high educational attainments are inclined to have fewer children. Regarding this, three reasons can be raised. First reason involves information and knowledge. More-educated women know the way to seek their own interest and family plan since they are able to gain access to various information and concrete practices such as contraception and related necessary information; therefore they are less affected by husbands and other relatives (Lutz, 2014) . Furthermore, the percentage of female wage labor must be another important aspect. By referring to the case in East Asia, the proportion of female workers has expanded due to the industrial shifts; but that growth is in conjunction with the increase in women completing secondary and tertiary education (Jones, Straughan & Chan, 2009). This point indicates that the issue of

educational levels serves as an important clue to explain lower fertility in urban areas. That is because, not surprisingly, highly educated labor force is more likely to cluster in certain urban areas. A good example to be introduced is Bangkok. In spite of the fact that the largest segment of working population, 49.1%, is the people with primary education or below, 34.2% out of the total university graduates are concentrated in Bangkok. Of course, higher income levels in cities must be a magnet attracting and retaining such well-educated manpower; moreover, such people are more able and willing to have their children received quality education (Oizumi, 2009). Honestly said, the correlations among variables described above are not a surprise at all. It seems quite logical that shifts of industry and betterment of education are associated with the advance of urbanization. All of which lead to prescribing demographic conditions of cities ; but it is important to remember that, as previously touched, urbanization has the nature that it can produce a widening disparities in (re)distribution of resources and associated opportunities.

In sum, it can be claimed that fertility decline serves as an indicator showing the start of urban restructuring. This is because demographic transitions prompted through drastic fertility decline are not under way on a nation-wide scale but intensively evident in urban areas. Hence, changes of fertility rates should not be interpreted as a continuum trend spreading across a country. Rather, those are inherently linked to the dynamics of urban transitions. In this respect, national population statistics do not help to capture present and future states of cities correctly. This reality reaffirms that today's cities are not the places representing each country but being increasingly detached from such national boundaries where they used to belong to.

Prospective Lessons from Southeast Asian countries

Based on the discussion presented above, a critical question to be examined is related to the original nature of urbanization. That is, whether a conventional model of urbanization rooted in Europe and North America has been duplicated in Southeast Asia or not. In order to answer this question, a concrete analysis to specify characteristics of urban transitions -- demographic changes and urban growth in particular-- in Southeast Asia needs to be delivered. In short, Knox & McCarthy (2014, p.140) summarize the main point as follows: "in sharp contrast to the experience of the world's developed countries, where urbanization was largely an outcome of economic growth, urbanization in the less developed countries has resulted from demographic growth that preceded economic development." Their statement is indeed instrumental in figuring out existing issues that will be developed into serious challenges in Southeast Asia.

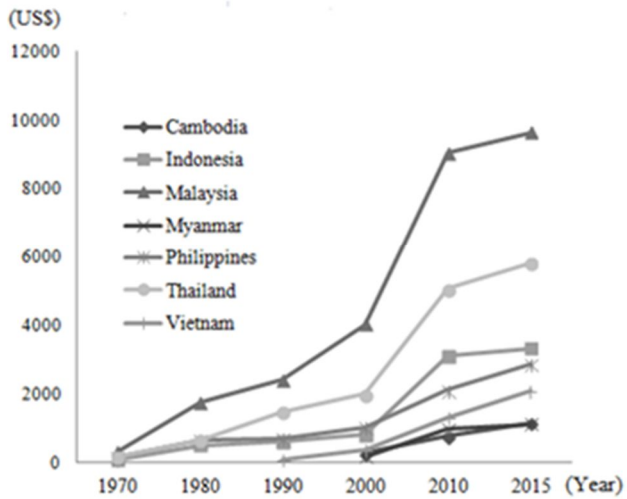
Out of all, the most pronounced characteristic in Southeast Asia is its abrupt acceleration. As Kato et al. (2013) mention, unlike other developed countries, there hasn't been enough time to undertake possible measures against fast-paced aging population because of galloping birthrate declines. In fact, as for the percentage of the elderly population whose age is over 65, it took 25 years in Japan to reach the level of 14% from 7%. Once it was known that Japan would be the fastest case; but, it is estimated that the shift of the percentage from 7% to 14% in some Southeast Asian countries will be achieved in much shorter periods: 20 years in Thailand and 17 years in Vietnam (Oizumi, 2015). Such a transformation definitely requires not only the reinvention of social policies and its public & welfare services but also the reconstruction of physical city designs catering to the change of urban morphology.

Nevertheless, in the matter of realizing those reorganizations, substantial amounts of financial resources have to be procured and retained in a very short span of time. Because of the difficulty in catching up with such a fast speed, deterioration of welfare and living standards start to be disclosed. This ordinary problem could be derived from a stereotyped image and discourse about the cities in developing regions. It is not necessarily true that cities in such regions are the places where destitute neighborhoods are scattered throughout the cities, leaving people deprived, idle and unproductive. Rather it is critical to understand that some of them are going to next stages similar to the situations of more developed countries. The reality is, even in developing countries, an increasing number of

households are likely to share the following characteristics: employed in modern sectors, high income, well-educated, fewer children, and nuclear form.

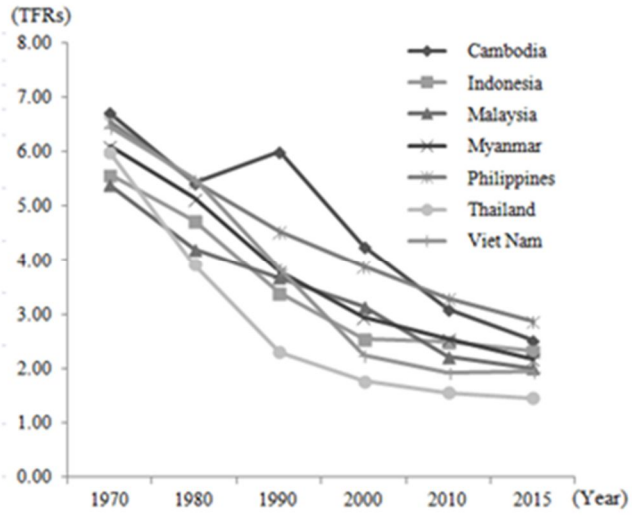
However, careful inquiries should be made to portray traits differentiating Southeast Asian from other developed forerunners. It is generally known in the world that fertility rates are negatively correlated with economic development (Kato et al., 2013). This hypothesis is possibly because economic development has been often initiated and promoted by the industrial shifts described above. That is why fertility declines have been usually forwarded in conjunction with urbanization and industrialization. It seems that Southeast Asian countries' experiences support the validity of such standardized formula. By comparing Figure 2 side by side with Figure 3, it is fairly apparent that declines of TFRs are associated with the rises in Gross Domestic Products (GDPs). Along with the advance in urbanization, those data suggest that income growth is connected with smaller family preference in favor of seeking the prospect of modern sector employment.

Figure 2: Changes of income, 1970 to 2015



Source: World Bank (2017)

Figure 3: Changes of TFRs, 1970 to2015



Source: UN-DESA (2017)[7]

[7] This source is custom data acquired via UN-DESA website: World Population Prospects: The 2017 Revision. Available at https://esa.un.org/unpd/wpp/.

Although the growth of GDPs per capita has great impacts on fertility, it might be skeptical to confirm the correlation. Two observations endorsing this question can be raised. First, even in the countries recording low GDPs, fertility declines have been identified. Myanmar is the best example in this sense. In 2015, while the GDP per capita in Myanmar was just $1,139, its fertility rate achieved the replacement level, 2.18 (World Bank, 2017). This is also applied to the case of Thailand. It is interesting to note that, in Thailand, the region recording the greatest fertility decline between 1965 and 1975 was the Northeast region, poorest in the country (Hirschman & Guest, 1990). What those figures suggest is that, fertility transitions in Southeast Asia do emerge regardless of a phase of economic development. This is possibly explained by the second observation: the periods when those changes occurred are not exactly coincided. Actually it is not necessary to have an absolute overlap between the two graphs. Given the points previously reviewed, it might be understandable as long as income growth comes up before fertility rates fall. However, as Figure 1 and Figure 2 exhibit, in Southeast Asian countries, fertility declines began ahead of rising income. In particular, special attention should be paid to the 1980s and 1990s since those times depict what happened in the real world. While many countries went through significant reductions of TFRs in the 1980s, comparably big boosts in income were monitored in the 1990s. Such evidence proves that TFRs in Southeast Asia went down akin to the levels of developed countries before experiencing economic development. It would not be a logical consequence under the assumption that income growth would be one of the prerequisites provoking fertility declines. Yet, this is a key to a proper interpretation of urbanization trends in many developing world: the advancement of urbanization continues without the development of industrialization in cities. When taken all together, it can be addressed that the synchronization between fertility and urbanization is not necessarily a phenomenon pertaining to industrialization and its subsequent economic development. As Sugaya (2012) mentions, fertility declines in developing countries may theoretically lead to heightening a potential of economic growth because ratios of working-age population go up due to the time lag in the decreases of mortality and fertility. Based on such understanding, facilitating fertility declines can be regarded as an important condition toward the promotion of economic development.

This kind of argument surely reflects the importance to explore the balance of impact between governmental initiatives and economic growth. According to the data shown above, the roles that policy interventions, namely family-planning program, historically have played are enormous to change reproductive behavior and decisions. In general terms, family-planning programs aim to enable women to limit their childbearing through the provision of information and access to contraceptives (Bongaarts, 2009). In view of that objective, such public schemes can be regarded as awareness-raising, educational efforts and this point offers a better grasp of why family-planning programs should target

people and communities in socioeconomically lagging areas rather than pursuing bigger achievements in a numeric manner. In practice, the study about sub-Saharan countries by conducted by Ezeh, Kodzi & Emina (2010) presents that the poorest urban married women in the bottom 20 percent are two and a half time less likely to use any contraceptive method in comparison to the ones in the richest 20 percent. The gist of their study is conducting an analysis on fertility dynamics by socioeconomic classes in the urban context. They say that the influences of urban poverty on fertility outcomes are still poorly understood because of the following reasons: (1) much of the related research have been conducted in reference to rural areas and (2) there might be an assumption that urban residence is more extensively subject to fertility regulation, a higher cost of rearing children, and better access to reproductive and other health services and information (Ezeh, Kodzi & Emina, 2010). These points again refer to in-city disparities that go beyond a traditional rural-urban dichotomy.

Such considerations pose two, somehow opposing questions. First concern is the effectiveness of public top-down initiatives in part to close the disparities; and second point is the efficiency of economic development at the level of subsistence. Although both are commonly recognized as crucial variables relating to fertility transitions, they are not always in stable equilibrium. Impacts of each variable totally depend on circumstances in a locality. More interestingly, it is often claimed that economic viability is indeed valuable, surpassing the effect of governmental schemes. This conception has been defended by the event that government policies can exert control over fertility for a temporal, initial period of time; but they might not be that influential on a continuous basis (Hirschman & Bonaparte, 2012). For example, as Sakata (2015) says in a broad sense, the rapid decline of TFRs in Vietnam is a result championed by Doi Moi, economic liberalization reform initiated in 1986, since cutbacks in public expenditures through the liberalization policies lead to an increase of private child-rearing costs. Furthermore, in the case of Vietnam, maintenance of high annual economic growth at 7% even after the Asian Currency Crisis in 1997 would be another factor (CIA, 2004). From those points, economic-based principles exercise great effects on lowering fertility rates, although favorable cultural and political conditions do exist in Vietnam[8]. In keeping with the discussions so far, it can be assumed that the prevailing climate of neo-liberalism from the 1980s should be regarded as one of the covert catalysts to fertility declines. Urban areas are the place where fertility transitions are likely to appear intensively because they are more subject to the adoption of monetized systems.[9]

[8] For example, penetration of Buddhism beliefs which do not impede any kind of modern contraception (Myint, 1991) and strong political commitments were facilitated by adopting Vietnam Population Strategy 2001-2000 (VCPFC, 2001).

[9] Points raised in this paragraph shall counterwork under certain circumstances. Based on the research on Singapore, Maruo and So (2017) presume that, in order to overturn low birthrates, continuous GDP growth per capita is more effective compared to the measures against

Despite a prevailing fashion of promoting social development, economic growth is a fundamental condition to heighten cities' sustainable capacity. This notion will gain more significance in this ever-urbanizing era. Economic growth would widen the gap between haves and have-nots within cities; but it might contribute to narrowing unjust disparities if profits are correctly to be redistributed. Nevertheless, before taking about the need of redistribution, the problem of distribution has to be deliberated and mitigated. In order to do so, it is necessary to think about what kind of "economy" needs to be created and developed. In the efforts to figure out the "economy," extensive and elaborate analyses on demographic compositions of the time are critically entailed. This is because employment opportunities should be facilitated consistent with the changes of demographic compositions. During the phrase when a huge pool of young productive population exists, development of labor-intensive industries is the most compelling option. Conversely, in the case of a city encountering aging labor force, reconsidering industries adequate to the population will be essential. This point evidently posits a serious challenge that urban planning has to tackle: building physical economic environments that enable the achievement of social sustainability.

Concluding Remarks got Coming Research Agenda

In accordance with a growing velocity of urbanization, demographic compositions of contemporary cities are undergoing a striking transformation. Once it was believed that cities in developing countries had a great accumulation of young poor migrants living under overcrowded, chaotic urban environment. However, as discussed throughout this research, such a stereotyped image of third-world cities will be no longer effective. As the examples of Southeast Asia show, some of them have been moving through the stages of change, which necessarily require restructuring not only economic and social bases but also physical designs of cities. Hence, development goals related to cities must deliberate the current feature and state of urban morphology in each locality. Additional point to bear in mind is, demographic compositions vary surprisingly according to different socio-economic groups even within a city itself.

At the end of the report, there are two research points that the prospective study should consider. First, research on urbanization from a demographic perspective does require an inclusion of geographic, space-based analysis. This is because many primate cities tend to expand its territories beyond their administrative boundaries. In effect, once it was a city, it has been transformed into a mega-urban region, which encompass extensive

falling fertility like public child-care support. This is because subsidies and incentives given through the public schemes are basically kept at the same level, not incrementally increased in proportion to economic development. From this, a contradictory formula can be also noted: economic growth will work as a favorable ingredient to improve declining TFRs, especially in a low-birthrate country achieving a substantial level of economic development (Maruo and So, 2017) . As a matter of fact, even in Europe, the implementation and effectiveness of public-driven measures have been difficult to ascertain (UN-DESA, 2013).

areas where do not officially belong to the cities. That is to say, today's city, which is sometimes better called as a broader urban region, can be broken into several spatial zones and each zone has its own demographic characteristic. For example, in their research on urban regions in Asia Pacific, Jones & Douglass (2008, p.7) note that "while the inner zone tends to be the area of new middle class prosperity in the form of gated communities and shopping malls, outer zones tend to fall behind municipal boundaries and lack even the most basic urban infrastructure despite the large urban population increases they are experiencing." Like this, extended cities nowadays are not a mono-centered structure but polynuclear having different spatial zones. Therefore, not applying uniformed planning approaches but formulating the ones customized according to socio-economic profiles of the population is desperately required to create a sustainable living environment for every city dweller.

Second concern is more grounded into the aspect of global movement of people, which means the unparalleled growth of international migration. For the last several decades, the phenomenon of heterogeneity and multicultural populations has gradually become prevalent even throughout Southeast Asian cities. Contemporary international migration is different from conventional models in terms of direction and composition. With respect to direction, a customary paradigm of migration was explained by south to north directions. However, in fact, south-to-south migration accounts for more than half of cross-border migration (Castles & Miller, 1994). Accordingly, a nation, often conceived of as a labor exporter, is both a receiving and a sending area like Malaysia: major outflow to Singapore and large inflow from Indonesia and Southern Thailand (Stalker, 1994). It is important to mention here that some predominant reasons of prompting international migration are negative population growth by low fertility rates, growing old-age populations, and depletion of reserves of flexible domestic labor in hosting countries (Sassen, 1994; Stalker, 1994; Abella, 1995; Douglass, 1999). In those views, some Southeast Asian countries such as Thailand hold a much larger potential to become hubs of international migrants more than now. Diversification of the types of urban population including foreign migrants surely challenges how to accommodate various people with different backgrounds and implement social and physical planning of cities. Furthermore, migrants to date are not necessarily limited to legal and permanent ones; the scale and scope of illegal migration also keep enlarging. So the challenge definitely extends to the issues of new comers who don't have a proper residential status.

Concerns described above pose that urban planning in this century is required to integrate socioeconomic development and physical city designs to accommodate demographically and culturally heterogeneous societies. In order to formulate desired urban planning, a coming research subsequent to this should revisit and scrutinize arguments, research points, and challenges that this report outlines.

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