## Living Arrangements of Older Persons in East Java, Indonesia

Contrary to the hypothesis, the percentage of older persons co-residing with the children was found to be higher in districts with more advanced stages of economic development. In rural areas, older persons were, by contrast, more likely not to co-reside with their children.

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As in many other Asian countries, norms regarding family life in East Java have changed and will continue to change with the forces of globalization. Family structures used to be the pillars for the support of children and older persons. However, the declining fertility, rising mobility and rising female labour force are changing as are norms regarding the family. Therefore, the question arises as to who and how will the society finance the care of its elderly?

Study of the pattern of living arrangements of older persons is very important in order to examine how dependent these elderly are upon their offspring and how

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strong this support system still is. It would also provide some information regarding the need to introduce institutionalized care for older persons. Yet, the idea of institutionalization of older persons seems to remain a taboo in Indonesia as the family is still seen as playing an important role in providing support for its members. This does not mean that there is no such institution providing support for older persons in the country. However, in this paper, the discussion on living arrangements for older persons is restricted to arrangements within the family and does not include arrangements with other institutions.

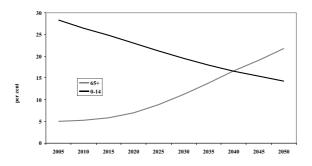
In the last decade, there have been few studies on living arrangements of the Indonesian elderly, such as Frankenberg, Beard and Saputra (1999), Cameron (2000), Beard and Kunharibowo (2001), Keasburry (2001), Frankenberg, Chan and Ofstedal (2002) and Schroder-Butterfill (2003). Some of them are limited in their geographical coverage while some others are small case studies. Beard and Kunhariwibowo examined the connection between living arrangement and support relationship from 20 cases in urban and rural areas of Java and Sumatra, focusing upon two distinct sociocultural groups: the Javanese and the Batak Karo.1 Keasburry's study2 focused on the rural Javanese in Yogyakarta and selected two different villages (297 respondents aged 55 years and above) in order to compare the different impact of migration, prosperity and agricultures possibilities on elderly care. Another study about the Javanese elderly by Schroder-Butterfill (2003) focused on the Javanese elderly living in a village in the regency of Malang, East Java. According to yet another study by Badan Pusat Statistik (2001), the Javanese's three home provinces of Yogyakarta, Central Java and East Java have reached below-replacement levels of fertility. Other studies utilized the Indonesia Family Life Survey, which covers 13 provinces and represents 83 per cent of the Indonesian population. However, the sample of this particular survey was not designed to gather sufficient information from small areas such as districts.

By contrast, the sample of the 2002 National Socio-economic Survey (SUSENAS), which forms the basis for this paper, allows the estimation of statistics which are representative at the district level. Relying on those data, this paper examines and compares the living arrangements of older persons taking into account differentials in their socio-demographic factors among the three selected districts of the province of East Java, at different stages of economic development. This paper also explores the hypothesis that the more "modern" an economy or the household is, the less likely elderly parents are to stay with their children. The paper also discusses the possible factors influencing living arrangements of older persons derived from other research findings. The data set is described before the discussion on the findings of this study. The paper ends with a concluding section.

#### Trends and context of population ageing in Indonesia and East Java

The Indonesian archipelago contained a population of 205.8 million people in 2000 consisting of various ethnic groups. The proportion of older persons aged 65 and above increased from 2.5 per cent in 1971 to 4.5 per cent in 2000 (Suryadinata, Ananta and Arifin, 2003). As shown in figure 1, the process of ageing in Indonesia, as in some other South-East Asian countries, is just beginning to accelerate. It was projected that this figure would grow to about 7.0 per cent in 2020 based on scenario 1 of Ananta, Arifin and Bakhtiar's study (2005). Furthermore, the proportion of older persons in 2040 will probably be more than double that of 2020 and exceed the proportion of young persons aged 0-14 years in 2040. In terms of absolute numbers, older persons increased from being nearly 3.0 million in 1971 to 9.1 million in 2000. Ananta, Arifin and Bakhtiar (2005) project that their number will increase to 10.7 million in 2005 and to 17.5 million in 2020, before reaching 47.4 million in 2040.

Figure 1. Percentages of elderly and young persons: Indonesia, 2005-2050



Note: Data compiled from scenario 1 in table 4 (Ananta, Arifin and Bakhtiar, 2005)

Indonesia is a very large country with various stages of development. It is not surprising, therefore, that stages of population ageing also varies among regions (Ananta, Anwar and Suzenti, 1997a) and ethnic groups (Ananta, Arifin and Bakhtiar, 2005) within the country. Table 1 shows that the Javanese is the oldest among the five largest ethnic groups in Indonesia3 and will continue to be the oldest at least until 2050.

Based on the 2000 population census data set, the province of East Java was one of the provinces having a high percentage of people aged 65 and over (6.0 per cent). The percentage was even larger in some districts of the province (see figure 2). Further, as seen in figure 2, the higher ageing proportion was concentrated in

the western part of East Java, while the proportion became smaller as it moved to the eastern part of the province. The two oldest districts (with the percentages of people aged 65 and over exceeding 10 per cent of the population) were the regencies of Pacitan (10.1 per cent) and Magetan (10. 1 per cent). The lowest one had already been as low as 3.6 per cent in the city of Surabaya, the second largest city in Indonesia, in which migrants accounted for a significant portion of the city's population and where fertility has dropped to below replacement level. Furthermore, the absolute number of older persons, and its related social and economic conditions, is another crucial issue in Indonesia in general, and in East Java in particular. As mentioned earlier, the number of older persons aged 65 and above reached 9.1 million in Indonesia as a whole and 2.1 million in East Java in 2000. In other words, elderly in East Java accounted for 23.1 per cent of the total Indonesians elderly. Furthermore, among districts in East Java, the elderly living in the three selected districts (Pacitan, Malang, and Surabaya) accounted for about 14.1 per cent of the entire elderly population in the province.

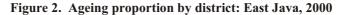
Ethnic group	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
				Sce	enario 1					
Javanese	5.97	6.34	7.02	8.44	10.79	13.93	17.22	20.54	23.55	26.81
Sundanese	5.03	5.02	5.59	6.62	8.43	10.83	13.46	16.44	19.15	21.75
Malay	3.25	3.46	3.95	4.87	6.36	8.23	10.12	12.52	15.08	17.78
Batak	3.43	3.76	4.27	5.19	6.58	8.24	10.05	11.93	13.84	16.49
Madurese	5.81	6.20	7.10	8.34	10.14	12.41	14.47	17.15	19.14	21.85
Others	4.12	4.32	4.93	5.83	7.27	9.10	11.20	13.68	15.81	18.12
				Sce	enario 2					
Javanese	5.97	6.32	6.96	8.29	10.50	13.40	16.36	19.22	21.68	24.20
Sundanese	5.03	5.01	5.53	6.50	8.21	10.43	12.80	15.40	17.65	19.66
Malay	3.25	3.45	3.92	4.80	6.21	7.96	9.68	11.81	14.01	16.25
Batak	3.43	3.74	4.20	5.04	6.29	7.72	9.19	10.61	11.93	13.71
Madurese	5.81	6.18	7.03	8.18	9.84	11.87	13.60	15.78	17.20	19.09
Others	4.12	4.31	4.89	5.76	7.12	8.84	10.78	13.01	14.83	16.74

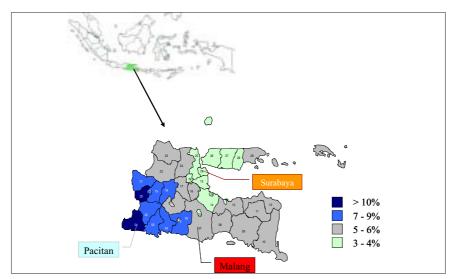
Table 1. Ageing proportion by ethnicity: Indonesia, 2005-2050

Source: Ananta, Arifin and Bakhtiar, 2005.

Note: Ageing proportion refers to the percentage of those aged 65 and above to the total population.

East Java has significantly reduced its mortality and fertility rates. Data show that the life expectancy at birth increased by 15 years within three decades, from 50 years in 1967-1971 to 65 years in 1996-2000 (Badan Pusat Statistik, 2001). This rate and the trend in its change are similar to those at the national level. At the same time, its fertility decline had been impressive compared to the one in many other provinces in Indonesia. The province's TFR dropped more than twice within the same period from 4.7 in 1967-1971 to 1.7 in 2000-2005 (Badan Pusat Statistik, 2001). East Java has reached below replacement level since the early 1990s and its TFR stood at 1.7 in 1996-1999, only slightly above Singapore's TFR which stood at 1.5 in 1998 (Saw, 2005). Therefore, demographically, East Java has been at an advanced stage.





This demographic revolution can be explained partly by the successful implementation of family planning programmes. The success in reducing both mortality and fertility has turned this province into one of the oldest of Indonesia; a position that it will remain at least until 2020 (Ananta, Anwar and Suzenti, 1997a). In other words, the province of East Java can be compared to European countries and to a few Asian ones such as Japan, Singapore and the Republic of Korea, in terms of attention required to be paid to the needs of the ageing population.

Urbanization and migration are part of the globalization process. In 2005, the urban population accounted for 48.3 per cent of the total population. It is projected that the urbanization rate in Indonesia will continue to increase and will reach at least 55.2 per cent in 2020, an increase from 30.9 per cent in 1990 (Ananta, Anwar and Suzenti, 1997b). Indonesians are also on the move and are becoming more educated. Some studies have indicated that urbanization and migration may lead to an abandonment of older persons in rural areas as their children migrate to cities or to other countries. Moreover, female participation in the labour market will also increase significantly, rising from 38.1 per cent in 1990 to 54.2 per cent in 2020 (Ananta and Anwar, 1995). This more widespread female participation in the labour force may lead to a decrease in the number of potential caregivers available in families.

Alike in other developing countries, the ageing process in Indonesia as a whole and in East Java in particular, is occurring much faster than the one in most developed countries. By contrast, the economic development of East Java has not been as advanced as other countries when they themselves started facing population ageing. The East Java's per capita gross regional domestic product was only US \$ 7014 in 2002. Therefore, East Java is growing old before getting rich.

Growing old before becoming rich is particularly problematic. Such a fast pace of ageing has serious consequence: for East Javanese fa illies because public institutions, such as social security and health system, have not been fully prepared to support this growing elderly population. However, some progress has been made. As described in Arifianto (2006), on 28 September 2004, the Indonesian House of Representatives (Dewan Perwakilan Rakvat) passed the law on the National Social Security System (Undang-Undang Sistem Jaminan Sosial Nasional). It became a public law (No. 40/2004) the following month, on 19 October 2004. The distinguishing feature of this new law is its mandate on the creation of several social security schemes for Indonesian citizens: old-age pensions, old-age savings, national health insurance, work injury insurance, as well as death benefits for survivors of deceased workers. The schemes were to be financed through the payroll tax mostly from the formal sector. Law No. 40/2004 implies that the existing social security programmes were to be expanded to cover not just those employed as civil servants and private formal-sector workers, but eventually also those working in the informal sectors. More concretely, the law stipulates that the social security scheme would also cover the informal sector and the poor. Nevertheless, the traditional family support system that has been the main provider of old-age income security to this day in Indonesia was not included in the above-cited law.

#### Factors influencing living arrangements of older persons

Factors such as family size and structure, economic well-being, health status of older persons and cultural tradition, as well as norms are some of the possible factors influencing living arrangements of elderly. Furthermore, whether older persons will co-reside with their children can be determined to some extent by examining the costs and benefits of co-residence, opportunities and preferences. Based on existing studies, some reasons explaining older person's preference to live with their offspring are also presented below.

#### Why would older persons prefer to stay with their offspring?

Co-residence with children offers a range of benefits from companionship and emotional support to the fulfillment of the physical and financial needs of both parents and children. Because spouses tend to be in a spatial proximity and to have cultivated long-term ties and commitments, studies have demonstrated that married parents were less likely to co-reside with their children (Natividad and Cruz, 1997; Cameron, 2000). In this respect, men were favoured because wives were generally younger and socially prepared to take care of others. By contrast, the benefits of being married for women were much less apparent because husbands tended to be older and therefore wives were generally the main source of care for women. Keasburry (2001) showed that, in rural Yogyakarta, 70.4 per cent of male elderly lived with their spouses and others, while only 32.8 per cent of female lived in such an arrangement.

Co-residence between elderly parent and children may allow for mutual financial support or domestic services. If the children live with their parents, they may be able to provide goods and services that their parents would have had to purchase. This may be especially important for those who are in poor health. The argument is that poor health status and disability decrease the likelihood of living independently at older age and increase the likelihood that a parent co-resides with a child (or sibling). Studies have demonstrated that, rather than a linear shape, the age patterns of co-residence with children follows a U-shape curve. In other cases, the associated with co-residence when health status is controlled for (DaVanzo and Chan, 1994). Generally it is assumed that poor health and disability trigger parents to move into children's households or induce their children to move into the parental house. The market care that could be an alternative to parental care is not always available, accessible, nor affordable. Therefore, in many circumstances, relatives, particularly children, are the only potential caregivers because the option

of buying services from the market is prohibitive for most families. This is particularly true in developing countries where services provided by Governments are so limited and precarious that families have no option other than providing themselves the necessary care for their elderly relatives.

Health status can be a result rather than the cause of specific living arrangements. For example, parents co-residing with their children, receiving emotional support may feel less lonely and thus be less prone to depression than those living alone; similarly those parents who were sick might have decided to move into their children's home.

Co-residence can also minimize the cost of living and therefore both parents and children can save money. The case for minimization of cost of living can be made in many developing countries, especially in areas where housing costs are very high and increasingly so. Studies have shown that in Asian countries such as the Republic of Korea co-residence with children is more prevalent in urban areas than in rural areas (Kim and Choe, 1992; Kim and Rhee, 1997). Housing shortages in urban areas might motivate co-residence, whereas in rural areas, children's out-migration might lessen the opportunity for co-residence. Land availability in rural areas made it easier for elderly to remain in a separate house, although children might live nearby. Schroder-Buttterfill (2004) pointed out, nevertheless, that the availability of children was not a guarantee for an adequate support.

By contrast, as mentioned earlier, co-residence may have some disadvantages for both parents and children. Co-residence with children can be viewed as a loss of privacy. With a larger income, people can afford to buy and enjoy privacy in independent living arrangements. Vast empirical evidences support the premise that higher income is associated with independent living. In other words, extended living arrangements can be seen as a means to obtain economies of scale or to exchange services. However, in some cases, higher income persons are associated with less co-residence.

There are problems with this view however. First, some literatures provide a measure of the effect of income on the probability of living alone (or co-residing), but they do not specify whether those living alone would be better off if they were co-residing nor whether those co-residing with children would be better off living alone (Palloni, 2000). Another problem is that the use of the economic approach frequently neglects the fact that household composition is influenced by cultural factors, while individuals in different societies may evaluate privacy and companionship differently. Ties that link generations can become weaker as a result of the increased individualism that generally accompanies the modernization and urbanization processes. In fact, it has been demonstrated that household

composition differs considerably across cultural and racial groups. Being Malay in Malaysia reduces the probability of living with children (Da Vanzo and Chan, 1994) whereas being religious in the Republic of Korea is associated with a higher probability of preferring separate residence (Kim and Rhee, 1997).

Da Vanzo and Chan (1994) mentioned that "opportunities" may affect decision to co-reside. Family size and structure may also play important roles. Childless older persons – whether de facto or de jure – are more likely to co-reside with others, either relatives (nieces/nephews) or maids. Studies have shown that in many Asian countries, older persons living alone represent consistently the smallest proportion of living arrangements (Cameron, 2000; Keasburry, 2001; Frankenberg, Chan and Ofstedal, 2002). Adopting or acquiring a grown-up child is rather common among childless people in South-East Asia and adoption is considered an ideal solution although it rarely comes without problem (Schroder-Butterfill, 2004).

No doubt that the availability of children constrains the set of possible living arrangements. Studies in general support the view that the number of living children is positively associated with the probability of living with (a) child(ren) and negatively associated with living alone (Natividad and Cruz, 1997; DaVanzo and Chan, 1994; Keasburry, 2001). The idea has been that more children increase the chances that at least one child will be willing to help a parent and that a higher numbers of sibling increases the chances that two or more of them will share the provision of care. A child's gender and/or marital status may be important as well. In western countries, daughters are much more likely than sons to co-reside with their parents and to provide care for them. However, the opposite may be true in some non-western countries. In Malaysia for example, sons are expected to be responsible for taking care of their parents (DaVanzo and Chan, 1994). Among the Javanese in rural Yogyakarta, older persons appear to have a preference for co-residing with their sons.

Fertility decline in the past has raised issues regarding the potential decline of co-residence among elderly parents and their children. The high number of living children among the present generation of older people actually facilitated co-residence in the recent past. However, given the current fertility decline and the increased life expectancy, the availability of caregivers for elderly parents is expected to decrease. Therefore, the decrease in the number of children may pose constraints on co-residence between generations. Yet, childlessness, as explained by Kreager (2004) is not adequately measured by reported data on the number of children ever born. Industrialization and urbanization processes, which increase spatial mobility, tend to further decrease the availability of children.

Modernization is also associated with a higher participation of women in the labour force. Since daughters (alike daughters-in-law) are the main source of care for their parents (and stepparents), the modernization process is likely to have an effect on intergenerational transfers.

### Analysis of data

This study utilizes the 2002 Indonesia National Socio-economic Survey data set, known as 2002 SUSENAS, regularly conducted by the BPS (Indonesian Central Board of Statistics) and designed to collect information on demographic and socio-economic aspects of the population. This study limits its focus to three districts in the province of East Java, as shown in figure 2.5 These districts are selected in order to compare different impact of macro-geographical variables such as migration, urbanization and per capita income (gross regional domestic product).

The regency of Pacitan is selected to represent the elderly living in the area described as "Old before Rich". Pacitan is the oldest regency in the province with 10.1 per cent of its population aged 65 years and above. Moreover, its urbanization rate was only of 11.0 per cent in 2000, while its per capita regional gross domestic product stood at 1.9 million rupiah (1USD = 9,000 IDR) (or US\$ 208) in 2002, making this regency the poorest and "less modernized" in the province. These conditions are certainly among the push factors for its population to out-migrate. The 2000 population census data show that out-migration from Pacitan to other districts within the same province is about 5 per cent.

Pacitan is completely in contrast with the city of Surabaya, the capital city of the province, which has a 100 per cent urbanization rate. Surabaya is just like other big cities, attracting migrants from surrounding areas. It is considered as the second biggest city in Indonesia and migrants account for a significant proportion of its population; 18.3 per cent in 2000 (Ananta, Arifin and Suryadinata, 2004). Surabaya's per capita gross regional domestic product in 2002 stood at about 23 million rupiah (or US\$ 2,560). It is the second richest district after the regency of Kediri in East Java. Fertility in Surabaya has already reached below replacement level, but its population has not been ageing. The proportion of older persons was still as low as 3.6 per cent in 2000. The youth of Surabaya's population, despite the city's low levels of fertility and mortality, is due to a high influx of migrants.

Finally, the regency of Malang, a district in transition, was also selected for the study. It had an urbanization rate of 39.4 per cent in 2000, while the migrants coming to this regency accounted for 6.7 per cent of its population. In 2002, Malang's per capita gross regional domestic product stood at 4.2 million rupiah

(US\$ 467), which represents twice Pacitan's income but is much lower than that of Surabaya.

For the analysis, the selected sample includes persons aged 60 years and above. The weighted count is used for the analysis of differentials in living arrangement of older persons so as to capture representative figures for each of the districts. This study analyses living arrangements and well-being of 83,866 older persons in Pacitan, 258,934 in Malang and 189,013 in Surabaya.

Living arrangements are defined here based on the information regarding the relationship of the various household members to the head of the household since most censuses and surveys are household-based and information is collected only for those living in the household. It is then categorized into three groups: older persons living with children, older persons living in a child's house and older persons living without children. The category "older persons living with children" encompasses elderly co-residing with at least one child and functioning as head of the household. This includes older persons living with a spouse and (a) child(ren), as well as older persons living with a child(ren) but without a spouse. Child or children are defined in the broad sense which can include grandchildren. If older persons live with children and are the parents or parents-in-law of the head of the household – not the head of the household themselves – this arrangement is categorized as older persons living in a child's house. In this particular arrangement, the children reciprocate the parents, who used to take care of them as children. The last group is that of older persons sharing a household with others. In this case, elderly can either be head of the household or members of the household. There is no gender division between son and daughter in this arrangement because numerous older persons live with more than one child. Therefore, the first two categories can be descr bed as co-residence with (a) child(ren) or co-residence in multigenerational household. The last group can be a quasi-co-residence, where the elderly parents live on their own but in close proximity to their children or other kins. However, it is not possible to report this quasi co-residence as there is no information available on children or other relatives living outside the household and the relative proximity between the residence of the parents and that of the children or other kins. It should be then noted that the more complex the exchange and network of support between elderly parents and adult children the less information can be provided by the SUSENAS.

Some of the socio-demographic and economic factors which have a bearing on the living arrangements of older persons include age, gender, marital status and employment status.

## **Findings**

### Description of the data

In this study, older persons, aged 60 years and above, comprised 16.2 per cent of the population in the regency of Pacitan, 10.8 per cent of the population in the regency of Malang and 7.3 per cent of the population in the city of Surabaya. Young elderly, aged 60-64 years, accounted for about 30 per cent of the total elderly in the regency of Pacitan, 33.9 per cent in Malang and 40 per cent in Surabaya, respectively.

As in many other countries, female older persons outnumbered male elderly in the regencies of Pacitan and Malang. By contrast, in the city of Surabaya, the numbers of female and male are similar. The majority of older persons were married (56.0 per cent, 61.6 per cent and 65.5 per cent in Pacitan, Malang and Surabaya, respectively) and some were widowed (40.2 per cent in Pacitan, 36.3 per cent in Malang and 30.8 per cent in Surabaya). A small percentage of older persons were divorced and an ever smaller percentage of them were single.

In rural areas, where agricultural-based jobs were the only viable options, it could be expected that older persons easily find opportunities to continue working. As shown in Pacitan, 66 per cent of older persons indeed worked the majority of them in agriculture. This was in contrast to Surabaya where only 33 per cent of older persons worked, many of them in trading (retail businesses).

#### Living arrangements

Table 2 shows that in all districts, the majority of elderly co-resided with at least one child. In Pacitan, 57 per cent of older persons co-resided with (a) child(ren), while in Malang and Surabaya 69 per cent and 70 per cent, respectively, did. It is interesting to examine the role played by older persons when living in such an arrangement. In Pacitan, the role they played was evenly divided between "own household" (as head of the household, assuming that children were perhaps still supported by their parent), and "live in child's household" (as dependent, living with the children, themselves playing the role of head of the household). This division was important and pointed out to the existence of reciprocity in parent-child relations. However, in Malang and Surabaya, the percentage of older persons housing their children in their own household was much higher than that of those living in their child's household. It appears that data from the survey did not support the hypothesis that living in more urbanized areas prevented older persons from living with their children.

in East Java by Sex. 2002							
	]	Living arrangement					
	Own household	Child's household	Without children	Tota	41		
Pacitan							
Male	36.90	16.93	46.17	100.00	46.4		
Female	21.64	38.56	39.80	100.00	53.6		
Total	28.72	28.52	42.76	100.00			
Malang							
Male	64.24	10.09	25.68	100.00	42.8		
Female	35.33	30.24	34.43	100.00	57.2		
Total	47.70	21.61	30.68	100.00			
Surabaya							
Male	62.42	6.06	31.52	100.00	50.3		
Female	50.31	21.47	28.22	100.00	49.7		
Total	56.40	13.72	29.88	100.00			

## Table 2. Living arrangement of elderly people in 3 selected districtsin East Java by sex: 2002

The percentage of older persons living without children – whether alone, with spouse only or with others – varied from 30 per cent in Surabaya to 43 per cent in Pacitan. The percentage of elderly living both alone and with spouse accounted for 24 per cent in Surabaya, 25 per cent in Malang and 34 per cent in Pacitan. The finding of the high level of childlessness among older persons in East Java should be viewed in the wider context of the historical pattern of fertility in Indonesia. From the 1971 Indonesian census, it was shown that East Java had the highest percentage of childless women among ever married ones aged 30 years and over (as quoted by Schroder-Butterfill, 2004 from Tukiran and Hull, 1976). Another possible explanation is the high level of out-migration from this regency.

In terms of gender differences in the case of co-residence with children, as shown in table 2, there is a similar pattern among the three selected districts; older women tend more frequently to live in a child's household than do male elderly. Also, living in their own household with their children, male elderly were more likely to retain the position of head of household as compared with females. This indicates that women tend to benefit more from co-residing with their children, while men may not to inspire the same level of loyalty. In Malang, the male elderly burden was higher than that of female: 64.2 per cent of them remained head of the household when living with their children, as compared with 35.3 per cent of female. Gender difference in the living arrangements of older persons was

probably contributed by gender differences in some basic demographic and social characteristics.

		T-4-1				
	Own household	Child's household	Without children	Total		
Pacitan						
60-64	43.23	13.21	43.57	100.00	29.5	
65+	22.65	34.94	42.42	100.00	70.5	
Malang						
60-64	58.05	16.01	25.94	100.00	33.9	
65+	42.39	24.49	33.12	100.00	66.1	
Surabaya						
60-64	65.12	7.75	27.13	100.00	39.3	
65+	50.75	17.59	31.66	100.00	60.7	

# Table 3. Living arrangements of elderly people in 3 selected districtsin East Java by age: 2002

## Table 4. Living arrangement of elderly people in 3 selected districtsin East Java by marital status: 2002

	I									
	Own household	Child's household	ousehold Without children		Total					
Pacitan										
Single			100.00	100.00	0.3					
Married	36.60	12.83	50.57	100.00	56.0					
Divorced	17.18	17.18	65.63	100.00	3.5					
Widowed	16.17	55.92	27.90	100.00	40.2					
Malang										
Single			100.00	100.00	0.3					
Married	66.99	4.96	28.05	100.00	61.6					
Divorced	15.48	30.93	53.59	100.00	1.8					
Widowed	23.97	44.17	31.86	100.00	36.3					
Surabaya										
Single			100.00	100.00	1.2					
Married	65.58	2.79	31.63	100.00	65.5					
Divorced	37.50	25.00	37.50	100.00	2.4					
Widowed	40.60	36.63	22.77	100.00	30.8					

A similar pattern was found in all districts where the pattern of living arrangement differed by age group (table 3). The percentage of those living with children and playing the role of head of the household was higher among younger elderly, aged 60-64, than among older ones. Moreover, living in the child's household was associated with older age and might have occurred as a result of widowhood, financial, physical and emotional constrains, etc. The effect of widowhood on living arrangements of older persons became clearer with the results presented in table 4. In all districts, a widowed elderly was more likely to live in his/her child's household than a married or divorced one.

#### Participation in the labour market

In general, older persons in Indonesia were still economically active in the labour market. In most of the regencies, more than 50 per cent of them are still working (Arifin and Ananta, 2004). These older persons might work because of economic necessity – if this were to be true, the number of elderly working in regencies would be more than that in cities. If older persons worked not because of economic necessity, then the numbers in the regencies would be lower than that in cities. The results presented in table 5 show that the percentage of older persons working in the regency of Pacitan was higher than that in the city of Surabaya. A possible explanation for this disparity was that elderly in urban areas were likely to work in informal sectors, where there is not retirement age. Furthermore, in rural areas, agricultural sector is always open to people willing to work.

		T-4-1				
	Own household	Child's household	Without children	Total		
Pacitan						
Working	33.29	18.21	48.50	100.00	66.21	
Not Working	19.79	48.72	31.49	100.00	33.79	
Malang						
Working	53.57	8.16	38.27	100.00	46.81	
Not Working	42.54	33.45	24.01	100.00	53.19	
Surabaya						
Working	57.01	4.67	38.32	100.00	32.62	
Not Working	56.10	18.10	25.79	100.00	67.38	

#### Table 5. Living arrangement of elderly people in three selected districts in East Java by employment status: 2002

A similar pattern was found on the relationship between employment status and living arrangements of older persons. In all districts, the working elderly were more likely to live without children than non-working ones. Table 5 also shows a similar trend: non-working elderly were more likely to live in their child's house than those working.

#### Conclusion

Three different districts were selected in this study so as to capture a range of demographic and socio-economic conditions and assess their impact on the living arrangement and well-being of older persons. The regency of Pacitan is home to the oldest population in the province of East Java, having a percentage of persons aged 65 and above which neared 10.1 per cent in 2000. Pacitan is also the poorest district in the province as it has the lowest per capita gross regional domestic product and urbanization rate. Thus, Pacitan has "become old before getting rich". By contrast, the city of Surabaya is fully urbanized and is the second largest city in Indonesia. However, the proportion of older persons is the lowest (3.6 per cent) in the province as a result of the big influx of migrants. The per capita gross regional domestic product of Surabaya is the second highest in the province. Unlike Pacitan, Surabaya has "become rich before getting old". On the other hand, the Regency of Malang is a district in transition. The ageing proportion, urbanization rate and per capita gross regional domestic product lie between those in Pacitan and Surabaya. Malang's urbanization rate is approaching 50 per cent and its per capita gross regional domestic product is about twice that of Pacitan.

It was hypothesized that as developing countries continue to modernize (becoming increasingly industrialized and urbanized), the proportion of adult children co-residing with their ageing parents would diminish (Nitividad and Cruz, 1997; Cameron, 2000). The paper finds that the majority of older persons in Indonesia co-resided with their children, although parents' role in the household varied according to districts. Contrary to the hypothesis, the percentage of older persons co-residing with the children was found to be higher in districts with more advanced stages of economic development (such as Malang and Surabaya). In rural areas, older persons were, by contrast, more likely not to co-reside with their children.

The cost of housing might be one of the explanations for this disparity. Young adults in an urbanized district such as Surabaya might find it difficult to own a house and therefore may continue to live with their parents. The results (not presented here) also showed that nearly every household in Pacitan owned at least a piece of land, whereas in Surabaya very few did (10 per cent). In the inheritance system, the land would be inherited by the children who get married first. In addition, nearly every household in Pacitan owned a house while in Surabaya the

percentage of ownership of a house was smaller. People's lives were also generally busier in the district with a higher stage of economic development and, as a result, people may opt to live together. It seems that urbanization did not always prevent older persons from co-residing with their children although Indonesia does not have any financial incentives in place to encourage co-residence with ageing parents as is the case in Singapore.

In Pacitan, older persons were found to be either the head of the household or a dependent in their children's home. In more urbanized areas, the picture is different as most elderly appeared to play the role of head of the household. In Surabaya, 56 per cent of older persons co-resided with their children and retained the status of head of the household while in Malang, only 48 per cent of them did. In other words, young adults in Malang and Surabaya might still be financially dependent on their elderly parents. This highlights parents' altruistic behaviour and role as they provide housing for their children in rather costly urban areas.

In all districts, the percentage of persons living without children was greater among those who were working than that among those not working. It suggests that living independently appeared more attractive to those older persons still actively participating in the labour market. In addition, higher levels of income might be associated with a greater tendency not to co-reside with children.

The pattern of living arrangements of older persons may remain the same in the next few years. In other words, kin availability or familial support would continue to remain an important factor of living arrangements of the elderly. Despite the pressures of globalization, family structures have endured in the three districts surveyed in this paper and, by and large, older persons have been looked after by their offspring. However, as the pace of population ageing increases, there will be an increased scope for institutional arrangements for elderly care. This may come about through an expansion of the social security system, as well as the strengthening of those infrastructures for elderly care that may be required in the future.

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## Endnotes

1. Beard and Kunhariwibowo's study relied on a case-study strategy with 20 case studies involving elderly respondents aged 60 years old and above and their adult children defined as persons over 18 years old. The 20 cases were evenly scattered in two provinces, the Special Province of Yogyakarta and the Province of North Sumatra. Ten case studies involved the Javanese respondents with 5 cases in urban and 5 cases in rural. Similar number of cases among the Batak Karo (5 cases in urban and 5 cases in rural) were selected in the Province of North Sumatra.

2. Keasburry's study was carried out using a questionnaire and face-to-face interviews. The village of Kebonagung, the subdistrict of Imogiri, the Regency of Bantul and the Village of Giriwungu, subdistrict of Panggang, regency of Gunung Kidul were selected. The former has characteristics representing a relatively more prosperous village with economic opportunities outside agriculture but still having agriculture as the main employment. The latter is a poor village with limited agricultural possibilities and almost no other opportunities to generate income. It was hypothesized that the out-migrants from Giriwungu would be higher than from Kebonagung.

3. The rank of the five largest ethnic groups in Indonesia is as follows: The Javanese, Sundanese, Malay, Batak and Madurese (Ananta, Arifin and Bakhtiar, 2005).

4. 1USD is assumed to be equivalent to 9,000 rupiah.

5. East Java in 2002 had 37 districts consisted of 29 regencies and 8 cities. The geographical locations are referred to the figure 2. The 8 cities have a code beginning with 7: 71 for the city of Kediri, 72 for Blitar, 73 for Malang, 74 for Probolinggo, 75 for Pasuruan, 76 for Mojokerto, 77 for Madiun and 78 for Surabaya. The regencies are ordered as follows: 01 Pacitan, 02 Ponorogo, 03 Trenggalek, 04 Tulung agung, 05 Blitar, 06 Kediri, 07 Malang, 08 Lumajang, 09 Jember, 10 Banyuwangi, 11 Bondowoso, 12 Situbondo, 13 Probolinggo, 14 Pasuruan, 15 Sidoarjo, 16 Mojokerto, 17 Jombang, 18 Nganjuk, 19 Madiun, 20 Magelang, 21 Ngawi, 22 Bojonegoro, 23 Tuban, 24 Lamongan, 25 Gresik, 26 Bangkalan, 27 Sampang, 28 Pamekasan and 29 Sumenep.

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