

Three Generations Under One Roof?: A Study of Interhousehold Transfers Among Sandwich Generation in Indonesia

Vianey Weda Rahesti¹, I Dewa Gede Karma Wisana²

¹Magister Program in Population and Labor Economics, Universitas Indonesia, Indonesia

²Faculty of Economics and Business, Universitas Indonesia, Indonesia

email: vianeywedarahesti@gmail.com

Received: July 5, 2023; Accepted: October 30, 2024; Published: March 27, 2025

Permalink/DOI: <http://dx.doi.org/10.17977/um002v17i12025p017>

Abstract

Empirical studies show some negative effects that arise in sandwich generation households. Even the negative impact of the sandwich generation raises the behavior that they want to leave the house. However, the empirical studies only measure sandwich generation if the parents live in the households, so it is necessary to recalculate sandwich generation households in Indonesia through an interhousehold transfer mechanism. This study examines interhousehold transfer differences among sandwich-generation households between parents, siblings, and others in Indonesia. Using Indonesian Family Life Survey (IFLS) 2014, this study found that 4.539 or 28,6 percent of households are classified as the sandwich generation, both if the elderly live in the household and the elderly doesn't live in the household. Tobit regression analysis shows that non-one-roof sandwich generation households spend an interhousehold transfer 56,4 percent higher than one-roof sandwich generation households.

Keywords: *Sandwich Generation, Interhousehold Transfers, Tobit Regression*

JEL Classification: J12; J14

INTRODUCTION

Sandwich generation phenomenon has become a cultural chain that has not been resolved (Rozalinna & Anwar, 2021). Discussion about the sandwich generation phenomenon has started to interest media attention, but not in the academic literature (Friedman et al., 2015). The sandwich generation is defined as a generation that has to bear both the economic and parenting burdens of parents and children at the same time (Miller, 1981). Syakriah (2019) suggests that there are two types of sandwich generation households, the first type is the elderly who help their children care for their grandchildren, and the second type is the elderly who cannot be physically and financially independent, so they have to depend on their children (who also still have to care for children). Nowadays, the dependence of the elderly on their children is considered normal as part of the ageing process (Brody, 1978).

This study will focus on sandwich-generation households with elderly that cannot be financially independent, so they have to depend on transfers from their children. Sandwich generation is the generation that bears the economic burden of

their parents and their children at the same time. If the sandwich generation fails to prepare for their retirement age, the next generation will be trapped in the same situation (Syakriah, 2019). Empirical studies of sandwich generation classify the households as a sandwich generation if the elderly live in the household and has not classified the households if their parents do not live in the household but have to bear the economic burden through transfers. Those who do not live with their elderly but share the economic burden through transfer are important to analyze because they spend larger transfers. The farther apart their parents live, the greater the transfer given, as a form of substitution, because they can not provide service to their parents directly (Park, 2017).

Figure 1 shows a decrease in the percentage of the elderly living with three generations from 2014 to 2017 and 2018 to 2021. However, on the other hand, there has been an increase in the percentage of the elderly living alone and living with a partner (not living with their children and grandchildren) from 27,14 percent in 2014 to 32,77 percent in 2021. This shows the possibility of changes in the formation of sandwich generation households with a transfer mechanism for the elderly who do not live with their children and grandchildren.

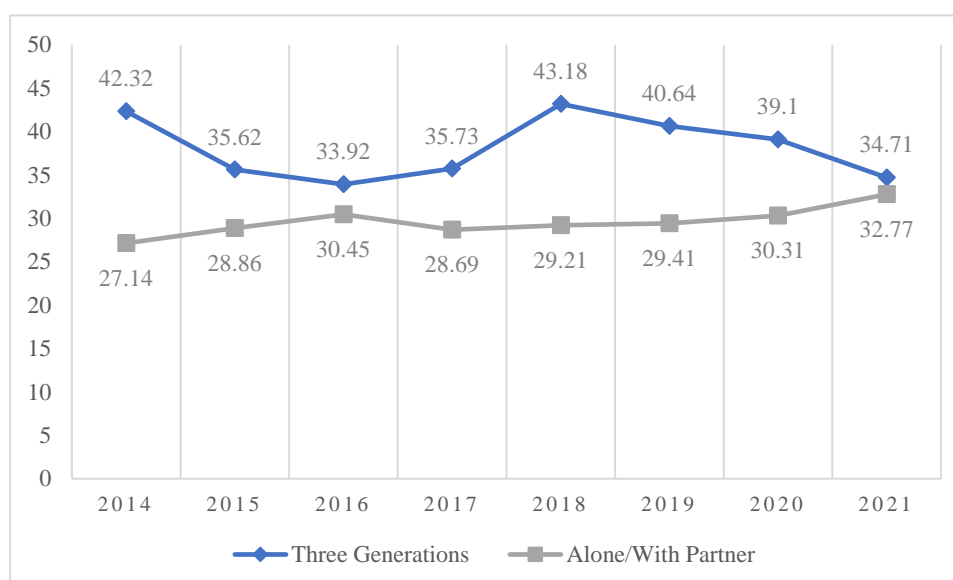


Figure 1. Percentage of Elderly Living Alone/With Partner and Three Generations
Source: BPS (processed)

The altruistic transfer motive states that giving transfers to other people is based on concern for the welfare of the transfer recipient (Becker, 1974). This means that the transfer is expected to increase the welfare of the transfer recipient. If a child sends a transfer for a parent, then the parents will have a higher income so they can live more prosperously. The economic theory of consumer choice states that an increase in income will cause the budget constraint line to shift to the right and increase utility (Mankiw, 2017). This increase in utility means increased satisfaction, thus indicating an increase in parental welfare.

Based on Susenas 2013, Samudra & Wisana (2017) found that 6,42 percent or 7,009 households in Indonesia were classified as sandwich generation households. Yuliana (2019) found that in 2007 there were 30 percent sandwich

generation households and decreased to 24,7 percent in 2014. Data shows the percentage of elderly who live with three generations decreased from 2018 to 2021 (Badan Pusat Statistik, 2021). The decline in the number of sandwich generation households may not be due to the decreasing number of elderly who can prepare themselves financially for their retirement, but because of the negative impacts arising from the sandwich generation phenomenon, which eventually leads to the behaviour that they want to get off from the house (Rozalinna & Anwar, 2021). The data also shows that the percentage of the elderly living alone and living with partners increased from 27,14 percent in 2014 to 32,77 percent in 2021 (Badan Pusat Statistik, 2021). Other studies also found that modernization factors encourage children to live independently (Aboderin, 2004) and parents who are highly educated are also exposed to modernization, tend to choose to live separately from their children (Sereny, 2011).

Various definitions of the sandwich generation are still very broad, and existing research uses different concepts and definitions. When referring to the true definition of the sandwich generation, the sandwich generation is those who live with their children and parents in the same household (Pierret, 2006). Research on the sandwich generation in Indonesia also defines a household as the sandwich generation if the parents and dependent children live in the same household. However, in reality, especially in Indonesia, there are households that, although they do not live with their parents, still bear the economic burden of their parents through family transfers. This problem shows the possibility of a change in sandwich generation household formation with transfer mechanisms for the elderly who do not live with their adult children and grandchildren. Therefore, it is necessary to recalculate the percentage of sandwich generation in Indonesia through interhousehold transfer. This study aims to determine the different amount of interhousehold transfers between sandwich generation households that live with their elderly in the same household and sandwich generation households that do not live with their elderly.

METHOD

This study uses Indonesian Family Life Survey (IFLS)-5 2014 with cross-section data types. The questionnaire used was book K section AR to obtain information on household members, and book 3B section BA to obtain information on transfer out of the household. Sandwich generation households in this study were limited to three generations, with a composition: elderly (first generation/G1), adult children as a sandwich (second generation/G2), and children (third generation/G3). A household will be classified as a sandwich generation household if allows the following criteria:

1. One-roof sandwich generation households: One-roof means that the elderly (G1) live in the same household with G2 and G3. There is at least one elderly or parent-in-law who does not work and at least one child who is not married and does not work in the household.
2. Non-one-roof sandwich generation households: Non-one-roof means that the elderly (G1) do not live in the same household with G2 and G3. There is at least one child who is unmarried and does not work in the household and give transfers for not working elderly parents who live outside the household.

Based on selection criteria, the unit of analysis in this study is 4.539 sandwich-generation households. The definition of sandwich generation in this study determines the second generation (G2) as the main breadwinner in the household based solely on working status. First generation (G1) may have a prosperous economic condition even though they are not working because they have assets or passive income. However, information about the economic conditions of G1 who does not live in the same household cannot be obtained, so the economic condition of G1 is only estimated through their working status.

The transfer flow is an outflow transfer given from a sandwich generation household to other households, consisting of elderly (G1) who does not live in the same household, siblings, and others (such as relatives, neighbours, and other family members). Transfers in the form of money and goods are given by the second generation (G2) to the elderly, siblings, and others outside the household. Social, economic, and demographic factors of G1, G2, and G3 are thought to influence the amount of interhousehold transfers issued by sandwich generation households.

The dependent variable in this study is the amount of transfers out of the household over the past year. The types of transfers issued are transfers for siblings and other relatives living outside the household. The main independent variable is the type of sandwich generation household which consists of two categories, one-roof sandwich and non-one-roof sandwich. The independent variables in this study are divided into three characteristics, characteristics of G1, characteristics of G2, and characteristics of G3. The operational definitions of each variable are described in Table 1.

Table 1. The Operational Definitions of Variables

Symbol (1)	Variable (2)	Description (3)
Dependent Variables		
ln_transfer	Interhousehold Transfer	Transfers in the form of money and goods are given by the second generation (G2) to siblings and others who are outside the household in a year.
Main Independent Variables		
sandwich	Type of sandwich generation	Type of sandwich generation household 0 = One-roof sandwich 1 = Non-one-roof sandwich
Control Independent Variables		
Characteristics of G1		
age_G1	Age of G1	Age of G1 (<i>elderly</i>) (years)
educ_G1	Education level of G1	Education level of G1 (<i>elderly</i>). 0 = Low (SD and below) 1 = Middle (SM equivalent) 2 = High (Diploma and above)
distance_G1	Distance of G1	Geographical distance between G2 and G1 0 = Near (in household, in the same village and sub province) 1 = Far (in the same province) 2 = Very Far (in the same country and outside)
Characteristics of G2		
age_G2	Age of G2	Age of G2 (years)
siblings	Number of siblings	G2's number of siblings
num_hh	Number of Household Members	The number of household members living together
quintile	Expenditure quintile	Classification of household expenses into three groups after being sorted from the smallest to the largest. The higher the quintile indicates the more prosperous. 0 = Quintile 1 (40% lowest) 1 = Quintile 2 (40% middle) 2 = Quintile 3 (20% highest)
educ_G2	Education level of G2	Education level of G2 0 = Low (SD and below) 1 = Middle (SM equivalent) 2 = High (Diploma and above)
sex_G2	Sex	Sex of G2 0 = female* 1 = male
Characteristics of G3		
age_G3	Youngest Age of Generation 3	Age of the youngest G3 (years)
educ_G3	Education level of G3	Education level of G3 0 = Low (SD and below) 1 = Middle (SM equivalent) 2 = High (Diploma and above)

This study uses both descriptive and inferensial analysis. After examining the raw data, it turns out that there are 686 households do not have interhousehold transfers, which causes the sample to be censored, so this study uses the Tobit regression. The form of the Tobit model is as follows:

$$\begin{aligned} \ln_transfer = & \beta_0 + \beta_1 sandwich + \beta_2 male + \beta_3 quintile_middle \\ & + \beta_4 quintile_high + \beta_5 num_hh + \beta_6 siblings \\ & + \beta_7 educ_G1_middle + \beta_8 educ_G1_high + \beta_9 educ_G2_middle \\ & + \beta_{10} educ_G2_high + \beta_{11} educ_G3_middle + \beta_{12} educ_G3_high \\ & + \beta_{13} age_G1 + \beta_{14} age_G2 + \beta_{15} age_G3 + \beta_{16} distance_G1_far \\ & + \beta_{17} distance_G1_veryfar + \varepsilon_i \end{aligned}$$

RESULT AND DISCUSSION

Based on the definition of sandwich generation households formed in this study, there were 4.539 households, or about 28,6 percent (from the total of IFLS-5 households) classified as sandwich generation households in 2014, which consists of 2.405 households are non-one-roof sandwich generation and 2.134 households are one-roof sandwich generation households. This result shows that there are more sandwich generation households still bear the economic needs of their elderly, although they do not live with the elderly. Figure 2 shows the number of sandwich generation households which increased from 1993 to 2014.

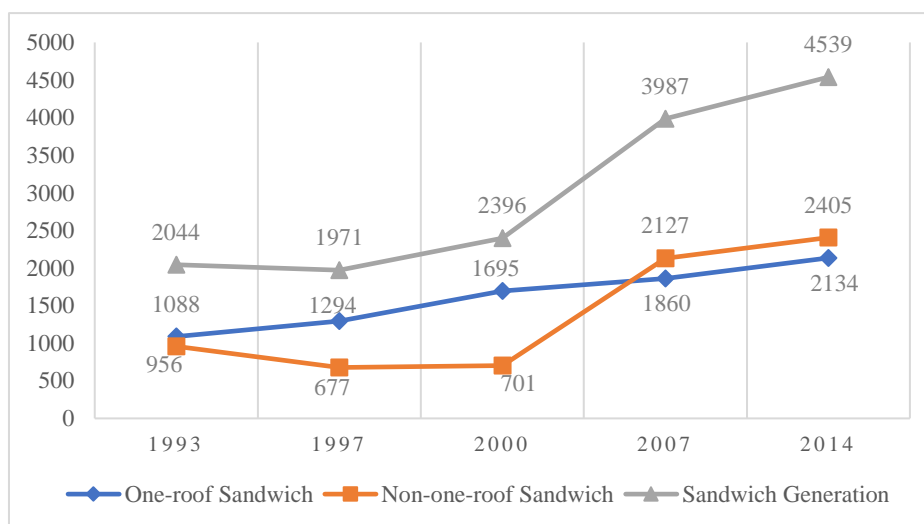


Figure 2. Number of Sandwich Generation Households, 1993 – 2014
Source: IFLS-5 (data processed)

There were 2.044 sandwich generation households, or 28 percent of the total 7.224 IFLS-1 households in 1993. This number decreased in 1997 to 1.971 households or 26 percent and increased again in 2000. The number of sandwich generation households increased again from 3.987 households in 2007 to 4.539 households in 2014. According to the type, from 1993 to 2000, the number of one-roof sandwich generation households was always higher than non-one-roof sandwich generation households. However, in 2007 and 2014, this number became the opposite, with non-one-roof sandwich generation higher than one-roof sandwich generation households. This shows a change in the sandwich generation household formation in Indonesia and shows the importance of this study.

This study also found that out of 3.987 sandwich generation households in 2007, 1.497 or 38,1 percent remained sandwich generation households in 2014 (Figure 3). Of the 1.497 households that remained as sandwich generation in 2014, 117 households (7,82 percent) of them transitioned from one-roof to non-one-roof sandwich generation households. 216 households (14,43 percent) transitioned from non-one-roof to one-roof sandwich generation households. Furthermore, as many as 698 households (46,63 percent) in 2007 still lived with their elderly in 2014 and 466 households (31,13 percent) still did not live with their elderly.

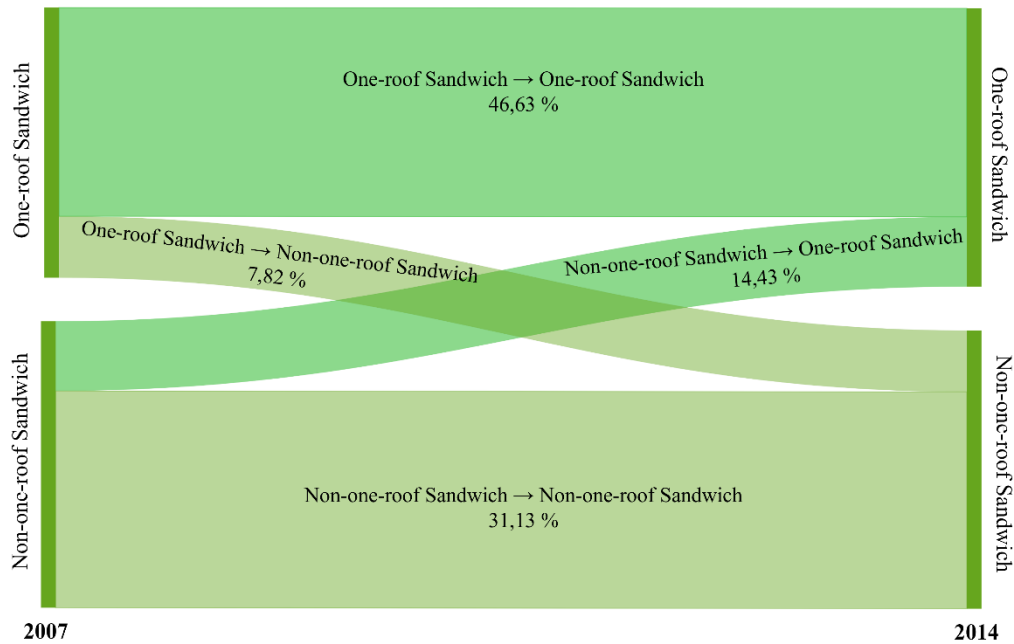


Figure 3. The Transition Type of Sandwich Generation Household, 2007 to 2014
Source: IFLS-5 (data processed)

Sandwich generation households are dominated by Generation 1 with low education, Generation 2 with secondary education, and Generation 3 with low education (Table 2). Generation 1 with low education indicates having low income during their productive years, so they have to depend on their children in their old age. Sandwich generation households that do not live with the elderly have an average age of G1, G2, and G3, which is higher than sandwich generation households that live with the elderly. The average age of G1 who lives with their children and grandchildren is 63 years, while the average age of Generation 1 who do not live with G1 is 71 years. The average age of G2 who lives with the elderly is 35 years while the average age of G2 who does not live with the elderly is 39 years. The average age of G3 who lives with the elderly is 4 years, while the average age of G3 who does not live with the elderly is 6 years.

According to the expenditure quintile, overall sandwich generation households in Indonesia are in the middle expenditure quintile. The sandwich generation that lives far from their parents has a higher average amount of interhousehold transfers than those who live with or close to their elderly. Those who live with or in the same district (near) with G1 have an average transfer of Rp2.294.980 a year. The average transfer of households whose parents live in the same province but are in different regencies (far) is Rp2.762.535 a year. Meanwhile,

households whose G1 lives in another province or another country (very far) have an average transfer of Rp4.033.104 a year. This means that the farther the area where the elderly live, the greater the transfer amount issued.

Table 2. Average Interhousehold Transfer by Characteristics and Types of Sandwich Generation Households (Rupiah)

Characteristics	N (households)	Types of Sandwich Generation Households		Difference
		One-roof Sandwich	Non-one-roof Sandwich	
Level of Education G1				
Primary	2.906	1.679.370	2.140.266	460.896***
Middle	1.335	3.467.555	3.177.837	289.718
High	298	5.126.441	6.186.904	1.060.463
Distance G1				
Near	3.456	2.213.728	2.426.138	212.410
Far	555	-	2.762.535	2.762.535
Very Far	528	-	4.033.104	4.033.104
Expenditure Quintile G2				
Quintile 1	1.259	658.163	850.228	192.064**
Quintile 2	2.031	1.545.817	1.837.372	291.554**
Quintile 3	1.249	4.879.392	6.523.080	1.643.688**
Sex G2				
Female	488	1.423.846	2.135.435	711.589*
Male	4.051	2.353.068	2.910.723	557.655**
Level of Education G2				
Primary	676	1.064.305	1.240.289	175.984
Middle	2.783	1.788.761	1.889.109	100.348
High	1.080	4.694.666	5.673.158	978.491
Level of Education G3				
Primary	1.789	2.135.068	1.385.564	749.504*
Middle	2.054	2.324.742	1.872.418	452.324*
High	696	3.676.649	5.673.158	1.996.509
Total Average of Transfers	4.539	2.213.728	2.856.566	642.837***

Source: IFLS-5 (data processed)

Sign. Level: ***= $p < 0,01$; **= $p < 0,05$; *= $p < 0,1$

Sandwich generation households spend an average of Rp2.554.337, or 3,51 percent of the total annual expenditure for interhousehold transfers. By type of transfer, on average, 34 percent of the total interhousehold transfers were transfers to siblings, and 50,5 percent were other transfers. In general, the average amount of interhousehold transfers in sandwich generation households that do not live with their elderly is higher than in sandwich generation households that live with their elderly in the same household. Sandwich generation who lives in the same households has the average transfer amount Rp2.213.728 a year, and sandwich generation who didn't live in the same households is Rp2.856.566 a year. It means that sandwich generation who live in the same households send transfers out of the

household Rp642.837 higher in one year than sandwich generation who didn't live in the same households.

Table 3. Average and Percentage of Interhousehold Transfers by Type of Transfer and Type of Sandwich Generation Household

	Types of Sandwich Generation Households		Total	Difference
	One-roof Sandwich	Non-one-roof Sandwich		
Transfer for Siblings				
Average of transfer (Rp)	721.257	994.218	865.886	272.961***
Average % transfer (%)	27,16	40,73	34,35	13,56***
Transfer for Others				
Average of transfer (Rp)	1.492.471	1.862.347	1.688.450	369.876**
Average % transfer (%)	53,33	48,03	50,5	5,29***
Total (Transfer for Siblings + Others)				
Average of transfer (Rp)	2.213.728	2.856.566	2.554.337	642.837***
Average % transfer (%)	3,17	3,80	3,51	0,63***
Transfer for Elderly				
Average of transfer (Rp)	-	2.367.244	2.367.244	2.367.244
Average % transfer (%)	-	58,87	58,87	58,87
Total (Transfer for Elderly + Siblings + Others)				
Average of transfer (Rp)	2.213.728	5.223.810	3.808.627	3.010.082***
Average % transfer (%)	3,17	7,72	5,58	4,38***

Source: IFLS-5 (data processed)

Sign. Level: ***= $p < 0,01$; **= $p < 0,05$; *= $p < 0,1$

Table 3 shows that sandwich generation households that do not live with their elderly spend transfers for siblings higher (Rp 994.218) than sandwich generation households that live with their elderly in the same household (Rp 721.257). This may happen because sandwich generation households that do not live with their elderly have other siblings who live with G1, so they send higher transfers to their siblings as compensation to help their economic needs. In transfers for others, sandwich generation households that do not live with their elderly spend higher than sandwich generation households that live with their elderly in the same household. Other transfers consist of food and non-food transfers for relatives or neighbors, for education costs of children or family members, and for other family members other than children, parents, and siblings who live outside of the household.

As already mentioned, only sandwich generation households that do not live with their elderly have interhousehold transfer expenses for elderly parents living outside the household. If transfers to elderly parents are included in the total interhousehold transfers, the average amount of transfers issued by non-one-roof sandwich generation households is Rp 5.223.810, while the average transfer in one-roof sandwich generation remains Rp 2.213.728. So that the interhousehold transfer difference between the two types of sandwich generation households is Rp 3.808.627.

Table 4. *Interhousehold Transfer Model*

Independent Variables	Tobit Regression		
	Model 1	Model 2	
Type of Sandwich_Non-one-roof	1,482*** (0,178)	0,564* (0,299)	
Age G1		-0,015* (0,009)	
Level of Education G1_Middle		-0,017 (0,208)	
Level of Education G1_High		-0,184 (0,390)	
Distance G1_Far		-0,441 (0,291)	
Distance G1_Very Far		-0,297 (0,298)	
Age G2		-0,001 (0,015)	
Number of Siblings G2		0,383*** (0,035)	
Number of Household Member G2		-0,117* (0,066)	
Expenditure Quintile G2_Middle		1,773*** (0,213)	
Expenditure Quintile G2_High		2,982*** (0,259)	
Level of Education G2_Middle		0,703*** (0,271)	
Level of Education G2_High		1,465*** (0,383)	
Sex G2_Male		0,185 (0,288)	
Age G3		-0,015 (0,022)	
Level of Education G3_Middle		0,016 (0,265)	
Level of Education G3_High		0,714* (0,433)	
	Prob>Chi2	0,000	0,000
	Pseudo R2	0,002	0,016
	Observation	4.539	4.539

Source: IFLS-5 (data processed)

Sign. Level: ***=p<0,01; **=p<0,05; *=p<0,1

Table 4 shows that type of sandwich generation household significantly affects the amount of interhousehold transfer for siblings and others. Tobit regression shows that the amount of interhousehold transfers in non-one-roof sandwich generation households is 56,4 percent higher than in one-roof sandwich generation households. The positive effect in the type of sandwich generation household variable indicates that the presence of elderly parents (G1) inside or outside the household affects the amount of transfers out to siblings and others.

Characteristic of G1 that affect the amount of interhousehold transfers is the age of G1. The older G1 is, the smaller the interhousehold transfers issued will be.

It might happen because the older G1 is, the higher their health costs (Agustina et al., 2018), so transfers for siblings and others will be smaller. In addition, because talking about sandwich generation, the older G1 is, there will be two possibilities that will occur in G3 when G1 gets older. The first is that G3 will also be getting older, and the second is that the number of G3 will increase due to birth. According to research by Agustina et al. (2018), health costs tended to be high in the age group of toddlers and the elderly. Friedman et al. (2017) also found that transfers from G2 in sandwich generation households for G3 were higher than transfers for G1. Both of these possibilities can increase the expenditure of sandwich generation households to be higher, thus causing the amount of transfers to other people to become smaller.

Characteristics of G2 that affect the amount of interhousehold transfers are expenditure quintiles, number of household members, number of siblings, and level of education. The higher level of education and expenditure quintiles reflects the more prosperous their lives (Cameron & Cobb-Clark, 2008), so they can spend more transfer. The number of household members negatively affects the transfer amount. The larger number of household members indicates an increasing amount of household needs, thus causing transfers to other people to be smaller. The number of siblings is positively related to the transfer amount, and the greater transfer is the result of the number of siblings they have.

Characteristic of G3 that affect the amount of interhousehold transfers is the level of education. Frankenberg et al. (2002) found a relationship between the level of education and transfer tendencies to parents. Married couples with children still in elementary and junior high school have a smaller tendency to give transfers to their parents. And the more children have completed their education, the greater transfer given to parents.

The increase in the number of sandwich generation households between 2007 and 2014 can be related to the aging population in Indonesia. As stated by Pierret (2006) that the sandwich generation is considered the impact of the demographic transition process, where parents have a longer life, length, and fewer children, so the economic burden and the burden of caring for their children become greater and longer. The shift in the age of first marriage also resulted in this phenomenon, when a woman marries, she has elderly parents and very young children, so both of them have to depend on her both financially and in parenting (Pierret, 2006).

Generation 1, which was still productive in 1993, began to enter retirement from 1997 to 2014. However, it turned out that the start of the unproductive period was not accompanied by financial readiness for retirement, so they had to depend on their children in old age. The factor that most influences the elderly to decide whether or not to live with their adult children is the child's (G2) level of education (Cameron & Cobb-Clark, 2008). The elderly prefer to live with adult children with secondary education and above. The higher levels of education reflect the more prosperous their lives are, so the elderly choose to live with them (Cameron & Cobb-Clark, 2008).

On average, sandwich generation households spend almost the same interhousehold transfers in each quintile, about 3 to 4 percent of total expenditure. Poor households often depend on transfers from other households, and poverty alleviation policies are expected to reduce informal transfers (Gulesci, 2021).

Informal transfers through interhousehold transfers significantly affect household income (Butz & Stan, 1982). Public transfers, such as aid or government programs, are expected to replace transfers between households (Ezemenari, 1997). Even in developing countries, private transfers account for 2 to 20 percent of total household income but only 1 percent in developed countries (Cox et al., 1990).

Transfers for siblings tend to be given to younger siblings and sisters (Park, 2017). Economic need is an important factor in the decision sending transfers for siblings (Wongkaren, 2012). The higher the income, the greater tendency to give transfers and the smaller the tendency to receive transfers. Transfers are made by those with higher incomes to those with lower incomes (Wongkaren, 2012). The number of siblings in this study is positively related to the transfer amount. In contrast, Wongkaren (2012) found that the more siblings one has, the smaller the tendency for transfers to occur, due to the division of tasks between siblings, where one sibling helps another sibling while the other sibling is on duty taking care of parents. Sandwich generation households that do not live with their elderly parents send higher transfers to siblings as substitutes and assistance for siblings who live with G1. However, there is no information regarding whether the sibling who has transferred lives with G1 or not.

CONCLUSION

This study wants to show differences in interhousehold transfers between sandwich generation households that live with their elderly in the same household and sandwich generation households that do not live with their elderly. This study found that the type of household of the sandwich generations affects the amount of interhousehold transfers. Sandwich generation households that live with their elderly in the same household send interhousehold transfers which are 56,4 percent higher than sandwich generation households that do not live with their elderly. If we consider transfers for parents in sandwich generation households that do not live with their elderly, the difference in the transfer amount will be Rp 2.367.244 higher. The existence of parents both inside the household and outside the household is important in the private transfer mechanism. When parents are in the household, the amount of interhousehold transfers will be lower. When parents are outside the household, the amount of interhousehold transfers will be higher for parents than siblings and others.

Characteristics of Generation 1 (G1), Generation 2 (G2), and Generation 3 (G3) that significantly influenced the difference in the amount of the transfer were the age of G1, the expenditure quintile of G2, the level of education of G2, number of G2 household members, number of siblings, and the level of education of G3. The older the G1, the smaller the amount of transfer issued. The higher the expenditure quintile indicates the more prosperous G2 households are, thereby sending larger transfers. The higher education level of G2, which reflects higher income, also sends larger transfers. A higher number of household members reflects the expenses incurred, thus sending smaller transfers for other households. The greater number of siblings also significantly affected the increase in interhousehold transfers.

Becoming a sandwich generation is not an option, because in Indonesia, transfers to parents are also influenced by cultural motives. Children will still make transfers if their parents are still alive and not working. The cultural chain's effect

on the sandwich generation phenomenon can lead to a continued increase in the number of sandwich generation in Indonesia, where sandwich generation usually gives birth to the next sandwich generation in the family. It should be a concern of the government to overcome the various negative impacts that may arise from this phenomenon. Awareness to prepare financial capabilities in old age must also be prepared to minimize the negative impact of sandwich generation. Efforts to increase life expectancy must also be followed by efforts to cope with the increasing number of elderly in Indonesia.

REFERENCE

- Aboderin, I. (2004). Modernisation and ageing theory revisited: Current explanations of recent developing world and historical Western shifts in material family support for older people. *Ageing and Society*, 24(1), 29–50. <https://doi.org/10.1017/S0144686X03001521>
- Agustina, R., Dartanto, T., Sitompul, R., Susiloretni, K. A., Achadi, E. L., Taher, A., Wirawan, F., & Sungkar, S. (2018). Review Universal health coverage in Indonesia : concept , progress , and challenges. [https://doi.org/10.1016/S0140-6736\(18\)31647-7](https://doi.org/10.1016/S0140-6736(18)31647-7)
- Badan Pusat Statistik. (2021). Statistik Penduduk Lanjut Usia 2021.
- Becker, G. S. (1974). *A Theory of Social Interactions* Author (s): Gary S . Becker
Published by: The University of Chicago Press Stable URL : <http://www.jstor.org/stable/1830662> Accessed: 31-07-2016 10: 01 UTC
Your use of the JSTOR archive indicates your acceptance of the. 82(6), 1063–1093.
- Brody. (1978). *The Aging of the Family*. 438, 13–27.
- Butz, W. P., & Stan, P. J. E. (1982). Interhousehold Transfers and Household Structure in Malaysia Author (s): William P . Butz and Peter J . E . Stan
Source : *Population and Development Review* , Vol . 8 , Supplement : Income Distribution and the Family (1982) , pp . 92-115 Published by : 8(1982), 92–115.
- Cameron, L. A., & Cobb-Clark, D. (2008). Do coresidency and financial transfers from the children reduce the need for elderly parents to works in developing countries? *Journal of Population Economics*, 21(4), 1007–1033. <https://doi.org/10.1007/s00148-006-0105-8>
- Cox, D., Jimenez, E., The, S., Bank, W., & Jul, N. (1990). Achieving Social Objectives through Private Transfers: A Review Linked references are available on JSTOR for this article : ACHIEVING SOCIAL OBJECTIVES THROUGH PRIVATE TRANSFERS. 5(2), 205–218.
- Ezemenari, K. (1997). The Link between Public and Private Interhousehold Transfers: Implications for the Design of Safety Net Programs in Developing Countries. *American Journal of Agricultural Economics*, 79(2), 666–671. <https://doi.org/10.2307/1244169>
- Frankenberg, E., Lillard, L., & Willis, R. J. (2002). Patterns of Intergenerational Transfers in Southeast Asia Published by: National Council on Family Relations Stable URL : <http://www.jstor.org/stable/3599930> REFERENCES
Linked references are available on JSTOR for this article : Patterns of Intergenerati. 64(3), 627–641.
- Friedman, E. M., Park, S. S., Wiemers, E. E., & Pruchno, R. (2017). New estimates

- of the sandwich generation in the 2013 panel study of income dynamics. *Gerontologist*, 57(2), 191–196. <https://doi.org/10.1093/geront/gnv080>
- Gulesci, S. (2021). Poverty Alleviation and Interhousehold Transfers: Evidence from BRAC's Graduation Program in Bangladesh. *World Bank Economic Review*, 35(4), 921–949. <https://doi.org/10.1093/wber/lhaa023>
- Mankiw, N. G. (2017). *Principles Of Economics-Cengage Learning*.
- Miller, D. A. (1981). The ' sandwich ' adult children generation : of the aging. 26(5), 419–423.
- Park, C. (2017). *Interhousehold Transfers between Relatives in Indonesia : Determinants and Motives* Author (s): Cheolsung Park Published by : The University of Chicago Press Stable URL : <http://www.jstor.org/stable/10.1086/375014> Interhousehold Transfers between Relativ. 51(4), 929–944.
- Pierret, C. R. (2006). The “sandwich generation”: Women caring for parents and children. *Monthly Labor Review*, 129(9), 3–9.
- Rozalina, G. M., & Anwar, V. L. N. (2021). Rusunawa dan Sandwich Generation: Resiliensi Masa Pandemi di Ruang Perkotaan. *Brawijaya Journal of Social Science*, 1(01), 63–79. <https://doi.org/10.21776/ub.bjss.2021.001.01.5>
- Samudra, R. R., & Wisana, I. D. G. K. (2017). Female Labor Force Participation of Sandwich Generation in Indonesia.
- Sereny, M. (2011). Living arrangements of older adults in China: The interplay among preferences, realities, and health. *Research on Aging*, 33(2), 172–204. <https://doi.org/10.1177/0164027510392387>
- Syakriah, A. (2019, September 6). Sandwich Generation in Indonesia : Caught between parents and Children. Results of an interview with I Dewa Gede Karma Wisana, Researcher at the Lembaga Demografi Universitas Indonesia. Retrieved from <https://www.thejakartapost.com>
- Wongkaren, T. (2012). *Cultural Model as an Alternative Approach to Analyze Familial Transfers - Dissertation*.
- Yuliana, S. (2019). *Perbandingan Kesehatan Anak Antara Generasi Sandwich Dengan Bukan Generasi Sandwich (Unpublished Thesis)*, Pascasarjana Universitas Indonesia, Indonesia.