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RESEARCH ARTICLE

Will dependency ratio matter the economic welfare of the geographically isolated and disadvantaged households in the province of Samar, Philippines?

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ABSTRACT

The study employed descriptive-exploratory research methods to examine the dependency ratio and economic welfare of geographically isolated and disadvantaged households in Samar Province, Philippines. It aimed to determine the demographic profiles of the respondents, including age, gender, civil status, highest educational attainment, occupation, family type, number of household members, and dwelling type. The study explored the dependency ratio, economic welfare status (in terms of consumption and expenditures), and the relationship between the dependency ratio and economic welfare. Households (n=88) were systematically sampled from 14 municipalities in Samar, Philippines. The findings revealed that these households had a high dependency ratio, and their economic welfare was below the country's poverty line. It was also found that the number of unproductive members did not significantly affect the households' economic welfare, while the productive population had a direct positive impact. Furthermore, as the household head aged, there was a direct negative effect on the household's economic welfare. Further, as the household head ages, there appears to be a negative impact on the economic welfare of the household. Interestingly, while the dependency ratio did not significantly influence economic welfare, it highlighted the increasing strain on the working population and the broader economy to support and provide necessary social services for the dependent population.

Keywords: geographically isolated and disadvantaged households; dependency ratio; economic welfare; economic condition

1. Introduction

Improving Individual's and households' economic welfare is one of the central issues in the Philippines. In fact, the Sustainable Development Goals in the country imply that this societal issue needs to be prioritized - to end poverty which is ranked 1 in the 17 agenda. Not only in the Philippines that economic welfare is a big challenge. Many people live in situations of severe scarcity[1].

According to Garbarino et al.,[2], economic welfare deals with satisfaction with the quality of life, which aims to measure the position of members of society in establishing a balance in life that encompasses material well-being, social well-being, emotional well-being, and security. On the other hand, Chakrabarty &

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Mukherjee[3] assumes expenditures and consumptions as a smoother measure of economic welfare than income among others. In the current study economic welfare follows that of Chakrabarty and Mukherjee[3] in the utilization of expenditures and consumptions as a measure of welfare with two considerations: the geographical location which is isolated and disadvantaged in which most of the income of the households are often rough as farmers and livelihoods usually receive cash receipts at certain times of the year. Second, it is actual consumption and non-consumption costs that normalizes and understands the typical way of living. Also, several studies used measures of welfare as household consumption and consumption expenditure[4-8]].

Enhancing households' economic welfare is associated with many indicators and societal factors[9] such as low labor productivity. Subsequently, low labor productivity is associated with a high dependency ratio. This is one of the demographic measures that can approximately show the economic situation of a country. The higher the dependence level, the greater cost of funding unproductive populations. According to Ginting, et al.,[1] When the dependency ratio increases, it can slow down economic growth and increase poverty.

The study of Syamsuddin[10] attested that the dependency ratio has an adversative and significant impact on economic growth. This was supported by Pangiuk[11] that an increase in variations in economic conditions is a consequence of the method of increasing total productive capacity by considering productivity and presenting it in terms of an increase in national income which leads to individual economic welfare as well.

Consequently, economic welfare is caused by geographical location[12]. This is basically why geographically isolated and disadvantaged households are the focus of the study to examine deeply welfare due to the fact that they are a distinct case among others in the state that necessitates being pioneered and institutionalized[13].

According to Bidisha et al.[12], it is vital to understand the long-term financial cost structure of the population will not only take about variations in the alignment of employment, but are also likely to have significant effects on countries' investments, funds, and, most importantly, their economic development. Globally, experiences of demographic transitions tend to be diverse, as other countries can contend that they were at different phases of this shift. Certain population issues, as well as community outlay in the critical areas of social resource growth, the subsequent impact on the economic growth of such a transition was also very different. However, the question of demographic share or the optimistic impact of demographic transformation on development is a long-term issue and it could arise over several generations.

On the other hand, conferring to Fang and Wang[14], a country's population structure can alter in numerous phases, with the first phase being expected to match the high share of children dependent on an increase in the labor force share in the next phase. Lastly, the prevalence of the increasing old-age dependency ratio will increase in the subsequent phase. This shift in demographic configuration can have more implications; Primarily the positive effect of changing labor supply due to changes in the working age residents. Second, because of its impact on personal saving and consumption, it can contribute to capital accumulation and hence GDP growth. Consequently, a larger part of adult people in the economy is expected to increase public expenses due to higher expenses on allowance and health care costs, which is thus likely to have a negative impact on spending in the manufacturing sector[14].

Hence, an in-depth understanding of the proportion of the working age group compared with the unproductive population and economic welfare of the isolated and disadvantaged households in Samar province is necessary so that in the future it can solve the issues of its safety and alleviate the proportion of the poor population. The study examined the dependency ratio and welfare of the geographically isolated and disadvantaged area (GIDA) households in Samar Province, Philippines. Specifically, it determined the demographic profile of the respondents in terms of age, gender, civil status, highest educational attainment,

occupation, type of family, number of household members, and type of dwelling. It also examined the dependency ratio, welfare status (consumption and expenditures), and the significant relationship between dependency ratio and welfare status.

2. Literature review

The population structure of a country significantly influences its economic growth trajectory. Developed nations are witnessing a proportional increase in older populations, while developing countries experience growth in youth demographics. These shifts underscore the importance of understanding the long-term economic implications of demographic transitions. Changes in population structure impact labor force composition, investment patterns, savings rates, and overall economic growth. The global experience with such transitions varies, as nations are at different stages of demographic change and are influenced by varying health, population policies, and public investments in human resource development[12].

The concept of demographic dividend, where population changes positively influence growth, often unfolds over several generations. According to Fang and Wang[14], demographic transitions typically progress through phases: an initial stage marked by a high child dependency ratio, followed by an increased working-age population, and finally, a stage dominated by a high dependency ratio of older individuals. These shifts yield multiple effects, such as a boost in labor supply during the working-age population's rise and enhanced GDP growth through capital accumulation driven by higher personal savings[15]. However, an aging population can strain public finances, increasing expenditures on pensions and healthcare while potentially reducing investments in productive sectors[14].

According to World Economics[16], age dependency ratio represents the proportion of young and elderly dependents (typically under 15 or over 64 years old and economically inactive) relative to the working-age population (15–64 years old). A high dependency ratio indicates a greater economic burden on the working population and the overall economy to support non-working dependents. Consequently, household members who are economically inactive create a strain on the family's capacity to meet their overall needs[17]. Early studies[18,19] indicated a significant positive relationship between multidimensional poverty and the household dependency ratio. In 2024, the Philippines reported an age dependency ratio of 50.1%, significantly higher than the global average of 40.1%. This elevated ratio suggests increased financial pressure on the working population and potential risks of political instability.

Numerous studies examine the relationship between economic growth and population dynamics, yet the role of demographic transitions, such as dependency ratios, remains underexplored empirically. Vijayakumar [20] analyzed the links between dependency ratios, poverty, economic growth, and employment in agriculture and industry using data from 41 countries in Asia, Latin America, and Sub-Saharan Africa. The findings indicated a significant positive relationship between dependency ratios and poverty but lacked robustness due to the omission of critical heteroscedasticity tests, potentially undermining the results' reliability for policy analysis. Fayissa and Gutema[21], using a more focused approach on Sub-Saharan Africa, employed Solow's growth framework with fixed and random effects models. Their analysis revealed that higher dependency ratios significantly hinder per capita GDP growth, arguing that high dependency rates limit income stability in these nations. However, their model omitted key contemporary growth determinants, such as social capital, raising concerns about potential endogeneity issues. Conversely, Basu et al.[22] explored the effects of declining dependency ratios on BRIC countries and select developed countries, finding that both the initial working-age population and its growth rate significantly influence economic growth. Their work underscores the importance of considering demographic factors in growth studies while emphasizing the need for comprehensive models to capture all relevant variables.

In Philippine context, Resurreccion[23] examined the relationship between unemployment, inflation, and economic growth, incorporating age dependency ratio as an additional variable to explore its influence on unemployment, grounded in Okun's Law and the Phillips Curve. The analysis utilized time series data from the Philippines (1980–2009), employing unit root tests, ordinary least squares (OLS) regression, and diagnostic checks for heteroskedasticity and collinearity using White's test and variance inflation factor (VIF). Results indicated a negative relationship between unemployment and both inflation and economic growth, aligning with Okun's Law and the Phillips Curve. However, while the age dependency ratio showed a positive relationship with unemployment, this was not statistically significant. The findings suggested a need for further research to clarify the role of demographic factors in unemployment and address potential limitations in the model, such as unexplored variables.

Further, Nieva, Balagtas and Asia[24] investigated the determinants of household welfare and poverty in Canaman, Camarines Sur, a municipality within the Bicol region, which is one of the poorest in the Philippines. Economic productivity in the region is hindered by frequent natural calamities such as typhoons, volcanic eruptions, and floods, which adversely impact agriculture, a key economic sector. Using data from the Community-Based Monitoring System (CBMS), the study employed two analytical models: Feasible Generalized Least Squares (FGLS) to identify factors affecting household welfare and a Probit Model to assess the likelihood of a household being classified as poor. The analysis incorporated variables such as household head (HH) characteristics, marital status, employment, and urbanity. Findings revealed that older HHs were associated with slightly higher household income per adult equivalent (HIAE), reducing their poverty risk. Conversely, younger HHs were identified as more vulnerable, indicating the need for targeted poverty alleviation programs. Female-headed households exhibited lower welfare and a higher likelihood of poverty. Marital status also emerged as a significant factor, with married households generally better off than those led by single, separated, or cohabiting heads.

Herpacio and Irham[25] analyzed poverty and its determinants in upland, lowland, and coastal farming areas of Occidental Mindoro using the Alkire-Foster methodology. Data from 210 farming households revealed that 71% were multidimensionally poor, with coastal areas showing the highest poverty index (0.41) due to deprivations in education, housing, clean energy, roads, and farmland. Indigenous households experienced greater poverty than non-indigenous migrants. Logistic regression indicated that non-indigenous households with educated female heads, fewer dependents, larger farms, credit access, and non-farm businesses were less likely to be poor. Particularly, their analysis revealed that adding one more dependent member increases the household's likelihood of experiencing poverty by 1.5 times.

Limited studies were conducted regarding the dependency ratio in the country and how it impacts household spending habits. Wiranatakusuma et al.[26] examined the financial literacy and planning of 13 women in Brgy. Digkilaan, Iligan City, Philippines, in response to challenges linked to low financial literacy, unclear financial goals, poor financial planning, and a high dependency ratio. The study applied the life cycle hypothesis to assess participants' financial conditions, noting a gap in literature regarding gender differences in managing household finances. A one-day workshop on financial literacy and planning was conducted, with a follow-up assessment. Findings showed that while participants' understanding of financial planning and awareness of Islamic finance improved, their income, which was below the national minimum wage, was disproportionately allocated to living expenses, limiting savings and leisure spending. This pattern of financial allocation highlights the risk of long-term financial instability. The study concluded that although participants exhibited moderate financial literacy, continuous education and revised financial management strategies, especially for low-income women, are needed to improve financial resilience and reduce the impacts of high dependency ratios.

3. Methods and materials

3.1. Research design

The study utilized a descriptive-exploratory research design. This determined the demographic profile of the household heads, dependency ratio, and economic welfare of the geographically isolated and disadvantaged households. It further explores the significant predictors of the economic welfare of the households with the number of dependents, the age of the household head, and the working age. The data were gathered through a survey questionnaire. The half-year before the interview is used as the reference period. This scheme was used to have the quality of the data collected, minimize respondents' retention bias, and at the same time capture the seasonality of consumption patterns. The data collection was conducted from June to July 2022 and gathered data for the period 01 January to 30 May 2022.

3.2. Participants and sampling plan

The study area was the Second District of Samar. There were 14 municipalities having GIDA namely, Motiong, Paranas, Jiabong, Catbalogan City, Basey, Calbiga, Hinabangan, Sta. Rita, Pinabacdao, Villareal, Talalora, Daram, Zumarraga, and San Jose de Buan[13]. The primary participants of the study were the household head of the family, however, in absence of the household head, a representative from the family could be possible provided that he/she can provide sufficient information for the study. The sampling unit was the household of the sample barangay. A multistage sampling technique was used to select the participants. The researchers had randomly chosen one (1) barangay from the 14 municipalities. From the chosen barangay, systematic sampling has been utilized in the selection of the household respondent. The sample size was determined through a proportionate allocation using a 5% margin of error. From the sample barangay, the researcher selected the first household from the right of the barangay hall as the starting point. Then every 8th household was involved in the study. The interval was determined by dividing the total household (3010) from all sample barangays by the desired sample size (385). A total of only eighty-eight (88) household heads consented to participate in the study.

3.3. Instrumentation

The main instrument of the study was adapted from the Family Income and Expenditure Survey 2018[27]. The questionnaire has two sections: Section 1 was the profile of the GIDA household respondents, and Section 2 consisted of the welfare status of the GIDA households which refers to the expenditures and consumptions. The questionnaire utilized the concept of "average week" consumption for all food items. Moreover, the reference period for sections on Housing and Clothing; in some cases, the concept of "average month" consumption was used. The reference period to be used for all other expenditure groups was the "past six months". However, the consumption and expenditures revealed in the study are limited only to basic commodities such as food, beverages, housing, and clothing.

As to the demographic profile of the respondents, the age group classification was based on the Philippine Statistics Authority[28] as follows: 0-14 years (children), 15-24 years (early working age), 25-54 years (prime working age), 55-64 years (mature working age), 65 years and over (elderly).

Further, the researchers used the following occupational classification were based from the Philippine Standard Occupational Classification [PSOC] 2012 as shown in **Table 1**.

Table 1. Occupational classification used in this study based on PSOC (2012).

Worker Category	Description
Managers	Workers who formulate, manage people, and establish policies in the workplace.

Professionals	Workers applying scientific methods and systematically teaching concepts and theories in the workplace.
Technicians and Associate Professionals	Workers performing technical tasks related to research, scientific or artistic concepts, and business or government regulations.
Clerical Support Workers	Workers performing clerical activities or supporting staff in the workplace.
Service and Sales Workers	Workers providing personal and protective services, or demonstrating and selling goods in stores or markets.
Skilled Agricultural, Forestry, and Fishery Workers	Workers engaged in agriculture-related activities for themselves and their households.
Craft and Related Trades Workers	Workers using specific knowledge and skills in construction, metalwork, machine maintenance, and the production of food, textiles, and crafts.
Plant and Machine Operators and Assemblers	Workers who operate and supervise industrial and agricultural machinery.
Elementary Occupations	Workers performing simple and routine tasks that require hand tools and significant physical exertion.
Armed Forces Occupations	All professions practiced by members of the armed forces.

The instruments were translated to vernacular through back-translation. That is, the questionnaires and interview guide were translated first into the vernacular and then into the English language by experts. After the instruments were translated into the vernacular, the instruments underwent expert validation to check whether the items or indicators are relevant to the present study. Afterward, pilot testing was done at Tarangnan Samar which was not included as the actual sampling site of the study. The result of the test of the reliability of Cronbach's alpha (*r=0.84)* revealed that the instrument was good enough to be used as the main instrument in the study.

3.4. Data gathering procedure

The researcher sought approval from the respective authorities in order, for the researchers to conduct and administer their survey questionnaire and get access to the necessary data that was useful in the study. A letter to the university president asking the authority to the researcher in conducting data gathering and a letter asking permission to the sampled municipalities and sampled barangays have been prepared by the researchers to ensure that data collection protocols have not been violated and for easier and smoother implementation of the survey as well. The researcher asked for the consent of identified household head respondents by filling out the informed consent before the start of the interview. After this, the researcher started the interview which lasted an average of 1 hour and 15 minutes, respectively. In the same manner, the researchers abide by the health protocols in the entire data collection phase.

3.5. Statistical treatment of data

Descriptive statistics were used to detail the socio-demographic profile and in summarizing the variables of the respondents. Pearson r, was utilized to test the significant relationships of the count variables related to the households' economic welfare. Multiple linear regression analyses were used to further predict factors associated with economic welfare and dependency age, working age, and age of the household heads.

4. Results

4.1. Profile of the respondents

Table 2 shows the age and gender of the household respondents. The data revealed that the age of the household heads ranges from 15 to 65 years old and over. Most of them were female (53.4%) with an average age of 43.51 years old, compared with males (46.6%) having an average age of 45.88 years old.

Table 2. Age and gender of the respondents.

Age group (year)	Gender	Total

	Female		Male			%
	No.	%	No.	%		
15 - 24	2	4.3%	0	0.0%	2	2.3%
25 - 34	11	23.4%	2	4.9%	13	14.8%
35 - 44	14	29.8%	6	14.6%	20	22.7%
45 - 54	10	21.3%	27	65.9%	37	42.0%
55 - 64	7	14.9%	5	12.2%	12	13.6%
65 years old and Over	3	6.4%	1	2.4%	4	4.5%
Total	47	100.0%	41	100.0%	88	100.0%
Percent	53.4%	-	46.6%	-	100.0%	-
Mean	43.51	-	48.61	-	45.88	-
SD	13.61	-	8.09	-	11.6	-

Table 3 contains the other demographic characteristics of the GIDA Households that may contribute to exploring the dependency ratio of the GIDA households in Samar. The data revealed that most of them were married (77.3%), attained Elementary (42.0%), their occupation belong to skilled agricultural, Forestry, and Fishing Workers (75%), and belong to a single type of Family (83%) with an average of 6 members, however, some of them belong to an extended family (14.8%).

Table 3. Civil status, educational attainment, occupation, type of family, and number of household members of the respondents.

Profile		No.	%
Civil Status	Separated	3	3.4%
	Married	68	77.3%
	Single	17	19.3%
	Total	88	100%
Highest Educational Attainment	College Graduate	12	13.6%
	College Level	5	5.7%
	High School	34	38.6%
	Elementary	37	42.0%
	Total	88	100.0%
Occupation	Elementary Occupation	4	4.5%
	Plant & Machine Operator & Assembler	1	1.1%
	Skilled Agricultural, Forestry & Fishing Worker	66	75.0%
	Services and Sales Worker	5	5.7%
	Professionals	11	12.5%
	Armed Forces Operations	1	1.1%
	Total	88	100.0%
Type of Family	Family Consisting of Two or more non-related families	2	2.3%
	Extended Family	13	14.8%
	Single Family	73	83.0%
	Total	88	100.0%
No. of HH Members	11 – 13	1	1.1%
	8 – 10	15	17.0%
	5 – 7	45	51.1%
	2 – 4	27	30.7%

Table 3. (*Continued*)

Profile	No.	%
Total	**88**	**100.0%**
Mean	**6 members**	**-**
SD	**2 members**	**-**

Another demographic profile of the respondents is the type of dwelling that can be seen in **Table 4**. The data found that the type of dwelling of the GIDA community was a single house in which the type of roofing was galvanized (70.5%), almost half of the outer walls were concrete (47.7%) and almost the other half were wood (46.6%), and more than half had concrete floor type (60.2%).

Table 4. Type of dwellings of the respondents.

		Type of Building (Single House)	
		No.	**(%)**
Type of Roofing	Galvanized	62	70.5%
	Concrete	17	19.3%
	Half Galvanized iron and Half Concrete	7	8.0%
	Bamboo	2	2.3%
Total		88	100.0%
Type of Outer Walls	Concrete	42	47.7%
	Wood	41	46.6%
	Half Concrete	2	2.3%
	Bamboo	3	3.4%
Total		88	100.0%
Type of Floor	Concrete	53	60.2%
	Ceramic Tiles	6	6.8%
	Wood	26	29.5%
	Bamboo	2	2.3%
	Mud	1	1.1%
Total		88	100.0%

4.2. Dependency ratio of the households

Table 5 presents the dependency ratio of the GIDA Households in Samar. It was found that out of 88 household respondents, there were 194 belonged to the dependency age (<15 years and ≥65 years old) and 301 were in the working-age population (15 – 64 years old). This shows that the computed dependency ratio of the GIDA community was 64.45%.

Table 5. Dependency ratio of the geographically isolated and disadvantaged households.

Age Category	No.	Dependency Ratio
Old Dependents	6	64.45%
Young Dependents	188	
Total	194	
Working Age	301	

4.3. The economic welfare of the households in terms of consumption

The welfare of the GIDA households is measured through their economic consumption per month. **Table 6** contains the basic consumptions of the GIDA households per month. It was found that the basic commodities consumed by the households were food, beverages, clothing, and housing. The food has the highest average consumption (*mean = Php1,405.8, SD = 1,396.2*) with an overall total of Php2,815.3/month. Further, the data revealed that at the 50th percentile, there were 44 households with an average consumption that have greater than or equal to Php966 (food), Php170 (beverages) Php489.50 (clothing), and Php82.9(housing) amounting to a total of Php1,708.4. On the other hand, at the 80th percentile, there were 70 households that consumed basic commodities for about more than or equal to Php3,999.6 per month.

Table 6. Summary statistics of the consumptions of the respondents per month.

Parameters		Food	Beverages	Clothing	Housing	Overall Total
Mean		1405.8	375.6	755.3	278.6	2815.3
Std. Deviation		1396.2	590.2	793.1	1601.7	4381.1
	20	537.2	0.0	111.0	19.9	668.1
	40	858.6	135.7	345.0	59.9	1399.2
Percentiles	50	966.0	170.0	489.5	82.9	1708.4
	60	1062.0	208.3	568.4	100.3	1939.0
	80	1827.6	564.0	1442.6	165.4	3999.6

Table 7 contains the multilinear analysis for the welfare of the GIDA households in Samar. The results revealed that the age of the household head ($\beta = -42.3$, $p<0.05$) and the number of working age ($\beta = 265.6$, $p<0.05$) in the community were significant predictors of the economic welfare of the households. The statistical model can be shown as follows,

$$y = 3220.7 + 265.6\ No.\ of\ working\ age - 42.3\ age\ of\ HH$$

This means that for every increase in the number of working-age people in the family, there will be a Php 265.6 increase in their consumption for their basic necessities, however, for each increase in the age of household head there is a decrease of Php42.30.

Table 7. Regression output between households' economic welfare and the no. of dependents, no. of working age, and age of the household head.

	Coefficient	SE	p-value
(Constant)	3220.7	863.4	0.000
No. of Young and Old Dependents	180.5	119.9	0.136
Age of Household Head	-42.3	18.2	0.023
No. of Working Age	265.6	123.5	0.034

**Significant @ p<0.05; R-square = 53.3%, F = 3.37, p=0.002)*

5. Discussion

In the geographically isolated and disadvantaged areas, the household heads were in an economically-active population and apparently represented by females due to the reasons that males were working away from home during the conduct of the study. They lived in single-typed housing with big family sizes and engaged in agricultural economic-related activities. These imply that even though they were in the isolated and disadvantaged areas in Samar province, they lived the least decent lives.

However, based on the dependency ratio analysis there were approximately 36 percent of the GIDA community have the potential to earn their own income compared to 64 percent who are most likely not earning their own income. This further shows that as the percentage of dependents increases, those who are employed are likely to be subject to higher taxes to recompense for the bigger dependent population. Additionally, it points out that the working people and the broader economy face a greater burden in supporting and giving the social services necessary to children and the elderly, who are often financially dependent. This result is similar to the result of the study by Ginting, et al.,[1] that the dependency ratio is one indicator in measuring the economy in terms of population. In their study, they found that in the Papua Province, the dependency ratio is considered relatively high, which means that the increase of dependency ratio, the lower the GRDP and the increasing percentage of the poor population. Also, according to the Philippine Age Structure, the age structure of a population affects a nation's key socioeconomic issues. Countries with young populations need to invest more in schools, while countries with elderly populations need to invest more in the health division. On the other hand, looking at the economic welfare of the households based on their consumptions and expenditures per month on their basic needs such as food, beverages, clothing, and housing they were living below the poverty threshold of Php12,030 per month for a family of five (5) members set by the Philippine Statistical Authority (2022, p.350).

Subsequently, further analysis revealed that the number of dependents was not a significant predictor of the economic welfare of the households in GIDA. This result confirmed the previous study by Ginting et al.,[1] that the role of the dependency ratio does not affect poverty through economic development. In this case, economic growth is not a prevailing variable between the influence of the dependency ratio on poverty. This implies that the government has the initiative to strengthen and prioritize GIDA by providing assistance and support such as governance and health information systems. The government specifically ensures that those who are living in GIDA shall be considered priority recipients of technical and financial assistance from both national and international-assisted projects[13]. On the contrary, the study of Knowles[29], pointed out that increasing the dependency ratio will increase the percentage of people in the poverty line. The decreasing dependency ratio demonstrates that the productive population has heightened and the non-productive people have declined, but this has not been able to have a positive influence on poverty through financial growth as well as the financial welfare of a certain individual.

6. Conclusion

Though the dependency ratio does not matter on the economic welfare of isolated and disadvantaged households, still point out that the working population and the wider economy face greater strain to support and provide the social services needed by the economically dependent. Further, as the household head becomes older there is an indication that there is a negative effect on the economic welfare of the household. Thus, the Local Government Unit (LGU) and other government, private entities, and academic institutions must consider and prioritize the geographically isolated and disadvantaged individuals as beneficiaries of technical and financial assistance from both National and International-assisted projects. Also, due to the fact that as people aged it had a negative effect on the economic welfare of the households due to some health issues. Therefore, there is a need for the government initiatives and policies to be successfully implemented, monitored, and evaluated such as RA 8371 or “The Indigenous Peoples’ Rights Act of 1997” which is an act ensuring all people living in GIDA to have access to basic health services by improving the core health system functions by the LGU.

In light of the empirical findings and conclusions of the study, here are some of the limitations of the current study. First, the dependency ratio indicates that children under the age of 15 and those aged 65 and

over are economically dependent. However, in many population groups people do not stop working at the age of 65, nor is it true that all people between the ages of 15 and 64 are employed. Although older people often need economic support from others, in many societies they have economic resources of their own and support their adult children. Furthermore, as the time to learn for a productive life increase, most adolescents and young adults remain in school and unemployed, effectively extending the period of youth dependency well beyond the age of 15. When available, direct estimates of net producers and net consumers can be used for a more accurate assessment and analysis of economic dependency, and second, the sample size of the study was small which might affect the generalizability of the result, and finally, the consumption and expenditures included in the study were limited only to the basic commodities such as food, beverages, clothing, and housing.

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Conflict of interest

The authors declare no conflict of interest.

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