

**Master's Thesis**

**Family challenges: A Quantitative Study on Household spending towards  
Culture and Church in Samoa using Engel's Theory of Income Elasticity**

By

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## List of Abbreviations

ADB	Asian Development Bank
BNPL	Basic Need Poverty Line
CBS	Central Bank of Samoa
CCCS	Congregational Christian Church of Samoa
FPL	Food Poverty Line
GDP	Gross Domestic Product
GFS	Government Finance Statistics
GoS	Government of Samoa
ILO	International Labor Organization
IMF	International Monetary Fund
LFS	Labour Force Survey
LMS	London Missionary Society
MoF	Ministry of Finance
ODA	Official Development Assistance
OECD	Organization for Economic Cooperation and Development
PSM	Pacific Strategy for the new Millennium
PWE	Protestant Work Ethic
SBJ	Statistics Bureau of Japan
SBS	Samoa Bureau of Statistics
SDG	Sustainable Development Goals
SDS	Samoa Development Strategy
UN	United Nations
UNDP	United Nations Development Program
WB	World Bank

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## **Certification Page**

I, Uaina. Kitiona (51220636) hereby declare that the contents of this Master's Thesis are original and true and have not been submitted to any other university or educational institution for the award of a degree or diploma.

All the information derived from other published or unpublished sources has been cited and acknowledged appropriately.



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Uaina Kitiona  
2022/07/25

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## Abstract

Spending is dependent on income. Theoretically speaking, it means that spending should be contained within our economic means to avoid economic stress and financial strains caused by the extent of spending on unnecessary demands and wants. Accordingly, there were three main findings of the research which answered the two respective research questions.

First, based on the literature review, one of the underlying findings from the research was the positive correlation between religion and economic growth. This concept was first observed by Max Weber during the church's liberal movement and reformation in 1517. The principles of hard work underpinned Weber's theory that culture and religious ideas have a positive impact on economic growth. Later, many scholars and theological researchers—for example, Botticini and Eckstein, Barro and McCleary, and Becker and Woessmann—support Weber's ideology.

Second, the correlation between income and expenditure on culture and religion was determined by using Engel's law of elasticity. It was found that the surveyed households considered cultural spending and church donations as essential goods as the income elasticities values were less than one. This means that the proportional spending on the three items does not differ if income fluctuates. In addition, Engel's elasticity results also showed that middle- to low-income families pay more towards culture and religion than wealthy families. Finally, the level of expenditure concerning the three components does differ in urban and rural regions.



# 1 Introduction

*“Every age, every culture, every custom, and tradition have its character, its weakness, and its strength, its beauties, and cruelties; it accepts certain sufferings as matters of course, puts up patiently with certain evils. Human life is reduced to real suffering, to hell, only when two ages, two cultures, and religions overlap”*

*Hermann Hesse*

John Wesley,<sup>1</sup> the nationalist and patriot of Methodism once said, “make everything you can, give everything you can, and save everything you can” (Wesley, 1703 - 1791). It sounds commercialized, yet it can be implied that it is vital to care for others in any case, but it is more critical to focus on ourselves also. I can optimistically argue that religion and culture are two of the old and complex ideas of communism.

This chapter explained how vital religion and culture are to Samoan society. The setting will also connect social issues and economic principles, as was the case in Europe in the 15th and 16th centuries. In this research, understanding this view is essential. It depicts the roles and effects of socialism on economic growth, whether they are favorable or negative, with a focus on how it impacts the people, their income, and their expenditure.

The connections between religious ideology, cultural development, and economic progress are defined in Section 1.1 using Weber's viewpoints on Europe's economic rebound as well as from the Samoan perspectives. The motivations of the author and the rationale behind the topic selection were discussed in Section 1.2. The significance of the

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<sup>1</sup> The founder of Methodism. Wesley was more involved in the reformation of the Church of England (Anglican Church) based on his argument that the Anglican Church lost its spiritual vitality. Wesley himself was an ordained Anglican minister he also was an Oxford fellow. His brother Charles composed many hymns as part of their evangelism work. (Calvin vs Wesley, Thorsen, 2013).

research in terms of personal growth, societal advancement, and policy formulation is discussed in Section 1.3. Finally, the research hypothesis and the two research questions that will be used to guide the study are presented in Section 1.4.

## 1.1 Preamble

The two concepts are somehow connected to both financial and political speculations regardless of whether it is directly linked to other aspects or not. For instance, in 1993, Brown and his study of the coexistence and the concurrence of religion and culture inside India's monetary and political issues. Brown referred to Mahatma Gandhi's end pages of his (Gandhi) collection of memoirs that says, “The individuals who say that religion doesn't have anything to do with governmental issues don't have any idea what religion signifies” (Brown, 1993). It could sound awkward, considering the perspective that religion and culture should be independent and left out of political influence, moreover, considering its roles and roles played in individuals' and societies' development. Nonetheless, as indicated by Brown's review, these two variables are turning into a test that is looked at by the world in the twenty-first century (Brown, 1993).

What is religion? In Latin, religion signifies a “commitment or bond.” In particular, the bond is between the human form and its spiritual realm (Boyer & Baumard, 2016). Religion is built on and ideally driven by historical data and discoveries that may be expressed through emotion (Howerth, 1903). Culture, on the other hand, was defined by Mr. Edward Taylor in 1871 as a complex phenomenon that hindered all walks of life. Theoretically, despite that the two phenomena played different roles in societies, culture serves a common purpose of connecting people physically, mentally, and spiritually. This

was the basic chemistry that constitutes the major economic surge in Europe and America during the fifteenth to the nineteenth centuries. The strong economic reform was evident to convince researchers to accept religious and cultural principles as the two benchmark factors that drove economic resurgence in industrialized countries and western civilizations.

This ideology did not settle well within the perspectives of the forefathers; accordingly, it became one of the hottest debated topics amongst theorists. For example, Weber in his book, *The Protestant Ethic and the Spirit of Capitalism*, highlighted the positive connection between culture, religion, and economic growth as well as poverty. This theory was a result of Europe's economic boom after the great Reformation of the sixteenth century. In his argument, Weber emphasized that the success of Europe's economic growth was mainly driven by religious principles and a culture of working hard. It started when families were poor and deprived because of brutal church policies enforced by the state. However, the reforms liberated them from the Catholic Church, and hence they called themselves "Protestants." This event has allowed families to work and save and subsequently, they became successful entrepreneurs in Europe.

If Europe's economic success was religiously and culturally driven, there is no doubt it should work and produce the same results for the Pacific Island countries as they are well known for their unique indigenous cultures and so-called religious people. Unfortunately, it is not the case. Why? Finding the answer to this question is the primary focus of this research paper. In addition, it will also present an examination of the preexisting connections between religion and culture to economic growth as well as poverty and hardship in Samoa. Also, it will feature a review of the impacts of excessive spending on culture and church on people's livelihoods and household economic stability. Before proceeding further, please take note that there has not been any research-based

evidence to indicate any existing links between these social factors to economic growth and poverty—particularly in Samoa. It is a privilege of course to take up the challenge as there was no research before to specifically address the connection between economic concepts towards socialism and poverty in Samoa.

In the wake of modernization, its most influential theorist, Karl Marx, proposedly argued that economically developed societies take the lead ahead of the less developed ones and as such, the concept of religion being part of economic perseverance would decline (Inglehart & Baker, 2000). Marx's proclamation contradicts Weber's theory that highlights the correlation between culturalism, religionism, and economic growth. Marxism favors people's statuses as factors of development. Religious and cultural ideas do and would not have any impact on economic growth and people should accept this situation. Finally, religion will never fade away and culture will remain as long as the people exist. Therefore, this paper will take another approach and a different perspective.

In the Samoan style— or “Faasamoa”—as in any other culture, respect comes first as it is paramount. They engaged with us and taught us that there are three main attributes a Samoan must have: culture, Christian values, and family. These three pillars acted as a magnetic or attractive force that connected people to the land. So, wherever a Samoan wanders, these values also exist. There is a Samoan proverb that says, “E mamae le tava'e i ona fulu a'o le Samoa i lana aganuu,” which translates as “The tava'e (tropical bird) is proud of its feathers, but the Samoans are very proud of their feathers (culture).” The proverb expressed the importance of the people of Samoa's values (culture and Christianity).

The culture (“aganuu”) can be disintegrated into two words. First, “*Aga*” means attitude, discipline, or in a broader perspective, it can also include roles and responsibilities in the family and society. “*Nuu*,” on the other hand, is the village or community. To stay

connected, everyone must uphold and practice these values of the faasamoa and aganuu to maintain peace and harmony amongst the people and societies.

It is with no doubt, that it has a prodigious significance within societies. However, it comes with a cost and the people are bearing these costs. For example, traditionally, when hosting guests for an event, traditional gifts such as fine mats, pigs, fish, and other items were used to show appreciation and utmost respect. However, people modified these practices and replaced them with cash. From an economic and accounting point of view, surely it is costly. Nonetheless, people preferred this option with the shared opinion that “it is easy for them where they don’t have to carry heavy loads around and save the hassle dazzle.” It is reasonable in the sense that, it will save time and workload when it comes to fa’alavelaves, but the aftermath can be agonizing and stressful.

## 1.2 Study Motivation

I have been involved with surveys for more than ten years taking the supervisory role. I have shared experiences with all kinds of people. So, during this experience, I visited and even stayed with families who are struggling to make a living. Their existing situation is not because they do not have money or land to work on, or families to support them when in need. The common problems for these families are financial management, financial control, and “affordability.” The household budgeting tool for controlling and managing family finances in terms of prioritization does not work for most of these vulnerable families. They added, that when they have money, the priority is “*mea faalelotu*” or “*church*.” If there is a family fa’alavelave, then that is the second priority and then family needs, which of course includes the welfare of the children and the elders. These are obligatory payments, and it is a norm for us Samoans as we believe in blessings

in return for forgiving. However, it jeopardizes the family's social and economic welfare.

Can we avoid, pend, or change it? The answer to this question is “no.” Therefore, what are the effects on sustaining family economies? Is it too naïve to say and blame these aged practices as the reason why families are struggling? If so, how can I help?

These questions, plus the experience, gave me the enthusiasm and the passion to study such claims if they are valid and proved by using economic theories; also, to depict the relationship between religion, culture, economic growth, and poverty. In addition, to find and address a solution to the problem faced by vulnerable families.

### 1.3 What is the Significance of this study?

It is with great hopes that this research will:

- Identify the impact of spending on church and culture on the household budget.
- Examine how valid the claims by households are that religion and culture are the cause of their struggle. This can be computed by using econometric methods and analytical tools.
- Provide the government, church leaders, and community leaders with a new perspective on factors that are causing poverty in Samoa and how they can assist and address an effective solution(s).
- Assist to construct useful measures in the area of policy formulation through research results and recommendations.
- Act as a platform to encourage and assist families with family budget priorities.
- Identify the relationship between religious beliefs, culture, and economics by using the Household Income and Expenditure Survey data.

## 1.4 Research Questions and Hypotheses

1. Is the cultural and religious obligations straining and burdening families' finances? Is there a solution that can be developed if this is the case?

The two research questions are intercorrelated. The first question targets household financial issues caused by either culture, the church, or both. The answer to this question will shine a light on this topic and broaden the scope of this paper. Moreover, this will provide affirmation on people's claims regarding financial problems they have had. The outcome can be two—yes or no. With regard to either of these two answers, this is a serious matter that needs to be addressed and solved. Hence, part two of the first question comes in handy with the assumption that the answer is yes. However, if otherwise, then what exactly is the root of the problem, and is there a solution to it? This paper will provide the answer through its findings and analysis.

2. Do families with higher incomes or lower incomes spend more on cultural and religious activities?

This question distinguished families who spend more on cultural and church obligations based on their levels of income. Why is it important and what is the contribution or the significance of this question to the study? This will be a new finding. The problem of excessive spending on culture and religion can be somehow moderate for families with stable and high incomes. However, it is a concern for families (as mentioned earlier) whose income is not stable, consistent, and adequate. In the latter stage of the research, it should provide policymakers, leaders of communities and religious groups, and heads of households with a tool to effectively monitor their level of spending.

The hypotheses to test are:

- Household spending changes when income changes.

- Low-income families spend excessively on fa'alavelaves (culture) and the church, thereby causing hardship and financial strains.
- Spending on food, fa'alavelaves, and the church differ by level of income and by region.



## 2 Literature Review

This chapter will provide insights and summarize all the literature that was used to bring light onto the topic of the research. Notably, the three main pieces of literature that my literature review will be based on are 1) *The Protestant Ethic and the Spirit of Capitalism* by Weber (1930) and 2) *Culture, Entrepreneurship, and Growth* by Doepke and Zilibotti (2013).

### 2.1 Introduction

It is critical to understand prehistorical occurrences or the philosophy of time to comprehend the contentious socioeconomic developments in current cultures (Luhmann, 1976). These events, in my opinion, have shifted people's perspectives and have had a substantial influence on the socio-economic environment of individuals and civilizations. Furthermore, pre-and post-church reformation events from the sixteenth century to the twentieth century are one of these occurrences. Without a doubt, academics, particularly those in the field of theology, find the issue of “Church Reformation” (Hillerbrand, 1968) fascinating and demanding, since it is unquestionably the foundation of current religious and economic ideals. Moreover, did it cause the sixteenth-century Great Reformation? Was it a political, religious, or economic movement? What did it mean in terms of economic and social development? Although it is well known that the sixteenth century had a great reformation, there was a fascinating pre-Reformation period before the century's real reformation (Brundin, 2016). So, understanding historical events will help bring insight into the research paper's objectives and the links between religion, culture, and economy.

Why are the Protestant Reformation and Church Reformation important to my research? Why is it so authentic? “This work begins by looking at the influence of certain

religious ideas on the development of an economic spirit, which in this case, the connection between the spirit of modern capitalism and the rational ethics of ascetic Protestantism,” wrote Weber in his book, *The Protestant Ethic and the Spirit of Capitalism*. Furthermore, social and economic changes were influenced by cultural and spiritual considerations (Weber, 1930). As a result, in my opinion, understanding the historical Protestant Reformation movement is beneficial and should be incorporated before moving into a more in-depth analysis of events. This is because it yields the true connection between Protestantism and capitalism as well as the link between religion, culture, and economic growth. There would be no questions asked about its grave relation to poverty once it had been established, and remedies could then be created. Revising, revisiting, evaluating, or renewing something that already exists is what the word “reform” means. According to Mark Greengrass of the University of Sheffield, the phrase was not coined primarily by historians. It had been used by numerous reformers from an early period, not just in religious but also in political organizations. Martin Luther,<sup>2</sup> John Wesley, and John Calvin are three well-known reformers. Calvinists<sup>3</sup> were sometimes known as reformers or the “pretended reformers” church (Greengrass, University of Sheffield, 1997). The majority of the European Christians worshiped and belonged to the Catholic Church where the church members pledged their devotion to the church by making monetary or material sacrifices. People were suffering to make ends meet while the church was misusing its authority to rob

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<sup>2</sup> Martin Luther led the church reformation in the sixteenth century. He is well known amongst theological scholars as the founder of the Protestant church. He developed his reformation theology in the “95 Theses,” “the Diet of Worms” and the creation of Lutheranism. The information was sourced from the book, ‘Martin Luther 2<sup>nd</sup> Edition’ by Michael A. Mullett

<sup>3</sup> Followers of John Calvin (1509 – 1564). The French theologian teachings impacted the course and theories of Protestantism, especially with his ideology theory of “pre-destined” which is against the theories of other theologians such as John Wesley (founder of Methodism). This was sourced from <https://www.biography.com/religious-figure/john-calvin>

them of their possessions. Accordingly, there was a lack of fairness and equality in society, and, worst of all, the church's acts violated sacred beliefs. Luther regarded himself as a liberator in the face of these difficult circumstances, rescuing Christians from the oppressive Catholic structures (Mullet, 2015). Mullet said, "The Reformation was a movement that freed the masses of people free from a fundamentally corrupt and unfree medieval Catholic order." Greengrass, in contrast, holds a different perspective on the Reformation, claiming that it was Luther's initiative to revise the university's curriculum, where he was a lecturer (Greengrass, 1997). In any case, it was aimed at reviving the Christian faith. By resisting the Pope and emperors, "striking them like a mighty hammer," and questioning church doctrines and morals through his well-known ninety-five theses, Luther became the patriot of the new Protestant faith, an organization of people who protested the Catholic Church. Consequently, he became the patriot of the new Protestant faith, an organization of people who protest the Catholic Church (Mullet, 2015). According to Greengrass, Luther was a devout Catholic monk (Greengrass, 1997).

## 2.2 Religion and Culture

Stephen characterized religion as "beliefs and rituals related with and concentrated around supposed supernatural entities and powers," (Sanderson, 2008). There are numerous different religions around the globe. Based on the latest statistics, Christians make up most of the world's population; however, they are dwindling in Europe, followed by Muslims and other religions. Religious teachings are solely intended to increase spiritual well-being, yet religion has been shown to have good effects on mental and physical health as well as financial security. After the greatest upheaval a hundred years before, the seventeenth and eighteenth centuries were hopeful times in Europe or the Western world (Steenkamp,

2013). Despite threats from the government and the church, Luther's freedom campaign in the sixteenth century was a triumph. Following his profound teachings, the majority of Catholics across Europe left the church to establish a new branch of the faith that involved the practicing and adopting of Protestantism ideas. In his work, *The Protestant Ethic and the Spirit of Capitalism*, Weber observed and noted changes in the Christian population in Europe—particularly in Germany—in terms of progress. According to occupational data from nations with a mixed religious population, company owners, as well as high and multi-skilled laborers and people, are overwhelmingly Protestants, independent of nationality (Weber, 1930). Furthermore, Weber argued that the changes in society were most likely related to the conversion of wealthier regions to Protestantism. As a result of these developments, a new phenomenon emerged: the majority of the developed and economically stable regions supported a revolution during the Reformation.

When it comes to transformations, Weber was a survivor of the European and North American industrial revolutions (Steenkamp, 2013). He saw a lot of progress take shape, which resulted in a lot of changes in the economy and social development of Europe. This is one advantage of having strong religious values and morale, as it provides prospects for advancement. Some of the changes Weber noticed were the improved road infrastructure—including railways and expanded manufacturing—and it offered and provided people with new chances, according to Steenkamp. The Protestant ethic of hard work and self-determination led to success and the advancement of profit (Weber, 1930).

Martin Luther and John Calvin were the key reformation pioneers, according to Weber, with Calvinism being more significant than Lutheranism (Weber, 1930). According to Weber's perspective, Calvin “offered religious beliefs that established a substantial new attitude toward work,” as Steenkamp stated. Calvin's “predestination” was one of the

beliefs he proposed, and it did not sit well with the people. Weber, on the other hand, recognized a link between Protestantism and the spirit of capitalism. Despite the melancholy and conflicting reactions, Weber recognized that the remedy rests in economic techniques and activities—specifically, work. Weber saw this in the Americans, who believed that to follow and please God, one must “labor” to honor him. They become more perseverant and collect more income as they labor more, encouraging economic growth (Steenkamp, 2013). It is not just about religion and ideas, as it may also be about the accumulation of human capital (Botticini & Eckstein, Study of the Jewish people, 2005). Hard effort, asceticism, deferral of gratification, frugality, economy, and other principles are still alive and well (Steenkamp, 2013). Modern journalists, administrators, leaders, economists, and philosophers continue to follow the ideas of the Protestant Work Ethic (PWE) in modern civilizations. Steenkamp's study report was consistent with the PWE and the current work ethic embedded in modern cultures, as shown in the table below.

Table 1: Alignment between the Protestant ethics and work value types

Work value type	Core individual value clusters		Core PWE values
	Basic Values	Core definitions	
Self-Development	Ability	Control and dominance over people and resources, as well as social status and prestige (social power, authority, and wealth)	Abundancy, but deferring entrepreneurial behavior.
	Accomplishment	Personal achievement is achieved through displaying competence in accordance with societal standards	Dedication and hard work individualism.
	Self-indulgence	Self-satisfaction and sensual enjoyment	Enjoyment of the fruits of labor with care.
Self-transcendence	Diversity	Understanding, appreciation, tolerance, and protection for	Be responsible at all domains including the

		all people and nature's welfare	environment, social equality, peace.
	Kindness	Protection and promotion of the well-being of those with whom one has frequent intimate interaction (helpful, honest forgiving, loyal, responsible)	Social responsibility, uphold mutual respect in the workplace.
Preservation	Custom	Respect, dedication, and acceptance of religious customs and ideals provided by traditional culture (humble, accepting my portion of life, devout, respect for tradition, moderate)	Culturally connected and uphold ethic with respect to change.
	Respect	Restraint of actions, inclinations, and impulses and likely to upset or harm others and violate social expectations or norms (politeness, obedient, self-discipline, honoring parents and elders)	Delay satisfaction, prudence, frugality
	Peaceful	Safety, harmony, stability of society or relationship, and self (family security, national security, social order, clean, reciprocal of favors)	Societal responsibility
Welcome changes	Motivation	Enthusiasm, innovation, and life challenges (heroic, a diverse life a thrilling life)	Does not afraid to take life risks and challenges (within-worldly) asceticism
	Independence	Individual actor and be proactive (creativity, freedom, independent curios, self-thriving)	Self-driven towards economic and financial success and be more practical.

Source: Protestant ethic: Contributing towards a meaningful workplace research paper by Petrus L. Steenkamp, 2013. *Published by the Reformed Theological College, University of Pretoria, South Africa, <http://www.scielo.org.za>*

### 2.3 The Spirit of Capitalism, Materialism, and Traditionalism

Is capitalism's spirit distinct from capitalism itself? But what is capitalism? Was it an unintended consequence of the Industrial Revolution and the Reformation? It is conceivable to describe it as a profit-making system. Depending on one's preferences, capitalism may be seen in a variety of ways; on the other hand, it has a deeper significance than merely financial gain. Weber supported these ideas and definitions in his book, *The Protestant Ethic and the Spirit of Capitalism*, in which he argued that Protestant asceticism—along with cultural and spiritual factors—are independent drivers of socio-economic transformation and that this is the true spirit of capitalism (Doepke & Zilibotti, 2013). Aside from the corporate viewpoint of capitalism, the phenomenon links religious beliefs to cultural values, as well as economic growth and change. Marx, in contrast, had a different opinion. Marx's theoretical point was that culture, religion, and ideology are just reflections of the materialistic interests of the class that owns the means of production (Doepke & Zilibotti, 2013). Adam Smith<sup>4</sup> also had the same mindset where he labeled Weber's theory of capitalism as “dangerous” (Johnson, 2021). However, Weber's argument was based on the Industrial Revolution where the changes were not just a reflection of “materialism.” Hence, this is why Weber brought up Benjamin Franklin's opinions on capitalism which differed slightly. Franklin was giving a speech about the value of time and money, the value of honesty, and the need of being responsible when owing money to people. According to Weber, this is the “philosophy of greed” or “materialism” in which once capital increases, it is the end of the world, and this is current capitalism (Weber,

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<sup>4</sup> Adam Smith, also known as “the father of economics,” was an eighteenth-century Scottish economist, philosopher, and author. He is well known for his book, *The Wealth of Nations*. Source of information: <https://www.investopedia.com/updates/adam-smith-economics/>

1930). Franklin was primarily concerned with accumulating wealth, enjoying success, and leading a self-centered life.

According to Weber, this component of capitalism is “all worldly asceticism” in which it stimulates the desire for money but discourages joy, and it is neither the real spirit of capitalism nor total irrationality (Coursehero.com, 2019). In other words, Franklin's message is simply that money should be valued over human needs, which Weber believes should not be the case. One thing to keep in mind is that, according to Weber, capitalism differs from the “spirit of capitalism.” Physiological concepts that question other beliefs are the spirit of capitalism. According to Weber, these additional concepts are referred to as “Traditionalism” (Weber, 1930).

Traditionalism refers to aspects or occurrences from the past; for instance, paying workers is an example used by Weber. Traditionally, he added, the catch is to raise the amount of compensation to attract more employees to work on agricultural farms. As time passed, however, the employees understood that they could work less for the same compensation. According to Weber's definition, this is customary conduct. Similarly, cutting wages to increase productivity does not appear to be rational and might be troublesome (Weber, 1930). Workers must remember that their occupations are a “calling” to enhance production. Education, not pay increases, will be the only way to achieve it, according to Weber (Weber, 1930).

Another instance of traditionalism occurred when women—particularly unmarried women—were more conservative. During the revolutionary era, businesses and companies frequently chastised women for their reluctance and inability to work (Weber, 1930). Weber, on the other hand, disagreed, arguing that women, particularly Pietistic women, are impelled and committed to their profession and that the spirit of economic advancement is



positive. Religion and religious beliefs have the potential to influence economic conditions through human capital, and Protestants (Piety followers) were more diligent than other religious groups, such as Catholics, in this regard (Becker et al., 2009). Weber then shifted his focus to entrepreneurs, observing that, despite their desire to pursue a business internship, many continued to think in traditional ways. It takes a lifetime to become a successful entrepreneur, and it is a risky endeavor (Doepke et al., 2013). “The accounting of culture is that a man is a trader when he sees his money generating a profit,” Adam Smith stated. “However, the accustomed man will spend his money mostly on expenditures, from which he will receive no partial return” (Smith, 1776). Despite the risks to investors, the entrepreneur serves as a link between cultural and economic growth. The three thinkers have differing perspectives on capitalism and its spirit, but they all agree and feel that culture and religion are elements in economic progress. In the nineteenth century, economists dismissed hypotheses that excluded culture from the equation (Doepke et al., 2013). Finally, Weber sees capitalism's spirit as entwined with the development of rationalism, which led to the idea of “calling,” the Protestants’ favorite term.

#### 2.4 Contextualizing the Concept of “Calling”

The heavenly job of calling is a theological idea. It is not German or Catholic in origin, even though it is thought to have come from a Bible translation (Weber 1930). Following one's calling is so important to Protestants and Protestantism that it is a requirement for being a good Christian. Luther came up with the theory after Calvin's evolution, in which he felt that all callings came from God and that it was only for Protestants—not Catholics—to receive them (Weber, 1930). The notion integrated Protestantism with capitalism, imbuing secular activity with sacred importance. According

to Weber, worldly activities are people's vocations and economic development activities. However, other philosophers feel Luther and Weber utilized the phrase to influence and control the people, thereby making the phenomena a problem. But Weber's motivations were clear in that he just wanted to understand the connections and relationships between religion, capitalism (economics), and culture.

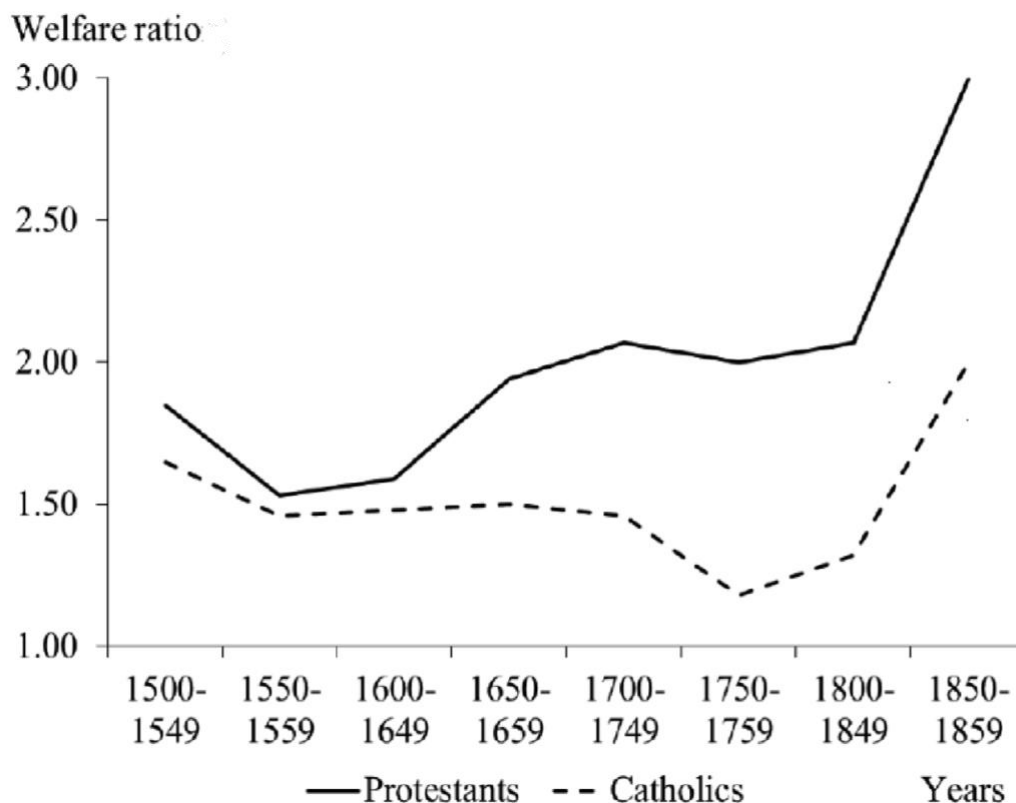
He begins by outlining the four main kinds of austere Protestantism: Calvinism, Pietism, Methodism, and Baptist sects. Weber preferred to back up his statements with Calvin's theories. He began by stating that God's grace is something that people can never fully understand, dispute, or affect. Calvinists thought that God would only aid those who helped themselves, as Weber pointed out in his analysis of Calvin's theological views (Weber, 1930). To put it another way, it is our worldwide responsibility and mission to commence growth and life betterment. As a result, Becker and Woessmann asserted that religion had a significant impact on economic performance and development via human capital (Becker et al., 2009).

## 2.5 The Socioeconomic Status Change and the Entrepreneurial Spirit

Luther's criticisms of the Catholic Church before the Reformation focused on its practices. Specifically, it was not so much the church's shady dealings as it was the gospel's distortion (Britannica, 2020). Pope Leo X aimed to restore the Vatican, but the church did not have any property at the time. To this end, the medieval church provided indulgences as a kind of monetary payment for sins while also raising money for the Pope's needs. Subsequently, people were divided due to this and other immoral activities—as if they had a choice—and so they were enslaved psychologically and financially.

The people's way out of economic turmoil and misery was church reformation. People's beliefs and ethics changed as a result of the Reformation, elevating their standing within their society (Weber's theory that there is a significant association between religion [based on the events of the Reformation] and economic progress developed from this) (Becker et al., 2009). In comparison to Catholics, Protestants in Western Europe are well off, according to Weber. Despite Becker and others' claims that their prosperity was due to their high literacy rates, Becker and Woessmann discovered that Protestants had much greater income than Catholics in 452 nations, owing to the Reformation. The research's outcome is depicted below.

Chart 1: Welfare ratios of workers in Protestant and Catholic cities, 1500 – 1899



Source: The impact of the reformation on the economic development of Western Europe (Sheremeta et al., 2017) website: [https://mpra.ub.uni-muenchen.de/87220/1/MPRA\\_paper\\_87220.pdf](https://mpra.ub.uni-muenchen.de/87220/1/MPRA_paper_87220.pdf)

A welfare ratio is defined as the "ratio of a worker's pay to the cost of purchasing the bare necessities of life. A welfare ratio of one suggests that employees are living and depend on what they can afford, whereas a ratio of two shows that they can purchase twice as much as they need to survive (Sheremeta et al., 2017). From the chart above, it can easily be seen that the Protestants were more well off compared to their Catholic counterparts. One of the effects of spreading Protestantism has been an increase in the number of Protestants who become entrepreneurs. This corresponded to the increased number of technology innovators—as noted by Schumpeter in 1942. (Doepke et al., 2013). Schumpeter's theory differs significantly from Weber's in that he stated entrepreneurship and innovation are two fundamental determinants of economic progress, but culture is not taken into account. Parents, on the other hand, are responsible for educating their children on how to understand the culture and accept the patience and dangers that come with becoming an entrepreneur (Doepke et al., 2013). Furthermore, Weber's spirit of capitalism necessitates ethics and patience, and culture was the dominant idea before industrialization, thereby explaining why people reacted differently to post-industrial developments (Doepke et al., 2013). Carroll also supports the idea that there is a positive and strong correlation between patience and income (Carroll et al., 1991).

Economic growth and religious teachings were shown to have a strong link in the theory of capitalism and entrepreneurship. For example, in a study of Jewish people's religious views about economic growth, it was discovered that religious beliefs lead to the building of human capital, which in turn contributed greatly to economic prosperity (Botticini et al., 2001). Furthermore, it was noticed in the nineteenth century that Protestants were more diligent than Catholics (Becker et al., 2009). According to Weber, that does not logically make sense. This is because Protestants were denied access to a

proper education during and after the Reformation since most schools were held by the Catholic Church (Weber, 1930). Despite the difficulties, the majority of Protestants subsequently became merchants, with the majority of laborers being Catholics. A religious movement and beliefs drove socioeconomic transformations and the spirit of entrepreneurship. Subsequently, it demonstrates the significant link between religion, culture, and economic progress.

## 2.6 Empirical studies of Engels theory in the Asia Pacific region

Based on the reformation event, Weber provided significant evidence to prove his arguments that there is a positive correlation between religious principles, culture, and economic enhancement. However, these positive concepts took a reverse path and were modified by Samoans and practiced to the extreme. Mixing it with emotions and pride, these new modifications lead up to financial stress as we often heard people complaining about too many “fa’alavelaves” and “mea faalelotu” saying that cultural and church payments are too much to bear. Statistically speaking, donations to churches and customary obligations is the fourth largest expenditure type. Every week, the total expenditure recorded was \$21.5 million (SBS, 2011). Of the amount, the total spending on church and customary obligations averaged 1.9 million talas (USD 700,000.00) which is equivalent to an 8.8 percent share of the total household expenditure per week. This is significantly higher if compared to household spending on education and health which amounted to \$0.4 million combined. If compared to family income, the total income recorded was \$22.1 million. The family's main source of income for families is wages and salaries which totaled 10.6 million tala. The margin is squeezed, which means that saving and investment

are almost impossible. Therefore, in summary, these findings show that families are facing some kind of hardship or financial strain.

This was also a result of a study conducted in New Zealand by the Auckland University of Technology (AUT). It was found that, from the 1,376 households surveyed, 62 percent of families send money home for family needs and 75.9 percent for church purposes. The study reveals this commitment has made the situations in their families more difficult (Cowley et al., 2004). Furthermore, the people of the Pacific Islands in New Zealand were considered poor, with low participation in the labor force due to a variety of factors. Notably, one such aspect is their culture and traditional obligations to their home countries (Cowley et al., 2004).

In contrast, the opposite was found in a University of Malaysia study concerning the impact of socio-religious beliefs and rural poverty on health care behaviors involving case studies in the poor residential community in Kedah, Malaysia. Religious affiliation and sociodemographic factors have been found to influence the choice of clinical care and traditional healers. Also, increasing age, education, and living children increased the utilization of clinics compared to traditional healers. Moreover, it was found that Christian religious practices increased the use of the clinic but decreased the use of the traditional doctor. Although the lack of family support affects respondents more, they prefer traditional practice. Religiousness is an important factor related to health status and the use of medical care. As such, the question is how to measure religiosity. The level of religiosity relates to a person's association with religious services. For example, Macintyre et al. (2002) found that criteria for a good level of religiosity include frequency and attendance at religious services, donations to religious institutions, and/or participation in activities related to religion. There is strong evidence that religious affiliation has a greater impact on

income and health. The research was conducted among agricultural households in Malaysia in the two states of Kelantan and Terengganu; specifically, it was discovered that religious practice affects monthly income. Additionally, peasants who attended their place of worship and recited the holy book found better income generation than those who engaged in religious commitments infrequently. Their findings also show that more religious farmers feel less stressed, less depressed, and less discouraged (Rahman and Uddin, 2018).

However, to re-focus the research, Samoa's economic situation has remained stable over the previous 30 years. Because of the increase in remittances whilst the commercial sector has taken over the agriculture and fisheries sectors. These shifts are mirrored at the household level as well. Families, for example, can now afford one or two automobiles despite rising fuel prices. One of the contributing causes to Samoa's economic stability was a shift in household purchasing patterns. Although it is a good sign of economic sustainability nonetheless, it has adverse effects on households as well as individuals. To examine these effects we use Engel's law as a mechanism for analysis.

Engel's (1821–1896) 185 law is undoubtedly one of the most well-known econo-statistical analysis laws in history (Rodney et al., 1995). In estimating and evaluating household expenditure patterns, it has become a key theorem for economists and statisticians. The link between household spending or income and expenditure on a specific item is determined by the Engel curve and elasticities. According to Engel's law, the proportion of money spent on food decreases as income grows (Houthakker, 1957). Engel created the idea because he was worried about the outturn balance of income versus spending in household budgets as the population grew. Many nations have now accepted his notion as an analytical tool and a measure of household spending management.

Engel's law is now compatible with a wide range of research relating to household economic situations. For example, in 2008, the Indian Society of Probability and Statistics conducted its Annual Conference, and Krishna Kumar, Jayarama Holla, and Puja Guha of the Indian Institute of Management presented a research working paper on applying Engel's curve approach for quantifying poverty in India. According to the researchers, Engel's curve offers researchers a lot of information on consumption behavior at various levels of total spending and for different family compositions (Kumar et al., 2008).

In addition, the Agricultural Economics Research Unit (AERU) of Lincoln College in New Zealand used Engel's law to estimate meat consumption by Christchurch households. They polled 300 households, asking them about their fundamental preferences for various meats as well as how much they spend on meat products. Finally, the study discovered and advocated several policy reforms related to meat consumption, meat quality, and domestic and international meat markets (Yandle, 1970). As a result, the application of Engel's law in this research is inevitable. As previously stated, the purpose of this study is to see if household expenditure on food, religion, and culture varies as income levels alter. As a question of affordability, the family's expenditure on food, religion, and cultural activities is logically determined by their income. However, the 2018 HIES data will be used to extract four primary attributes: total income (as the independent variable), food spending, church gift, and fa'alavelaves (cultural expenditures) as dependent variables.



### 3 The Church, the Culture, and Poverty in Samoa

#### 3.1 Religion

Within Samoan communities, the foundation of Christianity has been accorded the highest honor (Macpherson, 2011). The Methodists arrived in 1928; before them, it was the Catholics in 1845. The London Missionary Society (LMS), now known as the Congregational Christian Church of Samoa (CCCS), showed up in 1830. These three denominations, which Samoa referred to as the mainstream churches, arrived early and were prominent and dominating (Macpherson, 2011). Consequently, these new religions were quickly adopted by the populace.

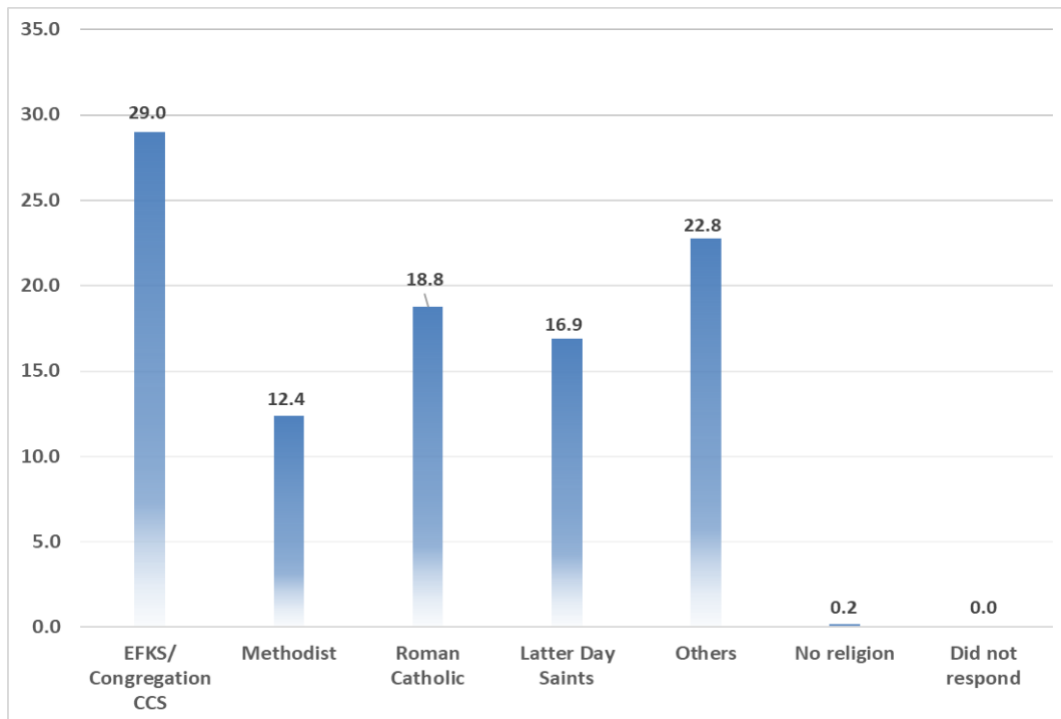
Surprisingly, why were the people so quick to embrace and convert? The structure of Samoan societies was first investigated. Mead (1928, pp. 481–495) describes the Samoan social structure as hierarchical. The primary unit is the “aiga” (family) and the “matai” (chief) is the leader of a traditional Samoan family. The family gave a title to them when either he or she became a chief, and since then, the new titleholder has been addressed by the chiefly title. Notably, more than one primary title can be held by a matai. The chief's primary duty is to watch after the family, regardless of where they live. They also attend village council meetings to represent the family and address community issues. The paramount chief, who controls all village activities, chairs the village council, which is made up of other family leaders. The supreme chief issues orders, and it is everyone's job to follow them. Perhaps this was the reason why the Samoans were so quick to convert and adopt the new religions.

Anyhow, the social structure is conducive to the mission's goals and facilitates their work of promoting Christianity. When the missionaries first came, they contacted one of

the reigning monarchs, who also happened to be one of the paramount leaders of the period. The LMS was approved by King Malietoa Vainuupo, while the Methodists (who had arrived two years before) were brought in by Saivaaia with a few Wesleyan missionaries and began their work in Saleleoga and Satupaitea (Macpherson, 2011). Malietoa became the first to convert since he was the first to adopt Christianity. With his position of power, he was able to easily order the Samoans to join Christianity and outlaw all forms of indigenous religion and devotion to traditional gods. He declared Samoa to be a Christian nation. The priests and pastors were awarded the supreme title of “ao faalupega,” the greatest degree of reverence, as a result of the Samoans' thanks. Given this, by Samoan custom, everyone is expected to serve the church, just as they are obligated to serve the high chiefs. This service can take any form, including monetary offerings.

Pascal Boyer (2001) and Scott Atran (2002) criticized the premise that the church served as a bridge between Samoan customs and Christianity (Sanderson, 2008). The fact that 99.8 percent of Samoans are members of the church demonstrates that this commitment is still strong. According to the most recent numbers, the CCCS, Methodist, Catholic, and Mormon were the most popular denominations, as indicated in the chart below.

Chart 2: Percentage of church members in Samoa, Population Census 2016



Source: Samoa Bureau of Statistics, *Census Report 2016*

There were already two theological institutions on the islands at the time. The LMS, or the CCCS, oversees Malua Theological College, whereas the Methodist Church oversees Piula Theological College. Many Samoan young men dedicated themselves to becoming pastors after the creation of these theological institutes. They were ordained and became “faifeau Samoa,” or simply a Samoan pastor, after years of theological education. Some began their ministry in communities around the country, while others went on to theology school and became missionaries to promote the gospel and Christianity to other Pacific Island nations. The first group of Samoan missionaries took their oath and left nine years after the arrival of the CCCS in 1830 to spread the gospel to other Pacific islands such as those in the Melanesian, Micronesian, and Polynesian groupings. Most of them never returned; some died of old age, but most of them were martyred. Methodism, on the other hand, began its mission in Samoa in a unique way. More than 1,000 Samoans had already

converted to Methodism by the time it arrived in 1835. The Methodist Church was the first church to set foot on the islands in 1928. The Methodist Church's operations were mostly handled at the time by Australians, Tongans, and a few Samoan pastors until the Australian conference voted in 1962 to make the Samoan Methodist Church an autonomous member church. Rev. Kamu Tagaolo was the first Samoan president to take office. On the anniversary of the country's independence, the decision was made. To date, there are more than 20 kinds of churches in Samoa, nevertheless, the CCCS, Methodist, Catholic, and The Church of Jesus Christ of the Latter-day Saints (the Mormon Church) are the leading denominations based on the total number of members.

Christianity took and grew strong roots in Samoa and around the Pacific. In the last 30 years, churches in and outside of Samoa have begun to flourish and spread. The increase in the number of Samoans going overseas is one of the elements contributing to the very quick growth. Together, they built Samoan communities with new churches springing up. Through the help of members, the mother churches were able to establish new church branches, which provided much-needed aid and resources. Support does not have to take the form of money as it may also take the shape of anything (even land) that is freely provided.

Church pastors work for the church. Some are engaged in the churches' headquarters in Samoa, while others are called to work in villages and communities. They are paid every two weeks by the church office payroll. Ministers ministering in villages, in contrast, are supported by their congregations. Donations are collected from the congregation on a weekly and fortnightly basis. The money contributed was made out of the goodness of one's heart. This contribution was known as “alofa” (compassionate donation) by the CCCS and “peleti” (plate) by the Methodists. Some examples of other side

payments include atina'e, which is intended specifically for church miscellaneous developments and maintenance; lafoga a tina (donations for the women's committee); lafoga a Tama (donations for the men's committee); and fa'alavelave (emergencies and unforeseen payments) which are collected every Sunday.

Aside from these biweekly or monthly payments, the CCCS and Methodist churches organize a yearly celebration called faigataulaga, which means "holy sacrifice" in cash. Members of the two denominations will make a one-time monetary donation to the church to help it financially. The Methodist Church received \$30.5 million SAT (USD 11.8 million) at the integrated level in 2021. This is a \$5.4 million SAT (USD 2.1 million) increase over the level of \$25.1 million SAT (USD 9.7 million) in 2020. Other contributions, as well as the value of in-kind gifts, are excluded. On the other side, the CCCS staged the same event year after year. In 2018,<sup>5</sup> the church collected a total of \$19.5 million SAT (USD 7.5 million), the amount equivalent to an increase of \$1.1 million (USD 0.4 million) from its 2017 amount of \$18.4 million (USD 7.1 million).

All the funds are put in the church's accounts at local and international banks; specifically, the church's authorized plans and budget dictate how this money is used. This includes payments for church schools (personnel, capital, and maintenance); head office payments (personnel, capital, and maintenance); church outreach and Christian awareness programs; a loan scheme to help newly established parishes and project funding; a government health grant; and other miscellaneous payments. The Mormon Church functions uniquely, but for the same reason. They did not have yearly conferences or

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<sup>5</sup> The total faigataulaga for the years 2020 and 2021 were not available during the time of research as the church cannot publicize its financial statements unless endorsed by the church council during the church's annual conference. The church's annual conference has been postponed for two years in a row because of the COVID-19 State of Emergency restrictions.

faigataulaga like the CCCS and Methodist churches; however, they, like others, offered funding and help. In addition, they are interacting more directly with communities and families that require assistance. The Mormon financial support comes straight from their headquarters in the United States. Similarly, the Adventist Development and Relief Assistance (ADRA) program of the Seventh Day Adventist Church helps communities. The ADRA program is a church-led project to help vulnerable and underprivileged families who cannot afford necessities.

To summarize, the mother churches—the Congregational Christian Church of Samoa and the Methodist Church—as well as other Samoan-founded smaller churches, rely on the support of their members. This support can come in any form, including financial and in-kind donations. The money contributed to the church comes from the people's pockets and it is handed out freely. As such, the church is required to provide financial accounts to the congregation during church conferences as well as propose a budget for the following fiscal year for approval. To do so, all processes including the use of the church's funds must be open and transparent. The church helps communities and people in a variety of ways, including giving to the health sector, providing low-cost education, and participating in church-related initiatives. The cycle of events depicts that there is a strong and profound correlation between family budget and church payments. One thing to be clear of, the church does not persuade people to give, it is up to the people, as it is given out of free will. Essentially, this means nothing will happen if you do not donate or make payments to the church.

### 3.2 Poverty Profile

Ending poverty is the first and foremost goal of the United Nations (UN) 2030 Sustainable Development Goals (SDGs). By the UN's definition, poverty is "*the lack of income and productive resources to ensure sustainable livelihoods. Its manifestations include hunger and malnutrition, limited access to education and other basic services, social discrimination, and exclusion, as well as the lack of participation in decision making.*" A study by the Asian Development Bank (ADB) in 2001 highlighted many issues concerning poverty status and causes of poverty for many Pacific Island countries. According to the report, because of climate change, Pacific Island countries are prone to natural catastrophes. Also, most Pacific Island governments have insufficient resource sources to meet their socio-economic needs (ADB, 2001). According to the United Nations Development Program's (UNDP's) Human Poverty Index (HPI), about 43 percent of Pacific Island countries are disadvantaged, meaning they do not reach recommended basic living standards. Even though it is not a measure of poverty, it does imply that Pacific nations require adequate measures and support programs (ADB, 2001). The report referred to the Pacific Strategy for the New Millennium (PSM), which addressed five major development concerns confronting Pacific developing countries (PDMCs). The key obstacles were: 1) a bad macroeconomic performance and lack of financial resources; 2) a rise in poverty; 3) ineffective public-private partnerships; 4) worsening environmental deterioration; and 5) limited progress in enhancing women's political, economic, and social roles (ADB, 2000). Despite the plethora of challenges that cause worry among Pacific Island country governments, admitting and accepting the truth that poverty occurs primarily because of Pacific culture is extremely tough. It is a reciprocal commitment in our society to help one another. Samoa, the country of focus, shares the same poverty-inducing

characteristics as other Pacific region countries. The reasons for poverty, on the other hand, differ by country, community, family, and person (ADB, 2001). Some people are unlucky due to circumstances beyond their control while others are reckless. The third poverty report for Samoa was released in 2016 by the Government of Samoa (GoS) in partnership with the UNDP through the Samoa Bureau of Statistics (SBS). The study was based on the 2013/14 Household Income and Expenditure Survey. According to the report, “Households and individuals are classified as extremely poor if their income falls below the food poverty line (FPL), poor if their income falls below the Basic Needs Poverty Line (BNPL), highly vulnerable to becoming poor if their expenditure is 20% or less above the BNPL, vulnerable if their expenditure is more than 20% but less than the BNPL, potentially vulnerable if their expenditure is more than 50% but less than 100% above the BNPL” (SBS & UNDP, 2016).

The Food Poverty Line (FPL) is the cost of basic nutrients required for survival per day and no other essentials whereas the Basic Needs Poverty Line (BNPL) is the minimum income per person to survive (World Bank, 2017). Recently, the World Bank has changed the threshold to measure the BNPL from \$1.9 USD to \$2.15 USD. As shown in the table below, 38.6 percent of the families questioned were non-poor, compared to 4.3 percent and 18.8 percent of homes classed as below the FPL and below the BNPL, respectively (SBS & UNDP, 2016).



Table 2: Vulnerability trends at the national and sub-national levels, 2013/14

	Samoa	AUA	NWU	RoU	SAV
HH Per Capita Expenditure	All Persons	All Persons	All Persons	All Persons	All Persons
Below FPL	4.3	4.5	6.5	2.5	2.8
Above FPL but below BNPL	14.4	19.4	17.2	11.3	9.6
Total Below BNPL	18.8	23.9	23.8	13.7	12.4
Less than BNPL+20%	10.2	11.3	10.2	10.3	9.4
Between BNPL+20% and BNPL +50%	12.9	10.1	14.6	12.9	12.9
Between BNPL+50% and BNPL +100%	19.4	16.0	16.0	22.1	24.7
Not Poor above BNPL+100%	38.6	38.7	35.5	41.0	40.6
Total	100.0	100.0	100.0	100.0	100.0

Source: Samoa Bureau of Statistics, United Nations Development Program, *Samoa poverty report 2016*

In comparison to the ROU (Rest of Upolu) and SAV (Savaii Island), the AUA (Apia Urban Area) and NWU (North West Upolu) experienced significant poverty at the regional level. The table reveals that 11.0 percent of the population in the two areas (AUA and NWU) lives below the FPL level and 47.7% live below the BNPL requirement. Despite the majority of economic advances and infrastructures being focused in the two areas, the concerning numbers are significantly above the national level and the other two region levels. This indicates that there are a few areas that need to be improved. One of them is creating and expanding job opportunities and access equity. The only way to achieve the basic income criteria is to earn more money, and by doing so, people may overcome poverty and be placed on the same level as others (Fields, 2019). Despite all of the attempts to alleviate poverty and hunger, poverty rates remain quite high. The issue is that there are not enough job possibilities for individuals, compounded by the poor wages they obtain

from their efforts. The entire labor force in Samoa after the 2017 Labour Force Survey (LFS) was 48,100 people (SBS, Labour Force Survey, 2017). The working-age population ranges from 15 to 65 years old; males made up 64.0 percent of the total, while females made up 36.0 percent. The most active age group in terms of employment participation was between the ages of 20 and 24, accounting for 15.8 percent of the overall workforce. The North West of Upolu Island had the greatest percentage (36.5 percent), while Savaii Island had the lowest at only 16.6 percent. The employment rate in Samoa was 85.5 percent, down 5.8 percent from 2012.

The unemployment rate, on the other hand, remains a challenge to overcome. Unemployment, according to the ILO, refers to all those who were 1) unemployed, 2) presently looking for work, or 3) looking for work during the reference period. As a result, persons who are not looking for employment are not considered jobless (Statistics Japan, 2021). Unemployment rates are still alarmingly high at the global level (ILO, 2011). With an unemployment rate of 6.2 percent in 2010, the total number of jobless people registered in 2010 was 205 million, which was 27.6 million higher than in 2007. According to 2017 labor force data, Samoa's unemployment rate was 14.47 percent (ILO, 2021). Samoa's unemployment rate is the highest amongst the Pacific Island countries according to the World Bank statistics as shown in Table 3.

Table 3: Unemployment rates of Pacific Island countries, 2010 – 2021

Country Name	Country Code	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
American Samoa	ASM	9.2										
Australia	AUS	5.2	5.1	5.2	5.7	6.1	6.1	5.7	5.6	5.3	5.2	6.5
Fiji	FJI	8.9	4.4	9.0		6.2		4.3				
Tahiti	PYF											
Guam	GUM	8.2	13.3	12.2	11.5	7.6	6.9	5.4				
Kiribati	KIR	30.6					9.3				8.6	
Micronesia	FSM					8.9						
Marshall Islands	MHL		4.7								6.4	
Nauru	NRU		23.0		13.3							
New Caledonia	NCL					14.6						
New Zealand	NZL	6.6	6.5	6.9	5.8	5.4	5.4	5.2	4.7	4.3	4.1	4.6
PNG	PNG	2.0	2.6									
Samoa	WSM		5.7	8.8		8.7			14.5			
Solomon Is	SLB				0.7							
Tonga	TON									3.1		
Tuvalu	TUV							8.5				
Vanuatu	VUT	1.9									7.9	

Source: World Bank, <https://data.worldbank.org/indicator>.

The majority of the jobless in Samoa are young people between the ages of 15 and 24. (SBS, 2017). The obvious reason for this is they were recent graduates from high school and were in the process of looking for jobs, which is common among young people when they become eligible for work (Axelrad et al., 2018). According to the ILO research, the school-to-work transition is becoming a major and long-term concern for developing nations.

### 3.3 Culture and Traditions

If you, the reader, have not been to my islands, may I say “Talofa lava” and “Hello” greetings from the Islands of Samoa, the heart of Polynesia. In this section, I will talk about a few things about the Samoan culture and then illustrate its significance to this research.

Samoa culture and religion are deeply ingrained in the Samoan way of life. The Samoan culture predates Christianity's presence on the islands. Based on archeological evidence and investigations, the Samoans are assumed to have originated in Southeast Asia. To begin with, Samoan is the only language spoken; it is one of the oldest Polynesian languages. However, most Samoans also speak English. Moreover, because of their great navigating skills, the Samoans were able to travel to and settle on other Pacific islands such as Tahiti, Hawaii, and New Zealand. As a result, Bougainville refers to the Samoans as “Pacific Navigators.”

The “Aganu'u,” or culture, is also known as the “FaaSamoa.” Despite their differences in meaning, complexities, and practice, they both exist in the same setting. The common feature is that it provides individuals with explicit directions on how to live their lives by our beliefs and traditions. There is a recognition that culture is concerned with the preservation of important values such as family, language, the environment, lineage, and political and social systems. Since the nation's contact with Europe—particularly through religious influence—some Samoan beliefs and traditions have shifted, as they have in any other civilization. When Western ideals are integrated into the fa'a Samoa, the way we practice it changes, thereby making reform difficult. The fa'a Samoa is about community pride and respect and social connection; it provides comprehensive counsel and covers all aspects of life. The honoring of your family is one of its enduring principles. Every Samoan family has a genealogy that has been passed down through the years. These lineages are holy to the Samoan people because they are tied to Samoan myths and legends. Financial support is one way to commemorate the family and stay connected to their genealogy in current times. For example, Samoans who migrate overseas send remittances home to

demonstrate their support, and this gesture assures the family back home that their relatives living abroad are still connected.

The “faamatai” is a unique social system in Samoa. As previously stated, the society is built up of extended families or “aiga,” with each "aiga" having a matai (chief) who is essentially the household's leader. Holding the matai title enables them and their family to connect to other families, villages, districts, properties such as land, and so forth. Everyone is supposed to be generous when it comes to putting others' needs ahead of their own. Food and products, for example, are freely shared without cost or expectation of a return. According to Samoan traditions and customs, the chief's role is to take after these concerns while keeping peace and harmony within the family and community.

In the FaaSamoa, not all matais have the same rights or prestigious status. The High Chief or “Alii” and the “Tulafale” are the two categories of matais. The Alii is known as the sitting chief and has very high prestige; accordingly, it is up to them to make the ultimate choice. On the other side, the Tulafale are orators or talking leaders. They are, nevertheless, obligated to speak on behalf of the high chiefs or to be the high chief's voice. Their ability to make decisions is contingent on the will of the high chief. The art of the “lauga” or “oration” is one of the abilities that the orator should learn.

When it comes to Samoan fa'alavelaves like marriages, funerals, chief title bestowments, unveilings, and other events, the matai is in charge of planning and advising the family on how to handle the fa'alavelave. The fa'alavelave budget is an important part of the matai's organizational approach, and each nuclear family, or “fale fanau,” contributes to it. It comes from each family member's pocketbook. Cash and products (“palapala malo”) are the two elements to prepare. The cost of looking for a fa'alavelave is estimated to be between \$100,000.00 and \$200,000.00 SAT. Because of the deep links formed via

extended families, chief titles, and marriage, everyone in Samoa is related, which means that if a Samoan family has a fa'alavelave, everyone will come—including those living abroad and on the neighboring Samoan islands. It is a means for them to show their respect for the family, but it is also a chance for them to develop their ties with other siblings, whether they are related by blood or married.

For large and well-off families, contributing to a Samoan or family fa'alavelave is not a major concern. Their income will be sufficient to cover the cost of the fa'alavelave because each family member's contribution will be minimal. Small households with low means, on the other hand, will be the ones to feel the strain. Other relatives, particularly those who live overseas, may be affected by this strain.

### 3.3.1 History in Brief

The archipelago of Samoa is in the middle of the South Pacific with coordinates of 168 degrees south and 173 degrees west (SBS, 2011). The group of Eastern Samoa or American Samoa is still under the United States (US) administration. Samoa is an independent state. The first Europeans to set eyes on the island were the famous traveler Jacob Roggeveen in 1722, followed by De Bougainville and La Perouse. In 1830 the first Christian missionaries arrived with John William being the first of them to set foot on the ground. Some Samoans from the islands of Tahiti sailed with him on his ship called The Messenger of Peace. John William was a member of the LMS. He was succeeded by John Peter Turner, a Methodist missionary in 1835 and a member of the Catholic Church in 1840. Politically, Germany was the first country to occupy Samoa, followed by New Zealand in 1914. When World War II broke out, US forces occupied the country as they feared an invasion by powerful Japanese forces. The war did not come to Samoa and so

New Zealand continued to administer the country when Samoa became a United Nations Trust Territory after the war. By 1953, preparations for independence were underway and it was eventually won in January 1962. As such, Samoa was the first South Pacific country to become independent; moreover, it is also the oldest among its Polynesian members like Tonga, Tokelau, Tuvalu, and others.

### 3.3.2 Demography and Politics

The entire land area of Samoa is 1,100 square miles (2,830 square kilometers). The largest island, Savaii, has a land area of 1,700 square kilometers, while the second-largest, Upolu, has a total land area of 1,110 kilometers and is home to Apia's capital (SBS Census, 2011). There are only two seasons in the tropical climate: the wet (cyclone season) and the dry season. The population of Samoa was 195,979 people at the time of the 2016 census (SBS Census report 2016). In particular, males account for 51.5 percent of the total, while females account for 48.5 percent. During the census period, a total of 28,880 households from all areas were counted. The average household size is seven persons in both urban and rural areas. So, the population of Samoa is growing at a rapid pace.

The Legislative Assembly of Samoa is the highest legislative body in the country. It is headquartered in Apia, which also serves as the home of the country's central administration. Samoa's legislative assembly is known as the “Fono Aoaio Faitulafono, a Samoa,” while the country's administration or government is known as the “Malo” in Samoan. While being installed during the New Zealand occupation, the Parliament nonetheless maintains and supports the traditional Samoan “Fono.” Specifically, Fono is a Samoan word that refers to large councils, small councils, or meetings, including national assemblies and legislatures as well as smaller village councils. Parliamentarians can only be

“mates” or chiefs. It is customary, as it is in local communities and villages, where only those with chiefly titles are allowed to participate in community meetings or gatherings. The “O le Ao o le Malo” can summon and bring the Legislative Assembly together on behalf of the Prime Minister of Samoa, as well as prorogue or dissolve Parliament to end a legislative session or call a general election. The Samoan Fono is a descendant of the Western Samoan Legislative Assembly, which was established during New Zealand's administration in the early 1900s. When Samoa acquired political independence in 1962, the island's first Parliament session was held. Before a constitutional amendment in 2019, there were only 49 members of Parliament. The modification to the constitution resulted in the inclusion of three more seats and a 10 percent increase in the number of female lawmakers. Some constituencies were also split into subgroups depending on population growth rates and other criteria. During the 2016 general election, these amendments were implemented.

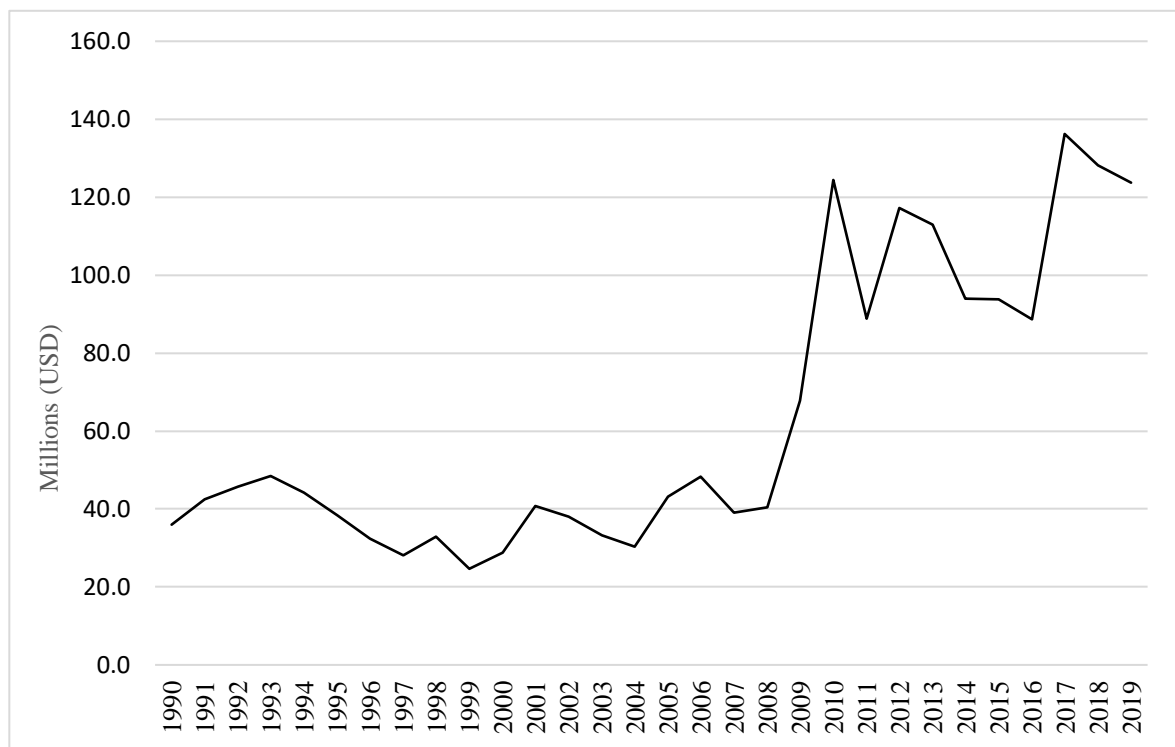
### 3.3.3 The economy

Samoa's economic development has been difficult due to traumas such as long-term trade imbalances and its vulnerability to natural catastrophes (OECD, 2011). Samoa's economic prosperity was severely hampered in the early 1990s. Notably, two back-to-back category five cyclones hit the region, causing significant damage and loss of life. Another calamity happened five years later when the rehabilitation effort was still underway. The tragedy of the taro leaf blight (TLB) almost wiped-out Samoa's principal food and export crop. These catastrophic patterns significantly influenced Samoa's growth as the new millennium approached and the SDGs were being met. As a result of this, as well as other



concerns, the country's need for aid from developing partners such as New Zealand, the US, Japan, China, and Australia has grown as can be seen below.

Chart 3: Official Development Assistance for Samoa, 1990 – 2019

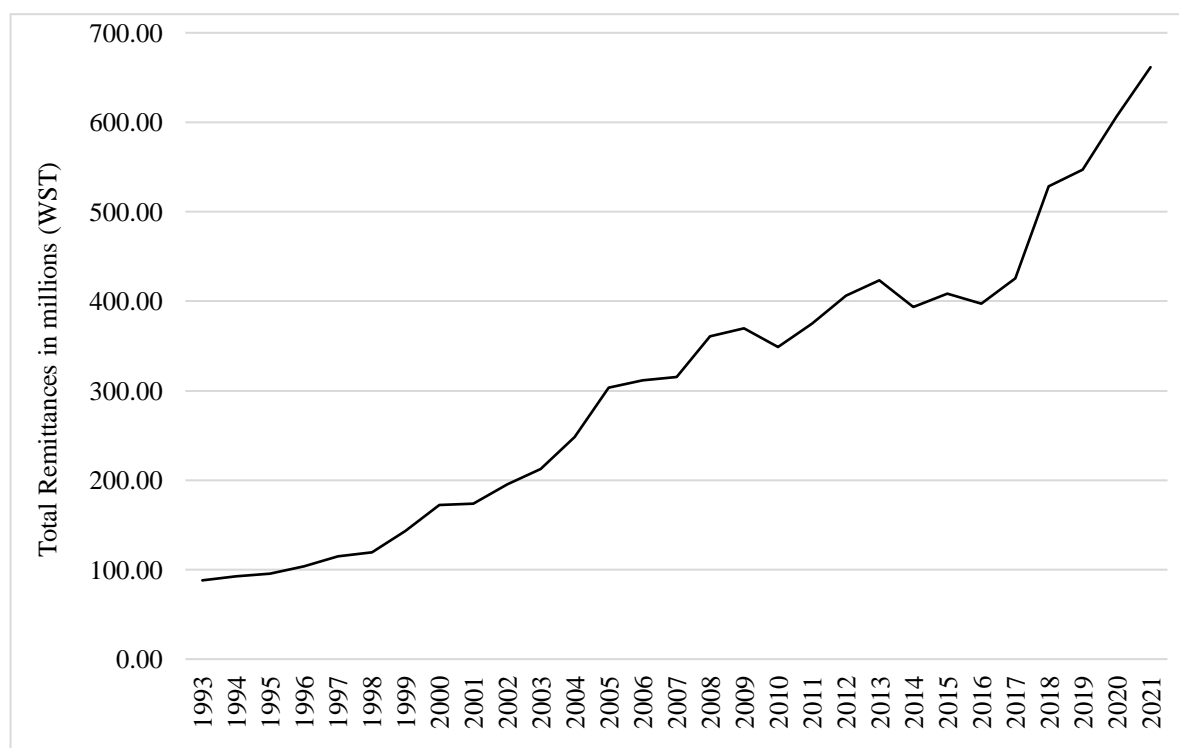


Source: World Bank, Net official development assistance and official aid received (in USD), <https://data.worldbank.org/indicator/DT.ODA.ALLD.CD>

After all, Samoa had recovered owing to the government's implementation of several significant economic reforms at the time. Its economic condition improved, and to this end, the country received tremendous support from both the regional and worldwide populations. The large influx of foreign remittances was one of the aiding elements in Samoa's recovery development. Remittances are regarded as one of the financial strongholds of households and there is little doubt that they have aided development in numerous situations (ADB, 2005). The growth in out-migration trends coincided with an increase in the flow of remittances over the years. On this basis, the household's source of

income may undoubtedly be sustained for a longer length of time (ADB, 2005). The inflow of remittances to Samoa began to increase in 1994, as seen in Chart 4. According to the Central Bank of Samoa's (CBS) quarterly report, total remittances for September 2021 totaled \$53.5 million. From September 2020, this equates to a 6.0 percent rise of \$3.0 million (CBS quarterly report, September 2021).

Chart 4: Total remittances growth trend, 1993 – 2021 (Unit: Samoan Tala)



Source: The Central Bank of Samoa, *Quarterly Report*, September 2021.

The largest number of Samoans going overseas each year is one of the contributing elements to the huge growth in remittances. The bulk of inflow remittances came from New Zealand, as seen in Table 4 since most Samoans went to New Zealand either under the quota system or by birthright. There might be a variety of compelling motivations for individuals to move. For example, they may value job possibilities, high-quality education,

and excellent healthcare systems; or, they may believe that the lifestyle and surroundings are ideal for them. Regardless of the cause, the outcome is a win-win situation for both countries. Private homes and churches are the primary beneficiaries of remittances in terms of composition. In 2020, remittances will account for 25.0 percent of the GDP (CBS & SBS. 2021).

Table 4: Composition of Remittances by country and recipient, 2016 – 2020 (Unit: Samoan Tala)

Amounts in Tala Millions	Total Remittances				
	2016	2017	2018	2019	2020
<b>By Recipient (Tala Millions)</b>	<b>397.06</b>	<b>425.67</b>	<b>528.31</b>	<b>546.92</b>	<b>606.98</b>
Churches, school, Charities	13.59	19.83	56.88	68.43	40.68
Individual/Family/Households	318.34	330.19	362.39	380.46	514.50
In Kind	6.41	6.56	6.89	7.57	6.08
Others	12.06	20.82	15.88	29.76	20.91
<b>By Country (Tala Millions)</b>	<b>397.06</b>	<b>425.67</b>	<b>528.31</b>	<b>546.92</b>	<b>606.98</b>
USA	62.17	71.13	97.04	102.23	87.69
New Zealand	169.14	182.84	214.20	223.95	253.86
Australia	130.30	136.97	169.03	161.19	193.73
American Samoa	18.79	16.43	20.17	22.52	42.13
Others	16.65	18.30	27.87	37.03	29.57
<b>By Channel (%)</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
Banks	1.29	1.85	2.15	2.43	1.51
Non Banks (1)	10.71	10.15	9.85	9.57	10.49
<b>Total Remittances (Tala Millions)</b>	<b>397.06</b>	<b>425.67</b>	<b>528.31</b>	<b>546.92</b>	<b>606.98</b>

Source: The Central Bank of Samoa, *Selected Economic Indicators Report*.

New Zealand is Samoa's most significant commercial partner, with 35 to 40 percent of imports and 45 to 50 percent of exports passing via the country. Australia, American Samoa, the US, Fiji, and Singapore are among the region's most important trading partners. Examples of imports include food and beverages, industrial and manufacturing supplies, agricultural and fishing raw materials and equipment, and transportation equipment. We export agricultural, forestry, fishery, and meat products, as well as handicrafts, kava, and

other items in exchange. The relevant industries employ almost two-thirds of the working population and account for 17 percent of the GDP to fulfill worldwide demand.

One of the most important contributors to the national economy is tourism. Over 90,000 visitors have visited the island country since the 1970s, contributing over \$12 million to the local economy. New Zealand, Australia, the US, China, and Europe account for the majority of visitors. Fiji's prolonged political upheaval was a boon to Samoa, which enjoyed a spike in visitors in 2000. The number of visitors and revenue generated by tourism more than quadrupled between 2007 and 2016. In 2007, there were 122,000 tourists in Samoa, compared to 145,176 in 2016. New Zealand accounted for 46 percent of the total, Australia with 20 percent, and the US with 7 percent. Overseas Samoans accounted for almost 33 percent of the total number of visitors. In the year 2020, Samoa suspended all foreign flights—including inbound and outgoing—in response to the COVID-19 pandemic.

#### 3.3.4 Fiscal Sector

Samoa's total GDP<sup>6</sup> in real terms in the year ended December 2020 was \$462.5 million. According to the SBS report, the outturn was the fifth consecutive quarter of underperformance since December 2019 largely due to the COVID-19 pandemic (SBS, 2021). Samoa's economy is made up of 15 sectors, namely Agriculture, Fishing, Food and Beverage, Other Manufacturing, Electricity and Water, Construction, Commerce, Transport, Accommodation and Restaurants, Communication, Financial Services, Business Services, Ownership of Dwellings, Public Administration, and Personal & Other Services. Samoa's economy scored 61.9 out of 100 in a study by the Economic Freedom

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<sup>6</sup> Samoa's GDP is measured using the production approach. The Bureau is closing to finalize GDP numbers using the expenditure approach. The GDP report is compiled by the Finance Statistics Division of the Samoa Bureau of Statistics.

Organization in Washington, putting it the 89th freest economy in the 2021 ranking (2001 Index of Economic Freedom, Washington DC). However, because of the pandemic and other underlying reasons associated with global unstable economies, the country's economy is expected to contract by 5.0 percent from 2021 to 2022. Samoa's monetary policy is housed within the Central Bank. The ultimate goal of Monetary Policy Statements (MPMs) is to raise public awareness by effectively communicating CBS's monetary policy stance transparently and responsibly. The basic goals of monetary policy, as well as their accompanying targets, are outlined in the CBS Act of 2015. In addition, the formulation and implementation of the monetary policy are driven by the strategy for the development of Samoa or the Samoa Development Strategy (SDS). The Central Bank's monetary policy is to achieve and maintain price stability—as well as develop and maintain a stable financial system—to ensure sustained real economic growth and a comfortable level of international reserves. For instance, to pursue and accomplish its price stability goal, Samoa will continue to compare its targeted inflation rate to that of its key trade partners, with an annual average inflation rate of 3.0 percent. Even while price volatility is generally driven by exogenous shocks beyond CBS' monetary policy control, this naturally informs the aim that CBS attempts to maintain each year. Persistent high increases in foreign pricing, such as crude oil and imported food prices, have put substantial downward pressure on local petroleum and food prices in recent years. During these times, the underlying (core) inflation rate was the major emphasis (CBS, 2021).

On the other hand, the fiscal policy is housed within the Ministry of Finance (MoF). The SDS defines the medium-term goal of a Resilient Macro-Economic Framework, which aims to ensure a minimal effect from external variables and a rapid recovery phase (MOF,

2021). As stipulated within the policy, the targets are the following: 1) The budget deficit to be within the range of 2 percent of GDP; 2) The total current expenditure to be maintained within the range of 25 percent to 30 percent of GDP; 3) Personnel Cost to be maintained within the range of 35 percent to 40 percent of Total Expenditure 4) Public debt to GDP to be kept below 50 percent; and 5) Debt Servicing Cost to Revenue receipts (Excluding Grants) to be kept below 20 percent (MOF, 2021). To pursue these targets, the Samoan government has worked closely with foreign partners and funders such as the International Monetary Fund (IMF), World Bank (WB), and Asian Development Bank (ADB), to mention a few. The responsive assistant helps Samoa with capacity building, administration and management, policy creation, and other technical matters. This aided the SBS in obtaining contemporary data collection, compilation, and distribution technology. For example, the IMF has been aiding Samoa with technical support through training for more than 10 years using the Government Finance Statistics (GFS) framework to compile fiscal statistics. The MoF, other government entities, researchers, and statistics users have access to this reporting system, which allows them to properly monitor the government's financial activities on a quarterly and yearly basis. In terms of fiscal data, according to the most recent SBS report, the government's total receipts for the fiscal year 2020/2021 (from July 2020 to June 2021) were \$792.2 million (SBS, 2021). Taxes, donations, and other kinds of money were the main sources of income. In contrast, total government spending in the same year was \$754.4 million, resulting in a \$37.8 million Net Lending/Borrowing balance, as shown in the table below.

Table 5: Statement of Operations for Government, FY 2018/19 – FY 2020/21 (Unit: Samoan Tala)

<b>Statement of Operations</b>			
	2018-19	2019-20	2020-21
<b>Transactions:</b>			
<b>Revenue</b>	<b>716.7</b>	<b>818.0</b>	<b>792.2</b>
Taxes	571.8	563.4	541.6
Grants	55.7	179.4	148.0
Other Revenue	89.2	75.2	102.7
<b>Expense</b>	<b>600.4</b>	<b>638.5</b>	<b>673.9</b>
Compensation of employees	230.7	261.8	267.7
Use of goods and services	201.6	188.8	170.2
Interest	16.6	15.9	6.7
Subsidies	8.7	9.5	17.4
Grants	110.9	124.5	154.2
Social benefits	19.9	23.0	28.0
Other expense	12.0	15.0	29.7
<b>Net operating balance</b>	<b>116.2</b>	<b>179.5</b>	<b>118.3</b>
<b>TRANSACTIONS IN NONFINANCIAL ASSETS:</b>			
<b>Net Acquisition of Nonfinancial Assets</b>	<b>55.9</b>	<b>45.2</b>	<b>80.5</b>
Fixed assets	55.9	45.2	80.5
<b>Expenditure</b>	<b>656.3</b>	<b>683.8</b>	<b>754.4</b>
<b>Net lending / borrowing</b>	<b>60.4</b>	<b>134.3</b>	<b>37.8</b>

Source: Samoa Bureau of Statistics, *Government Finance Report*.

Samoa's status was changed recently from a least developing country to become a developing country. However, because of the change in its recognized status, Samoa will no longer be eligible for some of the benefits it formerly received in terms of official development aid. One of them is its right to take out long-term loans with a low-interest rate. In the case of a nation that relies on Official Development Assistance (ODA) to support development, this benefit may result in a debt load. The effect can be disastrous, as it was in the 1980s when emerging countries struggled to promote economic sustainability and growth owing to massive debt burdens (Cunningham, 1993). High borrowing rates—as

well as a drop in GDP—are contributory factors, according to a study of emerging nations in the Southeast Asia region; moreover, this includes high-interest rates, a decline in resource inflow, lower export earnings, lower domestic outputs, and lower imports (Siddiqui, R., & Malik, A., 2001). If there are no right measures in place to manage and regulate debt, it may be disastrous to national economies. As a result, the Samoan government (GoS) included measures in its Development Strategy 2016–2020 (SDS 2016–2020) to successfully manage its social and financial operations. The public debt should not exceed 55 percent of GDP, the import cover should be maintained at 4.0 to 6.0 months, and real GDP growth should average 3.0 to 4.0 percent, according to the plan (SDS, 2016). Samoa's overall debt was \$1.0 billion in June 2021, comparable to 49.4 percent of the GDP and 4.6 percent below the fiscal policy target (SBS, 2021).

### 3.4 Summary

The 1990s saw Samoa's economy become congested from the impact of natural and economic calamities, which catalyzed economic change. The long-term objective was the changes would constitute Samoa's reaction to future economic disruptions and instability. In addition, the government was looking to improve core industries like agriculture and fisheries as drivers for long-term community activities. Subsequently, the government suggested policy adjustments through the Ministry of Women and Community Development to allow community-based development to flourish. The alleviation of financial load and stress on families as a result of cultural commitments is one policy shift. Families have been suffering for a long time because they have had no other option. So, because of its deep concern, the government also urged church leaders to follow the route, through the Samoa National Council of Churches (NCC), so that both institutions were on



the same page and worked together for the people's physical, mental, and spiritual growth. The council, on the other hand, offered only a slight amount of support. Despite their sensitivity, the majority of families welcomed the new adjustments, believing that they would enable them to alleviate their financial worries. They have run into financial difficulties as a result of their cultural and religious duties. To this end, fundamental family necessities are unmet, and education and healthcare are out of reach. This study will examine these allegations and demonstrate, through research findings, why Samoan culture and the church have become the people's issues.

## 4 Data and Analytical Method

### 4.1 Data

The research will use data from the 2018 Household Income and Expenditure Survey (HIES18) thanks to the permission granted by the Samoa Bureau of Statistics. The Bureau's sixth HIES study since 1997 was performed in 2018. The survey sample was intended to represent 10 percent of the entire population; accordingly, the Samoan islands are separated into four divisions for statistical purposes: Apia Urban Area (AUA), North West Upolu (NWU), Rest of Upolu (ROU), and Savaii, with the AUA being the only urban area. The sample was selected using a two-stage sampling method. The initial step was to choose the clusters using probability proportional to size (PPS), which yielded a total of 188 clusters (enumeration areas). The second stage consisted of a methodical selection of a specified number. In the end, 3,430 homes from the four areas were chosen to take part in the study as shown in table 6 below (SBS, HIES Report 2018).

Table 6: Survey sample frames

Region	Total Number of Households	Sampled Households	Responding Households	Proportion Households (%)	Response Rate (%)
Apia Urban Area	5,849	696	594	11.8	85.3
Northwest Upolu	10,404	1,173	1,029	11.3	87.7
Rest of Upolu	6,588	750	662	11.4	88.3
Savaii	6,388	811	733	12.7	90.4
<b>Samoa</b>	<b>29,229</b>	<b>3,430</b>	<b>3,018</b>	<b>11.7</b>	<b>88.0</b>

Source: Samoa Bureau of Statistics, *Census Report 2016*

The survey was taken in four rounds for a year. Each epoch has its unique collection of families. The goal of the 12-month survey was to capture household spending and income patterns as well as to account for large variations in household income and expenditure levels owing to holidays and other seasonality timeframes. The following six-module questionnaires were used in the survey: M1 – Demographics and Activity Information, M2 – Household Expenditure, M3 – Individual Expenditure, M4 – Individual Income, M5 – Household Income, and M6 – Diaries.

The data that will be used in this study is solely quantitative for this particular research. Household income, food spending, fa'alavelave (culture) expenditure, and church donations are the only factors studied. Food spending, fa'alavelaves, and church donations are dependent variables, with household income as the independent variable. Total household income is made up of total wages and salaries from the household's main, secondary, and occasional activities; income from agricultural, horticultural, livestock, and non-subsistence activities; homemade food; handicrafts; non-food activities; fishing and sea product gathering; transfer income, remittances, and cash received; the value of goods and services received by the household; the value of properties; and imputed rent. In contrast, Fa'alavelaves (Cultural payments) and Church gifts are sub-items of the Non-Food expenditure category. These are items recorded in the diaries by families.

## 4.2 Estimation Model

To estimate Engel's curve using household data, we assume no price variation during the survey period and write it as

$$q_i = q(y_i, z_i) \text{ at } i = 1, \dots, n.$$

where z denotes the variations between households to determine the difference in food consumption, cultural spending, and religion between households, Engel's elasticity coefficient should be expressed. As shown in the table below, there are four (4) types of Engel functions that are often used:

Table 7: Engel's laws of elasticities and curves

Engel's Curve	Mathematical formula	Income elasticity
Linear	$q = \alpha + \beta y$	$\eta = \frac{q-\alpha}{q} = \frac{\beta y}{\alpha+\beta y} \dots\dots (1)$
Double logarithmic	$\ln q = \alpha + \beta \ln y$	$\eta = \beta \dots\dots (2)$
Semilogarithmic	$q = \alpha + \beta \ln y$	$\eta = \frac{b}{q} = \frac{b}{\alpha+\beta \ln y} \dots\dots (3)$
Logarithmic reciprocal	$\ln q = \alpha - \beta \frac{1}{y}$	$\eta = \frac{b}{q} = \alpha - \ln q \dots\dots (4)$

Source: Quantitative Development Policy Analysis (Sadoulet and de Janvry, 1995)

Engel's curve has several requirements: 1) Computing variables must fulfill the budget constraint (predicted spending for each item must add up to total expenditure); 2) they should be able to represent luxuries, necessities, and inferior goods; 3) with inferior elasticities declining as income rises, and 4) the consumption of numerous goods should achieve saturation as income rises.

Given that all the prerequisites of Engel's properties are satisfied, it is necessary to determine the relationship between income and the three dependent variables. So, equation (2) is more appropriate to consider for calculation using a simple regression model technique. As such, equation (2) can be rewritten in the form:

$$\ln y = \ln \alpha + \beta \ln x + \varepsilon$$

where  $y$  is the total income of the household,  $\beta$  is income elasticity given by  $\frac{d \ln y}{d \ln x} = \frac{dy/y}{dx/x}$

and  $\epsilon$  is the margin of error. With the income elasticity given by  $\eta = \beta$  (2), the value of  $\beta$  is the determinant of whether the good is considered a necessity good or a luxury good. If  $\beta$  is less than 1, we say that the good is considered a necessity good. This means that, if the household income changes, it is most likely that the spending on such items will not change. However, if the value of  $\beta$  is less than 1, then it is considered a luxury good, and spending will change when income changes.

The three types of Engel's elasticity model curves are illustrated below:

Fig 1: Engel's elasticity if  $\beta < 1$

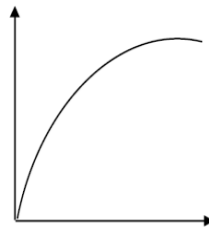


Fig. 2: Engel's elasticity if  $\beta > 1$

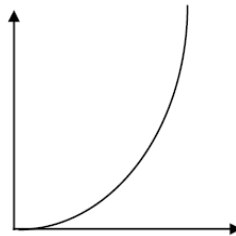
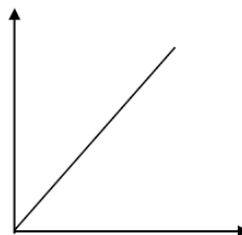


Fig. 3: Engel's elasticity if  $\beta = 1$



## 5 Results and Discussions

This section will discuss the outcome of computations using the methods stated above. It will also show if there is a correlation between research results to other sections of the paper and between the target variables. Therefore, it is important to refocus the attention on the theoretical focus and aim of the research and recall the three hypotheses to be tested.

The 3,018 households in the sample represent 10 percent of the total number of households in Samoa. Apia Urban Area (AUA), North West Upolu (NWU), Rest of Upolu (ROU), and Savaii (SAV) were among the four Samoan areas included in the sample. The goal of this study is to apply Engel's laws to evaluate household survey data and look into the financial stresses caused by spending on cultural, and church activities. Food expenditure will be included with the stated variables, thereby restricting the scope of the study, given the basic purpose and principal usage of Engel's law. The Samoan tala (100 sene = \$1.00) was used as the unit of measurement; moreover, we utilized the total amount spent on things rather than the quantity purchased—notably for food items—and we ignored price variations. Furthermore, even though household size and income/expenditure have a positive link, as pointed out by Paris and Houthakker (1995), household size is not taken into account. However, it is important to remember that, according to the SBS definition of a household, “a household is when people cook together in one kitchen, eat together, and have been staying permanently for more than three months regardless of the number of dwellings on the family's land.” Big families or households tend to spend more on food or other commodities than small families or households in terms of family income and overall spending (Burney & Khan, 1992). Even if households have the same number

of members, the home with more children will make a difference since youngsters consume less than adults (Burney & Khan, 1992).

Nonetheless, in the interest of keeping the focus of this research precise, only cultural expenditures and church donations will be evaluated. Given this, before proceeding further with the results and analysis, please take note that the analysis will refer to Table 8 below. Table 8 below presented the results based on the assumption of the  $H_0: b_1 = 0$  and  $H_1: b_1 \neq 0$ .

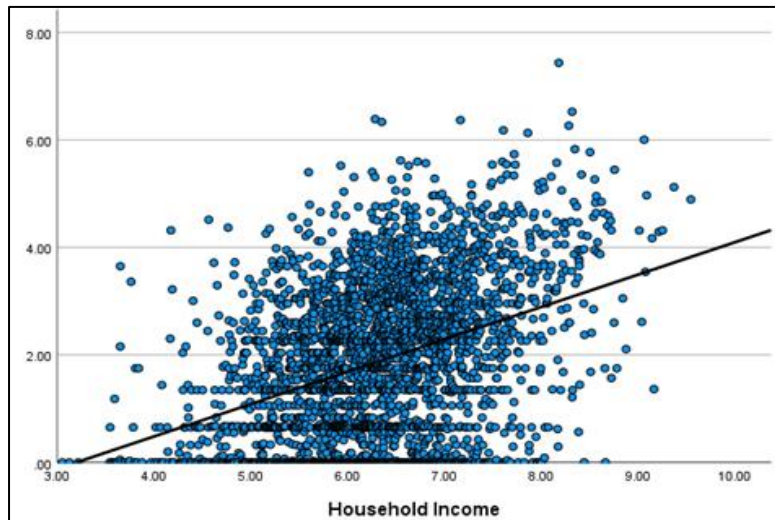
Table 8: Summary of variables

		Sample size (N)	Unstandardized Coefficients		Standardized Coefficient Beta	t - value	Sig.
			$b_1$	Standard Error ( $\epsilon$ )			
V1	Household Income_Food Exp	3018	0.323	0.014	0.383	22.749	0.00
V2	Household Income_Cultural Exp	3018	0.602	0.027	0.381	22.644	0.00
V3	Household Income_Church Donation	3018	0.522	0.026	0.343	20.069	0.00

### 5.1 Cultural Expenditure

First, from the results above, household expenditure on cultural activities is highly and strongly correlated to household income predicted by the significance level *p-value* of 0.00. The  $\beta_1$  value of 0.602 is tested at the alpha level of 0.95 percent confidence interval with a standard error of 0.027. Following the computations, we must test if the results are true or not. The hypothesis will be written as  $H_0: \beta_1 = 1$  expressed by  $1 - \hat{\beta}$  and  $H_1: \beta_1 \neq 1$  the t-value is given by  $\frac{1 - \hat{\beta}}{\epsilon}$ . From the results, we reject  $H_0$  and accept  $H_1$  that Cultural spending is regarded as an essential item (Appendix 6). In other words, if household income rises, spending patterns on cultural activities like fa'alavelaves will not be disrupted. Presented below are the charts for the cultural expenditure component.

Chart 5: Engel's curve for cultural expenditure

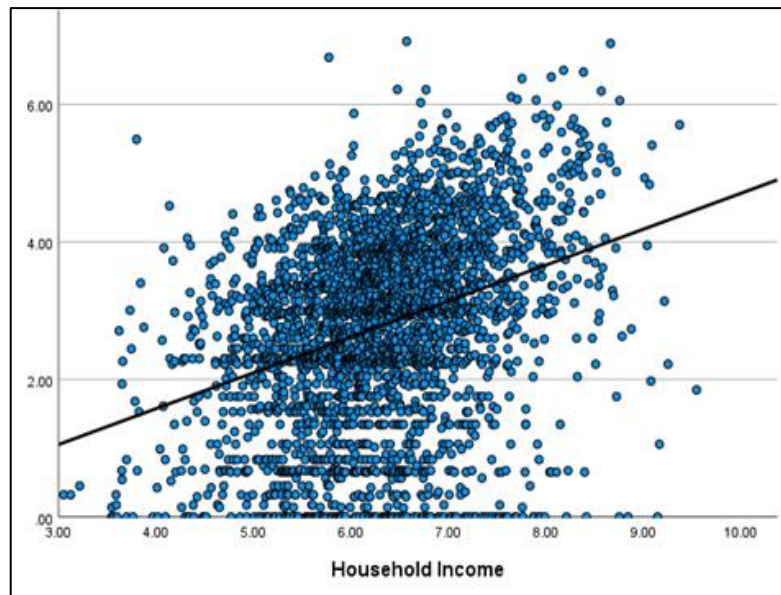


## 5.2 Church Donation

Similarly, the church donation component of the study follows the same procedure. Accordingly, the  $\beta_1$  value of 0.522 is tested at the alpha level of 0.95 percent confidence interval with a standard error ( $\varepsilon$ ) of 0.026. It concludes that the  $\beta_1$  is less than 1. However, further tests to confirm the results are applicable. Following the computations, we must test if the results are true or not. So, the hypothesis will be written as  $H_0: \beta_1 = 1$  expressed by  $1 - \hat{\beta}$  and  $H_1: \beta_1 \neq 1$ , the t-value is given by  $\frac{1 - \hat{\beta}}{\varepsilon}$ . From the results, we reject  $H_0$  and accept  $H_1$  that Church donation is also considered an essential item. In other words, if household income rises, spending patterns on cultural activities like faalavelaves will not be disrupted. Presented below are the charts for the church donation component and Appendix 6 presented the table of regression with more details.



Chart 6: Engel's curve for church donation



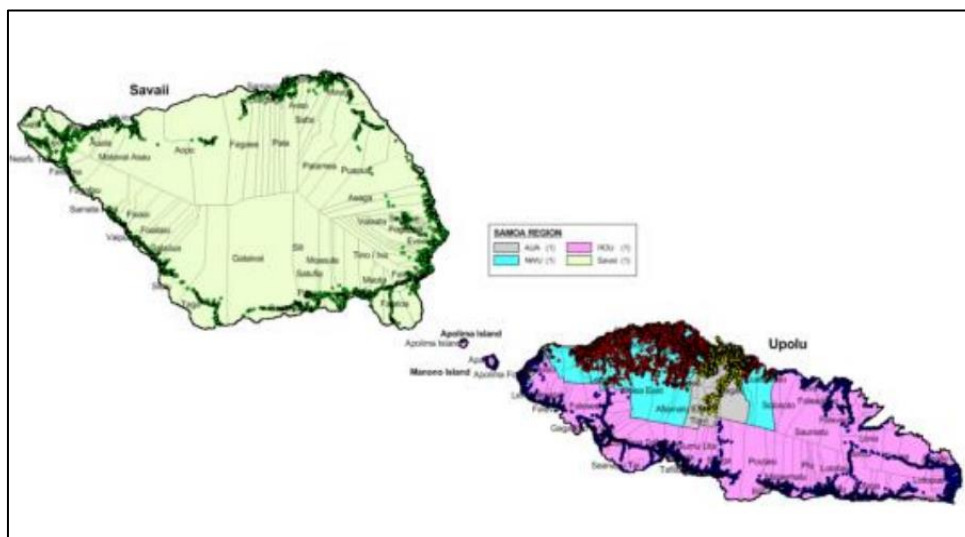
In general, the results showed that the three dependent expenditure variables—namely, food, cultural expenditure, and church donations—are all categorized as essential goods. They all meet the criterion of the determinant  $\beta_1$  of less than 1 ( $\beta_1 < 1$ ).

Based on the findings, regardless of their financial levels, the families examined do not vary their expenditure on cultural activities and church donations because their values are all less than 1. Furthermore, as presented in appendix 6, the study also considered other underlying factors that might have an impact on the results. These factors are,  $x_1 =$  Household Income,  $x_2 =$  Age,  $x_3 =$  Education level attained,  $x_4 =$  HHead Sex,  $x_5 =$  Region. Spending on cultural activities, education, and Household head sex seemed to have an impact. With their *p-values* less than  $\alpha$ -value of 0.05, we conclude to accept  $H_0$ , that Education and Sex of the household head are factors that contribute to the results above. In addition, from Appendix 5, 78.9 percent of households were headed by males compared to females. However, females were dominant in terms of education level attained

(SBS, 2016). On the other, church donations seemed influenced by the elders and the region of residence. The two results (culture and church) reflect the uniqueness of Samoan societies in terms of the top-down approach kind of leadership.

Examining the data at the regional level will give you a more detailed and precise picture of this matter. Samoa is split into the four following areas for statistical purposes: Apia Urban Area, North West Upolu, Rest of Upolu, and Savaii. These four areas are divided into constituencies, with villages inside each constituency. Official components and village boundaries are ignored in the statistical enumeration regions, which are only used for statistical purposes. From the four areas, 3,018 homes were chosen for the survey. The North West Upolu region recorded the highest number of households surveyed, followed by the Savaii region, the Rest of Upolu, and the Apia Urban Area as geographically presented in Figure 4 and Table 9, which show the total number of households selected from each region.

Fig 4: Population Distribution according to the Population Census 2016



Source: Samoa Bureau of Statistics, *Population and Housing Census 2016*.

Table 9: Number of households per region

Region	Number of Households (N)
Apia Urban Area	594
Northwest Upolu	1,029
Rest of Upolu	662
Savaii	733

Source: Samoa Bureau of Statistics, *Population and Housing Census 2016*.

Similarly, cultural expenditure and church donations are associated with the independent variable of household income. The two components of spending were classified as “essential goods” because their  $\beta_1$  values were less than 1, as indicated in the summary Table 10 below. Despite being classified as such, the findings suggest that households spend more on culture and religion than they do on food.

Table 10: Regression coefficients and Engel elasticity for the four regions

Region	Unstandardized B ( $b_1$ )			Coefficient Std. Error ( $\epsilon$ )			Engel's elasticity					
							$b1 + \alpha * \epsilon$ (where $\alpha = 95\%$ )			$b1 - \alpha * \epsilon$ (where $\alpha = 95\%$ )		
	Food	Culture	Church	Food	Culture	Church	Food	Culture	Church	Food	Culture	Church
AUA	0.28	0.61	0.59	0.04	0.06	0.06	0.35	0.74	0.71	0.21	0.49	0.47
NWU	0.32	0.63	0.55	0.02	0.04	0.04	0.37	0.71	0.64	0.28	0.54	0.47
ROU	0.48	0.66	0.57	0.03	0.07	0.06	0.54	0.79	0.69	0.42	0.53	0.44
SAV	0.45	0.59	0.54	0.03	0.06	0.06	0.51	0.70	0.65	0.39	0.48	0.43

Furthermore, the findings suggest that expenditure levels do not change or depend on household income or location. Nevertheless, compared to high-income earners, poor or low-income households spend more on food, cultural activities, and church donations. According to the findings, well-off or high-income earners get their money from investments or self-employment, whilst moderate and low-income earners get their money from salaries and earnings earned in the public or private sectors.

## 6 Conclusion

This section will provide in-depth interpretations and elaborate more on the results and outcomes of the research. Also, how the findings are linked to the literature review section, research question, and to provide hypothesis test results.

To begin, it is critical to recognize and account for the fact that food consumption habits change over time. As a result, Engel's elasticity estimation played a vital part in the regulation of family budgets in his pioneering work (1857) (Seale et al., 2012). The link between a person's or household's consumption and their spending or income is shown and determined by Engel's elasticity and Engel's curve. Regardless of eating preferences, Engel's law holds that when family income rises, the proportion of the family budget spent on food decreases even while actual expenditure rises. Food is considered a need good if its elasticity of demand is less than one (1), but a luxury item if it is larger than one in terms of income elasticity. From the results, Food is regarded as a necessity good at the national level, according to the results of the 3,018 families surveyed. Because the  $b_1$  value was less than 1, it did not meet the prerequisite criteria for it to be considered a luxury good. It was also thought that computing the results for each region was a good idea. The four areas, on the other hand, returned the same findings. In the case of food, changes in household income will not have an immediate impact on household purchasing habits. There might have been several reasons that influenced the outcome. As previously stated, food security is not considered a problem because most Samoan households have access to land for farming and cattle as well as the sea for fishing. Furthermore, fluctuating food costs have encouraged consumers and net consumers (those who consume more than they create) to be more cautious with their spending. The household budget should be feasible based on the

average number of people per home, assuming no change in the number of people unless otherwise indicated. Taking this into consideration, demand is likely to stay stable. The empirical findings, in contrast, revealed that there is no link between household size and consumption (Lanjouw & Ravallion, 1995). This is one of the deceptive elements that have a big impact on policy and decision-making, especially in developing nations like Samoa. It is commonly assumed that large and small households are impoverished (Lanjouw & Ravallion, 1995). Both the national and regional levels produced the same outcomes in terms of cultural and ecclesiastical payments. In comparison to the food component, the aggregated expenditure per component demonstrates that the average spending on each (culture payments and church donations) is considerable. According to the SBS' results in the Household Income and Expenditure Survey Report 2018, cultural contributions and church donations are the third and fourth highest categories of household expenses, respectively. As a result, the data revealed that the households studied do not vary or adapt their expenditure on culture and the church in response to their economic level. As a result of the findings, I may infer that we reject the null hypothesis that “household spending will vary as income changes” and accept the alternative that people choose food, cultural expenditures, and church donations as important commodities at both the national and regional levels. Therefore, to summarize, cultural payments and church donations are also considered “necessity goods” rather than luxury items.

The second hypothesis to be investigated was that excessive cultural and religious spending has put a burden on household resources. As a result of the findings, regardless of household financial level, expenditure on culture and religion will remain constant, rejecting the null hypothesis and accepting the alternative ( $H_1$ ) that this is not the case. However, while the findings suggest that it is basic, I believe it is necessary to delve deeper

into this so that we can comprehend people's worries. To begin, we conclude that the people's allegation of being financially burdened because of cultural and church expenditures is unprecedented and insufficient based on the findings. The research's goals, on the other hand, are within its purview and objective. If the problems occurred, providing research-based remedies will be beneficial, effective, and significant in the long term.

Before the reformatory revolution, Weber predicted rising confrontations among the minority population (nobles or commoners). The Roman Catholic Church uses law and order to exploit the people so that they have no choice but to pay up. As a result, it gave rise to the genuine spirit of capitalism, in which culture and religion may bring about changes in society's social and economic life (Weber, 1930). Despite the findings of the study, it illustrates one of Weber's essential economic principles: the close relationship between culture, religious beliefs, and economic progress. After that, the Reformation's favorable benefits on household economic stability became apparent. Again, the results showed that there is no correlation between cultural and church payments and financial strains. However, when estimating Engel's curve between food expenditure and income, religion-related expenditure and income, and culture-related expenditure and income, it was discovered that these particular curves were all convex to the above, implying that lower-income households are more likely to spend more relative to income. As such, the data is significant enough to support the hypothesis that poorer people in Samoa spend more money on religion and culture than wealthy families. This is an important conclusion to this research paper.

## 7 Policy Recommendation

The research has shown that neither culture nor religion is pushing people to be stressed out about overpayments. Yet, it is still important to take the matter of excessive spending on culture and religion into consideration as it is a serious matter that requires immediate attention. Please consider it will take some time for these measures to yield results. Any acts taken against or in support of two of our most precious and treasured values will be difficult to accomplish, yet I believe that people's well-being and family welfare are crucial and should be paramount.

For many years, the government has struggled with the long-standing issue of families suffering because of unnecessary cultural and church payments. Because of its significance, the Ministry of Women, Cultural, and Social Development is leading the way in tackling these concerns through policy formation and policy modification. For example, for many years, wholesalers only import big boxes of mackerel (48 cans of tin fish) which cost around \$55.00 - WST 60.00. It's expensive hence, the policy then changed prohibiting the importation of large- and medium-sized mackerel boxes, allowing only the small version, which holds only six cans and is cheaper at \$17.00 a box. The policy change intends to assist families by lowering the spending costs on faalavelaves.

Second, the issue appears to have begun within society and families. Therefore, to move forward, awareness campaigns to address these challenges should be implemented. The leaders (matais or chiefs) will be the target groups and they should be made aware that their actions affect the well-being of the people. In addition, the family budget is critical because it aligns all the priorities before spending. Providing such knowledge and skills will assist families in making sensible and suitable financial decisions.

Finally, churches play an important role in society. According to the literature, church leaders should use their advisory role to give individuals guidance and assistance, while also reminding them that their families should come first.



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## Appendix 1: Income vs Log Food Expenditure

Model Summary <sup>b</sup>				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.383 <sup>a</sup>	.146	.146	.71427

a. Predictors: (Constant), Household Income  
b. Dependent Variable: Log Food Expense

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	264.030	1	264.030	517.522	.000 <sup>b</sup>
	Residual	1538.705	3016	.510		
	Total	1802.735	3017			

a. Dependent Variable: Log Food Expense  
b. Predictors: (Constant), Household Income

Coefficients <sup>a</sup>					
Model		Unstandardized Coefficients		Standardized Coefficients	t
		B	Std. Error	Beta	
1	(Constant)	3.280	.091		36.209
	Household Income	.323	.014	.383	22.749

Coefficients <sup>a</sup>			
95.0% Confidence Interval for B			
Model	Lower Bound	Upper Bound	
1	(Constant)	3.103	3.458
	Household Income	.296	.351

Residuals Statistics <sup>a</sup>					
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	4.2670	6.3663	5.3201	.29583	3018
Residual	-5.78811	3.64551	.00000	.71415	3018
Std. Predicted Value	-3.560	3.537	.000	1.000	3018
Std. Residual	-8.104	5.104	.000	1.000	3018

a. Dependent Variable: Log Food Expense

## Appendix 2: Income vs Log Cultural Expenses

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.381 <sup>a</sup>	.145	.145	1.33647

a. Predictors: (Constant), Household Income  
b. Dependent Variable: Log Cultural Expenses

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	915.875	1	915.875	512.762	.000 <sup>b</sup>
	Residual	5387.061	3016	1.786		
	Total	6302.936	3017			

a. Dependent Variable: Log Cultural Expenses  
a. Predictors: (Constant), Household Income

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.926	.170		-11.359	.000
	Household Income	.602	.027	.381	22.644	.000

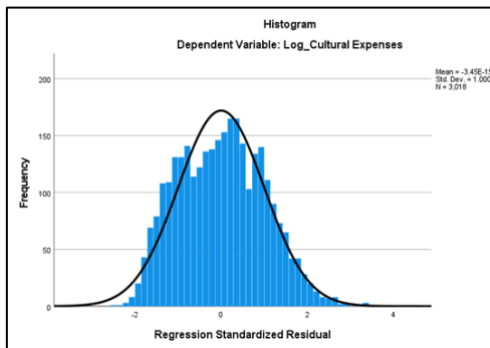
  

Coefficients <sup>a</sup>			
95.0% Confidence Interval for B			
Model		Lower Bound	Upper Bound
1	(Constant)	-2.258	-1.593
	Household Income	.550	.655

Dependent Variable: Log Cultural Expenses

Coefficients <sup>a</sup>			
95.0% Confidence Interval for B			
Model		Lower Bound	Upper Bound
1	(Constant)	-2.258	-1.593
	Household Income	.550	.655

Dependent Variable: Log Cultural Expenses



Residuals Statistics <sup>a</sup>					
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-.0881	3.8218	1.8733	.55097	3018
Residual	-3.29019	4.52877	.00000	1.33625	3018
Std. Predicted Value	-3.560	3.537	.000	1.000	3018
Std. Residual	-2.462	3.389	.000	1.000	3018

a. Dependent Variable: Log Cultural Expenses

### Appendix 3: Income vs Log Church Donation

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.343 <sup>a</sup>	.118	.118	1.30737

a. Predictors: (Constant), Household Income  
 b. Dependent Variable: Log Church Dona

Residuals Statistics <sup>a</sup>					
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.0800	4.4699	2.7805	.47769	3018
Residual	-4.26106	4.18408	.00000	1.30715	3018
Std. Predicted Value	-3.560	3.537	.000	1.000	3018
Std. Residual	-3.259	3.200	.000	1.000	3018

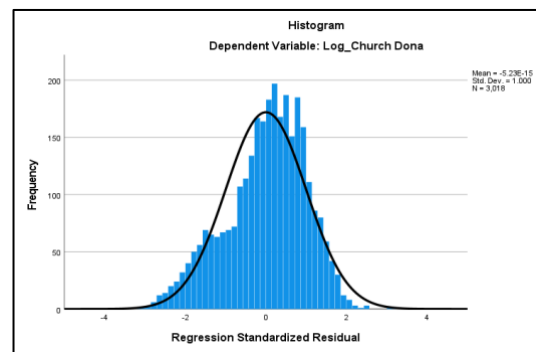
a. Dependent Variable: Log Church Dona

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.513	.166		-3.094	.002
	Household Income	.522	.026	.343	20.069	.000

Coefficients <sup>a</sup>			
95.0% Confidence Interval for B			
Model		Lower Bound	Upper Bound
1	(Constant)		
	Household Income		

a. Dependent Variable: Log Church Dona



## Appendix 4: Variables names with definitions

**Table 1. Variables and their definition**

No	Variables	Definition
1	Age Group	Household Head's age groups. Adult age (Working age), age below 64 years old (15-64 years old, Min=18, Max=98) = 1 Elderly, age from 65years old = 0
2	Education Attainment	Educational attainment, consists in 9 levels of ISCED of UNESCO, 2011: <ul style="list-style-type: none"> <li>– Level 0= No school or schooling years is not more than 5 years, age 0-5, called “No school or Less than primary education”</li> <li>– Level 1= Total schooling years is 5 years, age 6-10 years, called “Primary education”</li> <li>– Level 2= Total schooling years is 10 years, age 11-15 years, called “Lower secondary education”</li> <li>– Level 3= Total schooling years is 13 years, age 16-18 years, called “Upper secondary education”</li> <li>– Level 4-9 = Territory Education, age from 19 years old, or more than 14 years of education.</li> </ul> Control variable for education: Territory Education = 1, non-territory education = 0
3	HH Head Sex	Household head sex. Male = 1, Female = 0
4	Region	The location where the households are belonged to or living. Urban = 1, Rural = 0

**Remark:**

1. Definition of Labour force participation rate: The labour force participation rates are calculated as the labour force divided by the total working-age population. The working-age population refers to people aged 15 to 64. This indicator is broken down by age group and it is measured as a percentage of each age group (OECD, 2022).  
 Source: OECD (2022), Labour force participation rate (indicator). DOI: 10.1787/8a801325-en (Accessed on 21 May 2022).  
 For more info, please see: <https://data.oecd.org/emp/labour-force-participation-rate.htm#:~:text=The%20labour%20force%20participation%20rates%20is%20calculated%20as,measured%20as%20a%20percentage%20of%20each%20age%20group.>
2. UNESCO International Standard Classification of Education (ISCED) (UNESCO, 2011), page 28-  
 For more info, please see: <http://uis.unesco.org/sites/default/files/documents/international-standard-classification-of-education-isced-2011-en.pdf>



Appendix 5: Data Distribution

	<b>N</b>	<b>Percent</b>	<b>Valid Percent</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>
Age Group	3018	100	100	18	98	55.46	13.65
Elderly (>=65 years old)	764	25.3	25.3				
Working Age (15-64 years old)	2254	74.7	74.7				
Education Attainment	3018	100	100	0	17	11.0	3.2
Non-territory Education	2462	81.6	81.6				
Territory Education	556	18.4	18.4				
Household Head Sex	3018	100	100				
Female	636	21.1	21.1				
Male	2382	78.9	78.9				
Region	3018	100	100				
Rural	2424	80.3	80.3				
Urban	594	19.7	19.7				
Total Household Income	3018			21.12	13,916.21	843.56	1,026.74
Food	3018			1	8,160.22	268.06	264.47
Cultural Activities	3018			1	1,691.71	19.66	52.01
Donations to church	3018			1	1,011.53	37.45	62.99

Source: Samoa Household Survey

## Appendix 6. Regression Analysis

Dependent Variable	Coefficients						Model Summary			Model Test			
	$\beta_0$ : Intercept	$\beta_1$ : Household Income	$\beta_2$ : Age	$\beta_3$ : Education Attainment	$\beta_4$ : HHead Sex	$\beta_5$ : Region	$R^2$	Adj $R^2$	S.E of the estimation	$\chi_1 = 1$		$\chi_1 > 1$	
										F-value	Prob > F	F-value	Prob > F
Food Expenditure	2.9032*** (0.0961) [0.000]	0.3992*** (0.0145) [0.000]	-0.0293 (0.0302) [0.3312]	-0.3407*** 0.0344 [0.0000]	0.0720** (0.0320) [0.0245]	-0.3702*** (0.0324) [0.0000]	0.4690	0.2186	0.6834	1706.89 3012 <sup>(a)</sup>	0.0000	12118.36 3012 <sup>(a)</sup>	0.0000
Cultural Activities	-1.9620 (0.1870) [0.000]	0.5830*** (0.0280) [0.000]	0.0140 (0.0590) [0.8130]	0.2370*** (0.0670) [0.0000]	0.1660*** (0.0620) [0.0080]	-0.1320** (0.0630) [0.0370]	0.390	0.151	1.332	216.48 3012 <sup>(a)</sup>	0.0000	2499.39 3012 <sup>(a)</sup>	0.0000
Church Donation	-0.420** (0.183) [0.022]	0.530*** (0.028) [0.000]	-0.195*** (0.057) [0.001]	0.103 (0.065) [0.117]	0.059 (0.061) [0.332]	-0.319*** (0.062) [0.000]	0.360	0.128	1.300	288.54 3012 <sup>(a)</sup>	0.0000	2823.79 3012 <sup>(a)</sup>	0.0000

**Source: Author's estimation using the Samoa Household survey data.**

### Note:

1. Figures in the parentheses are standard errors while those in the square brackets are p-values. \*, \*\* and \*\*\* indicate the levels of significance of 90%, 95%, and 99%, respectively.
2. <sup>(a)</sup> is the degree of freedom (Df)