



RESEARCH ARTICLE

Bolivian Alamos de la Andes Co-op: An Empirical Case Analysis of Ethnic Women Identifying an Ethical Market Economy Path to Improve Their Financial Well-being

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Abstract

Increasingly the empirical challenges to transform an emerging nation economy require the engagement of gender diversity to expand monetary activity in the local market. Hence, we investigate the factors that influence gross pay in the Knitting industry using Bolivia as a case study. Women in Bolivia use the local practice of hand-knitting to establish a light industry that enriches the national economy. Global markets are capital-centered financial stability in emerging markets is inextricably link to greater gender inclusion. Conversion of aboriginal survival practices with such items as food, food preparation, knitting, weaving, music, and art into commerce provides found revenue to insert into the local market at minimal cost to the national government. Los Alamos de la Andes organize traditional hand-knitting skill to increase wealth building opportunities among Quechua and Aymara Indian women in Bolivia.

Keywords: *Knitting, Women, Market economy, Gross pay, Financial well-being*

Introduction

The integration of technology into emerging markets influence urban sprawl among populations that want to lift themselves above subsistence. A key step to improve income to benefit lifestyle is to transition work done free by women to sustain the household into an earnings model that may not disrupt the family. The case in Bolivia affirms a cooperative that trains women utilizing a basic skill can contribute to the household income.

The absence of women from employment cost a nation capital yield from more than 50% of its population denied complete market access to jobs due to customs and practices trusted to be the affirmative traction in the society. As capital-centered markets need growth to insure government stability, emerging economies may find it easier to signal expansion through supporting gender initiatives that refresh traditional products to be introduced to global buyers. Though

there are traditions that must be set-aside, inclusions require rethinking factors that have prohibited change in emerging markets. Los Alamos de la Andes in Bolivia is not the first group of women to advance market practices while navigating traditionalism to build wealth. Supriya Bally [1] in India observed that the emergent discourse supports the notion women's participation offered opportunities for the women to increase their responsibility towards the development of the community. Whether South America or India global activity indicates influence for significant shift in patriarchal societies to define a greater role for women.

The Los Alamos de la Andes cooperative creates work using traditional skill to generate an apparel product that may be sold around the world through the clothing industry. Their specialty sweater and cap products for adults, children, and pets may be found U.S. and European retail stores.

This organization is not exempt from challenges imbedded in their culture that fail to encourage cultivation of a business aptitude. On the other side of the world in an article about the women of China, Tania Branigan [2] reported interviewee cogent comments about gender that there are many laws protecting the rights of women-the problem is traditions and customs. Despite the reality of traditional and culture, the women of Bolivia manage to thrive using their traditional skills to make a market for their products. The case study finds the women of Los Alamos de la Andes did not abandon traditional functions to achieve

income generation through the cooperative. In Bolivia, they include knitting projects in their routine by multi-tasking whether in the rural or urban areas of the country. In traditional emerging economies globally, Siyu Li [3] outlines principle activities where women engage while being change agents that include nutrition, agriculture, collecting water, firewood, gather medicine plants, etc. The path to inclusion by women in developing markets around the world affirms commitment to transition toward progressive traditional and cultural practices as shown in *Figures 1, 2, and 3.*

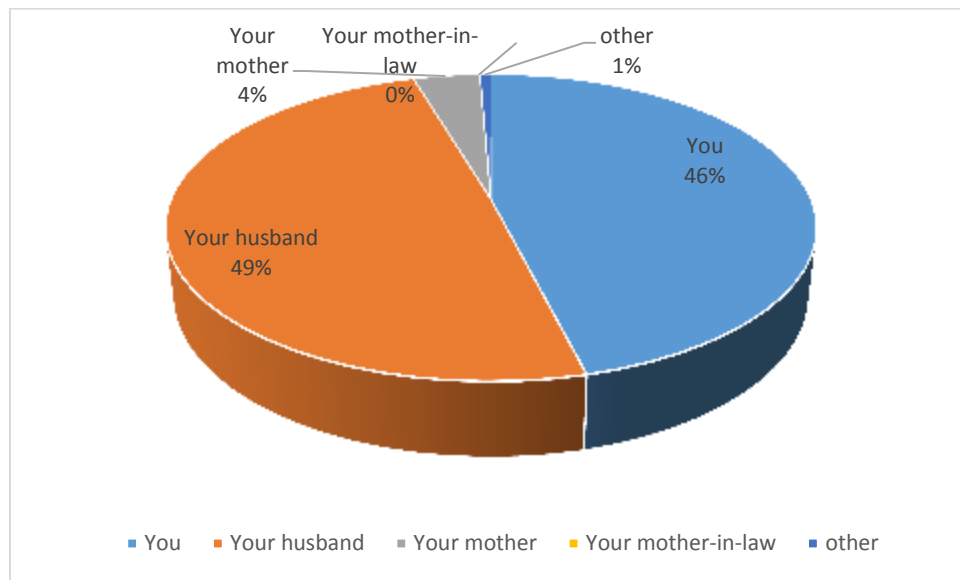


Figure 1: Who is the head of your house hold

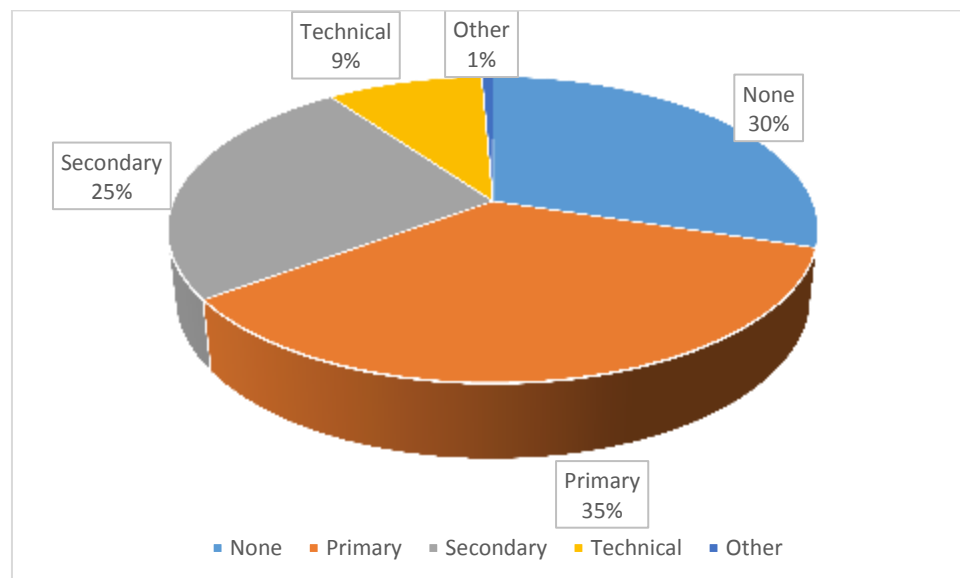


Figure 2: Highest educational level obtained before participation in a knitting

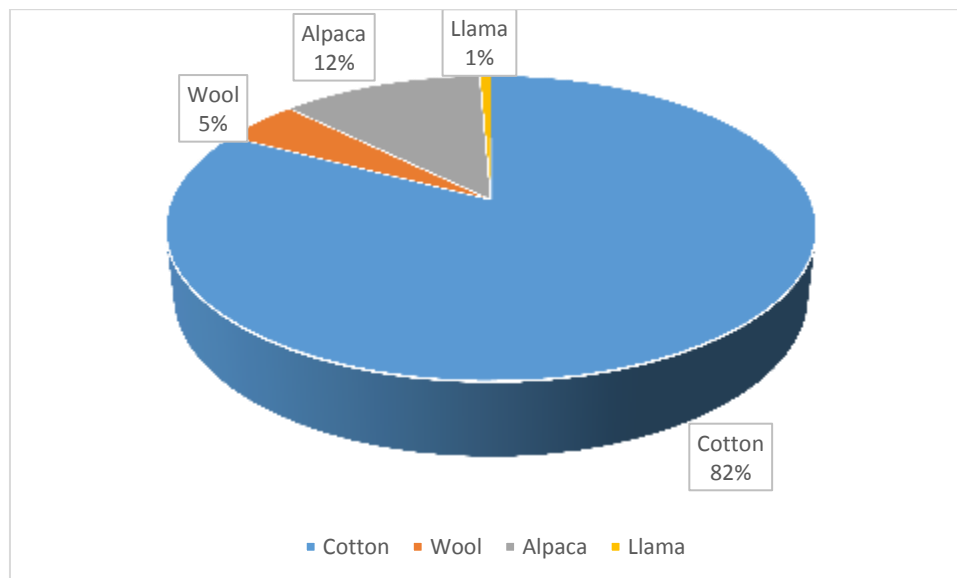


Figure 3: What fiber do you mostly use in your knitting

As gender equity global voice matures, the Bolivian cooperative for broader female engagement in the economy may signal a creep closer to their involvement becoming a trade barometer. Transitional emerging economies that look more similar than dissimilar to establish hegemonic economies may have less difficulty with trade partnerships. Due to monetary exchange for goods, this over-time influence the status of an organization in the local economy. The production of goods from Bolivia are premium hand-knit materials that retail in the U.S. and Europe at a higher price point. This provides dominance for their products in the local tourist market a result of global brand recognition. Since Los Alamos de la Andes products are not assembly copies from mechanize manufacturing, each product for the season becomes a limited edition that weighs on the wholesale price structure when international apparel buyers shop for goods to retail in their stores.

The effort to transition for women in Bolivia moves consistent with ability to sustain and increase their numbers in the electoral political arena. Jimena Costa Benavides [4] reports that in Bolivia female political participation began 1947-1949, universal suffrage in 1956, and domestic women's organization gained the requirement that parties have at least 30% females on their national list of candidates. With 1 in 3 voters' female, Benavides [4] indicates in the

data this improves the likelihood of women achieving elective office in Bolivia. The case study indicates that the continuous energy spent for political empowerment influence the will of Bolivian women to manage their inclusion in the market that benefits the national interest long term. Leny Olivera Rojas [5] finds that climate change is an impending crisis in Bolivia that may severely hurt agricultural production and forces distress families to migrate into cities for employment or government subsidies. Given Los Alamos de la Andes remains on its trajectory in domestic and international markets, the cooperative will insulate many members from the stress forthcoming with climate change.

The data affirms the success of the cooperative is the personal technique use to connect with their members in rural and urban centers. Los Alamos de la Andes practices the train the trainer model. This is an efficient training method since it does not require its more than 1000 members to learn in one place. The lead trainer teaches new product patterns to the team leader for a week or more. The team leader returns to the group to demonstrate techniques to complete the pattern. The cooperative may have as many as a 100 different patterns knitted simultaneously. Since the patterns are identical, the knitters produce high quality goods in various sizes that may be sold in the international market. If there is

doubt about a technique, the lead trainer may address the challenge with a telephone conversation. Each member learns how to read patterns by reviewing the questionable technique problems are solve quickly. This piece-meal labor intensive process contributes positive cash-flow to members' households. Individuals and teams generating an array of products for retail sales are the manufacturing arm of the cooperative. When the market demands a select style, the cooperative may provide material for members to produce additional stock. Los Alamos de la Andes fulfill many needs of the membership as a social group and income generator solidly earning revenue to benefit citizens in one of the poorest countries in the western hemisphere. Emerging nations that by-pass greater gender participation in the market risk instability and loss opportunities through international partnerships. Gradually, inclusion will be a hallmark as influence of

cooperatives increase among global businesses.

Methodology

To develop the case study to gain insight about the operations Los Alamos de la Andes, 152 members completed survey for assessment. The Participants' Characteristics are shown in Table 1. Literacy is a challenge in Bolivia. The survey was presented in Spanish the commercial language of the country. When participants were unable to read Spanish, a member read the material to the individuals. Members self-identified that they wanted to be part of the study. A cross-section of urban and rural members completed the survey to assist bringing clarity to membership in the cooperative. Though Los Alamos de la Andes provide support with training, members need to earn a certificate that confirms their proficiency as a knitter. The dataset for the study include the following:

- Age
- Gender
- Marital status
- Head of household
- Languages spoken
- Languages one can write
- Number of children
- Live rural
- Live urban
- Income
- Education
- Health insurance
- Dental insurance
- Chores
- Number of years knitting
- Knit training
- Fiber preference for knitting
- Attitude toward work
- Cell phone
- Land line phone
- Cultural tribal identity

Table 1: Participants' characteristics

Age	Mean = 37.1 Median = 35 Maximum = 83 Lowest = 17 Std. = 11.5
Gender	Female =149 (98%) Male = 1 (0%)
Marital Status	Married =107 (70.4%) Single = 27 (17.8%) Widowed = 10 (6.6%) Divorced = 8 (5.2%)
Who is the head of your household?	You =70 (46.1%) Your husband = 75 (49.3%) Your mother = 6 (3.9%) Your mother-in-law = 0 (0%) Other = 5 (0.7%)
Which languages do you speak?	Quechua =37 (24.3%) Aymara = 97 (63.8%) Guarani = 0 (0%) Spanish = 0 (0%)

	Other = 18 (11.8%)
How many children have you given birth to?	Mean = 4 Median = 4 Maximum = 12 Lowest = 0 Std. = 2.5
Do you have family living in the Campo?	Yes = 120 (78.9%) No = 23 (15.1%)
Highest educational level obtained before participation in a knitting	None = 45 (29.8) Primary = 53 (35.1%) Secondary = 38 (25.2%) Technical = 14 (9.3%) Other = 1(0.7%)

Note: The sample size is 152.

Analytics to Develop

English	Spanish	Title
Aq3	a3	marital status
Aq5	a5	languages spoken
Aq7	a7	languages written
Aq11	a11	urban/rural
Bq4	b4	urban/rural savings
English		Spanish Title
Bq5	b5	debt
Bq6	b6	education level
Bq7	b7	present level of education
Cq3	c3	activities while knitting
Cq7	c7	training
Cq8	c8	skill improvement
Cq9	c9	finishing technique
Cq12	c12	knit for family
Cq20	c20	main income
Dq1	d1	attitude rural/urban (D thru C)

Data Analysis

To answer the question on what are the factors that influence your gross income we implemented the Generalized Linear Regression using IBM SPSS Modeler as shown in *Figure 4*. We investigated if the following variables have influence on gross income:

- Marital status
- Highest educational level obtained
- Years of knitting experiences
- Hours spent per day knitting
- Fiber you used mostly in knitting
- Percentage of the items you design for knitting
- Satisfaction of job as a knitter

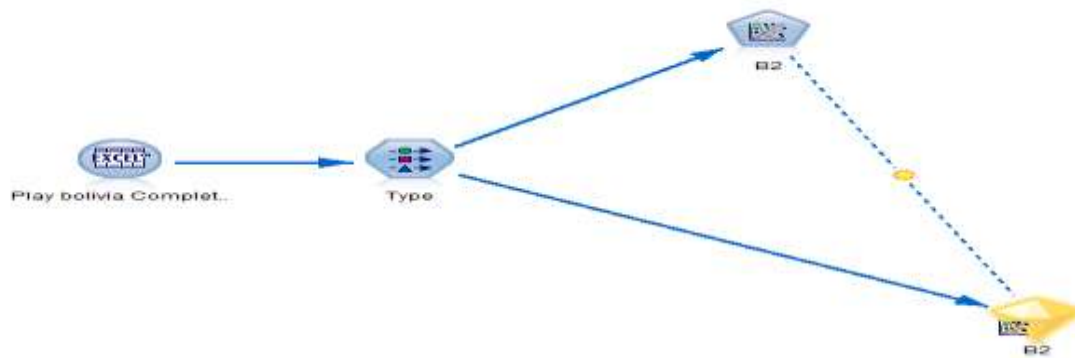


Figure 4: IBM SPSS model for generalized linear regression

Figure 5, shows the impact of all the variables on Gross Pay; and C18 (i.e. what percent do you design of all the items you knit) has the most impact on Gross Pay. It should be noted that C16 (i.e. what fiber do you mostly used in your knitting) has the

least impact on Gross Pay. Also, of all the variables in Figure 5, only C1 (i.e. years of experience knitting) and C18 (i.e. hours spent per day knitting) have a significant and positive impact on Gross Pay. C1 is significant at 0.006 and C18 is significant at 0.023.

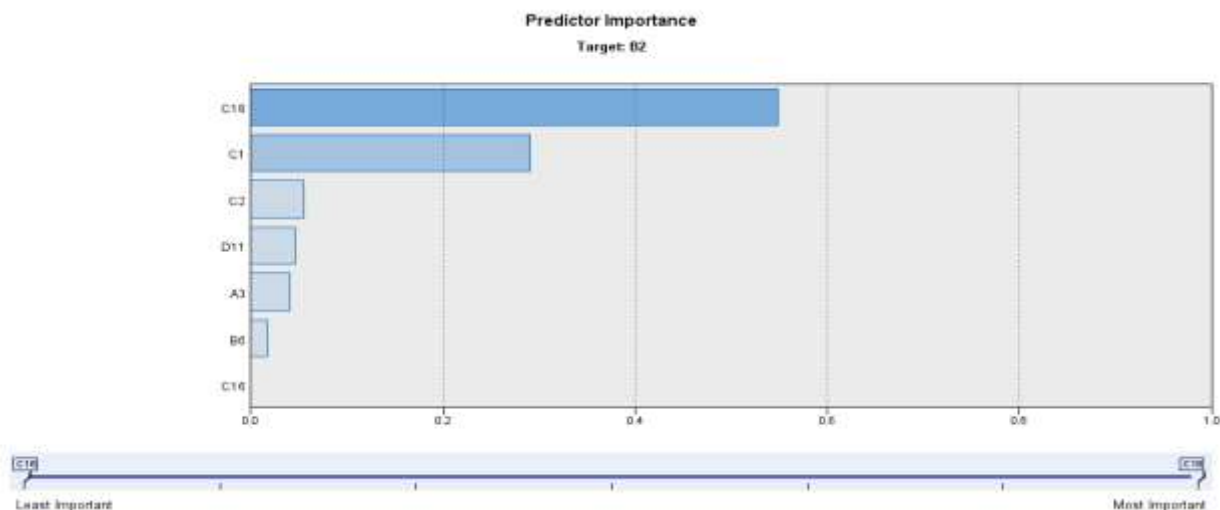


Figure 5: Predictor importance on gross pay

Notes: Variable legend:

- A3: marital status
- B2: gross pay
- B6: highest educational level obtained
- C1: years of experience knitting
- C2: hours spent per day knitting
- C16: fiber mostly use in knitting
- C18: percentage you design of all items you knit
- D11: Overall, satisfaction with my job as a knitter

Conclusion

Income from knitting by members in the co-op is a positive enhancement to gross pay. This is significant as financial yield relates to the sum of time allocated by members to knit. Los Alamos de la Andes has several pathways for members to influence their

gross pay through vendor contracts, replenishment of products due to international retail demand, and traditional local tourist market. The streams of revenue into the co-op move into the local economy through purchases made by members to sustain the well-being of their families.

Emerging nations that establish laws to support gender initiatives without an applied strategy to promote and encourage forfeit the wealth building opportunity from fifty percent of its population. Gender industries as in Bolivia may create a cultural product market that can grow exponentially as demand increases. The production of the Los Alamos de la Andes co-op is in conjunction with traditional domestic function where advance training transition cultural designs and skillset to market standards.

Symmetrical internal management to lift sustainability in local economies emerging nations may yield greater economic fortitude by supporting regional programs that increase market participation of women. Or, developing nations risk indenture servitude to hegemonic economies trying to identify a niche for a systemic partnership in global trade producing product components for advance industrial manufacturers. Failure to strengthen the structure of a vibrant local base leaves emerging economies vulnerable to the weaknesses of their external partners. Los Alamos de la Andes in Bolivia serves as an economic engineer that employs women to use traditional skills to manufacture apparel products with global appeal. Female co-ops generate found revenue to feed into the local economy to increase monetary disbursements for goods and serves across the competitive market. These micro-economies are immeasurable benefits to emerging economies that supports transition into globalization. Gender based enterprises may galvanize market fissures where challenges

make it difficult to distinguish market distinction to the best service of the populace. In short, privatization has relevance in maturing markets but the consideration of at any cost may be removed from the transition effort by governmental leadership.

Globalization is not at a crest, however, has arrived at crest that will redefine how to go forward by hegemonic nations. This makes low-cost gender businesses increasing more valuable to their nations. Climate change agreements reduce the dynamics of the global economy. There is sufficient data to affirm emerging nations may not replicate historical development practices of hegemonic nations without contributing to irreconcilable ecological damage. Yet, they must evolve to improve the quality of life in their countries.

The under-pinning to free-trade is constant growth, which is not reasonable due to over-production that suppresses cost. Simply, when your component to sale in the competitive market is tin all other regional tin manufacturers do not cease making the product. Everyone loses when there is market saturation with excessive inventory to sell cheap. To incorporate gender-based businesses in the national economic strategy provides a window of opportunity to design growth a model that harnesses population and ecological well-being with hegemonic partners. This case study demonstrates there is an effective path forward for nations that assess the advantages of leveraging female production as an attribute for success [6].

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