Analysis of Factors Affecting Furniture Production in Denpasar City

(Case Study Production Process and As Export Products)

Nyoman Djinar Setiawina
Lecturer of Faculty of Economics and Business Udayana University, Denpasar-Bali-Indonesia

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Abstract: This research entitled Analysis of Factors Affecting Furniture Production in Denpasar City (Case Study of its Production Process and As an Export Product). The research location in Denpasar City includes four sub-districts namely District: West Denpasar, South Denpasar, East Denpasar, and North Denpasar. The sample of research is 119 out of 163 population of industry sector which classified Small Industry and Micro Industry. Of the 123 samples, 58 samples from micro business households and 65 samples from small industry business households. The variables studied consist of: Manpower (HR), Investment, SDA, Capital, Raw Materials, Costs, and Technology analyzed in one model with Variable of income as dependent variable. The other variables are the quality of human resources, the number of working hours, the type of equipment, and the quality of raw materials, analyzed as one model with the net income of micro and small industry as the dependent variable. The supporting theories of this research consists of two groups: (1). Labor theory, (2). Investment Theory; (3). Capital, (4). Cost Theory; (5). Technology, (6). Theory of Price, (7). Theory of Production, and several theories relevant to the study of this study. This study raised 2 problems as problem research. Both problems are hypothesized either simultaneously or partially. Plus one problem that is studied qualitatively so it is not hypothesized.

Outcome of this research is the discovery of the ability of small and micro industries in Denpasar City, both in conducting the production continuity and the controlling power of the international market.

Urgency This research is how small industry and micro industry effort can prepare as early as possible as producer of export product, willing to enforce Globalization of International Trade.

CHAPTER I
PRELIMINARY

Background:
The industrial sector is the second sector after the agricultural sector and before the service sector, which plays an important role in the realization of a country's economic downturn. The economy of a country as measured by the Gross Domestic Product (GDP) at the national and regional levels, both Province Level and Regency Level and City, depends on the varied development of the agricultural, industrial and service sectors. These three sectors always contribute to GDP or Gross Regional Domestic Product (GRDP). The calculation of GDP or GRDP figures based on current prices is still influenced by the price level and inflation. While the calculation of GDP or GRDP based on constant prices is no longer no effect of price levels and inflation. Theoretically can be studied in macroeconomic courses (N. Gregory Mankiw, 2013).

The industrial sector is an activity that processes the conversion of goods from raw materials to finished goods. Therefore, if the agricultural sector can be called as a producer, then the industrial sector is also a producer, just different raw materials. The process of agriculture sector raw material comes from seeds, while the raw material industry sector comes from agriculture and sourced directly from nature. The industrial sector is subdivided into several sub-sectors, which can be seen based on its classification, namely: micro industry sector, small industry sector, medium industry sector, and big industry sector (BPS, 2011).

The four industrial classifications are distinguished by the amount of capital, the amount of labor, and so on that are are run on the basis of certain business entities. While the industry is run without a business entity, to date this research is called the home industry.

In general, the dominant factor in the workings of the industrial sector is its work tool which largely relies on technology. However, home appliance industry is based on human physical power, although there is now a combination of machine technology with human physical capability. The product of industrial sector in Indonesia is very varied, because the products are produced based on the inspiration of art and culture of each region.

Industry based on the inspiration of the Indonesian nation itself, both based on technology and rely on human physical capabilities, everything has happened that can be seen from two types: export-oriented and non-export oriented products. Various types of goods produced both from technology-based and physical-based power of humans vary widely in Indonesia, at least indistinguishable from the value of art owned by their respective regions. All kinds of industrial products in various regions in Indonesia, attract the desire of researchers to study it. However, based on the factors of existing researchers in Bali, industrial products produced by the people in Bali to be an option. Nevertheless, always expect that the results of research in Bali to be an inspiration for researchers who exist in all regions in Indonesia (Djinar Setiawina, 2011).
The related variables, with products produced in the industrialization process, illustrated theoretically are: (1). Manpower or human resources (HR), (2). Investment, (3). Working capital, (4). Raw materials, (5). Cost, and so on. The quality of goods produced also affects the export volume of furniture products, meaning the better the quality of the goods, the more can be exported. In this study, pre-research was conducted by interviewing 123 industrial companies classified as micro and small industries in Denpasar.

Main problem:
1. How is the influence of Manpower, Investment, Capital, Raw Materials, and Cost, both simultaneously and partially to Revenue (result of sale) product of small industry and micro industry in Denpasar City.
2. How the effect of the quality of human resources, the quality of raw materials, the type of equipment, working hours, and technology, both simultaneously and partially to the revenue (net proceeds) of small and micro industries in Denpasar.
3. How is the export of micro and small industry products in Denpasar today, is there a trend towards international market (for export).

Objectives and Benefits of Research:
1. To analyze the influence of Labor, Investment, Capital, Raw Materials, and Cost, either simultaneously or partially to Revenue (result of sale) of small industry and micro industry in Denpasar City.
2. To examine in depth about the impact of the quality of human resources, the quality of raw materials, the type of equipment, and working hours, and technology, both simultaneously and partially to the net income of small and micro industries in Denpasar.
3. To evaluate how exports of micro and small industry products in Denpasar are currently available, is there a trend towards international markets (for export).

Usefulness Research:
1. Academically,
   1). This research is useful to broaden the insight of the implementation of scientific research for students, lecturers, and for the campus level of Faculty and Udayana University level.
   2). This study provides inspiration for further researchers, both in the same area (in Bali), as well as in other areas of Indonesia.
2. Practically speaking.
   The results of this study are very useful for the government, both the city of Denpasar, Bali Province, and the Government of Indonesia, because it can be used as a basis in determining development policies in the industrial sector in particular and on regional economic development at various levels of the region in general.

CHAPTER II
THEORY REVIEW

Theories raised in this study are theories relevant to the variables used as research objects that are more specific or focus on the operationalization of variables that will be analyzed scientifically. The focus group of theories includes: (1). Labor Theory or human resources (HR); (2). Investment Theory; (3). Capital Theory; (4). Cost Theory; (5). Theory of Price; and (6). Theory of Production. Price theory is related to the theory of production, and is also associated with the theory of quality.

Theory of Labor or Human Resources (HR):
One of the production factors used in the production process to produce goods or services is labor. The definition of manpower referred to in this study that people or workers paid in the process of production and non-production. The definition of work force according to Dumairy (1996) is the total population of a country that can produce goods and services if there is demand for their labor and if they want to participate in the activity.

Meanwhile, according to the Labor Basic Law (Department of Manpower, 1969), the meaning of labor is any person who has a working relationship to produce services or goods to meet the needs of the community. Related to that, the amount of labor as one of the factors of production has an influence in increasing production. In such production theory illustrates the relationship between the level of production of a good and the amount of labor used to produce the various levels of production of the good. In terms of numbers, the more labor used in the process of the activity, the more produce the goods. (M. Suparmoko, 1990). This is in tune with the properties of the production function of the neo classical, that the more inputs used the more output produced. So in this case the amount of labor as an independent variable that also affects the income level of street vendors in Denpasar City.

In general, the working class concerns the share of the population with respect to the 15 th - 64 th age group. In the sense of the labor force should be taken into account the level of participation in economic activity among the number of labor for each age group and gender. The increase in the labor force affects both the real wage rate and the distribution of people's incomes. One of the reasons for the low rate of living in developing countries is the lack of employment (inefficient) compared to the developed countries.

Outpouring of working hours:
According to Mahmud Machfoedz (2007: 204-207) the decision to work is a top decision on how to take the time. One way to use the available time is to do fun-filled activities. Another common way for people to make the most of their time is to work. Therefore, work can be differentiated into a job that does not earn a living and a work that earns a living (salary).

The allocation of time to work or leisure is influenced by three factors: the opportunity costs, the level of one's welfare, and the set of choices of a person. Someone will allocate time for two options: 1). Someone is willing to work in the labor market if they earn an increase in income in the hope of improving their own welfare (walfare) and family. 2). Someone chooses not to work because they prefer to enjoy their free time. Someone who works will be faced with how to optimize the free time to work and enjoy the best time to be able to obtain utility (maximum satisfaction).
The utility level (maximum satisfaction) for a person increases (Winardi, 1986) if: (1) goods increases while leisure is fixed, (2) leisure time increases but the quantity of goods consumed does not change, (3) consumed and leisure time, both are equally changed. In other words, the ad relationship between the wage rate and the micro-work time is: the length of work with the public works (the work that earns money) will be affected by the current rate of wage for a job.

According to Mahmud Machfoedz (2007: 204-207) there are two consequences that can be generated by the increase in wage rates: substitution effect and income effect. The effect of increasing wage rates on the number of hours worked in the public sector will depend on the relative strength between substitution and income effect. If the substitution effect is more dominant, then the worker will work longer to support his services. Meanwhile, if the income effect is more dominant, then the worker will reduce his working hours. Observations show that the end result of these two effects depends on the strength of the high limit of the current low rate of wages.

**Labor:**

The number of workers in the micro and small industries is almost unclear consistency. That is, the workforce is considered a workforce like a workforce in formal corporate offices and government offices. They are regarded as mere domestic labor. Indeed, it can be examined the proportion of its work so that it will be counted contribution to the income of micro industries and small industries. The labor force in the micro and small industries usually have different working hours with the hours spent by office workers. They work by devoting their time to uncertainty, because nobody requires to work from and to a certain hour. They are free to determine the hours of work. Therefore, the outpouring of working hours of workers in "small industries and micro industries" needs to know how much it affects the results of "small and micro industries".

Although the number of job seekers did not increase very dramatically, but it turns out the formal sector of both the state and the private sector is not able to accommodate the job seekers, both from within the city and outside the city of Denpasar, so that job seekers who are not accommodated in the formal sector will enter work in the informal sector, such as Table 2.1.

**Table 2.1 Percentage of Workers by Business Sector in Denpasar City, Badung and Bali Province in 2008**

<table>
<thead>
<tr>
<th>Field Business Sector</th>
<th>Wilayah/Daerah Region / Region</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Denpasar</td>
</tr>
<tr>
<td>1. Agriculture</td>
<td>2.57</td>
</tr>
<tr>
<td>2. Excavation</td>
<td>0</td>
</tr>
<tr>
<td>3. Industry</td>
<td>12.46</td>
</tr>
<tr>
<td>4. Electricity, Gas &amp; Drinking Water</td>
<td>0.63</td>
</tr>
<tr>
<td>5. Building &amp; Construction</td>
<td>4.29</td>
</tr>
<tr>
<td>6. Trade, Hotel &amp; Restaurant</td>
<td>39.16</td>
</tr>
<tr>
<td>7. Transportation and Communication</td>
<td>9.06</td>
</tr>
<tr>
<td>8. Finance</td>
<td>5.31</td>
</tr>
<tr>
<td>9. Services</td>
<td>26.51</td>
</tr>
<tr>
<td>Total number</td>
<td>100</td>
</tr>
</tbody>
</table>

**Source:** Central Bureau of Statistics (CBS) Bali Province, 2009

Table 2.1 shows that most workers tend to prefer trade, hotel and restaurant sectors as their livelihood, both for Denpasar, Badung and Bali.

**Investment Theory:**

Where micro and small industries operate, even though they generally use most of their houses, business should be considered an investment in a business activity. In the meantime, the value of the investment is not considered as part of financing element of trading business. In terms of economics such an investment should be calculated, how much its contribution to revenue from the micro and small industries. Practical investment can be considered as a production factor that is not less important with operational capital.

**Working capital:**

In a business, the problem of capital has a very strong relationship with the success or failure of a business that has been established. Capital can be divided as follows: 1) Fixed Capital is a capital that provides services for the production process in a relatively long time and is not affected by the large amount of production. 2) Current Capital is the capital of the service provider only once in the production process, in the form of raw materials and others as supporting the business. Classical notion can be put forward, where capital implies a "production used to produce further". (N. Gregory Mankiw: 2013).
how big is their impact on the results of “micro and small industry enterprises”.

Understanding capital in a broader sense, namely capital include: capital in the form of money (Geldkapital), capital in the form of goods or (Sachkapital). For example, machine merchandise and so forth (Sadono Sukirno, 1997). Thus, capital is any form of wealth that can be used directly or indirectly in the production process to increase output (M. Suparmoko 1988). In the economic sense, capital is goods or money which together with factors of production of land and labor, produce new goods and services. Capital is an input (factor of production) which is very important in determining high income low. But that does not mean it is the only factor that can increase income. So in this case the business capital for street vendors is also one of the factors of production that affect the income level of street vendors in Denpasar City.

**Theory Turnover of money:**

Both investment and capital, closely related to money, because money is one measure of investment and capital itself. Meanwhile, money in its role as a means of exchange of goods always moves fast or slow depending on the activities of the company concerned. What is meant by the velocity of money here is the capital used to buy raw goods and then processed into finished goods ready for trading. The theory of velocity of money according to Irving Fisher (N. Gregory Mankiw: 2013) with the formula:

\[ MV = PT \]

\[ V = \frac{PT}{M} \]

\[ V = \text{velocity of money.} \]

\[ PT = \text{Price times transaction.} \]

\[ M = \text{Total capital} \]

**Cost Theory:**

Costs in the sense of economics (Paul A. Samuelson and William D. Nordhaus, 1986: Jld II, 21), mean any sacrifice to produce something, whether of money or not. In a company’s economy especially on accounting concepts, costs can be classified into direct costs, indirect costs, and general costs. Direct costs are expenditures that are directly part of the output, indirect costs are sacrifices that are not directly part of the output but must be charged to output, while the general cost is the burden of the whole company including the cost of production.

The concept of cost affects the parties outside the production that must bear the cost is called the social cost or opportunity cost that is the sacrificed net income or cost savings that are not so obtained because doing or choosing another alternative. It is this doctrine that is used when discussing the cost of production, because the cost of production must give value equal to the sources of production in the use of the best alternative. Alternative costs involve: implicit costs (normal investment earnings and resource costs alone), and explicit costs (easy-to-see costs such as wage, insurance, raw material costs).

**Concept of Production Cost:**

The concept of production-related costs (Ratya Anindita, 1997), are related to total cost, fixed cost, variable cost, average cost, marginal cost).

1. The Total Cost shows all the minimum spending to buy a certain number of input combinations aimed at generating a certain amount of output. The total cost is also called Full Costs can be formed from the sum of fixed costs and variable costs together. In simple terms the total cost has a function: \( TC = FC + VC \).

2. Fixed Costs indicate expenditure from all fixed production inputs, and can mean costs that will never change following the level of production to some extent. In Fixed Costs there is a fixed total cost of all costs that do not change following the output changes even if the output is zero. Total fixed costs are often called the cost of sinking because in the short term the company has no choice but to pay for them. In total cost the concept of the average total cost of total fixed cost divided by output (output) AFC = TFC.

3. Variable Costs indicate expenditures to obtain a factor of production which can be changed. The variable cost is definitively a function of the output level. The cost of this variable depends on the amount of production. Variable cost raises the concept of the average variable cost of the total cost of the variable divided by the amount of output.

\[ VC = \frac{TC}{Q} \]

4. The Average Cost indicates the cost to be incurred during the production process in generating one unit of output. The average cost function is obtained by dividing the Total Cost Function with the resulting output:

\[ AC = \frac{TC}{Q} \]

5. The average total cost can be calculated by summing the average fixed cost with the average variable cost. \( ATC = AFC + AVC \)

6. Marginal Cost indicates an additional cost because it increases production by one unit of output. So the marginal cost equals the change in total cost divided by the change of one output unit. Its function is:

\[ MC = \frac{\Delta TC}{\Delta Q} \]

**Concept of Short Term Cost and Long Term:**

The concept of short-term and long-term costs has been distinguished from fixed and variable production factors (Tambunan, Tulus, 2001). Short term is defined as a time period, in which at least one input can not increase without causing an increase in unit cost. While the long run is the period in which all the factors of production become variable. Short-term and long-term does not refer specifically to the period or calendar, but rather to the time it takes to adjust to the new conditions.

1. **Total Cost Curve, Average Cost Curve, and Marginal Cost Curve**

The long-term TC curve is S-shaped and continuously increases, because it is a combination of production points at the cheapest (efficient) cost of the short term. The AC curve is U-shaped because it shows a wide range of outputs, where there is a constant-scale result comparison.

Image: 2.1 Kurve TC, AC, and MC.
The MC curve is generally U-shaped, if the average cost goes down then the marginal cost curve lies below the average cost. But if the average cost increases then the marginal cost curve is above average cost.

2). **Planning Curve or Envelope Theorem.**

The MC curve is generally U-shaped, if the average cost goes down then the marginal cost curve lies below the average cost. But if the average cost increases then the marginal cost curve is above average cost.

![Planning Curve Diagram](source)

3). **Scale results using Long-term Average Cost (LRAC):**

The result of the scale using LRAC consists of three parts (N. Gregory Mankiw, Euston Quah, and Peter Wilson, 2013), namely:

1. The result of a "constant scale" means that if the input price is fixed, the average cost of production does not change as the scale of production changes. The company produces on a similar factory scale, but larger companies simply have more plants and do not have different cost structures. So the increase in the company's production scale does not affect the average cost per unit produced.

2. The "declining" result means that the average cost of the firm increases as the scale of production increases, resulting in a decrease in scale yield. This scale is also commonly called the "scale of diseconomy", because the increase in production scale causes the average cost per unit produced to be higher.

3. The result of "increased scale" means that the increase of the company's production scale causes the average cost per unit of production to be lower. This condition is commonly referred to as "economies of scale" due directly to the decrease in cost per unit of output arising from larger scale production.

Below are the three long-run average cost curves in scale.

![Long-run Average Cost Curves](source)

4). **Concept:**

Private cost (William A McEachern, 2003), is a financial expenditure made by a company due to their own decisions that have not previously accounted for any additional costs. In essence, private costs are costs incurred by every person and company in an economy or society.

5). **Social Cost Concepts:**

All costs that are outside the decision-making process of a company (William A McEachern, 2003), often referred to as Social Costs or externalities. Social costs include all personal costs incurred by any party engaging in transactions, whether explicit or implicit, plus any additional costs borne by other individuals. The terms of private fees and Social Costs were first introduced by A.C. Pigou.

6). **Concept of Costs by Decision:**

Economic decisions such as buying, selling, expanding production, working scale, are a choice of various optimum combinations between yield and cost. So cost is the only thing that needs to be taken into account in the rational decision-making especially the costs in the future. If the future includes short-term (Hady, Hamdy, 2001), then only variable costs are taken into account, whereas if the future is long-term needs to be taken into account the full cost or total cost.
7). The concept of Bidding with Cost:
The economic cost is the magnitude of the sacrifice of the lost and can not be produced alternatives. When the employees of the convection factory work to produce clothes then at the same time the employee can not produce pants. The economic cost is divided into two, namely the explicit cost and the implicit cost. The explicit costs of paying companies to hire labor, machinery, transportation services and buying raw materials. While the implicit cost is the cost of self-owned production factors, such as own capital used so as not to pay interest capital.

Production Period distinguished into short-term and long-term periods. Short-term periods are periods where the company does not have enough time to change the capacity of the plant, but can change the level of use of certain inputs. For example increasing or reducing labor. While in the long-term period, the company can change all inputs including product capacity in the form of machinery and other production equipment.

8). Production and Short Term Costs:
The marginal product (MP) (Tambunan, Tulus. 2001), ie the additional output or the total product due to the addition of one unit of labor or the addition of one variable production factor of the formula: \( MP = \frac{d (TP)}{d (L)} \). Average product per labor (average product = AP) is the total product division by the amount of labor used to produce, the formula: \( AP = \frac{TP}{L} \). Total cost (TC) is the sum of total variable costs (TVC) and total fixed costs (TFC).

The total variable cost (TVC) is the cost that changes as the output changes are produced. For example, payment of raw materials, fuel, labor, etc. While the total fixed cost (Total Fixed Cost = TFC) is a cost that does not change due to changes in output. For example, lease payments, depreciation of buildings and other equipment, insurance premiums, top managers salaries. Total cost or total cost (TC) is formulated with \( TC = TVC + TFC \).

If the fixed cost incurred by the manufacturer is Rp.300,000 and the variable cost is \( 3Q + 0.5Q^2 \), then the total cost (TC) is \( 300,000 + 3Q + 0.5Q^2 \). For example, the company produces 500 units then the total cost can be calculated: \( TC = 300,000 + 3(500) + 0.5(250,000) = 300,000 + 1,500 + 125,000 = 425,500 \). For example, the company does not produce the total cost: \( TC = 300,000 + 3(0) + 0.5(0) = 300,000 \).

Average fixed cost (AFC) is the total fixed cost sharing with the corresponding output quantity (Q). \( AFC = \frac{TFC}{Q} \). Average variable cost (AVC) is the total variable cost distribution with the corresponding output. \( AVC = \frac{TVC}{Q} \). AVC curve is U-shaped. At first the AVC curve falls to a minimum because it requires only a few more variable production factors to produce each additional output and then the AVC curve rises as there is an "increasingly decreasing yield" which requires more and more use-variable production factors to produce each additional output unit.

Average total cost is total cost sharing (TC) with total output (Q). This average total cost can also be obtained by adding an average fixed cost (AFC) with average variable cost (AVC). \( AC = \frac{TC}{Q} = AFC + AVC \). From the above matter the amount of AC can be calculated ie: \( AC = \frac{TC}{Q} \). The U-shaped AC curve is located above the AVC curve. The vertical distance between the two is the amount of FC at each output level. Marginal cost is the additional cost required to produce an additional output unit. \( MC = \frac{dTC}{dQ} \). MC of the above problem is: \( TC = 300,000 + 3Q + 0.5Q^2 \). \( MC = \frac{dTC}{dQ} = \frac{d (300,000 + 3Q + 0.5Q^2)}{dQ} \). \( MC = 3 + Q \).

The relationship between marginal cost and marginal product can be exemplified, when marginal product rises, marginal cost decreases, and when marginal product decreases marginal cost increases in addition of labor usage. The marginal cost curve is U-shaped while the marginal product curve is inverted U-shaped. The marginal cost curve reaches a minimum point when the marginal product curve reaches its maximum. The relationship between AVC, AC, and MC can be illustrated that the MC curve intersects AVC and AC curves at minimum points. If the marginal cost (MC) is less than the average total cost (AC) then the AC will decrease. If the marginal cost (MC) is greater than the average total cost (AC) then the AC will rise.

9). Production and Long Term Costs:
In long-term production period (Tambunan, Tulus, 2001), the company can change the plant capacity by increasing or decreasing the capacity of the plant and all production factors are variable. For example, the company uses only two factors of production in the form of labor and capital. The company's production function is: \( Q = f (C, L) \).

The curve of the Iso product is a curve showing the combined two factors of production (capital and labor) that can be used to produce the same quantity of output. The curve of the Iso product of the slope decreases and is concave toward the origin. Between labor and capital production factors can replace each other. For example in a textile factory, in producing the same output can use more machines to run the labor production factor.

The marginal rate of technical substitution (MRTS) can be measured by \( (\frac{\Delta L}{\Delta K}) \). \( MRTS_{L,C} = \text{degree of replacement} \ L \ by \ C; \ \Delta L = \text{change} \ L; \ \Delta C = \text{change} \ C. \) Kurve iso cost is a curve showing the combination of production factors that can be purchased with certain expenses. The curve of the iso of slope costs decreases because with a certain amount of expenditure, if the quantity of the purchasing power factor increases, the purchasing factor of capital can be reduced. \( TC = (P_cC + P_lL) \).

10). Minimization of Production Cost / Maximizing Output:
Manufacturers minimize production costs at whatever level of output can be achieved if the cost curve iso of the highest product iso curve. Companies can also produce maximum output at a certain total cost level. Terms of production balance that must be met are: \( MPL = \text{marginal product of labor factor (L)} \); \( MPC = \text{marginal product of Capital factor (C)} \); \( MPx = \text{marginal product of factor x. PL, PC, Px} = \text{factor price of production. If each level of output has been produced with a combination of factors of production with minimum cost then the balance of production has been} \)
achieved. If the equilibrium points are connected, an expansion path is obtained.

**Natural Resources (NR):**

Natural resources, whatever their form is the grace of Almighty God, because the grace of God can feed all creation's creatures. However, sometimes humans are less concerned about the surrounding natural environment as a place of emergence of natural resources fulfilling human needs itself including the needs of sustainable development. It can be seen clearly that the implementation of sustainable development poses a problem because it can reduce the amount and quality of natural resources while creating environmental pollution.

The environment, according to M. Suparmoko (2006: 1) has three (3) functions: (1). As a source of raw materials that can be processed in various economic sectors to meet human needs. (2). As a place to treat natural waste. (3). As a service provider or direct service to human life, such as beaches and beautiful scenery provide pleasure through tourism and recreation activities; river as water transportation infrastructure, forest as flood prevention and so on.

Natural resources in the context of this research, related to the various types of wood grown in forests are used as raw materials for various furniture products. That is, nature gives life to the millions of small and micro industries in the world, then enjoyed by consumers as furniture buyers. Not only in the form of furniture, but wood can be used for various types of houses and buildings that are needed by mankind.

### 2.6. Technology:

The technology intended here (Halwani and Hendra, 2005), is a production process tool that uses a machine and a fast working system, so that it can achieve high efficiency. Technology only as a tool to assist the production process in order to accelerate the realization of an idea to make a good. For example, to cut wood, finishing with sandpaper, painting, cet drying, etc. can be helped by modern tools powered by electricity. Thus the process of completion of the production of goods can be more accelerated. In conjunction with cost, then this technology can reduce variable costs, and the quality of goods produced can be more perfect than the human handmade without the technology.

### 2.7. Theory of Production:

The production theory (N. Gregory Mankiw et al., 2013) is a theory that explains the relationship between the quantity of the product and the factors of production used. While the production function is expressed in the form: \( Q = f (C, L, T, N) \). The output production function is influenced by capital factor (C), labor factor (L), technology (T), and soil (N). If production factors other than labor are considered constant, the production function of output is influenced by the labor factor alone: \( Q = f (L) \). The fixed factors of production are called fixed inputs while the changing factors of production are called variable production factors. Production activities require elements that can be used in a production process called a production factor.

Production factors that can be used in the production process consist of natural resources, human labor, capital, and entrepreneurship.

1. Natural resources (NR) is everything provided by nature that can be utilized by humans to meet their needs. The NRs here include: Land, plants, and animals; Air, sunshine, and rain; Minerals, and so forth. Natural resource production factor is the original production factor because it has been available in nature directly.

2. Human resources (HR) or human labor is all human activities both physical and rochani, poured in the production process to produce goods and services and the usefulness of a good. Human labor can be classified according to its level:
   (1). Skilled labor is a formal or non-formal education workforce, such as teachers, doctors, lawyers, accountants, psychologists, researchers, and others.
   (2). Trained labor is a workforce that acquires expertise based on training and experience (mechanics, carpenters, carvers, drivers, technicians).
   (3). Unskilled and untrained labor is a work force that relies on physical strength rather than rochani, for example: porters, sweepers, scavengers, farm laborers.

3. Capital resources, where capital in the economic sense is the goods or products used to produce the product further. For example, people make a net for fish, where the net is a capital goods, because the net is the product used to produce another product (fish). In the production process, capital can be in the form of equipment and materials that are distinguished into:
   (1). According to usability in production process that is: (a). fixed capital is capital goods that can be used many times in the production process, eg building, factory machinery, and others. (b). Current capital is disposable capital goods in the production process, for example: raw materials, auxiliary materials, and others.
   (2). According to Capital Forms include: (a). Concrete capital (real) is the capital that can be seen clearly in the production process. (b). Abstract capital (unreal) is a capital that can not be seen but has value in the company, for example: good company name, product brand, and others.

4. Resources Entrepreneurs, these resources are called entrepreneurship that plays a role to regulate and combine factors of production in order to improve the usefulness of goods or services effectively and efficiently. In relation to management, entrepreneurs as the trigger of production desperately need to have a reliable ability, so that it can plan, organize, direct, and control.

### 2.8. Export Theory

The types of exported merchandise are heavily influenced by the quality of which the quality is greatly determined by the activity that exists around the producers in the micro and small industries, the medium, and large industries. For example, in a country, the type of exported goods, which are offered diverse, can be food or drink, groceries, clothing, and so on. Likewise in the international market, the types of merchandise vary widely that come from various countries in the world.

Types of exported goods offered by exporters can be grouped into 4 (four) main groups (Amir: 1992), namely: 1. Unprocessed raw materials and finished goods into finished goods or services.
goods. For example, Sperpart cars have been traded, as they are not yet part of the finished goods car. 2). Finished goods, ie goods that are ready to use such as cars, radios, mobile phones, and so forth. 3). Medicines ie merchandise can be semi-finished or finished goods. 4). Goods Services, which consists of various activities, such as engineers, planning experts, and so forth.

Theories relating to export activities that need to be linked are theories of supply of goods, Theory of Productivity, Supply Elasticity Theory, and Theory of Money Turnover. Calculation of revenues of micro industry and small industry is done by (income approach) and household income of micro industry and small industry (expenditure approach). 1). The Theory of Supply of Goods says that changes in the price of goods lead to changes in the quantity of goods offered. The slope of the offer curve is positive. 2). Supply Elasticity theory.

$$E = \frac{\Delta Q/Q}{\Delta P/P} \quad (N. \text{ Gregory: 2013}).$$

Q = Number of items sold (unit)
P = Price of goods sold (Rp.).

Export theory is closely related to the exchange rate, especially the exchange rate of the country of export destination. If the exchange rate of the export-oriented country's currency strengthens against the currency of the importing country, then the exporters are vying to export, because the exporter's calculation is more profitable.

**Foreign exchange rate (US $ exchange rate):**

Talking about the exchange rate (Dornbusch, et al. 1997), (Herlinawati Erna, 2004), and (Kuncoro, Mudrajad 1996), are not solely related to the differences in currency values between countries, but also related to the quality of goods traded on the market international (exported) through the price of the goods themselves. Where, the price of the goods is determined also by: cost, both production costs, as well as transportation costs, and import duties to a country. The point here is that goods produced in countries with low currency rates will be more profitable if they are exported to countries with higher currency rates and vice versa. Therefore, a producer or exporter desperately needs to understand about the exchange rate of the trading partner countries where the exporter originated.

**Foreign exchange:**

Foreign exchange of the country in this case is very important to understand (Chenery, et al., 1966), because the country's foreign exchange is the financing of imports. This means that import costs for importing countries are a great opportunity for exporting countries. While the foreign exchange reserves of a country can be affected by the GDP of each country (Halwani and Hendra, 2005). The greater the GDP of an importer country, the greater the foreign exchange reserves for importer financing, and automatically the stronger the purchasing power of the people. Thus, foreign exchange reserves can be linked between the amount of goods exported to the GDP of an importer country.

**Income Theory:**

Revenue (Sadono Sukirno, 2004), is the net acceptance of a person, whether in cash or in kind. Income or also called income from a citizen is the result of "sales" of its production factors in the production sector. And this production sector "buys" these factors of production to be used as inputs to the production process at a price prevailing in the factor market. The factor price of production in the factor market (as well as for goods in the goods market) is determined by the attractiveness, between supply and demand.

Briefly (Tambunan, 2001), a person's income is determined by:

1). The number of factors of production that he has that comes from:
   (1). The results of his savings in the past years,
   (2). Inheritance or gift.

2). The price per unit of each of these factors of production is determined by the strength of supply and demand in the factor market. The supply and demand of each production is determined by different factors:

   (1). The soil (including the riches contained in the soil, minerals, water and so on) has an offer that is deemed not to increase anymore. Whereas demand (demand) for land usually increases from time to time because:
   (a). rising prices of agricultural goods, (b). rising prices of other goods (minerals, industrial goods using raw materials from the soil), (c). increasing population (who need shelter). Thus the price of the land will rise rapidly over time.

   (2). Capital (human-made economic resources) has a more elastic supply because from time to time the citizens set aside some of their income for savings and then the production sector will use these savings funds for new factories, buy machinery (ie investment). Due to the saving and investment, the supply of capital goods over time can increase while the demand for capital goods is especially influenced by the motion of demand for finished goods. When the price of clothing rises, the demand for weaving machines, sewing machines will also rise. The demand for finished goods, (Sukirno, 2004), is in turn affected by two main factors: (1). Population growth (which requires additional clothing, housing and so on), (2). Population income growth (reflected by an increase in national income or GNP per capita).

3). Labor has an increasing supply as the population grows. The demand for labor (Benny Susetyo, 2006: 51), depends on the increase in demand for finished goods (as well as demand for capital goods). Besides, the demand for labor (Mahmud Machfoedz, 2007: 75), is also influenced by the progress of this technology. Demand for labor by Gavin W. Jones in Anne Booth and Peter McCawley (1981: 309-324) does not grow as fast as labor supply, the demand is very diverse (and often these factors are beyond the ability of economics to analyze, for example : other motivational factors and so on).

Generally, bidding on developing countries, people who have a spirit of "entrepreneur" is still very small. This is why income for successful entrepreneurs is also quite large in the country. The most common way is to maintain private property, with the aim of reducing the inequality of income distribution. Ways that can be done to maintain income by the state (Juniarso Ridwan and Achmad Sodik Sudrajat,
Broadly speaking, income is classified into three (Paul A. Samuelson and William D. Nordhaus, 1986: 132), namely:
1. Salary and Wages are: rewards earned after the person performs work for another person given within one day, one week or one month.
2. Revenue from Own Business is: the total value of the production less the costs paid and this business is a self-owned business or family and labor comes from members of their own family, the value of rent of own capital and all these costs are usually not taken into account.
3. Revenues from Other Enterprises are: Revenues earned without expenditure of labor (usually a side income) such as:
   1). Revenue from the proceeds of renting assets (houses, livestock, and other goods).
   2). Interest from money.
   3). Donations from others.
   4). Revenue from retirement.
   5). Everything else.

There are three theories of calculation of national income (Dumairy, 1996: 37), namely:
1. Revenue (Income approach) is the amount of money received by micro and small industry entrepreneurs from the gross sales of goods minus the amount of purchase of goods sold.
2. Revenues (production approach) are all products produced in small and micro industries in units within a certain period of time.
3. Revenue (expenditure approach) is the household income of micro industry and small industry equal to the amount of money spent to purchase goods for household purposes (raw materials, food, clothing, boards (place of business), education, health, and others).

**Kinds and Level of Family Income:**

In general, humans feel that income / income received at this time is still lacking and a problem that will never be solved. In general, (Adrian D Lubis, 2010), can explain that efforts to increase income can be used several ways, namely:
1. Utilization of spare time. Individuals are able to take advantage of the remaining free time from work that has been done before into a new opportunity to supplement income.
2. Doing creativity and innovation. Individuals must be able to think creatively and innovatively create meaningful breakthroughs to achieve the perceived need is still lacking.

According to Chiara, F. and Sasidharan, S. (2009) reluctance to work in the agricultural sector because income as a laborer is lower than income as industrial laborer, non-agricultural sector laborer. Non-agricultural sector revenues are higher than farm labor and relatively more sustainable employment opportunities throughout the year.

According to Kemal A. Stamboel (2012), the poverty of the rural population is largely due to structural circumstances. The results of rural development can only be enjoyed by rich farmers, while large numbers of smallholders seem far behind. Another thing is not yet given the same rewards for the workers.

The definition of income according to Anne Booth and Peter McCawley (1990) is the increase in the company's assets or the decrease in corporate liabilities (or a combination of the two) over a given period of delivery of goods, delivery of services or other activities that constitute the central activity of the enterprise.

Meanwhile, it can be said that income is any additional assets or reduction of liabilities arising from the business of the company, either in the form of delivery of services or the sale of goods. The definition of income in this study is income received every family in each month include husband's income, wife income and other income in the form of kos-kosan income, income of agricultural products, income of children who have worked and not married, and others.

According to Paul A. Samuelson and William D. Nordhaus (1986) the individual income is the amount of income received by everyone in the community before deducting the transfer payment. Transfer Payment is income that is not based on remuneration in production process in the year concerned. Revenues are divided into: 1. Original Income, ie income received by any person who directly participate in the production of goods. 2. Income derived (secondary), ie income from other segments of the population who do not directly participate in the production of goods such as doctors, lawyers, and civil servants.

N. Gregory Mankiw (2013) says that revenue by acquisition is differentiated into: 1. Gross Income, ie revenue earned before deducting expenses and expenses. 2. Net income, ie revenue derived after deducting expenses and expenses. Revenues by shape are differentiated into: 1. Revenue in the form of money, is any income that is regular and received usually as a consideration, the main source of salary, wages, building, income, net of own business and income from sales such as: rental, social security, insurance premiums. 2. Income in the form of money, is any income of a regular nature, usually not in the form of remuneration and received in the form of goods.

Level of income a person can be classified into 4 groups (N. Gregory Mankiw, 2013) namely: 1. Low income group (low income group) is the average income of Rp. 150,000 per month. 2. Moderate income group average income Rp.150,000-Rp.450,000 per month. 3. Midle income group average income received Rp.450,000-Rp.900,000 per month. 4. High income group (average income group) average of more than Rp. 900,000 per month.

Factors affecting industrial revenues can be explained that any industry group of businesses, must be influenced by several factors in achieving increased production. Finally it will affect the level of income that will be received by the business industry (Tambunan Tulus T. H. 2000).
The concept of thinking can be implemented on variables affecting income level of small industry and micro industry where, investment or start-up capital, working capital, employment quantity, hours of work, type of merchandise, business location, and number of households.

The family count meant here is the number of household members living in one kitchen (the parents as the head of the household, grandparents, relatives, and helpers). They may be employed as "micro and small industry" workers or as members of non-working households "micro and small industry enterprises". However, they can be fed from the "micro and small industry" business.

The results of "micro and small industry enterprises" are part of the total household income. Therefore, please note the contribution of the results of "micro and small industry enterprises" to total household income.

The number of family members strongly determines the number of family needs.

More and more family members mean more and more number of family needs that must be fulfilled. Vice versa, the fewer family members mean less and less needs to be fulfilled by the family. Every individual has his own needs. So in the family that the number of its members many needs will be many.

According to Central Bureau of Statistics (CBS) 1990 the number of dependents is the number of children or other members who are dependent on the household of female workers who live together in one house and eat in one kitchen, measured in person. The number of household members reflects household expenditure. In the study shows that the more dependents of household members, the more the number of working hours poured by rural women housewives to earn a living. Similarly, the number of children who are insured in the family will have an impact on the size of the expenditure of a family.

Similarly, family members who are disabled or elderly. They can not bear the cost of their own lives so they depend on the head of the family and his wife. Adult children need to be assisted in education, health and other living expenses. The number of members covered, living together in one house, eating in a kitchen is the responsibility of the household. The number of family members in this study is the number of household members including household members who are insured who live together in one house and eat in one kitchen.

Technology:

In addition to talking about different types of costs, the following should be said about technology, quality of goods, because the two concepts are closely related to financing. Furthermore, since the goods produced are export-oriented, what is important to be discussed is the foreign exchange rate which in this case is the US dollar exchange rate, because it will reveal the price of the exported goods. Here is a brief description of the three concepts.

Quality of goods:

Quality of goods (Sadono Sukirno, 1981) is a beauty, strength, has charm, can be used according to the interests of consumers. So consumers want to buy it. The quality of a good is determined by the raw material, the producer's imagination, the process tool, and of course very related to the cost. High-quality goods require a high cost too, while the cost is low, it is impossible to realize a high quality product, although the same raw materials.

International Trade Relations:

International trade relations, should be understood, for export activities (Lindert PH and Kinderleberger CP 1995). In this study, the exports made are furniture products that are products that are needed by almost all over the world, and the product provides an image for an exporter country. Therefore, some export-related theories, in more detail are described in the following sections.

(1). Function and Role of International Economic Relations:

Economics is defined as a branch of economics that studies everything about economic relations between countries (Tambunan, Tulus T. H. 2000). For example: trade in goods and services between countries, foreign investment, short-term capital cross-border capital, balance of payments, foreign debt problems, multi-national corporations influence, world bodies (IMF, World Bank, GATT, ASEAN, and others the effects of world market changes on production, consumption, employment, and income.

International Economics has two major aspects (Lindert PH, Kinderleberger CP. 1995), namely: 1). International Trade which studies the basics of thinking about international trade, then it emphasizes on theoretical and in the long run. 2). International Financing that studies monetary adjustment as a result of international trade, so it is practical and in the short term.

In an open economy like Indonesia, the impact of changes in international economic relations is enormous for Indonesia's domestic economy, as it relates to the exchange of goods and services, capital exchange, technology exchange, and information and communication exchange.

Indonesia has been linked to industrialized countries (North-North economic relations), because the country is more capable of producing efficiently and has relatively high purchasing power. Indonesia's economic relationship with the South-South country is relatively small due to its low purchasing power and production capability.

The Merkantilisians identify four traits of international trade ideas: 1). His fear of goods, 2). Attitudes toward the sale of goods, 3). The desire to accumulate precious metals, and 4). Displeasure at usury.

(2). The Classical Theory of International Trade:

Starting from the criticism conducted by David Hume (Abdulhafid.1958), against the Merkantilis group known as the price spiece flow mechanism. It was followed by Adam Smith (Hamdy and Hadi, 2000), who criticized the economic policies undertaken by the Merkantilis group. Another Adam Smith criticism is about the government's role in international trade, that government intervention in the economy should not be necessary because it causes chaos in the course of the economy. Smith recommends that,
in the country, laisses faire should be done, while abroad, especially in the field of international trade is free trade. The original Adam Smith idea is:

1. an explanation of why countries do international trade known for its absolute advantage,
2. concerning vent for surplus production ventures to other countries because of specialization known as vent for surplus theory.

Smith's ideas were developed and perfected by David Ricardo and by John Stuart Mill (Salvator and Dominick 1997), which they basically argue that international trade is difficult when based on absolute advantage. They recommend that countries should engage in international trade with each having a comparative advantage or cost (Halwani and Hendra, 2005).

The classical theory that uses many assumptions, perfected by the Classic Neo by changing many of its essence. The most widely applied improvements (Lindert PH and Kinderleberger CP. 1995), are trade between countries and many goods, where their comparative advantage may vary, especially if in this case included the possibility of changes in wages and changes in exchange rates, so in such a trade the comparative advantage is difficult to implement.

Other improvements come from M. Suparmoko (1990), which attempts to change the basis of analysis from real costs to alternative costs, so that analysis becomes more realistic and easy to develop (eg introducing industrial conditions with increased costs, demand conditions, market equilibrium, and etc).

(3). Modern Theory in International Trade:

Modern theory emerged as a reaction to the classical theory which suffered a severe blow with the great depreciation of the 1930s. The modern theory proposed by Bertil Ohlin (1933), developed by Eli-Heckscher, is known by the theory of H-O, then refined by Samuelson (Paul A. Samuelson and William D. Nordhaus, 1986: 183), then changed to Theory H.O.S. The H-O theory modifies Classical theory to examine further the factors that determine the existence of comparative advantage. Modifications made by H-O (Salvatore: 1986), these include:

1. The influence of transport costs in Classical theory is considered non-existent.
2. Three factors of Neo-Classical production are: land, capital, and labor as a substitute for the concept of natural advantages and the advantages developed.
3. Giving meaning of cost as the price of factors of production in money instead of value theory on the basis of labor.
4. The importance of the notion that the product is interdependent with the market and the price of the factors of production that encourage trade, thus providing a much broader range of analysis than the Classical theory that emphasizes barter trade.
5. The statement that trade will affect prices. So the assumption that the constant income distribution is no longer in use.

The principal theories of H-O (Salvatore: 1986), are:

1. The basis of international trade underlying comparative advantage is that each country has a different natural gift, so that the factors of production have an unequally distributed proportionately.
2. Differences in the number of factors of production owned by each country encourage the use of factors of production in combinations having different intensities. As a result, every country tries to emphasize the production of its goods that its manufacture is done according to its natural state. The state will export labor-intensive products if nature rewards relatively large labor-intensive factors and will export capital-intensive production, if nature presents a capital-intensive production factor.

(4). Price Equalization Theory:

International trade tends to promote the similarity in the price of goods and the factor prices used to produce the goods, because international trade makes every country trying to specialize in goods that have comparative advantages. If the product has a comparative advantage in accordance with the natural gift owned by the country, then specialization efforts can increase demand. As a result, product prices go up, automatically shifting the price of other goods (Salvator and Dominick 1997).

(5). Theory of Economic Growth and International Trade:

For a small country (Wijaya, Nur Kiblat, 2004) can only act as price taker. The economic growth varies, namely: (1). If the country's real income increases and can increase the demand for imported goods, its economic growth has a neutral effect on international trade. (2). Conversely, if the increase in real income encourages imported goods, then that effect should be combined with the effect of cost changes on the pattern of production. For a large country (Barro, R. J. 1991), in international trade can contribute to determining the relative prices of traded goods, its economic growth would lead to: (1). The intensity of population assumptions on imported goods as a result of rising gross domestic product. (2). If the assumptions used are still used, then the economic growth of the big country has decreased its real income, although its gross domestic product has increased. There are two sources of economic growth (Director General of Trade, 2001), namely: (1). Increased economic resources, both quantity and quality, (2). Technological advancements that enable increased production without additional resources.

(6). Theory of Protection: Tariffs and Barriers to Non-Tariff Trading:

To encourage the growth of domestic industry, import duties on imported products are lowered. Because import duties can raise prices, so protection by wearing import duties is called tariff imposition. Other safeguards are import product restrictions / import quotas and export subsidies and subsidies to reduce imports. The reasons for the imposition of tariffs are two: 1. Based on economic principles (international exchange basis, industry in the early stages, industrial diversification, market distortion, etc.) and 2. Non-economic principles (associated with government foreign policy and preserved idealism (Tambunan, Tulus. 2001).

(7). Agreement on Trade and Economic Integration:

The trade agreement was formed after the second world war and is still valid is the GAAT (General Agreement on Tariff
and Trade) (Sobri, 1994). However, it is often violated by member states. So the GATT rules are often refined. Countries with weak economic status, provisions in GATT harm their trade. To help developing countries, UNCTAD established that emphasizes that developed countries provide tariff preferences in developing countries, the establishment of price stability programs and good cooperation between developing countries themselves (South-south). After the international trade flourished, emerging multinational companies (EEC, ASEAN, CALM, etc.). The EEC (the European Economic Community) takes advantage of its location into a powerful economic bloc. ASEAN in 1967 is planned to become an economic bloc, now developing into the economic bloc of Southeast Asian countries.

(8), New International Economic Order:
The new international economic order is reflected (Priharnowo, Thoso, 2004), on the "International Terms of Trade" which describes the position of a country in the countries of international trade partners. The position concerns the shift in profit sharing. Some time ago, the International Exchange (IE) was moving in the direction of developing countries, so many years there has been a transfer of revenue from developing countries to industrialized countries, because in IE calculations there are many weaknesses.

![Figure 3.1 Research Framework: Factors Affecting Gross Revenues Y1](image-url)
Figure 3.2 Research Framework: Independent Relation with Y1 and Y2
Hypothesis:
1. Working hours, Investment, Raw materials, and Cost simultaneously have a significant effect on business income of micro and small industries in Denpasar City.
2. Working hours, Investment, raw materials, and costs partially significant effect on revenues of micro and small industries in Denpasar.

CHAPTER III
METHODOLOGY AND ANALYSIS TOOLS

Methodology:
The research was conducted in Denpasar City, on Household unit of company which included classification of Small Industry and Micro Industry which produce Furniture goods. Selected industrial sector in Denpasar City with the consideration that the number of businesses that move in the most industrial sector in the city of Denpasar based on the latest data are: Karangasem 279 units; Klungkung 348 units; Gianyar 179 units; Bangli 121 units; Buleleng 75 units; Jembrana 288 units; Tabanan 67 units; Badung 1544 units, and Denpasar City 3788 units.

<table>
<thead>
<tr>
<th>No.</th>
<th>Regency</th>
<th>Number of Industrial Enterprises (unit)</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regency of Karangasem</td>
<td>279</td>
<td>4,17</td>
</tr>
<tr>
<td>2</td>
<td>Regency of Klungkung</td>
<td>348</td>
<td>5,20</td>
</tr>
<tr>
<td>3</td>
<td>Regency of Gianyar</td>
<td>179</td>
<td>2,68</td>
</tr>
<tr>
<td>4</td>
<td>Regency of Bangli</td>
<td>121</td>
<td>1,81</td>
</tr>
<tr>
<td>5</td>
<td>Regency of Buleleng</td>
<td>75</td>
<td>1,12</td>
</tr>
<tr>
<td>6</td>
<td>Regency of Jembrana</td>
<td>288</td>
<td>4,31</td>
</tr>
<tr>
<td>7</td>
<td>Regency of Tabanan</td>
<td>67</td>
<td>1,00</td>
</tr>
<tr>
<td>8</td>
<td>Regency of Badung</td>
<td>1544</td>
<td>23,08</td>
</tr>
<tr>
<td>9</td>
<td>Denpasar City</td>
<td>3788</td>
<td>56,63</td>
</tr>
<tr>
<td>10</td>
<td>Bali Province</td>
<td>6689</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Bali Provincial Industry Office, 2014 (processed data).

Table 3.2 Producing Furniture per District in Denpasar City

<table>
<thead>
<tr>
<th>No.</th>
<th>Classification of Industrial Enterprises</th>
<th>Kecamatan: Districts</th>
<th>Total (Unit)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>West Denpasar</td>
<td>South Denpasar</td>
</tr>
<tr>
<td>1</td>
<td>Small industry</td>
<td>13</td>
<td>33</td>
</tr>
<tr>
<td>2</td>
<td>Micro Industry</td>
<td>22</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>Amount</td>
<td>35</td>
<td>54</td>
</tr>
</tbody>
</table>

Source: Central Bureau of Statistics (CBS) Bali Province, 2014 (data processed).

Based on literature study as pre-research by processing data skundair, obtained information that micro industry and small industry Furniture in Town of Denpasar produce as many as 12 types of products such as Table 3.2. The next step is to conduct field research to interview 123 respondents. The respondent is the business leader. Of course with a preparation of a list of questions such as attached. Research has been conducted and ends in early August 2015 and is currently just completing the Tabulation phase. In the meantime, we have obtained the following analysis results.

Statistical Analysis and Testing Tools:
The analytical tool of this research is statistic regression with Statistic Pacage of Social Sience (SPSS) program (Singgih Santoso, 2009), and Eviws program (Gujarati and Damodar, espoused from Sumarno Zain, 1997 and 1999). The result of the statistical analysis of this SPSS program is to solve all the research problems raised and explain all hypotheses proposed with a particular model. Solving the first problem as well as answering the first hypothesis then, used the regression equation such as:

\[ Y_1 = a + X_{1b1} + b2X2 + b3X3 + b4X4 + b5X5 + b6X6 + b7X7 - E \]

The second problem and the second hypothesis, the equation is used:

\[ Y_2 = a + X_{3b3} + b4X4 + b9X9 - E \]

The results of multiple regression (multiple) were tested by F test (Singgih Santoso, 2009), (simultaneous test) with the formula:
Problems and hypotheses no. 1.1 to 1.7 and hypotheses 2.2 to 2.3 are used simple regression equations namely: \( Y2 = a + Y1b2 - E \)

The results of simple regression (mono regression) (Singgih Santoso, 2009), tested by t test (partial test) ith the formula:

\[
t_i = \frac{\beta_i}{S\beta_i}
\]

Description:
\( \beta_i = \) Coefficient regression
\( S\beta_i = \) Standard error of \( \beta_i \)

Figure: 6.2
Ho's acceptance and rejection test, positive or negative, is tested with a two-sided shading curve.

Figure: 6.3
Ho's acceptance and rejection test is negative, tested with left-side shading curve.

Figure: 6.4
Test of acceptance and rejection Ho positive, tested with right side shading curve.
CHAPTER IV
RESULT ANALYSIS AND DISCUSSION

Analysis Results:
Based on the results of SPSS assistance analysis Regression approach, obtained the following results:

ANOVA(b)

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>3521434678.578</td>
<td>8</td>
<td>440179334.822</td>
<td>411923.943</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>121819.683</td>
<td>114</td>
<td>1068.594</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>3521556498.261</td>
<td>122</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), X12.2 Inconsistent Cost (Hundred Thousand Rp), X6 Working Hours (Hours), X11.3 Value of Raw Material (Hundred Thousand Rupiah), X3.2 Number of Non-Permanent Persons (Persons), X12 Fixed Fixed (person), X9.1 Working capital value of wood raw material (Rp million)

b. Dependent Variable: Y1 Result of gross sales (Hundred thousand Rp)

Variables Entered/Removed(b)

<table>
<thead>
<tr>
<th>Model</th>
<th>Variables Entered</th>
<th>Variables Removed</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>X12.2 Fixed Cost (Hundred Thousand Rp), X6 Working hours (hours), X11.3 Value of raw materials (Hundred thousand Rp), X3.2 Number of non-permanent kindergarten (people), X12.1 Fixed Cost (Hundred thousand Rp), X8 Total Land, Building, Equipment (Million Rp), X3.1 Number of Fixed Kindergarten (people), X9.1 Value of working capital of wood raw material (Rp million) (a)</td>
<td>.</td>
<td>Enter</td>
</tr>
</tbody>
</table>

a. Tolerance = .000 limits reached.
b. Dependent Variable: Y1 Result of gross sales (Hundred thousand Rp)

Model Summary(b)

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.000(a)</td>
<td>1.000</td>
<td>1.000</td>
<td>32.689</td>
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</table>

Sambunbgan

<table>
<thead>
<tr>
<th>R Square Change</th>
<th>F Change</th>
<th>df1</th>
<th>df2</th>
<th>Sig. F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.000</td>
<td>411923.943</td>
<td>8</td>
<td>114</td>
<td>.000</td>
</tr>
</tbody>
</table>

(a) Predictors: (Constant), X12.2 Fixed Cost (Hundred Thousand Rp), X6 Working hours (hours), X11.3 Value of raw materials (Hundred thousand Rp), X3.2 Number of non-permanent kindergarten (people), X12.1 Fixed Cost (Hundred thousand Rp), X8 Total Land, Building, Equipment (Million Rp) X3.1 Number of Fixed Kindergarten (people), X9.1 Value of working capital of wood raw material (Rp million)

(b) Dependent Variable: Y1 Result of gross sales (Hundred thousand Rp)

ANOVA(b)

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>3521434678.578</td>
<td>8</td>
<td>440179334.822</td>
<td>411923.943</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>121819.683</td>
<td>114</td>
<td>1068.594</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>3521556498.261</td>
<td>122</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant),
X12.2 Fixed Cost (Hundred Thousand Rp),
X6 Working hours (hours),
X11.3 Value of raw materials (Hundred thousand Rp),
X3.2 Number of non-permanent kindergarten (people),
X12.1 Fixed Cost (Hundred thousand Rp),
X8 Total Land, Building, Equipment (Million Rp)
X3.1 Number of Fixed Kindergarten (people),
X9.1 Value of working capital of wood raw material (Rp million)

b Dependent Variable: Y1 Result of gross sales (Hundred thousand Rp)

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>1 Model</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unstandardized</td>
</tr>
<tr>
<td></td>
<td>B</td>
</tr>
<tr>
<td>(Constant)</td>
<td>-132.359</td>
</tr>
<tr>
<td>X3.1 Number of Fixed Kindergarten (people)</td>
<td>-22.262</td>
</tr>
<tr>
<td>X3.2 Number of non-permanent kindergarten (people)</td>
<td>-13.182</td>
</tr>
<tr>
<td>X6 Working hours (hours)</td>
<td>-.125</td>
</tr>
<tr>
<td>X8 Total Land, Building, Equipment (Million Rp)</td>
<td>.200</td>
</tr>
<tr>
<td>X9.1 Value of working capital of wood raw material (Rp million)</td>
<td>.099</td>
</tr>
<tr>
<td>X11.3 Value of raw materials (Hundred thousand Rp)</td>
<td>.000</td>
</tr>
<tr>
<td>X12.1 Fixed Cost (Hundreds of thousands Rp)</td>
<td>-.192</td>
</tr>
<tr>
<td>X12.2 Fixed Cost (Hundred Thousand Rp)</td>
<td>.012</td>
</tr>
</tbody>
</table>

Connection

<table>
<thead>
<tr>
<th>1 Model</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

a Dependent Variable: Y1 Result of gross sales (Hundred eibu Rp)

Excluded Variables | 9a |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>Beta In</td>
</tr>
<tr>
<td>1</td>
<td>X9.2 Nilai modal kerja bahan pelengkap (Juta Rp)</td>
</tr>
</tbody>
</table>

(a) Predictors in the Model: (Constant),
X12.2 Fixed Cost (Hundred Thousand Rp),
X6 Working hours (hours),
X11.3 Value of raw materials (Hundred thousand Rp),
X3.2 Number of non-permanent kindergarten (people),
X12.1 Fixed Cost (Hundred thousand Rp),
DISCUSSION

Data processing is done with two approaches are:

**First.** Multiple Regression Analysis approach uses 1 (one) dependent variable that is gross income (Y1) micro and small industry effort in Denpasar city as influenced variable or independent variable. While 5 (five) independent variables are raised as variables that affect (independent variables) are: X6 Working hours; X8 Amount of land, building and equipment investment (million Rp); X11.3 Value of raw materials (hundred thousand Rp); X12.1 Fixed costs (hundred thousand Rp); and X12.2 Amount of non-fixed costs (Hundreds of thousands Rp).

**Second.** Canonical Correlation Analysis approach uses 2 (two) dependent variables, namely: Gross Income (Y1) and Net Income (Y2). While 8 (eight) as independent variables are: X3.1 = Number of permanent workers; X3.2 = Number of non-permanent employees; X6 = Working hours; X8 = Total Investment of land, buildings and equipment; X9.1 = Value of working capital of wood raw material; X11.3 = Value of raw material; X12.1 = Fixed cost amount; and X12.2 = Amount of non-fixed costs.

**Multiple Regression Analysis Approach:**

The results of the research analyzed by Multiple Regression Analysis approach will be shown in the form of: Graph 1 and Graph 2. Then in the form of Tables, starting from Table 2 to Table 5. Data in Tables reflects the results of data processing from Multiple Regression Analysis approach that is used to solve the issues raised and answer the predefined hypothesis. Discussion of the results of this study, chronology from the original table view of the Program SPSS (Statistic Package of Social Science) then conducted an interpretation that describes the purpose and meaning of the numbers contained in the Table.

Table 2: Residuals Statistics (a) in column 5 “Std. Deviation” is used to test the normality of the analyzed data reflected in the histogram graph (Figure: 1) and in the probability plots (Fig. 2). Normality tests using a histogram graph indicate whether residuals are normally distributed or not. In the histogram graph it appears that the residuals are normally distributed and symmetrically shaped to the right or left, so that the analyzed data is quite normal so that the analysis can proceed.

In the probability plots, it appears that the spreading points coincide around the diagonal line and this indicates that the residuals are normally distributed, thus ensuring this research data can be continued for analysis.

<table>
<thead>
<tr>
<th>Predicted Value</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residual</td>
<td>-1719.43</td>
<td>26097.58</td>
<td>2245.10</td>
<td>4745.142</td>
<td>123</td>
</tr>
<tr>
<td>Std. Predicted Value</td>
<td>-8.35</td>
<td>5.027</td>
<td>0.00</td>
<td>1.000</td>
<td>123</td>
</tr>
<tr>
<td>Standard Error of Predicted Value</td>
<td>268.428</td>
<td>1193.239</td>
<td>.496.413</td>
<td>216.619</td>
<td>123</td>
</tr>
<tr>
<td>Adjusted Predicted Value</td>
<td>-1948.53</td>
<td>25890.49</td>
<td>2217.88</td>
<td>4628.328</td>
<td>123</td>
</tr>
<tr>
<td>Residual</td>
<td>-6347.799</td>
<td>22825.422</td>
<td>0.00</td>
<td>2399.941</td>
<td>123</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>-2.590</td>
<td>9.314</td>
<td>0.00</td>
<td>.979</td>
<td>123</td>
</tr>
<tr>
<td>Stud. Residual</td>
<td>-2.934</td>
<td>10.663</td>
<td>0.05</td>
<td>1.100</td>
<td>123</td>
</tr>
<tr>
<td>Deleted Residual</td>
<td>-8145.493</td>
<td>29918.182</td>
<td>27.218</td>
<td>3038.916</td>
<td>123</td>
</tr>
<tr>
<td>Stud. Deleted Residual</td>
<td>-3.035</td>
<td>63.268</td>
<td>.432</td>
<td>5.736</td>
<td>123</td>
</tr>
<tr>
<td>Mahal. Distance</td>
<td>.472</td>
<td>27.931</td>
<td>4.959</td>
<td>5.927</td>
<td>123</td>
</tr>
<tr>
<td>Cook's Distance</td>
<td>.000</td>
<td>5.889</td>
<td>.054</td>
<td>.532</td>
<td>123</td>
</tr>
<tr>
<td>Centered Leverage Value</td>
<td>.004</td>
<td>.229</td>
<td>.041</td>
<td>.049</td>
<td>123</td>
</tr>
</tbody>
</table>

*a* Dependent Variable: Y1 Result of gross sales (Hundred thousand Rp)
Table 3: Model Summary (b)

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Change Statistics</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.892(a)</td>
<td>.796</td>
<td>.788</td>
<td>2450.685</td>
<td>.796</td>
<td>91.477</td>
</tr>
</tbody>
</table>

a Predictors: (Constant), X6 Working hours (hours), X8 Total Land, Building, Equipment (Million Rp) X11.3 Value of raw materials (Hundred thousand Rp), X12.1 Fixed Cost (Hundred thousand Rp), X12.2 Fixed Cost (Hundred Thousand Rp),

b Dependent Variable: Y2 Sales net (Hundred thousand Rp).

Table 3 Summary Model (b) is the result of data processing using Multiple Regression Analysis approach. In this context, the column number 11 Durbin Watson is used to describe the state of the autocorrelated data. The data in column 4 Adjusted R Square, is used to perform determinant test.

Durbin Watson value = 1.986 which is greater than the value of Table Durbin Watsen with 5% significance, 123 samples (n), and the number of independent variables 5 (k = 5), then in Durbin-Watson table obtained value: du = 1.76 less from 5-1.76 (4-d), it can be concluded that there is no autocorrelation. That is, the six variables of this study, both dependent and independent variables have been eligible for analysis.

The value of Adjusted R Square = .788 is used for the Reflected Test which is to test the Goodness-fit of the regression model. The value of Adjusted R2 = 0.788 means 78.80% dependent variable variation can be explained by 5 independent variables, the remaining 21.2%) explained by other factors outside the model. So, the income variable is closely related to: Working hours, the amount of land investment, buildings, and equipment, Raw material value, Fixed cost amount, and Amount of non-fixed costs.

Table 4: ANOVA (b)

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>DF</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>2746997815.034</td>
<td>5</td>
<td>549399563.007</td>
<td>91.477</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>702685187.796</td>
<td>117</td>
<td>6005856.306</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>3449683002.830</td>
<td>122</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a Predictors: (Constant), X6 Working hours (hours), X8 Total Land, Building, Equipment (Million Rp) X11.3 Value of raw materials (Hundred thousand Rp), X12.1 Fixed Cost (Hundred thousand Rp), X12.2 Fixed Cost (Hundred Thousand Rp),

b Dependent Variable: Y2 Sales net (Hundred thousand Rp).

Table 4: ANOVA (b) values in column 7 Sig. used to test the Analysis of Variance is to determine the level of significance of the relationship between dependent variable with independent variable. With a probability level value of 0.000 explaining that the value is 0.000 < 0.05, meaning the value of F = 91.477 is indeed true indicating the relationship.
between dependent and independent of that variable and proved significant. Thus, the regression model of the results of this study can be used to predict the gross revenues of Micro and Small Industry Enterprises in Denpasar.

Table 5: Coefficients (a), in column 3 can be used to form multiple linear regression equations: 

\[ Y_2 = -0.525X6 + 0.285X8 - 0.052X11.3 + 1.778X12.1 + 0.314X12.2. \]

This regression equation explains that Working hours and Value of raw materials negatively affect Gross Income, while Total investment of land, building, and equipment; Fixed cost; and non-fixed costs; positively affect the gross income of micro and small industry enterprises in Denpasar City.

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td>T</td>
<td>Sig.</td>
</tr>
<tr>
<td>(Constant)</td>
<td>-1141.698</td>
<td>914.914</td>
<td></td>
<td>-1.248</td>
<td>.215</td>
</tr>
<tr>
<td>X6 Working hours (hours)</td>
<td>-0.525</td>
<td>4.222</td>
<td>-0.005</td>
<td>-124</td>
<td>.901</td>
</tr>
<tr>
<td>X8 Total Land, Building, Equipment (Million Rp)</td>
<td>.285</td>
<td>.015</td>
<td>.912</td>
<td>19.205</td>
<td>.000</td>
</tr>
<tr>
<td>X11.3 Value of raw materials (Hundred thousand Rp)</td>
<td>-.052</td>
<td>.027</td>
<td>-.900</td>
<td>-1.901</td>
<td>.060</td>
</tr>
<tr>
<td>X12.1 Fixed Cost (Hundreds of thousands Rp)</td>
<td>1.778</td>
<td>3.898</td>
<td>.028</td>
<td>.456</td>
<td>.649</td>
</tr>
<tr>
<td>X12.2 Fixed Cost (Hundred Thousand Rp)</td>
<td>.314</td>
<td>2.565</td>
<td>.007</td>
<td>.122</td>
<td>.903</td>
</tr>
</tbody>
</table>

\( i \) Dependent Variable: \( Y_2 \) Sales net (Hundred thousand Rp)

The numbers in column 7 Sig. shows the level of significance of the independent influence on income. Its meaning is for partial test (t test), used to know influence of each independent variable to dependent variable. Of the five independent variables are: X6 Working hours; X8 Total Land, Building and Equipment Investment (Rp million); X11.3 Value of raw materials (Hundred thousand Rp); X12.1 Fixed Cost (Hundreds of thousands Rp); and X12.2 Cost Not fixed (Hundred thousand Rp), partially affect variable Dependent variable that is \( Y_2 = \) Net income of micro and small industry.

The numbers are compared to 5% which is the level of negligence and applies as a provision for research on the social sciences. If the number is <5% significant and if >5% means insignificant. So in this context, the variables that have a significant effect are: Total Investment of land, buildings, and equipment. This variable appears significant, since its cost calculations are easier to remember and record, with respect to the relatively large numbers and only occurring over a long period of time. Others are insignificant. Not significant, because such a weakness possessed by micro and small business enterprises is a weakness in terms of administration, including bookkeeping (accounting). The results of simple regression (mono regression) (Singgih Santoso, 2009), tested by t test (t test) with the formula:

\[
 t_i = \frac{\beta_i}{S_e \beta_i}
\]

Information:

\( \beta_i \) = regression coefficient and

\( S_e \beta_i \) = Standard error of \( \beta_i \)

Image 2

Test of acceptance and rejection Ho positive, tested with right side shading curve for work hour variable. Therefore the result of \( t \) table = -0.124, and is in the reception area, then the hypothesis accepted.
Canonical Correlation Analysis:

The analysis that has been done before with the Multiple Regression Analysis approach only raises 5 independent variables that are considered to meet the requirements. While 2 (two) others who should be included in the design of regression analysis, it was involved in autocorelation, so had to be removed. For that, then done with Canonical Correlations Analysis approach is an approach that can analyze two dependent variables with a number of independent variables. Canonical Correlations Analysis results that theoretically can be seen from three sub-approaches are: 1. Multivariate Tests of Significance, 2. Eigenvalues and Canonical Correlations, and 3. Dimension Reduction Analysis. These three types of analysis are presented first, then interpreted as follows.

**Table: 6 Aova (Analysis of variance)**

<table>
<thead>
<tr>
<th>Test Name</th>
<th>Value</th>
<th>Approx. F</th>
<th>Hypoth. DF</th>
<th>Error DF</th>
<th>Sig. of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pillais</td>
<td>1.77767</td>
<td>113.94033</td>
<td>16.00</td>
<td>228.00</td>
<td>.000</td>
</tr>
<tr>
<td>Hotellings</td>
<td>27.19098</td>
<td>190.39358</td>
<td>16.00</td>
<td>224.00</td>
<td>.000</td>
</tr>
<tr>
<td>Wilks</td>
<td>.00761</td>
<td>147.74943</td>
<td>16.00</td>
<td>226.00</td>
<td>.000</td>
</tr>
<tr>
<td>Roys</td>
<td>.95771</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: F statistic for WILKS' Lambda is exact.

Table: 6 Aova (Analysis of variance) reflects the test of alternative significance. The commonly used numbers are: Wilks is to test the significance of the first Canonical Correlation. The results of this significance test turned out to be statistically all significant, because everything> 0.05. So it can be concluded that the first Canonical Correlation Analysis proved significant. If Canonical Correlation first significant, then Canonical Correlation second and so on are also significant. Or vice versa. Thus, the relationship of the two dependent variables with the eight independent variables indicates a significant relation.

---

Picture: 3
Test of acceptance and rejection Ho positive, tested with right side shading curve for variable Number of Investment Land, Building, and Equipment. Therefore the result of t table = 19.205, and is outside, right side, then the hypothesis is rejected.

---

Picture: 4
Test of acceptance and rejection Ho positive, tested with right side shading curve for variable Non-fixed cost. Therefore the result of t table = 0.456, and is in acceptance, then the hypothesis accepted.

---

Picture: 5
Test of acceptance and rejection Ho positive, tested with right side shading curve for variable Number of Investment Land, Building, and Equipment. Therefore the result of t table = 0.122, and is in, then the hypothesis accepted.
This study uses 8 independent variables and 2 dependent variables. Because of using two dependent variables, the Canonical Correlation analysis will show 2 forms of Canonical function. As shown by Table Eigen value and Canonical Correlation, on Root No. there are 1 and 2. Both of these Canonical functions on Canon Cor. shows the value for Canonical 1 function of 0.979 and for Canonical 2 function of 0.906. Theoretically the first Canonical Correlation function is more important than the second Canonical Correlation function. That is, the relationship of the two dependent variables with the eight independent variables is very strong.

After knowing that both Canonical Correlation Functions are significant, the next step is to interpret the Canonical Variate that exists in function 1 as well as in function 2. Canonical Variate is a collection of several variables that form a variate. In this context, there are two Dependent Canonical variates variables, namely: variable Y1 = Gross revenue and Y2 = Net income of micro and small industry enterprises. While Independent Canonical variates variables include eight variables, namely: X3.1 = Number of permanent workers; X3.2 = Number of non-permanent employees; X6 = Working hours; X8 = Total Investment of land, buildings and equipment; X9.1 = Value of working capital of wood raw material; X11.3 = Value of raw material; X12.1 = Fixed cost amount; and X12.2 = Amount of non-fixed costs.

In principle, this Canonical Correlation analysis wants to know whether all independent variables in the Canonical Variate are closely related to dependent variate, as measured by the magnitude of the correlation of each independent variable with its variation? To answer that, then through the interpretation of the results of the analysis as shown by Table: 9 Raw canonical coefficients for COVARIATES, it is expected to be clear.

For Function 1 Dependent variable shown two correlation numbers which are both equal and below 0.05 ie: -0.005 and 0.005. As for the function of 2 Dependent variables shown two correlation numbers which are both equal and below 0.05 are: -0.002 and 0.002. This means both functions have proven significant in its role of connecting the two dependent variables with the eight independent variables.

Univariate F-tests with (1.120) D. F. shows that there are 2 independent variables that are not significant ie: X11.3 and X12.2 because each shows significant value of 0.733 and 0.890 which are both above 0.05. While other variables are significant, because the significance value is 0.000 < 0.05.

So the Canonical Correlations Analysis approach shows that the three sub-approaches are: 1. Multivariate Tests of
Significance, 2. Eigenvalues and Canonical Correlations, and 3. Dimension Reduction Analysis, it is able to analyze 2 (two) dependent variables with 8 (eight) independent variables and by showing very satisfactory results.

CONCLUSIONS AND SUGGESTIONS

CONCLUSIONS

Based on the results of research and discussion that has been done above, it can be drawn some conclusions of research results, certainly associated with the problems posed and the hypothesis expressed at the beginning of this study as follows.

1. Through the F test with the value $F = 91.477$ or 91.48%, indicating that the five independent variables are: Working hours; Total Land, Building and Equipment Investment; Value of raw materials; Fixed cost; and Fixed Costs, simultaneously affect the gross Income of micro and small business industries by 91.48% and the magnitude of this effect is significant. The rest of 8.52% is influenced by other variables not included in this analysis.

2. Based on t test, the five independent variables are: Working hours; Total Land, Building and Equipment Investment; Value of raw materials; Fixed cost; and Fixed Costs, partially affect the net income of micro and small industry enterprises in Denpasar City. The effect is like the equation: $Y_2$

3. Based on in-depth interviews in the form of an opinion or opinion only, but with experience faced by small and micro industries in Denpasar City, the products they produce have been able to penetrate the international market. But still very little micro and small industry can export and can not penetrate the international market (exporter). The problem, they are less understanding of the export process, has not been able to penetrate the bookkeeping system that is a requirement of foreign trade.

4. Current condition, in order to face globalization, micro and small industry enterprises in Denpasar City, also ready to compete in skill to produce, but constrained working capital. From 123 respondents, they need the average loan assistance of Rp. 500 million per business unit as working capital. They also expect assistance in the form of administrative guidance.

SUGGESTIONS

The researcher suggested to Denpasar City Government to make new policy related to development of industrial sector, especially micro and small industry in Denpasar City for 2 (two) things, that is: administrative coaching to have export knowledge and give easy way to get working capital credit assistance..

BIBLIOGRAPHY

[18]. Djinar Setiaiwina, 2011. Traditional Traders Business Revenue Analysis in Denpasar City, Research Faculty of Economics and Business Udayana University.


