The Analysis of Cooperative Development on Padang Municipality Economy

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Info Articles	*Abstract*
	This research aimed to analyze the influence of Cooperative Development on Economic Performance and Public Welfare in Padang Municipality and analyze the indirect and direct effect of Economic Performance as a mediator construct related to Cooperative Development on Public Welfare in Padang Municipality. Cooperative Performance data used in this research as panel data consists of 17 sub-sectors of Cooperative groups in Padang Municipality within 2012–2019 (8 years). Data analysis using quantitative statistical analysis approached by structural equation modeling-partial least square (SEM-PLS) method. This research found that Cooperative Development positively and significantly influenced Economic Performance and Public Welfare in Padang Municipality. Economic performance has a positive and significant influence on Public Welfare in Padang Municipality. Cooperative Development on Public Welfare through Economic Performance has a considerable contribution compared to direct influenced Cooperative Development on Public Welfare in Padang Municipality. Finally, Economic Performance has effective and complete mediation to improve Public Welfare by Cooperative Development in Padang Municipality within 2012–2019.

INTRODUCTION

The achievements of Cooperative sector development in Indonesia today are generally a portrait of micro accumulation of each region, including Padang City as one of the regions in West Sumatra Province with the vision-mission in the Regional Medium Term Development Plan (RPJMD) 2019-2024 on improving the performance of Cooperatives and Micro, Small & Medium Enterprises (MSMEs) in the economy (BPS Padang, 2020).

Each indicator of Cooperative Development in Padang Municipality from 2017 to 2019 shows a significant increase. The number of cooperatives in Padang Municipality in 2019 has reached 722 units (410 active and 312 inactive) or grew by about 1.40% per year over the last three years. With an increase in the number of cooperative members by 8.26% per year (201,291 people in 2019), it has made each other suitable development indicators also increased by an average of 23.46% per year to the volume of business (turnovers), assets, own capital, and windfall profits (SHU) (Diskop-UMKM Padang, 2020). Therefore, the improvement of each indicator should contribute significantly to the progress of Economic Performance and Community Welfare in Padang Municipality over the last three years.

Table 1. Cooperative Development in Padang City, 2017-2019

Indicator	2017	2018	2019	Growth (%)
Cooperative Business Volume (IDR)	1.860.693.205	2.107.125.586	2.284.235.151	22,76
Cooperative Business Assets (IDR)	1.120.671.879	1.273.093.229	1.387.553.868	23,81
Cooperative Venture Capital (IDR)	730.842.034	825.142.228	897.397.224	22,79
Number of Cooperative Members (People)	193.600	206.087	210.291	8,62
Remaining Cooperative Business Results (IDR)	101.224.583	114.674.675	125.996.935	24,47
Number of Cooperatives (Units) :	712	717	722	
a) Active Cooperatives	678	528	410	1,40
b) Inactive Cooperatives	34	189	312	

Source : Diskop-UMKM Kota Padang, 2020.

As the capital of West Sumatra Province, Padang is one of the regions with the largest Cooperative population of about 21.70% (410 out of 1,919 units) in 2019. (BPS Padang, 2020). Cooperative development is able as the basis for carrying out products in other fields. Therefore, each region must develop potential economic sectors for regional revenues to be increased (Sjafrizal, 2016). However, when viewed from the economic structure of Padang Municipality in 2019 with a total Gross Regional Domestic Product (GRDP) of IDR 46,467,410.23 million dominated by the Transportation and Warehousing sector of 17.17%, the Large Trade, and Retail and Repair sector by 16.94%, the Processing Industry sector by 12.29%, and the Construction sector by 9.69%. Meanwhile, the Financial Services and Insurance sector in which the Cooperative sub-sector can contribute to the total GDP of 4.31% (IDR 2,001,523.78 million) (BPS Padang, 2020).

The economy is structured as a joint effort based on the principle of kinship as regulated in the 1945 Constitution Article 33 Paragraph 1 (UUD 1945). Based on this basis, law No. 12/1967 was born, then revised to Law No. 25/1992 on Cooperatives. In-Law No. 25/1992, Cooperatives are business entities consisting of Cooperative persons or legal entities based on Cooperative principles and people's economic movements based on family principles. Cooperatives in Indonesia aim to advance the welfare of members in particular and society in general and help build a national economic order to realize an advanced, fair, and prosperous society based on Pancasila and the 1945 Constitution. Healthy economic competition can be recognized if the roles of the three economic actors need to be regulated and adjusted. Cooperative Business Entity manages businesses that control the livelihood of many people and can by the people (Tjakrawerdaja et al., 2017).

In-Law No. 25/1992 Article 4 explains that the development of the Cooperative sector is very relevant in improving economic indicators and Public Welfare (Dunggio, 2019; Mubyarto, 2003). Cooperative Development, a policy to realize the Cooperative as a business entity and at the same time as

a healthy, resilient, vital, and independent people's economic movement and as a national economic pillar, as a forum to gather people's economic capabilities in national economic activities, to play a role in improving the financial performance and welfare of the people (Swasono, 2004).

As a socio-economic institution, aspects of self-empowerment, agents of development, the Cooperative does not aim to profit, but as a forum (facilitator) of jointly owned businesses to seek benefits for its members (Mubyarto, 2010). So that the development of Cooperatives is a manifestation of improving indicators of productivity of Cooperatives and the welfare of their members through the number of members, assets, business capital, business volume, and windfall profits (SHU) to maintain the sustainability of future business (Sitio & Tamba, 2001; Regulation of the Minister of Cooperatives and SMEs, 2012)

Cooperative Development is an essential part of the economy in developing countries, as it can generate real income, contribute to reducing income inequality, poverty, unemployment, and improving welfare (DeVille et al., 2007). Dogarawa (2005) stated that cooperatives play an important role in job creation, economic growth, and socio-economic development of the community (Agusalim et al., 2019; Alkire & Foster, 2011). One of the indicators in measuring the success of economic growth is the economy's performance as an achievement of the performance of economic indicators in the economic development of a region in aggregate in a certain period. Financial performance is very effectively used locally, regionally, nationally, and multinationally related to macroeconomic indicators such as economic growth, inflation, budget deficit, unemployment, poverty, and others (Arsyad, 2010; Mankiw, 2019).

Public Welfare (Welfare Economic) itself is the output of the market structure and allocation of goods and resources in economic activities to determine the overall welfare of society both standards of living, well-being, interest, and quality of life (Atkinson & Ezell, 2012; Dogarawa, 2005; Dunggio, 2019). According to the World Bank (2015), it is an indicator of the *life expectation index, expected years of schooling, mean years of education, and expenditure per capita*. Public Welfare can realize through equal growth and development in all sectors of life. However, people's well-being has not only looked at high economic growth, but poverty, inequality, and unemployment remain massive problems (Kamarni et al., 2019; Midgley, 2014).

Furthermore, Bharadwaj (2012) stated that Cooperatives could be effective socio-economic institutions in breaking the vicious cycle of poverty, especially in rural areas. Cooperatives are also able to create jobs, overcome socio-economic inequality, improve the quality of human resource education, and innovate to impact on improving productivity and national competitiveness (Kumar et al., 2018; Smith & Rothbaum, 2013; Verhofstadt & Maertens, 2015; Wanglin & Awudu, 2016).

Theoretically and various empirical studies in multiple countries and regions in Indonesia have, but the condition experienced differences in Padang Municipality. The state of Cooperative Development in its role micro and macro at this time, if there is no improvement in the national development

process, then it can risk exacerbating inequality and threatening the sustainability of development and welfare of the community itself (Alkire & Foster, 2011; Atkinson & Ezell, 2012; Dogarawa, 2005; DeVille et al., 2007). On the other hand, Micro cooperative development can increase market share, economies of scale, and scope among various business entities (Agusalim et al., 2019; Atkinson & Ezell, 2012; Dunggio, 2019). Thus, this study wants to prove the empirical results directly both Agusalim et al. (2019); Alkire & Foster (2011); Atkinson & Ezell (2012); Dogarawa (2005); DeVille et al. (2007); Azhari et al. (2017) who recommended that the development of Cooperatives can improve Economic Performance and Public Welfare.

This research by Dunggio (2019) on developing the Cooperative sector in 9 districts/cities in Bali Province in a data panel in 2010-2014, using SEM-PLS. Empirical findings state that the development of Cooperatives has a positive and significant effect on Public Welfare and Economic Performance, or subsequently, Economic Performance has a significant impact on Public Welfare in 9 districts/ cities in Bali Province. The fundamental difference to Dunggio's research is that in this study, using Cooperative Development indicators following Regulation of the Minister of Cooperatives and SMEs of the Republic of Indonesia Number 4/2012, by adding hands of Cooperative Development in terms of Own Capital and Economic Performance constructs add indicators of unemployment.

The hypothesis presented in this study is as a temporary conjecture on some findings both theoretical and empirical before, namely: that the development of Cooperatives has a significant influence on Economic Performance in Padang Municipality during the period 2012-2019; it that the development of Cooperatives has a considerable effect on the public welfare in Padang Municipality during the period 2012-2019; alleged Economic Performance has a significant influence on the Public Welfare in Padang Municipality during the period 2012-2019; it that the development of Cooperatives has a substantial effect on the Public Welfare in Padang Municipality during the period 2012-2019 mediated by variable Economic Performance.

Or reverse proof of the Hatta (1987) hypothesis the need to build a Cooperative business entity system before making the economy realize Public Welfare. This study aims to determine the influence of Cooperative Development on the Public Welfare in Padang Municipality during the period 2012-2019, where the Economic Performance is a variable mediator.

RESEARCH METHODS

This research design is a quantitative-exploratory approach with an exploratory research approach (Sekaran & Bougie, 2016). The object of this research is all cooperatives registered in the Department of Cooperatives and SMEs of Padang City. Cross-sectoral as many as 17 types of cooperatives during the period 2012 to 2019 (8 years). There are 722 Cooperatives Development and Renewal Units. However, along with the development of Cooperative business entity continuity, in 2019, the number of Cooperatives

that became the object of this research study amounted to 424 units of Cooperatives that are active and registered with the Office of Cooperatives MSMEs of Padang Municipality. All Cooperatives that are the object of this research are Cooperatives engaged in the rill sector and saving-loans following Law No. 25/1992 on Cooperatives.

The sample selection in this study uses several stages approach following selecting members of a particular population (Sekaran & Bougie, 2016). Determination of the number of research samples at each step of a specific method using a purposive procedure, namely the decision of the number of pieces by establishing unique characteristics and non-probability sampling because members of the population who have homogeneous tendencies by specific criteria (Cooper & Schindler, 2011)

The research variables in this study are about the development of Cooperatives on Economic Performance and Public Welfare in Padang Municipality during the period 2012 to 2019 consisting of 2 latent variables (construct), i.e. construct latent exogenous: ξ (ksi) and construct latent endogenous: η (eta) where both are unobserved variables (variables that can not be measured directly or through observation), are: 1) Construct latent exogenous: ξ (ksi) namely the development of Cooperatives in the city of Padang with latent indicators: Turnover (OMZET), Assets (ASSETS), Own Capital (EQUITY), Remaining Business Results (SHU), and the Number of Members (MEMBERS); and 2) Construct latent endogenous: η (eta) namely Economic Performance with latent indicators: Economic Growth (GROWTH), Poverty Rate (POVERTY), Gini Ratio (GINI), and Unemployment Rate (UNEMPLOY); and Public Welfare with latent indicators: Life Expectancy (LIFE_EXP), Expected Years Schooling (EYS), Mean Year Schooling (MYS), and Expenditure per Capita (CAP_EXPD).

The data of this research panel relates to the Data on Cooperative Development in Padang Municipality (i = 17) reported during the period 2012 to 2019 at the Office of Cooperatives and MSMEs of Padang Municipality. In addition, data on Economic Performance and Public Welfare was obtained from the Central Bureau of Statistics (BPS) Padang Municipality from 2012 to 2019 (t = 8), so the total observation was 136 samples.

It is testing this research model using Partial Least Square (PLS) approach with *SmartPLS* software, starting with model measurement (outer model), structural model (inner model), and hypothesis testing of research model (Ghozali, 2015). PLS, according to Ghozali, is an alternative approach that shifts from a covariance-based Structural Equation Modeling (SEM) system to a variant-based one. SEM is a statistical modeling technique that is very cross-sectional, linear, and common. Covariance-based SEM generally tests causality or theory, whereas PLS is more predictive of models. PLS is a powerful analytical method, it does not have to meet the requirements of data normality assumptions, and the sample size does not have to be consistently large in number. PLS can also be used as a confirmation theory and can also build relationships without theoretical basis or proposition testing.

Analysis using PLS-SEM through five stages process, where each step will affect the next stage (Ghozali, 2015; Vinzi et al., 2010), namely: 1) Designing measurement model (outer model). The relationship between the development of the Cooperative and its latent indicators is Reflective. Likewise, the relationship between Economic Performance and its latent indicators is Reflective. Meanwhile, the connection of public welfare with its hands is Formative; 2) Design structural or inner model. Outer specifications or measurement of research models evaluated using Confirmatory Factor Analysis (CFA); 3) Specification of internal (structural model) research using path analysis approach or recursive model and causal chain system; 4) Weighted Relation research model; and 5) Direct and Indirect Effect research models. The direct effect is indicated by the loading value of γ_{xy}, while the Indirect Effect by the loading value of β_{xz} and γ_{zy}. Thus, the Total Effect of exogenous latent variables on endogenous latent variables controlled by mediators is the summation of direct and indirect effects into $\gamma_{xy} + \beta_{xz}\gamma_{zy}$.

Evaluation of structural equation models through partial least square (PLS) approach in this study, including evaluation of outer model (measurement model) and evaluation of inner model (structural model) (Ghozali, 2015; Vinzi et al., 2010), namely:

1) Rule of Thumb Evaluation Measurement Model – Reflective :
   a) Convergent Validity with standardize loading factor parameter (λ) (> 0.70 for confirmatory research and > 0.60 for explanantory research, loading factor value ≥ 0.7 or > 0.5 can be said to be ideal), Average Variance Extracted (AVE) (> 0.50 for confirmatory or explanantory research, > 0.60 for explanantory research).
   b) Discriminant Validity and Reliability with Cross-loading parameters (> 0.70 for each construct).
   c) The square root of ave (√AVE) > correlation between latent constructs.
   d) Cronbach's Alpha (> 0.70 for Confirmatory Research and > 0.60 is still acceptable for Explanatory Research).
   e) Composite Reliability (> 0.70 for Confirmatory Research and > 0.60 is still acceptable for Explanatory Research).

2) Rule of Thumb Evaluation Measurement Model – Formative :
   a) Significance Weight (> 1.65 (α = 10%), > 1.96 (α = 5%), and > 2.58 (α = 1%).
   b) Multicolinearity (VIF < 10 or < 5 and Tolerance > 0.10 or 0.20).

3) Rule of Thumb Structural Model Evaluation, with parameters:
   a) R–Square (0.67; 0.33 and 0.19 indicate strong, moderate and weak models &0.75; 0.50 and 0.25 indicating strong, moderate and weak models).
   b) Effect Size (f2) (0.02; 0.15 and 0.35 indicate small, medium and large).
   c) Q2 = Predictive Relevance value (close to 1, the structural model fits with the data or has relevance predictions).

d) Significance (Two Tailed) (1.65, α = 10%, 1.96, α = 5% and 2.58, α = 1%).

RESULTS AND DISCUSSION

Descriptive Analysis of Research Results

A brief overview of the descriptive statistics of latent constructs used in the study can result in Table 2 below.

Table 2. Descriptive Statistics of Research Results

| Construct	Mean	Minimum	Maximum	Standard Deviation	Number of Obs.
ASSET	59.802.651,85	2.582.161,00	469.505.505,79	116.781.685,57	136
CAP_EXPD	13.594.375,00	13.237.000,00	14.312.000,00	355.307,96	136
EQUITY	29.175.315,26	1.050.916,00	293.262.005,81	57.392.101,20	136
EYS	15,40	14,62	16,50	0,70	136
GINI	0,34	0,30	0,37	0,02	136
GROWTH	6,29	6,01	6,66	0,19	136
LIFE_EXP	73,21	73,17	73,35	0,06	136
MEMBER	6.038,97	567,00	31.142,00	7.269,63	136
MYS	10,99	10,52	11,33	0,27	136
OMZET	72.912.243,39	1.974.345,60	626.821.765,63	132.710.643,89	136
POVERTY	4,83	4,48	5,00	0,19	136
SHU	4.344.906,50	60.458,00	36.581.653,25	8.255.689,89	136
UNEMPLOY	12,73	9,18	16,90	2,39	136

Based on Table 2 above, several descriptive sizes of each latent construct in the study. There are 17 types of cooperative business groups in this research sample. The data used is in the form of a data panel (pooling data). The entire selection is 136 actual observations.

The average value of the latent construct indicators of Cooperative Development is obtained as follows; The Cooperative's assets = IDR 59,802,651.85, the Cooperative's Capital (Equity) = IDR 29,175,315.26, the Cooperative Turnover = IDR 72,912,243.39, the Cooperative Winfall Profit (SHU) = IDR 4,344,906.50, and the number of members is 6,038.97 6,039 people per business group.

Structural Equation Model Evaluation

The calculation results of the entire model using the SmartPLS - Partial Least Square statistics program are as follows:

Figure 1. Full Model – Path Diagram Empirical Results
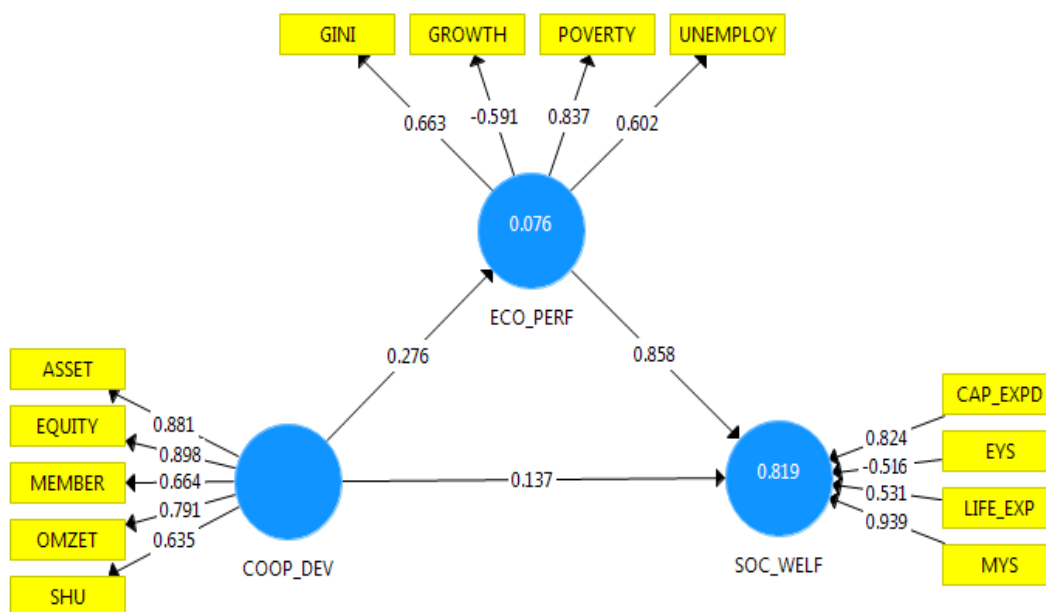
Testing of Structural Equation Modelling results with PLS approach by looking at the results of the Measurement Model (Outer Model) and Structural Model (Inner Model) of the empirical model above, as follows:

1) Measurement Model Test Results

Table 3. Loading Factor Indicator Construct outer model (COOP_DEV)

Manifest Variable	Original Samples (O)	Std. Dev	T-Stat	Information
OMZET ← COOP_DEV	0,791	0,078	10,119	Valid
ASSET ← COOP_DEV	0,881	0,044	20,023	Valid
EQUITY ← COOP_DEV	0,898	0,069	13,009	Valid
SHU ← COOP_DEV	0,635	0,120	5,288	Valid
MEMBER ← COOP_DEV	0,664	0,136	4,885	Valid

Based on Table 3 above, it can that the five construct indicators or manifest variables of Cooperative Development have outer loadings value of original samples greater than 0.5 to 0.7, and P-value is smaller than the level of significance $\alpha = 0.05$, which is reflective. The construct COOP_DEV and its indicators have a reasonably high correlation and meet the requirements of *convergent validity*.

Table 4. Loading Factor Indicator Construct Outer Model (ECO_PERF)

Manifest Variable	Original Samples (O)	Std. Dev	T-Stat	Information
GROWTH ← ECO_PERF	-0,591	0,182	-3,253	Valid
POVERTY ← ECO_PERF	0,837	0,048	17,282	Valid
GINI ← ECO_PERF	0,663	0,126	5,246	Valid
UNEMPLOY ← ECO_PERF	0,602	0,136	4,424	Valid

Based on Table 4 above, the four construct indicators (manifest variables) of Economic Performance have external loadings value of original samples greater than 0.5 to 0.7, and P-value is smaller than the significance level of significance $\alpha = 0.05$ is Reflective. The construct ECO_PERF and its indicators have a reasonably high correlation and meet the requirements of *convergent validity*.

Table 5. Loading Factor Indicator Construct Outer Model (SOC_WELF)

Manifest Variable	Original Samples (O)	Std. Dev	T-Stat	Information
LIFE_EXP → SOC_WELF	-0,558	0,058	-9,590	Valid
EYS → SOC_WELF	-0,588	0,085	-6,905	Valid
MYS → SOC_WELF	0,911	0,031	29,609	Valid
CAP_EXPD → SOC_WELF	0,861	0,083	10,370	Valid

Based on Table 5 above, the four construct indicators or manifest variables of Public Welfare have external loadings value of original samples greater than 0.5 to 0.7. P-value is smaller than the level of significance α = 0.05, which is formative. The construct SOC_WELF and its indicators have a reasonably high correlation and meet the requirements of *convergent validity*. Based on the test results of the measurement model (outer model) of this study, obtained the following products:

Table 6. Average Variance Extracted (AVE) Value of Reflective Latent Constructs

Latent Construct	AVE	√AVE	Information
COOP_DEV	0,610	0,781	Valid
ECO PERF	0,348	0,590	Valid

Based on Table 6, the latent constructs of exogenous Cooperative Development and the latent constructs of endogenous Economic Performance have a square root value of Average Variance Extracted (AVE) greater than 0.5. The SOC_WELF construct and its indicators have a reasonably high correlation and meet the discriminant validity requirements. Table 7 below describes the discriminant validity values.

Table 7. Cross Value Loading Indicator with Reflective Latent Construct

Latent Indicator	COOP_DEV	ECO_PERF	SOC_WELF	Information
OMZET	**0,791**	0,228	0,324	*Valid*
ASSET	**0,881**	0,264	0,355	*Valid*
EQUITY	**0,898**	0,266	0,343	*Valid*
SHU	**0,635**	0,107	0,152	*Valid*
MEMBER	**0,664**	0,150	0,208	*Valid*
GROWTH	-0,273	**-0,491**	-0,360	*Valid*
POVERTY	0,141	**0,837**	0,754	*Valid*
GINI	0,166	**0,663**	0,641	*Valid*
UNEMPLOY	0,187	**0,192**	0,083	*Valid*
LIFE_EXP	-0,397	0,008	**-0,458**	*Valid*
EYS	-0,044	-0,363	**-0,388**	*Valid*
MYS	0,473	0,794	**0,911**	*Valid*
CAP_EXPD	0,539	0,737	**0,861**	*Valid*

Based on Table 7 above, that the cross-loading value of the indicator with one latent construct is greater than the correlation between the needle and the other latent construct. The cross-loading value between latent indicators against latent construction of Cooperative Development; 0.664–0.898 is greater than the cross-loading value between latent hands against the latent structure of Economic Performance: 0.150–0.266 and latent construction of Public Welfare: 0.152–0.355 and so on in the matrix in other latent construct indicators. Based on AVE and cross-loading values, latent constructs COOP_DEV and ECO_PERF have good internal consistency or meet *discriminant validity* requirements.

Meanwhile, for latent variables of Public Welfare, testing the validity of discriminants should not be done because it has Formative indicators. Based on the significance of each latent indicator's weight to its latent construct or by testing the T-statistics value. For studies using two-tailed hypotheses, the significant value of T-statistics at > 1.96 or < α = 0.05. To find out the value of the outer weight of the latent measurement model construct that is Formative in this research model is shown in Table 8 below.

Table 8. Formative Latent Construction Indicator Outer Weight (SOC_WELF)

Manifest Variable	Original Samples (O)	Std. Dev	T-Stat	Information
LIFE_EXP → SOC_WELF	0,531	0,092	5,750	*Valid*
EYS → SOC_WELF	-0,516	0,091	-5,686	*Valid*
MYS → SOC_WELF	0,939	0,328	2,864	*Valid*
CAP_EXPD → SOC_WELF	0,824	0,363	2,318	*Valid*

Based on Table 8 above, can the t-statistics value result from each latent indicator's weight value (outer weight) against the latent construct of formative Public Welfare? Two-tailed hypotheses from each external importance of latent construct indicators LIFE_EXP (5,750), EYS (-5,686), MYS (2,864), and CAP_EXPD (2,318). The significant value for measuring the latent construct model of Social Welfare is that the T-statistic value is greater than the cut-off significance value (two sides) of 1.96 > 0.05. The four latent construct

indicators can be tested further in the structural model of People's Welfare as latent formative endogenous.

The results of the reliability test of the measurement model on the outer model of this study, presented in Table 9, follows:

Table 9. Composite Reliability Latent Reflective Constructs

Latent Construct	CR	Information
COOP_DEV	0,885	*Reliabel*
ECO_PERF	0,321	*Tidak Reliabel*

Based on Table 9 above, the composite reliability (CR) value of the measurement model in the outer model of this study, there is one latent construct with a CR value smaller than 0.7, which is ECO_PERF (0.321). Some latent construction indicators ECO_PERF are not reliable to measure Economic Performance in Padang City. However, removing one construct in this research model will cause the research model to lose its meaning and primary purpose. Theoretically, reflective constructs that have insignificant indicators can still be continued in structural testing but potentially reduce the predictive effect of causality between constructs (Abdillah & Hartono, 2015). Meanwhile, for latent constructs, COOP_DEV has a CR value greater than 0.7 (0.885); in other words, all manifest variables of latent constructs COOP_DEV proven to have good accuracy and consistency in measuring constructs.

2) Structural Model Test Results

The following table 10 will show structural model testing (inner model) results in this study.

Tabel 10. Nilai R^2 (*Square*) Konstruk Latent *Endogenous*

Latent Construct	R^2 (*Square*)	*Adjusted-R^2*	Information
ECO_PERF	0,076	0,069	Lemah
SOC_WELF	0,819	0,816	Kuat

Construction of Economic Performance in Padang Municipality in this research model is weak. Based on Table 10 above, the R2 (R-Square) value of the latent construct of Economic Performance is 0.076. Variations in Cooperative Development can explain variations in Economic Performance construct changes constructs in Padang Municipality by 7.6%. Other constructs outside the model define the remaining 92.4% percent of the rest.

Cooperative Development can explain public welfare constructs moderated by Economic Performance constructs in Padang Municipality as much as 81.9%. Meanwhile, the value of the R2 (R-Square) Public Welfare construct is 0.816, more significant than 0.7, so that the Public Welfare construct is categorized firmly in this research model. In comparison, other constructs define the remaining 18.1% outside the model.

***Stone Geiser* Q-Square (Q^2) Test Result**

Based on the R^2 value in Table 10 above, the Q^2 value obtained for this study is: $Q^2 = 1-\{(1- 0,076) (1-0,816)\} = 1-\{(0,924) (0,184)\} = 1-0,170016 =$

0,8299. The results of the calculation of Q2 above 0.830 indicate that in the structural model of this study. 82.99% of the variation of changes in the latent construct of welfare can be predicted in relevance by variations of latent construction. Cooperative development moderated by the latent construction of Performance Economy in Padang City in a structural model. In comparison, other constructs explain the remaining 17.01% outside the research model.

Evaluation of Direct Effects, Indirect Effects, and Total Effects of Research Models

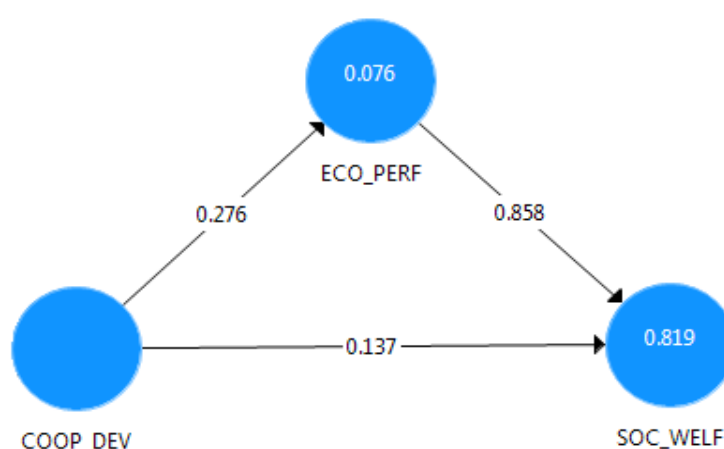**Figure 2. Path Coefficient Structural Model**

Figure 2 above shows the results of structural model testing through the inner model in a one-away path or direct effect of each latent construct of the empirical model of the above research results, as follows:

1) *Path Coefficient*, the influence between the Development of Cooperatives and Economic Performance obtained by $\gamma_1 = 0.276$. There is a positive influence between Cooperative Development on Economic Performance. If the Development of Cooperatives can by only 10%, then the Economic Performance will increase by 2.76%.

2) *Path Coefficient*, the influence between Economic Performance and Public Welfare obtained by $\gamma_2 = 0.858$. That is the positive influence between Economic Performance and Public Welfare in Padang Municipality from 2012 to 2019. If Economic Performance can be increased only by 10%, then Community Welfare in Padang City will increase by 8.58%.

3) *Path Coefficient,* the influence between the Development of Cooperatives and Public Welfare obtained by $\gamma_3 = 0.137$. That is the positive influence between the Development of Cooperatives on the Public Welfare in Padang Municipality during 2012 to 2019. If Cooperative Development can by only 10%, Padang City Community Welfare will increase by 1.37%

See the results of structural model testing direct effect, indirect effect, and total effect can be seen in Table 11, as follows:

Table 11. Indirect (IE), Direct (DE), and Total Effect (TE) Between Constructs

Latent Construct	ECO_PERF			SOC_WELF		
	DE	IE	TE	γ_{xy}	$\beta_{xz}\gamma_{zy}$	$\gamma_{xy} + \beta_{xz}\gamma_{zy}$
COOP_DEV	0,276	-	0,276	0,137	0,236	0,373
ECO_PERF	-	-	-	0,858	-	0,858

Based on Table 11 above, the *direct effect* value of Cooperative Development on Public Welfare by the loading value of $\gamma_{xy} = 0.137$. In contrast, the *indirect effect* of Cooperative Development on Public Welfare by the loading value of $\beta_{xz}\gamma_{zy} = 0.236$. Thus, the *total impact* of Cooperative Development on the Public Welfare controlled by the mediator of Economic Performance is the summation of *direct* and *indirect effect* into $\gamma_{xy} + \beta_{xz}\gamma_{zy} = (0.137 + 0.236) = 0.373$. Therefore, the Development of Cooperatives directly affects the Public Welfare in Padang Municipality from 2012 to 2019 by 0.137 (13.70%).

Due to the mediator effect of Economic Performance, the Development of Cooperatives on the Public Welfare to 0.373 (37.30%) or $\Delta effect = 0.372\text{-}0.137 = 0.236$ (23.60%). Therefore, testing the effective mediation of Economic Performance in explaining the influence of Cooperative Development on the Public Welfare in Padang Municipality during the period 2012 to 2019 in structural models can also be done by calculating the value of *effect size* (f^2 or *f-square*). f^2 is a measure of how significant the mediating variable can absorb the previously substantial direct influence of the model without mediating.

Based on the results of data processing *Smartpls* program in table f^2 obtained value ($R^2_{included}$) = 0.819 and value ($R^2_{excluded}$)= 0.336. So obtained *effect size* value (f^2) of 2,668. Therefore, the *effect size* value (f^2 or *f-square*) of the structural model of this study is 2,668. Economic performance can mediate positively and significantly the influence of Cooperative Development on the Public Welfare in Padang Municipality from 2012 to 2019. f^2 figures of 2,668 show that Economic Performance's latent construction effect can be used as a full mediation mediator 2,668 times.

Research Hypothesis Test Results

Table 12 below shows the results of the research hypothesis test based on the structural model of this study.

Table 12. Hypothetical Test Results (Total Effect, T-statistics, and P-value)

Latent Construct	*Original Samples (O)*	*Standard Deviation*	*T-Statistics*	*P-value*	*Cut-Off*	Information
COOP_DEV → ECO_PERF	0,276	0,078	3,521	0,000	0,05	H_0 rejected, H_a accepted
COOP_DEV → SOC_WELF	0,373	0,102	3,672	0,000	0,05	H_0 rejected, H_a accepted
ECO_PERF → SOC_WELF	0,858	0,049	17,531	0,000	0,05	H_0 rejected, H_a accepted

Based on Table 12 above, that the *path-way* between 3 latent constructs, namely the Development of Cooperatives, Economic Performance, and Public Welfare in structural models, is significant at the cut-off (α) of 5%, with the following details:

1) Hypothesis 1: *Path-way* between the latent construction of Cooperative Development and Economic Performance: COOP_DEV → ECO_PERF, obtained T-statistics value = 3,521 greater than t-table (1,68) and P-value = 0.000 more minor than the cut-off (α) of 0.05, then H_0 is rejected, and H_a is accepted. Thus, the Development of Cooperatives has a positive and significant influence on Economic Performance in Padang Municipality from 2012 to 2019 at the level of significance, α = 5%.

2) Hypothesis 2: *Path-way* between the latent construction of Cooperative Development and Public Welfare: COOP_DEV → SOC_WELF, obtained T-statistics value = 3,672 greater than t-table (1,68), and P-value = 0.000 more minor than the cut-off (α) of 0.05, then H_0 is rejected, and H_a is accepted. Thus, the Development of Cooperatives has a positive and significant influence on the Public Welfare in Padang Municipality from 2012 to 2019 at the level of significance, α = 5%.

3) Hypothesis 3: *Path-way* between the latent construct of Economic Performance and Public Welfare: ECO_PERF → SOC_WELF, obtained the value of T-statistics = 17,531 greater than t-table (1,68), and P-value = 0.000 more minor than the cut-off (α) of 0.05, then H_0 was rejected, and H_a accepted. Thus, Economic Performance positively and significantly influences Public Welfare in Padang Municipality from 2012 to 2019 at the significance level, α = 5%.

4) Hypothesis 4: *Path-way* between the latent constructs of Cooperative Development on the Public Welfare are mediated by Economic Performance: COOP_DEV → ECO_PERF → SOC_WELF, *direct effect (γ_{xy})* = 0.137 (13.70%), *indirect effect ($\beta_{xz}\gamma_{zy}$)* = 0.236 (23.60%), and total influence ($\gamma_{xy} + \beta_{xz}\gamma_{zy}$) = 0.373 (37.30%). Because the value of *indirect effect ($\beta_{xz}\gamma_{zy}$)* is greater than the *direct effect (γ_{xy})* or 0.236 > 0.137, so H_0 is rejected, and H_a is accepted. Economic performance can positively and significantly mediate Cooperative Development on Community Welfare in Padang City in 2012-2019. The magnitude of the influence of Cooperative Development on the Public Welfare through Economic Performance in Padang Municipality during the period 2012 to 2019 increased by 1,157 times compared to the *direct effect* of the Development of Cooperatives on the Public Welfare in Padang Municipality during the period 2012 to 2019.

Discussion

One of Indonesia's economic support, especially in rural and urban areas in the microeconomic sector, is Cooperatives, which are a forum for productive activities of the community in the people's economy (Swasono, 2004). Although not yet fully developed, Cooperatives in Padang Municipality still

show their existence in improving the micro-economy of the region. Until 2017, there was a significant increase in the total number of Cooperatives in Padang Municipality, reaching 729 units (678 active and 34 inactive.) Nevertheless, there was a decrease again but not so significant, especially in 2018 and 2019, which resulted in the total number of Cooperatives in the last year (2019) to 722 units (410 active and 312 inactive).

Overall, there has been an increase of 20.13% in the total number of Cooperatives from 2012 to 2019 (Dinas Koperasi & UMKM Kota Padang, 2020). The number of cooperative members in Padang City increased from 2012-2019 by 49.46% or 106,276 to 210,291. Continuous increases in Own Capital, Assets, Turnover, and Windfall Profits (SHU) with an average growth of 12.03%, 8.96%, 17.06%, and 11.99%, respectively.

Regulation of the Minister of Cooperatives and MSMEs Number 10/2015 concerning Cooperative Institutions sustainably and sustainably can succeed in the government's movement to grow the economy (pro-growth). Contribute to increasing the number of Cooperatives and Members, Own Capital, Assets, Turnover, Windfall Profit and reduce the unemployment rate (pro job), and People's Welfare to achieve a decent standard of living (pro-poor).

Cooperative development in improving the economy of Padang City for the period 2012 to 2019, the Financial Services and Insurance Sector (in which there is the Cooperative sector) can contribute to the total GRDP of 4.31% (Rp 2,001,523.78 million). Also relevant to Dunggio (2019), Cooperatives impact economic development processes, including increased employment and regional revenue growth. Dogarawa (2005) revealed that the Cooperative's role in the economy includes facilitating job creation, economic growth, and social development. Baswir (2013) gives the same view that Cooperatives contribute to reducing poverty and job creation. Cooperatives can overcome inefficiency and ineffectiveness if they carry out individual economic activities in the region. Sociologically, collective action and in-group feeling to face competition threaten the community's financial system.

The role of Cooperatives in the economy is nothing but to increase economies of scale and economies of scope (Baswir, 2013). The merger of the same and small-scale businesses (primarily people's businesses) into larger-scale joint ventures is very likely to result in greater efficiency to production, management, and various aspects of the economy. Togetherness at the operational level is also essential to minimize risks collectively and overcome information asymmetry to reduce losses. Cooperatives with an integrated network will overcome the problem of information asymmetry. In reality, actors in the production sub-system often do not know the situation of the marketing sub-system (Baswir, 2013; Boediono, 1982).

The fluctuations in economic growth and the high unemployment rate in Padang City have triggered questions regarding financial management, which is considered no longer in line with the constitutional mandate of the 1945 Constitution Article 33 Paragraph 1. The economy not structured as a joint business but as a company owned by individuals is the main culprit. The

contribution of Cooperative Development to the economy of Padang City during the period 2012 to 2019 was less than 4.31%. Not only that, but inequality also decreases the quality of economic growth in reducing poverty and unemployment. Economic growth tends to be enjoyed by economic actors with only upper-income levels caused by economic growth that is not inclusive or unequal. (Dunggio, 2019; World Bank, 2015)

Furthermore, suppose there is no affirmative step to redistribute income from top to bottom. In that case, economic growth is at risk of exacerbating the inequality that can ultimately increase social tensions. To some point, it can threaten the sustainability of economic growth and development (World Bank, 2015). Based on the development of Cooperatives in the world, the development of the Cooperative sector can be a solution to improve the Economic Performance of a country. Macro-based, early indications from the low levels of inequality, poverty, and unemployment in these countries, where the Cooperative sector contributes significantly to the economy.

Meanwhile, micro-Cooperatives have market share, economies of scale, and economies of scope among various business entities. Suppose the joint venture with governance that is not profit-oriented but benefit-oriented. In that case, the focus is on improving the welfare of its members, then micro-cooperatives can be realized. (Dogarawa, 2005; Dunggio, 2019).

Based on the level of community welfare through the Human Development Index (HDI) approach in Padang Municipality during 2012 to 2019 in terms of Cooperative Development and improved Economic Performance, obtained a significant improvement of every indicator of Public Welfare. Got that Life Expectancy is about 73.24 years, Expected Years of Schooling about 15.43 years, Mean Years of Schooling approximately 11.34 years, and Expenditure per Capita in Padang Municipality from 2010 to 2019 is IDR 13,668,000 per year.

Empirically, the significant influence of Cooperative sector development on the Public Welfare through Economic Performance in Padang Municipality during 2012 to 2019 was able to contribute 1,157 times compared to direct impact. In line with Philip (2003), Cooperative sector mobilization contributes to the level of Community Welfare, especially the literacy rate in the Indian state of Kerala of up to 90%, a figure above the Indian average of 51%. However, Dunggio (2019) revealed different empirical results that the development of Cooperatives in 9 districts/cities in Bali Province has a more significant influence than the Economic Performance in creating Public Welfare.

CONCLUSION

Based on the objectives and empirical results of the research, the development of Cooperatives has a positive and significant influence on the Economic Performance and the Public Welfare in Padang Municipality during the period 2012-2019. Economic performance positively and significantly impacted the Public Welfare in Padang Municipality during 2012-2019. Financial performance can substantially mediate the effect of Cooperative

Development on the Public Welfare in Padang Municipality during the period 2012-2019. The *direct impact* between the Cooperatives Development on the Public Welfare is smaller than through the Economic Performance in Padang Municipality during 2012-2019. Lastly, the Economic Performance was able to mediate the influence of Cooperative Development on the Public Welfare in Padang Municipality during the period 2012-2019 in*complete mediation.*

Suggestions from this research Cooperatives as business actors in the city of Padang need to improve several things related to the development of cooperatives with a local economic development approach, related to indicators of increasing the number of assets, own capital, turnover, number of members, and windfall profit. Policy to do improving people and systems, collaborative innovation, market share, cooperative education, people-centered business, job creation, and adopting the digitalization era. For the city government, the Office of Cooperatives and MSMEs and universities in the Padang Municipal Environment need to take steps to create stability of Economic Performance so that the successful development of the Cooperative sector can improve community welfare. The government can take steps in sustainable development, research, and business development, increasing economic scale and economic scope and formulating more targeted regulations in the development of cooperatives in the face of competition and the era of economic digitization.

This research has limitations in the generalization and determination of study objects, research methods, and the scope of variables used. However, this empirical result is indeed very relevant in representing the reality of Cooperative sector development in Padang Municipality today. However, for further studies, the need to add to the existence of various pertinent variables and more contributive to the development of the Cooperative itself, such as non-economic factors of the Cooperative sector, development and management patterns, and business continuity in market competition. Furthermore, Economic Performance indicators should be the main driving factor and more contributive in improving Public Welfare compared to the development of the Cooperative sector in sterile regional economic conditions and low stability.

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