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STUDY OF THE VALUE OF AIRPORT MANAGEMENT COMPANIES IN THE PANDEMIC PERIOD WITH THE OPTIMAL CAPITAL STRUCTURE APPROACH

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ABSTRACT

Study this aim for knowing mark company manager airport during the approaching pandemic optimal capital structure. Study this using method quantitative descriptive. In the study this optimal modal structure, the object study are PT Angkasa Pura I, PT Angkasa Pura II, and TAV Airports as manager airports in their respective working areas. PT Angkasa Pura I manages 15 (fifteen) airports in Indonesia, PT Angkasa Pura II manages 20 airports, while TAV Airports manages 15 airports in eight countries. Result of study this state that TAV As of February 2021, it works finish negotiation debt restructuring in Tunisia, where TAV operates two airport. With restructuring, TAV reduced bank debt TAV in Tunisia and TAV Tunisia achieved composition more financing sustainable.

1. Introduction

During COVID-19 pandemic, transportation air considered could spread the virus effective and simultaneously in many cities scattered in various regions, so no will enough time for authority health Public for do countermeasures (Grais et al., 2003). Worries this of course Correct there is, pause time Among case early in China and spread plague until to Europe, America and Asia only occur in a number of month.

because that, the COVID-19 pandemic has give significant impact to industry journey air as consequence from enactment Policy restrictions transportation air. Restrictions mobility biggest happened in April 2020, when many route flight canceled except for service supplying cargo food and equipment medical (Nizetic, 2020). Subtraction whole seats by airline flights in 2020 range between 33% to 66% if compared to with baseline in 2019, and reductions passenger in a manner whole is between 1.878 million and 3.227 million, with potency loss between $240 billion and $420 billion in a manner overall (ICAO, 2020).

Condition that's very ironic remember central airport role develop rapidly from only function utility public Becomes combination various function complex business. Growth rapidly industry flight has give high pressure on skills airport for keep going growing. Temporary that, the competition is tough among airline flights and competition that occurs Among airport limit ability airport for Upgrade cost flights that are historical Becomes source income main airport. Consequently, the airport face challenge for Fulfill increased needs will expansion significant infrastructure as well as need for Upgrade service to airline flights, passengers, and customers other in a manner wise. because that's the airport must efficient and healthy in a manner financial. As a result, measurement and monitoring performance airport has Becomes aspect urgent from management airport.

Studies about performance airports in general focuses on productivity, efficiency operational and quality service. Rather, study about appropriateness finances and strength financial airport still limited, in particular stated research that necessity analysis optimal capital structure for get mark highest from company manager airport with lowest cost of capital so that sale share investors can get best price. _

Table 1. Research Previously Regarding Airport Performance

Researcher	Study Focus
Bazargan and Vasigh (2003), Hooper and Hensher (1997), Kutlu and McCarthy (2016), lo Storto (2018); Om et al. (2008), Om et al. (2003), and Sarkis and Talluri (2004)	Measure productivity airport and performance efficiency operational use different and various methodologies input and output variables of business processes airport
(Loos et al., 2016), (Bezerra and Gomes, 2016), Cahill et al. (2017)	Measure Ratios finance for knowing size performance productivity and efficiency airport including Return on capital employed (ROCE), Return on sales (ROS), turnover per employee (revenue per employee), and total factor productivity (TFP)
Bazargan and Vasigh (2003),	Count cost operational and non- operational between business process inputs and revenue aeronautical and non-aeronautical among their outputs in measure efficiency performance airport
Merkert and Assaf (2015)	Building a DEA (data envelopment analysis) model for estimate profitability, perception quality service, and efficiency then cross
Pagliari and Graham (2019)	Analysis exploratory about influence change ownership to competition airport in five aspects performance, incl development then cross, options airlines and routes, revenue aeronautics, efficiency, performance financial (non-aeronautical revenue per passenger, expenses operational per passenger, and EBITDA), and performance quality service airport.
Vasigh and Haririan (2003)	Compare ratio of average revenue per gate, revenue per platform runway, cost per runway runway, and cost per gate from 15 airports (7 in the UK and 8 in the US).
Vogel (2006)	Compare performance airport public versus private in Europe During period 1990-2000 in matter productivity and performance finance.
Fason (2014)	Test performance finance 14 Italian airports using eleven ratio like Return on Equity, Return on Sales, Equity/Debt ratio, operating income per unit.
Om et al. (2008)	Measure and compare efficiency, productivity, and profitability Among airports owned and operated by the department government, 100% company owned by government, authority airport independent, company mixture with ownership majority government, and companies mixture with ownership majority private.
Abruzzo et al. (2016)	Gaussian graphical model for test role variable operational airport in influence performance finance they based on a sample of 10 Italian airports during period 2008-2014.

Researcher	Study Focus
Zuidberg (2017)	Researching influencing factors profitability airport, measured in profit margin, based on a panel of 125 airports in Europe, North America, Australia and Zealand New During period 2010-2016.
Asker and Kiraci (2016)	Do analysis five- group trend airports, AENA, Fraport, Ferrovial, TAV Airports Groupe, and Groupe ADP, for variable finance as following : accounts receivable trade, sales net, assets current, obligation period short, obligation period length, asset permanent intangibles, assets and liabilities fixed, and equity holder share, and discuss is ratio this increase or decrease During period 2007–2014.
Graham and Dennis (2007)	analyze connection Among then cross airport and performance finance based on a sample of 14 airports UK and 3 airports Ireland During period 1998–2003.
Santalo (2019)	Researching impact strategic airport (position related to service focus airline costs low (Low Cost Carrier) vs. full service airline (Legacy Carrier) in profit operation airport.
Painvin (2011)	Discuss problems and factors considered by the institution rating airport operator performance in evaluate and assess airport. Measured indicators covers resilience airport cash flow Europe During crisis financial year 2008 and 2009. Conclusion that that airport board on more tough During crisis and perform more good from perspective ranking credit.
Richardson et al. (2014)	Analyze impact agreement rent airline flight on performance finance of 23 major US hub airports during year fiscal 2011-2012.

Airport Capital Structure

Researches before in general consider that all airport, regardless from ownership, trying for maximizing profitability and returns investment and capital. Application metric profitability for privatized airport and airport public implies that all airport have same goal for maximizing profit. Researches previously find that airport with ownership majority private achieve profit margins remote operation more tall than another airport. Instead, airport with ownership majority government or ownership combined a number of government have a profit margin operation lowest. Research results show that airport owned by government possible no chase aim maximizing profit but mandate or mandate others assigned by the government to manager airport.

increasing privatization and commercialization airport has awaken a number of interest other related research with performance finance airport especially related non- aeronautical aspect. Wave privatization and commercialization airport push airport now operate with approach commercial. Airports tend try reach profitability with more interesting source non- aeronautical income. Management finance privatized airport has changed more drastic. They engage investors who are basically hope for get level decent profit. A number of airport privatized and commercialized as part from agreement concessions and airports do various project construction and development of airports, funding for efforts construction and development most of it obtained through project debt.

Every airport always look for optimal capital structure and ensure more capital costs low in the end could Upgrade profitability. For that's the airport must do analysis is will enter to the debt market,

issuing share them on the stock exchange, or look for sources other possible funding. factors the make decision more capital structure urgent for company current airport more independent than previously when airport fully depend on funding government.

Researches previously related theory capital structure provides proof empirical that difficult for offer one combination single capital structure universally can used and applied for every industry. on the industry transport, rate study related very limited capital structure specifically when speak about airports in Indonesia.

Table 2. Research Previously Related Airport Optimal Capital Structure

Researcher	Study Focus
Malighetti et al. (2011)	problem company capital structure airport
Drobets et al. (2013)	researching factors determinant company capital structure cruise.
Fernandes and Capobianco (2001)	efficiency finance airline flight through analysis data envelopment (DEA) where they are adopting capital structure parameters as input.
Malignetti et al. (2011)	company market valuation flights and airports with use variable operations, location, and finances including leverage finance.
Ekaputra, Virda Dimas, and Farida Titik Kistanti.	" Company Value Optimization Using Optimum Capital Structure Approach (A Study on PT Bandarudara International West Java)." Solid State Technology 63, no. 4 (2020): 3994-4007.

Study this try fill in gap research related optimal capital structure of the company manager airport with study decision capital structure. More concretely, research aim for knowing impact pendemic to mark company with approach optimal capital structure, managers airport which one is decreasing ? the smallest value, until it 's time pendemic finished and the world of aviation return recovered, company with optimal capital structure and value company highest will ready welcome recover back to the world of aviation with funding new. Study use sample data from airports in Indonesia managed by PT Angkasa Pura I, PT Angkasa Pura II, and Turkey Airports Holding.

2. METHODS

Study this use method quantitative descriptive. In study this optimal modal structure, object study are PT Angkasa Pura I, PT Angkasa Pura II, and TAV Airports as manager airports in their respective working areas. PT Angkasa Pura I manages 15 (fifteen) airports in Indonesia, PT Angkasa Pura II manages 20 airports, while TAV Airports manages 15 airports in eight countries.

Cost of Capital By WACC calculation.

Weighted average cost of capital is capital costs aggregates that consist from combination cost debts and expenses equity company. For determine the cost of capital is determined from equality as following :

$$\text{WACC} = w_e k_e + w_p k_p + w_d k_d (1 - t)$$

Where:

WACC = weighted average cost of capital
We = proportion from common equity inside capital structure
To = cost of common equity
Wp = proportion from total share preference inside capital structure
Kp = cost of preferred equity
Wd = proportion from debt inside capital structure
Kd = cost of debt
t = tax

because that need for knowing mark cost debts and expenses equity especially formerly before count mark cost of capital (WACC). Cost debt is level the return expected by the giver loan, where cost AP1, AP2, and TAV loans were obtained from level flower loan company, which is obtained from report entity 's finances in 2018,2019,2020 and 2021. As for value cost debt (cost of debt) respectively are :

Table 3 . Cost of Debt

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AP1 (in rupiah)	2018	2019	2020	2021
TOTAL INTERESTS	262.6 AD	873.4 M	1256.3 M	1572.1 AD
TOTAL DEBT	8941.7 M	20,625.3 M	24,454.2 M	28,297.9 M
COST OF DEBT	2.94%	4.23%	5.14%	5.56%

AP2 (in rupiah)	2018	2019	2020	2021
TOTAL INTERESTS	476.9 AD	795.9 AD	1242.5 M	1235.1 M
TOTAL DEBT	10290.8 M	14215.3 M	16,329.5 M	17546.2 M
COST OF DEBT	4.63%	5.60%	7.61%	7.04%

TAV (in US$)	2018	2019	2020	2021
TOTAL INTERESTS	434J	491J	606J	1.048J
TOTAL DEBT	3,874J	4.212J	5.585J	12.787J
COST OF DEBT	11.20%	11.66%	10.85%	8.20%

Temporary cost equity is level the return expected by the holder stock. Where is the value cost equity (cost of equity) depending on the proportion debt owned by the company, p this because the more tall mark debt so risk that will experienced by companies is also increasing high, because that holder share will expect mark appropriate returns listen profile risk the company. The more tall portion debt, then the more also high level expected return. one method approach for count mark cost equity (cost of equity) is Modigliani and Miller method. when using Modigliani and Miller method, necessary counted especially formerly how many level return equity in condition capital structure 100% equity, then mark cost equity the will be added with portion mark debt held by the company. this value will changed depends with magnitude mark debt, increasingly tall mark debt so mark cost equity will the more high.

WACC Calculation With Modigliani and Miller 's approach

Modigliani and Miller's (MM) theory has 2 assumptions different approach, ie MM theory Proposition I and proportion II. On approach proportion I, MM assumes that Policy company related the use of debt is not will influence mark company. If use approach this so no will obtained mark optimal capital structure for company, so writer use approach proportion II to look for mark optimal capital structure of the company. On approach proposition II, MM assumes that capital structure will influence mark company, increasingly tall mark debt so will the more Upgrade risk company in fulfillment his obligations. increasing risk this will hope also increases more returns tall for holder stock, so will Upgrade mark cost equity (cost of capital). The more increasing mark equity, will compared backwards with WACC value (weighted average cost of capital). This WACC value will be influence mark something company.

3. RESULTS AND DISCUSSION

1. Cost of Capital AP1, AP2, and TAV with WACC calculation

Capital costs or Weighted Average Cost of Capital (WACC) is the average cost proportionately weighted counted based on mark cost debts and expenses equity. Cost debt is level the return expected by the giver loan, temporarily cost equity is level the return expected by the holder equity (holders stock). Where will the WACC value be Becomes mark accommodating returns hope return holder shares and donors loan. corporate WACC is whole required return for company. Therefore, the company will often use WACC internally for take decisions, for one for count mark company for Merger/ acquisition needs or plan sale share to party third / investors.

The WACC value will be different depends with mark cost of debt and its cost of equity. There is two approach calculation where is the WACC value approach this emphasize to difference calculation mark the later cost of equity will influence mark capital costs. Temporary mark cost debt obtained from mark level return loan (interest).

Table 4. Component WACC Calculation on Capital Structure 10% -90% Debt

CAPITAL STRUCTURE		AP1				AP2				TAV			
DEBT	EQUITY	2018	2019	2020	2021	2018	2019	2020	2021	2018	2019	2020	2021

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0%	100%	9.67 %	10.99 %	14.89%	20.08%	9.92%	9.72%	9.67%	11.36 %	11.03 %	18.32 %	15.29 %	15.55 %
10%	90%	9.60 %	10.88 %	14.76%	19.94%	9.81%	9.58%	9.48%	11.18 %	10.77 %	18.05 %	15.04 %	15.36 %
20%	80%	9.52 %	10.77 %	14.64%	19.80%	9.69%	9.44%	9.29%	11.00 %	10.51 %	17.78 %	14.80 %	15.17 %
30%	70%	9.45 %	10.67 %	14.51%	19.66%	9.58%	9.30%	9.10%	10.83 %	10.25 %	17.52 %	14.55 %	14.98 %
40%	60%	9.38 %	10.56 %	14.38%	19.52%	9.46%	9.16%	8.91%	10.65 %	10.00 %	17.25 %	14.30 %	14.80 %
50%	50%	9.30 %	10.46 %	14.25%	19.38%	9.34%	9.02%	8.72%	10.48 %	9.74%	16.98 %	14.05 %	14.61 %
60%	40%	9.23 %	10.35 %	14.12%	19.25%	9.23%	8.88%	8.53%	10.30 %	9.48%	16.71 %	13.80 %	14.42 %
70%	30%	9.16 %	10.24 %	13.99%	19.11%	9.11%	8.74%	8.34%	10.12 %	9.22%	16.44 %	13.55 %	14.23 %
80%	20%	9.08 %	10.14 %	13.86%	18.97%	9.00%	8.60%	8.15%	9.95%	8.97%	16.18 %	13.30 %	14.04 %
90%	10%	9.01 %	10.03 %	13.74%	18.83%	8.88%	8.46%	7.96%	9.77%	8.71%	15.91 %	13.05 %	13.85 %

Value of cost of equity is mark level the return expected by the holder share on the capital placed in the company. In Modigliani and Miller 's approach there are 2 propositions in count mark firm, wherein MM proposition 1 says that mark company no there is relation with capital structure, so mark company counted with consider that as if the capital of the company entirely originate from own capital, so in calculation cost of equity value using mark unlevered beta as base calculation mark cost of equity. Then Modigliani and Miller pulled out proposition II where state that mark company will compared straight with ratio debt to equity something company where matter this revise statement they before. because that in calculation this second proposition mark cost of equity obtained with consider that company capital entirely is own capital then added calculation the value of the debt in it before not yet included inside calculation proposition I.

Table 5 . Components AP1 Cost of Equity Calculation on Capital Structure 10% -90% Debt

Debt	**0%**	**10%**	**20%**	**30%**	**40%**	**50%**	**60%**	**70%**	**80%**	**90%**
equity	100 %	90%	80%	70%	60%	50%	40%	30%	20%	10%
CoD	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%
CoE (r0)	20.08 %	20.1 %	20.1 %	20.1 %	20.1 %	20.1 %	20.1 %	20.1 %	20.1 %	20.1 %
CoED (re)	**20.0 8%**	**21.6 9%**	**23.7 1%**	**26.3 0%**	**29.7 6%**	**34.6 0%**	**41.8 6%**	**53.9 7%**	**78.1 7%**	**150. 79%**
Unlv Beta	**1.91**	**1.91**	**1.91**	**1.91**	**1.91**	**1.91**	**1.91**	**1.91**	**1.91**	**1.91**

Table 6. Components AP2 Cost of Equity Calculation on Capital Structure 10% -90% Debt

Debt	**0%**	**10%**	**20%**	**30%**	**40%**	**50%**	**60%**	**70%**	**80%**	**90%**
equity	100%	90%	80%	70%	60%	50%	40%	30%	20%	10%
CoD	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
CoE (r0)	13.60%	13.6%	13.6%	13.6%	13.6%	13.6%	13.6%	13.6%	13.6%	13.6%
CoED (re)	**13.60%**	**14.33%**	**15.24%**	**16.41%**	**17.97%**	**20.16%**	**23.44%**	**28.91%**	**39.84%**	**72.65%**
Unlv Beta	**0.68**	**0.68**	**0.68**	**0.68**	**0.68**	**0.68**	**0.68**	**0.68**	**0.68**	**0.68**

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Table 7. Components TAV Cost of Equity Calculation on Capital Structure 10% -90% Debt

Debt	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%
equity	100%	90%	80%	70%	60%	50%	40%	30%	20%	10%
CoD	8.2%	8.2%	8.2%	8.2%	8.2%	8.2%	8.2%	8.2%	8.2%	8.2%
CoE (r0)	15.55%	15.6%	15.6%	15.6%	15.6%	15.6%	15.6%	15.6%	15.6%	15.6%
CoED (re)	**15.55%**	**16.37%**	**17.39%**	**18.70%**	**20.45%**	**22.90%**	**26.58%**	**32.71%**	**44.97%**	**81.74%**
Unlv Beta	**1.11**	**1.11**	**1.11**	**1.11**	**1.11**	**1.11**	**1.11**	**1.11**	**1.11**	**1.11**

on the table on there is mark unlevered beta and levered beta being one component in count mark cost of equity. Where is the beta value showing level volatility risk from something mark company compared to with market change whole. Where can the beta value grouped into 3 categories :
β > 1: indicates that risk company on risk market ;
β < 1: indicates that risk company under risk market ;
β = 1: shows that risk company same with market risk.

For find company beta value that is not registered publicly. Writer refers to publications of NYU Stern School of Business that provides a list of values Betas by Sector. For find beta values of companies listed on the stock exchange, author calculate the average weekly return share company compared to with the average return of the market place where the stock that traded.

From processing the data, obtained mark unlevered beta for AP1 and TAV above number one while AP2 has below beta number one. this showing that risk company AP2 relative more low if compared to with risks facing AP1 and TAV. Unlevered beta value this later will Becomes base calculation mark unlevered cost of equity in Modigliani and Miller 's approach, after get mark unlevered cost of equity then counted mark leveraged cost of equity in accordance with proportion mark debt to be added in accordance with company capital structure.

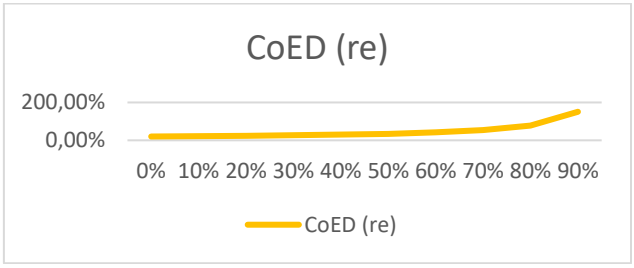

Figure 1. Cost of Equity Value Relationship With Portion Debt on Capital Structure 10% -90% Debt for AP1

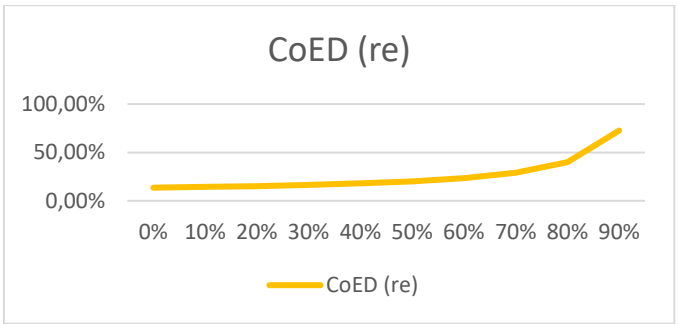

Figure 2. Cost of Equity Value Relationship With Portion Debt on Capital Structure 10% -90% Debt for AP2

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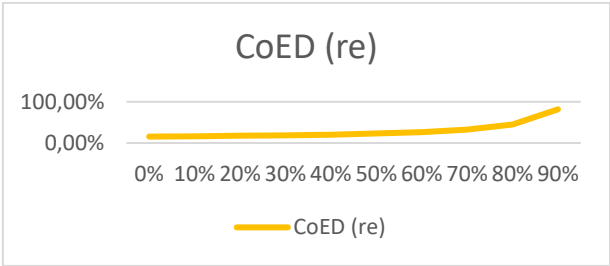

Figure 3. Cost of Equity Value Relationship With Portion Debt on Capital Structure 10% -90% Debt for TAVs

Value of cost of equity will compared straight with mark debt held by the company. From pictures on could seen in general increase mark cost of equity in a manner significant occur when mark debt reach >60% of all company.

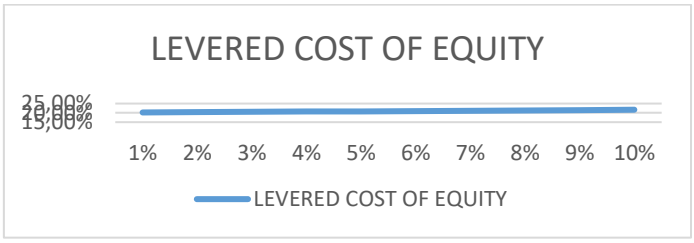

Figure 4. Cost of Equity Value Relationship With Portion Debt on Capital Structure 1% -10% Debt With 1% Interval on AP1

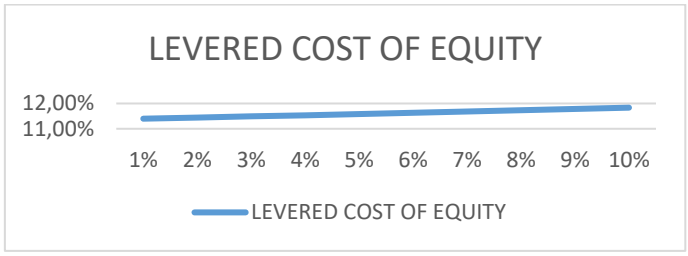

Figure 5. Connection Value of Cost of Equity With Portion Debt on Capital Structure 1% -10% Debt With 1% Interval on AP2

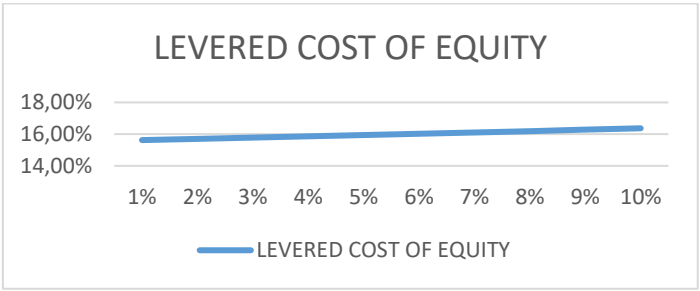

Figure 6. Cost of Equity Value Relationship With Portion Debt on Capital Structure 1% -10% Debt With 1% Interval on TAV

Value of cost of equity this is later then will used for count mark cost of capital (WACC), where combination Among cost of equity and cost of debt will produce the weighted average values are then will Becomes mark level return for company funder good party third nor holder stock. This WACC value will depends with how many portion debt and equity, the more tall mark debt so WACC value will be the more small, p this compared backwards because if company have debt so will there is cost payment later interest will Becomes deduction tax company, relief payment tax on flower this called with tax shield, because

moment company pay big flower for the loan so company that's true too currently Upgrade profit company with method reduce payment tax company, profit enjoyed taxes company this will reduce its WACC value.

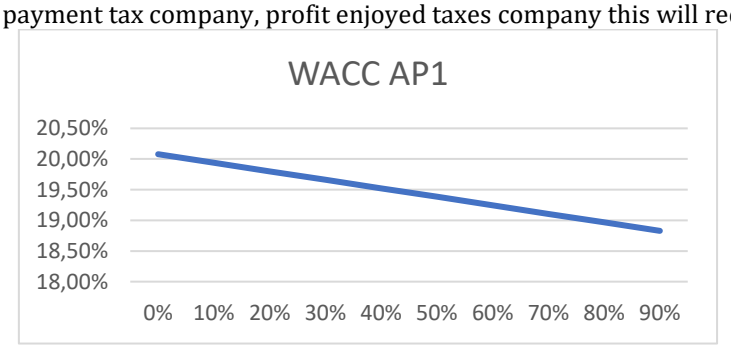

Figure 7. WACC Value Relationship with Portion Accounts payable on AP1

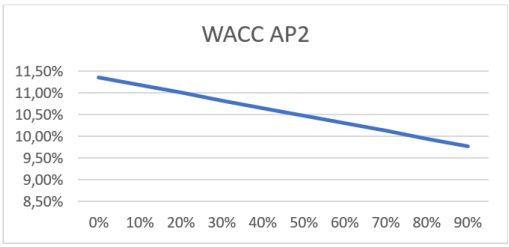

Figure 8. WACC Value Relationship with Portion Accounts payable on AP2

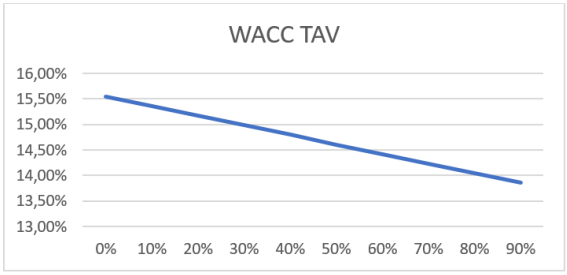

Figure 9. WACC Value Relationship with Portion Accounts payable to TAV

The WACC value will be decrease along with enhancement debt, but in fact will there is point where mark payment flower no will Becomes deduction tax because magnitude deduction tax will same or even more big from profit earned by the company, because that will there is optimal point of debt for something company.

4.1 Optimal Capital Structure with use Modigliani and Miller method

For determine optimal point of magnitude debt will be represented with mark company highest. Enterprise values this will be the determining parameter optimal capital structure for AP1, AP2, and TAV where calculation mark company based on level discount appropriate WACC values with magnitude debt.

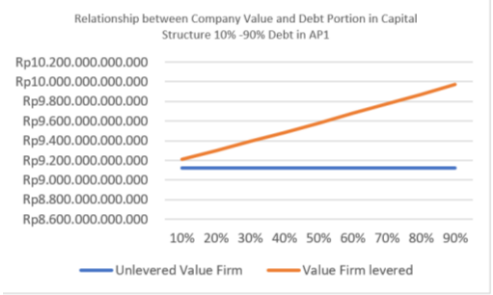

Figure 10. Corporate Value Relationship with Portion Debt on Capital Structure 10% -90% Debt on AP1

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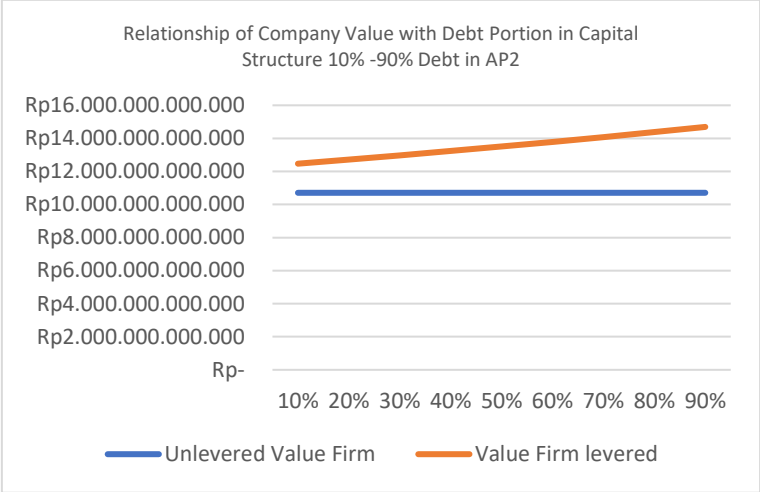

Figure 11. Corporate Value Relationship with Portion Debt on Capital Structure 10% -90% Debt on AP2

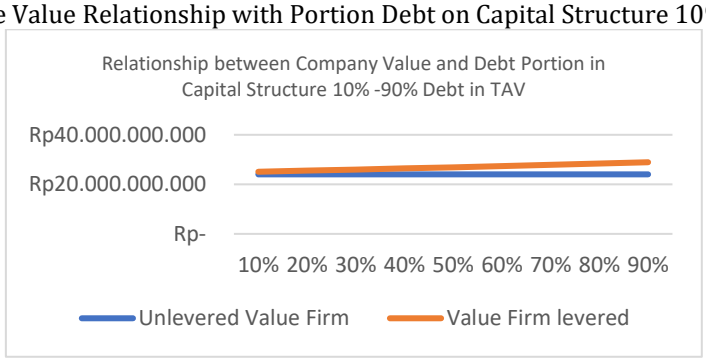

Figure 12. Corporate Value Relationship with Portion Debt on Capital Structure 10%-90% Debt on TAV

on the picture on showing that the more small WACC value then will the more big mark company, that is the more tall mark debt so will the more also high value company. In fact will there is the moment where the cost flower already no could made as deduction taxes, the same thing happens with values company. The more tall mark debt so will the more increase the risk that will be borne by the company, therefore that need exists calculation on cost of financial distress. Value of the cost of financial distress this will Becomes deduction mark company where will showing level risk that will experienced by the company in rupiah unit. There will be point where mark company return experience decline though mark debt increased. this occur because cost of financial distress keep going experience increase along with increase debt

Cost of financial distress showing level risk that will experienced by the company in rupiah unit, for determine mark cost of financial distress writer use approach debt service coverage ratio (DSCR). The more tall mark debt something company so the more high risk too fail pay faced company. DSCR value set by banks is worth at least 1.2 of the EBIT value, the better tall debt so the more also high interest that must be paid. on value debt certain company will experience risk fail pay, amount risk this is worth magnitude tree and flowers possible loan no could paid by the company.

Table 4. Calculation of Company Value AP1 Before Indebted And After Owe With 1% intervals and their relationship With Financial Distress

Debt	Unlevered Value Firm	Value Firm Leverage	Cost Of Financial Distress	Leveraged Value Firm New
1%	IDR 9,119M	IDR 9,128M	-Rp 8,697M	IDR 430M
2%	IDR 9,119M	IDR 9,137M	-Rp 9,102M	IDR 34.M
3%	IDR 9,119M	IDR 9,145M	-Rp 9,507M	-Rp 361M
4%	IDR 9,119M	IDR 9,154M	-IDR 9,912M	-Rp 758M
5%	IDR 9,119M	IDR 9,163M	-IDR 10,317M	-Rp 1,154M

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6%	IDR 9,119M	IDR 9,172 billion	-IDR 10,723M	-Rp 1.550M
7%	IDR 9,119M	IDR 9,181 billion	-IDR 11,128M	-Rp 1,946M
8%	IDR 9,119M	IDR 9,190M	-IDR 11,533M	-Rp 2,342M
9%	IDR 9,119M	IDR 9,199M	-IDR 11,938M	-Rp 2,738M
10%	IDR 9,119M	IDR 9,208M	-IDR 12,343M	-Rp 3,134M

From the table above could is known that AP1 still is could owe until figure 1% -2% of company capital value because height financial distress experienced by AP1. If it exceeds number such, the company will experience possibility more financial distress high. But AP1 is not can only rely on its EBIT because cost flowers that arise more large, so AP1 should be look for alternative source funding and one of them through debt.

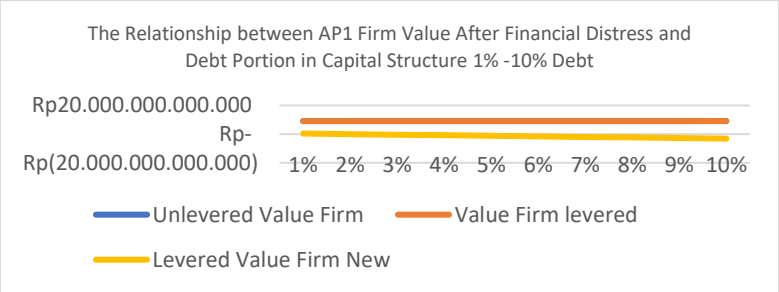

Figure 13. AP1 Corporate Values Relationship After Financial Distress with Portion Debt on Capital Structure 1% -10% Debt

From pictures on could is known that mark company highest with calculation Modigliani and Miller's approach to composition mark debt 0% due height financial distress experienced by AP1, but AP1 also had no other choice because reception company no capable cover cost a must flower paid in period walk.

Table 7. Calculation of Company Value AP2 Before Indebted And After Owe With 1% intervals and their relationship With Financial Distress

Debt	Unlevered Value Firm	Value Firm Leverage	Cost Of Financial Distress	Leveraged Value Firm New
1%	IDR 10,708M	IDR 12,254M	IDR -	IDR 12,254M
2%	IDR 10,708M	IDR 12,278M	-Rp 18M	IDR 12,260M
3%	IDR 10,708M	Rp. 12,301 billion	-Rp 423M	IDR 11,878M
4%	IDR 10,708M	IDR 12,325M	-Rp 828M	Rp. 11,496 billion
5%	IDR 10,708M	IDR 12,349M	-Rp 1,234M	Rp. 11,114 billion
6%	IDR 10,708M	IDR 12,373M	-Rp 1,639M	IDR 10,733M
7%	IDR 10,708M	IDR 12,397M	-Rp 2.045M	Rp. 10,351 billion
8%	IDR 10,708M	Rp. 12,421 billion	-IDR 2,450M	IDR 9,970M
9%	IDR 10,708M	IDR 12,445M	-Rp 2,856M	IDR 9,589M
10%	IDR 10,708M	IDR 12,469M	-Rp 3,261 billion	IDR 9,207M

From the table above could is known that AP2 still is could owe until figure 1% -10% of company 's capital value. If it exceeds number such, the company will experience possibility more financial distress

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high. AP2 got do debt optimally up to by 1-6% of mark company capital in order to benefit draft leverage still impact positive for jack up mark company.

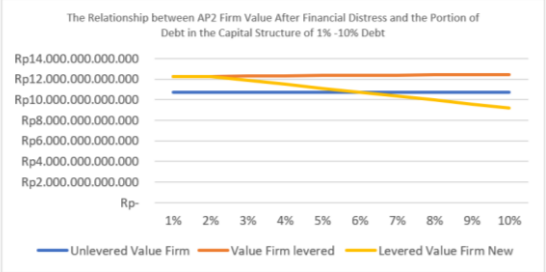

Figure 4. 1 AP2 After Financial Distress Corporate Values Relationship with Portion Debt on Capital Structure 1% -10% Debt

From pictures on could is known that mark company highest with calculation Modigliani and Miller's approach to composition mark 2% debt due height financial distress experienced by AP2, concept leverage that can Upgrade mark company could achieved with AP2 debt composition ranges from between 1%-6%.

Table 4. 1
Calculation of Prior TAV Company Value Indebted And After Owe With 1% intervals and their relationship With Financial Distress

Debt	Unlevered Value Firm	Value Firm Leverage	Cost Of Financial Distress	Leveraged Value Firm New
1%	IDR 24,021J	IDR 24,703J	IDR -	IDR 24,703J
2%	IDR 24,021J	IDR 24,745J	IDR -	IDR 24,745J
3%	IDR 24,021J	IDR 24,787J	IDR -	IDR 24,787J
4%	IDR 24,021J	IDR 24,829J	IDR -	IDR 24,829J
5%	IDR 24,021J	IDR 24,871J	IDR -	IDR 24,871J
6%	IDR 24,021J	IDR 24,913J	-Rp 341J	IDR 24,571J
7%	IDR 24,021J	IDR 24,956J	-Rp 822J	IDR 24,133J
8%	IDR 24,021J	IDR 24,998J	-Rp 1,302J	IDR 23,696J
9%	IDR 24,021J	IDR 25,041J	-Rp 1,782J	IDR 23,258J
10%	IDR 24,021J	IDR 25,083J	-Rp 2,262J	IDR 22,821J

From the table above could is known that AP2 still is could owe until figure 1% -10% of company 's capital value. If it exceeds number such, the company will experience possibility more financial distress high. AP2 got do debt optimally up to by 1-7% of mark capital company to benefit concept of leverage still impact positive for jack up mark company.

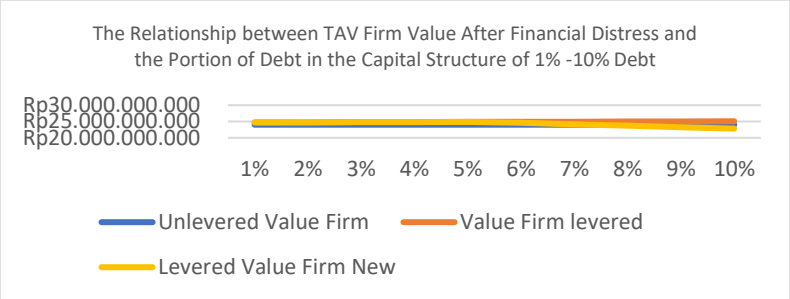

Figure 4. 2 TAV's Corporate Values Relationship After Financial Distress with Portion Debt on Capital Structure 1% -10% Debt

From pictures on could is known that mark company highest with calculation Modigliani and Miller's approach to composition mark debt 5% due height financial distress experienced by TAV, concept

leverage that can Upgrade mark company could achieved with TAV's debt composition ranges from between 1%-7%.

4. CONCLUSION

PT Angkasa Pura I is required for maintain ratios finance certain During period 2018-2021 as following : Ratio Debt To Maximum equity (DER). by 2.5 times. On December 30, 2021, PT Angkasa Pura I has accept letter exemption (waiver letter) from BNI for no fulfillment ratio finance on December 31, 2021. Commencement in 2022, PT Angkasa Pura I is required for maintain ratios finance certain as as follows : Debt to Equity Ratio (DER) maximum 3 times, and a minimum Debt Service Coverage Ratio (DSCR) of 1 time. For Upgrade liquidity, the Board of Directors in order to be able to looking for new financing models and innovative funding as well do analysis benefits and risks for company. PT Angkasa Pura I has also coordinate with PT Aviation Indonesian Tourism (Persero) as Parent (Holding) in the submission process addition State Capital Participation (PMN) as one deleveraging initiative. Same thing with PT Angkasa Pura I, PT Angkasa Pura II is required for maintain ratios finance certain During period 2018-2021 as following : Ratio Debt To Maximum equity (DER). by 2 times. Until with 2021 PT Angkasa Pura succeeds Fulfill given target criteria. Compared to with in 2018, happened increase in the Company's leverage ratios for 2019, 2020 and 2021. This show the ability of PT Angkasa Pura II in Fulfill need relatively decreased solvency. this will complicate credit new. High debt ratio show appropriateness more credit low. high DER considered risky for giver loans and investors due show that PT Angkasa Pura II financed a number big potency growth through loan. PT Angkasa Pura I and PT Angkasa Pura II in the middle experience pressure performance operational and financial consequence the ongoing Covid -19 pandemic going on until now. Condition the be one reason debt swelling and predictable increase if no quick handled. Condition financial and operational company experience pressure enough big. Income down during a pandemic. Decline predicted still will occur until the pandemic status ends. With situation decreased traffic and presence pressure finance, PT Angkasa Pura I and PT Angkasa Pura II must faced with obligation pay loan previously used for investment development airports.

Temporary the TAV As of February 2021, it works finish negotiation debt restructuring in Tunisia, where TAV operates two airport. With restructuring, TAV reduced bank debt TAV in Tunisia and TAV Tunisia achieved composition more financing sustainable. Because of success Transaction extraordinary debt restructuring normal this, TAV awarded “Infrastructure Finance Deal of the Year” award by Bonds & Loans Turkey. In Q4/2021, loan holder share of €192 million given to Medina Airport. €281 million paid in connection with acquisition of 85% of Almaty Airport. TAV Tunisia's debt fell €94 million in Q1/2021 in comparison with Q4/2020 due debt restructuring.

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