HUMAN CAPITAL VALUE ADDED & HUMAN CAPITAL RETURN ON INVESTMENT WITH APPROACH JAC FITZ-ENZ AT BPJS EMPLOYMENT HR

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ARTICLE INFO	ABSTRACT
Keywords: HCVAs; HCROI; Performance; HR	This study aims to determine the effectiveness and efficiency of HR management at Employment BPJS based on performance achievements in 2017 – 2021 using the Jac Fitz-Enz approach, namely Human Capital Value Added (HCVA) and Human Capital Return on Investment (HCROI). The results of the HCVA and HCROI analysis show that one BPJS Ketenagakerjaan HR has an added value of 9.5 to 11.7 billion rupiahs and every 1 rupiah issued by BPJS Ketenagakerjaan for its HR will generate income of 16.5 to 23.41 rupiahs. The role of the global economic crisis in 2018 and the Covid-19 pandemic in 2020 which caused a decrease in contribution income & investment returns are thought to have affected the HCVA and HCROI of BPJS Ketenagakerjaan HR.
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1. INTRODUCTION

Based on the mandate of Article 28H paragraph (3) and Article 34 paragraph (2) of the 1945 Constitution, the State issued Law no. 40 of 2004 concerning the National Social Security System (SJSN), which then mandated further arrangements regarding the Social Security Administering Body (BPJS) in Law no. 24 of 2011 concerning BPJS. There are 2 (two) BPJS, namely Health BPJS and Employment BPJS. BPJS Health organizes Health Insurance (JKN) programs, while BPJS Employment organizes Work Accident Insurance (JKK), Death Insurance (JKM), Old Age Benefits (JHT), and Pension Benefits (JP) programs, as well as Job Loss Insurance programs (JKP) which was just launched in 2022 based on the mandate of Law no. 11 of 2020 concerning Job Creation and PP No. 37 of 2021 concerning Implementation of the JKP Program.

The main task of the two BPJS is to achieve the target of universal social security membership coverage. For BPJS Health, universal membership coverage applies to the entire population (minimum 95%). Meanwhile for Employment BPJS, universal membership coverage applies to all workers, which in the Strategic Plan is set at 70 million workers in 2026. Based on the Monitoring and Evaluation System of the National Social Security Council (Sismonev DJSN), data as of September 2022 shows that the achievement of national participation for BPJS Health has reached 244,600,449 people or 90.24% of the entire population, or is close to Universal Health Coverage (UHC). Meanwhile, Sismonev DJSN data also shows that the coverage of membership in BPJS Ketenagakerjaan is still low. Whereas, the need for social protection for workers is increasingly needed. In addition, membership also determines the amount of contributions that are collected and managed, so that it will have an impact on the sustainability of funding for all social security programs.

In determining the potential coverage of membership, there are differences between BPS data, data from the Ministry of Cooperatives and UKMM, as well as the potential coverage coverage determined by BPJS Ketenagakerjaan in its Strategic Plan as shown in the following table:

Table 1. Potential Membership according to Employment BPJS

Type	2017	2018	2019	2020	2021
PPU	39,108,264	39,803,467	40,496,670	41,150,899	41,809,129
Jakons	8,034,927	8,177,759	8,320,180	8,454,593	8,589,829
PBPU	40,713,189	41,436,923	42,158,574	42,839,651	43,524,893
Total	87,856,380	89,418,149	90,975,424	92,445,143	93,923,851

Table 2. Data on the number of workers according to BPS

No	Main Employment Status	2018	2019	2020	2021	2022
1	Try Yourself	24,122,854	25,322,658	25.102.200	25,647,945	26,912,779
2	Trying Helped Labor No Permanent/Unpaid Labor	21,597,075	21,569,469	22,116,390	21,611,700	22,276,875
3	Trying to be Helped by Workers Fixed/Paid Labour	4,764,965	4,749,575	4,905,664	4,397,238	4,483,950
4	Laborer/Employee/Employee	49,106,925	51,294,354	52,885,045	48,520,667	49,798,221
5	Free Labor in Agriculture	4,664,172	4,782,815	4,982,052	5007143	5,505,304
6	Free Workers in Non-Agriculture	6,459,764	5,980,092	5,890,888	6,700,776	6,921,999
7	Family/Unpaid Worker	18,763,786	17,993,629	17,410,627	19,178,836	19,712,767
	The number of workers	**129,479,541**	**131,692,592**	**133,292,866**	**131,064,305**	**135,611,895**

Table 3. Number of Workers based on Business Scale according to the Ministry of Cooperatives and SMEs

Scale	subject	2015	2016	2017	2018	2019
Micro	BU	58,521,987	60,863,578	62,106,900	63,350,222	64,601,352
	kindergarten	110,807,864	103,839,015	105,509,631	107,376,540	109,842,384
Small	BU	681,522	731,047	757,090	783,132	798,679
	kindergarten	7,307,503	5,402,073	6,546,742	5,831,256	5,930,317
Intermediate	BU	59,263	56,551	58,627	60,702	65,465
	kindergarten	5,114,020	3,587,522	4,374,851	3,770,835	3,790,142
Big	BU	4,987	5,370	5,460	5550	5,637
	kindergarten	4,194,051	3,444,746	3,828,953	3,619,507	3,805,829
Total	**BU**	**59,267,759**	**61,656,546**	**62,928,077**	**64,199,606**	**65,471,133**
	kindergarten	**127,423,438**	**116,273,356**	**120,260,177**	**120,598,138**	**123,368,672**

From the three tables above, it can be seen that in 2018 and 2019, the difference in the number of workers between BPS and the Ministry of Cooperatives and SMEs seems relatively small, namely 8,881,403 in 2018 and 8,323,920 in 2019. This is quite reasonable when it is related to the number Employees at State Administration Employers such as ASN Employees (PNS and PPPK), Members of the TNI/Polri, State Officials, Regional Officials, and other public agency officials/employees who are not included in the scope of the workforce who are the objects of duties, functions and authority Ministry of cooperatives and SMEs. However, when compared with the BPJS Ketenagakerjaan version of worker data, which has been used as the basis for determining membership potential, a fairly large gap is visible. The gap is shown in the following table:

Table 4. The ratio between Potential Membership according to Employment BPJS and Number of Workers according to the Ministry of Cooperatives and SMEs in 2017 – 2019

Items	2017	2018	2019
PPU BU MKMB	120,260,185	120,598,138	123,368,672
Membership Potential according to Employment BPJS	87,856,380	89,418,149	90,975,424
Ratio between BU MKMB PPU Potential and Data	73%	74%	74%

It can be seen that there is a gap of workers in the private sector of 26% to 27% who are not included in potential participation according to BPJS Employment in 2017 to 2019. Even though the potential for participation should be in sync with the data on the number of workers who are the universal membership

coverage of social security programs employment. This of course has an impact on not optimally setting targets for participation, where the number of targets set is smaller than the potential for participation, as shown in the following table.

Table 5. Target Coverage of Employment BPJS Membership

Segment	2017	2018	2019	2020	2021
PPU	16,924,055	19,476,319	22,778,583	18,737,100	20,800,000
Jakons	7,253,983	7,755,584	8,033,829	6,849,100	6,000,000
PBPU	1,029,507	2,420,928	3,541,856	3,913,800	3,700,000
Total	25,207,545	29,652,831	34,354,268	29,500,000	30,500,000

Table 6. Percentage of Participation Coverage Target compared to Participation Potential

Type	2017	2018	2019	2020	2021
PPU	43%	49%	56%	46%	50%
Jakons	90%	95%	97%	81%	70%
PBPU	3%	6%	8%	9%	9%
Total	29%	33%	38%	32%	32%

Table 7. Realization of Employment BPJS Membership Coverage Targets

Segment	2017	2018	2019	2020	2021
PPU	16,068,453	19,427,150	20,174,472	19,963,696	20,832,255
Jakons	8,459,410	8,639,900	11,279,754	7,521,392	6,276,788
PBPU	1,714,169	2,393,022	2,712,031	2,494,994	3,551,858
Total	26,242,032	30,460,072	34,166,257	29,980,082	30,660,901

Table 8. Percentage of Target Realization of Employment BPJS Membership Coverage

Type	2017	2018	2019	2020	2021
PPU	95%	100%	89%	107%	100%
Jakons	117%	111%	140%	110%	105%
PBPU	167%	99%	77%	64%	96%
Total	104%	103%	99%	102%	101%

Table 9. Coverage of Jamsosnaker Membership by Business Scale

Items	2015	2016	2017	2018	2019
Workforce at Business Scale BMKM*	127,423,438	116,273,356	120,260,185	120,598,138	123,368,672
Employment BPJS Active Participants**	19,275,061	22,631,094	26,242,032	30,460,072	34,166,257
Membership Coverage Jamsosnaker	**15%**	**19%**	**22%**	**25%**	**28%**

Information:
* Data from the Ministry of Cooperatives and SMEs
** Employment BPJS data

Apart from membership, in terms of application-based services, JMO was also hampered by errors. Information from the relevant authorities at BPJS Ketenagakerjaan that several times the downtime occurred was caused by technical problems. Deputy Director for Public Relations and Inter-Agency BPJAMSOSTEK Oni Marbun explained that his party was indeed carrying out system maintenance as of April 24, 2022 yesterday. Unfortunately, there are a few problems that make the JMO application error (Herdi Alif Al Hikam – Detik Finance: Monday, 25 April 2022, 09:47 WIB). Some problems with fraud also cannot be anticipated optimally, such as the case of fictitious JHT and JKM claims that occurred some time ago. The mode of operation used by DS perpetrators is to falsify biodata and photos on electronic KTPs. Family Card which is used as a requirement for submitting JHT claims (Choirul Arifin – Business Tribune: Friday, 7 October 2022, 13:38 WIB). From the investment side in May 2022 based on Sismonev DJSN data, the Yield on Investment (YoI) results for JHT and JP Fund Assets were above the BI 7-Day Reverse Repo Rate

(BI7DRR) of 3.50% in May 2022. As for JKK Funds, JKM Funds, JKP Funds, and Employment BPJS Assets, the level is below BI7DRR. The JKP Fund, which has the smallest YoI, is understandable, considering that the JKP program is a program that was only implemented in early 2022 by the Government. For JKK Funds, JKM Funds, and Employment BPJS Assets which are quite a concern, considering that it has been running since the era of PT.

Table 10. May 2022 Employment Social Security Fund Investment

NO	FUND ASSETS	INITIAL INVESTMENT	FINAL INVESTMENT	INVESTMENT RESULTS	YoI
1	JKK	45,960,741,385,790	48,128,328,930,254	1,475,009,300,228	3.21%
2	JKM	14,527,941,109,300	14,832,527,178,892	472,060,124,573	3.25%
3	JHT	372,500,227,156,518	392,519,220,087,056	19,277,670,758,996	5.18%
4	JP	101,660,391,387,327	112,660,596,258,449	4,368,031,350,937	4.30%
6	JKP	7,727,402,454,149	8,295,522,429,677	90,629,796,956	1.17%
5	BPJSTK	11,837,277,918,227	11,857,394,511,266	369,883,611,398	3.12%

Of all the performance achievements of the Employment BPJS that have not been maximized, personnel and management expenses still dominate the operational expenses of the Employment BPJS as shown in the following table.

Table 11. BPJS Ketenagakerjaan Operational Expenses 2018 – 2022 (in Million Rupiah)

Types of Operating Expenses	2018 (audit)	2019 (audit)	2020 (audit)	2021 (audit)	2022 (Consolidation)
Operating & Support Expenses	624,274	712,763	391,576	464,850	339,085
Personnel & Management Expenses	3,213,482	3,096,151	3,068,523	3,363,225	2,571,832
General & Other Expenses	554,373	635,306	628,757	805353	635,264
Total Operating Expenses	**4,392,129**	**4,444,220**	**4,088,856**	**4,633,428**	**3,546,181**
% Personnel & Management Expenses	**73%**	**70%**	**75%**	**73%**	**73%**

Table 11 above shows the average percentage of personnel and management expenses in the range of 73%. This raises the question, is the personnel and management burden, which has such a large portion of the total operational expenses, directly proportional to the performance achievements of the Employment BPJS? Then how big is the contribution of each BPJS Employment HR in encouraging the achievement of Employment BPJS performance? To answer these two questions, it is necessary to conduct research that analyzes HR Capital Value Added (HCVA) and analysis of HR Capital Return on Investment (HCRoI) in BPJS Ketenagakerjaan HR which includes the Supervisory Board, Directors, and all ranks.

2. LITERATURE REVIEW
Human Capital Value Added (HCVA)

The problem of human resource productivity is seen in a simple form as income per employee. Later, Fitz-Enz looked at more accurate forms in revenue per FTE (HCRF). Subsequently, Fitz-Enz introduced fees with HCCF. Now, if you want to move on to the profit per FTE ability, the calculation is carried out with the following formula:

$$HCVA = \frac{Revenue - (Expenses - Pay\ and\ Benefits)}{FTEs}$$

(Fitz-Enz.2009: 49)

FTE stands for Full Time Equivalent. As a simple example, if ten people work part time, the FTE is five, even though the number of ''employees'' is ten. The number ten represents what is commonly referred to as the head count. (Fitz-Enz, 2009: 44).

In this case, Fitz-Ent looks at the average profitability of employees. By subtracting all company expenses, except for salaries and benefits, an adjusted profit figure is obtained. Consequently, non-HR costs have been deducted. Then when divided by the FTE-adjusted profit figure, the average profit per FTE is obtained. Note that these can be set to include or exclude contingency, no-show and replacement costs. An example using SamCo's numbers with just salary and benefits:

Revenue:	$100,000,000
Expense:	$80,000,000
Payrolls and benefits	$24,000,000
Contingent cost	$3,750,000
absence costs	$200,000
turnover costs:	$3,600,000
Employees (FTEs):	500
Contingents (FTEs):	100

(Fitz-Enz, 2009: 46)

HCVA = $100,000,000 – ($80,000,000 – $24,000,000)
                                500

HCVA = $44,000,000
              500
HCVA = $88,000
(Fitz-Enz, 2009: 50).

Human Capital Return on Investment (HCROI)

Another relationship of human capital investment to profitability can be made visible through the following ratio from the formula for HCVA. HCROI looks at ROI in terms of returns for money spent on employee salaries and benefits.

$$HCROI = \frac{Revenue – (Expenses – Pay\ and\ Benefits)}{Pay\ and\ Benefits}$$

(Fitz-Enz.2009: 50 – 51)

Again, subtracting expenses except for salaries and benefits, we have an adjusted profit figure. Consequently, we have taken out only non-human expenses. Then, when we divide the profit-adjusted figure by the cost of human capital (salaries and benefits), we find the amount of profit earned for each dollar invested in human capital compensation (excluding training and the like)—thus, the effect on salaries and benefits. This can be expressed as a ratio. Applying SamCo's figures, we have the following equation without any additional contingent, no-shows, or turnover inside costs:

HCROI = $100,000,000 – ($80,000,000 – $24,000,000)
                                        $24,000,000

HCROI = $44,000,000
$24,000,000
HCROI = $1.83
(Fitz-Enz.2009: 51)

In this case, the HCROI ratio is $1:$1.83. If you want a complete and correct return on direct and indirect human capital expenditures, you must use the figure of $31,550,000 as shown earlier, not $24 million. The HCROI ratio in that case is $1:$1.63. As a result, less than that total cost for Non-HR costs due to transferring contingent, absenteeism, and turnover costs where they belong—the cost of human capital. For every dollar spent on HR costs with no change in total costs, a smaller human capital gain ratio is obtained. Now that we've seen the logic, we can design additional metrics that include training and other employee-related costs to suit our specific needs. (Fitz-Enz.2009: 51)

With the examples so far, we can see that the cost of human capital can be much more than is usually realized. However, the important point is that no matter what the costs are or in which direction they move, it is clear that the relationship between human capital and productivity and profitability is definitely established. (Fitz-Enz.2009: 52)

3. METHOD

This research is a quantitative research with descriptive and explanatory approaches. This research was conducted to measure HCVA and HCROI and to analyze the factors that influence HCVA and HCROI in BPJS Ketenagakerjaan HR.

The population in this study were all employees at BPJS Employment HR. The sample was selected using a purposive sampling technique with the following criteria: employees who have worked for at least

1 year, employees who have complete performance data, and employees who are willing to be respondents in this study.

To measure HCVA and HCROI, a measuring instrument developed by Jac Fitz-Enz was used. The HCVA measurement tool consists of measuring HR added value based on company productivity and performance, while the HCROI measurement tool consists of measuring the return on investment made in HR. In addition, measurement tools are also used to measure variables that affect HCVA and HCROI, such as education, training, work experience, and competence.

Data was collected through a survey using an online questionnaire. The questionnaire consists of questions related to the variables that affect HCVA and HCROI as well as measuring tools for HCVA and HCROI. Prior to the survey, a questionnaire was tested to ensure its validity and reliability.

Data were analyzed using descriptive statistical techniques to measure HCVA and HCROI and multiple linear regression techniques to analyze the factors that influence HCVA and HCROI.

4. RESULTS AND DISCUSSION
Data Revenue, Expenses, Pay and Benefits, and Employment BPJS FTE

Prior to calculating HCVA and HCROI at Employment BPJS, an inventory of revenue, expenses, pay and benefits data, as well as FTE HR of Employment BPJS is carried out as follows:

Table 12. Revenue, Expenses, Pay and Benefits, and HR BPJS Employment FTE

No	Component	2017	2018	2019	2020	2021
1	*Revenue*(Rp Billion)					
a	Operating revenues BPJS assets	6,039	5,822	5,767	4,280	4,767
b	DJSKK Revenue	6,517	6,964	8,620	6,393	7,885
c	DJSKM Revenue	2,725	3,077	3,817	2,834	3,373
d	DJSHT Revenue	60,957	52,892	68,416	65,530	72,258
e	DJSP Revenue	14,248	15,735	20,446	21,716	24,438
f	DJSKP Revenue	0	0	0	0	1959
	TotalRevenues	90,486	84,490	107,066	100,753	114,680
2	*Expenses*(Rp Billion)					
a	BPJS Asset Operating Expenses – Personnel Expenses & Management	350 – 2,797	067–3.213	156 – 3.096	4,683 –3,069	4,838 –3,363
b	Asset Operating Expenses DJS	31,044	32,846	35,623	41,076	50,596
	Total Expenses	32,597	34,700	37,683	42,690	52,071
3	*Pay and Benefits*or Personnel & Management Expenses (Rp Billion)	2,797*	3,213	3,096	3,069	3,363
4	FTE or Number of Permanent Employees + Prospective Employees (Person)	5,568	5,598	6.202	6045	5,888

Source: Financial Statements & Employment BPJS Program Reports from 2017 to 2021

*specifically for 2017 because it is not combined, it is obtained from the sum of Personnel Expenses, Management Expenses, Retirement Awards, and HR Development Expenses

HCVA on BPJS Employment HR

Based on the time series data in Table 12 and by using the HCVA formula as explained in Sub-Chapter 2.1., the HCVA of BPJS Employment HR in the period 2017 – 2021 is obtained in graphical form as follows:
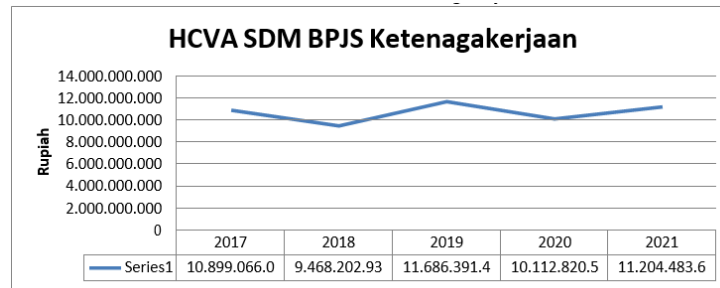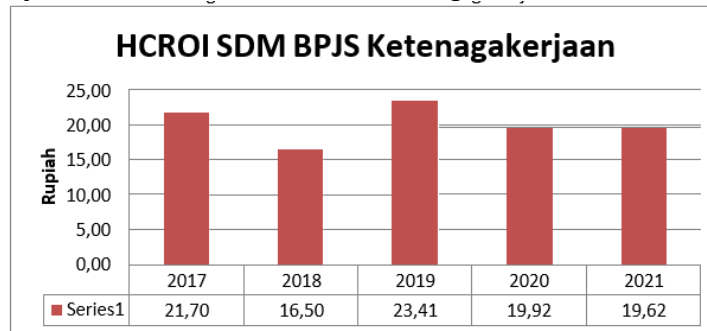
Sumber: Hasil Analisis Penulis

Figure 1. HCVA HR BPJS Employment Graph 2017 – 2021

The graph above shows the added value of BPJS Employment human capital. One BPJS Employment HR has an added value of 9.5 to 11.7 billion rupiah. The graph shows fluctuations, especially in 2018 and 2020. Judging from the components of the formula which consist of revenue, expenses, pay and benefits, and FTE, and also related to macro conditions, it is reasonable to suspect the role of the global economic crisis in 2018 and the Covid-19 pandemic in 2020 which caused a decrease in contribution income and a decrease in investment returns.

HCROI on BPJS Employment HR

Then an HR HCROI analysis was carried out at Employment BPJS using the formula as described in the previous sub-chapter, with the results in the form of a diagram as follows:

Sumber: Hasil Analisis Penulis

Figure 2. 2017 – 2021 BPJS Employment HR HCROI Diagram

The diagram above. shows that every 1 rupiah issued by Employment BPJS for its HR will generate income of 16.5 to 23.41 rupiah. Similar to the comments on the results of the HCVA analysis, the role of the global economic crisis in 2018 and the Covid-19 pandemic in 2020 which caused a decrease in contribution income and a decrease in investment returns should be suspected of influencing the HCROI of BPJS Ketenagakerjaan HR.

5.   CONCLUSION

One BPJS Employment HR has an added value of 9.5 to 11.7 billion rupiah. The graph shows fluctuations, especially in 2018 and 2020. Judging from the components of the formula which consist of revenue, expenses, pay and benefits, and FTE, and also related to macro conditions, it is reasonable to suspect the role of the global economic crisis in 2018 and the Covid-19 pandemic in 2020 which caused a decrease in contribution income and a decrease in investment returns. Every 1 rupiah spent by Employment BPJS for its HR will generate income of 16.5 to 23.41 rupiah. Similar to the comments on the results of the HCVA analysis, the role of the global economic crisis in 2018 and the Covid-19 pandemic in 2020 which caused a decrease in contribution income and a decrease in investment returns should be suspected of influencing the HR HCROI of BPJS Ketenagakerjaan.

REFERENCE

[1]   Setiadi, Concepts and practice of manufacturing research writing (Ed.2). Yogyakarta: Graha Ilmu, 2013.

[2]   YRWR Alexandra, "The Impact of Viral Marketing on Consumer Interest in Indihome Products", J. Appreciation of Ekon., vol. 7, no. 1, p. 103–107, 2019, doi: 10.31846/jae.v7i1.141.

[3]   NPNP Wijaya, "The Influence of Viral Marketing on Social Media and Online Communities on Purchasing Decisions in the Pandemic Era (Case Study of McDonald's Area BTS Meal Products in Bandung)," Pdt.Int. geogr. Online Education, vol. 11, no. February, p. 3385–3391, 2021, doi: 10.48047/rigeo.11.07.307.

[4]   M.S. B. Reformatting, "The effect of brand awareness and brand image on brand equity – an empirical study of logistics service providers," J.Econ. Manage., vol. 33, no. September, p. 96–119, 2018, doi: 10.22367/jem.2018.33.06.

[5]   IINA Adzharuddin, "The Influence of Celebrity Endorser Characteristics on Brand Image: Vivo Case Study," SEARCH J. Media Commun. Res., vol. 13, no. 3, p. 19–34, 2021.

[6]   Ratih Kusumawardhani, Risal Rinofah, and Dandi Rukmana, "Google and stock market trends: Does it matter?" J.Innov. Bus. Econ., vol. 5, no. 02, p. 85–92, 2022, doi: 10.22219/jibe.v5i02.18678.

[7]   Fitz-Enz, Jac. 2009. The RoI of Human Capital: Measuring the Economic Value of Employee Performance. AMACOM. New York.

[8]   BPJS Employment Program Report for 2017, 2018, 2019, 2020, 2021

[9]   https://www.bps.go.id/statictable/2009/04/16/971/penduduk-15-tahun-ke-atas-menurut-status-main-work-1986---2022.html

[10]   https://kemenkopukm.go.id/data-umkm/?rwMhR1RYZdethNgmA5IiWR32SmfBTZ9QBJBOJvWwfXB6i0KOgf

[11]   https://sismonevtk.djsn.go.id/