WOMEN'S CONTRIBUTION AS PROFESSIONALS AND WOMEN AS ENTREPRENEURS TO THE WOMEN’S HUMAN DEVELOPMENT INDEX (IPM) IN JAVA ISLAND

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Abstract

Indonesia faces the problem of a low HDI for women, this problem is caused by the low contribution of women in the country’s economy. In fact, the HDI for women is still not evenly distributed in all districts/cities throughout Indonesia. In fact, the issue of HDI for women is not only a problem of inequality in Java and outside Java, the problem of inequality also occurs in regencies/cities on the island of Java. This study intends to analyze the partial and simultaneous contribution of women entrepreneurs and women’s professional workers to HDI women in Java. The research data uses secondary data in the form of women's HDI data documents, data on women entrepreneurs and data on women professional workers that have been calculated by Central Bureau of Statistics, then the data is analyzed using multiple linear regression and cross-variable tests. The results of the study found that there was a simultaneous positive influence on the contribution of women entrepreneurs and professional women workers to the HDI of women, partially only the variable of professional women workers had a significant positive effect on the HDI of women. While the variable of women as entrepreneurs has no significant positive effect on women’s HDI in Java.

Keywords: HDI Women; Women Entrepreneurs; Women Professionals.

INTRODUCTION

The problem of gender equality in fact leaves homework unresolved, although in terms of education, equality of women has been recognized, but in the economic field the condition is not better. Women are often in disproportionate poverty, often women are in the poorest conditions among the poorest. Conditions caused by limited equality in access to resources make it difficult for women to grow economically. Often gender-biased economic development occurs in developing countries, the severity of the inequality occurs at various levels and fields of development (Khaerani, 2017). Even
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though the contribution of the female workforce has a significant effect on economic growth, a note from McKinsey mentions that countries that do not create an equal environment will lose 12 trillion USD, equivalent to 16.5 percent of the total global economy (McKinsey Global Institute, 2015). In the Asia Pacific region itself, there is actually an increase in the workforce which provides opportunities for gender equality, so there is a potential for economic revenue of USD 4.5 trillion to be received by each country in 2025 (McKinsey Global Institute, 2018).

As one of the countries in the Asian region, Indonesia is in fact still facing the problem of gender inequality, Indonesia's Human Development Index (IPM) is still below the world average (KPPA and BPS, 2019). Even the female HDI ranking in Indonesia is also far behind Singapore, Thailand, the Philippines and even Vietnam (UNDP, 2018). The low HDI rating for women is due to the low contribution of women in the country's economy. Indonesian women's Gross National Income (GNP) is in fact far behind Singapore, Malaysia, Brunei, Thailand and the Philippines (UNDP, 2018). The low participation of women in professional positions at the highest level also contributes to the low HDI of women. Women's participation is still low, around half of the total productive age women in the professional labor market, so women workers are still concentrated in the informal sector (Dalilah, 2021). The involvement of women in the formal sector is evidence of gender equality and women's empowerment, as countries with developed economies continue to carry out sustainable economic development (Sabariman, 2019). Women who manage to get out of their "domestic zone" to enter the formal job market will open up new opportunities for other women so as to create a transition to economic drivers and changes in the social landscape around them (Sabariman, 2019). So it is not wrong if working in the formal sector becomes an "achievement" for women in terms of higher education abilities, not just "helping" the family economy (Cameron, Suarez, & Rowell, 2020).

It is not wrong if (Abdurrahman & Tusianti, 2021) provide solutions to increase women's HDI through the contribution of women as professionals, women as entrepreneurs and representation in parliament. It is time for the wrong mindset about women to be changed through gender equality, placing women according to their capabilities to achieve development goals, and including women in the development process as assets and potential advantages (KPPPA, 2015). The fact is that until 2019, the HDI of women (69.18) was far behind the HDI of men (75.96) there was a fairly wide gap (KPPA and BPS, 2020).

Prejudice on the inability of women to occupy high positions is the reason that women's positions in the top structure of positions are still limited and very minimal, besides that at the same level of office there is a gap in the salary received by women compared to men (Yaish & Kraus, 2003); ADB, 2016). The wage inequality between women and men is proven by (Pirmana, 2006) that 23.34 percent of men receive higher
salaries/wages than women. The existence of discrimination in the wages received is a potential barrier to the achievement of women's financial and economic independence (Iskandar & Hamid, 2019). The condition of the gender gap reflects gender-based discrimination in the labor market that does not look at the productivity of male workers with female workers, even though there are already many professional positions that should be able to be held by women with good educational backgrounds (ADB, 2016).

Provision of higher education is related to expertise and the existence of skills in the field of formal work that must be possessed by female workers (Wijayanto & Sari, 2019). So it can be expected, low education, limited knowledge, and minimal expertise will make it difficult for women to enter the formal sector, only the informal area which ultimately provides an opportunity to be selected (Josephine, 2019). The provision of education will hone skills so as to encourage productivity (Kamplemann, et al., 2018). A study conducted by (Aisyah & Oktavilia, 2020) provides strong evidence of a significant link between education and productivity that can be achieved by women. It is not surprising that the dominance of women in cities with higher education backgrounds and participation in formal work is higher than women in villages (Dalilah, 2021).

The condition of inequality is also still burdened by the existence of patriarchal understanding causing the construction of women to be discriminatory and beneficial to men (Safitri, 2014). The patriarchal culture also perpetuates the discrimination in wages received by women in the labor market, found in 31 provinces in Indonesia (Iskandar & Hamid, 2019). Even though providing a female leadership portion has a real impact on company earnings, the Peterson Institute study found that 30 percent of women's representation on the board of directors and C level will contribute 15 percent to the company's net income (Noland, Moran, & Kotschwar, 2016).

Limited access forces women to enter the informal industry, which has various complex problems that characterize it. The role of women in the micro-industrial labor market cannot be ignored, data from the Ministry of Manpower records that as many as 70 percent of female workers are in the informal sector, and depend on it for a living. This is early evidence of the high role of women in the informal sector, as well as the limitations on established job opportunities in the formal labor market for women (Ministry of Manpower, 2021). In poor families, the role of women becomes important to help the family economy, the condition of powerlessness with low education demands that the wife be empowered to help her husband who is economically inadequate (Anwas, 2013). The choices for part-time jobs that are usually done by women are house servants, sellers, farm laborers, and home industry workers (Yuliati, 2019). The choice of the informal sector on the one hand provides flexibility to female workers because of the scope of work and work protocols offered but on the other hand the lack of guaranteed wages, future work status, and the absence of professional training, career promotions that are not obtained as formal workers.
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The role of women in encouraging entrepreneurship is evidence of their adaptive capacity and contribution, both in developed and developing countries, although access is often discriminated against by (Jati, 2009). In Indonesia, the role of women in the entrepreneurial sector is proven by the fact that the ownership of SMEs is very large, from a total of 700 thousand SMEs, 34 percent are owned by women. These SMEs contribute 22 percent to GDP, while women-owned SMEs contribute 9.1 percent to GDP. Half of micro-enterprises and one-third of women-run enterprises contribute to economic growth and job creation, on a par with male-owned enterprises. Although women are faced with multiple responsibilities, in terms of business as well as family affairs and household chores (IFC and USAID, 2016). This condition is due to the fact that female entrepreneurs have the courage to take higher risks and are happy with challenges than male entrepreneurs (Sherlywati, Handayani, & Harianti, 2017). In general, the obstacles experienced by women in entrepreneurship can be classified into two, personal barriers and structural barriers (Ardhanari, 2007).

This research has an urgency that the achievement of the Women's Human Development Index (IPM) is still low due to the minimal contribution of women in the economy, especially the role of women as professionals at high level positions and the role of women as entrepreneurs. The existence of HDI disparities between women and men's HDI during 2010-2019, is a question mark over the performance and efforts to increase HDI through policies carried out by the government so far. The condition of the HDI disparity is strong evidence of the gap in human development in Indonesia between women and men. In addition, other evidence shows the inequality of human development between Java and outside Java. This condition of course also has an impact on the disparity in the HDI achievement of women in Java and outside Java, but what is interesting is that the disparity in HDI achievement has in fact also occurred in the provinces in Java itself, which in terms of infrastructure development are better, this condition is certainly interesting for further studies. So that researchers are interested in studying more deeply about the condition of the Women's HDI which is predicted through the contribution of women in the economy represented by women as professionals and women as entrepreneurs.

METHOD

Researchers set an associative quantitative approach to see the relationship between the Women's Human Development Index (HDI) which will be predicted through the factor of women's participation as entrepreneurs and professional workers. This study chose the object of study in 34 cities and 85 districts on the island of Java as the object of research. Secondary data of the research was taken through the BPS website, namely the HDI data for women, female professionals and data on women entrepreneurs in 2019.
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The HDI data for women was calculated using three components, namely health referring to life expectancy data, education referring to data on average length of schooling and expected years of schooling, the economic component refers to a decent standard of living through gross national income per capita in each district/city on the island of Java (UNDP, 2020). Data on the percentage of women entrepreneurs is the number of women entrepreneurs divided by the total number of entrepreneurs in each district/city on the island of Java. Furthermore, the data on the percentage of women as professional workers is the ratio of women as managers, professionals, administration and technicians to all women in every district/city in Java Island. Furthermore, the data obtained will be processed through the classical assumption test followed by using multiple linear regression to see the partial and simultaneous contribution to the HDI of women. The data is also cross-processed between independent variables and the dependent variable to explain the contribution of each category to the HDI in women descriptively.

RESULT AND DISCUSSION
The achievements of the HDI for Women in Java

Island, which is the center of government and the center of the Indonesian economy, but still has complex issues of gender equality, this condition is certainly interesting to observe, if so far there have been striking gaps in the HDI between Java and outside Java, in fact there are many districts/cities on the island of Java itself is still struggling to overcome the HDI problem. Women's HDI in Java is still experiencing a surprising disparity.

Figure 1. Women's HDI in Java Island in 2019

The research findings found that 5 percent of regions had a low Women's HDI and only 8.4 percent of regions were categorized as very high in achieving Women's HDI. There is a large gap in the achievement of HDI for women between regions on the island of Java itself. What is interesting in the findings that the areas that have low HDI
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achievements for women are also areas that are categorized as poor, such as Cianjur, Garut, West Bandung from the West Java region. The East Java region is represented by Sampang, Sumenep, while from Banten one district is Lebak. Regions that are able to achieve a very high HDI for women are South Jakarta, East Jakarta, Bandung City, Surakarta City, Salatiga City, Semarang City. Furthermore, from Yogyakarta Province there are Sleman and Yogyakarta City, while East Java is only Malang City which is able to achieve a very high female HDI.

1. Women Entrepreneurs in Java Island

Women who have a career in entrepreneurship have a high level of business resilience when compared to businesses owned by men. Even with the double burden they have, this condition proves that women's abilities in business management can be contested. Of course managing a business for women has its own challenges, it is not surprising that the involvement of women in the business world is not evenly distributed in each region.

![Figure 2. Number of Women Entrepreneurs in Java Island in 2019](image)

The involvement of women in the informal business sector is actually quite high, but the ownership of independent formal businesses owned by women is indeed not as large as that of men. Regions on the island of Java that have the number of women who become entrepreneurs in the high category are only 26.9 percent, such as Central Jakarta, Tasikmalaya, Purworejo, Wonosobo, Klaten, Rembang, Jepara, Demak, Pekalongan, Pemalang, Salatiga City, and Tegal City. Furthermore, Yogyakarta Province contributed very high the involvement of women in the business sector, in East Java Province the areas of Ponorogo, Blitar, Kediri, Lumajang, Jember, Mojokerto, Nganjuk, Ngawi, Bojonegoro, Kediri City, Blitar City and Batu City contributed very high participation of women in entrepreneurship especially in the MSME sector. Regions with women's participation as entrepreneurs who are in the low category are recorded at 15.1
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percent which is contributed by the Thousand Islands from Jakarta Province, from West Java it is recorded as Bogor, Sukabumi, Cianjur, Bandung, Garut, Majalengka, Indramayu, West Bandung, and Kota Sukabumi. Meanwhile, from Central Java, areas with low female participation in business ownership are Banjarnegara, Grobogan. Meanwhile, from East Java Province, it was recorded that Situbondo, Sampang, Sumenep. Furthermore, Banten Province recorded that Lebak, Tangerang and Serang City had low participation of women as entrepreneurs.

2. Female Professional Workers in Java Island

Inequality of female professional workers in several areas in Java Island is still happening, although every year the share of women who occupy professional worker positions continues to increase. This condition causes the economic gap experienced by women, on the other hand there is a gap in the wages received between women and men, this difference is also the cause of the ratio of women's per capita expenditures being lower, only 58.26 percent compared to men (BPS, 2020). Generally, the wages received by women are always lower than the wages received by men both in rural and urban areas. There seems to be an increase in the number of women entering the world of professional work in some areas, although there are still many areas where women's representation in professional work is still low.

![Figure 3. Number of Women as Professional Workers in Java in 2019](image)

There are still as many as 9 percent of regions where the level of women's involvement in professional work is low, such as the Province of West Java, which accounts for the highest number, such as Sukabumi, Ciamis, Majalengka, Indramayu, Purwakarta, Bekasi and West Bandung. From Central Java Province, Blora Regency was donated, while East Java was from Pamekasan and Banten Province was only Lebak Regency. Furthermore, the regions that have the contribution of women as professional
workers in the high category are 27 percent, while the regions that are in the medium category are 64 percent very dominant which shows that there are already many regions that have a portion of women's involvement in professional work. The increasing number of women who have adequate educational backgrounds and competencies encourages the share of women to enter available professional jobs.

**a. Classical Assumption**

Test Prerequisite tests that must be carried out before performing multiple linear regression tests through the stages of normality, multicollinearity, autocorrelation and heteroscedasticity tests are presented as follows:

i. **Normality Test**

The distribution of data that is considered normal is a prerequisite for the data to be able to continue the parametric test stage, in this study the pp plot normal test was used to see the normality of the data which can be presented as follows:

![Figure 4. PP Normal Test Plot](image)

Data Regression shows that it is around the diagonal line and follows the direction the diagonal line, based on the test results, it can be interpreted that the data meets the normality assumption so that it is worthy of parametric testing.

ii. **Multicollinearity Test**

The results of the multicollinearity test refer to the tolerance value of more than 0.1 and the VIF value of less than 10, the data is interpreted as meeting the multicollinearity test, the test results are presented as follows:

<table>
<thead>
<tr>
<th>Collinearity Statistics</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>perp.as an entrepreneur</td>
<td>.826</td>
<td>1.211</td>
</tr>
<tr>
<td>perp.as a professional worker</td>
<td>.826</td>
<td>1.211</td>
</tr>
</tbody>
</table>
The test results prove that the processed data meets the required assumptions, all independent variables have a VIF value below 10 while the tolerance value is above 0.1 so that the data deserves to be tested parametrically.

iii. Autocorrelation Test
A good regression model avoids confounding correlations by looking at the provisions on the Durbin-Watson (DW) value on the data being tested with a benchmark if the DW number is between -2 to +2, it means that there is no autocorrelation, the test results are presented as follows:

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.394a</td>
<td>.155</td>
<td>.140</td>
<td>6.23464</td>
<td>1.093</td>
</tr>
</tbody>
</table>

The test results show the DW value of 1.093 which is in the range of -2 to +2 with these results it can be concluded that the data passes the autocorrelation test so that it is feasible to carry out further tests.

iv. Heteroscedasticity Test
Whether or not the assumption of heteroscedasticity in this study uses a regression scatterplot test which refers to the spread of points with an unclear pattern spreading above and below the Y axis, the data passes the heteroscedasticity test. The test results are presented as follows:

**Figure 5 Scatterplot . Heteroscedasticity Test**

The test data looks irregularly spread above and below the Y axis so that it is concluded that the data meets the assumption of heteroscedasticity so that it is feasible to do a regression test.
b. The Contribution of Women as Entrepreneurs and Workers to the HDI of Women in Java

The results of the research analysis using the estimation of model parameters will be tested partially and simultaneously to see the contribution of the independent variables to the HDI of women in Java. This study also conducted a cross-test to see more detailed cases with district/city level analysis tools in achieving the Women's HDI through predictors of women's participation in professional workers and entrepreneurs. The research data that has been processed previously has been tested for parametric prerequisites so that it meets the classical assumption test, the test results can be presented as follows:

**Table 1. Estimated Multiple Linear Regression Model**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Beta</th>
<th>t</th>
<th>sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>44,522</td>
<td>7,760</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>Women as entrepreneurs</td>
<td>0.128</td>
<td>0.171</td>
<td>1.823</td>
<td>0.071</td>
</tr>
<tr>
<td>Women as professional workers</td>
<td>0.409</td>
<td>0.290</td>
<td>3.090</td>
<td>0.003</td>
</tr>
<tr>
<td>R Square</td>
<td>0.155</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>10.642</td>
<td></td>
<td></td>
<td>0.000</td>
</tr>
</tbody>
</table>

Source: data processed, 2021

Partially, the variable of women as entrepreneurs has a positive but not significant impact on the HDI of women in Java, with these results it can be interpreted that the higher the contribution of women in the field of work as entrepreneurs will increase the HDI of women, although the contribution of women is still small in Java Island can be seen from the percentage of HDI for women which is only 17.1 percent. Interestingly, the findings of this study are not in line with the national research conducted by (Abdurrahman & Tusianti, 2021) which stated that there was a positive and significant effect of the variable of women as entrepreneurs on women's HDI. This condition shows that the role of women in economic activities is still low, so that participation in economic improvement has not been seen in quantity. In fact, if women take a role independently in the field of entrepreneurship, it will certainly accelerate the increase in women's income so that it will become a leverage in the economic dimension. This is in line with the explanation of (Abdurrahman & Tusianti, 2021) who stated that in terms of quantity,
women entrepreneurs will significantly contribute to boosting purchasing power on a macro basis in a region.

Managing an independent business for women is a challenge that is not easy, one of which is equal access to limited business capital, both in the form of capital assistance and access to business credit. Constraints faced include complicated administrative requirements and the existence of collateral that is impossible for women business actors to have, in addition to providing credit and financial assistance to women-owned businesses, in fact, it is not gender-affirmative (Ramdlaningrum, et al., 2020). In fact, a World Bank study states that 44 percent of women are willing to borrow to invest in advancing the company they manage, such as buying machines, developing product and expanding marketing compared to male business owners (40 percent) (IFC, 2016). Various studies confirm the business management difficulties faced by SME owners regarding financing with different levels, Informal SMEs at 19 percent, semi-formal SMEs at 10 percent while formal SMEs at 11 percent. Another obstacle faced by SMEs regarding competition is 66 percent, large operational/labor costs account for 37 percent (IFC, 2016). Of course, the challenges faced by women business owners will be even more difficult when running a business in a very tight market like in Java, although the market potential is open, the competitors who play in the same business are also quite busy. So it is very important for women to have adequate education and knowledge before entering the area of entrepreneurship. The contribution of women's education and experience also has a big role in risk taking in managing women's businesses (Faridyah, 2020).

**Table 2. Regional Categories by Participation of Women Entrepreneurs and Women's HDI in 2019**

<table>
<thead>
<tr>
<th>as entrepreneurs</th>
<th>Low (60-69.99)</th>
<th>Medium (60-79.99)</th>
<th>High (&gt; 80)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low (&lt;40 percent)</td>
<td>Count</td>
<td>% of Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>5.0%</td>
<td></td>
<td></td>
<td>18</td>
</tr>
<tr>
<td>8</td>
<td>6.7%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>3.4%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>0.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td></td>
<td></td>
<td></td>
<td>15.1%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Medium</th>
<th>Count</th>
<th>% of Total</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td></td>
<td>0.0%</td>
</tr>
<tr>
<td>36</td>
<td></td>
<td></td>
<td>6.7%</td>
</tr>
<tr>
<td>26</td>
<td></td>
<td></td>
<td>3.4%</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td>0.0%</td>
</tr>
<tr>
<td>69</td>
<td></td>
<td></td>
<td>100%</td>
</tr>
</tbody>
</table>
The findings of the data show that regions that have low participation of women as entrepreneurs can in fact achieve a women's HDI in the high category (3.4 percent) namely the Thousand Islands Regency, but the achievement of low HDI (5 percent) and medium 6.7 percent) dominates. Meanwhile, regions with women's participation as entrepreneurs in the high category have a better contribution to HDI achievement in the high category as much as 11.8 percent, even very high 2.5 percent, namely Salatiga City, Sleman and Yogyakarta City. However, regions that have a moderate level of women's participation as entrepreneurs in fact dominate the achievement of a better HDI in all categories of women's HDI.

Furthermore, the variable of women as professional workers has a positive and significant impact on the HDI of women in Java, the contribution of the variable of women as professional workers dominates the HDI of women with a large contribution of 29 percent. With these results, it can be interpreted that the higher the increase in women entering the professional worker area will increase the HDI of women on the island of Java. The position of women in entering the labor market is certainly different from that of men. In order to enter the labor market, many women have to struggle through the barricades of strict labor market prerequisites. Empirically found three explanatory factors that influence individual decisions to enter the labor market, namely individual characteristics (age, education, gender, marital status), household characteristics (head of household or not) and labor market characteristics (secondary and broadcast economic sectors, population) (Nor and Said, 2016; Anas and Damayanti, 2020).

The narrowing of the gender gap in work participation between men and women is certainly good news, but unfortunately only happens in big cities like Jakarta. The findings of the study by Anas and Damayanti (2020) mention that in the span of 20 years the gender gap has narrowed in 2015 by only 29.34 percent. This means that the level
of discrimination in Jakarta is decreasing, but similar conditions do not occur in other areas. So the task of local governments to encourage women's empowerment in the economic field must be a serious concern, through various strategic programs for women, such as skills, easy access to capital so that women have good quality and women's independence in the economy is realized (Khairuunnisa & Supriatna, 2018).

The success of the empowerment carried out by the local government must consider the age, education and work experience of women (Miskiyah, Ridho, Jauhari, & Purnamasari, 2021). This condition is based on the characteristics of women, there is a double burden to be borne. As a study states that married women are less empowered, so when given empowerment, failure is more likely to occur (Meraj & Sadaqat, 2016). The level of education will contribute to the decision of the owner of the company to employ women in Indonesia, the higher the education of women, the easier it will be to enter the tertiary employment sector compared to the primary and secondary sectors. So this is what causes a shift in the economic structure in Indonesia due to the participation of women workers in the tertiary sector (Wijayanto & Sari, 2019).

The government's homework in gender-based development is still large, in fact in the range of 2010 to 2019 the HDI for women was still below the HDI for men, in 2010 the HDI for men was 70.94, increasing in 2019 to 75.96. While the HDI for women in 2010 was 63.43, there was a continuous increase but the achievement was still below the HDI for men, in 2019 the HDI for women reached 69.18 (Kemen PPPA, 2020). The slow increase in women's HDI is allegedly hit by structural and cultural walls, on the structural path there is still no alignment of policy makers and implementers of gender equality-based development programs, while on the cultural path, patriarchal culture is deeply rooted in people's lives, so that various decisions have not properly considered the needs of women in development participation (Kemen PPPA, 2020). Almost similar to the description, Khairani (2017) mentions three factors that cause gender inequality to remain lasting, namely patriarchal culture, religious teachings which are interpreted to be highly gender-biased and the state hegemony in it is very strong. So it is true that married women are less empowered than unmarried women (Menon & Sharma, 2020).

The backwardness of women in formal work seems to have started since the beginning of their careers, the percentage of young women entering the formal job market is lower than the percentage of young men, the highest percentage of young women who work in the formal sector is achieved by the province of Bali at 44.5 percent, on the island of Java, DKI Jakarta Province is the holder of the highest percentage of young women entering the formal job market (Bappenas, 2019). The proportion of young women who are still low in the formal sector is due to the low participation of young women in the workforce, only a small proportion enter the labor market while the majority of the rest choose to take care of the household. Sadly, the low female labor force participation (TPAK) continues as adults, in 2019 female LFPR (51.89 percent) was far
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behind when compared to men (83.13 percent) (Kemen PPPA, 2020). The low level of education of women will have an impact on the positions that can be obtained in work and the wages that women will be able to get (Castellano, Punzo, & Rocca, 2018). However, there is still a big wall of persistence over the cultural construction that women work in the domestic area, stereotypes, and the concept of marginalization influence work choices that are not as free as men. Barriers to the development of women's performance potential are very limited, only a few are able to pass so that they successfully reach the peak of their careers but with certain consequences for making compromises in the domestic area (Fitriyaningsih & Faizah, 2020).

### Table 3. Regional Categories by Participation of Women Professional Workers and HDI Women in 2019

<table>
<thead>
<tr>
<th>Women as professional workers</th>
<th>Low (&lt;60)</th>
<th>Medium (60-69.99)</th>
<th>High (70-79.99)</th>
<th>Very high (&gt;80)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low (&lt;40 percent)</td>
<td>Count</td>
<td>2</td>
<td>8</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>% of Total</td>
<td>1.7%</td>
<td>6.7%</td>
<td>0.8%</td>
<td>9.2%</td>
</tr>
<tr>
<td>Medium (40 percent-49.99 percent)</td>
<td>Count</td>
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<td>41</td>
<td>26</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>% of Total</td>
<td>3.4%</td>
<td>34.5%</td>
<td>21.8%</td>
<td>5.9%</td>
</tr>
<tr>
<td>High (&gt; 50 percent)</td>
<td>Count</td>
<td>0</td>
<td>10</td>
<td>17</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>% of Total</td>
<td>0.0%</td>
<td>8.4%</td>
<td>14.3%</td>
<td>2.5%</td>
</tr>
<tr>
<td>Total</td>
<td>Count</td>
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<td>59</td>
<td>44</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>% of Total</td>
<td>5.0%</td>
<td>49.6%</td>
<td>37.0%</td>
<td>8.4%</td>
</tr>
</tbody>
</table>
Women's Contribution as Professionals and Women as Entrepreneurs To The Women's Human Development Index (IPM) In Java Island

Regions that have women's participation as professional workers in the medium category dominate the achievement of the Women's HDI in all categories, as much as 34.5 percent are able to enter the medium category, while 21.8 percent are in the high category, even 5.9 percent are able to achieve a very high Women's HDI. Meanwhile, regions that have the participation of female professional workers in the high category are able to contribute 14.3 percent of the HDI women in the high category, as much as 8.4 percent in the medium category and only 2.5 percent in the very high category, namely Surakarta City, Semarang City and Yogyakarta City. What is interesting is that there is one area where the contribution of women's participation as professional workers is in the low category but is able to achieve the HDI of women in the high category, namely Bandung Regency.

The simultaneous contribution shows the model's ability to explain the variation of the female HDI variable is very significant with a coefficient of determination of 15.5 percent, so it can be explained that as much as 84.5 percent of the female HDI is influenced by variables outside the model in this study. Regions that have a high level of gender equality correlate with the level of economic growth that can be achieved by (Nazmi & Jamal, 2018). In addition, the existence of gender inequality is an obstacle to the wheels of the economy, a slow-growing economy will affect income at the national to per capita level (Karoui & Feki, 2018). Gender inequality still occurs in Indonesia due to socio-cultural barriers, work agreements, weak regulations, and a lack of understanding of the rights of women workers (Nuraeni & Suryono, 2021). Women who work in public areas are generally motivated by (1) public perception of productive sector work, (2) the motive for helping the family, (3) the process of self-actualization in the environment, (4) the presence of prestige, a shift in the perspective of women who are Previously it was only considered a complement but now has an equal position with the role of men (Sabariman, 2019).

It is proper that serious attention to gender equality becomes an important component of economic development, broad opportunities for women open up opportunities to improve the welfare of women and their families directly (Abdullah & Morley, 2014). The better gender-based development, the smaller the gender inequality in a region, which will encourage high economic growth and per capita income of a region (Sitorus, 2016); (Sari, 2021). So it is very important that the local government intervenes through sustainable regulations, so that women workers get special rights such as protection, wages, benefits and proper social security, as well as opportunities for self-development through training (Aulya, 2017). This includes the rights of women workers to naturally inherent reproduction rights, such as the right to maternity leave, maternity leave and miscarriage (Tantimin & Sinukaban, 2021).

Women's participation in the development process is very important, participation in various aspects shows development equality in the policy space that is equal in gender.
Women's Contribution as Professionals and Women as Entrepreneurs To The Women's Human Development Index (IPM) In Java Island

Women's participation in the economy can go through the entrepreneurial path or become professional workers, various studies confirm that entrepreneurs have a contribution to economic development and are the key to economic growth (Sarfaraz, Faghih, & Majd, 2014). Women's participation in the economy is indeed closely related to women's ease of access to education on an equal basis with men. Openness to access to education for women is indeed something to be proud of, participation at the higher education level is also getting higher. Young women who attended high school and college level education increased by 2.06 points from 36.61 to 38.67 in the 2015–2018 period. The percentage of young women who are currently pursuing senior high school education is also found to be higher than the percentage of young men. DI Yogyakarta Province is the province with the highest achievement in Indonesia (61.15%) (Bappenas, 2019). Although (Arora, 2012) proves the opposite finding, that increasing access to education and health does not affect the role of women in economic growth.

The spirit of entrepreneurship throughout the world is experiencing a gradual increase, countries that have high entrepreneurial activity are related to the role of entrepreneurial activities carried out by women. This awareness encourages various countries to pay more attention to women's entrepreneurship through policies that are friendly to women entrepreneurs (Nedelcheva, 2012). Opportunities for women entrepreneurs to manage their own businesses are still wide open, according to (Stefan et al., 2021) provide sustainable business development solutions for women entrepreneurs by expanding connections, building network structures, increasing technological capabilities to expand the market. The main key is that digital transformation will significantly affect women's entrepreneurship.

CONCLUSION

This study has statistical evidence that simultaneously the contribution of women as entrepreneurs and professional workers has a positive and significant impact on the Women's Human Development Index (HDI). The greater the contribution of women as entrepreneurs and as professional workers will increase the Women's Human Development Index in districts/cities on the island of Java. Partially, the contribution of women as professional workers is also positive and significant, the greater the involvement of women in professional work will increase the achievement of the Women's Human Development Index. However, the contribution of women as entrepreneurs has not shown a significant contribution in forming the Women's Human Development Index in Java.
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REFERENCE


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