RESEARCH ARTICLE

Estimating the Effect of Government Programs on Youth Entrepreneurship in the Philippines

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Abstract: For decades, the majority of the Philippines' jobless sector is comprised of the youth. This creates the need to craft programs and policies that would enable entrepreneurship among Filipino youths. Using the Community Based Monitor System survey on Accelerated Poverty Profiling among member schools of De La Salle Philippines, we estimate the marginal effects of a multinomial logistic regression that underscore how participation in government-sponsored programs impacts a youth's likelihood to be entrepreneurial. Results suggest a framework for improving program design and policy implementation to support youth entrepreneurial undertakings.

Keywords: business studies, entrepreneurship, quantitative methods, youth welfare, social policy

JEL Classifications: J13, L26, M51

Although the global economic outlook in 2017 and 2018 were optimistic and is expected to continue accelerating in the forthcoming years due to greater investments and trade, it is not necessary that this be accompanied by job growth. Moreover, the recent global crises ensued uneven economic recovery with the youth as the most affected by slow economic recovery. According to the International Labor Organization [ILO] (2017), global youth unemployment slightly increased by 13.1% in 2017, although the anticipated 70.9 million unemployed youth is still below the crisis peak of 76.7 million in 2009. Moreover, according to ILO (2017), "youth labor force participation declined sharply in the past 20 years" (p. 1). That is, youth labor force contracted by 34.9 million between 1997 and 2017. Likewise, through these years, the fraction of youth who are active in the labor market (i.e., employed or actively seeking for work) dropped to 45.7% from 55.0%. Such is the case because the more youth are in school. ILO (2017) argued that its

immediate repercussion is the "reduced availability of human resources for global production and greater dependency on productive resources" (p. 1).

The youth concept is varied. In Singapore, it refers to individuals aged 15 to 35 years. In Ireland, youth are those with age 10 to 25, while in South Asia, it is 18 to 35. In the Philippines, youth are those aged 15 to 30, as defined by the Youth in Nation-Building Act of 1994 (Republic Act [R.A.] 8044, 1995). On the other hand, the United Nations (UN) defines those 15 to 24 as youth. Using these definitions, we refer to youth unemployment as the share of the labor force whose ages fall from 15 to 30 without work but available for and actively seeking employment.

According to the Philippine Department of Labor and Employment (DOLE) as cited by Corrales (2014), unemployed Filipino youth accounts for the majority of the economy's jobless sector. Moreover, Corrales (2014) quoted the Labor Force Survey (LFS) conducted by the Philippine Statistical Authority (PSA), wherein "1.456 million Filipino youths, who belong to the 18 to 24 age bracket are jobless" (par. 2). That is, "while youth unemployment decreased by 1.1% from 16.8% in April 2013 to 15.7% in April 2014, it still accounts for more than half of the 2.9 million unemployed Filipinos in the country" (Corrales, 2014, par. 3). More recent statistics reported by Cortez (2018) indicated "youth unemployment improved from 17.6% in 2010 to 14.4% in 2017 but the Bureau of Local Employment (BLE) observed that unemployment is still rampant within the youth sector" (par. 5). In fact, the PSA's LFS for July 2018 as cited by Cortez (2018) showed that there were 1.040 million unemployed youth (i.e., aged 15 to 24).

Hence, it can be construed that half of the unemployment is likely to decrease if youth unemployment is mitigated. To do this, there is a need to increase the employability of the youth by providing them access to technical and life skills training demanded by employers. It is also vital to exploit the entrepreneurial propensity of the youth so that they too can contribute in creating job opportunities.

This prompts the need to enable Filipino youths to be entrepreneurial. Policymakers can create interventions to provide the youth with opportunities to meaningful income-generating activities. One of DOLE's thrusts is on youth employment. DOLE is delegated to provide the youth with access to skills training and on-the-job opportunities that would increase their likelihood of getting employed. However, there is a need to foster the entrepreneurial mindsets and skills of both the youth and disadvantaged people to combat youth unemployment.

As such, we explore the alleviation of youth unemployment through entrepreneurship from the Community Based Monitoring System (CBMS) survey data. We address the research question: How does availing government in-aid programs influence a youth's chances of being entrepreneurial? To address this, we have these objectives:

- To estimate the probability that an individual will be employed or be entrepreneurial through government in-aid programs;
- To provide policy frameworks on how to motivate the youth to be entrepreneurs.
- To create policy recommendations targeted towards youth entrepreneurship, culled from the empirical analysis, are presented to curb youth unemployment through entrepreneurship.

The Construct of Entrepreneurship

Who is an Entrepreneur?

Entrepreneurship is the examination of how, by whom, and with what effects opportunities to create future products are discovered, evaluated, and exploited. Entrepreneuring indicates efforts to bring about new economic, social, institutional, and cultural environments through the actions of individual(s). Trofin (2012) stressed that elements of entrepreneurship are entrepreneurs who create new businesses at risk pressure to obtain profit. Meanwhile, Ahmad and Hoffman (2007) defined entrepreneurial activity as the enterprising human action in pursuit of value generation, through the creation or expansion of economic activity, by exploiting new products, processes, or markets.

The PSA, and adapted by CBMS, operationalized entrepreneurial activity as any economic activity engaged in by any household member as an operator. This includes family-operated activities, single proprietorship, or partnership. Partnerships, corporations, associations, formally organized, and registered with the Securities and Exchange Commission are excluded. Persons in private practice of profession or working on account with or without a regular helper are considered operating an enterprise as a business.

The Global Entrepreneurship Monitor (GEM, n.d.) provided an encompassing definition of entrepreneurship. GEM defined entrepreneurship as "any attempt at new business or new venture creation, such as self-employment, a new business organization, or the expansion of an existing business, by an individual, a team of individuals, or an established business" (par. 2).

GEM (n.d.) took an expansive view of what it recognizes business activity to be. That is, it is not limited to newly registered enterprises because it adapts the occupational perspective of entrepreneurship, even though it looks further than individuals officially registered as self-employed.

GEM (n.d.) also viewed entrepreneurship from a behavioral perspective by identifying employees within organizations who behave entrepreneurially— "intrapreneurship or corporate entrepreneurship." It also zoomed in on the phase that combines the stages of nascent entrepreneurship and owning-managing a new enterprise. This combination is called "early-stage entrepreneurial activity."

Driving Factors of Entrepreneurial Propensity

Studies on the factors of entrepreneurial propensity include the works of Mukundan and Thomas (2016); Remeikiene, Startiene, and Dumciuviene (2013); Peng, Lu, and Kang (2012); Fini, Grimaldi, Marzocchi, and Sobrero (2009); Pruett, Shinnar, Toney, Lopis, and Fo (2009); Turker and Selcuk (2009); and Ajzen (1991). Overall, entrepreneurship is increasingly becoming important to policymakers who aim to strengthen youth disposition towards entrepreneurship through education and various programs.

In-Aid Programs That Support Entrepreneurship

In line with studies indicating a positive impact of programs on entrepreneurship, DOLE launched programs that support entrepreneurship.

- Bureau of Working Conditions (BWC) Work Improvement in Small Enterprises (WISE) aims to improve productivity through low-cost improvements in working conditions in small and medium enterprises.
- National Wages and Productivity Commission (NWPC) ISTIV¹ Bayanihan is a training

program and networking intervention for Barangay Micro Business Enterprises (BMBEs) that aids the growth of micro-enterprises through the enhancement of the entrepreneurs' management skills.

- DOLE Integrated Livelihood Program and Emergency Employment Programs (DILEEP) provide grant assistance for capacity building on livelihood for the poor, vulnerable, and marginalized workers.
- Special Program for the Employment of Students (SPES) aims to help students pursue their education by providing income through employment during vacations.
- Youth Entrepreneurship Support (YES) Project engages in partnerships with government agencies and educational institutions to produce resourceful and self-reliant entrepreneurs.
- Youth Education-Youth Employability (YE-YE) covers the education-to-employment needs by education and endowment of proper work habits.

The "Youth Entrepreneurship Act" (R.A. 10679, 2015) supports and complements these programs by promoting the sustained development of young Filipinos whose aptitude in finance and entrepreneurship shall be honed through specialized training programs. As per the Act:

It is hereby declared the policy of the State to promote the sustained development of young Filipinos whose aptitude in skill in the field of finance and entrepreneurship shall be encouraged and honed through education and specialized training programs. Towards this end, the State shall establish, maintain, and support a complete, adequate, and integrated system of education and training to encourage the entrepreneurial spirit among our youth as well as support and promote the growth of young entrepreneurs nationwide. **(§** 2)

One of the most salient provisions of R.A. 10679 (2015), in line with the shift towards a K-12 educational system, is the role of the Department of Education (DepEd), the Commission on Higher Education (CHED), and the Technical Education and Skills Development Authority (TESDA). According to the Act:

the DepEd, the CHED, and the TESDA shall partner with government financial institutions, banks, national government agencies, local government units, nongovernment organizations, foundations, private corporations, and individuals, foreign or local, who are interested to support entrepreneurship education by launching small enterprise incubation programs with them and making available to young entrepreneurs funding and support for the incubation of an enterprise project. (§ 7)

The Accountancy, Business, and Management (ABM) strand of the senior high school program, of the K-12 educational system of the DepEd, is a good platform for the government to promote and execute its programs on entrepreneurship.

Operational Framework and Methodology

We employed a multinomial logistic regression model—the simplest unordered multinomial model that permits regressors to vary across alternatives (Cameron & Trivedi, 2005). Marginal effects were determined afterward, which are computed as a separate marginal effect on the probability of each outcome, and these marginal effects sum to zero since probabilities sum to one.

The model captures the following categorical outcomes: (1) salaried (i.e., with work, employed); (2) self-employed (i.e., without work, with business, entrepreneurial); or (3) non-employed (i.e., without work, without business, unemployed, unproductive). Given exogenous variables indicating whether a youth has availed of government in-aid support, we assessed if these facilitate a higher likelihood of being entrepreneurial. Our sample is composed of individuals aged 15–30, who are members of the labor force.² We excluded individuals who are both engaged in employment and entrepreneurship.

We construed from the results whether the youth prefer traditional employment or entrepreneurship as argued by Levine (2011) or vice-versa (Constable, 2015). According to Preston (2014, par. 1), "not everyone can handle the pressures of being an entrepreneur." In the Philippines, it can be observed that in times of financial and job difficulties, the youth resort to entrepreneurship as a temporary solution to unemployment. When meaningful employment becomes available, they quit being an entrepreneur.

Model Specification

Equation 1 represents our empirical model. We employed Maximum Likelihood Estimation (MLE) on the CBMS Accelerated Poverty Profiling dataset, conducted in 2013, whose samples are individuals from the different schools of De La Salle Philippines³ (DLSP), who are part of the labor force. The survey keeps information on the number of households who availed government-sponsored programs.

$$Y_{i} = \theta_{0} + \theta_{1}AVWISE_{i} + \theta_{2}AVNWPC_{i} + \theta_{3}AVDPLK_{i} + \theta_{4}AVDPEE_{i} + \theta_{5}AVSPES_{i} + \theta_{6}AVYESP_{i} + + \theta_{7}AVYEYE_{i} + \zeta_{i}$$

$$(1)$$

Endogenous variable: Career status – **Employment or entrepreneurship?** The dependent variable, *Y*, is a dummy variable representing an individual *i*'s employment status and entrepreneurial incidence. It assumes a value of 1 if an individual is (1) salaried (with work, employed); (2) self-employed (without work, with business, entrepreneurial); or (3) non-employed (without work, without business, unemployed, unproductive).

Exogenous variable: Training/entrepreneurial programs. The predictors of the likelihood that an individual is employed or entrepreneurial are listed in Table 1.

Results and Discussion

Descriptive Statistics

Among the youth sample with identified job status in the labor force, Table 2 shows that only 4.17% of the youth are non-employed. It can be inferred that they may either be in school or looking for a job. Meanwhile, of the 86.12% of the salaried youth, majority (62.4%) are seasonally employed. Meanwhile, 9.71% are self-employed. It can be seen that the youth are mostly employed rather than entrepreneurial.

Among the youth sample, Table 3 shows the distribution that availed of programs on entrepreneurship. Across all programs, there is a

Table 1. The Exogenous Variables

VariableDescriptionAVWISE _i Dummy variable indicating whether an individual availed the BWC KAPATIRAN WISE-TAV. Assumes a value of 1 if program was availed and 0 otherwise.AVNWPC _i Dummy variable indicating whether an individual availed of the NWPC ISTIV Bayanihan program. Assumes a value of 1 if program was availed and 0 otherwise.AVDPLK _i Dummy variable indicating whether an individual availed of the DILEEP – Livelihood or Kabuhayan program. Assumes a value of 1 if program was availed and 0 otherwise.AVDPEE _i Dummy variable indicating whether an individual availed of the DILEEP – Emergency Employment program. Assumes a value of 1 if program was availed and 0 otherwise.AVDPEE _i Dummy variable indicating whether an individual availed of the Special Program for the Employment of Students. Assumes a value of 1 if program was availed and 0 otherwise.AVSPES _i Dummy variable indicating whether an individual availed of the Youth Entrepreneurship Support program. Assumes a value of 1 if program was availed and 0 otherwise.AVYESP _i Dummy variable indicating whether an individual availed of the Youth Entrepreneurship Support program. Assumes a value of 1 if program was availed and 0 otherwise.AVYESP _i Dummy variable indicating whether an individual availed of the Youth Education – Youth Employability program. Assumes a value of 1 if program was availed and 0 otherwise.AVYEYE _i Dummy variable indicating whether an individual availed of the Youth Education – Youth Employability program. Assumes a value of 1 if program was availed and 0 otherwise. ζ Stochastic disturbance term that captures all other variables not included in the model.		
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	ζ_i	Stochastic disturbance term that captures all other variables not included in the model.

Table 2. Descriptive Statistics for Career

Career	Number of Individuals	%
Salaried	5,127	86.12
Permanent employment	1,784	34.80
Short-term, seasonal, casual employment	3,199	62.40
Worked on different jobs on day to day or week to week	130	2.54
Unclassified	14	0.27
Self-employed	578	9.71
Non-employed	248	4.17
Total	5,953	100.0

minuscule number of youth samples that have availed. Those who did not avail are mostly employed.

Table 4 indicates that the highest average cash wage is from permanent employment, followed by being entrepreneurial. There is also a substantial difference between the mean cash wage of those salaried and selfemployed. This illustrates youth preference towards employment relative to entrepreneurship. Being an employee is low-risk where one is solely responsible for assigned work responsibilities during business hours. This is ideal for individuals who prefer a higher degree of career stability and predictability. For those who thrive under the high-pressure situation, being an entrepreneur may be advantageous—accountable for all costs and risks accompanying an enterprise's start-up and operations.

For those who have permanent employment, this racks the highest mean cash wage at PHP99,032.55 (approximately USD2,000.00) followed by short-term, seasonal, and casual employment (PHP62,668.22 or approximately USD1,300.00), and entrepreneurial activities (PHP24,882.40 or approximately USD500.00). Working on different jobs on day to day or week to week results to a mean cash wage of PHP42,975.05 (approximately USD900.00), which is still higher by PHP18,152.65 (approximately USD400.00) than what one would get, on average, in an entrepreneurial venture. Hence, it can be construed that the mean wage differential between employment and entrepreneurship is not enticing enough for the youth to switch to being entrepreneurial.

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Various Selected In- Aid Programs	Μ B	WC ISE	NN ISI	VPC TIV	IIC	JEEP JP	DI	LEEP JEP	S	PES	Y	ES	YE	-YE
Status	Z	%	Z	%	Z	%	Z	%	Z	%	Z	%	Z	%
Availed	S	0.08	6	0.15	15	0.25	9	0.10	4	0.07	7	0.12	4	0.07
Salaried	5	100.00	6	100.00	13	86.67	6	100.00	3	75.00	7	100.00	4	100.00
Permanent employment	7	40.00	٢	77.78	6	69.23	б	50.00	С	100.00	7	28.57	С	75.00
Short-term, seasonal, :asual employment	б	60.00	7	22.22	3	23.08	ę	50.00	0	0.00	5	71.43	1	25.00
Worked on different obs on day to day or week to week	0	0.00	0	0.00	-	7.69	0	0.00	0	0.00	0	0.00	0	0.00
Self-employed	0	0.00	0	0.00	7	13.33	0	0.00	1	25.00	0	0.00	0	0.00
Von-employed	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Did not avail	465	7.81	461	7.74	455	7.64	464	7.79	466	7.83	463	7.78	466	7.83
Salaried	407	87.53	403	87.42	399	87.69	406	87.50	409	87.77	405	87.47	408	87.55
Permanent employment	186	45.70	181	44.91	179	44.86	185	45.57	185	45.23	186	45.93	185	45.34
Short-term, seasonal, casual employment	207	50.86	208	51.61	207	51.88	207	50.99	210	51.34	205	50.62	209	51.23
Worked on different obs on day to day or week to week	14	3.44	14	3.47	13	3.26	14	3.45	14	3.42	14	3.46	14	3.43
self-employed	36	7.74	36	7.81	34	7.47	36	7.76	35	7.51	36	7.78	36	7.73
Von-employed	22	4.73	22	4.77	22	4.84	22	4.74	22	4.72	22	4.75	22	4.72
Vo response	5,483	92.10	5,483	92.10	5,483	92.10	5,483	92.10	5,483	92.10	5,483	92.10	5,483	92.10
Salaried	4,715	85.99	4,715	85.99	4,715	85.99	4,715	85.99	4,715	85.99	4,715	85.99	4,715	85.99
Permanent employment	1,596	33.85	1,596	33.85	1,596	33.85	1,596	33.85	1,596	33.85	1,596	33.85	1,596	33.85
Short-term, seasonal, sasual employment	2,989	63.39	2,989	63.39	2,989	63.39	2,989	63.39	2,989	63.39	2,989	63.39	2,989	63.39
Worked on different obs on day to day or week to week	116	2.46	116	2.46	116	2.46	116	2.46	116	2.46	116	2.46	116	2.46
Unclassified	14	0.30	14	0.30	14	0.30	14	0.30	14	0.30	14	0.30	14	0.30
Self-employed	542	9.89	542	9.89	542	9.89	542	9.89	542	9.89	542	9.89	542	9.89
Non-employed	226	4.12	226	4.12	226	4.12	226	4.12	226	4.12	226	4.12	226	4.12
Total	5,953	100.0	5,953	100.00	5,953	100.00	5,953	100.00	5,953	100.00	5,953	100.00	5,953	100.00

Cash Wage	Number of Individuals	%	Mean	Standard Deviation	Minimum	Maximum
Salaried	5,127	86.12	74,751.76	84,554.95	0	2,616,000
Permanent employment	1,784	34.80	99,032.55	103,538.60	0	2,616,000
Short-term, seasonal, casual employment	3,199	62.40	62,668.22	69,655.56	0	2,400,000
Worked on different jobs on day to day or week to week	130	2.54	42,975.05	51,053.08	0	493,200
Unclassified	14	0.27	36,842.86	29,761.75	0	84,000
Self-employed	578	9.71	24,822.40	56,622.96	0	672,000
Non-employed	248	4.17	2,472.53	12,998.75	0	129,600
Total	5,953	100.00				

Table 4. Descriptive Statistics for Cash Wage

Table 5. Marginal Effects After Multinomial Logistic Regression

Variables	Margin	al effects for each out	come (N=474)
variables	Salaried (1)	Self-employed (2)	Non-employed (3)
Predicted Probability	0.8700	0.0855	0.0445
$AVWISE_i(*)$	0.0213	-0.0271	0.0058
$AVNWPC_{i}(*)$	0.1830	-0.1571	-0.0259
$AVDPLK_{i}(*)$	-0.0291	0.0780	-0.0489
$AVDPEE_i(*)$	0.0376	-0.0530	0.0154
$AVSPES_i(*)$	-0.2564^	0.2139*	0.0425
$AVYESP_i(*)$	0.0504	-0.0395	-0.0108
$AVYEYE_i(*)$	-0.0159	-0.0026	0.0185

^ Statistically significant at the 1%

* Statistically significant at the 5%

 \sim Statistically significant at the 10%

(*) dy/dx is for a discrete change of dummy variable from 0 to 1

Marginal Effects After Maximum Likelihood Estimation

Table 5 shows the marginal effects after MLE. It can be seen that the SPES statistically and significantly decreases the probability that a youth is salaried but increases the probability that a youth is entrepreneurial. Note that SPES is mandated to provide extra income to poor students by encouraging them to work during vacations. Their experience working for somebody at a young age might have fuelled their desire to be entrepreneurs.

All other programs such as *AVWISE*, *AVNWOC*, and *AVYESP* are statistically insignificant in influencing

the likelihood of being salaried and self-employed. Although most programs either increases the likelihood of being employed and entrepreneurial, and reduces the likelihood of being non-employed, they are not significant enough to set in motion changes in an individual's status quo.

Results call for the need to evaluate programs in terms of design, coverage, and results. The statistical insignificance of the results does not necessarily mean that programs are useless. There is a need for empowerment so programs can reach a wider set of beneficiaries, allowing empirical evidence to see its impact on a larger scale.

Conclusion

In addressing our research problem and objectives, we utilized the CBMS Accelerated Poverty Profiling dataset. It has been evident that for individuals aged 15 to 30 in the labor force who are employed, most of them are in short-term, seasonal, and casual employment. A minority is entrepreneurial.

The government initiated a number of programs to support both entrepreneurship and employment. We found that both entrepreneurial and employment assistance packages can increase the probability of employment and entrepreneurship, and reduce non-employment. However, the desired positive effects of entrepreneurial training have not been effectively translated into an increase in the number of entrepreneurs. This is the opportunity cost of being engaged in a short-term, seasonal, and casual employee making entrepreneurship not lucrative. The benefits of entrepreneurship are not immediate. Rapid, but not necessarily sufficient income, is probably more palatable to the youth. These entrepreneurial programs need to be re-evaluated to see how they can be more effective if their focus is in increasing the incomes (much higher than what they would usually acquire from short-term, seasonal, and casual work) of the vouth.

Levels of entrepreneurship are low because permanent employment brings about higher incomes. Emphasizing on the importance of entrepreneurship, there is a necessity to upsurge the participation of the youth in government-sponsored programs that nurture entrepreneurial attitude. Since these programs already increase the chances of employment, it must also make entrepreneurship more enticing through the creation of an entrepreneurial ecosystem that would encourage the youth to become entrepreneurs.

Of equal importance, such programs must be complemented by the commitment of the government, regardless of the governing administration, to generate meaningful employment and entrepreneurial opportunities to address youth unemployment. New program designs must consider the balance between the short and long term objectives—address the immediate needs and subsequently address the larger goal of eradicating youth unemployment. With this, the government can mitigate abysmal implementation and waste of budget on such programs. Likewise, these types of programs should be planned in such a way it will plead the commitment of the incumbent and incoming administrations to continue whatever progress previous programs have initiated and achieved. This will only require one program design and will avoid redundant and inefficient implementation.

Specifically, government-sponsored entrepreneurship programs must have wider breadth and scope to reach the youth while they are still in school. The ABM strand of the senior high school program of DepEd is a platform to market and implement entrepreneurship programs accompanied by a strong partnership with the industry. Program reach must be maximized to harness further the entrepreneurial mindset, which generates successful and sustainable youth entrepreneurs.

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Notes

¹ ISTIV stands for I - Industrious, S - Systematic, T- Timeconscious, I - Innovative, and V - with strong Value for work.

² Labor force participation refers to the population 15 years old or over who are either employed or unemployed based on the definitions of the Philippine Statistical Authority (https://psa.gov.ph/content/technical-notes-labor-forcesurvey-lfs).

³ Participating schools: DLS – College of St. Benilde, DLSU – Dasmarinas, DLSU – Manila, De La Salle Lipa, La Salle University – Ozamiz, and University of St. La Salle – Bago.

References

- Ahmad, N., & Hoffman, A. (2007). A framework for addressing and measuring entrepreneurship. Retrieved from http://www.oecd.org/std/business-stats/39629644. pdf
- Ajzen, I. (1991). The theory of planned behavior. Organizational Behavior and Human Decision Processes, 50, 179–211.

- Cameron, A.C., & Trivedi, P.K. (2005). *Microeconometrics: Methods and application*. UK: Cambridge University Press.
- Constable, K. (2015, January 05). 5 reasons you should consider becoming an entrepreneur. *Entrepreneur*. Retrieved from http://www.entrepreneur.com/ article/241175.
- Corrales, N. (2014, June 18). DOLE: Jobless youths account for half of PH's unemployed sector. *Inquirer.net*. Retrieved from https://newsinfo.inquirer.net/612180/dolejobless-youths-account-for-half-of-phs-unemployedsector?utm expid=.XqNwTug2W6nwDVUSgFJXed.1.
- Cortez, G.M. (2018, October 12). DOLE agency flags lack of inclusiveness in youth employment despite job growth. *BusinessWorld*. Retrieved from https:// www.bworldonline.com/dole-agency-flags-lack-ofinclusiveness-in-youth-employment-despite-jobgrowth/.
- Fini, R., Grimaldi, R., Marzocchi, G.L., & Sobrero, M. (2009). The foundation of entrepreneurial intention. Paper presented on the Summer Conference 2009 on CBS – Copenhagen Business School, Solbjerg Plads 3, DK2000 Frederiksberg, Denmark. Retrieved from http://www2.druid.dk/conferences/viewpaper. php?id=5955&cf=32.
- Global Entrepreneurship Monitor. (n.d.). *How GEM defines entrepreneurship*. Retrieved from http://www.gemconsortium.org/wiki/1149.
- International Labour Organization (ILO). (2017). *Global* employment trends for youth 2017. Geneva: International Labour Office. Retrieved from https://www.ilo.org/ wcmsp5/groups/public/---dgreports/---dcomm/---publ/ documents/publication/wcms_598669.pdf.
- Levine, C.C. (2011, June 13). Why traditional employment is better than entrepreneurship. *Forbes*. Retrieved from http://www.forbes.com/sites/work-inprogress/2011/06/13/why-traditional-employment-isbetter-than-entrepreneurship/

- Mukundan, R., & Thomas, S. (2016). Discriminating entrepreneurship intentions: Empirical study of young Indian IT professionals. *International Journal of Entrepreneurship and Innovation Management, 20*(3/4), 147-159.
- Peng, Z., Lu, G., & Kang, H. (2012). Entrepreneurial intentions and its influencing factors: A survey of the university students in Xi'an, China. *Creative Education*, 3(Supplement), 95–100.
- Preston, J. (2014, September 25). *Richard Branson: My thoughts on entrepreneurship v steady employment*. Retrieved from http://www.virgin.com/entrepreneur/ richard-branson-my-thoughts-on-entrepreneurship-vsteady-employment.
- Pruett, M., Shinnar, R., Toney, B., Lopis, F., & Fox, J. (2009). Explaining entrepreneurial intentions of university students: A cross-cultural study. *International Journal of Entrepreneurial Behavior & Research*, 15(6), 571–594.
- Remeikiene, R., Startiene, G., & Dumciuviene, D. (2013). Explaining entrepreneurial intention of university students: The role of entrepreneurial education. In Active citizenship by knowledge management & innovation: Proceedings of the Management, Knowledge and Learning International Conference, held on June 19–21, 2013, in Zadar, Croatia (pp. 299–307). Retrieved from http://www.toknowpress.net/ISBN/978-961-6914-02-4/ papers/ML13-258.pdf.
- The Youth In Nation-Building Act (R.A. 8044), H.B. 11614, S.B. 1977. (1995).
- Trofin, M.I. (2012) Entrepreneur: Between the old and the new. Portrait of Romanian entrepreneur. *Studies and Scientific Researches* (Economics Edition). Retrieved from http://sceco.ub.ro/index.php/SCECO/article/ view/96/96.
- Turker, D., & Selcuk, S.S. (2009). Which factors affect entrepreneurial intention of university students? *Journal* of European Industrial Training, 33(2), 142–159.
- Youth Entrepreneurship Act (R.A, 10679), H.B. 5603, S.B. 2212, 16th Cong. (2015).