

ECONOMIC GROWTH, WORK OPPURTUNITY AND EDUCATION POLICY

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Abstract

This economic growth was the result of economic development that create increasing output from each input both fact input of natural production , capital and skilled labor. The growth of input aggregately will create revenue of aggregate consumption and finally will open work opportunity. Economic growth include national growth, sector groth and competition growth. Therefore it needed the planning and education policy with approach such as: social demand approach, needs for national approach and development generation approach. Especially for high education it was necessary to emphasize on preparation because of nation leadership and mastering the development of science and technology of the future. One effort that can be done was by refreshing leadership insight and superiority.

Introduction

The growth of economic as result of economic development essentially was such. Community transformation process from such condition to another conditions that more approaching the needed community order. In this transformation process there were two matters that must give any attention namely the continuity in such sudea and changes (growth) in another side. Both that aspects must run balance and harmonious according to Wardiman Djajanegara (1996).

The economic growth creates out icreasing for any input of natural production factor, workface, morale and skill. Aggregate output growth, make the increasing of aggregate growth, ceteris paribus of demand increasing of consumption and then the increasing of production volume with periodically assumption of unlimited production capacity (the supply of unlimited production factors and technology) and extra workface and capital goods (like machine) .

By assumption that technical coefficients from those production factors in the

constant production process and growth rate of production factors offering amounts in the local market was slower than the demand rate that caused the real value of workforce (wage) and capital (interest rate) to increase. The economic growth can be shown from the growth result in each region (province). If the economic growth between provinces is increasing simultaneously, of course it will increase work opportunity and community revenue and be accompanied by the increasing work opportunity and community revenue and be accompanied by the increasing use of another production factor (capital or skill labor). According to Tambunan (1996 : 207): “In the economic growth theory, the factors that influence economic growth rate in such region, can be grouped as factors from individual (supply growth factor) such as technology progress, improving of human resources, invention of new materials and demand factors such as the increasing of revenue and consumers taste “. From offering factors for the economic growth, the most important was the reform capability of human resources to achieve aimed economic growth. In this relationship , education policy was necessary to produce active and skilled graduates in the supporting economic growth especially and economic development generally.

Analysis of economic growth

Analysis of economic growth must be done from many methods, one of them was shift-share (SS) analysis. This technique is based on the basic assumption or influenced by three major components namely :

1. National growth

The output or revenue change (another indicators such work opportunity) of such region caused by national changes generally the changes of national economic policy, or the changes in the factors that influence all region economic and sectors uniformly.

2. Sector growth

The growth emerges because of the difference of final output demand , the raw materials supply, sector policy and behaviour and performance of market structure in each national sector.

3. The growth of regional competitiveness

This growth occurred because the output increasing or decreasing or revenue of such region was faster/slower than another region. It is determined by comparative advantage, access to market input and output support from social and economic infrastructure institutional and national economic policy.

This analysis known by the value-added changes of PDRB of such sector (i) in such province (j) between two periods namely basic period (D) and t period, with formulation :

$$\Delta Q_{ij} = Q_{ij}^t - Q_{ij}^d \dots\dots\dots (1)$$

In this analysis i = 1 - 4 (four major sector = agriculture sector, manufacture, mining and services) , while j = 1-10 (ten provinces) .

The formulation can be extended become :

$$\Delta Q_{ij} = Q$$

The equation (2) indicated that output growth of such sector in such region could be categorized in three growth components that have been discussed previously.

$$PR_{ij} = Q \{ \dots\dots\dots \} \text{ Regional share (national growth component)..... (3)}$$

$$PS_{ij} = Q \{ \dots\dots\dots \} \text{ Proportional shift (industry Mix component)(4)}$$

$$DS_{ij} = Q \{ \dots\dots\dots \} \text{ Different shift (competitive Effect component)(5)}$$

Information :

- Y_0 and $Y_1 =$ PDB (national output) , respectively in the basic year (t=0) t period.
- Q and $Q =$ PDRB (regional output) from I sector at j province,
- respectively on the basic year and t period .
- Q and $Q =$ National output of sector I (PDB from I sector) ,
- respectively in the basic period and t period

Statistically , the equation (4) and (5) in the deviation form , where Y_1 and Y_0 (or Y_1/Y_0 ratio) determined as average value from , respectively, Q and Q (or

Q/Q ratio); this later variables was average value from Q and Q for every province. Therefore, total of every equation (4) and (5) for all sector and province in Indonesia was zero :

$$\sum\sum PS_{ij} = \text{and } \sum\sum DS_{ij} = \dots\dots\dots(6)$$

Where the merger of equation (3) until (5) and equation (2) become :

$$\Delta S = PR_{ij} + PS_{ij} + DS_{ij} \dots\dots\dots (7)$$

Then obtained

$$\sum\sum \Delta S = \sum\sum PR_{ij} = \sum\sum Q \{ \dots\dots\dots \} \dots\dots\dots(8)$$

SS analysis can divided to be two parts : share analysis with using equation (3) and shift analysis with using equation (4) and (5). This study will estimate the values of three equations above for four major sectors in each province.

a. Analysis of Regional Share (PR)

In this study, the using of PR analysis was to saw the structure of relative position of provinces in related with national economic growth as the indicator can be used output value, added value, income or workforce that used. In another word, sub method from this SS analysis measure the proportion from. For instance , added value total or national revenue total according to province. In this study, province PDRB will be used as the indicator. Therefore, it futher found that one or some province has high output share (PDRB) in the national output total (pdb), those province will be called that they have high contribution toward the creating and growth of national PDB. In this study, this sub method analysis also used to saw the contribution of four important sector, namely agriculture, mining, manufacture and service in all ten provinces in output creation and growth in that sector nationally.

b. Shift Analysis

In the regional growth analysis , shift component or changes were more important that PR component . Total shift comprises as two-sub component,

namely the proportionality shift and different shift. Proportionality shift or PS (equation 4) measure how far the output growth rate in such sector in such different region with output growth rate in the same sector at national level. So, PS actually indicated the economic structure and it's changed in such region. Different shift or DS (equation 5) occurred if the output in such sector in such region has higher growth rate than output growth rate in the same sector at another region. The different in that output growth rate mirrored the different in the location advantage position in such region. In the other word. DS indicated the location advantage position in such region that has positive impacts toward the output growth in one or some sectors in the region. Such sector was higher (lower) that the output growth rate in the same sector in another province.

Since this analysis method introduces in early 1960s, there were so many regional studies used this method and there were a lot of critics and modification that done toward this nalaysis method. Model that use shift analysis based on such assumption that economic comprises of market (output and input) with high competition level and economic activities were based by motivation of profit maximization. Through this approach, the growth such sector and economic in such province can be explained through the growth of production factors, namely work force, capital and technology progress.

Empirically can be expressed that the growth of Indonesian economic in the years after crisis showing bad in the period 1999-2003. The economic growth of Indonesia is always under 5 %. Year 1999=0.79% , year 2000 = 4.29% ; year 2001 = 3.45 % , year 2002 = 3.69% and year 2003 = 4.11%.

(Bank of Indonesian, June 2004)

~ If compared with another countries that experienced crisis. (South Korea, Malaysia, and Thailand) the average of Indonesian economic growth in that period was the lowest.

~ The Indonesian economic growth more driven by consumption, not investment. The investment activities in last 4 years tend to decrease. PMDN decrease from Rp. 92.327,7 billion in the year 2000 become Rp. 48.484,8 billion in year 2003. PMA decrease from US\$ 15,413.1 million to US\$ 13,207.2 million in year 2003. The worse of investment climate influenced by any factor namely : complex business establishment procedure, approval and investment license that not transparent, there were not legal certainty, and labor condition (low work ethuc, many demonstration, etc.)

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From the economic growth data, of course it will influence higher unemployment, it means that there were little work opportunity. Unemployment coverage many kind of employment according to Adi Sasono (1989,2). This unemployment problems and half-unemployment will always be the mains problem of Indonesian development.

Based on the literature review the unemployment major from were the excess of workforce supply that useless. Unemployment comprise of four categories according to definition of East Java and province workforce (1999;4) namely :

1. Jobless people
2. People in the work age that wants to work
3. People who work less then time they needed because of something outside their authority
4. People who work for job under their own skill on their potential.

In the fourth group can include the people who have low work productivity under their capability, both because they forced to accept the job under their qualification and because the management was not efficient.

In the some surveys in Indonesia category 1 and 2 usually calculated as full unemployment. In the population census that has been done in Indonesia they called as work seeker., such term that has different connotation. The category 2 consists of jobless people people who not try to find work because they think that they were not any vacamcies fot them. They calculated as discourage worker. They included in-group 3 as half unemployment, they are usually work just a half time of normal work or under it. Category 4 in foreg\ign book called “mismatched” / They were people who work on the job that under their skill or education. For instace, an engineer just works in the job for senior high scholl graduate. For this category there were not any numbers.

Unemployment was people who not have job and tray to find it. They divided on such factors. Based on the willingness,they differentiated as forced unemployment and voluntary employment. They forced unemployment was the people that not have job although they will accept lower wage than normal prevailing vage. The voluntary unemployment was people that prefer job-

Less than they accept lower wage from prevailing wage. In the census report usually there was not any number for it .

Therefore it is necessary to expand work opportunity, both from micro sector of company or macro sector of economic live recovery (to increase economic growth) and also the education policy in creating skilled workforce to fulfil the work opportunity. According to Made Pidarta (1997:230) “ The development for macro economic will also influence the education sector”.

Education Planning and Policy

The education planning in order to make any relevance with the development according to Harbinson that quoted by Suyanto (1989-13) can be done by three approaches namely :

1. The approach that called “ social demand approach ”
2. The approach that called “ Needs for National approach ”
3. The approach that called “ Employment generation approach ”

The social demand approach was not commonly used. In this approach the most important consideration for education process was how far the continuity.

Actually, education is needed by all community members. The basic point of view of this approach that education (especially basic education) was the human rights universally. This approach required that middle education must available and covered all of basic education graduate, So for universities must available for covered the middle education graduate (SLTA) that qualified to continuing their education in university. Can be drawn a conclusion that this approach will give opportunity maximally toward all people to get education. This approach was compatible with article 31 of UUD 1945 sub section (1) that expressed : every citizen has right to get education. But the problems was government can not accommodate all community members from school age until university, especially related with budget problem both for funding the education building infrastructure, books, equipment and etc and also in the funding the teacher's prosperity.

The approach that called “ needs for national development ” has orientation, which emphasized that education must producing knowledge , skill and com-

petency that truly relevant with national development in many sectors. This approach must center their attention to the needs of development directly. Including namely :

a. Manpower needs approach, considered that education will produce knowledgeable and skillful people to fulfill the modern formal sector needs. Basically this approach required that with education would educate many workforce that needed by national development.

This or government also heavy enough to run related with data owner problems that good, accurate and systematic about work force. Also difficult to make synchronization between education program and projection and work force that has long term nature. The problems was that education program which will produce graduate people until university level and ready to joint work force needs long period approximately 16 years. During this time there were any possibility of many unstable conditions and many events that related with work force, which difficult to anticipate.

b. Economic return approach required anu education planning based on cost-benefit analysis. This approach will consider comparison between education cost and education productivity that measured by lifetime revenue of their graduate.

This approach has limitation such as the difficulties to measure and making productivity standard for the graduate of such education level. And problems revenue at the developing countries can not used as the mirroring of high/low productivity of a work force. Many variables that involved influence this revenue problem. For instace : often occurred in the reality that wage of blue-collar work-force (low education) was higher than white-collar work force (educated).

Third approach is known as “ employment generation approach ” that emphasized on creation of work force. The main consideration focused n the extending opportunity for work vacancy that more productive for all community level.

Rationally these approaches was the use of human resources maximally and

Develop accurately will urge the creation of higher revenue and also the distribution of development results. So based on this, rational, economic prosperity was the result of development process and the development of human resources effectively. The approach in the recent time was very popular because the increasing of economic problems such as not optimal using of human resources, the problem of revenue distribution that not spread evenly, and another problems. This approach is actually more realistic and humanly. But it not means that this approach not have any limitation. There were some limitation such as how to arrange the education program and curriculum that can be implemented in the real life and how to support the usefulness of program to make realization of this approach. Many funds was needed for the development of human resources like skill training program such as the establishment of Balai Latohan Tenaga Kerja (Work Force Training Bureau) that spread over all provinces and the development of polytechnic education also need high funds.

Have been realized that education will determined the nation future because of the productive activities would use all output from national education system. In order to make educated people can communicate optimally in work world, so must be trying to increase the quality and relevance of capability and skill in education process. Education process must capable to prepare the students with proportional competencies that have high usefulness in the work world. This matter according to Wardiman (1996:3) called education operation strategy that links and matches with the community demand and development.

There were some competencies that must be considered related with education policy namely:

1. Academic competence. This competence related with tips and capability of science methodology in the mastering and developing science and technology that has very important meaning for the development of science and technology and the production of development taught, concept and development that innovative.
2. Professional competence. Professional competence related with insight, behaviour, and capability to implement the science and technology in the community life reality. This professional competence creates the capable development people.

3. Competence of value and behaviour. This competence related with the capability to always use every problem in the frame of Pancasila and culture value, and also the faith to God. This competence was the frame of prior competence, so it has more meaning for the nation interest context and relationship context with God.

4. Competence to face the changes. This competence covering three matters :

- a. Competence to understand the meaning and essence of the change
- b. Competence to cope with direction of change learning
- c. Competence to manage and use those change to reach future advantage. The students must develop their insight that oriented to future wholly and not just have short-term nature.

With considering that four competence above, so the education policy strategy primary directed to the increasing of quality in all sectors and increasing their relevance with the needs of economic growth especially, and national development generally . both for work world needs and industry. The industry development appropriate with science and technology development and related with future development challenge.

Especially for high education policy it was necessary to emphasize on the mastering science and technology in the development of academic capability, professional capability and leadership that spirit by nationalism enthusiasm and underlying by the faith to God. High education must continuously supervising and developing in order to make the students become community members that have academic and professional capability and also leadership. And responsive to the development needs of science and technology, beside that, high education also must producing people that have serving spirit and have responsibility toward the country future.

Education policy must give direction and the university has two specific dimensions namely:

1. Preparing the nation leader cadre
2. Preparing the human resources that has continuous capability in the future

One effort that can be done in running the mission to preparing the leadership and long standing capability was by refreshing leadership insight and superiority. Leadership and superiority insight must always become the spirit of every university activity. Just with the development of these two insights, the good university mission can be achieved.

Conclusion

From the explanation above can be concluded that economic growth will influence by creation of work opportunity therefore it was needed the education policy in the producing the workforce to support the growth and change in the future.

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