

Rationalization Model for Market Economy Improvement in Indonesia

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Abstract

The market economy works on the basis of the price mechanism, the balance point between the demand and the supply curve named equilibrium, any changes of demand and supply sides will automatically be corrected itself. Some of the key issues in economic improvement are: what and how much to produce, how the organization produces and the total output generated. The graph analyses study is made to analyse how to improve market economy in Indonesia. By developing the theory of Zairi, this article proposes effective bureaucracy support model, integrated economic model, and market economy improvement model. With effective bureaucracy support model, to eliminate deadweight loss which is not enjoyed by government, consumers, and producers, this study suggest that government should: 1) imposed tax on the basis of profit or income generated (direct taxes) and not on the commodity of goods traded (indirect taxes); 2) not enacts ceiling prices for goods and services. With integrated economic model, government should support international trading to enlarge economy size and to increase gross national product (GNP). With market economy improvement model, government should improve technology to used natural resources which can use resources efficiently and effectively.

Keywords: Price mechanism; Economic improvement; Deadweight loss; Price control; Market integration

Introduction

Indonesia economy continues to grow since economic crises year 1998 until now. Indonesia targets the fifth position of the world's economic power is assumed to be achieved, given the economic growth according to the Central Bureau of Statistics data every year reach rates above 5%. The basis for this increase is due to Indonesia has four leading sectors: services, agriculture, fisheries, natural resources and education [1]. Furthermore, Basri, et al. stated that the level of investment and credibility of the government in the eyes of foreign investors and the business world has increased with improved economic performance [2]. The sovereign rating was lifted to BBB- from BB+ with a stable outlook by S&P, citing an improvement in the budget. Both Moody's Investors Service and Fitch Ratings have a positive outlook on their assessments of the nation's debt. According to Nguyen there are some major issues in economic improvement, including: what and how to produce, how the organization of production and the total output generated [3]. To overcome this problem, there are several conditions that must be fulfilled, as follows: (1) an economy based on open market balance with effective bureaucratic support, (2) natural resource-based, human and capital development, and (3) technology quality and sustainable, and integrated. These three conditions are assumed to be closely related to the improvement of the market economy [4].

The market economy works on the basis of the price mechanism, the balance point between the demand curve and the supply curve, the encounter between the two curves, called equilibrium [5]. If there is a change in the variables affecting the consumer demand side so that the price changes, then in the long run will be adjusted by the price mechanism itself [6]. Consumers as the determinants of the demand curve and the producers as the determinants of the supply curve will

always try to obtain their individual welfare optimally. Meanwhile, the producers will increase their production to get maximum profit. This implies a shift in the supply curve, thus forming a new equilibrium point [7]. Similarly, if the opposite happens, i.e. changes in variables affecting the supply curve, such as interest rates, wage rates, rents, etc., then the demand curve will also adjust to reach the equilibrium point. An economy based on open market equilibrium is an economic system based on market mechanisms. Both of these, depending on their characteristics, are: personal ownership, freedom of expression, motivation and self-interest, competence and competition, and market, price and role of government. Such characteristics, assumed to have implications for the price mechanism [8]. If these problems can be managed properly, then it is assumed to have an impact on the improvement of the market economy.

Model of Market Economy Improvement

In making the model, it is done with different stages. Stages for market economy improvement is developed from as follows (Figure 1) [9].

In the first stage, the following activities are carried out: selection of fields and objectives, fixing priorities for improvement, identification of factors affecting market improvement, and resource identification. In stage two, the data collection activities are as follows: selection of group companies, as well as the collection of company data and production processes. Furthermore, at stage three, the following activities are carried out: estimation of company efficiency, as well as identification of gaps and product analysis process [10].

In improving the market economy there is a basic economic principle, namely to achieve maximum output using available resources. These resources are: nature (N), labor (L), capital (C), and technology (T). In this case the production rate (Q) depends on the

variables N, L, C and T [11]. To analyze the production (Q) in market improvement, in the form of equations is written as follows:

$$Q=f(N,L,C,T) \quad (1)$$

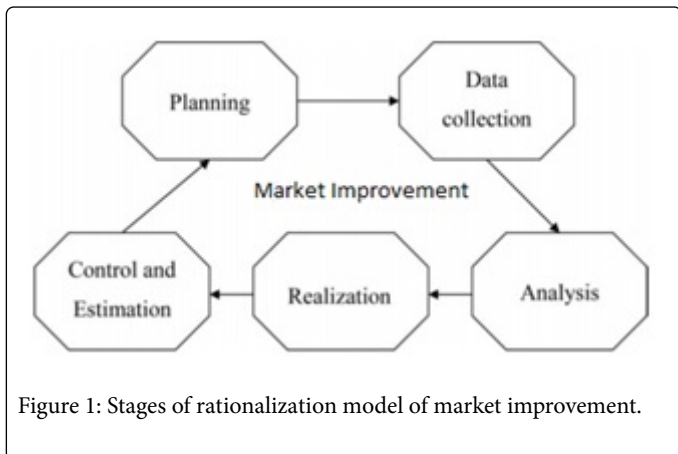


Figure 1: Stages of rationalization model of market improvement.

With Q quantity of output, N natural resources, L labor quantity, C amount of capital, and T technology.

In a country used closed system, the country's production rate is the sum of the output quantities of all producers from all of its resources. However, in countries with open market economies, output produced by producers is a summation of all producer output of all resources owned plus resources of other countries except land, minus the resources transferred to other countries [12]. In the form of equations is written:

$$Q=f(N1L1C1T1+N2L2C2T2-N3L3C3T3) \quad (2)$$

With N1L1C1T1 being NLCT of the country, N2L2C2T2 is NLCT (without soil) coming from another countries, and N3L3C3T3 is NLCT (without soil) invested to other countries. Meanwhile, to calculate the total production of a country is the sum of revenues generated from the process of producing final output plus tax minus subsidy plus depreciation. To calculate the total production is calculated using the equation:

$$GNP=Income+Taxes-Subsidies+Depreciations \quad (3)$$

Results and Discussion

Open market balance model

The price is formed at the equilibrium point between demand and supply of a particular good or service. At that point, there is the optimum welfare point that the producers and the consumer side together achieve the maximum welfare. If the demand for a good or service is greater than its offer, then the price is considered too high or too expensive, so the buyer does not reach the maximum welfare point. Conversely, if the demand for a good or service is less than its offer, then the price is considered too low or too cheap, so the seller/producer does not reach the maximum welfare point [13].

The imbalance occurs at a certain moment or in the short term only, whereas in the long run automatically there is a balance between demand and supply. If the price is too high then encouraging producers to produce more or higher prices invites other producers to produce the goods so that the supply goes up and the price falls. Conversely, if the price is too low then consumers/buyers buy more

than their needs, causing prices to rise. Any change in production factors from the producer side and the change of income and tastes from the consumer side, then move the meeting point between the supply and demand of a certain goods/services, so as to reach a new equilibrium point. To increase production in order to increase profits, producers need more labor, interest, and lease, payments for input production are increasing, so that the income of the community that provides labor, interest, and rent also increases. Too much production causes the price of the goods to fall. Falling goods prices and rising incomes can increase demand for these goods, resulting in prices rising again to reach a new equilibrium point.

Effective bureaucracy support model

The role of government bureaucracy in reducing the weaknesses of the economic system based on market mechanisms are as follows: public goods and services delivery, externality management policies, income taxes and subsidies as an effort to equal distribution of income, and maintain pure competition. In relation to the provision of public goods or public quasi items purchased or carried out by the government, collective choice shall be made based on the consideration of its ease of implementation. Funds used to finance are collected from taxes on individual households (personal income taxes) and producer sector (corporate income taxes).

The uneven distribution of outputs needs to be controlled by the government by applying taxes to high-income communities and providing direct subsidies in the form of money to the poorest communities. The taxation by the government on the commodity of goods/services, which is subjected to taxes not on the goods/services itself, such as Sales Tax, Value Added Tax (VAT), but should apply tax on net profit. Net profit taxes earned by employers (producers) or net income received by the household sector, the tax object in the form of income, called the Corporate Income Tax and Personal Income Tax. Taxation of certain goods will cause the loss of some welfare producers and consumers and also not to enter the government or economic inefficiency called deadweight loss. The tax implementation model associated with market improvement is shown in Figure 2 below.

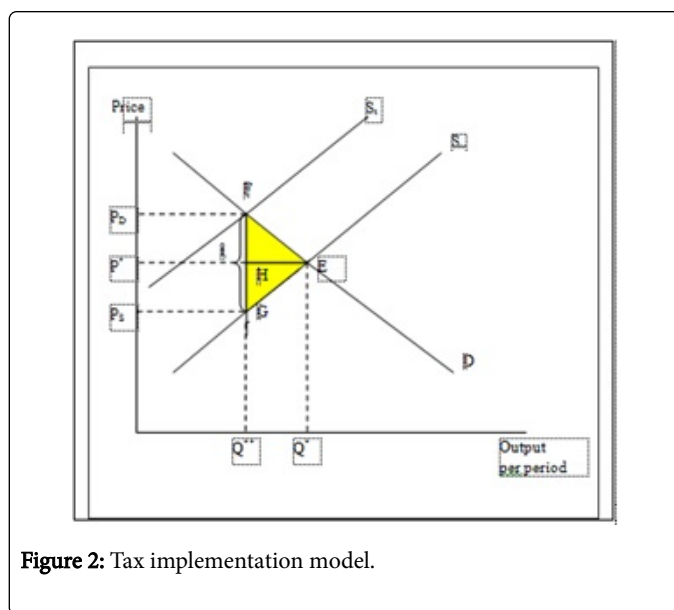


Figure 2: Tax implementation model.

Based on the Figure 2, at the equilibrium point, i.e. at point E, at the price of P* and the traded goods of Q*. Hence, the government

imposed a tax on the commodity of goods traded (indirect tax) of t . As a result, the supply of goods shifts from S to S_t . The price will rise by $P^* - PD$ and the demand will decrease by $Q^* - Q^{**}$. The tax is shared by the manufacturer of P^* HGP's and consumer of $PDFHP^*$. Direct taxes (such as VAT and PPn.BM in Indonesia or Sales Tax in other countries) are taxes whose expenses can be shifted by the producer to another party i.e. the consumer. Taxes borne by consumers are the tax burden of the producer, but the burden is shifted to the consumer. The yellow color (FEG) field is the loss of welfare due to the imposition of such direct taxes, which are not enjoyed by any government, producer, or consumer (deadweight loss).

The amount of tax charged to the consumer or borne by the producer depends on the elasticity of the demand and supply of the taxable commodity. The more elastic the supply curve or the less elastic the demand curve the greater the taxes the consumer will bear. Conversely, the less elastic the supply curve or the more elastic the demand curve the greater the share of taxes borne by the producer. Fair tax enactment will have implications for the price system.

In order to maintain perfect market competition in order for the price system to run properly, the government needs to do the following: (1) to prevent monopolies and oligopolies by banning or limiting legislation. Monopolistic laws and unhealthy competition are expected to prevent conspiracy, unfair competition, and impose each other, (2) issue regulations and implement regulations consistently to safeguard the rights of producers, farmers and labor, and (3) to be referees Fair in contracts and business disputes among entrepreneurs. Model rationalization of the price control system, shown in Figure 3.

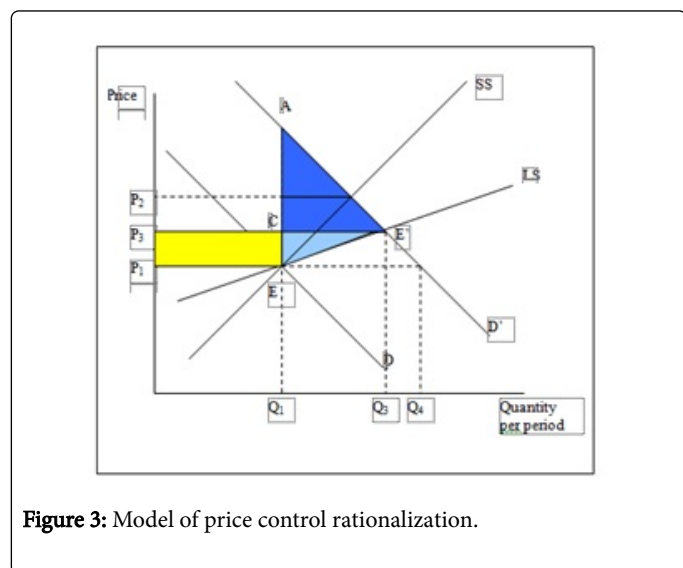


Figure 3: Model of price control rationalization.

Based on the Figure 3, the market initially is in a state of long-run equilibrium at the price level P_1 and the quantity of demand Q_1 is at point E . The increase in demand from D to D' will lead to price increases to P_2 in the short run and encourage the entry of new firms to produce goods/Assuming that the market is in a state of rising costs (which is illustrated in the long-run supply curve which slope is positive LS). The price will decrease as a result of the entry of new producers, and finally the price becomes P_3 at equilibrium point E' . If the price changes are not desired by the government then the government needs to prevent price increases by setting the highest price regulation by P_1 . This will cause the producers to re-supply the goods of the original output that is Q_1 with the price of P_1 . Because

the price drops consumers will buy goods as much as Q_4 , resulting in shortages of $Q_4 - Q_1$.

The ceiling price (HET) gives consumers a surplus of P_3CEP_1 (yellow field) fields because consumers can buy the item at a lower price than the price if the price is not controlled by the government. The profits are pure transfers from the reduced number of producer surplus due to price control. What consumers get because of price control is a loss of producers. Although this transfer does not reflect the loss of overall welfare, it affects the relative wellbeing of all market participants. The AEC field (the dark blue field) represents the surplus value of additional consumers acquired if there is no price control (lost due to price control). Likewise, the CEE' field (the blue light field) represents the surplus of additional producers obtained if there is no price control (lost due to price control). The $AE'E$ field (dark blue and young) represents the total value of the surplus lost as a result of transactions that occur due to the price control policy. This is the pure welfare cost as a result of the government policy of fixing the ceiling price. The amount of surplus value borne by the consumer or by the producers depends on the elasticity of demand or supply of the commodity of goods that has been determined price. The more elastic the demand curve the greater the surplus value lost by the goods.

Integrated Economic Model

To improve the efficiency of the production and welfare of a country's people, it is necessary to integrate the producer's market and the labor market of the whole country within a certain region and the whole world. With this integration, it is expected that the production of certain goods is only produced by producer entrepreneurs in certain countries who excel in the factors of production so as to achieve production efficiency. For example, goods are only produced in country A, goods q only produced in country B, goods r only produced in country C, and so on so as to achieve mutual efficiency. In addition, goods/services produced by each country are marketed throughout the region based on pure market mechanisms. If this happens then all producers and consumers in the region and around the world will get maximum welfare. The world community has led to an open global market economy characterized by the AFTA, APEC, EEC, AEC, free trade area and economic cooperation between several developed countries, as well as between regions of the world. It aims to remove the barriers that occur in the market. An integrated market economy model is shown in Figure 4.

Based on the Figure 4, if there is no international trade (no import) of a certain good, the equilibrium price on the domestic market is P^* and the quantity of traded production is Q^* . The fall in prices will cause the number of preferred production to rise from Q^* to Q_1 , while the number of domestically supplied goods drops to Q_2 . Thus, the quantity of imported production is: $Q_1 - Q_2$. The shift in market equilibrium from E_0 to E_1 causes a large surplus increase in the area of $P^*E_0E_1PW$. Some of it comes from the profits given by domestic producers i.e. P^*E_0APW (green field) and partly the welfare advantage of E_0E_1A (yellow field). These benefits occur because consumers can get a cheaper price than the previous price.

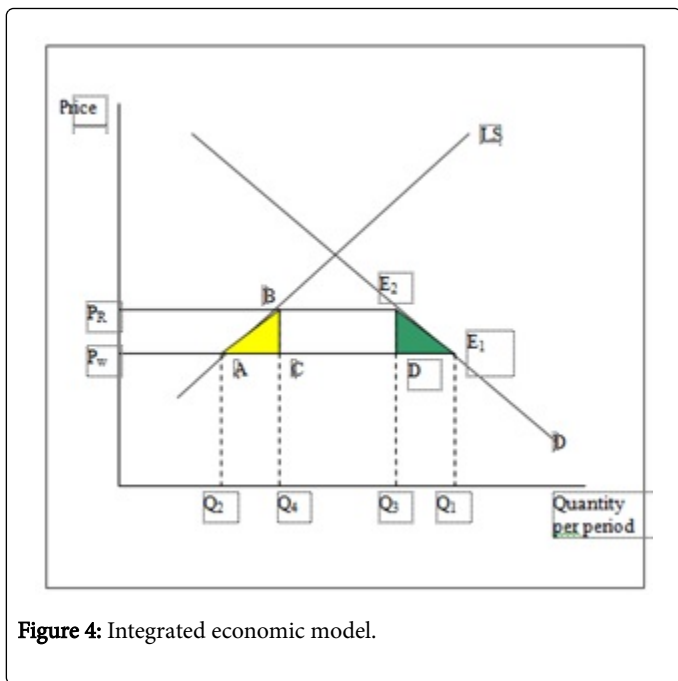


Figure 4: Integrated economic model.

Market economy improvement model

The improvement of the market economy in Indonesia, generally depends on technological variables and labor competence. Taking into account other variables, such as land potential, the quantity of production (Q) continues to increase. The relationship between technology and natural resources, shown in Figure 5.

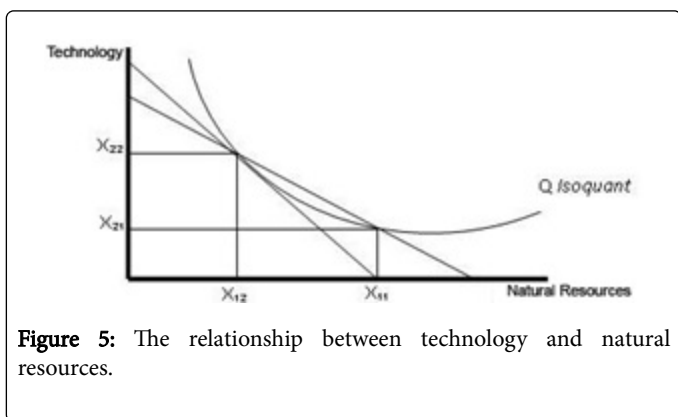


Figure 5: The relationship between technology and natural resources.

Based on the picture above, that between technology and natural resources shows an inverse relationship. If natural resources are small, it requires high technology, and vice versa. Meanwhile, for the analysis of production quantities (Q) by using equations (1) and (2) forming parabolic patterns. With high technology, although the natural resources are not good, it will produce a good amount of production. Conversely, with good natural resources, but not supported by technology, then the amount of production is less than optimal.

High production amounts, usually cost a lot. Using equations (1) and (2) analysis of the relationship between cost and quantity of production, while the quantity of production is calculated using equation (3). The results of the analysis, shown in Figure 6 below. Based on the picture above, there is a linear relationship between the

cost and the amount of production. Large production amounts cost a lot, and vice versa.

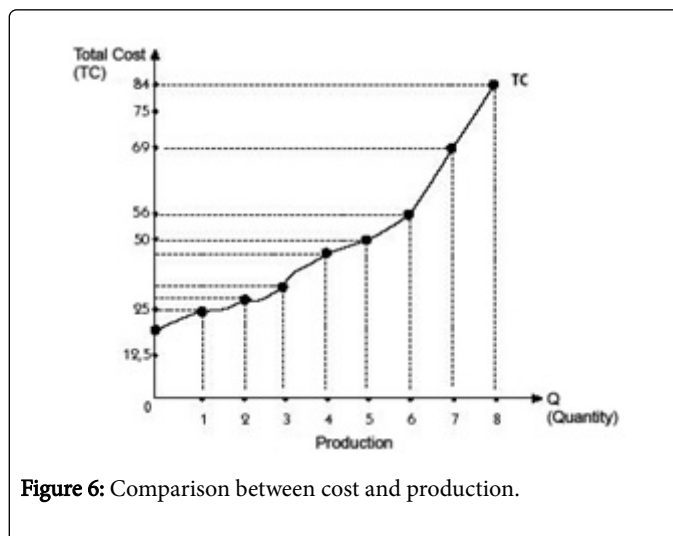


Figure 6: Comparison between cost and production.

Referring to the above two Figures 5 and 6 in arranging the amount of production, it is necessary to balance between technology and natural resources. High technological mastery will have implications on the amount of production. Mastery of these technologies, will minimize costs without disrupting the amount of production. Therefore, the dominant variable in managing the amount of production, namely: the mastery of technology, and the utilization of labor. If both variables are well managed, then the production amount will be controlled. Structuring the amount of production well, will have implications for the improvement of the market economy.

Conclusion

Economics based on open market balance, is an economic system based on market mechanisms with various goodness and weakness. Meanwhile, in relation to the price, if the demand for a good or service is less than its offer, then the price is considered too low/too cheap, so the seller/producer does not reach the maximum welfare point. Conversely, if the demand for a good or service is more than its offer, then the price is considered too high/costly, so the buyer/customer does not reach the maximum welfare point. The imbalance will occur at a certain moment or in the short term only, while in the long run will automatically occur a balance between demand and supply.

The uneven distribution of outputs needs to be controlled by the government by applying taxes to high-income communities and providing direct subsidies in the form of money to the poorest communities. The taxation by the government on goods/services commodities, which are subjected to taxes are not on the goods/services themselves, such as Sales Tax, Value Added Tax (VAT), but should apply tax on net profit. Net profit taxes earned by employers (producers) or net income received by the household sector, the tax object in the form of income, called the Corporate Income Tax and Personal Income Tax. The imposition of tax on certain goods will cause the loss of some welfare producers and consumers and also not into government which is economic inefficiency (deadweight loss).

To improve economic efficiency which is to maximize producers and consumers welfare, government should not controls product and

service price by enacting ceiling or floor price, because such a price control policy will caused deadweight loss.

It is also necessary to integrate the producer's market and the labor market of the whole countries within a certain region and the whole world. With this integration, it is expected that the production of certain goods is only produced by producer entrepreneurs in certain countries who excel in the factors of production so as to achieve production efficiency.

To improve economic growth, government should manages natural resources utilization properly by using appropriate technology.

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