CHAPTER II

LITERATURE REVIEW

2.1 Previous Studies

The link between decentralization and fertility has been studied in several developed and developing countries.

2.1.1 Borck, 2007

Rainald Borck in his paper titled "Federalism, fertility and growth" analyses the effect of federalism on fertility and growth. Using data from OECD (Organization for Economic Co-operation and Development) that consist of 34 countries in Europe and US, the paper presents a quantitative model to analyze the decentralization of policies which simultaneously affect fertility and growth. The main results can be summarized as follows.

- Decentralization leads to higher growth of human capital but increases inequality.
- (2) Total fertility is not strongly affected by decentralization but differential fertility between rich and poor is strongly affected. Whereas in the centralized system the poor have more children in the decentralized system they have fewer children than the rich.
- decentralization and fertility. The evidence shows that decentralization seems to have a negative effect on total fertility. For tax decentralization, this effect seems to be small. Expenditure decentralization, on the other hand, seems to have more economically important effects.

2.1.2 Yamamura, 2011

This paper uses panel data of OECD countries during the period 1995—2003 to examine how corruption affects fertility. The Corruption Perceptions Index is used to measure the degree of corruption. Labour force participation and divorce were expected to influence fertility rate, thus, they were included as independent variables. Results from the regression models provide evidence that there is a higher fertility rate in less corrupted countries. From this, the argument can be made that lack of political corruption underlies desirable conditions for child rearing in developed countries. However, this paper does not explore precisely the mechanism by which corruption influences government expenditure and in turn affects fertility rate.

2.1.3 Uchimura and Jutting, 2009

This study analyzes the effect of fiscal decentralization on health outcomes in China using a panel data set with nationwide county-level fiscal data. This study uses fertility rates as an explanatory variable to assess the effect of fiscal decentralization on infant mortality rates. The results shows that more fiscally decentralized provinces have lower infant mortality rates than provinces that are the main spending authority, if certain conditions are met. Key among those conditions is the county governments' own fiscal capacity and intergovernmental transfers. Local spending responsibilities need to be matched with county governments' own fiscal capacity. When the county's government relative spending responsibility is held constant, the ability to spend on local public goods and health outcomes depend upon intergovernmental transfers.

2.1.4 Khan, et al. 2014

This study explores the effects of decentralization on education, health and agriculture outcomes in Ethiopia using an original database covering all of the country's *woredas* (local governments). The descriptive statistics provide evidences that rapidly rising decentralized expenditures in education, health and agriculture have led to significant increases in public sector outputs, such as education enrollments and vaccinations against communicable diseases, as well as substantive outcomes such as fertility. Ethiopia's fertility rate – a variable that, across countries and cultures, moves slowly in response to broad demographic and economic factors – declines markedly from 7.1 live births per woman in 1993 to 4.8 in 2011.

2.1.5 Rahayu, et al. 2009

This study examines whether the contraceptive use pattern in Indonesia has changed between 1997 (before decentralization) and 2007 (after three years of the decentralization) by analyzing the demographic and socio-economic factors influencing contraceptive use before and after decentralization. The data are obtained from the 1997 and the 2007 Indonesia Demographic and Health Survey (IDHS) with 26,886 married women as respondent in 1997 and 30,931 married women in 2007. The main findings are:

(1) Almost all selected characteristics have a significant relationship with contraceptive use in both years (before and after decentralization

- (2) Women's education is one of the most important factors related to contraceptive use in both years
- (3) Being visited by family planning worker had a significant impact on contraceptive use before decentralization but it was no longer significant after decentralization, even though it still had a positive effect.
- (4) The low increase in the rate of contraceptive use over the ten-year period suggests stagnation in the family planning program. The results of this study highlight the impact of the relaxation in family planning programs in Indonesia that occurred after decentralization.

From the five previous studies mentioned above, the one conducted by Borck (2007) is the only study that examines the association between decentralization and fertility directly, while the other four studies examine the association indirectly but nevertheless provide a relatively similar framework in understanding the linkage between the two concepts. Furthermore, three of the studies (Borck, Uchimura & Jutting, Khan et al.) only take fiscal decentralization as their variables (see Appendix 1). Therefore, by exploring three aspects of decentralization as in fiscal, administrative and political, this study will contributes to the existing literature of decentralization and fertility.

2.2 Theory of Decentralization

2.2.1 The Meaning of Decentralisation

Decentralization, or decentralizing governance, refers to the restructuring or reorganization of authority so that there is a system of co-

responsibility between institutions of governance at the central, regional and local levels according to the principle of subsidiarity, thus increasing the overall quality and effectiveness of the system of governance, while increasing the authority and capacities of sub-national levels. Decentralization could also be expected to contribute to key elements of good governance, such as increasing people's opportunities for participation in economic, social and political decisions; assisting in developing people's capacities; and enhancing government responsiveness, transparency and accountability (UNDP, 1997).

Some scholars also have tried to give a definition to decentralization, among them are Cheema and Rondinelli (1983) who stated the idea that;

"Decentralization is transfer planning, decision making or administrative authority from the central government to intensities field organization, local administrative unite, semi-autonomous and parastatal organizations, local governments, or non-government organization"

Smith (1985, p. 185) explains that the developing countries need decentralization because it is necessary for development of economic, social and political. Ideologically, the concept of decentralization is needed, but the burden of development defined by the concept of decentralization is too large to be borne by local governments. Developing countries find that the promise of decentralization performance is often disappointing and not as expected. Furthermore, Smith (1985, p. 186-188) explains that decentralization has seven promises, there are:

1) Democratic decentralization is more effective to meet the local needs than central planning.

- 2) Decentralization has been seen as particularly relevant to meet the needs of the poor. If development wants to eradicate poverty, inequality and material deprivation, it must involve and mobilize the poor.
- 3) Decentralization is said to improve access to administrative agencies. The form of decentralization in which the society can participate referred to as an attempt to soften the resistance in social changes as a result of development. Participation in local institutions helps to resolve differences, pessimism and passivity of society. Decentralization can reduce the barriers in the central government. It provides the speed and flexibility to local governments to make decisions in the development of their respective regions. Development in the region requires flexibility during implementation when policy changes are needed in the short notice. Type of initiative and effort required for the flexibility of administration development can be obstructed by a centralized government.
- 4) There is a persistent belief that local democracy is needed for national unity.
- 5) The state needs to support the development plans in the region.

 Plans and targets should be communicated in accordance with the physical and cultural conditions of each region.

2.2.2 Types of Decentralisation

Rondinelli (2001, p. 73), divided decentralization into four types, which are:

1) Administrative Decentralization

The purpose of administrative decentralization is to distribute power,responsibility and financial resources for the provision of public service samong different levels of government

2) Fiscal Decentralization

Fiscal decentralization is a financial responsibility that is a major component in decentralization. If the local government and private organizations can implement decentralized functions effectively, they have to have enough revenues, enhanced locally or transferred from the central government. Besides that, fiscal decentralization also manage the authority to make decisions about spending

3) Economic/Market Decentralization

Economic/market decentralization is the most complete form of decentralization from government perspective. This type of decentralization can be done in the form of privatization and deregulation, i.e. transfer of responsibility from public sector to private sector

4) Political decentralization

The aim of political decentralization is to give greater authority to the citizens and representatives of voters in public decision making.

Another scholar, Schneider (2003) identified only three types of decentralization excluding the economic/market decentralization. Those three types of decentralization were explained as follow:

1) Fiscal decentralization

Fiscal decentralization focus on maximizing social welfare, which is portrayed as a combination of economic stability, allocative efficiency, and ditributive equity.

2) Administrative decentralization

Administrative decentralization focus on the administrative effects of granting local jurisdictions autonomy from central control. The amount of administrative decentralization ranges from low degree of autonomy to high degree of autonomy. In this section, Schneider elaborated Rondinelli's study on decentralization (1990) in categorizing administrative decentralization using three terms, "deconcentration", "delegation" and "devolution". Deconcentration involves the least amount of autonomy, delegation slightly more, and devolution the most.

"Deconcentration" refers to a central government that disperses responsibility for a policy to its field offices. This transfer changes the spatial and geographical distribution of authority, but does not significantly change the autonomy of the entity that receives the authority. Under deconcentration arrangements, the central government retains authority over the field office, and exercises that authority through the hierarchical channels of the central government bureaucracy. Deconcentration allows only moderately more autonomy than centralized systems.

"Delegation" transfers policy responsibility to local governments or semiautonomous organizations that are not controlled by the central government but remain accountable to it. The main difference between deconcentration and delegation is that the central government exercises its control through a contractual relation that enforces accountability of local government.

Under "devolution," the central government allows quasiautonomous local units of government to exercise power and control over the transferred policy. Compared to the other two types of administrative decentralization, devolution provides the greatest degree of autonomy for the local unit. The local unit is only accountable to the central government in so far as the central government can impose its will by threatening to withhold resources or responsibility from the local unit.

3) Political decentralization

Political decentralization focus on mobilization, organization, articulation, participation, contestation, and aggregation of interests.

2.2.3 The Importance of Decentralisation

Basically, the emergence of the idea of decentralization is not separated from the weaknesses that exist in a centralized government. According to the Devas (1989, p. 45), there are three deficiency of centralized government, namely:

- The existence of difficulties in implementing regional development program effectively, because the responsibility of central government is very broad
- 2) Centralized government do not put the experience and knowledge from local area into the decision-making process or policy formulation, so the implementation of policies and programs does not reflect the needs of local communities

3) The lack opportunity of local governments to be involved in implementing the national development program. In addition, a centralized government also makes all decisions and policies in general for all regions. Thus, it makes a long time to decide policy and become inefficient.

Based on various weaknesses of a centralized government described above, government decides to implement decentralization. There are two benefits that expected from decentralization according to Mardiasmo (2002, p. 6), namely: (a) To encourage increased participation, initiative and creativity in the development community, and encourage equitable distribution of development outcomes (equity) in the entire region by utilizing the resources and potential in each region (b) To improve the allocation of productive resources through role transfer of public decision making from higher to lower level of government has the most complete information about their own region.

According to Smith (1985, p. 46), main reason of decentralization is administrative needs and political demands. The need to decentralize felt in all system of government, through the response made by different states to that need differ greatly. One of the most distinctive features of modern state administration is the need for close contact between the individual citizen and official. How the state responds to the need to decentralize and the demand for particular institutional forms will reflect the balance of political forces in each individual case.

Based on some experts' opinion, it can be seen in general, decentralization begin due to the weaknesses of centralized government, the lack of effective implementation of regional development programs as well as the lack of involvement of local governments in implementing national development programs. Moreover, the reason of decentralization is political, democracy and development reasons. Those three reasons above are the basis for the implementation of decentralization that the goal is to improve the efficiency and effectiveness of governance with the division of authority between the central government and local governments.

Additionally, Cheema and Rondinelli (1983) identify nine arguments about decentralization, namely:

- 1) Decentralization facilitate the articulation and implementation of development policies are made to complete the development of the fair through the efforts of enhancing the capacity of regional units and subregional and prevent political leaders and local officials to raise the issue and their own development priorities
- 2) Decentralization reduces restrictions and bureaucratic procedures

 Decentralization can improve the national unity government and political
 power in the community by providing a mechanism to express their
 problems and discuss their demands at the appropriate government
 agency
- 3) Decentralization generates local coordination of planning and implementation effectively. Provinces, district and municipal set

geographical basis to align and combine the development activities undertaken by various government organization

- 4) Decentralization can be used as a tool to increase the performance of central government by delegate their authority to local government
- Decentralization is considered as a prerequisite to increase citizen participation in the planning process. Widespread participation requires the distribution of equipment and means to express people needs to decision makers in government at various levels. The existence of a mechanism for the public to participate directly may also increase the accountability of government representatives at the provincial and district or municipal.
- 6) Decentralization facilitate the entry of facilities and government programs to reduce the supervision of the local elite of development activities, with occasional supervise and conduct periodic evaluation of the program by the next generation
- 7) Decentralization will increase the efficiency of the basic interests of the public services by reducing costs for services, local government reporting system to identify problems in the community, and bring the public response to the basic framework of government and social welfare facilities
- 8) Decentralization can improve the flexibility of the central government representatives, field staff and local leaders about specific problems in an area or region, trying to implement the program in a

suitable area, testing the administrative innovation in the region and encourage local officials and political leaders to take the initiative

9) This argument does not state that decentralization is always necessary, but these arguments put general overview of decentralization consequence. From an operational perspective, that argument can be used as basis reason to choose centralized or decentralized. It allows for implementers and policy makers to analyze rationally and estimate materials and consideration of various combinations of decentralization (Domai, 2011, p. 17-18).

2.2.4 Measures of Decentralisation

In general, Fesler (1965) explains there are at least eight indicators that can be used to determine the degree of decentralization, namely:

- 1) The degree of decentralization can be seen from the function or affairs that are run by the local government. More functions are decentralized, higherthe degree of decentralization
- 2) Type delegated functions. There are two types in this case, namely: openend arrangement or general competence and ultra-vires doctrine. If local government has delegated the function on the type of general competence, it can be considered that greater degree of delegation.
- 3) Type of central government control over local governments.
 Repressive controls is greater the degree of decentralization than preventive control

- 4) In connection with the financial is to which extent decentralization influence the decision making on local government revenue and expenditure
- 5) On the method of local government formulation. The degree of decentralization would be higher if the local authority comes from legislative rather than executive
- 6) The degree of financial dependence of local governments to the central government. The greater the percentage of central government assistance than local revenues means that the greater the dependence of the area to the central government. It means that level of decentralization is low.
- 7) The amount of the local government areas. There is an assumption that the larger of area, the greater of decentralization degree, because the local government is able to solve the problem of domination from central government. However, the effect of area to government's control is still debated
- 8) Political parties. If politics at the local level is still dominated by national political organization, the degree of decentralization considered inferior when compared with independent local politics.

Schneider (2003) also proposed some measures of decentralization.

According to Schneider (2003, p. 36-37) there are at least two advantages of using income and expenditure as a measure of fiscal decentralization.

First, data on income and expenditure are usually available in every state.

Second, the income and expenditure is the main or core aspects of fiscal

decentralization. Revenue and expenditure is a good measuring tool to determine the degree of fiscal decentralization, because it describes how much control over the local government fiscal resources. The greater proportion of local expenditure and revenue compared with national expenditure and revenue, means that the degree of decentralization is higher. Administrative decentralization refers to how much authority in the area of resource management. Schneider (2003, p. 38-39) explains that the proportion of the regional income tax is a good measuring tool to see how far the local revenue controlled by local government. That's because, the percentage of the area of tax revenue shows the extent of the resource control is done by local.

Furthermore, the percentage of the total grant and revenue transferred from local such as, taxes, loans, fees, sale of assets, or informal contribution is a measure of the degree of administrative decentralization. Due to improvement of the entire revenue apart from transfers provide an indication of the extent to which local governments collect their own funds. Political decentralization refers to the extent to which the process of democratic politics is run in the region. Schneider (2003) explains that local election is the best indicator to measure democracy, because local election is representation of democracy. In addition, the elections in the region could increase the possibility of the implementation of democratic political functions in the region.

Based on the description above, the size of decentralization can be seen generally as described by Fesler (1965) and can also be seen in each field as described by Schneider (2003). Under decentralization,

Schneider explained that the local revenue and expenditure is the best indicator to measure the degree of fiscal decentralization. While the proportion of total tax and grant is the best indicator to measure the degree of administrative decentralization. Finally, a local election which describes how much democracy and representation of the people is a good indicator to measure the degree of political decentralization.

2.3 Decentralization and Family Planning Policy in Indonesia

Decentralization of family planning in Indonesia took the form of devolution. While the Ministry of Health had devolved authority to local governments in 2001, the national family planning program did not devolve until 2002 with a decree from the government stating that the official handover of authority must be completed by early 2004. This gave local governments less than two years to address management issues. Local governments faced daunting new family planning logistics cycle management challenges. For the first time they were expected to forecast, procure and distribute contraceptives to ensure continuous supply while ensuring the quality of Family Planning services, so that all clients choosing a family planning method have affordable access to that method (Thompson, 2005).

In the era of decentralization, the institution in charge of the implementation of family planning programs went through structural changes that make it weaker in dealing with family planning issues. BKKBN, which previously had offices at the provincial and district levels, had to willingly let them go. Local/District BKKBN was removed and the

implementation of family planning became the responsibility of the Local/District Government Task Force (SKPD). Even in many cases, family planning concerns were only settled in a sub institutional status, which certainly had a lower capacity than previously as a main mandate of SKPD. The budget to support this program from the division for those concerns was more limited. Besides, family planning field workers (PLKB) in the reformation era were included as local apparatuses and their numbers continued to decrease due to several factors. First, a part of PLKB was assigned to a new job or position outside of family planning affairs. Second, the number of PLKB decreased because of job relocation or retirement and were not being replaced by new PLKB soon after. Because of that, overall, there was a crisis for the continuation of PLKB's existence. This situation certainly had a great impact on the ability of the family planning service unit to reach the target groups in various places.

In the last fifteen years of decentralization era, significant changes in the family planning management system took place. Regarding the legal status of family planning affairs in governance for instance, had went through several development. In Law No. 32 of 2004 on Local Governance, it does not mention that family planning is a compulsory affair delegated to the province and regency/city. Article 13-14 only refers to demographic and civil registry services as a compulsory affair. However, three years after, in 2007, the Government Regulation No. 38 of 2007 regarding the Distribution of Governmental Affairs between the Government, Provincial Regional Government, and Regency/Municipality Regional Government was created as an implementation of Law No. 32 of

2004. In that Governmental Regulation, it is clearly stated that family planning and a prosperous family are one of the 26 compulsory affairs delegated to provinces and regencies/ municipalities as a form of basic services (Article 7).

The government's concern of family planning furthermore continued by the issue of Law No. 52 of 2009 regarding Population Growth and Family Development as a replacement for Law No. 10 of 1992 regarding Population Growth and Prosperous Family Development which was no longer suitable to the recent demographic developmental conditions. In the new law, family planning is understood in the perspective of rights. It is mentioned that family planning is an effort to control child births, spacing of births, and the ideal age for giving birth, and controlling pregnancies through protection and help according to reproductive rights in order to realize a quality family (Darwin et al, 2015).

2.3.1 Central-local Authorities in Family Planning Policy

In order to implement the family planning program, the Law No. 52 of 2009 controls the government's authority and responsibility, either at the central or local level (provinces and regencies/ municipalities).

The central government has responsibilities in creating national policies while provincial governments are responsible for creating local policies (Article 12-13) which are inherent in national policies. Meanwhile, the government of regencies/municipalities is responsible for creating the implementation of population growth and family development in regencies/municipalities or acting as the implementer of the policy made by BKKBN (Article 14). The authority at the regency/ municipality level can

be seen as a chance for family planning policy in local areas to work in the same way with national policy (and/or provincial policy).

Through Article 53, the National Family Planning Coordinating Board (BKKBN) was formed as a non-ministerial government institution at the central level. Furthermore, at the local level, the Local Family Planning Coordinating Board (BKKBD) was formed, either at the province or regency/municipality level. In implementing its duty and functions, BKKBD has a functional relationship with BKKBN (Article 54), which means that between BKKBN and BKKBD, either province or regency, there is no vertical relationship (Darwin et al, 2015).

From the aspect of funding, the funding of the family planning program is nationally charged to the National Budget (APBN), and in local areas it is charged to the Regional Budget (APBD) (Article 15-16). This means that local areas do not receive any budget support from the central government in implementing the programs regarding population growth and family development. Therefore, the success of family planning becomes very dependent to the commitment of the regional head and legislative members, which is visible from the budget support for demographic and family planning programs. Remembering that the local area commitment to the national program of family planning widely varies, likewise the APBD fund allocated for implementing the national program also varies.

2.3.2 The Role of Local Government in Family Planning Policy

As mentioned in previous section, by the Law No. 52 of 2009, the local government is responsible for creating the implementation of

population growth and family development in regencies/municipalities or acting as the implementer of the policy made by BKKBN. This role furthermore strengthens by the Presidential Decree No. 62 of 2010, in which the formation of Family Planning Coordinating Board (BKKBD) was regulated.

According to the decree (Article 55), Representatives of the National Family Planning Coordinating Board (BKKBN) become Provincial Representatives of the National Family Planning Coordinating Board (BKKBN) until the formation of all Local Family Planning Coordinating Boards (BKKBD) of the Province and Local Family Planning Coordinating Board (BKKBD) of the Regency/ Municipality as meant in Law No. 52 of 2009. BKKBN through Provincial Representatives of BKKBN implement counseling and facilitate the formation of BKKBD of the Province and BKKBD of the Regency/Municipality according to the provision of law and regulation.

However, it has been five years since the enactment of the decree and there have not been many regencies/municipalities that have formed BKKBD. It indicates that the commitment of many regions to the issues on demographic and family planning is still low. BKKBN targeted that until 2014, there would be at least 66 representative offices of BKKBD which independently operate and are not united with other institutions. Through the formation of a special board that handles the issues on demographic and family planning, it is expected that every region can solve them comprehensively. Therefore, it is necessary to devise a significant

innovation so the issues on demographic and family planning become one of the priorities of regional development.

2.3.3 Some Issues of Family Planning Decentralization

No matter how carefully planned the implementation strategy, problems will surely be encountered. Decentralization is a complex process, requiring considerable time to implement, commitment, resources, and coordination and communication among all levels of administration. Conyers (1985, in McGirr et al, 1994) divides the problems into three categories: design problems; implementation problems (associated with human and financial resources and infrastructure); and impact problems.

1) Design Problems

Problems with the overall design of the decentralization program occur in situations when local governments are created but given no powers or training for new responsibilities; when policies and legislation are enacted but not supported by corresponding changes in administrative procedures; or when decentralization is designed to bring power to the people but provides limited opportunity for participation. In Indonesia family planning case, the main problems came from the unreadiness of the local government to address management issues due to the strong centralistic authorities prior to the decentralization. For the first time they were expected to forecast, procure and distribute contraceptives to ensure continuous supply while ensuring the quality of Family Planning services, so that all clients choosing a family planning method have affordable access to that method.

2) Implementation Problems

a) Human Resources

The biggest human resource problem associated decentralization is the shortage of sufficiently and appropriately trained personnel, which is especially severe at the local level (Rondinelli, 1981). Existing staff often lack the capacity to fully carry out their responsibilities subsequent to decentralization. New responsibilities associated with decentralization become a burden in areas that do not receive adequate staff and technical assistance. Personnel shortages make intersectoral coordination a necessity. Two additional issues are the transferring or seconding of national staff to local areas and the difficulty of filling technical positions in undesirable areas. National ministry staff may be threatened with transfer to lower positions in areas outside the capital or larger cities, where many amenities are absent and pay scales are lower. Replacing persons who are not well-suited to their posts may be difficult. If an ineffective person holds a newly created post in the decentralized program, the necessity of the post may be the appropriateness of the person executing the responsibilities of the questioned rather than position.

b) Financial Resources

Revenue generation is a key element of decentralization, but it is also one of the most difficult to implement. It is very hard for central governments to transfer authority for allocating resources to the local government. As a result, there is tight central control over

resources, and local governments remain financially dependent. Often, money comes to local governments in the form of transfer payments, grants and subsidies. Local governments and organizations need the authority to plan and money to implement those plans in accordance with the needs of the over the local population. When funds are transferred to local areas, conflict is likely to arise amount of resources transferred: local governments will want more; national agencies will want to keep more. In some cases, when central governments failed to provide the necessary financial resources to local governments, the quality of services actually deteriorated following decentralization. Local areas must be able to spend money allocated to them in a timely fashion. Sometimes when funds are channeled through a central ministry, it takes a long time before the local areas have access to them.

c) Infrastructure

Setting up or extending a system of field administration or finding extra space for local government functions-such as the health committee, the district population office or the family planning manager's office-can pose great difficulties in countries where there is little existing infrastructure below the national level. The lack of facilities and support capabilities-including transportation, communications or office equipment-makes coordination among organizations and communication with the central level difficult. It also poses difficulties for local administration in mobilizing resources, supervising and delivering services and disseminating

information to its target population. Supporting infrastructure development for decentralization also requires a source of funds. Another significant infrastructural problem lies in lack of planning for recurrent costs (maintenance and upkeep), which can in turn erode sustainability.

3) Impact Problems

Mounting evidence based on historical experience and evaluation procedures indicates that decentralization has not always achieved its stated objectives. Often decentralization programs lack sufficient time to work. Due to concern over such matters as implementation problems, lack of political commitment, impatience for change, or the short terms of office for locally elected officials, the process requires ongoing adaptation and flexibility to respond to problems as they occur. This often involves a deep-seated change in attitudes and outlooks about ways of doing business. Major organizational change of any type takes time. Mistakes will be made along the way and a long period of organizational learning will ensue. Personnel must learn to perform new duties, play different roles and follow revised procedures.

2.4 Policy Determinants of Women Fertility in Decentralized Indonesia

The primary direct reason that fertility rates have declined is that the percentage of married women of reproductive age using modern contraception (contraceptive prevalence) has increased substantially. Another reason is dramatic changes in people's attitudes toward childbearing over the past four decades (Mize & Robey, 2006). Survey

findings demonstrate the success that Indonesia's family planning program has had in promoting a small-family norm and in enabling women to have the smaller families they want, furthermore proved the importance of family planning program in the policy of fertility.

Lowering fertility rate through increasing access to quality family planning services thus an important policy for developing countries that mostly have limited resources to provide essential public goods such as education, health, and job opportunities. Fewer children mean healthier and well-educated families as well as reduced government burdens to allocate budget on widening access of health and education services. Fewer children also mean households can allocate more resources to education and health care for the child. For these reason, the key policy objectives set by the Government of Indonesia are as follows (Jones & Adioetomo, 2014):

- Lower the fertility rate to replacement level as soon as possible, in the face of still relatively high desired family size, while respecting the rights of individuals and couples to have the number of children they desire.
- 2) Promotion of a rising age at marriage in the interest of the wellbeing of young people (especially young girls) whose freedom to choose their partner must be promoted, and who face health consequences from early childbearing. A rise in age at marriage will also lead to lower fertility.

3) Revitalization of the family planning program, in order to meet the reproductive health needs of the population and lower the level of unmet need for contraception.

Success in implementing these policies can be expected to have an influence on population growth rates and their determinants (fertility and mortality), and the implications of these demographic trends for the growth of different segments of the population. Based on this assumption therefore, the policy to decrease fertility rates in Indonesia will be framed by the family planning policy.

2.4.1 Budget Allocation Policy

The Family Planning program is allocated a very small share of the Regional Government Budget - between 0.04 and 0.2%. It is hard to say what share it should receive, but non-involvement of Local/District Government Task Force (SKPD) in planning and budgeting at the district level means loss of opportunity in competing with other programs such as education and health. There is also lack of integrated planning with the Health Offices and Ministry of Women's Empowerment and Child Protection.

Of the total BKKBN budget, about 35% remains at the central level and 65% goes to the Provincial BKKBN offices. At the provincial level, about 50-60% of the budget is distributed to the kabupaten/kota level, depending on needs. The 40-50% which remains at the Provincial level is used, among other things, for workshops, training etc. which draw participants from the kabupaten/kota level. The budget at the

kabupaten/kota level can be used for all aspects of the population, family planning and family development program. It is subject to control by the Provincial level. Since 2012, the distribution of the BKKBN budget from the Province to the Local/District Government Task Force (SKPD) has been by means of a MOU which is also signed by the Regents/Mayors.

The family planning program at the districts has two sources of funding. The first is the funds noted above, allocated by the BKKBN provincial level, and the second is the Regional Government Budget, which depends on commitment by the legislative and executive arms of local government.

BkkbN requires local government to provide 30% of contraceptives and supplies needed (Minimum Standard of Services – Standar Pelayanan Minimal – SPM, SK Kepala BkkbN, 29 January 2010). The minimum standards of services (Standard Pelayanan Minimal), designed as follows:

1) Family Planning-Regional Work Unit should allocate 30% of contraceptive supplies from the local budget (APBD) but in reality, this is not happening, so the central BKKBN has to provide all the contraceptive supplies, for free. Only some kab/kota under study was able to provide the 30 % of contraceptives, showing that these Bupati have a commitment to implement the Family Planning program. In addition, the Family Planning program obtains DAK (Dana Alokasi Khusus, or Special Funds) but the regulation stated that this money is mainly for equipment and infrastructure. This is a problem since the Family Planning program is more about

activities than infrastructure. If it is used for mobile clinics (operational car, speakers etc), there should be funds to cover operational cost.

- 2) There is a requirement set by the central government that local government has to provide 10% of the DAK money in order to receive this DAK. This reduces the local budget that is supposedly for the Family Planning program
- 3) Family Planning-Regional Work Unit is not actively involved in planning and budgeting of programs or activities at the village level. Most often proposals from the village level are only for infrastructure. Local/District Government Task Force (SKPD) should be involved in the development planning discussions (MUSRENBANG) at the district and sub-district level to advocate the need for FP to be included in the planning and budgeting.
- 4) Local/District Government Task Force (SKPD) has to compete with other local programs - education, health etc, family planning is not a priority, and there is no monitoring and evaluation of SKPD's performance.
- 5) Budgeting refers to past years performance and there is no guidance on the budget ceiling for the Family Planning program.

Some districts do meet the requirement, but the majorities do not have enough funding to do this. Therefore the Central office has to provide most of the free contraceptives for the poor. There are seven provinces where contraceptives were provided free for all of the

acceptors: Papua, Papua Barat, Maluku Utara, Maluku, NTB and NTT. But there is also an issue that contraceptives provided by the central office and delivered to districts level become commodities at this level, which means that acceptors have to pay to obtain contraceptives. Another issue is that funds are not provided for the handling costs of delivery of the contraceptives provided by the central office to the point of services (Jones & Adioetomo, 2014).

DAK (*Dana Alokasi Khusus* or Special funds) also poses problems. Regulations specify that it is only for infrastructure (sarana and prasarana) - which are not prioritized in the operational mechanism at the local level. This means that although this is a source for funding at the local level, regulations hamper its use for operational cost of the Family Planning program.

Since the family planning program is only one of 26 *urusan wajib* (obligatory functions) at the districts level, it is important for the SKPD to be able to negotiate the importance of family planning for funding. Government regulation No. 41 of 2007, article 22, and President Decree No. 62 of 2010 article 55 provides for the establishment of Local Family Planning Coordinating Boards (BKKBD), but so far, out of 534 districts, only 18 have a BKKBD (Jones & Adioetomo, 2014). Of course, the program works well in many districts that do not have a BKKBD, as the Family Planning-Regional Work Unit can conduct activities based on the MOU with the Province officials. But in many cases, it does not appear to work well, as it depends entirely on the political commitment of the local officials.

2.4.2 Human Resources Management

PLKBs (Petugas Lapangan Keluarga Berencana - family planning field workers) are the spearhead in the family planning dissemination; they were responsible for motivating clients to become acceptors. But since decentralization the availability of PLKB and their activities has been limited. Until 2000, the number of PLKB was around 36,000. This number decreased to 21,000 at the beginning stage of decentralization. The lowered priority for the family planning program after decentralization encouraged a number of PLKB to change careers. Since then, one PLKB, who is on duty in the field for the education of family planning, has to cover four villages. Ideally, one PLKB should be on duty only in two villages. The number of villages covered by PLKB varies between different areas in Indonesia. In Papua, for instance, one PLKB has to cover 42 villages (Jakarta Post, December 12, 2012).

PLKB in the reformation era were included as local apparatuses and their numbers continued to decrease due to several factors. First, a part of PLKB was assigned to a new job or position outside of family planning affairs. Second, the number of PLKB decreased because of job relocation or retirement and were not being replaced by new PLKB soon after. Because of that, overall, there was a crisis for the continuation of PLKB's existence. This situation certainly had a great impact on the ability of the family planning service unit to reach the target groups in various places.

Beside PLKB, the human resources that previously proven to give a great aid in the dissemination of family planning program are the PPKBD (Pembantu Pembina Keluarga Berencana Desa- supervisor of PLKB) and Sub-PPKBD. While PLKD based on the districts level, PPKBD and Sub-PPKBD are supporting them in village level. Unfortunately in local government budgeting there are no incentive remunerations for PPKBD and Sub-PPKBD (although it is exist in some districts, the number is very insignificant). Thus, geographical and topographical barriers, with no support for operational cost; and sometimes lack of social support from religious and community leaders, PPKBD and Sub-PPKD role practically vanished.

Another issue in human resources management is the uneven distribution of midwives in the village. In some districts, midwives are more concentrated in the districts capital than in the villages, no doubt related to the preference of midwives to work in urban areas. This increases problems of accessibility by the users. The overall performance of midwives is low due to the lack of trained ones, lack of technical skills, no supervision mechanism to ensure quality performance of midwives, and lack of necessary equipment.

2.4.3 Family Planning Dissemination

Behavior change communication is a hallmark of the Indonesian family planning program strategy. Throughout all phases of the program, communication has been a key element of Indonesia's family planning dissemination. BKKBN launched strategically designed, large-scale, multipronged, and long-term communication campaigns designed to

create a small-family social norm, to increase people's interest in having fewer children, and to generate demand for family planning services. The "small, happy, and prosperous family" campaign message became the unifying theme of all program communication materials at all levels (Mize & Robey, 2006).

These interpersonal outreach and community mobilization efforts were augmented by creative use of the mass media— radio in the early days and later shifting to television—and in every district by extensive networks of mobile vans, billboards, wall markers, and an array of locally inspired and developed approaches and materials. The Indonesian press also has played a prominent role in covering population and family planning events. News media coverage helped promote an enabling environment and set the agenda of family planning's crucial importance to Indonesia's development aspirations.

However, the success of these communication strategies lay mostly in the work of PLKB. The task of PLKB is encouragement of couples to adopt small family size values and to use contraception. PLKB, with non-medical backgrounds and sometimes only supplied by middle-school education, went from house to house promoting family planning methods, interesting residents in using contraception, and making referrals to private providers.

After decentralization, the PLKB belongs to the districts and the numbers declined significantly. Thus, the promotion of FP is rather neglected at the local level, with great variation between districts. Nowadays, the recruitment of new acceptors is mainly through strategic

events, campaigns to mobilize potential acceptors such as National Family Day (Harganas), and other events which can be used for mobilization of couples to become new acceptors. This system is called 'klinik bergerak' (moving clinics), which raises question on the sustainability of contraceptive use, the referral system and contraceptive re-supply.

2.5 Understanding the Link between Decentralization and Fertility

Decentralization is broadly defined as the shifting of responsibilities between tiers of government by several fiscal, political, and administrative instruments. The rationale for any decentralization initiative is to increase efficiency, cost effectiveness and program performance. Decentralization is also expected to improve intersectoral coordination and promote community participation.

There are many arguments in favor of decentralization. First, it is argued that a decentralized system, by reducing centralistic policy and increasing the access to better information on local circumstances, helps to make rational and flexible decisions that reflect the real problems and preferences of the population. This closer flow of information and interaction between health service providers and clients can provide non-bureaucratic institutional support to effectively target the local needs. It also promotes inter-sectoral coordination, increases accountability, reduces duplication, and improves the implementation of health programs (Litvack and Seddon, 1999; Lieberman, 2002). This has a positive impact

on the delivery of health care services and ultimately on health outcomes, including reproductive health.

Based on the argument above it can be well assumed that local government agendas such as family planning and population control also can be better addressed in a decentralized environment. Localization of fertility policy in China is a good example to illustrate the success of decentralization in decreasing total fertility rate. Baochang et.al (2007) explained that the ability of China's provincial government to draft their own birth control regulations allowing the local bodies to make their own preferences to regulate the allowable number of children and criteria of exemptions. These regulations clearly more acceptable in a country with heterogeneous demographic and socioeconomic conditions such as China, proven by the decline of the total fertility rate from more than 6 children per woman in 1950s to below the so-called "reproductive level" of 2.1 children per woman in 1990s (World Bank, 2014).

Second, decentralization passes responsibility and accountability to local bodies. This makes local governments become allocatively efficient because resources can be devoted to the most needed local services. With decentralization, fiscal responsibilities for services rest with local managers who have incentives to improve efficiency given that they can use the savings for other local purposes (Robalino et al, 2001). Their close relationship with the local people enables them to be aware of local problems and needs, and they are 'therefore in a better position to establish the right priorities than a central (or regional) government far away' (Peabody et al., 1999; World Bank, 2004). From these arguments

thus can be derived that the ability to self-maintain the public services programme's expenditure allowing the local government to focus on their own population preferences including in the matter of population control. Higher fiscal capacity enables local government to increase their expenditure in fertility related budget, thus contributing to fertility decrease.

Third, decentralization is expected to enhance the participation of local communities in decisions regarding health policy objectives, goals, strategies, planning, financing, implementation, and monitoring, which are important to improve the health outcomes at the local level (Lieberman, 2002). Decentralization is expected to create an environment for decision makers to get appropriate and up-to-date information about the preferences and problems of the local people, to be an effective channel for the people to express their wants and priorities, and a motivating environment for the local decision makers to respond to the local needs quickly and effectively (Khaleghian, 2003). Schneider (2003) argued that under politically decentralized system citizens define interests and form identities on the basis of local concerns, and organizations such as parties and social movements operate locally and compete over local issues and in local elections. In a fair and competitive local elections, incumbents will be motivated to prove their competence in facilitating public needs. Therefore, a well-designed and implemented decentralization policy is expected to improve the responsiveness of local leader toward public's needs and at the same time to improve equity, efficiency, quality, and coverage of reproductive health care services and thereby its outcomes.

However, if not properly implemented, decentralization may pose risks and challenges. Some literatures present arguments against decentralization and some factors that may hinder its effectiveness. First problem that associated with decentralization is increase in regional disparities in the absence of a mechanism to transfer resources from rich districts to poor districts (Robalino et al. 2001). Borck (2007) proposed a framework in which disparities affect fertility choice in decentralized OECD countries; he found that decentralization leads to higher growth of human capital with greatly increased inequality. While total fertility is not strongly affected, the distribution of fertility between rich and poor is, and in particular, the ranking of fertility rates is reversed (with a large elasticity of substitution). Whereas in the centralized system the poor have more children, in the decentralized system they have fewer children than the rich.

Second, a key factor that influences the effectiveness of decentralization is the existence of a strong planning and executive capacity at local levels as 'decentralization brings a heavy new management burden' to local bodies (Litvack and Seddon, 1999: 61). However, the experience of most developing countries reveals that local governments suffer from a shortage of qualified personnel and managers to shoulder the new responsibilities. This may undermine the competence of local bodies to plan and execute the new tasks (Collins and Green, 1994). The problem may be further worsen if there is a lack of clearly defined accountability and responsibility between and within different actors at the central, regional, and local levels (Arun and Ribot, 1999).

Williamson et al (2014) proposed that decentralization in family planning may overwhelm the capacity of lower-level organizations to fulfill new functions. Moreover, in some countries, decentralization has led to family planning not being a priority as local-level authorities reallocate resources to other areas. This problem may arise due to the lack of awareness of the local government about the importance of family planning in controlling population growth problems including fertility matter.

Bolivia's experience demonstrates the importance of decentralized institutional capacity in determining the impacts of decentralization on family planning services. Decentralization in Bolivia began in 1994 and was applied unevenly due, in large part, to weak capacity at the decentralized level (Saunders and Sharma, 2008). Family planning services were hampered by a lack of administrative and managerial capacity at the local level. Inadequate provision of training, technical support, and sharing of best practices to support small municipalities posed a major barrier to accessing services. In general, municipalities in Bolivia did not know how to access available funds and did not have the capacity to manage the funds that they were able to access.

The third potential disadvantage of decentralization is that local bodies may not necessarily reflect the interests and developmental priorities of the community they represent. It is argued that local elites and dominant individuals may hijack the decentralized power and authority to pursue their own interests and may not promote efficiency and equity (Collins, 1989; Mills et al. 1990). The inequalities brought by decentralization translate into higher implicit welfare weights assigned to

wealthier and more powerful classes in policy making and implementation, a phenomenon commonly referred to as elite capture (Bardhan & Mookherjee, 2012). In a centralized selection system for sub national leader, local elites may not have been able to capture public office because everything was strictly managed by the central government. The new mechanism opens a window of opportunity for local elites to consolidate and expand their power base by utilizing undemocratic methods (Sidel, 1999). The rise of elite capture presumably will influence the interests and priorities of local government to move toward the elites rather than the population of its region.

Some studies have also shown that the level of corruption at local governments can be much higher than at the central level (Brueckner, 1999; Dethier, 2000; von Braun and Grote, 2000). It is well known that corruption is a critical factor influencing personal decision making and hence economic outcomes, inevitably influences the decision about giving birth and child rearing. It is argued that corruption reduces not only productive investment such as education but also fertility rate. Yamamura (2011) presented evidence based on data from OECD countries that fertility rate is higher in less corrupted countries. However, the study did not explore precisely the mechanism by which corruption influences government expenditure and in turn affects fertility rate.

2.6 Other Determinants of Fertility

The organizations of fertility determinants were first introduced by Davis and Blake (1956). From their study, the factors influencing fertility

can be classified into two groups of determinants: (1) proximate variables and (2) socioeconomic and environmental "background" variables. While the former consists of all biological and behavioral factors through which the background variables must operate to affect fertility, the latter include the social, cultural, economic, institutional, psychological, health and environmental variables (Davis and Blake, 1956; Boongarts and Potter, 1983).

2.6.1 Direct Factors (Proximate Determinants)

The intermediate variables together constitute a complete set of proximate determinants through which socio-economic and cultural factors affect fertility (Bongaarts and Potter, 1983). The principal characteristic of a proximate determinant is its direct influence on fertility. It is explained in their study that most of the variations in fertility are mainly due to the differential impact of four variables, which are marital status, contraceptive use, abortion and breastfeeding (postpartum-infecundity).

a. Marital Status

In explaining historical patterns or the cross-sectional variation in fertility across countries or among regions and groups within a country, the proportion of the population ever married, the age of marriage, or the age at entry in sexual unions and the probability of widowhood and remarriage are often powerful determinants of overall fertility than the level of marital fertility itself. It is noted that age at marriage is generally low in developing countries, and it varies within the country among the

different groups. The general rule is that the higher the age at marriage the lower will be the fertility.

b. Contraceptive use

Contraception is central to the whole question of fertility control. By definition, some forms of contraception or abortion must be used if married couples wish to reduce their fertility. It is notable however, that contraception can take many forms, some of which are associated with sexual activity and may require high motivation to be used effectively (e. g coitus interruptus or the condom), and some of which are independent of sexual activity and are generally more effective (e. g hormonal contraceptive or intrauterine devices). From the perspective of economic research on fertility, it may be advisable to include contraception sterilization and deliberate abstinence from sexual relations all under "contraception". While there are many advantages to modern contraception (and some disadvantages as well), more traditional methods can also be effective in reducing the level of fertility.

c. Breastfeeding (Postpartum-infecundity)

In most societies there are several practices that women can follow after the birth of child that delay subsequent pregnancy. A woman is unable to conceive after a pregnancy until her normal ovulation returns. When she is breastfeeding, the length of factional amenorrhea is determined primly by the duration, intensity and pattern of breastfeeding. Moreover, in a number of societies, sexual intercourse is not permitted while the mothers breastfeeding the new born children, which further reduces the chances of conception.

2.6.2 Indirect Factors (Socio-economic Determinants)

Socioeconomic variables can affect fertility only indirectly by modifying the proximate determinants (Boongarts, 1983). Friedlander and Morris (1967) found positive and statistically significant relations between fertility and illiteracy, child mortality, proportion of agricultural population, proportion of nonfarm self employment, and overcrowded housing. Heer (1966) found that fertility is directly associated with per capita income when controls for other relevant variables are counted. Ainsworth et al (1996) observed the impact of women's schooling on fertility and contraceptive use in fourteen Sub-Saharan African countries and found that female schooling has a negative and statistically significant relationship with cumulative fertility in all of the countries, in both urban and rural areas. Panopoulou and Tsakloglou (1999) found that fertility is negatively related with female education, urbanization and family planning but is positively related with the levels of infant mortality and economic development.

a. Education

Studies of fertility differentials in both developed and developing countries indicate a negative relationship between the level of education attained by women and their fertility (Goldstein, 1972; Hessian, 1970; Jordan, 1976; Rodriguez and Cleland, 1980; Jain, 1980). This relationship tends to be strongest when factors such as husband's education, women's employment and type of education and place of residence are uncontrolled; and it seems to be strongest at younger ages. Fertility is

generally lower for women with more schooling (Becker 1960, Schultz 1997). There are several reasons why. First, when girls attend school their marriage age and age at first birth tend to rise relative to women who do not attend school (Birdsall 1980, Cleland, Bernstein et al. 2006). Second, women with more schooling are generally better able to obtain and understand information on how to prevent pregnancy; more likely to use modern family planning methods; and more effective users of family planning methods, although a certain minimum level of schooling may be necessary, typically about four years (Birdsall 1980, Cleland 2002, Pörtner, Beegle et al. 2011, Rosenzweig, Schultz 1989). Third, women are generally the prime care givers and as their schooling levels rise and they face improved employment and earnings opportunities, the opportunity cost of childrearing increases and they may choose to have smaller families (Chernichovsky, Meesook 1981). Fourth, as women's schooling and incomes rise there is less need for children to work either outside or at home, or to have children for old-age security (Lloyd, Ivanov 1988). Fifth, women with more schooling and higher incomes may in addition trade off more investment (e.g., in child health and schooling) in a smaller number of children against a larger number of children in which they invest less (Becker, Lewis 1973).

b. Income

The income variable is important in studying fertility. Any effect of income on fertility will depend on the type of income (e.g., wealth or wages) that changes and the relative income (wealth) level of households. Wealthier households, where wealth takes the form of income from

physical assets and land, tend to have more children. This is because increases in the returns to these assets while raising household endowments are unlikely to raise the opportunity cost of raising children (Schultz 1994, Schultz 2005). However, rises in other types of income such as women's wages may lower fertility as the opportunity cost of childrearing increases due to improved labor market and earning opportunities for women (Schultz 2005). However, in cases where women's wages are low, for example, in agriculture, looking after children may not entail a loss of income in which case fertility may not decline even if income rises (Chernichovsky, Meesook 1981).

c. Place of residence

Fertility is found to be higher in rural areas than in urban areas. Residence may have a strong effect on fertility by influencing women's values, how she spends her time, and their view of the world (Zeidenstein, 1979). Women in rural areas may want large families to ensure that someone will help with domestic and agricultural activities and provide financial security in old age. In urban areas, women may begin to limit their fertility because of the costs associated with child breeding. Living in urban areas may change women's values as they are expected to the modern health sector, family planning, and more western attitudes (Acsadi and Johnson-Acsadi, 1990)

d. Age at Marriage

Age is one of the most important variables, which characterize individual participants in the fertility process. Similarly age structure is one the major determinants of society's fertility patterns. The age of the

potential parent plays an important role in fertility outcomes because fertility is, in most senses, a cumulative process closely related to the lifecycle of each parent and of the family unit. Thus, age is closely associated with marriage, divorce or widowhood, menarche, the frequency of intercourse, the probability of conception and with menopause. Age is also related to many of the economic variables. Income, for example, is likely to increase over much of the live-cycle.

e. Female Employment

The employment of women often account as one of background factor that may affect fertility. For national population samples, the World Fertility Survey results confirm the existence of negative relationship between fertility and female employment (Rodriguez and Cleland, 1980). While a few studies provide evidence of a negative association many others demonstrate a positive relationship or no relationship at all; for example, even in the urban areas of developing countries, women's employment has been found to be consistently associated with fertility (Mc Greevy and Birdsall, 1974). Furthermore, in rural areas, women's participation in the work force often appears to be positively associated with fertility. The complexity of the relationship is underscored by the observation that, in some cases working women in rural environment of the developing countries have higher fertility than non working women in urban areas.

Occupational status is also cited as a crucial factor but a strong inverse relationship exists only for women employed in higher-paying professional jobs (Goldstein, 1972). This relationship is complicated by

attainment and modern life-style. As a result, a direct causal relationship between women's labor-force participation and fertility has not been adequately demonstrated. The fact that the relationship is often negative, and significant only for a national perspective, since only a small fraction of the female population has or is likely to have access to high status employment.