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**Matching Grants and Earmarking for Family Planning:
Lessons for the Philippines**

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Executive Summary

Matching grants and earmarking are two funding mechanisms that can be used to increase funding for family planning and reproductive health in local governments. Matching grants are funds that flow from the central authorities to peripheral governments that require these governments (e.g., state, province, municipality, district) to provide a proportion of the resources to be used for a particular program, in this case family planning and reproductive health. Earmarking is another funding mechanism where the central authorities specify the purpose and activities that are to be funded by their sources. Both types of funding mechanisms have been used in different countries for family planning and/or reproductive health activities.

The following report reviews several country examples where matching grants and earmarking have been used for family planning and reproductive health. This review provides empirical and anecdotal evidence of how matching grants and/or earmarking achieve effectiveness, equity, efficiency, quality, resource mobilization, and influence politics. In summary, the review found:

- Theoretical, empirical, and anecdotal evidence tend to show that both matching grants and earmarking are effective mechanisms for promoting objectives of family planning and reproductive health programs.
- Earmarking tends to be a more effective funding mechanism for achieving program goals than are matching grants.
- Matching grants have been shown to increase allocative efficiency (spending on appropriate cost-effective activities) in the US and technical efficiency (more “bang for the buck”) in Canada, while earmarking has been shown to decrease allocative efficiency in Colombia and Bolivia.
- Anecdotal evidence from Canada and Colombia shows that both earmarking and matching grants increase equity of local-level financing.
- There is some evidence of increased quality of services through earmarking. However, quality is one of the more under-studied areas of grant performance and further research needs to be conducted in this area before any formal conclusions can be made.
- The empirical evidence shows that grants produce higher increases in local government spending than do increases in taxable individual income in funding suggesting that both earmarking and matching grants could be an effective means of increasing local government expenditures for family planning and/or reproductive health.
- Political context and processes have a strong effect on the type and effectiveness of matching grants and earmarking.

Four recommendations for promoting family planning and reproductive health in the Philippines emerge from this review:

- Earmarking and matching grants are effective means of promoting the family planning and reproductive health objectives and could be effectively implemented in the Philippines.

- Earmarking and matching grants have potential to increase equity in funding for family planning and reproductive health objectives.
- In the current national political process, it is unlikely that either earmarking or matching grants will be adopted by the current national government; however provincial governments and donors could use matching grants as a means of mobilizing funds from LGU budgets for contraceptive procurements and other family planning and reproductive health activities.
- In the long run, earmarking of national budgetary allocations to local governments could be a more effective means of mobilizing local funds for family planning and reproductive health objectives. As the national political climate shifts, this option should be considered.

I. Introduction

Matching grants and earmarks have been promoted in countries around the world as means for central authorities to encourage or require that decentralized authorities fund specific priority health activities. In the US, matching grants effectively mobilized state funding for Medicaid health programs targeted to the poor. In Colombia, earmarking has assured a portion of central government transfers are assigned to health prevention and promotion programs. In Bolivia, earmarking has assured funding for maternal and child health.

This paper reviews the literature on international experience in the use of matching grants and earmarking in order to draw lessons for the use of these approaches for promoting family planning and reproductive health in the Philippines. We review two examples of matching grants for family planning and reproductive health (United States and Canada) and four examples of earmarking (United States, Colombia, Bolivia, and Ghana). These cases present empirical evidence on how matching grants and/or earmarking have had an impact on family planning and reproductive health, in terms of effectiveness, equity, efficiency, quality, and resource mobilization. This review also included analysis of the political processes involved in adoption and implementation of these funding mechanisms. Based on this review and our understanding of the Philippine context we make recommendations for the use of these mechanisms to promote family planning and reproductive health objectives in the Philippines.

The framework for the paper is as follows. The paper first defines matching grants and earmarking and the indicators of impact that will be used to evaluate the effectiveness of these funding mechanisms. Then the paper introduces case examples of matching grants and earmarking from six countries around the world and reviews the evidence of effectiveness of the mechanisms that comes from these cases, using measures of effectiveness, equity, efficiency, quality, resource mobilization, and political effect. The final section provides recommendations and suggestions for the Philippines.

Methods

The following analysis is based on a qualitative, web-based literature search of peer review journals and grey literature. The search found two detailed country examples of matching grants and four country examples of earmarking used for family planning and reproductive health objectives. These cases provided some evidence of how the mechanisms impacted the level of effectiveness, equity, efficiency, quality, and resource mobilization, as well as a discussion of the politics surrounding the implementation of these programs.

Limitations

Although there is a considerable amount of literature describing different matching grant and earmarking systems, there is a notable lack of evidence regarding their performance and/or impact. Specifically, there is little empirical evidence regarding the degree to which matching grants and/or earmarking achieve the technical aims for which they are designed. Most of the research involves cross sectional data, using only one time point,

which limit any assessment of causality and usually is insufficient for isolating the effects of the funding mechanism relative to other potential influences. Better research methodologies for measuring the effect of matching grants and/or earmarking would involve collecting data on performance over a period of time or incorporating methodologies that account for the potential bias of endogenous variables. The difficulty with these analyses is that the implementation of matching grants and/or earmarking is often implemented in all local units at the same time, not allowing for variation among local level entities. A proper time series analysis would need to have some the reform implemented in certain areas and not implemented in other areas in order to distinguish between time effects and reform impacts. Similarly, identifying and modeling endogenous variables requires proper data collection and difficult modeling techniques. Some of the empirical evidence below does use time series analysis and more complicated modeling techniques while other evidence is based on cross sectional analysis and/or anecdotal observations. These limitations are noted in the discussion below.

II. Background on matching grants and earmarking

Objectives and Types of Matching Grants

The theory behind matching grants and other types of intergovernmental transfers is based on a framework of fiscal federalism. Fiscal federalism refers to the division of public-sector functions and finances in a logical way among multiple layers of government (King, 1984; Bird, 1999). It encompasses a whole range of issues relating to the vertical structure of the public sector (Oates, 1999). Motivation for a fiscal federalism framework stems from Principal-Agent theory. In this theory a “Principal” (individual or institution) has a set of objectives whose achievement depends on the actions of other individuals or institutions, “agents”.. While agents may share some (or all) of the principal’s objectives, agents also have other objectives such as increasing their own income or reducing the time and effort they devote to tasks for the principal. The principal, therefore, must use administrative rules and incentives to encourage the agents to achieve desired objectives. Under a federalism framework (i.e., in the case of decentralization) the principal is the central authority and the agent is the local authority (Bossert, 1998).

Matching grants are a mechanism by which the central government can help finance the services for which local governments are responsible. Under fiscal federalism, the central government has the basic responsibility for fiscal stabilization and income redistribution within a country, while the local governments, although they may not have the fiscal abilities of the central government, determine the most appropriate and necessary services for those in their territory. One of the important aspects of the fiscal federalism literature is the appropriate level and design of transfers from upper-level governments to finance the services for which local governments are responsible. Matching grants are intergovernmental transfers that provide funds from one level of government to another (Ma 1997)). They are a way for the central government to compensate local governments for additional expenses for providing specified public services to their citizens (Bird, 1999). They also may require that the lower level (e.g.,

state, province, municipality, district) provide a certain proportion of the resources to be used for a particular program (Bossert, 1998). Such a cost-sharing system is designed to capitalize on the resources of the central government and provide incentives to the local level to match these funds in order to mobilize additional funds and provide services to their citizens. Different matches may be provided based on the wealth or location of the local entity. The central government often imposes standards and norms for the local programs, but may give the local entities some flexibility in responding to local conditions and priorities. Such a system would be important if the government wants to require that local governments enact policies designed to achieve family planning/reproductive health priorities. They may not be an effective option if the national government, as in the Philippines does not support these objectives. However, donors may use matching grants to local governments if they are allowed to provide funds directly to local authorities. And in some cases, sub-national governments, such as the provincial government, may use matching grants with lower level district or municipal governments.

There are several types of matching grants within the broad domains of “conditional” and “unconditional” grants. Conditional grants, also called “specific-purpose” or “categorical” grants, define which purpose(s) or activities are to be funded with the grant and the matching funds from the local government (i.e. restrictions on the use of the transfers) (Ma 1997). There are three types of conditional grants: “matching open-ended grants”, “matching closed-ended grants”, and “non-matching grants”. With an open matching grant, the cost to the central government depends on how much the local government has to pay: the funding level on open matching grants is uncapped and fluctuates with service costs and demand (Bossert and Beauvais 1998). In this type of grant the liability of the central government is uncertain and could lead to budget overruns. In a closed-ended matching grant, the central government or donor puts a ceiling or defined spending limit on the amount they will contribute to the specific purpose. Non-matching grants, also known as “block grants” became popular in the United States in the 1980s. They consolidate several grants into one “block” and fund a broad range of activities within a particular sector, such as health or education. They have few restrictions and monitoring requirements. Non-matching grants are not expected to have redistributive effects; whereas matching grants are predicted to stimulate local expenditures because they lower the marginal cost of the services they target (Bossert and Beauvais, 1998). Table 1 below summarizes the different types of conditional grants.

Table 1. Types of Conditional Grants: Description and Examples

Type of Grant	Description	Examples
Matching Open-Ended Grants	Cost to the central government is variable depending on local government expenditures	Medicaid Matching Program in the United States
Matching Closed-Ended Grants	The central level puts a ceiling or defined spending limit on the amount they will contribute to the local level	Canadian Assistance Program
Non-matching Grants (Block Grants)	Consolidate several grants into one “block” and fund a broad range of activities within a particular sector,	Canadian Health and Social Transfer Program

	such as health or education	
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Unconditional grants place no restriction on the use of the funds. These types of grants are mainly lump sum payments made to local governments with the purpose of equalizing financial capabilities among local governments. Often, a formula is used to allocate the equalization transfers. The type of formula used for this allocation is often subject to intense debate. This form of grant has been used widely in the OECD countries (Bossert and Beauvais 1998).

Objectives and Types of Earmarking?

Earmarking is another financing mechanism used by governments to ensure that funds are assigned to certain activities. Earmarking is often accomplished through the approval of a budget that includes a line item for a certain program, like “family planning”. Earmarking shares similarities with conditional grants in that the central level usually specifies the specific purpose of the earmarked funds. However, unlike conditional grants, earmarked funds do not have to be matched by lower levels.

According to the literature, eight distinct types of earmarking have been identified (Type A-H) (Bird, 1997). The following table highlights the different types of earmarking, along with a short description and an example.

Table 2. Different Types of Earmarking

Type	Description	Example
A	Revenue from the sale of a service are used solely to finance a specific activity	Public Enterprise
B	Revenue from the sale of a service is used to finance a specific activity, but the amount spent on the area is not affected by the amount collected from the tax	Gasoline Tax and road finance
C	Revenue finances a range of activities or social payments	Social Security
D	Revenue finances a specific activity, but the connection between the revenue and activity financed is quite “loose”	Tobacco Tax and health finance
E	Revenue finances a specific activity, but the rationale behind this investment is poor	Environmental Taxes and clean-up programs
F	Rationale behind earmarking is poor and amount spent on the area is not affected by the amount collected from the tax	Payroll tax and health finance
G	Revenue sharing where the amount of revenue collected by some national tax is distributed to sub-national governments	Revenue sharing to localities
H	Earmarked tax is spent in a “general” manner	Lottery Revenue to health

Experts debate about the benefits and risks of earmarking. Some argue that earmarking is beneficial because it provides a pre-committed amount of revenue to a specific expenditure program, avoiding the risk of spending the funds inappropriately (Brett and Keen, 2000). For example, in the United State earmarking is often used for environmental issues. Taxes on chemical and gasoline are often spent on cleanup efforts from leaks of such substances or for road and public transport projects. Earmarking of taxes eliminates the possibility that the taxes or revenues raised for one purpose will then

be used for a different purpose. However, other experts point out that earmarking may not be beneficial for the agents involved since it may not lead to greater local allocations, in either the short term or long term, to the earmarked priority areas (Waddington, Cattriona, 2004). Several country examples and empirical evidence will be used below to expand on these ideas.

Impacts of Matching Grants and/or Earmarking

The country examples will be used to assess the level of effectiveness, equity, efficiency, quality, resource mobilization, and political effect of implementing a matching grant and/or earmarking for family planning. The following section gives a brief definition of each impact measure.

Effectiveness

A central question is whether matching grants and earmarking have had any impact on the effectiveness of family planning/reproductive health programs. The measures of effectiveness often cited in the cases are reduction in the number of births among young mothers, infant mortality rate, and abortions, and increases in the number of modern contraceptives used.

Equity

One of the measurements used to evaluate matching grants and/or earmarking programs has been the level of equity in allocations and in impacts of family planning and reproductive health programs among the local government units receiving the match and/or earmarked funds. A positive impact of implementing matching grants would be to increase horizontal equity among local entities. Some matching grants, such as those in the United States, focus on urban and low-income populations in order to achieve interstate equity of access by these populations. Through intergovernmental transfers, the federal government redistributes allocations of funds among states in hopes of decreasing differing mobility and competition among states and achieving greater horizontal equity in funding. A negative impact of implementing matching grants or another type of intergovernmental transfer would be a decrease in equality of allocations and outcomes across states. This could happen if more autonomy is granted to the local level, allowing some states more potential to raise their own funds than other states (Bahl, 1999).

Efficiency

Another measurement used to evaluate matching grants and earmarking is the level of efficiency achieved through these funding mechanisms. Efficiency is traditionally measured in two ways: allocative and technical efficiency. Allocative efficiency refers to the assignment of resources to the most effective type of program for achieving objectives. Allocative efficiency occurs when resources are put into activities that are most cost effective means of achieving the objectives – such as funding low cost effective contraceptive methods. Technical efficiency is defined as producing the maximum amount of output (e.g., services) from a given amount of input (e.g., funding, human resources). In other words, a country is efficient in making family planning and/or

reproductive health care if they can produce more family planning services for the dollar amount they are spending to provide these services (Hollingsworth, Bruce 1999).

Quality

The level of service quality produced using matching grants and/or earmarking is unfortunately an under-studied area of grant performance. Few of the studies provide evidence of the quality of services provided. However, quality is an important element even for efficiency measures since low cost services may be of a lower quality than high cost services and efficiency measures assume equal quality. The discussion of quality and its relation to matching grants and/or earmarking summarizes patterns of quality found in the literature giving examples from the country studies cited below.

Resource Mobilization

A central objective of matching grants and to some degree also of earmarking is to encourage local governments to mobilize additional resources for the objectives of the grants or earmarks. Early theoretical work on the effects of intergovernmental grants found that earmarking leads to the assignment of funds to the required activity and usually results in more total spending on those activities than do matching grants for similar activities. Thus it was found that matched grants stimulated only a small amount of local and state spending (Gramlich, 1977). However, subsequent studies have cast doubt on these findings, showing that matching grants have been able to stimulate local spending more than a corresponding increase in local income (Bailey and Connolly 1998). This phenomenon has indicates that grants can exert some degree of control and influence over local governments, and are thus useful as tools for redistribution and stimulation.

Political Processes

The political process to adopt and implement matching grants and/or earmarking involves several steps. First, the general political system will define the context and rules of the political “game” that will specify which political actors are important players and what rules they must play by. In the cases we review, all are democracies and all have similar players, including the Executive branch, legislatures, civil society actors (including churches) as well as specific advocacy groups in favor and opposed to the objectives and the use of matching grants and earmarking mechanisms. In some countries donors play a significant role and in others (US. And Canada) they are not important actors.

Second, all key players (stakeholders) that may be involved in the matching grant and/or earmark policy should be identified and their positions, power, and interests and the consequences of the policy for each player should be determined. It is often useful to use the stakeholder analysis software created by Michael Reich of the Harvard School of Public Health, the PolicyMaker, to analyze positions and powers of the different actors.

The major actors interested in pursuing the specific objectives of greater access to modern contraceptives and other reproductive health activities and in using matching grants and earmarking as the means to achieve these objectives need to be identified and

their relative power assessed. Other actors, who might be drawn to support these objectives through matching grants and earmarking, should also be identified and their power assessed. Most important also will be identifying the potential opponents and their power. In the case of using matching grants and earmarking for the purpose of reproductive health objectives, we must consider both those actors who have clear positions in favor or opposed to the objectives of reproductive health as well as those who have positions in favor or opposed to the use of matching grants and earmarking. These may two different sets of actors. The interest groups involved in the political process of reproductive health are well known to family planning and reproductive health advocates and do not need to be reviewed here. However, usually the Ministry of Finance and other actors involved in tax and finance issues, are generally opposed to the limitation on funding that is imposed by earmarking for special purposes. While national level actors are not generally opposed to matching grants which can be seen as a mechanism for mobilizing additional resources, the local governments who would be required to mobilize these resources tend to oppose this mechanism. The cases below review some of the political process in country contexts that are somewhat different from that of Philippines. Specifically, the national level actors in favor of family planning and reproductive health were relatively successful in gaining support for these objectives and were then able to overcome opposition to the use of matching grants and earmarking in order to achieve those objectives. In the Philippines, the national political situation is such that the objectives of family planning and reproductive health are not yet strong enough to gain support of these objectives, let alone overcome resistance to use of these financing mechanisms for those purposes.

III. Country Examples-Matching Grants and Earmarking

Matching Grants

United States

One of the better examples of a federal matching grant that includes family planning is the Medicaid Program in the United States. The US currently has over 600, mostly conditional, federal grants. In the early 1990's conditional grants accounted for more than 90% of the federal intergovernmental transfers (Rosen, 1995). These grants were for highways, public transportation, airports, waste water treatment, community and economic development, elderly assistance, aid to families with dependent children, supplemental security income, food stamps, housing assistance, and public health (Bossert and Beauvais, 1998). Health was one of the most important recipients of these grants, with one of the largest open-ended matching grants being the Medicaid program.

Medicaid was established in 1965 as a jointly funded initiative between Federal and State Governments to assist states in the provision of adequate medical care to eligible needy persons (www.cms.hhs.gov/states/). The Federal government pays the largest share of Medicaid costs, while the state provides its own source revenues as a match for national funds received (Palley, 1997). The Federal Center for Medicare and Medicaid Services calculates its share of costs for services based on the most recent three year average per

capita income for each state and the national per capita income (Addendum to North Carolina Annual Report, 2003). A state with the same per capita income as the nation has 55% of its Medicaid expenditures reimbursed (matched) by the Federal government, and each state is guaranteed at least a 50% match. As a state's income decreases, the federal match received increases (Fossett, 1996).

While Medicaid varies considerably from state to state, family planning services must be provided by all states. Within broad national guidelines provided by the Federal government, each state establishes its own eligibility standards, determines the type, amount, duration, and scope of services, sets the rate of payment for services, and administers its own program. However, according to Title XIX of the Social Security Act, in order to receive the Federal match, certain basic services—including family planning—must be provided in each state: the Social Security Act requires payment of part or all of the cost of “family planning services furnished (directly or under arrangements with others) to individuals of child-bearing age (including minors who can be considered to be sexually active) who are eligible under the State plan and who desire such services and supplies” (Social Security Act #1905).

Since the 1980s, a systems of waivers have been used by states to explore innovative approaches to achieve the objectives of the national program. Before the 1980s, persons and families qualifying for welfare were automatically enrolled in Medicaid and could visit doctors enrolled in the Medicaid program. (Benson Gold, 1999)¹. After the 1980s, federal law required states to expand Medicaid coverage to include prenatal, delivery, and postpartum care to women with incomes up to 133% above the federal poverty level (Alan Guttmacher Institute, 2005 and Benson Gold, 1999). A woman who qualified for this maternity care expansion remained eligible for care throughout her pregnancy and for 60 days post partum, during which family planning services could be provided (Benson Gold, 1999). However, any services offered at the state level which went beyond the prenatal, delivery, and postpartum care required approval, in the form of a waiver, from the Centers for Medicaid and Medicare (CMS) at the federal level. In order to obtain such waivers, the state had to prove that providing these family planning services was more cost-effective than providing pregnancy-related services to recipients who would “otherwise become pregnant and eligible for Medicaid funded prenatal, delivery, and postpartum care.” Waivers have essentially been tools used by the state to relax federal Medicaid guidelines and still qualify for matching grants (Hurley and Zuckerman, 2002). They have therefore allowed states to launch new initiatives, programs, and practices that improve levels of reproductive health (Hurley and Zuckerman, 2002).

Two types of waivers have been granted at the state level. The first type continues Medicaid coverage for family planning services beyond the regular 60 day postpartum period (Benson Gold, 1999); continued coverage varies from 2-5 years. A second type of waiver applied for by states extend Medicaid family planning coverage to women who had not previously been covered under Medicaid. These waivers essentially increased income-eligibility levels for Medicaid-covered family planning services above the

¹ Adults qualified for welfare if they were poor and disabled, pregnant, elderly or in a family with dependents.

eligibility levels for Medicaid-covered maternity care. For example, New Mexico, Oregon, and South Carolina have received approval to cover family planning services for all state women with incomes up to 185% of poverty. Four waiver programs, California, New York, Oregon, and Washington, provide coverage to men as well as women (Alan Guttmacher Institute, 2005).

While states have worked to expand Medicaid coverage, not all eligible persons enroll. Extending a Medicaid eligible enrollee into the family planning program after their 60 days of coverage is quite simple: since the enrollee is already in the system, extending her eligibility only requires sending her an updated enrollment card. However, identifying those women who qualify for family planning services solely on increased income qualifications is considerably harder. Because Medicaid eligibility is determined at the point of service, women not currently enrolled in the Medicaid program and/or with no previous contact with the state social service “welfare” agency are difficult to locate proactively. Further, many of them resist participation because they perceive it to be related to “welfare”. Some states have begun an outreach/media campaign to increase enrollment, while others are using the current provider network to increase awareness about the program.

Canada

The largest block grant that is currently allocated to provinces in Canada was introduced in 1996 and is called the Canada Health and Social Transfer Program (CHST). The CHST is a combination of two earlier transfer programs, a matching-grant program called Canadian Assistance Plan (CAP) and a lump-sum allocation called the Established Programs Financing (EPF) (Smart and Bird, 1996).

Although CAP is no longer in place in Canada, it is describe here because it initially was an open-ended matching grant program that eventually became closed-ended before being eliminated altogether. Canada phased in this conversion from open-ended to closed-ended, starting with three out of ten provinces. One of the few empirical studies conducted on matching grants in Canada was done using this natural experiment, comparing the outcome of open versus closed matching schemes in these provinces. A description of the Canadian program as well as the results of this study is described below.

The CAP was a conditional matching transfer for welfare assistance providing elderly assistance, blind person allowance, disabled persons allowance, and unemployment assistance. Although it was a conditional matching grant, it did leave wide discretion to the provinces in the allocation of expenditures to particular areas of social assistance. Similar to Medicaid in the US, CAP originally was matched and open-ended. All provinces had a fixed matching rate of 100% (Baker et al., 1999). Provinces were free to choose their own rates and categories of assistance. CAP was mostly used for non-insured services like drugs and dental and nursing care (Osborne, 1985). Family planning services, when rendered by a physician or in a hospital, were ineligible for CAP sharing (Osborne, 1985). In order to control rising costs, CAP was changed to a closed-ended matching grant for three out of ten provinces in 1990. This meant that federal

contributions to these three provinces were “constrained to grow by no more than 5% annually” (Baker et al., 1999). These three provinces still received the 100% match, but any expenditure over the 5% was not subject to matching.

In 1995, the Canadian system was revamped, introducing the Canada Health and Social Transfer (CHST). CHST merged the health and post secondary education funding of another funding mechanism, Established Programs Financing (EPF), with the CAP. The CHST block grant is allocated to provinces on a historical basis (Smart and Bird, 1996). While the expenditure policies in each of the program areas under CHST are the responsibility of the provinces, there are mandated general “national standards” that the provinces must follow—one of which is compliance with the Canada Health Act. Since the CHST is a block type grant, it will not be the focus of the discussion below.

Earmarking

United States

In the US, earmarking for family planning is done at both the national and state level. At the national level, Title X of the Public Health Service Act of the Research and Family Planning Act of 1970, is an earmarked set of funds strictly to be used only for family planning services. These funds can be administered to the state or another entity that provides such services (McFarlane and Meier, 1998), such as a clinic or a family planning organization.

At the state level, each state approves its own annual budget and earmarking of funds depending on the priorities for the year and the political environment in each state. For example, the state of Massachusetts cut their budget line item for family planning by 41% in FY04. Those in favor of reinstating these funds proposed an earmarking of funds so the no less than a certain amount would be spent on “family planning services and expanded outreach and education provided by agencies certified as comprehensive family planning providers” (Pro-Choice Action, 2004).

Colombia

Colombia began allocating broadly earmarked grants to lower levels to support education and health since as early as 1968 in the form of an intergovernmental transfer for health and education called the Situado Fiscal (SF-Tax Appropriation). Under Law 60, established in 1991, 20% of the amount of SF was earmarked for health and half of this amount was to be devoted to primary care activities (Bossert et al., 2000). In addition, Law 100 was implemented in 1993 introducing a General System of Social Security for Health in Colombia (PAHO, 2001). Under this law, health care would be provided to all citizens by the year 2000. In the same year, Law 10 was implemented to begin the process of decentralization. The Colombian system was subsidized by contributions from those above a certain income threshold (12% of their monthly salary) (International Observatory on End of Life Care), while the poor, unemployed, and peasants were subsidized by the national government (PAHO, 2001).

Family planning services are included in several health plans offered to Colombian citizens through these policy changes. One of the health care plans, the Compulsory plan, provides health services to all families and includes maternal health care. A second health care plan under this system, the Primary Health Care plan, provides coverage for family planning services and the treatment of transmissible diseases like HIV/AIDS (Center for Reproductive Law and Policy, 1998). This coverage is mandatory and free. A third plan, the Subsidized plan for those who cannot afford fees, also includes family planning services and reproductive health counseling, pap smear testing, breast examinations, and programs to treat sexually transmitted diseases (Center for Reproductive Law and Policy, 1998). The government only partially subsidizes any primary care services not included in the Primary Health Care Plan.

Bolivia

Several reforms in the early 1990s in Bolivia introduced health sector deconcentration and a new structure for the Ministry of Health called the New Health Model. These changes were accompanied by the implementation of a national program of maternal child health insurance called Seguro Nacional de Maternidad y la Niñez (SNMN) in 1996. This program provided a basic care package that was available without fees. The program was co-financed by the central and municipal governments. The municipal governments were required to earmark 3% of its “tributary co-participation” resources to the maternal child health insurance. Tributary co-participation was another aspect of the fiscal reforms that mandated that 20% of central government spending had to be allocated to the municipalities (Bossert et al., 2000). One of the goals of the Maternal and Child Health Insurance was to reduce maternal mortality by 20% and infant mortality by 25% (Center for Reproductive Law and Policy).

There is not a considerable amount of empirical evidence showing positive or negative impacts from the introduction of SNMN and earmarking of funds for maternal and child health insurance. One study (Dmytraczenko et al., 1998) that does provide some evidence was conducted in 1998 and examines various indicators of effectiveness, quality and efficiency. The results of this study are discussed in more detail below. Although these results are presented, they should be analyzed with caution since this study did not control for any possible confounders in their analysis and did not analyze the outcomes with respect to the earmarking of funds alone, rather with respect to the implementation of the entire SNMN.

Ghana

Ghana has used earmarking of donor funds in the past to support their immunization efforts. Although this example is not specifically related to family planning, it is relevant because Ghana had to use this financing strategy as donor funding for immunizations was decreasing and they needed to begin to sustain immunization programs with local resources. Using other sources of funding along with earmarking of donor funds has ensured that vaccines and supplies are purchased in a timely fashion (Levin et. al, 2001). Earmarking in this example was a short term strategy that was used in 2000, while the Government of Ghana devised a more long term, stable solution. Although it is difficult to separate out the effects of earmarking of donor funds from other donor financing

activity (especially since it was only a short-term solution), there seems to have been some positive outcomes from the earmark. For example, it was reported that supplies were purchased in a more timely fashion and funds for specific programs, such as the Polio National Immunization Days, were guaranteed to be delivered. Other impacts of this earmarking are addressed in the discussion of impacts below.

IV. Impacts

The following section reviews the empirical evidence on the impact of matching grants and earmarking from the above country examples. The criteria used to measure the impact of each type of program are the level of effectiveness, equity, efficiency, quality, resource mobilization, and the politics surrounding the implementation of these programs.

Effectiveness

In 1998, McFarlane and Meier examined three types of funding mechanisms for family planning (matched grants, block grants, and earmarking) to determine which funding mechanism produces the best outcomes for family planning services in the United States. Using birthrates, abortion rates, and infant mortality rate as outcomes, they assess these different funding mechanisms using a pooled time-series analysis. Their results show that earmarking is most effective in lowering infant mortality rate, birthrate, and abortion rate. Matching grants were found to be more effective in lowering the abortion rates than block grants, however block grants are more effective in lowering infant mortality rates and birthrate than matching grants. Although there are some methodological issues with using a pooled analysis that might bias these results, they conclude that earmarking is the most effective way to address family planning issues. The authors also conclude that matching grants are the second-most effective program and block grants least effective. (McFarlane and Meier, 1998).

There are numerous other studies that show positive impacts in terms of effectiveness from United State's Medicaid-funded (matching grant) family planning services. These results are only for matching grants and were not analyzed in comparison to earmarking and/or block grants. Cutright and Jaffe (1976) found that the US family planning program reduced fertility of low-income women. Anderson and Cope (1987) found that public family planning programs lowered fertility in areas where they operated. Corman and Grossman (1984) showed that organized family planning services reduced infant and neonatal mortality rates.

Another more anecdotal example of effectiveness of the matching grant program for family planning is found in one of the states of the US, Rhode Island. Rhode Island was one of the first states to analyze whether the family planning services they provided through extending the post partum family planning services for two years made a difference. Before the Medicaid expansion in Rhode Island, 20% of women having Medicaid-funded deliveries in the state had become pregnant within nine months of a previous birth. After the expansion of Medicaid through the waiver program, this figure dropped to 11%. The program was estimated to have helped prevent 1,433 deliveries to Medicaid-eligible woman—a significant cost savings to Rhode Island. This study has

certain limitations in its design in that effects of time and other factors are not considered in determining the drop in deliveries. Although these studies show the positive impact of matching grants, they all have certain limitations such as cross-sectional design and/or lack of proper modeling. They also focus more on the specific requirements of the program rather than evaluate comparatively the funding mechanism.

A more recent study, by Mellor (1996) uses data over a series of years and a modeling technique that accounts for certain biases in the data structure. Using this more sophisticated design, Mellor finds that providing contraceptive services through the matched grant system of Medicaid in the US is effective in decreasing birth rates. Mellor's study design does not clearly demonstrate that it is the public Medicaid funding that leads to the increase in provided, since the entire cohort used in the study is taken from public data sources. However, using this cohort, she does find this positive result which may be generalizable to other cohorts that receive similar services through similar funding mechanisms.

There is some anecdotal evidence of the success of Colombia's health sector reform in terms of access to family planning and reproductive health services after implementing an earmarking of funds specifically to the health sector (RH Catalyst, 2005). According to the National Demographic and Health Survey from 1995, the age of first pregnancy has increased for educated women and maternal mortality rate is declining. Although, these are positive trends, they are not supported with results from valid methodological study designs. Further research on earmarking in Colombia is needed to verify the link between increased effectiveness for family planning and earmarking.

The only indicator of effectiveness measured before and after the introduction of the Seguro Nacional de Maternidad y la Niñez (SNMN) and the earmarking of 3% of funds to maternal and child health insurance in Bolivia was the total number of births registered in 35 health care facilities. The survey of these health care facilities found a 32% increase in births between 1995 and 1997 (Dmytraczenko et al., 1998). These data are not consistent with the empirical evidence mentioned previously indicating that earmarking decreases birthrates, abortion rates, and infant mortality rates. The differing findings may be due to the fact that, although this study measured a change in births over time, the authors did not control for the effect of time and any other factor that may influence births, such as differences across facilities.

Since the earmarking of funds for immunizations in Ghana was combined with many other sources of funding, it was difficult to separate out the effectiveness of earmarking versus the other funding sources.

Equity

The Canadian experience provides some evidence of a higher level of equity achieved through matching grants. Anecdotal evidence shows that the CAP and the EPF were fairly consistent at redistributing funds over all the provinces compared to the new block grant, CHST. Under the CAP and the EPF, transfers were largest to provinces with below-average per capita income (Smart and Bird, 1996). Similarly, transfers were

below-average for the three provinces with above-average incomes. The authors who note these equalization effects worry that block funding of transfers “may exacerbate interprovincial inequities, relative to the matching formula adopted under CAP” (Smart and Bird, 1996). Further research is needed to determine the true equity impact of matching grants versus other forms for intergovernmental transfers.

The Colombian example provides some evidence that earmarking funds for health increases the level of equity of health care expenditures in Colombian municipalities. According to a study published by Bossert et al. (2003), after the implementation of earmarking in 1991, the ratio of municipal health care expenditures between the richest and the poorest municipalities in Colombia fell from 6.1 in 1994 to 1.2 in 1997. Over the same time period, the Gini coefficient fell from 0.41 to 0.21.² While expenditures for health care increased over this period for all municipalities, a higher level of equity was achieved between the rich and poor municipalities through a combination of a population based formula and earmarking. This analysis was performed using general health care expenditures, not reproductive health care expenditures. The assumption that has to be made is that if overall health care expenditures increased, reproductive health care expenditures must have increased as well.

Despite the positive evidence for increased equity from the above study, a report from a workshop in 1997 on Women’s Health within the frame of the Colombian Law 100 of 1993 shows that maternal mortality rates are three times than the national average on the Pacific Coast as compared to the rate in the Medellin metropolitan area. Moreover, while educated women have tended to postpone motherhood, poor women have begun to have children even earlier (Center for Reproductive Law and Policy, 1998).

Bolivia’s introduction of an earmarking for maternal and child health did not show an increase in equity between departments. The study looking at the effects of the SNMN (Dmytraczenko et al., 1998) showed a high level of inequity in the percent increase in prenatal care visits and births at the department level between 1996 and 1997. Over this one year period the difference between departments for primary care visits was large. The department of Oruro had an 85.7% increase in new prenatal care visits while Santa Cruz actually had a 9.9% decrease in visits. Similarly, there was an almost four fold increase in births between the departments with the highest percent increase in births (64.3%) to the department with the lowest percent increase in births (13.2%). These results should be analyzed with caution since these increases do not factor in any possible confounding factors such as population size and type of facility available in each department.

More generally, the empirical evidence linking increased equity between states and matching and/or earmarking is weak. The above studies show some trends that are in

²The gini coefficient is a common statistic used to measure income inequality. Algebraically, the gini coefficient is defined as half of the arithmetic average of the absolute differences between all pairs of incomes in a population, the total then being normalized on mean income. If incomes in a population are distributed completely equally, the Gini value is 0, and if one person has all the income (the condition of maximum inequality), the Gini is 1.0.

favor of increased equity and other patterns of decreased equity with these financing mechanisms. Further research needs to be developed to clarify this relationship.

Efficiency

The Medicaid waiver program has been shown to be cost-effective. Under the waiver program, any service offered at the state level beyond the basic prenatal, delivery, and postpartum care requires approval, in the form of a waiver, from the federal level. Each state must obtain their own waiver, describing and producing evidence that providing these services is more cost effective than covering pregnancy related services. A study examined the level of cost effectiveness achieved through this program. The study examined six state waiver programs to determine whether they met the federal requirement for “budget neutrality”, which measures if federal spending under the waiver was less than what federal spending would have been without the waiver. The study found that all six waiver programs resulted in net savings. These saving were split between the federal and state governments, based on the match for each state. As they saved money, the amount of services increased (number of clients served in clinics, geographic availability of services, reduction in unintended pregnancies) (Benson Gold, 2004). Although these studies did not involve rigorous, methodological analyses they show some level of increased allocative efficiency with the Medicaid matching grant specifically for family planning.

Canada’s matching program showed a level of increased technical efficiency in changing from an open- to a closed-ended matching grant system. An analysis was done by Baker et al. (1999) using a time-series design, which controls for differences across provinces and unobserved time effects which could potentially bias estimated expenditure levels. After controlling for these effects and other types of observable heterogeneity across provinces (GDP, population size, age structure, and political characteristics) using random- and fixed-effects designs, Baker et al. found that those provinces with a cap on their spending rates had a 7.5% lower total expenditure than those provinces that remained open ended. The study also showed that the capped provinces lowered their expenditures by decreasing the number of beneficiaries to their programs. These results suggest that matching grants, especially closed-ended grants, decrease expenditures and provide incentives for the local level to re-assess the number of services they can realistically provide with the funding allocated to them. Unfortunately, there was little further evidence and/or empirical results of the success of the matching program, CAP, in Canada, since it was replaced by a block grant structure in (CHST) in 1996.

In terms of earmarking, Bossert et al. (2003) investigated the change in efficiency before and after the health reforms in Colombia (incorporating earmarking) were implemented. They used a more technical level of efficiency measure, defining efficiency as the amount spent (in Colombian pesos) per unit of health care service. The authors found a decreased level of efficiency from before health care reform in 1994 (spending of 55 pesos/unit of health care) until after health care reform in 1997 (spending of 166 pesos/unit of health care). In general, the larger and richer municipalities were less efficient.

Similar to the findings from Colombia, the study of Bolivia found that the level of allocative efficiency also decreased with the introduction of earmarking. This decrease in efficiency was shown through the increase use of tertiary services (hospitals and emergency rooms) as opposed to primary care services (clinics). It was hypothesized that the Bolivians chose the tertiary care facilities because they perceived them to have better quality. The high use of tertiary facilities is less cost effective as their direct and indirect costs (infrastructure and equipment) are much higher than primary and secondary facilities. The level of technical efficiency also decreased leading to discrepancies in reimbursement amounts for different services. The estimated costs of services were incorrect leading to incorrect reimbursement amounts (both above and below actual amounts) (Dmytraczenko et al., 1998).

Quality

Quality is defined by the Institute of Medicine as the “degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge” (Lohr, K, 1990 and Chassin et al., 1998). Building on this definition, Judith Bruce developed a framework for assessing the quality of family planning care. The six main elements of this framework are: choice of methods, information given to clients, technical competence of providers, client provider interaction, mechanisms to promote continuation of services, and appropriateness and acceptability of services (Bruce, J, 1990). Unfortunately, the effect of grants (matching and/or earmarking) on these definitions of service quality is one of the most understudied areas of grant performance. For this reason, this study did not find a considerable amount of evidence supporting increased or decreased quality of care from matching grants and/or earmarking.

In the United States, there is anecdotal evidence that categorical programs, like Title X earmarking for family planning, have begun to assess quality of care indicators (Chassin et al., 1998). Despite these evaluations, evidence on increased or decreased quality has not been ascertained due to a lack of “a single set of criteria designated to evaluate the quality of care provided at the family planning clinics” and monitoring activities are conducted by varying program staff and data systems (Chassin et al., 1998).

There is evidence of increased quality, as measured through access to services, in Colombia since the introduction of earmarking. Since the implementation of the Colombian reforms the number of men and women with health care coverage in Colombia has tripled (Center for Reproductive Law and Policy, 1998). During the first 5 years of the reform, health insurance coverage went from 20% to 57% of the population (Cespedes, Juan Eduardo et al.). Along with this increase in overall coverage, the National Demographic and Health Survey in Colombia, showed that for all births in 1995, 73.8% were attended by physicians, 10.8% by nurses, 8.5% by midwives and 6.6% were not attended by any trained person (Center for Reproductive Law and Policy, 1998). Despite these increases in coverage and quality of services, health care workers complain that the mandatory health care plans are having adverse effects on their earning and technical quality of services (Cespedes, Juan Eduardo et al.).

There is evidence of both increased and decreased quality with the implementation of earmarking in Bolivia. Quality increased in all health facilities due to an increase in the availability of supplies and medicines. However, 31% of the facilities still had difficulties maintaining these supplies and medicines due to late reimbursements from the municipal level. Ninety-one percent of the respondents on a patient satisfaction survey also indicated that “doctors and nurses closely examined you during your visit” (no survey was implemented to measure patient satisfaction before earmarking). Despite these positive results, some women still complained of short, hurried, impersonal visits with their doctors (Dmytraczenko et al., 1998).

Resource Mobilization

Most empirical evidence on local resource mobilization from intergovernmental grants shows a higher increase in local government spending from a grant than from an equal size increase in individual’s incomes (Gramlich, 1977; Bailey and Connolly, 1998). Gramlich, for example, found that matched grants generally stimulate a small amount of local and state spending. Block grants tend to stimulate some local spending, but this spending is usually even less than matching grants. Block grants tend to be used for tax cuts or to avoid tax increases. Earmarking leads to an equal amount of spending as the size of the grant and usually results in more spending than matching grants. These results show that in terms of spending, earmarking will lead to the largest amount of spending, following by matching grants and then block grants. Although these results were found in the late 1970s, further research has corroborated these findings, even when looking specifically at family planning. This suggests that both earmarking and matching grants should increase local government expenditures for family planning. There is some evidence of increased resource mobilization at the local level under Medicaid in the United States. In general Medicaid spending has increased over the years, almost tripling between 1986 and 1993 (Fossett, 1996). Some of this increase has come from federal donations and some from own source resource mobilization. States mobilize more of their own resources to pay for Medicaid reimbursed services in order to receive a greater amount of the federal match. In this way, the states can save some of the federal match for their general fund. In mobilizing more resources for Medicaid programs, states also increased the amount of services offered.

Besides the funds received by each state for family planning through the Medicaid match and the Title X earmarked funds, many states add funds of their own to make family planning more widely available. These funds can come from special appropriations made by legislatures, general assistance programs and general revenues allocated to state health and social service agencies. Some states cover family planning services for to citizens who do not meet the federal eligibility criteria for receiving services (Daley and Benson Gold, 1993). In 1992, forty states reported using their own funds to support the provision of contraceptive serves.

The evidence from Colombia’s introduction of earmarking of funds shows after implementing the mandatory earmarking of funds for health both rich and poor municipalities increased their share of own resources that they allocated to health. From 1994 to 1997, the poorest municipalities increased their health expenditures from own

sources from 200 Colombian pesos/capita to 2100 Colombian pesos/capita. The rich increased their own resource allocations to health during the same time period from 8300 to 25,000 Colombian pesos/capita. Although this study looks at data over time, the methodology does not include many possible confounders in this relationship (Bossert et al, 2003).

Politics

The politics of both family planning and of financing mechanisms are usually hotly contested involving a variety of stakeholders and a changing balance of support and opposition. In the US the debates over family planning and abortion have involved a network of different interest groups – some specifically identified as pro or anti family planning and abortion, and others such as the major political parties with tendencies in one direction or the other. These interests put family planning on the agenda at national, state and local levels and the interplay of power and position may result in changing national policies that are resisted or supported by different states and local governments. The balance of support and opposition in each of these arenas will assist or make more difficult the promotion of funding mechanisms that address these highly debated issues. In the US the initial strong support for family planning and abortion that followed *Roe v. Wade*, has in subsequent years been eroded and increasingly the balance of power has shifted toward those who would restrict both family planning and abortion. (McFarlane, 1998).

The debates over types of funding mechanisms are also politically charged. Sub-national governments tend to prefer block grants to those that restrict their choices. National governments tend to want to impose their programs on state and local governments through more restrictive earmarking or matching grants. The Canadian political process has shifted from the federal government promoting matching grants and earmarking to less restrictive block grants – under pressure from the provincial governments. Similarly, in Colombia, the local governments have attempted to reduce the restrictions on their own source funding by exercising wider powers over the earmarked funds.

There is not sufficient literature that focuses on the interplay of these two political dimensions and it is an area that needs much more research to provide guidance for developing political strategies for gaining support for appropriate mix of funding mechanisms and family planning programs.

IV. Recommendations and Conclusions for Philippines

Although matching grants and earmarking are both intergovernmental transfers from the central authorities to local levels of government, they function in different ways and produce different impacts and results. Of the six indicators used to evaluate matching grants and earmarking (effectiveness, equity, efficiency, quality, local resource mobilization and politics) only the empirical results for effectiveness and efficiency were able to differentiate the impact of matching grants and earmarking. The results for these two impact measures lead to the following conclusion: earmarking is more effective in

achieving objectives of specific programs while matching grants are more efficient in the use of resources. There was not enough empirical evidence to make any other conclusions on the impact measures of equity or quality on earmarking and/or matching grants. Both earmarking and matching grants were shown to increase local revenues. And finally, the effect of earmarking and/or matching grants on politics is specific to each country, making it difficult to come to any concrete conclusions that apply to all countries in general.

The results for effectiveness clearly show that earmarking is more effective than matching grants in lowering key family planning indicators (birth rates, abortion rates, and infant mortality rates). Empirical and anecdotal evidence supports this conclusion. Efficiency, on the other hand, is better achieved through matching grants. This is shown through anecdotal evidence from the US Medicaid program and Canada's former matching grants system called CAP. The evidence provided above on equity showed that both earmarking and matching grants can possibly increase equity. However further research is needed to determine if equity is achieved more easily by matching grants or earmarking. The information on quality was not sufficient to make any conclusions on the impact of matching grants above earmarking or vice versa. Similarly, the evidence also showed that both matching grants and earmarking increase local resource mobilization.

The United States provides one of the more creative ways to promote family planning at the local level through the use of the waivers within the Medicaid program. As described above, even though there are strict federal guidelines on family planning that states much adhere to, a waiver can be granted to extend services to persons who otherwise would not qualify for the Medicaid services. Many states have used the waiver mechanism to provide family planning services to women and families that otherwise may not use family planning services. Through the waiver system, states are more aggressive in providing their own family planning services. If the Philippines decided to begin a matching grant process to support family planning at the LGU level, they could install a waiver program similar to the United States in order to monitor if the LGUs are meeting certain targets such as increased contraceptive use and/or decreased number of pregnancies. Furthermore, the waiver program takes the pressure off the political side of the issue and gives central authorities as well as the local entities an objective reason and evidence to support family planning. As the Philippines is transitioning to a more decentralized system, increasing the level of authority at the local level for defining their own family planning and/or reproductive needs may be an appropriate next step for the Philippines as they plan to increase family planning activities in the face of decreasing funding from outside sources.

Earmarking works differently in different country settings. Empirically and anecdotally, earmarking has been shown to be more effective than matching grants. Colombia, for example, has a very clear definition of earmarking of funds for health and their system has worked over a long period of time. Other countries, like Ghana, use earmarking as a short-term solution while they decide on longer-term financing options.

The political context in the Philippines suggest that at the national level in the current government the balance of political forces is not in favor of using any national funding mechanism to promote the objectives of modern family planning programs. It is unlikely that the national government will attempt to use matching grants or earmarking to encourage local governments to promote family planning programs. In this context, it is more likely that donors and perhaps, local provincial governments might have sufficient support to initiate the use of these mechanisms to promote family planning objectives. Therefore, it is likely that promoters of these mechanisms will have to wait until there is a change in national political balance before they initiate a program of matching grants or earmarking.

However, currently donors and perhaps provincial governments might use at least the matching grant mechanism to encourage local governments to adopt family planning activities and to mobilize local government revenues for this purpose. Since neither donors nor provincial governments have direct transfers to local government budgets that could be earmarked for specific activities, this mechanism is less likely to be available until the national government political balance changes.

The following more specific recommendations are made based on the country examples and empirical evidence given above:

- Earmarking and matching grants are effective means of promoting the family planning and reproductive health objectives and could be effectively implemented in the Philippines.
- Earmarking and matching grants have potential to increase equity in funding for family planning and reproductive health objectives.
- In the current national political process, it is unlikely that either earmarking or matching grants will be adopted by the current national government; however provincial governments and donors could use matching grants as a means of mobilizing funds from LGU budgets for contraceptive procurements and other family planning and reproductive health activities.
- In the long run, earmarking of national budgetary allocations to local governments could be a more effective means of mobilizing local funds for family planning and reproductive health objectives. As the national political climate shifts, this option should be considered.

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