Best Practices for Fostering Family Planning Total Markets in Indonesia, Mexico, Romania, Thailand, and Turkey: A Retrospective Analysis

Jennifer Kidwell Drake, MPH
Janet G. Vail, MPH, MBA
Jamie R. Stewart, MSc

PATH

Corresponding Author: Jennifer Kidwell Drake, PATH, PO Box 900922, Seattle, WA., 98109. Phone: 206-285-3500; Fax: 206-285-6619; Email: jdrake@Path.org.

Suggested Citation: Drake JK, Vail JG, Stewart JR. Best practices for fostering family planning total markets in Indonesia, Mexico, Romania, Thailand, and Turkey: a retrospective analysis. Cases in Public Health Communication & Marketing. 2014;8(suppl 1):S19-S41.
Available from: www.casesjournal.org/volume8_suppl1

www.casesjournal.org

Peer-Reviewed Case Study
Abstract

**Background:** Governments faced with family planning funding shortfalls have moved toward mobilizing and coordinating all sectors through a “total market approach” (TMA). This retrospective analysis focuses on best practices from TMA experiences in Indonesia, Mexico, Romania, Thailand, and Turkey. We aimed to learn which practices or contextual factors fostered total market planning, and specifically whether and how deliberate, proactive and coordinated approaches by government may have contributed to total market engagement.

**Methods:** For each country, we examined government support for family planning, level of contraceptive use, coordination with broader health sector reforms, and operating environments for the private sector. We considered policy change in terms of eight good practice hypotheses and gathered data on modern contraceptive prevalence rates (MCPR) by wealth quintile and public-private sources.

**Results:** Based on this analysis, especially alongside contextual factors of government leadership and stable demand, six of the eight processes can be hypothesized as good practices for total market planning: ensuring problem recognition among key stakeholders, aligning priorities with national government strategies, collecting data about health markets, evaluating options through pilots, engaging all levels of the health system (national and sub-national), and evaluating results. Our review found that government agencies in Indonesia and Thailand played a significant role in deliberate, proactive, and/or coordinated planning processes to meet demand for family planning across sectors.

**Conclusions:** We concluded that deliberate government planning and action, especially leadership and support for family planning, contribute to total market programming. Prospective monitoring and evaluation of TMAs moving forward can contribute to clearer roadmaps.

**Keywords:** Family planning services, Private sector, Public sector, Health policy, Healthcare financing
Introduction

Achieving universal access to reproductive health, including family planning, is a priority target of the fifth Millennium Development Goal to improve maternal health. Family Planning 2020 (FP2020), a global multisectoral partnership launched in 2012, is supporting governments, the private sector, and civil society to expand access to family planning for 120 million women and girls in the world’s poorest countries by the year 2020. Donor and government commitments for family planning are increasing; public-private sector coordination and partnerships at the country-level, as well as engaging potential end-user groups, will be critical in order to reach the FP2020 goal.

This retrospective case study analysis considers the government role in coordinating multisectoral family planning efforts to improve contraceptive access and use, and looks at total market approaches and experiences historically in five countries during five distinct time periods spanning 1987 to 2008: Indonesia, Mexico, Romania, Thailand, and Turkey. We define “market” to mean the family planning health system in its entirety, including all service points where a consumer can access services, both public and private. The private sector, by this definition, includes all non-state actors, both commercial and nonprofit. We define total market approach as the government being engaged in intentional coordination of an entire market for family planning commodities, by supporting a range of partners to reach the segments of markets that they have comparative advantage to reach, in order to enhance equity and sustainability of family planning access.

The objectives of this retrospective analysis of five country cases were to:

• Determine which specific practices or contextual factors, especially those related to action by government health and family planning agencies, can help to foster total market planning.
• Understand whether deliberate, proactive, and coordinated approaches to total market planning (which include contributions from the private sector) by governments are necessary to meet demand, or whether market forces can simply adjust to fill in the gaps in family planning access and use.

Background

Government-run or public-sector family planning programs have played a significant role in increasing modern contraceptive prevalence in most developing countries since the 1960s. Historically, many of these programs have provided free or low-cost products and services while relying heavily on donor support for financing. By the early 1990s, international development assistance was providing over 40 percent of contraceptives in low- and middle-income countries, including from the US Agency for International Development (USAID) and the United Nations Population Fund (UNFPA) (although the costs of providing family planning services in the public sector were generally supported by national governments).
Beginning in the mid-1990s, however, donor funding began a steep decline; between 1995 and 2007, international assistance for family planning decreased from US $980 million to US$340 million, due in part to shifting priorities, international frameworks (e.g., the International Conference on Population and Development Programme of Action from 1994), and the economic development and growth of many countries. Over the past few decades, government leaders in Indonesia, Mexico, Romania, Thailand, and Turkey have all been faced with acute or impending shortfalls in donor support for family planning at different points in time and at different stages of market development, and have taken different approaches to respond to these shortfalls. While these experiences were not termed as “total market” programs at the time, the activities are consistent with our definition of a total market approach (TMA). Lessons learned from these experiences may help to inform the FP2020 agenda.

In all of these cases, while the public sector played a key role in the provision and subsidization of family planning commodities and services, private-sector involvement was needed to increase the overall accessibility of family planning. Moreover, family planning users and insurance systems began paying a larger proportion of the costs of products and services. As service provision diversifies, new opportunities arise for supportive action by the public sector (which will be discussed later in the paper). In this study, we explored public-private collaboration in five countries to learn which practices or contextual factors fostered total market planning, and specifically whether and how deliberate, proactive, and coordinated approaches by government may have contributed to total market engagement.

Methods

Study Design and Sample
The five countries were selected for this retrospective case study analysis starting with a literature search on PubMed and Google using the following search terms: family planning market segmentation, family planning total market, family planning public-private partnerships, contraceptive security, family planning targeting, family planning financing, family planning stewardship, family planning sustainability, and family planning equity. Results were cross-referenced with a list of countries that had completed USAID graduation from family planning assistance (i.e., they had moved away from donor dependence), had completed a Strategic Pathway to Reproductive Health Commodity Security (SPARHCS) assessment, and had a known family planning total market initiative. This two-step process resulted in an initial list of 36 countries. We then excluded countries if their total market activity was too new and difficult to evaluate, or if it was limited to one to two isolated and exploratory activities (e.g., market segmentation studies, private-sector assessments). This narrowed the list to 16 countries. For the final phase of country selection, we reviewed all documents collected from the literature review and assessed the extent to which activities in each of the 16 countries aligned with the team’s definition of a total market approach. Six countries were retained for inclusion in the analysis: Egypt, Indonesia, Mexico, Romania, Thailand, and Turkey. Egypt was ultimately eliminated because of ongoing political instability making it difficult to gather information. While the number of cases is small and some of the activities occurred decades ago, we chose countries with usable data and a range of activities described below in order to increase applicability of lessons learned to family planning initiatives today.
Indonesia: By the mid-1980s, it became clear to the centralized government agency for family planning, Indonesia’s National Family Planning Coordinating Board (BKKBN), that the success of the public-sector family planning program would be difficult to sustain over time as the number of users grew and donor assistance began to decline. BKKBN set an ambitious goal to shift 50 percent of family planning program users to the private sector by 1994. Clients were encouraged to become more responsible for the costs of their family planning either by seeking services in the private sector or by paying a full or partial amount in the public sector. USAID and BKKBN collaborated on a series of initiatives focused on developing and strengthening the private sector. These initiatives built family planning capacity of private midwives and doctors, created demand for private family planning products and services, and ensured supply of low-cost contraceptive products in the private sector.

Mexico: In 1992, USAID and the government of Mexico signed a memorandum of understanding to coordinate activities during the phase-out of family planning support. The phase-out plan called for the reduction of USAID funding to be replaced with funding from the government of Mexico. This would be achieved by increasing the national budget for family planning by 25 percent every year for four years starting in 1992, and by instituting mechanisms to hold states and the federal government accountable for family planning budget allocations. USAID also collaborated during this period with two private nongovernmental organizations (NGOs): the Mexican Family Planning Association (MEXFAM), the local International Planned Parenthood Federation affiliate; and the Mexican Federation of Private Health and Community Development Associations (FEMAP), an autonomous network of family planning organizations. A key component of the USAID phase-out strategy was to target public-sector family planning resources in nine rural states with the highest need, while supporting complementary efforts by MEXFAM and FEMAP to reach underserved and vulnerable groups and become self-sustaining (i.e., not dependent on USAID funding). By 1999, when USAID graduated Mexico from its assistance, all public-sector family planning agencies were financing 100 percent of their contraceptive commodities.

Romania: In 1990, the government established a unit in the Ministry of Health for women’s and children’s health, medical training, and family planning, and the Society for Education in Contraception and Sexuality (SECS), an NGO, began establishing private family planning clinics. In the mid-1990s, policy changes enabled general practitioners to provide family planning services, and allowed sales of contraceptives by NGOs on a not-for-profit basis (not charging more than the procurement price; previously sales of products in clinics was prohibited). In 2001, USAID worked with Romania’s Ministry of Health and implementing agencies (including SECS and John Snow, Inc.) to increase access to and use of integrated reproductive health services in the context of primary health care services. In 2002, family planning services were included in the basic package of services guaranteed to all Romanians, regardless of insurance coverage. During this time, the national government and NGOs also increased efforts to target free products to vulnerable groups.

Thailand: The National Family Planning Program (later the National Family Planning Council, or NFPC), was established in 1967 to implement family planning activities. In 1972, a key government policy was revised to include auxiliary midwives in the public health personnel who could be trained and qualified to provide family planning services. This set the stage for wider community-based distribution programs by NGOs, which were important to mobilizing family planning users in rural areas and integrating family planning into community development. The government also allowed commercial pharmacies to provide a variety of oral contraceptives without medical prescription. Overall, while the government of Thailand did
not intentionally facilitate private-sector growth, they enabled innovation in the private sector (e.g., community-based distribution by NGOs and provision by commercial pharmacies without prescription) that was critical to the growth of family planning in Thailand. In 1982, the government also dramatically increased its budget for contraceptives from US$750,000 to US$6 million per year, and funding continued to increase in future years.

**Turkey**: Between 1994 and 2004, the government of Turkey and USAID were focused on expanding contraceptive self-reliance in the country by increasing the public-sector budget for contraceptives (which was nonexistent prior to 1994) and implementing a donation policy for public-sector family planning services. The donation policy distinguished between those clients willing and able to pay for services and those who were not, with an option for wealthier clients to electively contribute to the costs of their family planning products in order to subsidize supplies for the poor and reduce the amount of government funding needed to purchase commodities. From 1992 to 1997, USAID also supported efforts to expand the family planning capacity of Turkey’s social insurance organization (SSK), which covered about 60 percent of the population but, at the time, was focused only on curative services.

**Measures**

Our retrospective analysis centers on adaptation and application of an existing health policy framework to analyze the total market experiences of these five countries. We focused on two key elements of the framework: surrounding context and the practices of the policy process. In the framework, good practice hypotheses are used to analyze health reforms. A practice is defined as the customary way of performing a task or set of tasks to achieve certain ends with accuracy and efficiency; good practices are well-documented, show some evidence of impact, and can be replicated and studied further. Due to the difficulty of evaluating whether a practice is truly a good practice, especially retrospectively, we put forward a set of hypotheses that could be validated/invalidated by considering multiple experiences of policy reform. Based on prior family planning total market projects in Nicaragua and Vietnam, and additional published health policy literature, we adapted our own list of contextual factors and good practice hypotheses, which focused on those related most closely to the role of government.

**Contextual factors.** Using the same policy framework, we defined contextual factors involved in building the total market as those relating to the national health sector:

- Prominence of and support for family planning in government;
- Modern contraceptive prevalence rates (MCPR) as a proxy measure of the size and growth of the market for family planning among the population at baseline and over the periods in question. (Modern contraceptive prevalence was used because modern methods are obtained in the market, as opposed to overall contraceptive prevalence, which includes traditional methods that are more driven by practicing behaviors such as periodic abstinence and withdrawal.);
- Opportunities for coordination with broader health-sector reforms, such as overall health financing; and
- Operating environments for the private health sector (e.g., the extent to which governments actively supported or restricted private-sector family planning service provision).

**Good practice hypotheses.** In the policy framework we applied, we defined the following eight good practice hypotheses related to TMAs that could be validated/invalidated by considering the experiences of policy reform in the five countries:

1. Problem recognition occurs among key stakeholders.
2. Clear priorities are set with national government leadership.
3. Data are collected about health markets to help clarify options and advocate for these options.
4. Policy and programmatic options are evaluated through pilot studies and projects.
5. A government-led coordinating group oversees total market work and all sectors are considered.
6. Implementation is guided by an action plan.
7. Planning and implementation involves every level of the health system (such as national, state, etc.).
8. There are sufficient resources for evaluation and learning following implementation.

Equity and sustainability indicators. In addition to examining the context and good practice hypotheses for their contribution to facilitating equity and sustainability of a total family planning market, we examined the following indicators: MCPR by wealth status, percent of modern contraceptive methods obtained from public/private sources, and percent of modern contraceptives obtained from public/private sources by wealth quintiles. We examined these indicators to show the overall status of the family planning program at various points before, during, and after the total market work, not to show causality of the total market programming.

Data Collection
Data collection from the five countries focused on identifying practices and contexts relevant to total market implementation. As a first step, the team drew on available literature, in-country documents and technical reports, and population survey data to write a short overview of total market work in each country. In Indonesia and Thailand, we reached out to a range of expert reviewers who had been involved in family planning in their respective countries and invited them to send feedback on the country documentation. In Mexico, Romania, and Turkey, we hired expert consultants with context-specific family planning experience to provide feedback and provide additional information from local documentation and population data sources. This study was not submitted for human subjects review since it involved secondary analysis of existing published and unpublished sources.

Analysis
Published literature, population survey data, and consultant reports, as well as ongoing discussions with in-country reviewers, were then analyzed to assess and compare and contrast the family planning TMA experiences in each of the five countries. To analyze the five country cases, we examined each country’s process of policy change through the lens of the good practice hypotheses, considering overall context and practices.

Equity and sustainability indicators. Regarding equity and sustainability indicators, we compared and contrasted data from national surveys in all five countries for the time periods designated. To assess trends, we used survey data at two points in time as close to the defined beginning and end of the total market periods as possible, based on available data (see the Study Design and Sample subsection for more details on timing). The years analyzed for each country varied depending on availability of data, but were inclusive of the following ranges: Indonesia (1987-2002), Mexico (1992-2009), Romania (1993-2004), Thailand (1970-1987), and Turkey (1993-2008). Data on MCPR were readily available for two time periods from national surveys in all countries. Wealth quintile data and data on sources of supply were taken from published reports, where available, or specially computed from data sets when not available.

Computation of wealth quintiles. Data were available on wealth quintiles for Indonesia in 2002 only, and for Romania and Turkey for both time periods in question. Futures Institute calculated the remaining wealth quintiles using the relevant Demographic and Health Surveys. To construct wealth quintiles for Indonesia in 1987, Mexico in 1992 and 2009, and Thailand in 1987, a principal component analysis was conducted using the responses to all questions concerning household assets in the relevant national survey. Then, women
were ranked from highest to lowest based on the first component score. Based on the ranking, women were placed into quintiles. In Indonesia, Mexico in 1992, and Thailand, sample weights were used to assure that equal numbers of weighted women were in each quintile. In Mexico in 2009, sample weights were not available in the dataset; therefore all women were weighted equally. It was not possible to calculate wealth quintiles for Thailand in 1970.

**Computation of source of supply for family planning.** Data were available for source of supply for family planning services for Romania and Thailand in 1970. Futures Institute tabulated the remaining sources of supply based upon two sets of categories created by the DHS project—disaggregated and aggregated—except in Mexico where sources of family planning services were tabulated based upon the source of family planning for the most effective current method being used. All users of modern family planning who indicated a source for their family planning were included in the tabulations.

---

**Results**

### Contextual Factors

**Government support for family planning.** Our analysis found that government support was clearly present in three of the five countries: Indonesia, Mexico, and Thailand. In Indonesia, BKKBN, the centralized family planning agency, was a key galvanizing force. In Mexico, although there were several implementing government agencies involved with family planning, they were able to coordinate such that all public-sector family planning agencies were financing 100 percent of their contraceptive commodities by 1999, when USAID graduated Mexico from its assistance. In Thailand, the national health ministry, including a key champion at the national ministry level, justified major increases in family planning budgets “on the grounds that the return on investment in family planning is better than in practically any other area of social services; that the government is actually saving money by underwriting family planning services; and that introducing cost-recovery would result in loss of users.” By contrast, leadership for family planning in Romania and Turkey primarily came from the NGO sector and donors, rather than government. Family planning and reproductive health had a troubled history in Romania in particular. Between 1966 and 1989, family planning and abortion were banned due to a rigidly enforced pro-natalist population policy. A change in government in 1989 ultimately brought about a reversal of these policies, but their legacy still lingered.

**Extent of contraceptive use in the population.** As shown in Figure 1, all countries experienced growth in MCPR during the periods in question, with the most impressive gains in Thailand. Both Romania and Thailand began with low MCPR (less than 15 percent) and could be considered in the early stage of market development at the beginning of the defined total market periods. Their total market interventions appropriately focused on increasing access. Indonesia and Turkey had higher initial modern contraceptive prevalence (35 to 45 percent) and could be considered in the developing stage at the outset; their interventions focused on targeting subsidies and identifying those who could pay for services. Mexico, with more than 55 percent MCPR at baseline, would be considered a mature market; its intervention focused on sustaining public financing through insurance programs and coordination with NGOs. By the end of the period, no countries were in the early stage of market development. Romania
Figure 1. Modern contraceptive prevalence rate (MCPR) at the beginning and end of the defined total market periods

<table>
<thead>
<tr>
<th>Years</th>
<th>MCPR (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>14.8</td>
</tr>
<tr>
<td>1975</td>
<td>62.0</td>
</tr>
<tr>
<td>1980</td>
<td>43.9</td>
</tr>
<tr>
<td>1985</td>
<td>55.2</td>
</tr>
<tr>
<td>1990</td>
<td>34.5</td>
</tr>
<tr>
<td>1995</td>
<td>42.5</td>
</tr>
<tr>
<td>2000</td>
<td>56.8</td>
</tr>
<tr>
<td>2005</td>
<td>69.3</td>
</tr>
<tr>
<td>2010</td>
<td>38.2</td>
</tr>
</tbody>
</table>

a Data were obtained from various national demographic and health surveys in Indonesia,26,27 Mexico,28,29 Romania,30,31 Thailand,32,33 and Turkey.34,35

had shifted to a developing stage and Thailand had vaulted to become a mature market.

**Opportunities to coordinate with broader health sector reforms.** In both Romania and Turkey, individuals and groups leading total market efforts were effective at linking with broader ongoing health-sector reforms, especially establishment of social insurance systems. There is no evidence of similar opportunities or activities in Indonesia, Mexico, or Thailand during the time periods under consideration.

**Operating environment for the private sector.** This varied substantially in each country. In Indonesia, the government extensively engaged and collaborated with the private commercial sector for health services. As a result of these efforts, commercial manufacturers clearly saw the value of a growing market that had the potential to expand beyond government sourcing. In both Romania and Thailand, it appears that the government may have facilitated commercial growth less deliberately and intentionally. In Romania, the government’s focus on rural areas and the resulting lack of public services in urban areas, and efforts by donors and NGOs to create demand overall (eg, through behavior change communication campaigns targeting providers and potential clients), both indirectly contributed to urban commercial market growth.12,13 The Thai government also did not coordinate closely with the private sector; however, “the MOPH [Ministry of Public Health] made major efforts to draw in the major NGOs. An unanticipated, but highly significant, aspect of the MOPH’s approach was its readiness to allow others to run their programs without government interference or control.”15 This also had benefits in terms of commercial provision in pharmacies. By contrast, the operating environment for the private sector was more challenging in both
Mexico and Turkey. In Mexico, the government had a legal commitment to provide free services to everyone, and collaboration with the commercial sector was perceived by some members of the coordinating group to be in violation of this policy. Limited information is available on the commercial sector in Mexico during this period; as noted in the Methods section, two major NGOs were key players in Mexico. Price controls, advertising restrictions, and wide distribution of free contraceptives were noted as particular challenges for development of Turkey’s commercial sector. Again, limited information is available on commercial family planning services in Turkey during this period, although it is clear that some NGOs were involved in family planning.

**Good Practice Hypotheses**

Table 1 summarizes our findings with regards to the good practice hypotheses in each of the five countries. Most of the practices were commonly applied across settings, with the exception of establishing a formal, government-led coordinating group for all sectors and developing an action plan. The text below provides a summary analysis of the results presented in Table 1 related to each good practice hypothesis.

- Problem recognition occurred in all countries except Romania, albeit to varying degrees.
- Priority setting with national government leadership varied. Clear priorities were set for family planning access, sustainability, and equity in all of the countries; however, Indonesia and Thailand were more government led, whereas priority setting was led more by donors and/or NGOs in Mexico, Romania, and Turkey.
- Market research occurred in every country with the exception of Thailand. This research helped to clarify needs and options for addressing those needs.
- Pilot projects were crucial steps for each of the countries. In particular, pilot studies established the feasibility of proposed total market activities.
- In all countries except Indonesia, some type of coordinating group for family planning was led, at least in name, by the government and included participation from the private sector (generally NGOs, not the commercial sector). While it is not clear if a formal group existed in Indonesia, this was the only country with clear, effective outreach to and consideration of commercial entities.
- Only Mexico was guided by a clear action plan that encompassed the multisectoral activities that took place during the time period considered.
- All countries involved every level of the health system in the planning and implementation of their activities.
- Experience was mixed in terms of deploying sufficient resources for evaluation and learning following implementation. Donor support to Indonesia, Mexico, and Turkey included opportunities to evaluate the impacts of reforms and initiatives. Evaluation efforts were led by the government in Thailand; a central research and evaluation unit monitored early family planning program performance, with all clinics expected to submit monthly activity reports to the unit including clinics run by private agencies. In Romania, evaluation work was limited to supportive supervision of service provision.

The BKKBN in Indonesia and the NFPC in Thailand stand out as strong government agencies that engaged in deliberate, proactive, and coordinated planning processes for family planning in the total market, including the public sector, NGOs, and the private commercial sector.

**Equity and Sustainability Indicators**

In terms of equity, at the end of the time periods under consideration for this analysis, all countries had lower MCPR in the lowest wealth group compared to the highest wealth group as is shown in Table 2. During the time periods in question, the gap between the lowest and highest wealth groups grew smaller in Indonesia, Mexico, and
Table 1. Assessment of good practice hypotheses by country

<table>
<thead>
<tr>
<th>Good Practice Hypotheses</th>
<th>Indonesia</th>
<th>Mexico</th>
<th>Romania</th>
<th>Thailand</th>
<th>Turkey</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Problem recognition occurs among key stakeholders</td>
<td>Growth in demand and the Asian financial crisis served as a stimulus to BKKBN to identify mechanisms for program sustainability.</td>
<td>USAID’s announcement of impending withdrawal was a major stimulus for total market initiatives. Confusing messages around timing of withdrawal may have compromised momentum, however.</td>
<td>It is not clear that those at the highest levels of government ever appreciated contraceptive security challenges. While the government was aware of and tried to address depleting public-sector stocks at different points, overall political interest in family planning was never particularly strong. NGOs worked with USAID over a number of years to develop solutions for sustainability.</td>
<td>While it has been noted that the government realized internally that they could not provide free services to the entire population ad infinitum and therefore allowed for development of private-sector family planning services, there is also a perception that the government believed it could continue to serve everyone and, as a result, did not actively engage the commercial sector.</td>
<td>A contraceptive availability crisis in the late 1990s compelled recognition and action, as family planning leadership was forced to draw on a government emergency fund shared with several other divisions of the health ministry.</td>
</tr>
<tr>
<td>2. Clear priorities are set, with national government leadership</td>
<td>National government leadership was clearly present with the overall goal to shift users to the private sector. However, specific initiatives were not necessarily coordinated under a formal policy framework with clear priorities.</td>
<td>While the government was formally involved in discussions with USAID to establish priorities for phase out, there is no evidence to suggest that it played a role in making other key actors aware of priorities guiding relevant activities.</td>
<td>While the national government prioritized family planning in certain populations, leadership and broader engagement came from donors and NGOs.</td>
<td>Activities that furthered total market interests evolved under broader, government-led family planning strategies.</td>
<td>While the government was formally involved in discussions with USAID to establish priorities for financing, it did not play a role in making other key actors aware of priorities guiding relevant activities.</td>
</tr>
<tr>
<td>3. Data are collected about health markets to help clarify options and advocate for these options</td>
<td>A market analysis study commissioned by BKKBN found that women had little information about available private-sector products and services, that they faced several issues and challenges in accessing public-sector services, and that the private sector might have an advantage in serving some of these women. BKKBN employed three different levels of targeting: urban women to pay for services in the private sector; village and sub-village family planning users whose service was partially subsidized; and services from public clinics or community health workers to those who could not pay.</td>
<td>A situation analysis of the family planning program that helped to guide priorities during phase-out led to investment of public-sector resources in rural states with greatest need; the NGO FEMAP also conducted studies that helped the organization plan for initiatives to achieve financial sustainability.</td>
<td>The USAID POLICY project conducted demographic and health research, market research, and economic research that were used to shape policy options and engage support of national stakeholders. One result was a strategy for free public sector services to serve rural women and for the private sector to focus on wealthier urban clients.</td>
<td>The government’s data collection focused on the role that NGOs could play in services to rural women, with the commercial sector serving urban women.</td>
<td>Market segmentation studies were critical to demonstrating that some women would be willing and able to pay for services on a voluntary basis under the donation policy. SSK conducted a cost-benefit analysis of family planning commodities.</td>
</tr>
</tbody>
</table>
Table 1 (continued). Assessment of good practice hypotheses by country

<table>
<thead>
<tr>
<th>Good Practice Hypotheses</th>
<th>Indonesia</th>
<th>Mexico</th>
<th>Romania</th>
<th>Thailand</th>
<th>Turkey</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Policy and programmatic options are evaluated through pilot studies</td>
<td>Pilot studies helped demonstrate evidence of potential for private-sector expansion and women’s willingness to pay.</td>
<td>MEXFAM conducted a pilot project of a social marketing program for oral contraceptives in rural areas.</td>
<td>The USAID Women’s Health Initiative pilot study demonstrated that it was possible to integrate family planning in the country’s primary health care model.</td>
<td>Pilot studies demonstrated the feasibility of using auxiliary midwives to provide family planning products to consumers, and enabled NGO-led community-based distribution programs. Pilot studies also were used to focus resources to increase access for hill tribes.</td>
<td>A pilot demonstrated the feasibility of the donation policy, and a pilot approach was used for integrating family planning in SSK services before scaling up.</td>
</tr>
<tr>
<td>5. A government-led coordinating group oversees total market work and all sectors are considered</td>
<td>It is not clear whether any multisectoral group to guide family planning policy or practice existed, but coordination of family planning actors (e.g., commercial groups, professional associations, faith-based social welfare organizations) did occur, led by BKKBN and USAID.</td>
<td>The Inter-Institutional Reproductive Health Group was led by the government and included public-sector and NGO/civil society representation, although not the commercial sector or donors. The group is still active today.</td>
<td>Various family planning stakeholder groups existed, but none of them involved the commercial sector, and government leadership of these groups was somewhat lackluster (although they served as important coordination mechanisms for NGOs and donors working in the country).</td>
<td>The National Family Planning Committee was very active in formulation of family planning policy over time and invited active and consistent participation from NGOs, although not the commercial sector.</td>
<td>A government-led Family Planning Advisory Board involved NGOs and civil society groups and helped to improve multisectoral collaboration and cooperation; commercial-sector representatives were involved in occasional multisectoral meetings.</td>
</tr>
<tr>
<td>6. Implementation is guided by an action plan</td>
<td>There is no evidence of an overall action plan.</td>
<td>An action plan guided implementation of the USAID phase-out.</td>
<td>There is no evidence of an overall action plan.</td>
<td>There is no evidence of an overall action plan.</td>
<td>There is no evidence of an overall action plan.</td>
</tr>
<tr>
<td>7. Planning and implementation involves every level of the health system</td>
<td>Recently, lack of engagement with local health authorities has caused family planning efforts to lose ground in some parts of the country due to decentralization.</td>
<td>During decentralization, some states did not allocate funds for family planning and others had trouble budgeting for and purchasing contraceptives. Therefore, the federal government set budget line items for family planning services at the state level, holding states accountable for maintaining contraceptive supplies.</td>
<td>Involvement of district health authorities was credited as being a crucial step for family planning service integration in a variety of geographic areas.</td>
<td>Considerable effort was made to involve local health authorities and auxiliary midwives in oral contraceptive provision.</td>
<td>Considerable effort was made in Turkey to involve local health authorities and service providers in implementation of the donation policy.</td>
</tr>
<tr>
<td>8. There are sufficient resources for evaluation and learning following implementation</td>
<td>Donors supported activities to evaluate the impacts of reforms and initiatives. Government surveys evaluated where clients were accessing products and the costs of services. The goal of shifting 50 percent of users to private-sector sources was mostly met by 1994, although government financing subsidized the private sector.</td>
<td>USAID’s evaluation of the immediate effect of the phase-out showed improved service quality and an increase in the population served.</td>
<td>The government collects data on family planning irregularly, and little information is available about how programs and private-sector access are working.</td>
<td>A strong government infrastructure for data collection around family planning included service data submitted by NGOs to the national family planning program for inclusion in their monitoring.</td>
<td>One study demonstrated that both the donation policy and SSK’s work were successful.</td>
</tr>
</tbody>
</table>

---

a Information was obtained from various technical reports and in-country source documents in Indonesia, Romania, Thailand, and Turkey.
Table 2. Modern contraceptive prevalence rate (MCPR) by wealth status

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Lowest wealth group</th>
<th>Highest wealth group</th>
<th>Difference between highest and lowest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesia</td>
<td>1987</td>
<td>37.0</td>
<td>52.3</td>
<td>15.3</td>
</tr>
<tr>
<td></td>
<td>2002-2003</td>
<td>48.6</td>
<td>58.1</td>
<td>9.5</td>
</tr>
<tr>
<td>Mexico</td>
<td>1992</td>
<td>35.5</td>
<td>68.2</td>
<td>32.7</td>
</tr>
<tr>
<td></td>
<td>2009</td>
<td>60.1</td>
<td>74.6</td>
<td>14.5</td>
</tr>
<tr>
<td>Romania</td>
<td>1993</td>
<td>8.3</td>
<td>28.1</td>
<td>19.8</td>
</tr>
<tr>
<td></td>
<td>2004</td>
<td>22.8</td>
<td>48.5</td>
<td>25.7</td>
</tr>
<tr>
<td>Thailandb</td>
<td>1970</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>1987</td>
<td>59.6</td>
<td>64.7</td>
<td>5.1</td>
</tr>
<tr>
<td>Turkey</td>
<td>1993</td>
<td>21.0</td>
<td>45.5</td>
<td>24.5</td>
</tr>
<tr>
<td></td>
<td>2008</td>
<td>38.0</td>
<td>54.3</td>
<td>16.3</td>
</tr>
</tbody>
</table>

a Data for wealth quintiles were obtained from various national demographic and health surveys in Indonesia, Mexico, Romania, Thailand, and Turkey.

b Wealth quintile data were unavailable for Thailand in 1970.

Turkey, while differentials increased in Romania. Data were not available for the start of the period under consideration in Thailand (1970). In order to consider trends over time, however, more recent data from Thailand demonstrate that MCPR is now higher among the lowest wealth group than the highest wealth group. In other words, while overall MCPR increased for the lowest wealth group during total market phases in each country, wealth differentials remained in most countries and increased in Romania.

A simple indicator for total market sustainability is the relative share of public service provision. As shown in Figure 2, the public sector dominated the source of supply in three of the five countries (Mexico, Thailand, and Turkey) even at the end of the total market implementation. This is also related to the fact that the main modern contraceptive methods used in those settings during the periods considered were clinical methods (female sterilization and the IUD), which were typically provided in the public sector. In these three countries, increasing the share of private-sector provision was not necessarily a stated goal, and minimal changes occurred in relative provision by public or private sectors during the time period considered (less than 10 percent in either direction). Only in Indonesia did the public-sector share dramatically decrease, meeting the government’s stated goal and based on their explicit engagement with the commercial sector. Although not presented in the figure, the public-sector share in Indonesia decreased for all of the main methods (oral contraceptive, injectable and IUD). It is challenging to assess trends in Romania due to changes in the way public and private sources were defined during this period (e.g., in 2004 the categories were broken down into “Medical sector,” including both public and private sources, and “Commercial sales,” including shops and pharmacies).

Analysis of wealth quintiles of consumers by source of provider can help provide some indication of
equity and targeting. In Indonesia, the proportion of consumers accessing modern contraceptives through public sources at baseline (1987) was quite high; over 80 percent for all wealth quintiles except the highest, where it was still close to 70 percent. In 2002, the proportion of consumers accessing their contraceptives through public (i.e., highly subsidized) sources showed a distinct downward shift away from the public sector (and into the private sector) across all wealth quintiles. Notably, as compared with the baseline findings, public-sector source access tended to decrease as consumer wealth increased (see Figure 3). In Mexico and Turkey, higher proportions of lower wealth quintiles than higher quintiles were accessing the public sector at baseline (Figures 4 and 5). In Mexico, there was little change in that pattern after total market reforms; the public sector was the dominant source of supply for all quintiles in both years (Figure 4). In Turkey, the most notable change following total market reforms was that the share of public-sector supply increased for the three lowest wealth quintiles (Figure 5). Data from Romania and Thailand are insufficient to make side-by-side comparisons on this point, due to the fact that many surveys in these countries did not collect information on both contraceptive source and wealth quintile.

Figure 2. Percent of modern contraceptives obtained from public sources

Data for source of supply were obtained from various national demographic and health surveys in Indonesia, Mexico, Romania, Thailand, and Turkey.
Figure 3. Percent of modern contraceptives obtained from public sources by wealth quintile (Q1-5) in Indonesia\textsuperscript{a,b}

![Bar chart showing the percentage of modern contraceptives obtained from public sources by wealth quintile in Indonesia from 1987 to 2002.]

\textsuperscript{a} The Demographic and Health Survey categorizes households into five wealth quintiles using an index that is a composite measure of a household’s cumulative living standard, ranging from the poorest, Quintile 1 (Q1) to the wealthiest, Quintile 5 (Q5). The wealth index is calculated using easy-to-collect data on a household’s ownership of selected assets. See more at: http://dhsprogram.com/topics/Wealth-Index.cfm#sthash.vhbpnv3L.dpuf

\textsuperscript{b} Data for wealth quintiles and source of supply were obtained from the Indonesia National Contraceptive Prevalence Survey in 1987\textsuperscript{26} and the Indonesia Demographic and Health Survey in 2002-2003.\textsuperscript{27}

Figure 4. Percent of modern contraceptives obtained from public sources by wealth quintile (Q1-5) in Mexico\textsuperscript{a,b}

![Bar chart showing the percentage of modern contraceptives obtained from public sources by wealth quintile in Mexico from 1992 to 2009.]

\textsuperscript{a} The five wealth quintiles range from Quintile 1 (Q1), the poorest, to Quintile 5 (Q5), the wealthiest.

\textsuperscript{b} Data for wealth quintiles and source of supply were obtained from the Mexico Encuesta Nacional de la Dinámica Demográfica in 1992 and 2009.\textsuperscript{28,37}
Figure 5. Percent of modern contraceptives obtained from public sources by wealth quintile (Q1-5) in Turkey\textsuperscript{a,b}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{chart.png}
\caption{Percent of modern contraceptives obtained from public sources by wealth quintile (Q1-5) in Turkey\textsuperscript{a,b}}
\end{figure}

\textsuperscript{a} The five wealth quintiles range from Quintile 1 (Q1), the poorest, to Quintile 5 (Q5), the wealthiest.

\textsuperscript{b} Data for wealth quintiles and source of supply were obtained from the Turkey Demographic and Health Survey in 1993 and 2008.\textsuperscript{34,39}

### Discussion

This analysis explored activities, especially those involving government health and family planning agencies and leadership, related to the family planning total market in five countries during five distinct periods of time. We considered how each country’s context influenced the process of policy change, as well as the process of policy change itself in terms of good practice hypotheses. Finally, we gathered data on indicators of equity and sustainability in each country to try to assess the status of family planning access and use. The discussion will first consider the data on MCPR, equity, and sustainability indicators; based on that, will revisit our two objectives concerned with 1) good practice hypotheses and contextual factors, and 2) the importance of deliberate, proactive government involvement.

**Family Planning Markets, Equity, and Sustainability**

Of the five countries considered, Indonesia, Mexico, and Thailand achieved high levels of modern contraceptive prevalence. Indonesia also experienced significant private-sector growth. This was the result of deliberate and proactive efforts by BKKBN to involve multiple sectors, especially the commercial sector, and to diversify financing sources for sustainability. Analyses elsewhere in the literature have shown that these gains did not cause negative impacts at an aggregate level in terms of equity.\textsuperscript{42}
The government of Thailand focused relatively more on equity, ensuring government provision to reach everyone throughout the population. In terms of sustainability, they fostered private-sector innovations (such as community-based provision of family planning by NGOs), while putting favorable policies in place to enable commercial pharmacies to distribute products. Government leadership also played an important role in Mexico, where the government took on funding of family planning and targeting to vulnerable populations, and had policies allowing for the sale of some family planning products in pharmacies. However, the private sector was relatively more constrained in Mexico due to policies requiring free provision of contraceptives through the public sector.

Even in Romania and Turkey, some type of total market planning may have contributed indirectly to the more limited progress on MCPR, equity, and sustainability in those countries. Demand-creation activities such as those implemented by the Romanian government indirectly helped to create a strong commercial market in that country by raising awareness of and interest in family planning among the population overall. In Turkey, the government evaluated a range of options before implementing a donation policy that was ultimately quite well received by both family planning providers and users; there did appear to be some gains in MCPR equity in Turkey.

**Key Findings for Total Market Planning**

Based on both qualitative and quantitative information from Indonesia, Mexico, and Thailand and the strong role of government in those three countries, we concluded that deliberate government planning and action that reaches beyond the public sector—as opposed to fragmented support to, or action by, the private sector—can play an important role in total market programming to increase family planning access and use (Objective 2 of our analysis).

With regards to the contextual factors we explored under Objective 1, the experiences in Indonesia and Thailand, and to a lesser extent Mexico (where the private commercial sector was more constrained), underscore that strong government leadership and support for family planning can align well with total market implementation. This is consistent with stakeholder analyses conducted in Nicaragua and Vietnam regarding total market family planning, which found that government support and/or leadership in this arena was valued by all types of stakeholders. These three countries also had relatively more advanced family planning markets than Romania and Turkey by the end of the periods in question (e.g., MCPR over 50 percent), as did Nicaragua and Vietnam; this points to the importance of stable demand as an enabling contextual factor for TMAs.

Findings regarding the contextual factors of operating environments for the private sector and coordination with broader health sector reforms were more mixed. Indonesia, the one country that actively engaged multiple sectors, including the private commercial sector, also had the greatest success in decreasing public-sector share of MCPR and in shifting public sector sources to those most in need (the lowest wealth quintile). However, challenges and concerns with engaging the private sector persist; in many countries, government leaders remain resistant to private-sector engagement (either non-governmental or commercial) or simply do not have any data or information about the private sector family planning market in their country. Without such information, market sustainability remains challenging. One potential role for government engagement with the private sector is stewardship, or “setting and enforcing the rules and incentives that define the environment and guide the behaviors of health system players.” Future analysis could examine in more detail the role of governments beyond policy and dialogue to the areas of information exchange, regulation, and engaging in financing initiatives with the private sector.
Deliberate efforts were made in both Romania and Turkey during the periods examined to link family planning with broader health-sector reforms related to social insurance; but as noted, these countries seem to have relatively mixed results for the equity and sustainability indicators considered. In the years after the time periods examined, social insurance was linked with family planning services in Mexico and Thailand as well. According to our key informants in both Thailand and Turkey, however, the family planning offerings covered by social insurance are currently somewhat limited. In Indonesia, a failure to link with decentralization efforts after the period considered in our analysis compromised the success of the family planning program. These experiences might underscore the importance of establishing sustainable mechanisms for family planning programming to link with ongoing policy reform over the long term.

In terms of good practices for total market planning (Table 1), problem recognition, priority-setting, data collection and information gathering through market research and pilot projects or studies, work across all levels of the health system, and evaluation all emerged as clear common practices across countries. On the other hand, findings on the importance of formal mechanisms such as multisectoral coordinating groups and action plans were more ambiguous. For example, the most comprehensive coordination across sectors probably took place in Indonesia, but there is no evidence that a formal coordinating group for total market work existed. In the other countries, coordinating groups rarely involved commercial sector players in a meaningful way. There was limited evidence of an action plan in any of the countries (Table 1).

**Limitations**

We anticipated that it would not be easy to assess the impact of total market work, but the variation in available data made it even more difficult than expected to draw definitive conclusions about impact in any country. For example, the limited data available on wealth quintiles by source of service in all countries made it challenging to clearly assess family planning equity. Our indicators for equity were not exhaustive, and did not include urban vs. rural populations or ethnicity. Similarly, the family planning effort scores we reviewed did not match the total market processes, and for the most part, did not mirror increases in MCPR. We are not able to say with assuredness that total market programming led to increased equity, sustainability, or modern contraception use. Variations in the data led us to determine that tests of statistical significance would be of limited value. The lack of information about overall family planning financing overemphasizes the funding of product procurement compared to the total cost and financing of service provision, and does not enable analysis of targeting of government resources to specific populations. Indicators for sustainability did not look at elements of the diversity of products and service providers in the market.

Our definition of total market (ie, governments engaged in intentional coordination) led us mainly to countries with a high degree of government involvement in family planning. Therefore, our sample did not include countries with a weaker governmental role and dominant private sector; a similar analysis of good practices in those types of settings could also be informative. The policy analysis framework that we applied to each country placed a heavy emphasis on process. It should be acknowledged that it was difficult to review processes retrospectively; in some cases it was many years, if not decades, after the initiatives were undertaken. The family planning programs in these countries today look markedly different in many ways, and some of these differences have been noted.

**Conclusions**

Experience in all five countries shows that governments, NGOs, and private commercial providers all have a role to play in family planning
markets. However, peer-reviewed literature on total market approaches to family planning, as well as the role of governments in this work, is scarce. Documentation of processes in these five countries was limited, albeit more plentiful than in many other countries. As this field continues to evolve, implementers of current and ongoing total market initiatives should strive to proactively monitor and evaluate their process and publish their results. In addition to the domain of government leadership, policy and dialogue, future indicators of total market success may also examine the extent of information exchange and coordination between the public and commercial sectors, including through developing and instituting appropriate regulations. This analysis also makes clear that financing for family planning is increasingly complex; public-sector financing is linking more and more with mechanisms such as social insurance, while private sources are diverse and not well monitored. Collecting data on financing flows for family planning is therefore quite challenging. To assess the impacts of total market work on equity and sustainability, and to coordinate markets more effectively, it will be important to strengthen approaches to collecting data on both public and private sources of financing for family planning, particularly out-of-pocket expenditures.

Acknowledgements

Funding/Support: This work was supported by the Fred H. Bixby Foundation and the William and Flora Hewlett Foundation.

Additional Contributions: The authors would like to thank the following reviewers and consultants who made invaluable contributions to this work:

- Indonesia: Rita Leavell, Gary Lewis, Jay Parsons, Christopher H. Purdy
- Mexico: Jose David Ortiz Mariscal
- Romania: Borbala Koo
- Thailand: Anthony Bennett, Hatairat Kaoaiem, Pawana Wienrawee
- Turkey: Ayse Akin, Gokhan Yildirimkaya

The Futures Institute conducted data collection and analysis; the National Institute of Statistics and Geography (Instituto Nacional de Estadística y Geografía, or INEGI) in Mexico and the Institute of Population Studies of Hacettepe University in Turkey provided guidance for country-specific data analysis. The following reviewers provided input to the content of this analysis: Ian Askew, Jeffrey Barnes, Veronique Dupont, Fariyal Fikree, Dai Hozumi, Jane Hutchings, Yann Lacayo, and Margaret Neuse. Lesley Reed of PATH provided assistance editing background material that served as the foundation for this document. Hailey Wright and Rose Slavkovsky of PATH provided administrative support to the project and manuscript preparation.
References


34. Ministry of Health [Turkey], Hacettepe University Institute of Population Studies, Marco International Inc. *Turkish Demographic
and Health Survey 1993. Ankara, Turkey:
Demographic and Health Surveys/Westinghouse; 1994.
35. Hacettepe University Institute of Population
Studies. Turkey Demographic and Health Survey
2003. Ankara, Turkey: Demographic and Health
Surveys; 2004.
36. Lubis F. History and structure of the national
family planning program. In: Niehof A, Lubis
F, eds. Two is Enough: Family Planning in
37. Instituto Nacional de Estadística y Geographía,
Consejo Nacional de Población. Encuesta
Nacional de Dinámica Demografcia 2009:
Panorama Sociodemográfico de México:
Principales Resultados. Mexico City, Mexico:
INEGI; 2011.
38. Chayovan N, Kamnuansilpa P, Knodel J.
Thailand Demographic and Health Survey 1987.
Bangkok, Thailand: Institute of Population
Studies, Chulalongkorn University and Institute
39. Hacettepe University Institute of Population
Studies, Ministry of Health General Directorate
of Mother and Child Health and Family
Planning, T.R. Prime Ministry Undersecretary of
State Planning Organization, TÜBİTAK. Turkey
Demographic and Health Survey 2008. Ankara,
Turkey: Hacettepe University; 2009.
Reproductive Health Survey. Bangkok, Thailand:
NSO; 2010.
41. Westinghouse Health Systems, National Institute
of Development Administration, Ministry
of Public Health. Thailand Contraceptive
Prevalence Survey Summary Report. Columbia,
MD: Westinghouse Health Systems; 1978.
42. Hotchkiss DR, Godha D, Do M. Effect of
an expansion of private sector provision of
contraceptive supplies on horizontal inequity in
modern contraceptive use: evidence from Africa
43. Druce, N. Reproductive Health Commodity
Security (RHCS) Country Case Studies
Synthesis: Cambodia, Nigeria, Uganda and
Resource Centre; 2006.
44. Lagomarsino G, de Ferranti D, Pablos-Mendez
A, Nachuk S, Wibulpolprasert S. Public
stewardship of mixed health systems. Lancet.

Author Information

Jennifer Kidwell Drake is a program officer at PATH with over ten years of
experience in reproductive health and family planning. Ms. Drake led initial
conception and design of this work, and drafting and revisions of the article;
she also made substantial contributions to acquisition of data, and analysis and
interpretation of data.

Janet G. Vail worked at PATH and in global public health for more than 25 years
before her retirement in 2014, most recently leading PATH’s family planning
total market work. Ms. Vail made substantial contributions to the conception and
design of this work, acquisition of data, and analysis and interpretation of data, as
well as drafting and revising the article.
Jamie R. Stewart is currently a project manager at the Bill & Melinda Gates Foundation. She served as a family planning intern and consultant for PATH in 2012, at the time the paper was written. Ms. Stewart led acquisition of data and made substantial contributions to analysis and interpretation of data, as well as drafting and revising the article.