COMMENT

Reasons for Rising Condom Use in Vietnam

By Daniel Goodkind and Phan Thuc Anh

The sharp drop in Vietnamese fertility over the past several years has attracted global attention. Several recent studies published outside of Vietnam have linked this decline to the general context of how family planning is delivered in that country,[1] and to the widespread use of modern contraceptive methods (such as the pill and the IUD) and of abortion.[2] In addition, several reports on the topic have recently been published in Vietnam, including a series of in-depth monographs on contraceptive use based upon the 1994 Vietnam Intercensal Demographic Survey (VICDS).[3]

The condom, however, has been given less attention than other methods used in Vietnam; the VICDS-based reports, for example, did not include it among the in-depth studies. Although several other recent studies examined patterns of condom use within the overall mix of methods and the role of the condom in preventing sexually transmitted diseases (STDs),[4] only one readily obtainable report focused exclusively on the condom as a method of family planning.[5]

This article attempts to fill the gap in knowledge about condom use in Vietnam. We begin by summarizing the history and general goals of Vietnam's national family planning program. Then we identify and discuss six factors that have contributed to a recent rise in condom use and that will likely increase the future demand for condoms in Vietnam faster than that for other methods. Finally, we estimate levels of current condom use for family planning within marriage, and both potential and actual demand for condom use to prevent pregnancy and STDs outside of marriage.

Daniel Goodkind is assistant research scientist at the Population Studies Center, University of Michigan, Ann Arbor, Mich., USA. Phan Thuc Anh is principal researcher at the Center for Social Sciences in Health, Hanoi. The authors thank John Knodel, Chanpen Saengtienchai, Ronald Freedman, Vu Quy Nhan and Dao thi Khanh Hoa for their comments and other assistance. They are also grateful to Andrew Piller for his remarks and for providing access to internal records of DKT International's social marketing activities in Vietnam. The research on which this article is based was supported by an award from the Fogarty International Center (of the U.S. National Institutes of Health) to the Population Studies Center, University of Michigan. The Andrew W. Mellon Foundation and the United Nations Population Fund (Hanoi office) also provided funds.

General Context in Vietnam

The Vietnamese family planning program has its roots in the early 1960s, when some methods became available in both the northern and southern regions on a limited basis.[6] However, a governmental family planning policy was not formally implemented until the late 1970s. The National Committee for Population and Family Planning (NCPFP) was established during the early 1980s, and a one- or two-child policy was formally begun in late 1988 (at about the same time that Vietnam officially abandoned centralized economic planning in favor of free-market reforms).[7]

The program put into place to implement this policy—which included an extensive media campaign, free provision of services and devices, and the creation of incentives and disincentives to encourage compliance—helped reduce Vietnamese fertility.[8] The original government target was to reduce the total fertility rate (TFR) to 3.0 births per woman by the year 2000, but the TFR had already fallen to 3.1 by 1994, according to both the VICDS and the Vietnam Living Standards Survey (1992–1993).[9]

Table 1 presents data on contraceptive knowledge and practice collected in two nationally representative surveys—the 1988 Vietnam Demographic and Health Survey (VDHS)[10] and the 1994 VICDS, which was both an intercensal survey and a family planning survey.[11] The 1988 VDHS probably overestimated general contraceptive prevalence, although the relative patterns of use of specific methods seem plausible.[12]

In the past, the condom was rarely used in Vietnam. Recently, knowledge and use of the condom have increased markedly. For example, knowledge of the condom rose more than that for any other method, going from 45% in 1988 to 76% in 1994. Similarly, use of the condom more than tripled over the period, passing from only about 1% of respondents in 1988 to 4% in 1994. This absolute increase in prevalence (almost three percentage points) was larger than that for any other modern method, although the increase in reliance on the pill over the period (from 0.4% to 2.1%) was proportionately greater.

Why Has Condom Use Risen?

A Previously Underused Method

The IUD has been the predominant contraceptive choice in Vietnam; in 1988, 33% of married women of reproductive age were relying on the IUD and they ac-

Table 1. Percentage of married women aged 15–49 who know of a contraceptive method, and percentage distribution of women currently using a method, all by method, according to year, Vietnam

Measure and method	1988	1994
% who know a method	**94.0**	**96.3**
Condom	44.5	75.7
Pill	46.4	68.1
IUD	91.8	94.2
Withdrawal	40.3	60.6
Periodic abstinence	43.0	61.2
Female sterilization	60.2	77.4
Male sterilization	49.2	75.5
% currently using		
Condom	1.2	4.0
Pill	0.4	2.1
IUD	33.1	33.2
Withdrawal	7.0	11.2
Periodic abstinence	8.1	9.8
Female sterilization	2.7	3.9
Male sterilization	0.3	0.2
Other	0.3	0.5
None	46.8	35.0
Total	100.0	100.0

Sources: **For 1988 VDHS data**—see reference 10; **for 1994 VICDS data**—see *VICDS, 1994:…*, 1995 (reference 3).

Table 2. Percentage distribution of married women aged 15–49, by method used, according to fertility intentions, 1994

Method	Spacing (N=2,775)	Stopping (N=6,352)
Condom	3.7	4.2
Pill	1.7	2.4
IUD	22.4	40.0
Withdrawal	8.8	12.6
Periodic abstinence	8.6	10.7
Female sterilization	0.0	3.8
Male sterilization	0.0	0.2
Other	0.0	0.7
None	54.8	25.4
Total	100.0	100.0

Source: VICDS, Contraceptive Knowledge..., 1996 (see reference 3), p. 43.

counted for about two-thirds of all current users. Primary reliance on the IUD, together with abortion, is typical of former Marxist states, which usually discouraged supply-based methods—reflecting both an indifference to consumer choice and an inability to afford these methods or to keep tight reins on their distribution and use.[13] Within Asia, Vietnam is further distinguished by having the highest levels of IUD and abortion use in the region, perhaps partly because policymakers see this strategy as the most effective way to meet current fertility targets.[14] These patterns of contraceptive use in Vietnam thus suggest a large unfilled niche for supply-based alternatives.

Free Markets, Distribution and Choice

One reason for the recent rise in condom use is the increased availability of condoms themselves. Comprehensive free-market reforms were instituted in Vietnam in the mid-1980s; combined with aggressive family planning promotion in the late 1980s, these reforms allowed for two channels of condom distribution—free condoms supplied through the public health sector (including community-based distribution in rural areas) and the sale of condoms through private pharmacies and family-owned roadside stalls.*

Although cost-conscious consumers would likely prefer obtaining condoms free of charge from public-sector providers, there are potential drawbacks, such as having to travel far to reach a public-sector center. (For example, in 1994, 28% of condom users reported that they had to travel 15 minutes or more to obtain condoms.[15]) Other drawbacks to using free public services include having to register one's name to receive supplies[16] and having to use whatever brand of condom is being offered.

Thus, a growing proportion of condom users in Vietnam choose to go through the private sector. That proportion rose from 17% in 1988 to 51% in 1994, while the proportion of pill users relying on such providers climbed only from 33% to 48%. (Few IUD users—5% in 1994—obtained their method from private sources.[17])

In addition, the growth of social marketing programs has increased the number of brands available. For instance, before 1993, consumers' choices were limited to condoms made locally or in China (the latter were often perceived to be of lower quality). When other internationally manufactured brands were available, they were often very expensive. In early 1993, however, with the permission of Vietnam's Ministry of Health, a social marketing firm (DKT International) began distributing condoms meeting international standards that cost less than many of the other international brands.†

The growth of the two distribution channels and of social marketing campaigns (which together have brought in a variety of condom brands from around the world[18]) has created competitive forces that have kept prices low and contributed to an overall rise in condom quality. By 1993, most current condom users felt that condom quality was fairly good.[19]

Compatibility with Traditional Methods

Among supply-based methods in Vietnam, the condom is more popular than the pill, both for spacing births and for stopping them (Table 2). One reason for the greater popularity of the condom relative to the pill may be its greater compatibility with traditional methods, which were used by 21% of married women of reproductive age in 1994. Data on contraceptive switching patterns indicate that 31% of those switching from the condom to another method chose rhythm or withdrawal, compared with only 24% of those switching from the pill (Table 3). Similarly, among those switching from a traditional method, 9–11% decided on the condom, whereas only 2–3% turned to the pill (not shown).

This difference between the choice of condoms over pills among initial traditional method users was more than double the spread between the choice of condoms over pills among women switching away from the IUD (in both absolute percentage points and relative percentage difference). Given the high prevalence of traditional method use in Vietnam, these switching dynamics seem to favor use of the condom relative to that of the pill.

In addition, those who reported switching methods might not have completely terminated the use of one method to start using another, as respondents might rely on more than one at a time or alternate frequently between two or more. Such strategies seem plausible for users of coitus-dependent barrier methods such as the condom, but not for users of long-term methods such as the pill and the IUD. Regrettably, we cannot investigate adequately the dynamics of these strategies using the VICDS. That survey asked about the last two segments of contraceptive use only, and even those questions were not

Table 3. Percentage distribution of women who switched from one method to another, by new method chosen and by reason for switching, according to method used initially

Method chosen and reason	Method used initially	
	Condom (N=220)	Pill (N=257)
Method		
Condom	na	11.4
Pill	3.5	na
IUD	41.9	33.8
Traditional	30.8	24.1
Periodic abstinence	14.9	13.0
Withdrawal	15.9	11.1
Female sterilization	6.6	5.2
Male sterilization	0.0	0.0
Other	0.0	1.8
None	17.2	23.7
Reason		
Side effects	3.6	28.8
Health concerns	3.6	19.8
Not convenient	45.4	7.0
Wants children	25.5	11.7
Husband objects	7.3	1.9
Other	15.6	30.8
Total	100.0	100.0

Source: VICDS, Contraceptive Knowledge..., 1996 (see reference 3), pp. 82–86.

*The line between public and private channels is sometimes fuzzy, since many condoms that are supposed to be distributed for free are actually sold to clients or to private distribution centers at a discount, which drives down condom prices. In addition, some clients who receive free supplies from health clinics may supplement their incomes by selling those supplies to private distributors. (See: "Research on the Retail Condom Market in Vietnam [UNFPA Project VIE/94/P02]," Population Center, National Economics University, Hanoi, 1994, pp. 11–14.)

†DKT's media operations included spots and TV ads for the agency's initial flagship brand, Trust. Since no other condom brand had been marketed so aggressively before, the brand name Trust became synonymous with condoms in the minds of many consumers. (See: Pacific Wave Communications, 1994, reference 17.) When Trust T-shirts were first worn on the streets of Hanoi at the beginning of the promotion campaign in 1993, few Vietnamese knew what the shirts meant. However, within a month after the TV ads began, many people, especially young males, would yell out "Trust!" at the wearer to show that they recognized the product. Recently, however, this brand-name dominance has receded, due in part to the increasing availability of other local and foreign-made brands.

Table 4. Percentage of currently married women aged 15–49 using various contraceptive methods, percentage-point difference between condom and pill use and total fertility rate (TFR), by type of society and country, selected Asian countries and years

Society and country	Condom	Pill	IUD	Ster.*	Other	Condom-pill differential	TFR†
Confucian							
Japan	48	1	3	4	18	47	1.6
Taiwan	19	4	22	27	8	15	1.7
Singapore‡	24	12	§	23	15	12	1.7
Hong Kong	26	16	5	24	10	10	1.4
Republic of Korea	10	3	9	47	0	7	1.6
Malaysia**	17	13	§	13	22	4	2.1
Vietnam	4	2	33	3	29	2	3.1
China	§	3	33	44	2	–2	2.1
Non-Confucian							
Philippines	1	9	3	13	15	–8	3.3
Malaysia††	2	11	§	2	25	–9	4.0
Indonesia	1	15	13	4	18	–14	2.9
Thailand	1	19	7	27	11	–18	2.1

*Includes both female sterilization and vasectomy. †Mean lifetime births per woman. ‡Contraceptive use data by ethnicity are unavailable; about 78% of Singapore's adult population is Chinese. §Included with "other" methods. **Chinese population only. ††Malay population only. *Notes:* Countries are listed in declining order by differential between level of condom use and level of pill use. Data are most recent available. *Sources:* **For all but Malaysia and Taiwan—**United Nations Population Division, *World Contraceptive Use, 1994*, data sheet, New York, 1995; **for Malaysia—**R. Leete, "Dual Fertility Trends in Malaysia's Multiethnic Society," *International Family Planning Perspectives*, **15:**58–65, 1989; and **for Taiwan—**see R. Freedman, M.-C. Chang and T.-H. Sun, 1994, reference 27.

detailed enough to permit a direct investigation into the use of more than one method (either simultaneously or in alternation).*[20]

Confucian Preference for Condoms

The preference for condoms over the pill in Vietnam cannot be accounted for by most conventional explanations. The lesser compatibility of the pill with traditional methods is not a sufficient explanation. For purely technical reasons, the pill is less compatible with traditional methods in any society, and yet pill use exceeds that of the condom in almost all societies. In Vietnam, monetary costs seem not to be a major concern: Among women in the VICDS, price was the least-cited reason for using (as well as not using) pills and condoms.[21]

Neither can the preference for the condom simply be due to bottlenecks in pill supplies. Knodel and colleagues found that supply problems were the reason cited least often by clinic personnel and clients to explain the pill's lack of popularity;[22] they concluded, rather, that national family planning leaders and local motivators discouraged pill use because they were skeptical that rural women could use it effectively. In addition, official policy has looked at the pill less favorably than the IUD and sterilization, and even abortion, reflecting the socialist legacy of deemphasizing consumer choice and ensuring compliance with the one- or two-child policy.[23]

But why should the use of condoms exceed that of pills, since both of them are supply-based methods and are perceived by the government to be less effective than long-term clinical methods such as the IUD or sterilization? In addition to other reasons, we believe that enduring cultural factors[24] may be part of the explanation. Specifically, Vietnam's Confucian heritage may contribute to a preference for condoms over the pill. By Confucian, we mean societies that share the heritage of the Chinese written language, as well as cultural patterns (to be discussed shortly) related to the blending of Confucian, Buddhist and Taoist ideas that permeate East Asia. For example, Vietnam exhibits the same family formation characteristics that distinguish many other Confucian societies in East Asia—patrilineal family organization, son preference, lunar birth timing[25] and unusually high rates of abortion.[26]

Table 4 presents data on contraceptive prevalence and fertility levels in Confucian and non-Confucian areas of East and Southeast Asia. The societies are ranked by the absolute percentage-point differences between the proportions of users of the condom and the pill, the two major supply-based methods used in these societies. Although the prevalence of condoms and pills, as well as the subsequent differential between them, varies widely within East Asia, the results clearly bifurcate Confucian Asia from non-Confucian Asia (and indeed, from the rest of the world). In all of Confucian Asia, except China, condom use exceeds pill use; in China, as in Vietnam, the overall proportions using supply-based methods are very low.

Malaysia provides the most convincing evidence of the divide between Confucian and non-Confucian societies, because Chinese and Malays in that country each evince the patterns of preference for supply-based methods of the wider cultural groups to which they belong. In areas of the United States, one also finds a higher prevalence of condom use than of pill use among Confucian groups than among non-Confucian Asians.[27] Moreover, in Korea and Taiwan, as fertility has fallen over time, the proportion of condom users relative to pill users has also increased considerably (not shown). (When Taiwan and Korea first started their national family planning programs in the late 1960s and the 1970s, respectively, pill use did exceed condom use, although the pill was promoted through special programs at that time.[28])

Why the discrepancy between Confucian and non-Confucian Asia? These preferences could, in part, be due to contextual circumstances, such as the negative publicity that the pill has received in recent years. However, such publicity would presumably have dampened pill use in all areas of Southeast Asia. Other institutional factors, such as legal statutes governing contraceptive use, bureaucracies and the structure of family planning programs, may have also led to biases in contraceptive use in Confucian Asia. In Japan, for instance, the overwhelming predominance of the condom over the pill may partly be explained by laws that prohibit doctors from prescribing the pill for contraceptive purposes and by aggressive marketing campaigns for condoms.[29]

However, while local institutional contexts and policies are indeed important, so are the underlying causes of these contexts themselves. The critical question that Table 4 raises is why all Confucian societies should have developed the same kinds of institutions that would encourage individuals to use condoms rather than the pill.

Although to our knowledge, neither Confucius, Buddha nor the Taoists ever said anything that would encourage use of the condom rather than the pill, we hypothesize that this preference may stem in part from traditional Chinese medical beliefs. These beliefs are intertwined with that troika of religious philosophies and often stress the importance of maintaining a balance of natural body rhythms. Besides interfering with the menstrual cycle, the pill may also be perceived as upsetting

*Anecdotal evidence suggests that some Vietnamese couples may use the condom only during the fecund phase of the menstrual cycle (see: NCPFP and Deutsche Gesellschaft für Technische Zusammenarbeit, 1995, reference 38). Furthermore, in Japan, 40% of those who were currently using the condom combined it with the use of rhythm or alternated condom use with withdrawal (see: S. Coleman, 1981, reference 29).

the body's "meridians," the invisible pathways through which energy is presumed to flow. (Knowledge of these meridians assists acupuncturists and other traditional healers in practicing their craft.) Such beliefs likely reinforce the notion among Vietnamese health care workers that women need to periodically "rest" from taking the pill to restore their health.

The Vietnamese may also perceive pill use as disturbing the proper balance between "hot and cold" food intake.[30] Knodel and colleagues noted that three-quarters of all pill users reported at least one side effect, with the major one being that the pill made them feel "hot,"[31] although it is not clear whether these responses reflected physiological or psychosomatic perceptions.

Our hypothesis of a cultural explanation clearly requires further investigation, but policymakers in Vietnam might consider such issues in deciding how to allocate their resources in promoting family planning. If the government is truly committed to making a full range of family planning options available, the currently high proportions of women who rely on the IUD and traditional methods (and the high proportions who resort to abortion) should decline as more women begin to use supply-based and other methods.

To the extent that the cross-country data in Table 4 correctly predict an increasing preference for condoms over the pill in Vietnam, the relative decline in pill use might not result from a specific failure of the family planning program or its promoters or clients, but rather from the cultural undertow that envelops them all. No one can be sure how much advertising and government resources might be required to overcome this.

Table 5. Percentage of married women aged 25–39 who are currently using contraceptives, by selected socioeconomic characteristics, according to method, 1994

Characteristic	N	Condom	Pill	IUD	Traditional methods*	Female ster.
All women	**5,969**	**5.0**	**2.5**	**38.0**	**22.8**	**3.6**
Education†						
None	430	0.0	1.5	20.3	2.8	1.8
Some primary	1,042	1.5	4.5	24.9	20.5	3.6
Primary	1,313	3.9	4.1	32.6	20.8	3.3
Lower secondary	2,305	4.1	1.9	43.4	22.8	4.3
≥secondary	879	9.2	1.8	39.4	27.0	2.9
Wife's occupation						
Agricultural	3,431	2.5	2.3	41.4	19.4	3.9
Not working	759	6.9	3.7	26.0	25.0	4.2
Nonagricultural						
Nonprofessional	1,425	8.9	2.7	35.8	27.9	3.3
White collar	355	10.1	1.6	40.3	30.6	1.8
Residence						
Rural	4,669	3.5	2.4	38.8	21.7	3.6
Urban	1,300	10.4	3.1	35.4	26.4	3.7
Region						
Northern Upland	1,089	3.5	1.6	44.1	16.8	4.2
Red River Delta	1,281	4.8	0.7	52.8	21.5	3.1
North Central	781	5.0	1.7	41.8	18.1	2.1
Central Coast	539	7.8	2.1	29.3	25.6	5.8
Central Highland	214	5.0	1.4	19.5	20.0	3.3
Southeast	752	7.5	5.0	31.1	26.8	5.5
Mekong River Delta	1,313	4.0	4.6	26.9	28.9	2.6

*Includes periodic abstinence and withdrawal. †Highest educational level shared by both spouses. *Source: VICDS, Contraceptive Knowledge...*, 1996 (see reference 3).

Favorable Social and Demographic Factors

Among modern contraceptive methods in Vietnam, the condom is the only method with consistently higher prevalence among urban users and among those with higher levels of education and of occupational status (Table 5).* Furthermore, condom use varies widely within each of these socioeconomic groups. For instance, 10% of urban dwellers rely on the condom, compared with only 4% of rural residents. This urban-rural differential is larger than that for any other contraceptive method.

Since Vietnam is currently developing very rapidly, its population is becoming better educated, more affluent and more urbanized. Thus, even if there were no further increases in the relative preference for condoms over other methods, these social and demographic shifts alone portend an increase in reliance on the condom among contraceptive users. Moreover, since condom use is more prevalent in the south, especially the southeast region encompassing Ho Chi Minh City, the tendency for Vietnamese to migrate from the less-developed north to the south may raise the proportion of condom users in Vietnam even further.

Premarital and Extramarital Sex

We also expect that condom use for pregnancy and STD prevention outside of marriage will increase rapidly in Vietnam for a variety of reasons. First, the free-market reforms mentioned earlier have contributed not only to a rising standard of living overall, but also to a growing disparity between the richest and the poorest. These conditions have consequently increased the numbers of both commercial sex workers and their patrons.†

There is a high level of unmet need for condoms for pregnancy and STD prevention in sexual relations outside of marriage. For example, according to one study, nearly 40% of Vietnamese married men have had extramarital sex.[32] In another survey conducted in 1993 based on a nonrandom (snowball) sample, more than half of all men, regardless of marital status, had had two or more partners during the previous two weeks.[33] In that sample, ever-use of a condom was especially low among homosexual men (who are at highest risk for HIV infection), compared with urban heterosexual men (38% vs. 69%, respectively). Moreover, 50% of sex workers in the sample had not used a condom during their three most recent sexual encounters.

Among the unmarried, in contrast, even though sexual intercourse is still relatively uncommon,[34] its prevalence is increasing. For example, the proportion of single women among all women seeking abortion has risen from about 7% in 1991 to 20–30% in 1995, suggesting an increase in premarital sexual activity.[35] Moreover, among married couples, the proportion of first births conceived premaritally rose notably during the early 1980s.[36] The proliferation of videos, TV programs and other media from abroad with the free-market reforms in the late 1980s brought international images of sex and romance to young people, and these are slowly al-

*The VICDS report presents data on contraceptive use across socioeconomic groups at ages 15–24 and 25–39. Since differentials by social characteristics are similar within each age-group, Table 5 represents only those aged 25–39.

†For example, sex resorts have recently mushroomed in such northern beach towns as Do Son and Som Son, both of which border very poor rural areas, and in several areas near Ho Chi Minh City. Vietnam's proximity to Thailand, which is well known for its sex industry, may be attracting increasing numbers of international clients to Vietnam, who might perceive its more recently developed sex industry to be comparatively "safer."

tering the norms of acceptable behavior in the culture. Attitudes toward informal dating, for example, have recently become more tolerant, especially in urban areas.*[37]

With rising incomes, attitudinal changes and greater international exposure, the attendant rise in the number of risky extramarital or premarital sex acts is likely to continue to increase the potential demand for condoms. Of course, the extent of the actual increase in demand will depend on the proportion of extramarital acts in which protection is used. Decisions to use condoms will be determined, in part, by government efforts to improve knowledge and awareness of HIV and other STDs and how to prevent them.

However, potential obstacles to condom use in Vietnam include the objections of influential political groups who assume that condoms encourage people to engage in premarital or extramarital sex; these groups interpret the availability of condoms and the discussion or endorsement of them as a "social evil."[38] Other groups hold a more neutral philosophy, and one of them has recently prepared a publication about preventing AIDS that is targeted to young people.[39]

Estimates of Current Demand

Here we estimate the current demand for condoms for family planning within marriage, and tentatively estimate condom demand for pregnancy and STD prevention outside of marriage. Our within-marriage estimates are woman-based and are derived from condom use data among married women of reproductive age. We assume that the prevalence of condom use now (circa 1997) stands at 4.5% (up slightly from the 4.0% registered in the 1994 VICDS). As there are approximately 12 million married women of childbearing age,[40] the number of couples using the condom is about 540,000. If each of these uses 60–90 condoms per year,† then 32–49 million condoms would be needed each year to prevent unintended pregnancy among married Vietnamese couples.

To estimate the demand for condom use outside of marriage, we begin with a male-centered estimate of potential demand if the five million unmarried men aged 18–59 in Vietnam engage in sexual intercourse 5–10 times annually, and if the 13 million married men aged 18–59 engage in extramarital sex 5–10 times annually. If all these nonmarital sexual acts were to be protected, the demand for condoms would reach 90–180 million condoms;‡ currently, however, only a fraction of these acts, perhaps one-third or fewer, are protected by condoms, so the actual demand for condoms for sexual activity outside of marriage probably approaches 30–60 million annually.

Thus, the total actual demand for condoms—for both marital and nonmarital sexual activity—currently stands at 62–109 million condoms per year. However, this total demand may double or even triple over the next decade, because of likely increases in the proportion of all contraceptive users who rely on the condom, in the total number of nonmarital sex acts and in the proportion of all nonmarital sexual activity that is protected by condom use§ (assuming that government support for condom use to prevent STDs remains strong).

Conclusions

Six factors explain the rising prevalence of condom use among married couples in Vietnam and portend further increases in condom use overall. First, family-size desires are still declining in Vietnam; the relatively low prevalence of supply-based methods in a country that currently has the highest levels of reliance on the IUD, traditional methods and abortion in Asia suggests that a large niche has yet to be filled.

Second, Vietnam's free-market reforms have made condoms more accessible. In addition to the public distribution channels facilitated by the family planning program, the reforms have spurred the growth of private distribution networks, have increased citizens' disposable income (and thus their ability to patronize the network of their choice) and have lowered prices, as product choices and overall quality have risen.

Third, condoms are particularly suitable for use in tandem with traditional contraceptive methods, which remain popular in Vietnam. Fourth, among supply-based methods, the Confucian cultural group to which the Vietnamese people belong seems to prefer the condom over the pill; this cultural undertow will likely enhance the demand for condoms.

Fifth, those Vietnamese who are currently most likely to use condoms are relatively better educated, wealthier and more likely to live in urban areas. Thus, since current upward social mobility and migratory patterns will likely redistribute more of Vietnam's population into these social and economic groups, condom reliance may rise even without any overall increase in preferences for condoms. Sixth, and last, recent increases in adolescent and extramarital sexual activity and a growing concern over STD infections have further expanded the market for condoms.

Thus, it is likely that condom use will continue to rise in Vietnam. The speed with which this will occur is not yet clear, though, and concerns among certain political groups that condoms represent a "social evil" could intermittently dampen their promotion. Nevertheless, all major developmental, cultural, social and demographic factors suggest an underlying and increasing demand for condoms. Some of these factors also presage increases in other currently underutilized methods (e.g., sterilization, the pill and the diaphragm), but only the condom seems to be unanimously favored by all of these factors. Policymakers should take full advantage of this intrinsic demand for condoms in Vietnam; the continuing promotion of condoms can broaden their use among the current family planning options, and help preserve reproductive and sexual health in Vietnam.

References

1. Q. N. Vu and R. Hanenberg, "The 1988 Demographic Survey of Vietnam," *Asia-Pacific Population Journal,* **4:**3–14, 1989; J. Allman et al., "Fertility and Family Planning in Vietnam," *Studies in Family Planning,* **22:**308–317, 1991; A. Dang, "Differentials in Contraceptive Use and Method Choice in Vietnam," *International Family Planning Perspectives,* **21:**2–5, 1995; and V. P. Nguyen et al., "Fertility and Family Planning in Vietnam: Evidence from the 1994 Inter-Censal Demographic Survey," *Studies in Family Planning,* **27:**1–17, 1996.

2. T. H. Do, J. Stoeckel and V. T. Nguyen, "Pregnancy Termination and Contraceptive Failure in Vietnam," *Asia-Pacific Population Journal,* **8:**3–18, 1993; D. Goodkind, "Abortion in Vietnam: Measurements, Puzzles, and Con-

*These data should not be taken to imply that premarital sexual relations were unheard of in Vietnam prior to the 1980s. Rather, they suggest that such relations have increased in recent years. In Hanoi, for instance, the centrally located Lenin Park has become an increasingly well-visited "lovers' lane," especially since the proliferation of motorcycles has made the park more accessible to young people.

†Our estimates are lower than those made by the Vietnamese Ministry of Health, which estimated that each woman uses 70–100 condoms per year. We used the lower estimates because we think that average coital rates may be lower than previously believed and that some Vietnamese couples do not use condoms at each act of intercourse, but only on the days when they believe they are fertile.

‡Our estimates of 5–10 nonmarital sexual acts a year is far more conservative than similar United Nations assumptions of 22 such acts per year. (See: United Nations Population Fund, reference 31.) We believe that 22 nonmarital acts annually is too high for four reasons: because the estimate was influenced by early reports with a strong urban bias (even though Vietnam is still predominantly rural and early sexual behavior and prostitution are less prevalent in rural areas); because the vast majority of single men older than 17 are still comparatively very young, due to a skewed population structure; because some men may not have had sex prior to marriage; and because recent surveys suggest relatively low rates of sexual intercourse among unmarried young people (see: D. Goodkind and T. A. Phan, reference 34).

§Of course, the increase in demand for condoms will also be enhanced by the population momentum created as the large and growing cohorts of adolescents enter adulthood.

cerns," *Studies in Family Planning*, **25:**342–352, 1994; J. Knodel et al., "Why is Oral Contraceptive Use in Vietnam So Low?" *International Family Planning Perspectives*, **21:**11–18, 1995; T. H. Do et al., "The Pattern of IUD Use in Vietnam," *International Family Planning Perspectives*, **21:**6–10, 1995; and A. Johannson et al., "Abortion in Context—Women's Experience in Two Villages in Thai Binh Province, Vietnam," *International Family Planning Perspectives*, **22:**103–107, 1996.

3. *Vietnam Intercensal Demographic Survey (VICDS), 1994: Major Findings*, Statistical Publishing House, Hanoi, 1995; *VICDS, Contraceptive Knowledge and Practice: Patterns and Differentials*, Statistical Publishing House, Hanoi, 1996; *VICDS, Contraceptive Discontinuation and Failure*, Statistical Publishing House, Hanoi, 1996; and *VICDS, Knowledge and Use of Oral Contraception*, Statistical Publishing House, Hanoi, 1996.

4. Care International (Vietnam), *The Risk of AIDS in Vietnam: An Audience Analysis of Urban Men and Sex Workers, With Guidelines for Prevention*, Monographic Series No. 1, Hanoi, 1993; National Committee for Population and Family Planning (NCPFP), *Reproductive Behavior of Unmarried Urban Students of Age 17–24 in Viet Nam*, Center for Population Studies and Information, Hanoi, 1996; Gender Education Group, *Results of Group Interviews with Youth on Reproductive Health Issues in DaLat, NhaTrang, DaNang and Ho Chi Minh City—Spring/Summer 1996*, Hanoi, 1996; and D. Belanger and T. H. Khuat, *Youth, Premarital Sexuality and Abortion in the Hanoi Region: Results of a Survey*, Institute of Sociology, Hanoi, 1996.

5. Ministry of Health, *Report on Condom User Survey (UNFPA VIE/88/P17)*, Maternal and Child Health and Family Planning Department, Hanoi, 1993.

6. Q. N. Vu, "Family Planning Programme in Vietnam," *Vietnam Social Sciences*, **39:**3–20, 1994.

7. D. Goodkind, "Vietnam's One- or-Two-Child Policy in Action," *Population and Development Review*, **21:** 85–111, 1995.

8. Ibid., p. 92.

9. State Planning Committee, General Statistical Office, *Vietnam Living Standards Survey, 1992–1993*, Hanoi, 1994; and J. Haughton and D. Haughton, "Son Preference in Vietnam," *Studies in Family Planning*, **26:**325–337, 1995, p. 335.

10. NCPFP, *Vietnam Demographic and Health Survey, 1988*, Hanoi, 1990.

11. *VICDS, 1994, . . .* 1995, op. cit. (see reference 3).

12. J. Allman et al., 1991, op. cit. (see reference 1).

13. H. David, "Abortion in Europe: 1920–91: A Public Health Perspective," *Studies in Family Planning*, **23:**1–22, 1992.

14. D. Goodkind, 1994, op. cit. (see reference 2).

15. VICDS, *Contraceptive Knowledge...*, 1996, op. cit. (see reference 3), p. 45.

16. National Economic University, *Research on the Retail Condom Market in Vietnam (UNFPA Project VIE/94/P02)*, National Economics University Population Center, Hanoi, 1994, p. 21.

17. *VICDS, Contraceptive Knowledge . . .*, 1996, op. cit. (see reference 3).

18. Ministry of Health, 1993, op. cit. (see reference 5); and Pacific Wave Communications, *A Condom Survey in Two Population Centers of Northern Vietnam*, DKT International, Hanoi, 1994.

19. Ministry of Health, 1993, op. cit. (see reference 5).

20. *VICDS, Contraceptive Discontinuation and Failure*, 1996, op. cit. (see reference 3).

21. *VICDS, 1994 . . .* , 1995, op. cit, (see reference 3), p. 5.

22. J. Knodel et al., 1995, op. cit. (see reference 2), pp. 12 & 16.

23. D. Goodkind, 1995, op. cit. (see reference 7).

24. C. Goldscheider and W. D. Mosher, "Patterns of Contraceptive Use in the U. S.: The Importance of Religious Factors," *Studies in Family Planning*, **22:**102–115, 1991.

25. C. Keyes, *The Golden Peninsula: Culture and Adaptation in Mainland Southeast Asia*, MacMillan, New York, 1977; J. Haughton and D. Haughton, 1995, op. cit. (see reference 9); and D. Goodkind, "New Concerns for Child Quality Amidst Multicultural Modernity: Chinese Lunar Birth Timing in Singapore," *Journal of Marriage and the Family*, **58:**784–795, 1996.

26. T. H. Do, J. Stoeckel and V. T. Nguyen, 1993, op. cit. (see reference 2); D. Goodkind, 1994, op. cit. (see reference 2); and A. Johannson et al., 1996, op. cit. (see reference 2).

26. C. Chen et al., "Ethnic Differentials in Reproductive Behavior in the State of Hawaii and the City of Seattle," paper presented at the annual meeting of the Population Association of America, Washington, D. C., Mar. 27–29, 1997.

28. R. Freedman, M.-C. Chang and T.-H. Sun, "Taiwan's Transition from High Fertility to Below-Replacement Levels," *Studies in Family Planning*, **25:**317–331, 1994; and Committee on Population and Demography, *The Determinants of Fertility in the Republic of Korea*, Report No. 14, National Academy Press, Washington, D. C., 1982, p. 135.

29. S. Coleman, "The Cultural Context of Condom Use in Japan," *Studies in Family Planning*, **12:**28–39, 1981; and N. Ogawa and R. D. Retherford, "Prospects for Increased Contraceptive Pill Use in Japan," *Studies in Family Planning*, **22:** 378–383, 1991.

30. L. Manderson, "Hot-Cold Food and Medical Theories: Overview and Introduction," *Social Science and Medicine*, **25:**329–330, 1987.

31. J. Knodel et al., 1995, op. cit. (see reference 2); and N. Ogawa and R. D. Retherford, 1991, op. cit. (see reference 29), p. 380.

32. United Nations Population Fund, *Contraceptive Requirements and Logistics Management Needs in Vietnam*, Technical Report No. 16, undated.

33. Care International, 1993, op. cit. (see reference 4).

34. D. Goodkind and T. A. Phan, *Practices, Attitudes, and Knowledge Related to Sex and HIV/AIDS Transmission Among Young Adults in Hanoi: Some Results of a Multi-Method Pilot Study and Recommendations for Future Research and Policy*, Research Report Series, Population Studies Center, University of Michigan, Ann Arbor, MI, USA, in press.

35. D. Belanger and T. H. Khuat, 1996, op. cit. (see reference 4).

36. D. Goodkind, *Marriage Style, Development, and Spousal Distances: Sex and the Transition to Parenthood in a Province of North Vietnam, 1948–1993*, Research Report No. 95-348, Population Studies Center, University of Michigan, Ann Arbor, MI, USA, 1995.

37. J. B. Chittick, *The Coming Wave: HIV in Vietnam—Observations and Recommendations on Ho Chi Minh City's HIV/AIDS Programs*, self-published, Boston, MA, USA, 1996.

38. Ibid; and NCPFP and Deutsche Gesellschaft für Technische Zusammenarbeit, *Promotion of Family Health in 5 Provinces of Viet Nam*, GmbH World Publishing House, Hanoi, 1995.

39. Vietnam Women's Union, *Youth Who Love Life Know About AIDS*, Hanoi, 1996.

40. *Vietnam Population Census—1989, Completed Census Results, Vol. I*, Hanoi, 1991.