

## Legacy and Policy in Fertility Transition: A Comparative Study of Indonesia and Nigeria\*

Geoffrey McNicoll\*\*

Understanding why economic growth rates differ is fundamental to designing effective development policy. In the same way, understanding why fertility transition succeeds or falters is a requirement for devising policies to advance such transitions in situations where they are lagging or not yet begun. In both cases that understanding may be highly imperfect, leading to policy designs that are misdirected or that neglect important opportunities. For fertility, I shall argue, neglect is the larger problem: policy choice tends to be limited to a few familiar elements—mainly concerned with access to family planning services. But the policy space is actually much larger, and recognizing those wider boundaries draws attention to a broader range of potentially effective interventions.

Historically, of course, and arguably still in large part, fertility transitions occur without much deliberate intent on the part of government. They are driven by falling child mortality and enlarged youth cohorts; by the perception of new economic opportunities and risks tied to the emerging landscape of early industrial development; by exposure to new consumption opportunities and consumerist lifestyles; and by erosion of patriarchy and rise in female autonomy and agency. In modern times, these are supplemented by government-supported efforts to encourage the use of modern means of birth control. Yet in the presence of some or even all of these drivers, responses differ widely among countries. Some countries experience rapid fertility decline, others very modest or negligible declines. My interest in this paper is in explaining those differences.

The simple framework I will use divides the factors accounting for divergent fertility outcomes among countries into three: *legacy*, *policy*, and *circumstance*. *Legacy* refers to initial conditions: a country's cultural and institutional inheritance, its natural and built environment, and its existing complement of human capital. These are the materials that states and societies are endowed with (or have achieved) at the start of the development process—admittedly, an arbitrarily-defined point. *Policy* refers to deliberate government action seeking to reduce fertility and government measures taken mainly for other purposes that indirectly bear on fertility. And *circumstance* refers to the external conditions that fortuitously influence the course of demographic change, whether aiding or impeding policy efforts. Legacy and policy can be interwoven: some policy efforts build on or try to combat elements of legacy. And both are subject to circumstance.

Dominance of legacy effects would imply historical determinism; the absence of those effects would imply full freedom of policy action. Reality lies somewhere in between. In behavior bearing on fertility, as in any other complex sphere of human behavior, change

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\*\* Population Council, New York (gmcnicoll@popcouncil.org)

always entails some amount of path dependence. That dependence constricts the policy space although it almost always still leaves some room for maneuver. In this paper I seek to identify those constrictions as they apply to fertility transition in particular cases and to explore their effect on policy choice and policy achievement. Throwing light on the origins of divergent transition outcomes is likely to offer policy insight for present-day high-fertility countries.

Over the last 50 or so years the most striking regional divergence in fertility outcomes, as also in development performance more generally, has been between East Asia and Sub-Saharan Africa, regions that many observers in the 1950s and even 1960s would have seen as similarly placed in development level and prospects. Such broad comparisons, however, are necessarily blurred. A sharper contrast can be attained by narrowing the scope, focusing on pairs of countries, one from each region, that share some similarities in their initial conditions but diverge in their development paths. Thailand and Ghana are often paired on that basis: starting at comparable levels of real income around 1960, the first showed a six-fold rise by 2000, the second, virtually no improvement; and from fertility levels of 6 children per woman in the 1960s, Thailand currently averages about 1.8, Ghana still about 4.

Another plausible country pairing is the subject of the present study: Indonesia and Nigeria. Both are populous, relatively resource-rich, and culturally diverse; both experienced political turbulence and secessionist struggles in their early years of independence; both have had authoritarian governments over much of their histories as independent states, lately giving way to the forms, and, to differing degrees, the substance, of democracy. In the late 1960s their per capita incomes in purchasing power terms were about the same, and both had high levels of fertility and mortality. Their subsequent economic and demographic performance, however, has been radically different. From the 1970s on, Indonesia moved toward an East Asian style of growth, recording strong expansion in agriculture and manufacturing—though with a major setback in the late 1990s; in Nigeria both those sectors stagnated in an economy increasingly dominated by oil and natural gas revenues. Indonesia made considerable strides in reducing poverty, Nigeria almost none. And while Indonesia currently has a life expectancy close to 70 years and fertility averaging little over two births per woman, Nigeria's life expectancy is still below 50 and its fertility is above 5.

I start by looking more closely at the two countries' apparent initial similarities and their subsequent divergent outcomes. In economic development, the various explanations offered to account for that divergence are described, largely located in post-independence governance and policy choice. I then turn to the particular case of fertility transition, and discuss the contrasting legacies in the two countries that have arguably affected post-1970 fertility trends. My interest is in identifying significant obstacles in the way of Nigeria's fertility transition that were not present or were successfully overcome in Indonesia. I argue that policies directed at removing those legacy obstacles offer at least as good and may be a better payoff than policies aimed more directly at lowering birth rates. In the particular circumstances, of course, it is not difficult to identify factors that would have made those legacy-directed policy choices difficult.

## COMPARATIVE ECONOMIC-DEMOGRAPHIC DEVELOPMENT

Indonesia declared independence from its colonial Dutch rulers in 1945, its economy in shambles from the effects of the Great Depression (which devastated its agricultural export sector) and four years of wartime occupation by Japan. Several years of revolutionary struggle against the returning Dutch forces followed, with sovereignty finally acknowledged in 1949. Belated Dutch efforts to establish Indonesia as a federal state had been abortive—succeeding only in giving the idea of federalism a colonial taint. The unitary state that in fact emerged, with Indonesian (at the time not widely used) adopted as the national language, was easily able to defeat various local rebellions that broke out in its early years—in the process, overcoming Islamist protest against its secular basis and suppressing regional resentment about the inevitable dominance of Java (with near two-thirds of the population). Over the 1950s and early 1960s, however, political instability steadily increased. A fragile constitutional democracy was replaced in 1958 by Sukarno's so-called guided democracy, in effect a balancing act between left and right—more accurately, over a left-to-right spectrum of communists, nationalists, the (regionally deployed) army, and major Muslim parties. The Communist Party, centered in Java and Bali, sought to mobilize its large if mostly nominal membership in a radical agrarian movement in support of land reform, eliciting intense hostility from landholders, most of them small rice farmers. By the 1960s administrative capability, not least in revenue collection, was fast eroding and the country's physical infrastructure was visibly decaying; high inflation had destroyed real incomes in the public sector. In one economist's bleak summary (Arndt 1975: 85), "economic activity continued despite rather than because of the government."

A failed coup attempt in 1965 instigated by left-wing army officers with some Communist Party support precipitated months of violent reprisals by Muslim groups (with strong army backing) against Communist Party members and sympathizers throughout the country. Probably several hundred thousands were killed, mainly in rural Java and Bali, and thousands more imprisoned. A military regime took power, sidelining Sukarno and his leftist-nationalist supporters but also not conceding much to his Muslim opponents. In 1967 the leading army commander, General Suharto, became president, heading a regime that called itself the New Order. Drawing on technical expertise from University of Indonesia economists—the famed "Berkeley mafia"—the new government rapidly brought inflation under control and, with a renewed influx of foreign aid, set about reconstruction and serious development planning.

Nigeria's history up to the 1960s, in comparison, seems uneventful. The country's modern federal structure was rooted in a colonial history of separate administrative regions—primarily a north-south division—and Britain's policy of indirect rule drawing on pre-colonial authority structures. In particular, the largely Muslim Northern Protectorate established by Britain retained most of the administrative forms of the region's pre-existing emirates. The northern and southern protectorates were brought together administratively in 1914. This combined region became the Federation of

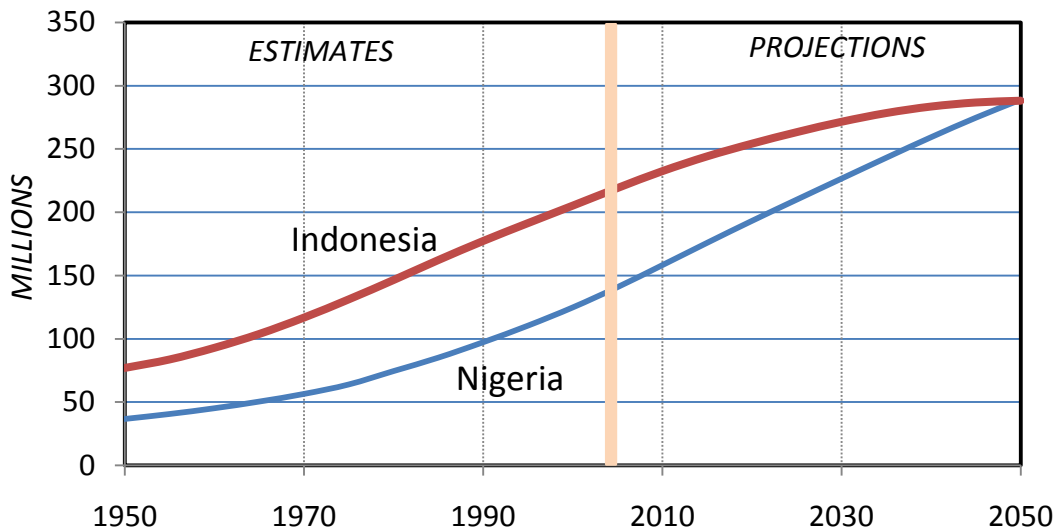
Nigeria in 1947, attaining self-governing status 1954 and full independence in 1960. An army takeover in 1966 brought to power the first of a succession of military governments that were to rule the country for most of the next three decades.

Regional tensions, rooted in cultural, religious, and economic differences among the major ethnic groups (Hausa and Fulani in the North, Igbo in the South and Southeast, Yoruba in the Southwest) were and remained a fundamental political reality of the Nigerian federation. They erupted with great violence in the Biafran civil war of 1967-70, in which the federal government defeated an attempt by the Igbo to carve out an independent state in their region. A substantial part of the country's subsequent political history can be interpreted in terms of the management of competing regional and ethnic claims on power and resources.

***Basic economic and demographic indices***

The bottom-line demographic contrast between Indonesia and Nigeria is seen in the population trajectories in Figure 1. The critical differentiation comes in the 2-3 decades after 1970. The figure also shows the medium UN forecast for growth up to 2050. The projections assume the completion or steady progress of demographic transition: Indonesian fertility, already low, leveling out just below replacement; Nigerian fertility halving by 2050.

**Figure 1: Population growth in Indonesia and Nigeria, 1950-2050, estimates and projections**

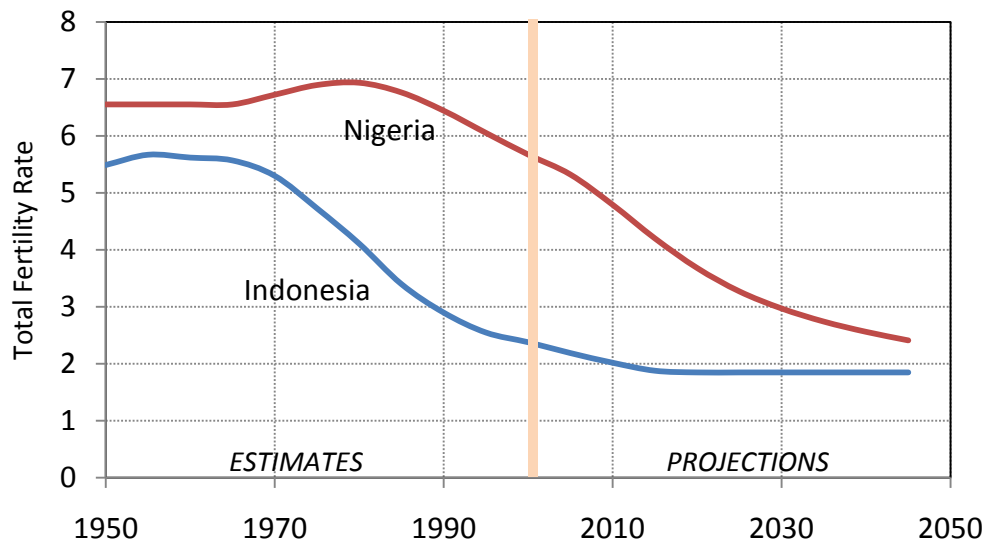


Source: United Nations 2009 (2008 Revision), medium variant

The population growth rate in Indonesia has already fallen to less than half its peak level (2.4 percent per year, reached in the early 1970s); in Nigeria, a higher peak (3 percent) was reached a decade later and growth is now estimated at 2.4 percent. In 1965 Nigeria had just half the population of Indonesia; it is now two-thirds the size; by 2050 the two countries' populations are projected to be virtually identical. Nigeria is currently adding some 3.5 million persons annually; even with the forecast near completion of its fertility transition, the annual increase would still be almost 3 million in 2050.

Fertility trends in the two countries, as reconstructed by the United Nations Population Division, are plotted in Figure 3, along with the DHS estimates for the survey years. Indonesia's fertility transition starts in the 1970s and fertility fell by half in about two decades. It is now believed to be close to replacement level. Nigeria's fertility shows no decline until the 1990s, and the main course of transition is still in the future. A 10 percent fall in fertility is often taken as marking the onset of the transition. By that measure the Nigerian transition could be said to have started around 2003. (Regional differences are very marked, however. The 2003 DHS records total fertility averaging near 7 in the northern states, around the national average (5.7) in the central region, and in the range 4.1-4.6 in the south.<sup>1</sup>

**Figure 2: Fertility trends in Indonesia and Nigeria, 1950-2005**



Source: United Nations 2009 (2008 Revision)

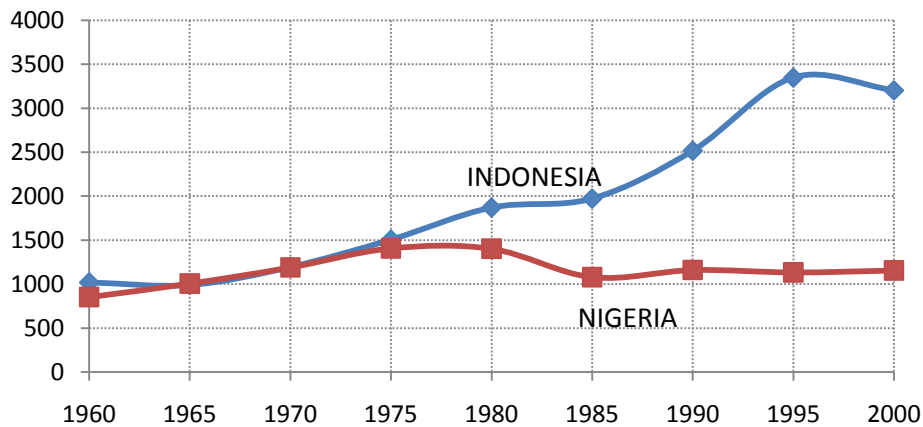
Fertility outcomes seem largely to reflect stated desires. According to the 2003 DHS, the average ideal number of children was 6.7 for Nigerian women at reproductive ages and 7.3 for currently married women. For men, the corresponding averages were 8.6 and 10.6. (Nigeria DHS 2003, p.67).

<sup>1</sup> *Nigeria Demographic and Health Survey 2003*, pp. 54-5.

In life expectancy, Indonesia's pace of improvement over the last four decades parallels that of its region but at levels well below the region's best performers; Nigeria shows minimal gains over that period.

Economic divergence is most simply captured in terms of average incomes. Figure 3 charts Maddison's estimates for per capita GDP at purchasing power parity. Income levels were essentially equal in 1970; by 2000, even allowing for the dramatic downturn Indonesia experienced in the Asian financial crisis of 1997-8, Indonesia's average income was almost three times Nigeria's. The World Bank's constant-dollar income estimates put the 2000 multiple at five times. Poverty figures are equally telling: Indonesia recorded a strong decline in income poverty up to 1996, resumed after the crisis, with the poverty rate (proportion below the country's poverty line) falling from 60 percent in 1970 to well below 20 percent today; an opposite trend was recorded in Nigeria, with poverty rates more than doubling in this period to more than two-thirds of the population (Lewis 2007: 198-9).

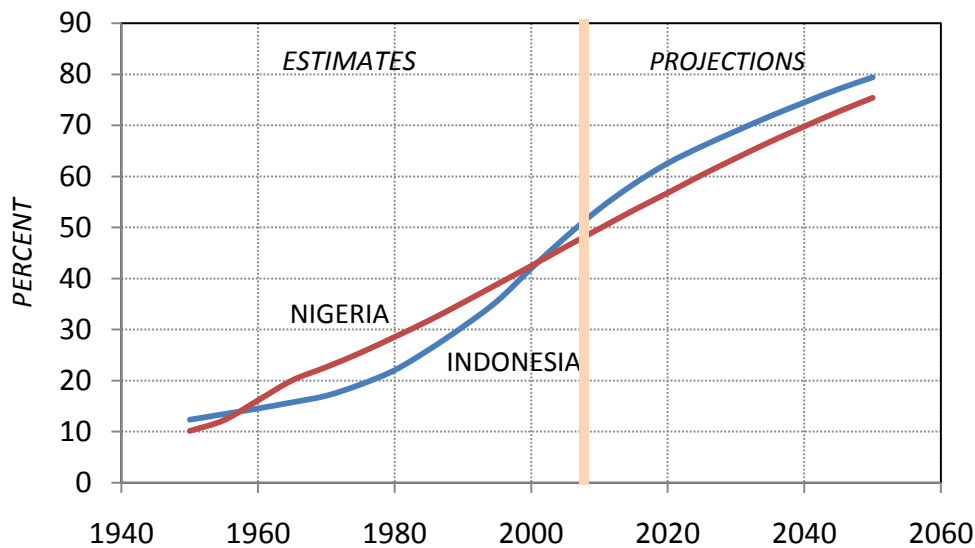
**Figure 3: Income growth 1950-2005**  
(per capita GDP in purchasing power, 1990 dollars)



Source: Maddison 2003

Finally, among the basic indices considered here, Figure 4 shows the UN's estimates of proportions urban for 1950-2005 and projections to 2050. The notable feature here is the similarity of the two trends. Notwithstanding Indonesia's much faster economic expansion, the structural shift toward the cities has proceeded at roughly the same pace in the two countries. Underlying that similarity, however, are very different modes of support for the urban population: Indonesia's growing manufacturing and service economy on the one hand, Nigeria's oil-based rentier economy on the other.

**Figure 4: Proportions urban, Indonesia and Nigeria, estimates and projections, 1950-2050**



SOURCE: United Nations 2008 (2007 Revision)

***Explaining the post-1970 economic divergence: the policy perspective***

There are two monographic comparative studies of Indonesian and Nigerian economic performance: Bevan, Collier, and Gunning (1999)—one of a number of case studies in a major World Bank project on the political economy of poverty, equity, and growth organized by Deepak Lal and Hla Myint—and Lewis (2007). Both focus on policy differences as the source of the divergent experience. Indeed, in the case of the World Bank study the authors flatly dismiss any influence of the past: "As of the mid-1960s there was no basis for a forecast of divergence in either policies or performance; a thesis of historical determinism is therefore unsustainable" (Bevan et al. 1999: 424). The two studies are agreed on one major area of policy contrast: Indonesia's shift in industrial policy from import substitution to export promotion. From the 1970s, in Lewis's (1970) account, Indonesia adopted liberal macroeconomic policies along with strategies to promote nonoil exports, foreign direct investment, and integration into international markets—the cluster of policies now typically castigated as the "Washington Consensus". Nigeria, in contrast, favored an inward-orientation and political control of trade and investment, insulating the economy from global markets. Its vastly overvalued currency prevented any emergence of internationally competitive industries. Differing elite attitudes toward private capital were another factor. In Indonesia, a system of crony capitalism emerged in which the political elite and the military, in alliance with local entrepreneurs, cornered major sectors of the economy—a corrupt system in many respects, but still operating within a macroeconomic framework that fostered growth, including growth in manufactured exports. In Nigeria, government support of private capital was much less effective, with pervasive ethno-regional politics encouraging rent-

seeking and impeding a coherent investment strategy. As in Indonesia, corruption and cronyism were pervasive, but in Nigeria the political uncertainties faced by the elite favored capital flight rather than productive domestic investment.

Indonesia's reform in the post-1967 New Order period was partly forced by the circumstance of declining government revenues. Oil production was expected to drop as reserves dwindled, although oil's economic contribution of course rose for a time with the OPEC-led surge in prices. Nigeria's oil reserves were substantially larger, allowing production to expand and making the country increasingly a resource-based economy. Indonesia certainly had other natural resources that partly substituted for falling oil exports—timber, for example—but found the policy discipline to avoid “Dutch-disease” side-effects that eluded Nigeria.

A policy-centered interpretation of the disparity in growth performance does not solely point to Indonesia's espousal and Nigeria's rejection of liberal economic policies. Major differences in two other policy areas have also contributed, both of them emphasized in the World Bank report. Indonesia devoted substantial resources and energy to enhancing agricultural productivity, particularly by smallholders, and to the goal of attaining self-sufficiency in the main staple crop, rice. Nigeria's agricultural economy was allowed to decline as the overvalued currency turned the domestic terms of trade against it and the country became a major food importer. Finally, Indonesia adopted a number of social policies that benefited the poor, particularly through village development programs, expansion of primary education, and subsidized prices for rice and cooking fuel. In the manner of the East Asian hyper-growth economies it added equity to growth. Nigeria kept a low domestic price of gasoline but otherwise did little to intervene to halt a worsening in income inequality.

The dismissal of legacy in favor of policy is an understandable position for the World Bank to take since, along with its loans, the Bank is a major purveyor of policy advice. But it goes much too far: no one is defending historical determinism tout court. Path-dependence, however, is a real phenomenon. There *was* a basis to forecast an economic divergence between Indonesia and Nigeria, though not recognized at the time. Discerning such a basis in retrospect is simply to acknowledge some degree of historical contingency—a routine expectation for any historian. And Bevan et al. implicitly recognize this in a few cases, for example linking Suharto's pro-poor policies to the expectations on the government built up under Sukarno—a point I will come back to.

## **THE LEGACY-POLICY FRAMEWORK**

The simple analytical framework of fertility transition that I shall employ, mentioned at the start of this paper, can be described as follows.

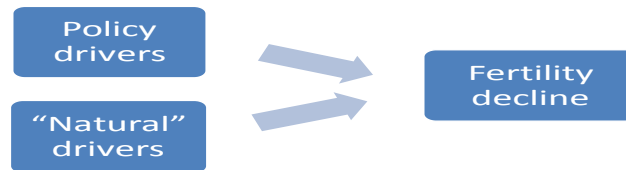
- The underlying forces that make for fertility transition are those of economic and social development. Plausibly, various selections of these forces may be sufficient in different situations: for example, transitions have taken place at low economic levels



in response to shifting attitudes about authority and women's agency, or in anticipation of new opportunities requiring more education. This can be called the historical fertility transition: it is the experience of Western societies and pre-war Japan, and arguably Brazil, where governments either ignored the matter of fertility or actively opposed the use of contraception.

- With the population explosion created by rapid mortality declines after World War II, many governments sought to lower birth rates at a faster pace than might occur "naturally", and most chose to do so by policies aimed at encouraging use of contraception. In effect, then, two sets of drivers are at work: the "natural" drivers (that is, socioeconomic and cultural change) and policy drivers—principally family planning programs. (Figure 5.)

**Figure 5. Standard view of modern fertility transition**



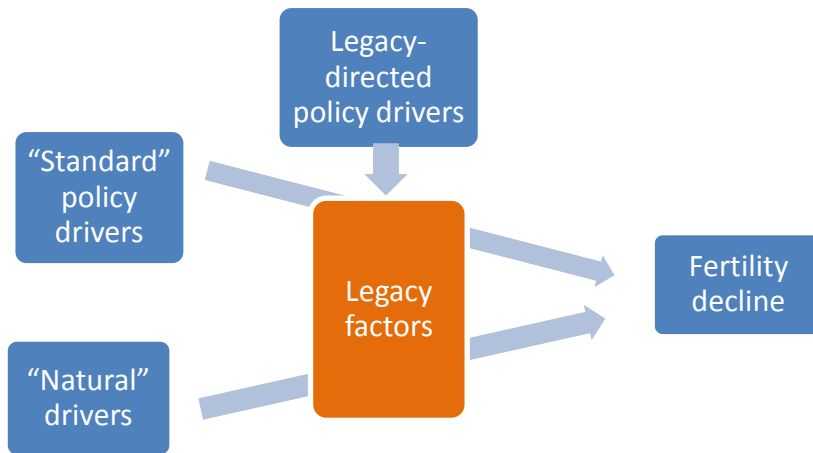
- How effective each of these drivers are, however, depends in many ways on the existing institutional context and other features of the society inherited from the past—what I have called legacy. These legacy elements may modify, blunt, or distort the fertility outcome, acting as a kind of mediator of natural and policy drivers.
- This observation suggests that there is a further route for policy efforts to promote fertility transition: by removing or diminishing legacy obstacles. Hence we have two kinds of policy, as indicated in Figure 6.

Legacy-directed policy drivers, I believe, constitute an important set of policies affecting fertility transition, potentially more influential than "standard" policies aimed directly at fertility.

### **LEGACY FACTORS BEARING ON FERTILITY**

There would probably be little disagreement about the kinds of legacy factors that affect fertility, leaving aside issues of relative weight. Factors promoting or impeding economic development in general make up a major category of these, since sustained economic growth eventually brings down a country's fertility—not least by the simple process of urbanization. Included here would be the initial stock of natural and human capital, the existing physical infrastructure, and inherited economic and political institutions. The

**Figure 6: Policy drivers in the legacy-policy framework**



legacy factors that affect fertility more directly make up a partly overlapping set. Human capital is the major common element. Other elements are features of family and household organization, kinship systems and community structure, belief systems (mainly as they affect agency), and aspects of public administration and local government organization. I discuss these briefly in turn in the context of Indonesia and Nigeria.

### *Human capital*

Health conditions and educational levels in the population are the main relevant dimensions of human capital. On health, the murky estimates constructed from subsequent censuses and surveys suggest comparably poor conditions in the 1960s in Indonesia and Nigeria, with Nigeria marginally worse off. In both, health services, outside the few city hospitals, were rudimentary. On education, Indonesia was a little ahead, having had more time to overcome colonial neglect: it was advancing toward full coverage at the primary level (compared to 30 percent enrollment in 1965 in Nigeria), and had an advantage too at secondary and higher levels. Indonesia's small number of universities and technical institutes had lost their expatriate Dutch faculty after independence but their Indonesian successors, many of them overseas-trained, were gradually filling their places. Nigerian higher education was similarly ramped up after independence. The statistics in Table 1 signal the comparative human capital situation at the aggregate level.

Table 1 does not convey some important distributional differences, notably by gender and by region and ethnicity. On gender, Indonesia showed somewhat less an imbalance than Nigeria: for instance, male literacy in 1970 was 50 percent higher than female in Indonesia, but more than double the female rate in Nigeria. Regional differences are of course important in both countries, but Indonesia even by the 1960s had done much to

**Table 1: Indices of social development, Indonesia and Nigeria, mid-1960s**

	<i>Indonesia</i>	<i>Nigeria</i>
Infant mortality rate (per 1000 births)	155	166
Life expectancy at birth (years)	44	39
Adult literacy rate (>15 years, %) <sup>a</sup>	54	25
Secondary school enrollment (% of age group)	12	5
Higher education enrollment (% of age group)	1	0.4

<sup>a</sup> 1970

Source: UN *World Population Prospects*, 2008 revision (online); *Human Development Report 1990*; *World Development Report 1986*.

limit them—in particular, the Java vs. Outer Islands contrast that had been emphasized in colonial times—while Nigeria's north-south gap, especially in education, has remained marked.

Improvements in health and education are obviously major contributors to development performance, as they are also to fertility transition. They are priority objects of investment by development-minded governments. Clearly, an early disadvantage in these areas can be overcome by strong policy action, certainly over the space of several decades. Arguably, therefore, the most important legacy elements concerned with social development are not the initial conditions but the factors that elevate or downgrade the policy priority of these areas. An interesting question, then, is why Indonesia's decisive espousal of developmentalism under Suharto included such an emphasis on social development—a question taken up below.

### *Family systems*

Cultural variation within each country undermines most generalizations about Indonesian and Nigerian family systems: nearly every assertion needs to be qualified with ethnic or regional specification and acknowledgment of exceptions. That said, Indonesia's dominant family systems were (and are) broadly nuclear, with relative household economic autonomy—manifested, for example, in individualized land ownership. Kin-based influence on economic and demographic decisions from beyond the nuclear group have been fairly weak—indeed, communal landownership, when practiced (it had been common in colonial times), was village- rather than kin-based. Arranged marriage, and for women very early marriage, used to be prevalent, along with high divorce rates, but in the post-independence decades has been steadily replaced by companionate marriage and a narrowed age difference between spouses. Compared to many countries, social relations in Indonesia display relative sexual equality. Although technically permissible under Islamic family law, and occasionally practiced by prominent individuals (Sukarno famously), polygyny has always been rare in Indonesia.

Nigeria's family systems were and are less easily characterized. Several distinctive features stand out, though with varying regional incidence. Lineage influence on family decisions, mainly from the husband's side, is significant. Fostering of children, especially between relatives, is widely practiced.<sup>2</sup> Polygyny is common: countrywide, according to the 2003 Nigerian DHS, 36 percent of married reproductive-age women (over 40 percent in the Northern states) and 23 percent of men were reported to be in polygynous unions, mostly involving a single co-wife.<sup>3</sup> Partly as an outcome of polygyny spousal age differences tend to be large. And whether polygynous or not, families would often be "non-pooling" in budgetary terms—the wife or wives and children having (notionally) a separate household budget from that of the father. The overall picture, then, is of a complex organizational setup in which childraising costs and child-labor benefits are not neatly contained within nuclear units, and are very likely to be unequally shared between spouses. Both costs and accountability are diffused. Fapohunda and Todaro (1988: 578-9), referring to Yoruba society in particular, summarize the resulting pronatalist inclinations:

[C]hildren generate net positive income flows to extended families by providing labor, guaranteeing financial security, and enhancing family power through enlarged social networks. The elders, in turn, encourage the birth of many children by arranging early marriages, by exerting pressure on young parents to observe postnatal abstinence practices that maximize the number of surviving children, and by easing parental budget constraints through intrafamily transfers.

The potential fertility effects of these contrasting family systems are apparent. Indonesian families for the most part are unable to offload child-raising costs, hence have been responsive to the competitive pressures of the expanding market economy and its educational requirements by lowering their planned family size. In Nigeria, the analogous effect—the quality-quantity substitution of Beckerian family economics—has been obstructed by the mesh of transfers among kin and by the non-pooling household. The critical question for fertility transition is how quickly that obstruction will erode. (That it is eroding and will eventually disappear, absent a rather dire development scenario for the country, seems almost certain.)

For social scientists, there is a parallel question of great interest: what kind of family system will emerge to accommodate low fertility in Nigeria? A once widespread but now fairly controversial belief of sociologists has been in the process of nuclearization of the family, with economic change eroding the significance of extended kin ties. There are some signs of this in Nigeria, among them a waning of lineage influence, a rising age at marriage, and the decline in polygyny. Perhaps most important structural change

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<sup>2</sup> Caldwell and Caldwell (1987) estimated that one-third to one-half of West African children were fostered-out for some period during their upbringing. Data for Ibadan around 1980 collected by Isiugo-Abanihe (1985: 61) showed 37 percent of males and 33 percent of females at the time currently fostering-in one or more children under age 15.

<sup>3</sup> Nigeria DHS 2003, p.85. (The proportion has been decreasing: it was appreciably higher in the 1990 DHS.)

favoring this process is urbanization, since city living seems to enhance individualism and provides evident opportunity to slough off obligations to kin. But there is no certainty about such a process: many Caribbean societies, for example, combine low fertility and a family system dominated by visiting unions—in effect, female-headed households with some support from an absent father or fathers; in the low-fertility West, a nuclear family norm persists but the reality is that families have become markedly more diverse in the post-industrial era. Comparative research on family change in African countries where fertility transition is more advanced is clearly needed—updating the important Changing African Family Project of the 1980s.

### ***Kin and community***

Rural social organization in Indonesia, colonial and even pre-colonial in origin, comprised a territorially-based hierarchy of provinces, districts, subdistricts, administrative villages, and hamlets. These units could be and were mobilized in maintaining physical security and carrying out line-ministry extension activities in areas such as public health and agricultural extension. For the colonial government, a major recurrent activity was revenue-raising from the rural populace—a function replaced after independence by the administratively simpler reliance on income from resource rents and trade tariffs. This top-down administrative system became increasingly ineffective in the Sukarno presidency as political unrest grew. It was reformed under Suharto, becoming sternly authoritarian with ex-military officers appointed to many regional and local leadership positions. (Village heads were not themselves government officials but had quite limited freedom of action.) Political stability and quiescence was additionally maintained by a formal military hierarchy that paralleled the civilian one at each regional level.

Nigeria's social organization reflected a different kind of colonial influence: the policy termed indirect rule by which the colonial government superimposed itself above the existing structures of authority—emirates, kingdoms, chieftaincies, and their various subordinate levels. (Where these institutions could not be found, they were essentially invented for the purpose.) Graf (1988: 7) writes that "indirect rule tended to reinforce the most conservative aspects of traditional political organization while shutting out pre-colonial tendencies towards supra-ethnic group cooperation." It produced "extremely diverse, and to a large extent, developmentally dysfunctional structures" of local government (ibid., p.180), which persisted after independence.<sup>4</sup> Nation-wide uniformity of a sort was imposed only in 1976 with establishment of elected local government councils as a third level of government below federal and state.

One of the forms of local social organization that remained important in Nigeria, separate from the village community, was the lineage. As in much of Sub-Saharan Africa, lineages had been traditionally influential in land allocation among their members and could

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<sup>4</sup> Rising civil disorder and ineffective policing in the 1990s led to emergence of vigilante groups (the Bakassi Boys in the southeast, most notoriously, but also similar groups in other regions. (Meagher (2007) suggests that this shows the resilience of Nigeria's civil society.)

exercise some degree of control over members' marriage decisions. That influence steadily weakened with the spread of individualized land titles and widened economic opportunities, but some obligations of membership persisted—especially in pressures to favor kin when the opportunity arises. And those pressures have consequences: Smith (2007: 163) writes of "the incredible strains placed on individuals in modern Nigeria by the contradictory pressures of increasing individual ambition and continuing obligations to kin and community, all in a context of economic insecurity." (There is, of course, a complementary benefit in the expectation of kin and community support when needed.) These practices, widely found in traditional societies but perhaps especially intense in Africa, are what Goran Hyden (1983) has called the "economy of affection".<sup>5</sup> Strong obligational ties of that kind are much less evident in Indonesia, at least as a routine expectation, although nepotism on a fairly spectacular scale characterized Suharto himself.

### *Belief systems*

In Indonesia, census data records some 86 percent of the population as Muslim, 9 percent Christian and 5 percent other faiths. Fervent Muslims are a much smaller proportion, however: many Javanese, for example, appear to carry the affiliation lightly. Christians are mostly located in the eastern provinces. This degree of Muslim dominance might be expected to relegate religious conflict to the periphery of national politics, but contention persists over the role of Islam in government, with Muslim parties decrying the secular state and pressing for greater incorporation of Islamic beliefs and practices.

Nigerian religious divisions, more evenly balanced, are more socially and politically consequential: about half the population, predominantly in the North, are Muslim; 40 percent or so are Christian of various strands (including a burgeoning evangelical component); the rest mainly espousing indigenous beliefs. The regional dimension means that religious influence is felt particularly at the state level—even extending to adoption of sharia law in some northern states—and gives added potency to regionalism in national politics.<sup>6</sup>

Both Islam and Christianity endeavor to impose their moral beliefs on adherents in matters such as sex roles, filial respect, and marriage. For Muslims, Koranic schools, existing alongside the public education system, are a major vehicle for this purpose. A different, older set of beliefs—in a supernatural world—predates those religions and coexists with them. These primordial beliefs are influential in certain areas of life,

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<sup>5</sup> It is not only kin who may be enlisted for such purposes. For example, Smith (2007: 69) writes of the "fierce competition" to get into favored secondary schools in Nigeria, necessitating mobilization of efforts and resources of "families, kin groups, and communities".

<sup>6</sup> As alluded to already, Indonesia experienced several regionally confined Islamist rebellions in its early years of independence, and one, in Aceh, that persisted for decades. Both countries have experienced recurrent episodes of Muslim-Christian communal violence in areas where local proportions of each faith are comparable—murderous clashes in the eastern Indonesian provinces of Sulawesi Selatan and Maluku, and in Plateau and Kano states in the central region of Nigeria.

notably in the understanding of illness and infertility and thus in choice of health-seeking behavior. In Indonesia they have largely lost force, overtaken by the spread of clinical medicine and modern pharmaceuticals. In Nigeria that is not the case: "indigenous beliefs," standing alone or melded uneasily with a formal religion, constitute an intricate and highly consequential spiritual reality, one inhabited by ancestral souls and local deities, demanding obeisance or needing placation, benign or sometimes malevolent. (It figures daily in the country's lively tabloid press.) In the context of rural society these beliefs would tend to sustain the power of elders and lessen the independence and agency of the younger generation. Over time, that influence would likely wane, as it has in much of the rest of the world, especially in the transformed social and economic setting of the city.

### *Governance*

Indonesia emerged from colonial rule as a unitary state, federalism firmly rejected and the country's ethnic divisions increasingly seen as a cultural rather than political characteristic. This was no accident. In retrospect, Sukarno, while rightly castigated for incompetent economic management, was singularly skillful in wielding symbols of unity and creating nationalist sentiment (a point stressed by Bevan et al.). Choice of Indonesian as the single national language was a major move, lessening the sense of domination of the polity by Java and the Javanese—a de facto reality, none the less. Nigeria's federal system, in contrast, sought a fair power-sharing balance between North and South rather than suppression of regionalism. This seemingly very reasonable aim, however, entrenched an ethno-religious and regional basis of national politics. In Nigeria, as Kalu (2004) puts it, "ethnicity is a political, rather than a cultural phenomenon." Given the state's institutional weakness, "ethnic identity will continue to be perceived as the most effective strategy for making demands on the state. This in turn, will tend to increase the capacity of the elites to manipulate ethnic differences to achieve their own goals."

A crucial further difference in the two countries' legacies followed from Indonesia's violent suppression of agrarian radicalism in the 1960s, described earlier. Pointing to the supposed communist threat, Indonesia's militarized government forbade nearly all village political activity, allowing space only for a single state-sponsored party. This depoliticization not only precluded any leftist opposition (or expression of views that could be portrayed as leftist) but equally applied to the Muslim parties on the right, giving the government free rein in designing and implementing its programs. In contrast, Nigeria's distributional politics below the federal level continued relatively unabated under military rule.

As legacies, these differences in the character of the national polity and its relationship to regional and local authority arguably had profound consequences for development. They likely mattered too for fertility transition. In Indonesia, a strong central government commitment to nation-wide programs—in agricultural extension and public works on the economic side, in education, health, and family planning on the social side—brooked no political resistance and faced comparatively little dissipation of effort through local rent-seeking. In Nigeria, national commitments in those program areas tended to lose force in

the course of transmission out to the regions and localities in the face of competing political interests and opportunism. Specifically on fertility, a further problem for Nigeria was the perceived effect of birth control on the relative population size of the regions, given the population-weighting of regional claims on state resources. The politicization of census-taking, a longstanding problem in Nigeria, was a manifestation of that concern. Both countries experienced decades of strongly authoritarian central government but only Indonesia found ways to direct that authoritarianism to productive ends in effective regional public administration and extension programs reaching down to local levels. A dictum of U.S. policy-makers in today's economically turbulent times is "don't let a crisis go to waste"; something similar should perhaps be said of dictatorships.

Decentralization, by then a favored theme of development thinking, did eventually come in Indonesia, starting in 2001, with fairly radical devolution of financial and program responsibility to provinces and districts. Democratic accountability no doubt gained; how greatly efficiency may have suffered is not yet fully apparent. As McLeod (2005: 368) bluntly puts it, "Indonesia gained democracy but lost effective government." Timmer (2004:198) describes the change as a shift from "economic policy designed and administered by an insulated group of skilled technocrats, to a politically responsive system with few public institutions in place to protect economic policy from polemicists". In some respects, the country has been creating the conditions for administrative incoherence that Nigeria began with. The hope would be that enough of a modern political and economic dispensation has been created to preclude backsliding. Nonetheless, "it is entirely possible," Timmer writes, "that Indonesia will follow a path that looks more like Africa than East Asia" (2004: 197). The demographic significance of the shift, however, is likely to be minor: by the time it occurred, the country's fertility transition was largely complete.

A rough summary of some of the contrasting institutional legacies of the two countries spelled out above is given in Table 2.

## **PARALLELS AND CONTRASTS IN FERTILITY POLICY**

The discussion above provides the material to explore the two sorts of policy drivers identified in Figure 6—"standard" and "legacy-directed"—in the context of the all-but-completed fertility transition in Indonesia and the barely-begun transition in Nigeria.

### ***"Standard" policy drivers: family planning in Indonesia and Nigeria***

Neglect or even disavowal of a population problem characterized the Sukarno era in Indonesia. This stance was decisively changed in the late 1960s as one of the first orders of business of the New Order government. The subsequent rapid expansion of a family planning program in Java and Bali, extended, within a few years, to the whole country, is widely viewed as a signal success story in population policy annals. The program gained from Suharto's strong support, effective top-level management, and foreign assistance in



**Table 2: Contrasting legacies: institutional inheritances in rural Indonesia and Nigeria, 1960s**

	<i>Indonesia</i>	<i>Nigeria</i>
<i>Family and household system</i>	Mainly nuclear, minimal kin-group influence	Nuclear and extended (covering co-wives); non-pooling household budgets; residual lineage influence; informal child-fostering common
<i>Gender relations</i>	Substantial gender equity, minimal polygyny	Entrenched role differentiation in household economy and labor force; widespread polygyny; unequal inheritance in <i>sharia</i> areas
<i>Community structure</i>	Well-defined administrative villages; pressures for conformity from local community rather than kin	Less formal administrative roles for communities below Local Government Areas (LGAs); kinship competing with territoriality as principle of affiliation
<i>Land rights</i>	Privatized in Java and Bali and becoming so elsewhere, but with social pressures against sales to outsiders; substantial tenancy but absence of large holdings; residual areas of shifting cultivation in outer islands	Communal or lineage-based ownership still common; conflict between grazing and farming systems in North
<i>Legal system</i>	Mixture of customary and statutory systems	Mixture of customary, statutory, and (in some northern states) <i>sharia</i> systems
<i>Local government</i>	No district-level financial or program autonomy	Substantial devolution to states and LGAs.

supplies and logistics. At least as important as a contributor to its performance, in my view, was the program's ability to draw on a mobilized regional administrative hierarchy that had been firmed up chiefly for security reasons. Provincial and local officials were enlisted in promoting the program's ambitious goals—set in terms of target numbers of "acceptors"—and vigorous recruitment efforts got underway. (Some amount of compulsion in those efforts reportedly took place but, unlike the Emergency experience in India, the Indonesian program at the time was mainly pill-based and did not offer sterilization: "acceptance" did not necessarily translate into any change in number of births.)<sup>7</sup>

<sup>7</sup> For details see McNicoll and Singarimbun (1983) and Hull and Hull (1997).

Nigeria stands in striking contrast in family planning activism. Government denial of the need for birth control (on grounds, mainly, of abundance of natural resources—Sukaron's argument too) and resulting policy inaction persisted longer than in Indonesia, leaving program activity, such as it was, largely up to NGOs. Official statements mildly in support of birth control began to be issued in the 1970s, and a National Population Council was established to formulate and coordinate policy. Desultory official activity largely reflected lack of urgency about the issue and satisfaction with the private sector taking the lead. And opposition to targeting in family planning program performance, let alone in fertility outcomes, found broad international support at the 1994 Cairo population conference and may have helped justify this hands-off position in Nigeria. Eventually, however, demographic realities intruded. Some strengthening of goals took place under President Obasanjo in a 2004 policy statement that called, inter alia, for "progress towards demographic transition to reasonable birth rates and low death rates". Full country-wide access to contraceptive services was envisaged and the target set of a decline in total fertility of 0.6 children every five years. (That is roughly the pace anticipated in the UN's current medium projection series.)

The 2003 DHS, the most recent survey results available, records Nigeria's low contraceptive prevalence rates. Just 9 percent of currently married women were using a modern method of contraception (chiefly condom and pill), another 4 percent a traditional method (chiefly periodic abstinence). The rural use rates were half the urban levels. There were large regional differences: the 13 percent country average use-rate breaks down to less than 5 percent in the North and 23-33 percent in the South. (Nigeria DHS 2003, pp.67-68.)

What might have been done to have jump-started Nigeria's program at least a couple of decades earlier? Survey-based estimates of demand for birth control are often used to argue for program investments but would have been pointless in the context of Nigeria's very high desired fertility. Indonesia's attention to population in the Suharto regime seems to have had origins in Malthusian thinking—as it had in Dengist China and in India in the mid-1970s, but with less coercive results than in those cases. The Nigerian government's views became nominally more in favor of family planning from the 1970s on, but actual program performance languished, any sense of urgency on the demographic front perhaps attenuated by the easily-acquired stream of oil revenues. But even in the absence of that excuse, slowness in coming to terms with population growth might have been expected, given a political landscape fractured by ethnic, regional, and religious divisions.

### *Legacy-directed policy drivers*

The discussion of contrasting legacy factors in the two countries has pointed to obstacles that Nigeria faced (and for the most part still faces) in engineering a fertility transition that did not exist or were successfully overcome in Indonesia. In summarizing these here I should note that my interest is in explaining the past, not laying out a future—trying to answer the question of why some roads were not followed. There is, obviously, much

room for policy deliberation on Nigeria's future fertility transition, but that is for participants in the country's policy process not outsiders.

-- *Human capital deepening*: Both countries inherited major weaknesses in health and education. Both had the resources at hand in the 1970s to repair them, which as a byproduct would give a strong impetus to fertility transition. Indonesia invested heavily in these sectors, Nigeria much less. Why? The example of social policy in nearby Asian countries—the original "Asian miracle" economies—must have been influential. But part of the answer, too, plausibly lies in a legacy factor: the expectations of government in Indonesia created by Sukarno's leftist rhetoric of the 1950s and early 1960s. These expectations the successor regime felt it had to accommodate, even though the events of the 1960s had vitiated any potential political opposition.<sup>8</sup>

-- *Family nuclearization and economic autonomy*: Family change is a politically sensitive area, but many governments have little compunction about intruding—and after all, what could be more sensitive than reproductive behavior, altering which is the widely-accepted objective of family planning interventions? Land ownership is one significant entry point in this sphere. Communal ownership or periodic reassignment of use rights hinders investment; it arguably also impairs social development. Individualized ownership tends to emerge naturally over time or with decolonization—as happened in Indonesia—but land titling programs may be needed to speed the process. For fertility transition, any nudges in the direction of economic autonomy of the nuclear unit or greater agency for women is likely to be helpful. Countervailing patriarchal and lineage interests, strong in Nigeria, are undermined by these shifts in family economics.

-- *Community roles*: Program management in Indonesia, not only in family planning but also in various other government-led extension activities, was assisted by drawing on village solidarity and social pressures in the context of an authoritarian structure of public administration and a co-opted village leadership. Nigeria's more free-wheeling political life stands in strong contrast, messier and less beholden to top-down directives, but in that sense less coercive. These different legacies seem to reflect fundamental social differences between the two regions, perhaps inaccessible to any policy.

-- *Belief systems*: Organized religion and occult beliefs are among the most entrenched parts of a society's heritage; both potentially bear on fertility behavior and birth control. Indonesia's cooptation of Muslim leaders in support of the government's family planning campaign was a notable policy achievement. Although aided by the imposed political quiescence of the time, it suggests the scope for enlistment of religious backing of such programs elsewhere. Cooptation of traditional healers as part of a health network has been accomplished in many places, serving both to expand the supply system and to defuse potential resistance to it.

-- *Governance*: Rural society in Indonesia in the 1970s would have seemed to observers to be characterized by physical security, social stability, and effective public

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<sup>8</sup> This argument is made persuasively by Bevan et al. (1999); Timmer (2004: 197), however, sees Suharto's embracing of pro-poor policies as somewhat of a mystery.

administration—qualities that anyone who knew the country pre-1965 would not have imagined to lie in its future. They are qualities too that are still not much found in Nigeria. In Indonesia those conditions immediately derived from the militarization of provincial and local government following the mid-1960s anti-communist communal violence, but the form they took built on existing administrative arrangements, a legacy of former regimes. They undoubtedly benefited the processes of development and fertility transition—not as necessary conditions but certainly as helpful background features in the early stages.

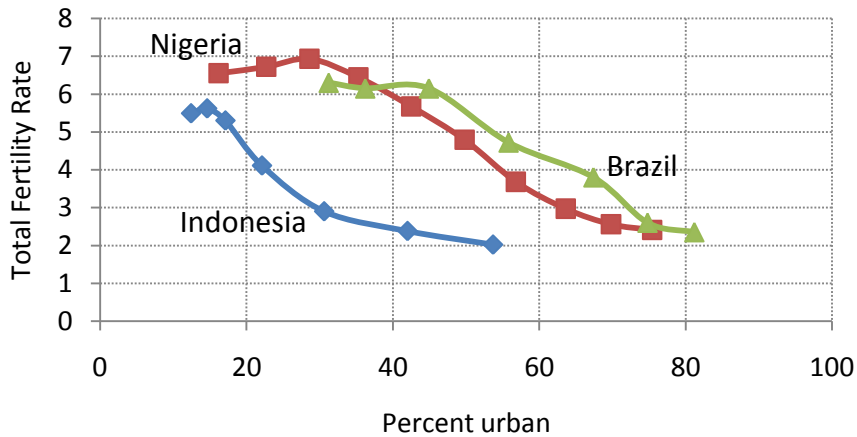
### *Fertility transition by default? Natural drivers and fortuitous events*

As noted at the start of this paper, many fertility transitions have occurred with little or no deliberate intent on the part of government, or even in the face of official opposition. That was the common Western experience; it has been repeated in Brazil, for instance. It points to the possibility of a comparatively policy-free route of fertility transition for Nigeria, one that relies instead on "natural" socioeconomic drivers such as higher incomes, achievements in health and education, urbanization, and, more elusively, "ideational change"—a transformation in attitudes and values affecting fertility but not necessarily tied directly to present material realities.

Urbanization is the most straightforward of the natural drivers. Urban fertility decline is probably less impeded than rural fertility by legacy obstacles—city dwellers are less beholden to social traditions and cultural dictates. At present there is not a large urban-rural fertility difference in Nigeria—about one child in total fertility according to the 2003 DHS (4.9 versus 6.1)—but that differential could increase fairly quickly: certainly there are well-known African instances of very low urban fertility, such as Addis Ababa. If so, a Brazilian-type fertility transition could be envisaged for Nigeria. The UN medium projections for Nigeria seem to suggest that scenario: they show fertility reaching 2.4 (near 2050) at an urban share of 76 percent. Brazil reached that fertility level with about the same urban fraction. Indonesia's fertility transition, in contrast, has been much less urban-centered. (See Figure 7.)

Ideational change by its nature is harder, perhaps impossible, to foresee. The dynamics of values are mysterious. Ideational change, many believe, underlies coincidences in fertility transitions in distant regions and under widely differing material circumstances. Some see it in the substantial fall in fertility in Bangladesh in the 1980s and 1990s that occurred despite lackluster economic progress. Soap operas in Latin America are often pointed to as agents of influence in changing attitudes toward family size in that region, though their effect is hard to separate from the influence of a vibrant consumer economy. And in Africa, the very rapid spread of cell phones is a wholly new phenomenon with the potential to generate ideational change in numerous spheres of life. (One telecommunications company, the MTN Group, records in its 2008 annual report that it has 23 million subscribers in Nigeria; it estimates it has 55 percent of the market.)

**Figure 7: Fertility and urbanization transitions in Indonesia and Nigeria compared to Brazil's transitions**



Note: Data points are at 10-year intervals: 1940-2000 for Brazil, 1950-2010 for Indonesia, 1960-2050 for Nigeria (UN medium-variant projections).  
 Source: United Nations Population Division online data (2007 and 2008 revisions); Merrick & Graham 1979 (Brazil 1940 data).

"Circumstance" was the third component of the fertility transition framework I initially set out. It refers to external conditions and fortuitous trends with indirect bearing on fertility. Thus, for example, Indonesian economic performance under the Suharto government gained greatly from spillover effects of the progress of its neighbors and from a favorable international trade regime. Indonesia was able to construct a labor-absorbing manufacturing export economy during the "window" of the 1980s and early 1990s when Western demand was surging and protective barriers were low, as its oil exports dwindled. Nigeria, awash with oil revenues, developed no significant manufacturing sector at the time, and any efforts to do so now would face daunting competition from the manufacturing powerhouses of Asia. Indeed, the benefits of globalization for Nigeria are unclear: Collier (2007) argues that globalization tends to reinforce the bad governance of poor, resource-rich countries.

For fertility transition, a particular circumstance, already mentioned, has been the shift of international attention away from population problems as the large declines in Asian birth rates became apparent. That trend, along with the sentiments opposed to family planning programs and fertility target-setting that found expression in the 1994 Cairo Agenda, eroded both interest in and foreign assistance for birth control—despite Africa's still high fertility. Evidence of the situation is seen in the almost total neglect of population issues in recent accounts of Africa's development problems—for example, in the widely-publicized 2005 report of the Commission for Africa.

## FINAL REMARKS

Social change is a lagging area of the social sciences, both as theory and as prediction. In the case of fertility, explanations of high fertility all too readily become reasons for high fertility to persist, and the analyst is routinely taken by surprise when it does not do so. Africa-Asia comparisons seem particularly subject to this tendency—forgetting the relative recency of the very notion of a dynamic Asia. Certainly, there are deep-seated differences in play here. J.C. Caldwell notes one of them when he speculates that the family planning program as now conceived is virtually an Asian invention: "a manifestation—almost a cultural one—of the Asian arc from India through South-East Asia to China and South Korea" (Caldwell 1993: 304). But fertility transition more broadly construed is not, or not just, a cultural phenomenon: it is almost an arithmetic one, a necessary if not an immediate accompaniment of achieving a modern mortality regime. The main obstacles in the way of that transition are the institutional forms and practices that I have been discussing in this paper—social realities of the kind that Chinua Achebe referred to (in his essay *The Trouble with Nigeria*) in writing of his country as being held in "the dead grip of the patriarchs of an obsolescent dispensation..." (1983: 61). But while some legacies are indeed all but immutable, many are not, and the policy task is to discern how to nudge into being a new dispensation, one in which fertility levels can be reached that are in accord with the needs of a modern society and the emerging desires of its citizens.

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