There is a direct empirical relation between rapid population growth and a high incidence of domestic conflict. I recently found that the rate of population growth in 86 nations between 1950 and 1965 correlates .19 with the magnitude of turmoil (riots, demonstrations, etc.) in those countries, 1961-65, and .26 with magnitude of rebellion (coups, guerrilla and civil wars, etc.) in the same period. If a time-lag were introduced between the growth-rate data and the conflict measures, the correlations would quite likely be higher. But this research approach is too highly aggregated. Underlying such general relations are a number of separate processes. Population growth, for example, is likely to have different components: the increased longevity of adults has different effects on domestic conflict than do increased fecundity and decreased infant mortality.

In particular, the macrocomparisons reported above do not permit us to distinguish among any of the following possible mechanisms by which aspects of rapid population growth might increase violent domestic conflict (henceforth DC):

1) Absolute population growth increases DC by increasing competition for scarce resources.

2) Rapid increases in the absolute number of youths in the population increases DC because of some combination of socialization failures, high youthful expectations, and inadequate job opportunities.

3) Youth age bulges (relative rather than absolute increases in numbers of youths) increase DC, because adolescents with few young adult role models, and leaders, cannot easily adjust to society.

4) Differentially-rapid population growth among underdog and discriminated groups increases DC by increasing their demands for distributive justice.

These mechanisms are not mutually exclusive, but almost certainly they would have different effects on the group origins of DC, its intensity, its timing, and possibly its forms.
Below are a set of assumptions, distinctions, and hypotheses about some of those more specific connections between RPG and DC. The hypotheses are all subject to testing by application of linear regression techniques to data that are available or obtainable for at least some less-developed countries.

Assumptions About the Causes of Domestic Conflict

These assumptions are a drastically-simplified derivation from recent theoretical work, especially Gurr (1970), Eckstein (1969), and Galtung (1969). The capacity of societies to avoid or forestall the more intense and destructive manifestations of domestic conflict is a multiple function of:

- a) the availability of expandable stocks of resources that can be used to satisfy expectations ("resources");
- b) the capacity of agencies of socialization and integration to induct new members of society into cooperative, hierarchic patterns of production ("socialization and assimilation");
- c) a system of distribution that rewards equally-regarded groups equally ("distributive justice").

The following argument rests on the premise that population growth affects the intensity of DC through its impact on one or more of these three variables.

Population Characteristics with Possible Relevance to Domestic Conflict

a) Absolute population growth (PG). Rapid population growth per se may have a general or residual effect on DC not represented by any of the following ratios.

b) Dependency ratio (DR). The greater the proportion of nonproductive to productive individuals in a society, the greater the pressure on the society's productive capacities and resources.

Suggested operational measure: Total population
pop. aged 25-60

c) Socialization ratio (SR). The greater the proportion of pre-adolescent individuals to those responsible for their socialization, the less effective socialization may be.

Suggested operational measure: population 0-14
population 25-60

d) Assimilation ratio (AR). The greater the proportion of youths to all adults, the less effective assimilation may be.

Suggested operational measure: Population 15-24
Population 25-60
c) **Age bulge ratio (ABR).** The greater the proportion of youths to young adults, the less effective adult socialization may be.

Suggested operational measure:  
Population 15-24  
Population 25-34

The suggested operational measures use age breakdowns common to most censuses, hence are suitable for cross-national comparison. Longitudinal studies of specific societies should be made using operational measures commensurate both with cultural definitions of what constitutes "youth," "young adults," etc. and with prevailing census age breakdowns.

**Static Hypotheses**

The following hypotheses like those in subsequent sections are derived from the foregoing sets of assumptions. The first three are most appropriately tested using cross-sectional and cross-lagged comparisons (of nations, or regions within nations).

I.1: The greater the **Socialization Ratio**, the greater the level of DC (because of adverse effects on "socialization and assimilation").

I.2: The greater the **Assimilation Ratio**, the greater the level of DC (same rationale).

I.3: The greater the **Age Bulge Ratio**, the greater the level of DC (same rationale).

**Dynamic Hypotheses**

The following take account of changes over time, and are suitable to testing using (a) cross-sectional and cross-lagged comparisons and (b) time-series (longitudinal) analysis of single nations and regions.

II.1: The greater the rate of increase in the **Dependency Ratio**, the greater the long-term level of DC (because of pressure on "resources"). The effects will be long-term or generational, rather than temporally abrupt.

II.2: The greater the rate of increase in the **Socialization Ratio**, the greater the medium-run level of DC. The effects will be felt within 5-10 years of the SR increase.

II.3: The greater the rate of increase in the **Assimilation Ratio**, the greater the immediate level of DC. The effects will be immediate, occurring more or less simultaneously as a relatively-large number of individuals pass through the 15-24 age bracket.
II.4: The greater the opportunities for internal and external migration, the less the effects on DC of the Age Bulge Ratio, increases in Socialization Ratio, and increases in the Assimilation Ratio.

Interaction Hypotheses

III.1: The effects of high Socialization Ratios and rapid increases in the Socialization Ratio are multiplicative. In other words, DC will be substantially greater in societies with both high and rising SR's than in societies with only one of these conditions.

III.2: The effects of high Assimilation Ratios and rapid increases in the Assimilation Ratio are multiplicative.

Segmentation Hypotheses

IV.1: The greater the differentially-rapid increase in the population of an oppressed class or segmental group, the greater its DC with other groups.

IV.2: The greater the increase in Socialization Ratio, Assimilation Ratio, and/or Age Bulge Ratio in an oppressed class or segmental group, the greater its DC with other groups.

Comments on Research Design

Testing the above hypotheses requires both reasonably accurate census data and domestic conflict measures. The former data are available for a substantial cross-section of contemporary societies; across time for a smaller set of them; and for segmental groups within a few of them. Many indicators of the more overt forms of domestic conflict have been developed in the past decade, based on such variables as the number, scope, duration, and casualties of events like demonstrations, riots, terrorism, and guerrilla and civil war (for examples see Feierabend, Feierabend, and Gurr, 1972, Part II). The most comprehensive collections contain annual data for all contemporary political entities (nations and colonies) from 1946 through the late 1960's (Taylor and Hudson, 1973; Adams, 1970). Some of the data collection techniques are capable of being applied pre-1947 at modest cost.

The recommended research strategy is to test all or a selection of the above hypotheses with:

a) A cross-section of all countries for a recent period for which there are adequate demographic data;

b) Sub-sets of these countries, distinguished according to level of economic development and region;

c) Time-series data for those (relatively few) developing countries for which demographic information is available for a 50-year span;
d) A cross-section of regions for a recent period in several large and heterogenous less-developed countries, e.g. India, Brazil, Indonesia.

Possible Research Outcomes

Most of the hypotheses postulate time-lagged relations between aspects of population growth and increased domestic conflict. If proven accurate, it should be possible to make forecasts about the short- and medium-range effects of "baby booms" on domestic conflict. Whether such forecasts would be meaningful would depend upon how strong these relationships prove to be. If the best "predictor" ratios can account for only 10% of the variance in domestic conflict among countries, or regions, they will be of little practical value. If they account for 50% of the variance, they would be of obvious use for long-range policy planning. My guess-estimate is that "variance explained" would be closer to the lower than the higher of these two. But initial research on the subject would be rather inexpensive and might have high payoffs.

Estimated Time Budgets for Cross-Sectional and Time-Series Research

a) Cross-sectional test of hypotheses (for ca. 80-100 nations)

1½ research assistant man-years to collect conflict data per five-year period per 100 countries (existing measures for conflict magnitudes are available for most of the 1950s and 1960s, and could be used in lieu of new data collection)

½ research assistant man-years for collecting, evaluating demographic data

½ research assistant man-years for constructing population measures, making correlational analyses to test hypotheses

½ professional researcher man-years supervising, evaluating, writing up research

b) Time-series test of hypotheses (for 4 nations, ca. 75 years each)

½ ¾ research assistant man-years to collect conflict data (time varies considerably according to country studied, sources used, precision required; such data are available in time-series depth only for France)

½ research assistant man-years collecting demographic data

½ research assistant man-years for constructing population measures, making time-series correlational analyses to test hypotheses

½ professional research man-years for evaluating demographic and historical materials, supervising and writing up quantitative analyses