

# Fertility responses to short-term economic stress: Exploring the effects of a wealth shock in a pre-transitional settler colony

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Whether pre-transitional couples exercised deliberate control over their fertility has been a keystone question for much of the historical demography research produced over the last half century. The earliest attempts to find an answer concluded that there was little evidence to suggest that couples might have been limiting their fertility in any meaningful way prior to the transition (Henry, 1961; Knodel and van de Walle, 1979). Early study designs however, could not isolate parity-dependent spacing behaviour, suggesting that some degree of fertility control could still have been operating in society, but that data and statistical limitations prevented researchers from detecting it. The search for evidence of parity-dependent spacing before the transition is important because if found, lends credence to the notion that some couples already knew how to achieve their desired family size and that they were doing so prior to the transition, albeit not in a transition-initiating way (van Bavel, 2004; van Bavel and Kok, 2010; Cinnirella et al., 2017). Borrowing Coale’s (1973) terminology, couples may long have been “able” limit their fertility with greater or lesser degrees of success, having knowledge of traditional methods of family planning, but not yet “ready” or “willing” to do so, either because large family sizes were viewed as beneficial for economic reasons or seen as the cultural norm, and therefore desired.

The implicit assumption in the ongoing debate that the observed outcome of smaller family sizes and longer birth intervals must be driven by an intention to limit family size, doesn’t allow for a change in birth interval lengths to be driven by something other than parity-dependence (Johnson-Hanks, 2007; Timæus and Moultrie, 2008; Moultrie et al., 2012). During periods of short-term economic stress however, all three ready, willing and able conditions might temporarily be satisfied, with couples deciding to postpone their next birth to ease the burden of a shock (Timæus and Moultrie, 2008). Postponement, then, encompasses decisions not to have another birth because of temporary personal circumstances such as the state of the local economy or reasons related to individual income and health, some of which could be more readily detectable in rural agricultural contexts (Bengtsson and Dribe 2006).

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The pre-transitional South African settler context is ideal for an investigation of fertility-limiting behaviour in light of short-term economic stress, captured here by a large negative wealth shock. The 1834 emancipation of slaves represented a substantial loss of wealth to many Cape Colony slaveholders, with records showing that they received, on average, between 40 and 50% of the market value of their slaves. From slaveholder compensations claim forms we derive the average shortfall per slave - the difference between the actual value of slaves at market prices and the amount received from the compensation scheme - for each slaveholder. To this, we link complete birth histories of settler women from the South African Families database. Using this combination of novel data sources and event history models that look simultaneously at stopping, spacing as well as postponement we investigate the effect of an unanticipated wealth shock on all dimensions of fertility limitation. Crucially, because the ultimate compensation received was, we argue, random, uncorrelated with wealth and unexpected, we can interpret the effects as causal, therein, bringing some much-needed resolution to this longstanding debate.

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