

## **ICELAND'S FINANCIAL CRISIS: New evidence of the negative impact on babies' health**

The sudden and unexpected collapse of the Icelandic economy in 2008 had a highly damaging impact on babies born in the following months. That is the central finding of research by **Arna Vardardottir**, to be presented at the annual congress of the European Economic Association in Mannheim in August 2015.

We already know about the damaging effects of smoking and drinking in pregnancy on birth weight: this study detects comparable effects from financial stress. Because the Icelandic economy fell apart with many people losing their savings, families were left in a stressful position even with various new benefits schemes being set up.

By studying the weight of newborn children, the research finds that babies who had been in their first trimester during the crisis were on average 120g lighter. They were also 3.5 percentage points more likely to have a low birth weight (less than 2.5kg) and generally more likely to suffer from neonatal diseases. The author comments:

'My results show that a sudden deterioration in economic conditions has a negative impact on birth outcomes and that children in the early stages of gestation are more vulnerable to such shocks.'

'The findings suggest large losses from financial distress that have previously been ignored: children with worse health at birth can expect to earn substantially less over their lifetime, and low-income families are more likely to experience financial stress.'

### **More...**

This study examines the effects of intrauterine exposure to the 2008 financial crisis. Exploiting the sudden and unexpected collapse of the Icelandic economy and drawing on detailed information from the National Birth Register on birth outcomes for the entire population, the author advances evidence that the crisis had a substantial adverse impact on the birth outcomes of children who were in utero at the time of the collapse.

The results show that financial stress, a common stressor in advanced economies, has an impact on birth weight similar to those of the two most widely cited behavioural taboos during pregnancy, smoking and drinking.

The Icelandic economy fell apart during the 2008 financial crisis. The reasons for the bank failures were difficulties of the sort experienced by many financial institutions worldwide. The crucial differences here were the scale of the collapse and how sudden and unexpected it was.

The collapse had significant effects on the balance sheets of households and arguably inaugurated a new era of economic distress. A large portion of private saving were destroyed in the implosion of the stock market, and the currency collapse and ensuing inflation increased household debt because of its indexation to the CPI and exchange rates. But immediate forbearance efforts (freezing of instalments and interest payments on loans) and changes to various benefit schemes were made to assist struggling households, which therefore remained liquid despite mass insolvency.

The main goal of this study is to establish whether there is a causal link between birth outcomes and the shock to household solvency even while liquidity remained intact.

This paper makes two primary contributions. First, to the best of the author's knowledge, the study is the first to document a causal link between foetal exposure to financial stress in an advanced economy and health at birth.

Second, the author estimates some direct costs of the Great Recession that have not previously been considered. The results show that a sudden deterioration in economic conditions has a negative impact on birth outcomes and that children in the early stages of gestation are more vulnerable to such shocks.

First-trimester exposure led to a 120-gram reduction in birth weight and increased the probabilities of low birth weight (<2,500 grams) by 3.5 percentage points. Such children were also more likely to be born small for their gestational age and to suffer from neonatal diseases.

These results shed light on a difficult to comprehend propagation mechanism in which in utero exposure to deteriorated economic conditions affects individual outcomes. The study therefore contributes to the literature on the determinants of the initial endowments of infants and to the understanding of the long-term effects and full costs of financial catastrophes in advanced economies by exploiting a unique economic collapse that was unexpected in both timing and severity.

The clear break in the economic trajectory eliminates the problems posed by the diffuse timing and endogenous sorting normally associated with economic hardships and makes it possible to capture the effect of the crisis on children exposed in utero.

The results imply large welfare losses from financial distress that have hitherto been ignored – because children with worse health at birth can expect substantially lower lifetime earnings – and suggest that economic hardships may in general exacerbate income inequalities in the long run, since low income households are typically more exposed to financial stress.

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Household Financial Distress and Initial Endowments: Evidence on how in utero exposure to the 2008 financial crisis affected health at birth

Arna Vardardottir

Assistant Professor

Department of Economics

Copenhagen Business School

Porcelænshaven 16 A

DK-2000 Frederiksberg, Denmark

Phone: +45 9394-3999/+41 7934 37856

Email: [ava.eco@cbs.dk](mailto:ava.eco@cbs.dk)

[www.vardardottir.weebly.com](http://www.vardardottir.weebly.com)

