## 2020

## 36<sup>th</sup> IARIW General Conference

Paper Prepared for the 36<sup>th</sup> IARIW General Conference, Oslo, Norway, August 24-28, 2020

Measuring What Matters: Towards an Indicator-based Approach to Human Capital

Gueorguie Vassilev Sunny Sidhu Chris Payne William King

The measurement of Human Capital is increasingly recognised as a priority for the development and monitoring of policy in the UK and internationally. In 2018, the UK's finance minister asked ONS to develop a more sophisticated measure of human capital, supplementing the existing statistics which use an income-based approach. In response to this call, ONS have developed a new theoretical framework for measuring human capital through a set of indicators, which is set out in this paper.

The new framework is based on a lifetime acquisition model, and comprises a set of indicators measured at different life stages. The indicators relate to different themes, which are: compulsory, further and higher education, independent learning, family and home, health, work and job mobility, personality traits and characteristics, and crime.

The proposed indicators are grouped into three types, relating to the process of each mechanism of improving someone's skills and knowledge. First, there are the input indicators, which measure the direct drivers of improving or worsening an individual's human capital. Secondly, there are outcome indicators, which capture the impact, effect or return on the original driver. These relate both to direct skills, knowledge, competency or attribute development, as well as secondary outcomes on educational attainment, the labour market, individual health and wellbeing. The third category of indicators are referred to as enabling indicators, which do not have a direct effect, but improve or worsen the opportunity for individuals to acquire skills and knowledge.

Particular focus will be given to methods of developing and applying causal methods for outcome indicators, beyond typical statistical inference methods. This is seen to be key in associating the right benefit to the right driver, as studies tend to over- or under-attribute the value of certain drivers, either by misspecification, measurement error, linearization of effects or various other methodological issues which will be discussed, along with proposed solutions.

This builds upon previous attempts to measure human capital, such as the UNECE guide on Measuring Human Capital and the original Jorgensen-Fraumeni 1989 framework. Feedback from users and policymakers, and subsequent developments as a result of it, will be presented.