

# Area Group on Labour, Education and Human Capital

UNECE Expert Group on National Accounts

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# Area Group Operations

Commenced as area team on Education and Human Capital.

Included Labour Accounts within the scope of activity of area group: important in its own right, but also serves as a critical link from the topics of education and human capital to the topics of production and income.

Michael Smedes (Australian Bureau of Statistics), Ann Lisbet Brathaug (Statistics Norway), Barbara Fraumeni (Central University for Finance and Economics, Beijing), Wulong Gu (Statistics Canada), Patrick O'Hagan (consultant, former Statistics Canada), Paolo Passerini (Eurostat), Alessandra Righi (ISTAT), Gueorguie Vassilev (UK ONS) and Peter van de Ven (OECD)

# Why is this area important?

Crucial policy questions that hinge on a better understanding of the links between the labour market, human capital, production and income include:

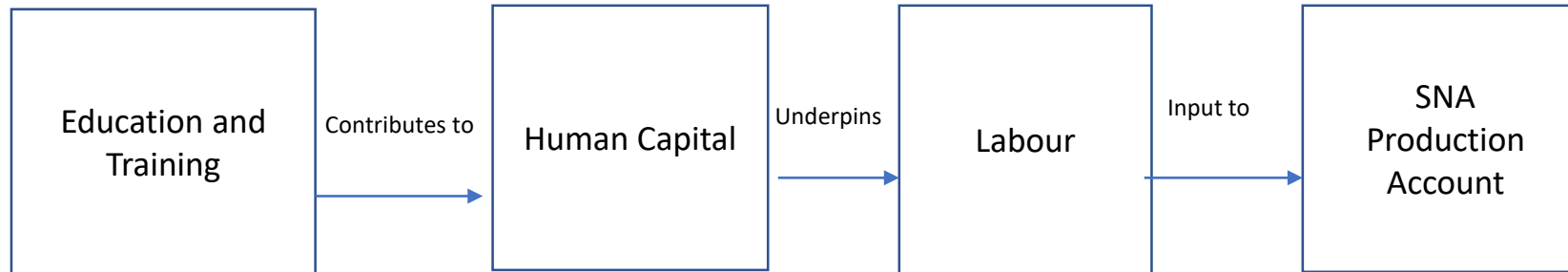
- Human capital as a driver of innovation and economic development
- Measurement of productivity and the ability to deliver real income growth to households
- Issues of inclusive growth, equity and the distribution of income
- Impacts on the labour market and the changing nature of 'work' from changes in production arrangements, including those changes caused by digitalisation and globalisation

# Current Situation

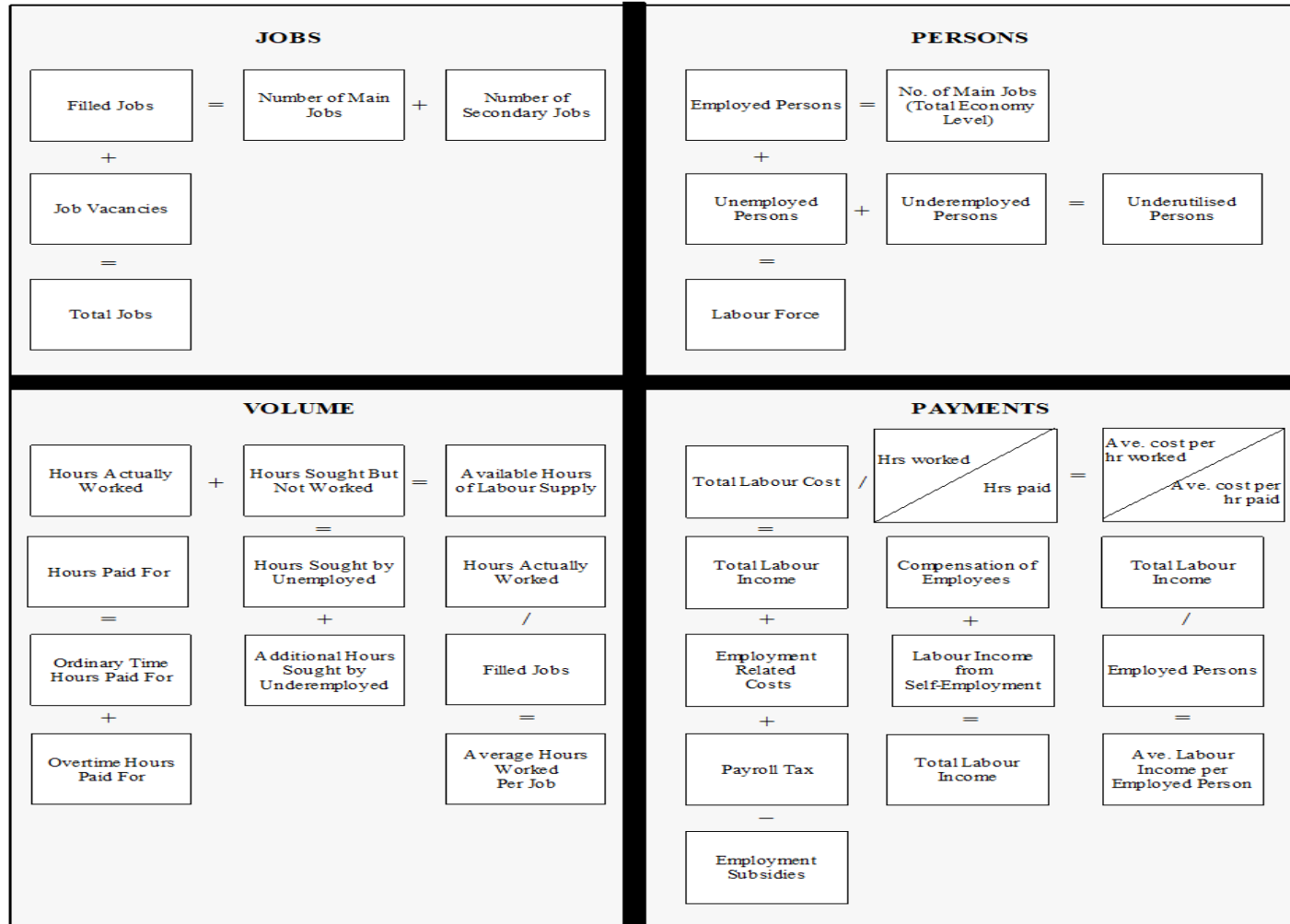
The *SNA 2008* sets out its position to exclude human capital from production in Chapter 1. The central premise is that it is not consumption of education and training services in and of themselves that may form human capital assets, but rather the assembly of these inputs by the persons consuming them into productive knowledge, skills, competencies and attributes.

Labour is at the heart of production, forming a primary input alongside capital, but, unlike capital, is recognized only indirectly in the *SNA* through compensation of employees, mixed income and informal production. The *SNA* references that labour statistics form an important adjunct to the accounts in brief [*2008 SNA*, paras 2.156-2.158], and some of the linkages to population and productivity are set out in Chapter 19.

# Labour, Education and Human Capital Stylized Relationship



# Labour Accounts



# Labour Accounts: Existing material & practice

Many NSOs currently produce, or are now establishing, labour accounts (some have been producing these accounts for decades): Netherlands, Norway, Denmark, Switzerland, Australia, Iran, Malaysia

A range of other NSOs use some form of labour accounting to support their productivity estimates: USA, Canada +

ILO have considered the topic at two Conference of Labour Statistician meetings

# Labour Accounts Recommendations

1. Labour accounts should be included within the central framework in the update to the 2008 SNA. This places labour in the same position as other inputs into the production process, and supports extensions to the accounts for valuing human capital
2. These accounts would be described in a new additional chapter of the SNA, placed between current chapter 9 “The use of income accounts” and chapter 10 “The capital accounts”. This would replace some elements currently covered in chapter 19.
3. The labour accounts will be based on the SNA production boundary and would, at a minimum, cover the labour domains of jobs, people, volume (hours), and payments. They should also include demographic breakdowns by gender, age and educational attainment



# Education Accounts

The goal of the account is to compile the total expenditure on education and training consistent with the framework of the national accounts in a set of tables: the supply and use tables and the financing/cost tables by education and training purpose

The account would also include educational attainment of the resident population and the number of students and graduates and participation in vocational training and lifelong learning

And extended to provide additional demographic and labour detail related to education and training that can be used to show the distribution of investment across groups of individuals (gender & age)

# Education: Existing material & practice

Substantial guidance material already developed:

- UNESCO Methodology of national education accounts
- UNESCO-OECD-Eurostat Manual for data collection on formal education
- UNECE Satellite account for education and training
- SNA, OECD, Eurostat guidance on measuring volumes of output

Many NSOs have produced some version of an education account, many of them as part of initiatives organised by international agencies

A number of education accounts have been produced in conjunction with estimates of human capital

# Education and Training Recommendations

1. Extended accounts for education and training should be developed. These accounts would build on existing material, particularly the Satellite Accounts for Education and Training (SAET)
2. The Education and Training Account would be an extension on the central framework in that it includes (i) both monetary and non-monetary data; (ii) own account (in-house) training; and demographic breakdowns by gender & age
3. The account should be produced in both current price and volume terms
4. The Education and Training Account in turn provides a step towards producing an extended Human Capital Account

# Human Capital

The idea of viewing human knowledge and abilities as an asset – as human capital - and to estimate its value is not new, but has gained more prominence in recent years, especially in the context of sustainable development

Policymakers are calling for ways to understand and quantify human capital, in order to better understand what drives economic growth and the functioning of labour markets, to assess the long-term sustainability of a country's development path

Devising a robust methodology for the monetary valuation of the stock of human capital is especially crucial as studies suggest that human capital is the most important component of the total capital stock in advanced economies

# Human Capital: Existing material & practice

*UNECE Guide on Measuring Human Capital*

There are six major measures of human capital, each of which covers at least 130 countries. Of these, two are monetary measures, one by United Nations Environment Programme (UNEP) and Kyushu University Urban Institute, and the other by the World Bank

A number of NSOs have produced experimental estimates of Human Capital

# Human Capital Recommendations

1. Extended accounts for Human Capital should be developed. The Human Capital Account would provide stock estimates, in both volumes and current price terms, with demographic dimensions (gender, age, education attainment)
2. The account would focus on point in time stock estimates, it would not be a full SNA-type account that, for example, described the flow changes to stock estimates
3. The Accounts will focus on formal education and training investments role in delivering Human Capital, with possible extensions to informal training and health services (as a link to other components of the research agenda – unpaid household work and health accounts).
4. It is expected that some countries will feel they lack the capacity to produce human capital estimates. However, the critical importance of human capital to economic development and progress means it is essential that we begin to engage on the topic. And this proposal would appear to be a sensible starting point