Introducing Labour Accounts

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A coherent and integrated set of labour market data

Aligned to the broader set of macroeconomic accounts

Based on a conceptual framework rather than a measurement framework

Why do we need/want Labour Accounts?

A statistical perspective

        National Accounts

        Labour Statistics

        Sustainability Development Goals

A user perspective

        Improved quality

        Additional analytical power

        Linking between economic phenomena

Despite labour being one of the two factors of production within the SNA production model and being a fundamental component of the economic system more generally, it is not currently articulated as an account within the System of National Accounts.

Unlike produced capital, there is no labour account to enable analysis of the stock, utilization, rates of return and so forth of labour within the production process.

The SNA manual itself does not include a dedicated discussion on labour. This helps lead to seemingly inconsistent treatment in different areas of the manual.

Productivity is the key driver of real income growth, and real income growth is in turn the main determinate of material living standards.

The study of productivity continues to develop with research initiatives including: KLEMS; total factor productivity; quality adjusted measures of labour; human capital and so forth.

Having an explicit discussion of labour in the national accounts framework facilitates the research and analysis of productivity measurement.

Many countries have a relatively large amount of labour market data available from a variety of sources: household, business, taxation and other admin data. However, the current data system demonstrates a range of issues:

1. Contradictory results between data sources: different labour market statistics not only use different reference populations, measurement units, reference periods and definitions but they also contain sampling and non-sampling errors. This lack of comparability between the various sources often leads to contradictory results.

2. Lack of global overview of the labour market data: Each available data source on labour describes part of the labour market and related aspects. This fragmentary approach leads to both overlap and gaps in coverage.

3. Difficulties and limitations in describing labour market dynamics: Most surveys present only the situation at a given point in time or net changes between two points in time. They do not show the gross changes. It is often impossible to fully perceive important labour market phenomena without knowledge of the dynamic interplay.

4. The links between labour market data and other statistical systems are missing: The links between labour market data and data on production, income and wealth from the National Accounts are explicitly missing as stated, but links to population or education statistics should also be clear.

- Sustainable Development Goal 8: Decent work and economic growth

- These are combined in one goal for a reason! We need to inform on the links between economic growth and work to answer the policy questions

- The same sentiments has been picked up in the policy agendas adopted by other institutions:

  - Stiglitz-Sen-Fotoussi "Report by the Commission on the Measurement of Economic Performance and Social Progress" called for statistics to close the gap between aggregate production data and common people's well-being.

  - Many organizations (incl. World Bank, IMF, G20) have adopted an Inclusive Growth approach which seeks to generate growth through inclusion, with inclusion in the labour market typically being a central concern.

Within the Current Production Boundary

- Recent efforts to include distributional analysis of income, consumption and wealth within the National Accounts have enabled improved analysis of inequality (i.e. how have the shares of economic growth been distributed?).

- In much the same way, development of Labour Accounts could enable the study of the distribution of labour outcomes. Clearer analytical links could be drawn from investment and production activities through to paid employment outcomes for populations of interest (by gender, migration status, educational achievement etc.).

Within an Expanded Production Boundary

- A long-standing criticism of the SNA is that it does not value, or include, unpaid work – whether this is unpaid household work or volunteering. As a response to this criticism satellite account treatments for Non-Profit Institutions and for Households have been developed. Most of the work for these satellite accounts revolves around measuring this unpaid work.

- Having a set of labour accounts in place would make these extensions easier to undertake and would facilitate the comparison of paid and unpaid labour.

Improved Quality

- Typically driven by concerns about productivity measures at the industry level.
  - Productivity is the ultimate test of coherence between your inputs and outputs
  - General believe that Household Labour Force Survey give poor quality estimates at the industry level, but is typically the best starting point for total employment
  - Many countries that don't produce a full labour account do produce 'synthetic' estimates of employment by industry by combining data sources

- Anytime the various data sources are providing different signals is a concern as users do not know which estimate to rely on, and it generates mis-trust in the quality of all estimates

Increased Analytical Power

- Combining data sources also enables the provision of additional information for users. A good example of this is multiple job holders.
    - Labour Force focus is on employed persons
    - Establishment survey focus is on number of jobs
    - What about when one person has multiple jobs? An increasing issue in the modern economy where an increasing number of people juggle multiple jobs
    - Linking in administrative data provides very powerful insights

- Integrating data within the Accounts identities provides insights, for example in the area of 'payments'
    - Total Labour Cost relative to Total Labour Income
    - Ave Compensation of Employees per employed persons

Linking Economic Phenomena

- GDP is the primary measure of the economy, this is in large part because of its correlation with employment. It is this link between production and employment outcomes that is fundamental for policy makers

- Globalisation and digitalisation are driving major changes through the production arrangements and processes across the world. The impact of these changes on labour markets is a key challenge for policy makers everywhere

- Labour Accounts provide a framework to better inform users on this link between production and employment

- At the 15th International Conference of Labour Statisticians (ICLS) in 1993, it was said that Labour Accounts "provide a logical framework for obtaining internally consistent estimates of key labour market variables and their distribution over the population ..(which) .. are necessary for the description and analysis of the state and dynamics of the labour market and its interaction with the rest of the economy"

- There has been no internationally coordinated work take place subsequently that I'm aware of. Though chapter 28 of the 2008 SNA includes a short description of one possible labour account as an example of a type of Social Accounting Matrix.

Individually four countries (Netherlands, Denmark, Switzerland and Australia) have developed labour accounts of different types. The labour accounts of these countries cover similar elements (though none covers them all) in their own way:

- employed persons and jobs;

- unemployed and underemployed persons;

- job vacancies;

- hours of work and full-time equivalents;

- income from employment and labour costs; and

- organisation of the labour market (i.e. statistics on collective labour agreements, industrial disputes and trade-union memberships).

- **Household Surveys**
  - Labour Force Survey, General Social Surveys

- **Business Surveys**
  - Targeted Labour Employer Surveys, Whole Economy Enterprise Surveys

- **Administrative Data**
  - Taxation, pensions, workers compensation,

- **New (big) data**
  - Statistics New Zealand online accountant services for example

- **Data scavenging**
  - Department of Defence, Informal sector studies, etc

Harmonization and Completeness:

- Production boundary as applied in the SNA
  - Treatments like Defence Forces, age cut-offs in surveys
  - Inclusion of Agriculture
- Resident population basis
  - Temporary workers?
  - Student workers?
- Common valuation approaches (exchange values)
  - Payment in-kind?
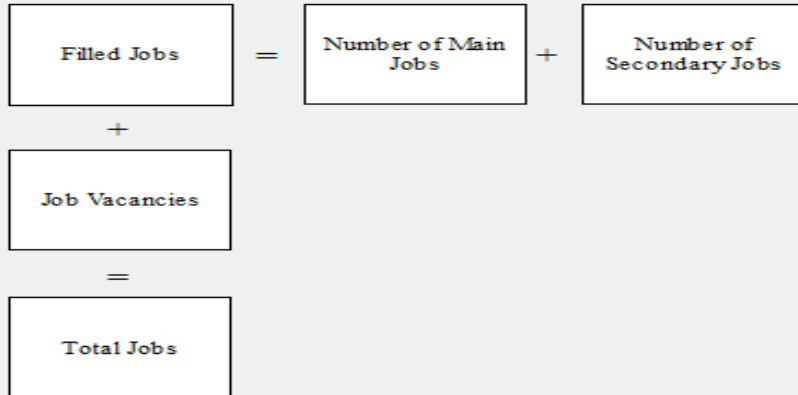- Common classifications
  - Sector and Industry

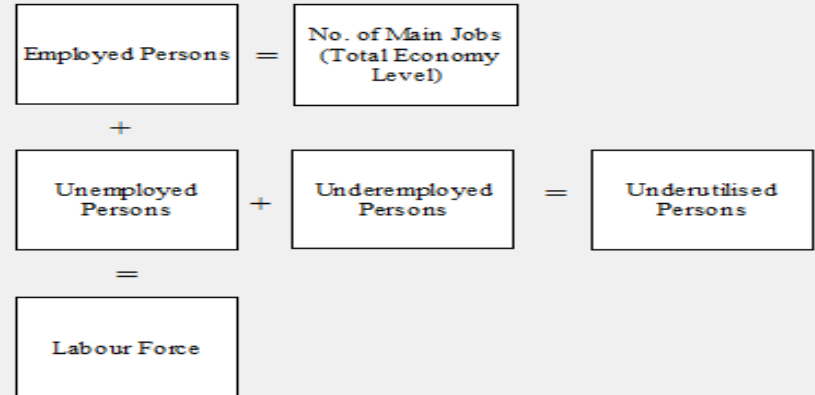Use of Accounting Identities for ensure coherence

- Supply of Labour (persons, hours)
  - Unemployment, underemployment, participation
  - Hours worked?

- Demand for Labour (jobs, hours)
  - Vacancies, skills gaps
  - Hours paid?

- Pay/Costs for Work Done (earnings and costs)
  - Average earnings, average costs, unit labour costs

- Stocks and flows
  - Persons, jobs has typically recorded as stocks
  - Hours and earnings typically recorded as flows
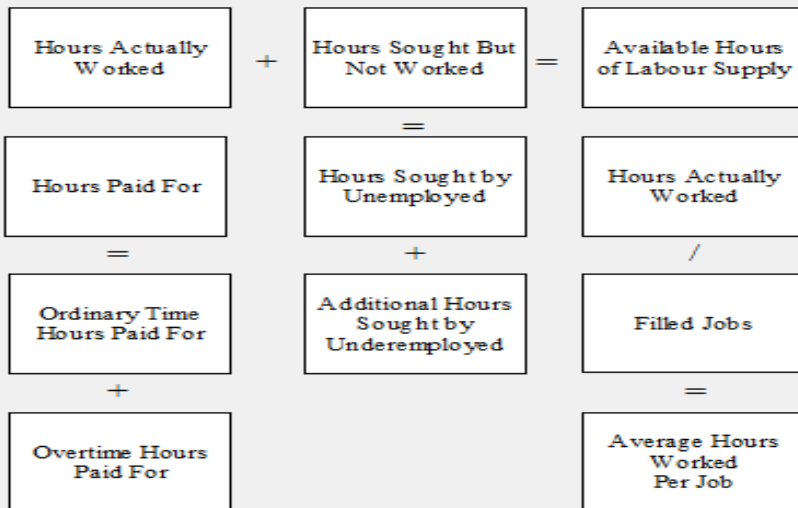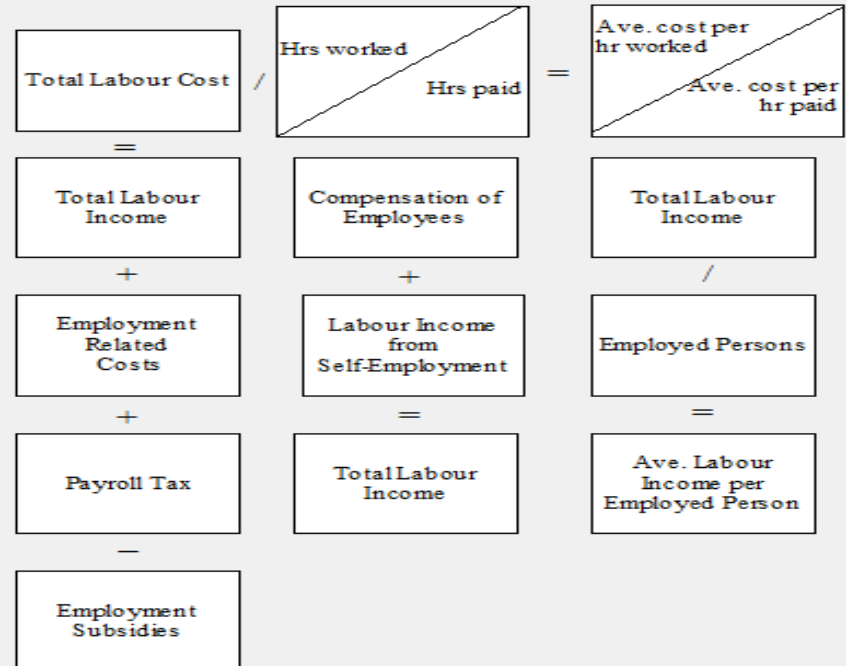 - Flows into and out of the labour force?

JOBS

Filled Jobs = Number of Main Jobs + Number of Secondary Jobs

+

Job Vacancies

=

Total Jobs

PERSONS

Employed Persons = No. of Main Jobs (Total Economy Level)

+

Unemployed Persons + Underemployed Persons = Underutilised Persons

=

Labour Force

VOLUME

Hours Actually Worked + Hours Sought But Not Worked = Available Hours of Labour Supply

= = /

Hours Paid For   Hours Sought by Unemployed   Hours Actually Worked

= + /

Ordinary Time Hours Paid For   Additional Hours Sought by Underemployed   Filled Jobs

+ =

Overtime Hours Paid For   Average Hours Worked Per Job

PAYMENTS

Total Labour Cost / [Hrs worked / Hrs paid] = [Ave. cost per hr worked / Ave. cost per hr paid]

= + /

Total Labour Income   Compensation of Employees   Total Labour Income

+ + /

Employment Related Costs   Labour Income from Self-Employment   Employed Persons

+ = =

Payroll Tax   Total Labour Income   Ave. Labour Income per Employed Person

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Employment Subsidies

- Confront data sources

  - Need to understand quality dimensions and confidence intervals in surveys

  - Review Outliers, major movers etc

- Plausibility of results

  - Look at ratios and other analytical measures

  - Both movements and levels

  - Real world 'sniff' test

- Manual v Automatic balancing

  - If want to completely balance accounts, will need to automate balancing at some stage of the process

  - How far along in the process will be a matter of judgement but in any case statisticians need to understand the process and results

Terima Kasih