Using data from rapid surveys for employment policy
Applications in the COVID-19 era and beyond

Key points

- A key phase in the formulation of evidence-based national employment policies (NEPs) is an employment diagnostic, which draws on labour market and other sources of data for its analysis.
- Rapid surveys have proliferated as a tool for collecting such data since the onset of COVID-19 and hence have become a relevant complement to labour force surveys.
- The main advantage of a rapid survey is its speed, timeliness, remote collection techniques and its cost effectiveness. However, limitations have emerged in terms of coverage and bias. Employment-focused rapid surveys pose additional challenges.
- Innovation and best practice have emerged in the COVID-19 period, especially around data collection. National statistics offices have worked collaboratively with researchers and academics to reach target populations, despite containment measures. Computer assisted (CAWI) and telephone assisted (CATI) are the most common approaches and are becoming more feasible with increases in technology adoption and access. High frequency and longitudinal methods have also been adopted.
- Data and evidence from rapid surveys continue to be a key input towards diagnosing employment impacts of the crisis and recovery. In the absence of labour force and other more representative data, they can provide a “flashlight” for designing recovery measures.
- However, policy makers should exert a high level of caution and make sure the limitations of rapid surveys are always stated up front and that key employment indicators and sample composition is compared with verified, nationally representative data.

I. Introduction

Rapid surveys have proliferated as a tool for collecting labour market data since the onset of COVID-19. This brief reflects on the role of rapid surveys in the post-COVID labour policy formulation process and provides some...
considerations and procedures that can assist policy makers in working with this kind of data.

Employment policy in the COVID-19 era

National employment policies (NEPs) are comprehensive and integrated frameworks and are the main framework for the ILO to work with social partners and governments towards full and productive employment.\(^2\) A key phase in the formulation of NEPs is the diagnostic phase, whose objective is to identify strengths and weaknesses of the economy and the labour market, and the likely challenges for sustainable, inclusive, job-rich growth. The next phase is the issue identification phase where policy makers make informed decisions on which problems to address, set objectives, and determine interventions that are technically feasible and financially sustainable (ILO, 2012). These two phases require a strong and up-to-date understanding of a country’s employment situation, and the collection and analysis of labour market data is a key constituent of this. Beyond this role in the early stages of policy formulation, when diagnostics and assessment are performed, high quality labour market data are also integral to the monitoring stage, where feedback is obtained through the measurement of an intervention’s implementation and impacts.

COVID-19 and the associated lockdowns have had a devastating effect on labour market outcomes across the world. The ILO Monitor estimated that global working hours remained around 4.5 per cent lower in 2021 relative to the last quarter of 2019 (after declining dramatically in 2020) (ILO, 2021). During the pandemic the role of data in the policy formulation process intensified with the need to track the impact of the virus and containment measures on different groups of the population and workforce. This was essential for the planning of relief measures (for individuals, households and firms) and the effective execution of interventions aimed at containment of the pandemic’s contractionary effects (ILO, 2020b). For example, employers under strain needed to be identified for the effective targeting of policies, which aim to maintain employment relationships in the face of temporary closures. This meant that in many cases data was needed at a higher frequency than was previously necessary, and that new kinds of information suddenly became important for informing policy (ILO, 2020b). However, at the same time there was a reduction in the available labour force data, as many countries suspended national labour force surveys (LFSs), among other household surveys, due to the implications of lockdowns for data collection (especially face-to-face interviewing). An ILO survey of 110 countries found that about half of countries had to suspend face-to-face interviewing at some point in 2020, and that disruptions to labour force surveys were greater in Africa and the Americas than in Europe or Asia (Discenza & Walsh, 2021).

The emergence of rapid surveys

Rapid surveys are meant to respond to sudden data needs following a disaster or emergency. In many countries they were introduced, often with the support of international agencies, to satisfy the need for labour data arising from COVID-19’s

\(^2\) See, for example, [Gender-responsive national employment policies (EMPLAB) (ilo.org)](https://www.ilo.org/)

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effects on employment and on data collection. In some instances, this was done to substitute for LFSs; of the 22 per cent of countries who had to cancel some or all waves of an LFS in 2020, just over half conducted a rapid or alternative survey (Discenza & Walsh, 2021).

Rapid surveys can be quantitative or qualitative but generally have the common properties of short turnaround times, brief questionnaires, small sample sizes, and limitations in their sampling frames and survey design (ILO, 2020a). They are designed to be flexible tools and are often implemented using remote modes.


The ERF/ILO Rapid Labour Force Survey was conducted in Egypt, Morocco and Tunisia in several longitudinal waves. Its goal was to monitor the impact of COVID-19 on households, household enterprises, and farmers. The survey retrospectively estimated a baseline pre-COVID situation for February 2020 and measured key indicators for the week or month preceding the roll-out in February 2021. The survey was conducted by phone following a randomized digital dialing (RDD) approach. It targeted mobile phone owners aged 18-64. A sample of around 2,000 interviews was collected in the first wave in each country. The sample was weighted to be nationally representative by including a question in the survey on the number of phone numbers within the household and other questions related to households’ demographics.

The household questionnaire covered demographic and household characteristics, labour market status, education, food security, incomes, social safety nets, attitudes towards risks and social distancing, coping strategies, and mental health. It includes a core module, an individual module, a worker module, a farmer module, a household enterprise module, a women module, and a tracking module (ILO & ERF, 2021).

Although there were some calls for more high frequency labour data before 2020, remote surveys with national coverage were rare in low-income countries (Brubaker et al., 2021). The proliferation of rapid surveys has contributed to a sharp increase in this kind of survey in the COVID-19 period, and high-frequency phone surveying remains prevalent two years into the pandemic (Gourlay et al., 2021). The challenges posed by the pandemic to established national surveys have also spurred innovations in these surveys towards building more resilient data collection systems.

The fact that many rapid surveys are planned and implemented in an ad-hoc manner means that there is an increased need for users of the data to be aware of data quality issues. These surveys often have issues in terms of coverage and representativeness, and it may be more difficult to detect and correct for bias in rapid relative to national household surveys. Indeed, several countries have reported concerns with increasing bias in their data in the COVID-19 era but have not known how to evaluate and correct for it (Discenza & Walsh, 2021). In addition, the use of remote modes of data collection is associated with the exclusion of parts of the population (e.g., rural inhabitants who have less access to phones or computers). This limits the scope of policy that can be informed by the resulting data.

This brief is targeted at employment policy makers and practitioners including representatives of employer and worker organizations. It is also useful for ILO specialists at the global and local level involved with employment diagnostics and employment policy formulation. It focuses on providing guidance on the proper use of data from rapid surveys (and not on how to conduct rapid surveys). This includes the assessment of data quality, appropriate data analysis, and the interpretation and communication of findings.
Specific attention is given to the role of evidence in the labour policy formulation process, and how this role changed in the COVID era with the emergence of rapid survey data.

II. Characteristics of rapid surveys

This section covers the characteristics of rapid surveys that are important for their analysis and interpretation.

**Modes of data collection and sampling units**

Rapid surveys typically target persons and not households. This is because of how respondents are selected or targeted (e.g., through telephonic databases), and because of interview time limits which make enumeration of entire households difficult. This is sufficient for the measurement of most employment indicators, which are at an individual level, but means that we have less understanding of the impacts of changes in employment on household welfare, which is relevant for a lot of employment policy. Some rapid surveys have attempted to remedy this by asking individuals for proxy information on other household members and for total household income, but information gathered in this way is generally limited in its accuracy and usefulness relative to data from household surveys.

Many enterprise-level rapid surveys have also been carried out. The focus of these studies is typically on business outcomes, such as temporary or permanent closures, as well as changes in variables like production, sales and liquidity. A prominent example is the World Bank Enterprise Survey (WBES) COVID-19 Follow-up COVID-19 Surveys, which interviewed a total of 35,496 firms across 40 countries between May 2020 and March 2021 (Karalashvili & Viganola, 2021).

Depending on the aim of a rapid survey its target population may vary from the entire population to the working age to just the economically active or employed. Many rapid surveys have a longitudinal design to follow some phenomenon over time, like employment dynamics, and to make extended use of existing databases of contact details.

While some rapid surveys use face-to-face interviewing, most rapid surveys use remote modes such as computer-assisted telephonic interviewing (CATI) or computer-aided web interviewing (CAWI) (Discenza & Walsh, 2021) or a combination of the approaches (mixed modes). Other rapid surveys have adopted a hybrid approach, where the first wave is conducted face-to-face (and contact details are recorded), and then subsequent waves are conducted telephonically. Within modes there are additional factors that will affect the collected data and realised sample. For example, in CATI surveys, whether sampled respondents’ numbers are dialled multiple times and on different days will affect the kinds of workers and individuals that are likely to be captured, as will the respondent selection mechanism in cases where a single number is associated with multiple people (as with landlines or SIM sharing).

**Sampling**

The properties listed above will all have implications for the sampling strategy. In terms of sampling methodology, rapid surveys exist along a spectrum from probability-based surveys (broadly representative of a target population) to those with opt-in or convenience samples (non-representative). In the absence of
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a sampling frame, the most common method for producing representative rapid surveys is to use an existing sampling frame (with contact details) from a previously collected face-to-face survey (ILO, 2020a; Discenza & Walsh, 2021). For example, the World Bank Living Standards Measurement Study assisted seven African countries with high-frequency phone surveys monitoring employment in 2020, using sampling frames from pre-pandemic face-to-face surveys (Contreras-Gonzalez et al., 2020; Gourlay et al., 2021).


This rapid survey was carried out by the ILO in 2021/22 and focused on the effect of the COVID-19 pandemic on people's current employment and education, on their future work aspirations, and whether they had experienced job loss or obstacles to employment over the period (ILO, forthcoming). It was conducted in 40 countries across all regions and consisted of a sample of 1000 respondents in each country, with an additional 200 rural respondents sampled in some countries (a “rural booster”). The mode of data collection differed from country to country and included face-to-face, CATI and CAWI methods, along with a supplementary opt-in web survey. Most countries used CATI with RDD and quotas for age, sex, education level, and capital/non-capital place of residence.

This is an example of a complex rapid survey where the same or similar questionnaire is applied through a variety of modes in different contexts. The addition of a rural booster was designed to address the well-known under-representation of rural respondents in remote surveys, and the use of different modes in different countries is influenced by the awareness of coverage issues associated with remote modes. This will facilitate the use of the data in labour policy targeted at rural areas, something which is not possible in many other rapid surveys.

There are issues with this method in terms of contact details not being universally available in the sampling frame and in terms of low contact rates among those who do have contact details. These issues tend to affect rural and remote areas more than urban and are more acute for harder to reach populations (such as the economically inactive or the informally employed), leading to issues of uneven representation of different groups in the data. These issues and their implications for the representativeness and coverage of rapid survey data are discussed in Section 3.

Other strategies include using existing registers with contact details, such as local administrative lists, telephone company or mobile network operator (MNO) frames, or credit bureau registries (ILO, 2020a; Discenza & Walsh, 2021). Random digit dialling (RDD) is also a popular strategy, as in theory it produces a sample that is representative of all people with access to a phone. Finally, some rapid surveys seek to attract participants online.

Survey content and questionnaires

Rapid surveys using remote data collection typically have very short questionnaires relative to face-to-face surveys. In addition, individual questions typically need to be shorter and simpler, as complex questions are hard to convey telephonically. This means that the employment information captured is generally more limited relative to household surveys based on face-to-face interviews. One also needs to be aware of the number of questions (and their phrasing) that are used to determine employment status; some rapid surveys may determine employment status on the basis of fewer, simpler questions relative to national LFSs. Another important factor is the reference period used for questions; whether respondents were asked about work in a particular month or in a duration of time preceding the interview.
Retrospective questions became very common in labour surveys to capture pre-pandemic employment status (and to be able to measure subsequent job loss). Issues with recall accuracy mean that it is important to pay attention to whether a variable is based on contemporaneous or retrospective questioning.

The pandemic and lockdowns introduced challenges for the measurement of employment. In many cases the conventional definitions of employment and unemployment were not sufficient to capture the labour market states that were relevant in terms of people's welfare and how they were affected by the pandemic (Discenza & Walsh, 2021). For example, the increased prevalence of phenomena such as temporary absences from work meant that hours worked took on greater significance (and captured impacts of the pandemic that employment status alone could not). The ILO (2020c) warned against changing definitions and criteria of key labour market states at the same time that the labour market was affected by COVID-19. Rather, they provided guidelines clarifying the measurement of key indicators under pandemic and lockdown conditions and recommended expanding the range of statistics and analyses used to capture policy-relevant employment outcomes.

In addition, certain forms of work and characteristics of work increased in importance in response to the crisis. Questionnaires, or sometimes even entire surveys, were shaped around these emerging issues. Examples of additions include questions on capacity to work from home or at distance, questions on the impact of the pandemic on earnings, working conditions and turnover, questions on the impact of government interventions aimed at containing these measures, and questions on unpaid work (like childcare) or volunteer work (Discenza & Walsh, 2021). Additional response categories were also added so that pandemic-induced changes in work could be distinguished from other changes.

Not all rapid surveys that collect labour data are specialized labour force surveys. General-purpose surveys will have even more limited labour sections, and may use reference periods (i.e., for determining employment) that were chosen to match some other element of the survey. Other factors to bear in mind are whether employment information about an individual comes from information provided by that person or by someone else in their household, and whether respondents were interviewed in their preferred language.

III. Advantages and limitations of rapid surveys

Advantages

One of the main advantages of rapid surveys is their flexibility. Their ad-hoc nature and fast turnaround times mean that there is the capacity to adapt questionnaires and survey design to provide fast information for short-term decision-making or for monitoring evolving situations in the context of emergencies.

Many of the advantages of rapid surveys are tied to the remote mode. CATI is generally faster and more cost efficient than conventional face-to-face interviewing which allows for a higher temporal resolution with shorter gaps between waves.

During the pandemic these advantages have been felt, with rapid surveys reacting to emerging policy issues in a matter of weeks or
months and tracking respondents at several points within a year to follow people’s employment and welfare paths through the crisis. In addition, a significant advantage has been the capability to continue collecting data, without health risks, at times when conventional data collection was suspended due to lockdowns. Many countries subsequently resumed household survey operations after switching to telephonic interviewing or introducing new safety equipment and protocols for field staff.

**Box 3: National Income Dynamics Study-Coronavirus Rapid Mobile Survey (NIDS-CRAM; South Africa)**

The National Income Dynamics Study - Coronavirus Rapid Mobile Survey (NIDS-CRAM) was an individual-level rapid survey implemented in South Africa using CATI during 2020 and 2021. The survey was longitudinal, following individuals over five waves, and focused on the employment effects of the pandemic and lockdowns, along with health and education outcomes. The use of a sampling frame (with contact details) from an older face-to-face panel survey meant that the survey was broadly representative and that the selection bias in the realized sample could be identified to some extent and corrected for. The survey contributed to employment policy by helping to identify which groups suffered the largest job and earnings losses, helping to show which income support intervention was essential to the welfare of job losers’ households, and helping to identify the effect of the country's temporary employer/employee relief scheme.

**Limitations**

A lot of research has found that remote surveys have issues with coverage of certain groups (Brubaker et al., 2021; Discenza & Walsh, 2021). Phone-based and, especially, web-based surveys are likely to have less representation of rural and lower socioeconomic status respondents due to the requirement of having a device with which to conduct the interview. Relatedly, it is often the case that the unemployed or economically inactive, and those who are less educated or are not in education, employment or training (NEET), are less likely to respond to these surveys because there is less phone ownership and internet access among these groups.

A separate coverage issue relates to rapid surveys based on older sampling frames. If a long time has elapsed since the survey from which the sampling frame is taken, that may mean that some people, such as immigrants, will be less likely to be sampled (Ingle et al., 2021).

In addition, if respondents are not randomly selected within households, then household heads, who are generally older and male, are more likely to be sampled (Brubaker et al., 2021). These coverage issues have substantial implications for labour findings, as all of these factors are correlated with employment, labour force participation and the kinds of work that people do.

There is also evidence of issues with random digit dialling, especially in lower socioeconomic settings, including similar problems with coverage and bias, along with issues around cost efficiency and the accurate geolocation of respondents (ILO, 2020a; Shook-Sa et al., 2016). In these cases collaborations with mobile phone operators or national telecom regulatory bodies can be useful as the sampling frame can be developed using anonymised geo-coded call data record data.

Beyond issues related to coverage, rapid surveys can be less representative because of non-response and, in longitudinal surveys, attrition. Traditional non-response analysis may not be sufficient to capture the increase in bias in remote modes relative to face-to-face interviewing (Discenza & Walsh, 2021).
Many longitudinal rapid surveys maintain the same sample over time to extend the use of a representative sampling frame, but if samples are not refreshed then attrition over time creates the risk of declining precision in estimates and, if attrition is selective (non-random), declining representativeness over time (Discenza & Walsh, 2021).

In addition, shorter questions and shorter overall questionnaires may mean that certain kinds of work that generally require a lot of probing to capture, such as informal work, are systematically under-captured.

IV. Using data and estimates from rapid surveys in the employment policy process

Methods for assessing the quality of underlying data and determining appropriate analyses

All of these factors need to be considered when selecting data sources for analysis. In rapid surveys based on older face-to-face sampling frames the characteristics of the realised subsample and the parent sample can be compared to estimate selection bias deriving from the change in mode (and from attrition). Even for convenience or RDD samples one can compare the distribution of key demographic variables against the distribution from a trusted data source to get some idea of selection bias and coverage. Users of rapid surveys should investigate whether steps, such as adjusting weights, have already been taken to address selection bias and other issues. Sample data can be weighted to be representative of the target population, with the target population defined to exclude those groups who are not captured in the sampling frame. But it cannot be made representative of the population including excluded groups, which can be significant for policy applications. The implications for labour estimates of these adjustments to the data should be thought through carefully.

Survey design and data quality considerations also inform which analyses are appropriate and how findings should be interpreted. For example, sub-national estimates, or estimates based on small disaggregations, may not be appropriate if the survey is not designed to be representative at those levels (Discenza & Walsh, 2021). Survey design also constrains the level and content of analysis. Most rapid surveys are at an individual level and so cannot be used to directly study the effect of employment on poverty, which is defined at a household level.

Besides the coverage issues inherent to telephonic sampling frames, users of rapid surveys should investigate whether there are different patterns of non-response when using remote modes (relative to face-to-face interviewing) and should develop means of adjusting for this. Around a third of countries reported introducing new quality checks for coverage and bias issues in 2020 (Discenza & Walsh, 2021). Users of rapid surveys should check the data for internal consistency and should run robustness checks for whatever analysis they perform.

One of the first steps in deciding how to use a rapid survey is assessing the availability of other data that can be used to inform questions. Rapid surveys are meant to provide fast, crucial information in crisis or emergency situations. More rigorous and representative LFSs should generally be used when available, and for benchmarking labour market indicators. However, in many instances either LFSs are
unavailable for the period in question, or higher frequency or different information is needed than is provided in available surveys. Due to noise and variation inherent to survey data, no one survey will give the exact population value, so it can be useful to contrast multiple estimates of key outcomes. As an illustration, in South Africa rapid surveys took on a leading role in informing labour policy in early 2020 in the absence of standard labour data, before being used together with LFSs (and then being replaced by them) as the latter resumed (see Simkins, 2021).

**Rapid surveys in the employment policy formulation process**

Even after these elements of data quality have been assessed and steps have been followed to ameliorate bias, there remain limits on how evidence from rapid surveys should inform labour policy.

The ILO’s (2012) NEP framework emphasises that data analysis is only one component in building a strong knowledge base for issue identification and intervention planning. Other components include thorough reviews of current and past policies (including research on their impacts), consultation and engagement with a range of stakeholders including civil society and workers’ and employers’ organisations, and reviews of public expenditure on employment. In the case of rapid surveys, with their less methodical nature, the complementary role of these other forms of analysis becomes all the more important.

One of the most important aspects of appropriately using data is having an appropriate goal or intention for how the analysis will contribute to the policy formulation process. Rapid surveys are best used for understanding specific phenomena rather than providing a picture of the general state of employment and longer-term trends and should be used in exceptional circumstances where fast information is needed to respond to labour market shocks. Their estimates should be seen as providing a platform for informed engagement with actors in the labour market and pointing to questions which need further investigation.

As mentioned, rapid surveys have provided much needed input into the diagnostics and assessment phase of employment policy formulation, especially with regards to the impacts of COVID-19 on employment. Rapid surveys often provided a picture on the employment situation at the peak periods of the spread of COVID-19 and they were complemented with other sources of data including LFSs but also economic modelling and big data. These employment diagnostics and the accompanying rapid approaches are best carried out in cooperation with national statistics offices. However, these approaches should never diminish the importance of robust labour market information systems at the national level.

Beyond providing evidence for the effectiveness of a potential intervention, rapid surveys can also provide valuable indications of which policies should definitely not be ceased. For example, rapid survey data may indicate that the cessation of an income support grant, for people who have lost their employment, would lead to dramatic increases in poverty for these people and their dependents. Likewise, rapid surveys with high-frequency longitudinal information can be valuable tools in evaluating policy interventions, especially if they cover time points both before and after the intervention.
With the limitations from Section 3 in mind, language should not overstate confidence in findings, and should be precise about what can be said from the data. It is just as important to communicate what one does not know from a survey's findings as what one does know. The characteristics of the rapid survey used should be described, as outlined in Section 2, so that it is clear what survey properties might be affecting estimates, and any concerns about the precision of estimates should be highlighted (ILO, 2020a). Finally, it is important that the findings of more ad-hoc and less representative surveys are not presented as equivalent to findings from more rigorous, representative household surveys such as LFSs.

**V. Conclusion**

After emerging as temporary solutions to a crisis-induced scarcity of data and acute need for information, rapid surveys are increasingly being thought of as a lasting component of countries' employment related data collection. In this new terrain it is important to think about what the role of rapid surveys should be in the formulation of employment policy, and how they should best be used.

This brief has shown how rapid surveys provide valuable insight into emerging questions during emergencies and in cases where standard labour statistics are not available or adequate. However, issues with coverage, representativeness and bias mean that rapid surveys should not be understood as replacements for LFSs and household surveys and should not be seen as definitive evidence for the impact of a given policy intervention. Rather, they can indicate issues which are worth investigating further, and can provide a platform for more informed discussion of policy options.
References


