International Labour Organization

Guidelines for employment diagnostics in times of continuous change

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▶ Preface

As witnessed during the COVID-19 crisis, timely and relevant employment diagnostics are critical to understand the nature and drivers of labour market trends and challenges, especially during times of rapid change. Diagnostics are, in turn, vital inputs for designing and implementing gender-responsive and inclusive employment policies that seek to promote decent and productive employment for all.

However, a key lesson over recent years is the importance of adapting diagnostic approaches to country-specific circumstances and seeking innovative solutions when needed. An ILO review of COVID-19 diagnostics released in 2022 stressed that a demand-driven approach is essential to support constituents and contribute to social dialogue; moreover, this support is not a one-shot exercise but a process that needs to continue over time and the policy cycle. A second key insight is that new data and analytical approaches need to be in line with international statistical standards and best practices as much as possible. All actors should be aware of the advantages and disadvantages of different approaches within a clear framework.

To learn from these lessons and update ILO's technical support to constituents and ILO staff in this context, the ***Guidelines for Employment Diagnostics in Times of Continuous Change*** provides a strengthened framework, which focuses on analysing current short-term and longer-term trends, along with key sources of data. Prepared by the ILO under the leadership of Elina Scheja, Sher Verick and Drew Gardiner, the Guidelines also highlight the importance of following an inclusive process on diagnostics with the involvement of policymakers, social partners and other relevant stakeholders.

The Guidelines will be a key tool for the ILO and its constituents over the coming years to promote more timely and relevant employment diagnostics that support a new generation of employment policies that respond to multiple challenges and evolving trends.

Sukti Dasgupta
Chief
Employment, Labour Markets and
Youth branch

▶ Introduction

The world of work is changing. In the prevailing context of multiple crises and ongoing change, understanding the underlying structural dynamics and assessing the impact of temporary shocks becomes essential for designing policy actions towards a human-centred recovery. This requires analysing how shocks impact the society, understanding what structural or temporary constraints are standing in the way of different groups, and ensuring that short-term shocks do not turn into long-term deprivation but instead open alternative paths to prosperity.

Analysing changes in the economy and the labour market is a cornerstone of ILO's policy advice. Employment diagnostics are commonly used as a first step when designing employment policies towards full and productive employment for all. Owing to multiple sequential and overlapping shocks to the world economy in recent years, updating the analytical base on which policy decisions are taken has increased in importance. ILO's approach to employment diagnostics[1] covers different dimensions related to the quantity and quality of employment outcomes, as well as an assessment of the inclusiveness and sustainability of the current development path. Often, several thematic studies are needed to understand different aspects of the world of work, i.e. pro-employment macro-economic frameworks, relevant sectoral and industrial policies, or skills mismatches.

The COVID-19 crisis triggered innovation in the field of employment diagnostics. Many actors, including the ILO,[2] adapted their employment diagnostic approach to satisfy the needs of policymakers and to adopt their analytical frameworks to the new context of change. Many diagnostics have looked at the overall socio-economic impacts, while others narrowed in on specific questions of interest such as transmission mechanisms (e.g., mobility or consumer demand), impact dimensions (e.g., wages or education) or on tracking policy responses. The focus of analysis could also vary between firms, households, and workers. ILO's nowcasting of working-hour losses became a leading source of evidence on the employment impacts of the crisis as the estimates reflect the impact of both job losses as well as work reductions of those who remain employed.

In times of multiple crises and continuous change, revised tools for monitoring change – and responding to it – are needed. In line with the ILO's Global Call to Action for a human-centred recovery, this guidance note proposes an approach to employment diagnostics to understand labour market impacts in continuous change. The aim is to support ILO constituents and staff to identify the underlying causes and context-specific constraints and opportunities for achieving full and productive employment for all. This guidance builds on previous work,[3] while updating it according to the changing needs for policy-relevant information.

The overall objective of this guidance is to support ILO constituents and staff to analyse labour market trends in continuous change. More specifically, this note seeks to provide:

- **i.** Guidance for analysing current trends and key sources of data;
- **ii.** A discussion on selected long-term trends in the world of work;
- **iii.** An overview of alternative types of data for trends and recovery monitoring; and
- **iv.** A description of the process for in-country engagement.

[1] ILO. 2012. Employment Diagnostic Analysis: A methodological guide (ilo.org).

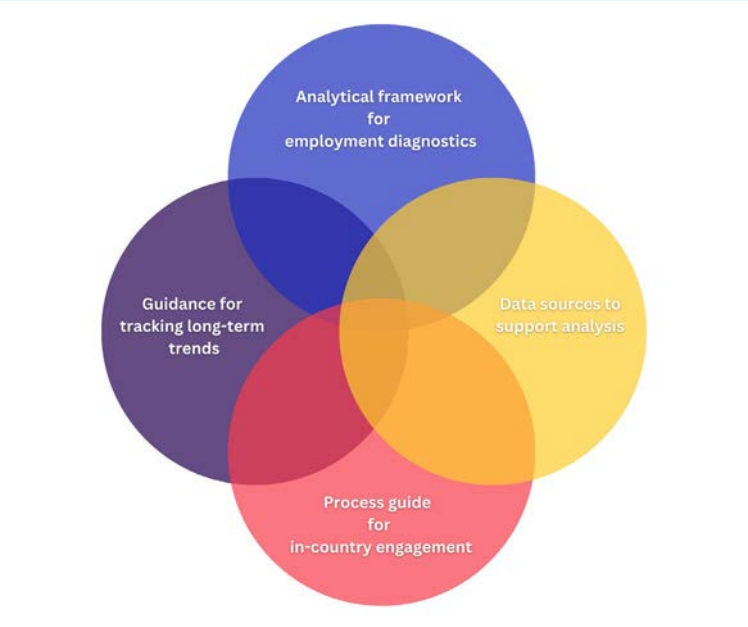
[2] See, for example, ILO Technical brief: Rapid Diagnostics for Assessing the Country Level Impact of COVID-19 on the Economy and Labour Market - Guidelines and UN Women - ILO Policy Tool (ilo.org).

Assessing the gendered employment impacts of COVID-19 and supporting a gender-responsive recovery. For examples of recently conducted country assessments by the ILO, see: Country assessments (ilo.org). Hempel, K. (2022) Lessons learned from employment diagnostics during the COVID-19 crisis. Available at: http://www.ilo.org/employment/Whatwedo/Publications/WCMS_846775/lang--en/index.htm.

[3] This guidance builds on: "Guidelines for Covid-19 Employment recovery monitoring" by Per Ronnås (unpublished), ILO Technical brief (2020): "Rapid Diagnostics for Assessing the Country Level Impact of COVID-19 on the Economy and Labour Market – Guidelines", and UN Women - ILO Policy Tool (2021): Assessing the gendered employment impacts of COVID-19 and supporting gender-responsive recovery.

The remainder of the report deals with these four parts. While the ultimate aim of employment diagnostics is to provide a solid ground for formulating appropriate policy responses, the process of such policy formulation falls outside the scope of this guidance.

▶ Figure 1: Structure of this guide



Source: Author

▶ I: Analytical framework for employment diagnostics

An employment diagnostic aims to identify the constraints and opportunities for productive employment for all. The analysis takes its starting point in people who are willing and able to contribute through work, if given an opportunity to do so, in line with ILO's Convention 122 on Employment Policy.[4] This human-centred approach to economic analysis aims to find ways to empower individuals and groups, and to address structural barriers that stand in the way of inclusive development outcomes. Employment diagnostics, as understood by the ILO, puts emphasis on the agency of all people, and the analysis focuses on "human resources as a creator of growth through productive employment and decent work, rather than productive employment as an outcome of growth" (ILO 2012).

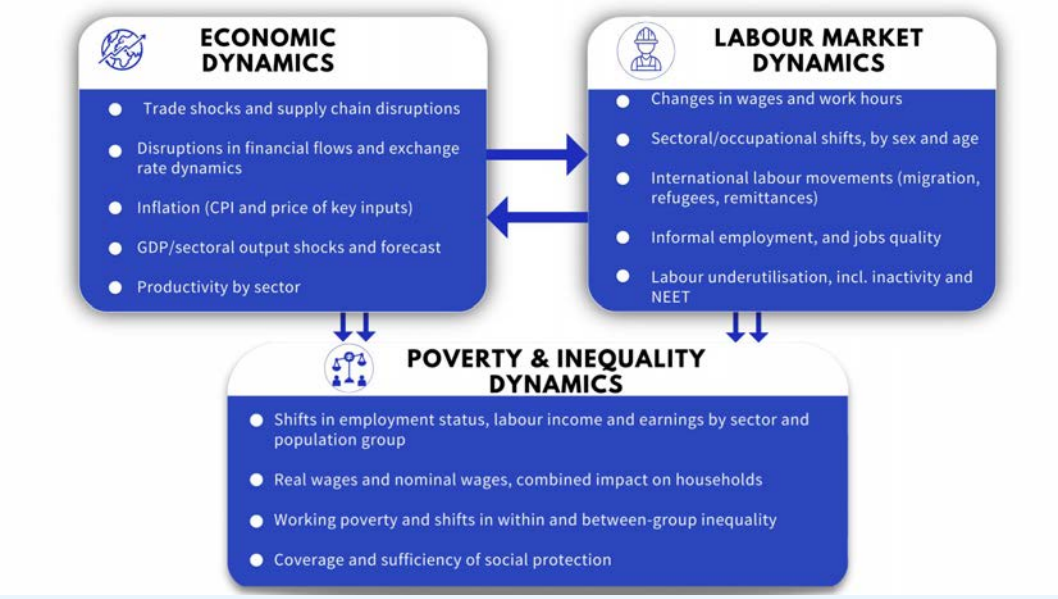
Analysing employment and labour market dynamics in a more volatile context builds on conventional employment diagnostics but pays particular attention to the ongoing changes. The focus of the diagnostics is now more frequently on the changes the shocks have had on the economy and the labour markets, and their implications on different groups and sectors. Thus, the core indicators should permit comparisons across a baseline (in the case of COVID-19 crisis, the baseline would be the last quarter of 2019 before the crisis hit), the peak of the crisis or the shock (the timing varies depending on the country and type of a shock), as well as the current situation. Information on the extent to which women and men, young and old participate in the labour force and in employment in the baseline provides an essential background to a subsequent more detailed sectoral analysis of the employed, while change in labour force participation and in labour underutilisation are an essential aspect of the employment impact and recovery analysis.

While the global pandemic, the recent geopolitical tensions, and adverse weather events have introduced many unexpected shocks to the economy and caused substantial damage to the labour market, many of the problems highlighted by these crises were not new. For many low- and middle-income countries the global pandemic came on top of the ongoing pressures imposed by climate change, uneven structural transformation, rapid technological change, and demographic pressures. The acute problems triggered by shocks often reveal many latent long-term issues related to weak health care systems, lack of public investment and insufficient fiscal space. The strength of the local institutions and regulatory environment have played a determining role in the resilience of many societies through their capacity to absorb and mitigate crises. Understanding the baseline vulnerabilities in the economy is the first step of analysing the subsequent changes and the potential pathways to recovery. For instance, countries with undiversified economies, high levels of informality, insufficient social protection systems, and weak fiscal stance were worse hit by the recent pandemic compared to countries that were better able to buffer the blow and spread the risk between sectors and population groups. Weaknesses in health care and inadequate labour market regulations were not the result of the pandemic but put a spotlight on the importance of addressing these underlying problems to build more resilient societies.

The analytical framework proposed in this guidance adjusts the traditional employment diagnostics to accommodate recent changes imposed by crises but can also be applied more generally to analyse employment dynamics patterns. The framework rests on three dimensions: economy-wide trends, labour market dynamics, and analysis of poverty and inequality implications that cut across the previous sections.

[4] Convention C122 - Employment Policy Convention, 1964 (No. 122) (ilo.org).

▶ Figure 2: Analytical Framework for Employment Diagnostics in Times of Change



Source: ILO

- ***The framework starts by analysing the effects of a crisis or rapid change on the economy***. This involves understanding the pre-existing structure of the economy and analysing the changes in production and economic activity in different sectors due to a shock. The long-term trends in population dynamics, sectoral composition of the economy, macroeconomic fundamentals, labour market structure, exposure to the global supply chains and financial markets, and social protection coverage are elements that are not likely to be directly impacted by a short-term crisis, but they define the impact that a crisis can have on the economy and the people in it. The institutional context, regulatory framework and the strength of the enforcement mechanisms in times of hardship shape the way the economic crises translate into economic consequences for different sectors and population groups. A sudden shock such as a pandemic, war, or an adverse weather event will change the short-term prospects for economy to continue on its current path. In addition to the direct impact of crises, the economic analysis pays attention to any indirect adverse effects that resulted from political decisions to combat the crisis, such as the trade embargos introduced as a consequence of the conflict in Ukraine or workplace closures to counteract the global pandemic. Such shocks and changes are not evenly distributed throughout the economy, and thus disaggregating the impact by sector and population groups is important to understand the nature of the change.
- ***The changes in the economic dynamics will have an impact on the labour market, that will be analysed next***. Depending on the characteristics of the shock or crisis, the impact on different sectors of the economy is uneven, and a detailed employment analysis by sector is essential. Here, looking at multiple labour market indicators will help to unveil what is driving the change in productive employment. For example, a distinguishing feature of the COVID-19 crisis was the loss of working hours that outweighed the loss of jobs as many workers remained employed but without being able to work. Furthermore, while employment and hour losses were high in tourism-related sectors they increased in the health sector in many countries. As a consequence, the trends in unemployment only revealed a part of the losses and may lead to misguided conclusions and lack of understanding behind the increase in working poverty. Further, changes in employment had an unequal effect on different workers based on their gender, sector, level of education, region, and other characteristics. Informal workers and economic units that are outside the realm of employment and social protection are likely to feel the impact of a negative demand shock at the early stage of a crisis, while longer-term economic and fiscal pressures in drawn out recessions will shape the outcomes of workers in a broad array of circumstances in the medium and long-term. Thus, understanding what is driving the change in the different indicators and who is impacted is at the heart of the labour market analysis.

- ***Finally, the changes in the economic and labour market dynamics can lead to changes in inequality across different groups, and result in changes in poverty and wellbeing***. Deterioration of economic prospects and productive job opportunities lead to a decrease in incomes. The impact of these changes depends not only on the size of the shock but also the level at which they could be cushioned by existing or ad-hoc financial support packages and social protection programmes, and the prospects of retaining or regaining employment. Existing legislation for employment protection impact the workers' possibility for stable income on one hand, and the ability for employers to adjust their workforce to the changes in the outside world. For some groups, such as young people, who were already in a precarious labour market situation before the COVID-19 pandemic, the crisis served to exacerbate existing fragilities.[5] The government support to buffer the impact of the shock on businesses and workers varied widely, and while the economic consequences differed by sector and population group, so did the social consequences in terms of inequality and poverty dynamics. As a result of the massive economic and labour market shock during the pandemic, poverty increased in many contexts.

In sum, the interplay of economic changes, and subsequent labour market impacts, translate into welfare changes at the household level. Disaggregated analysis of the effects of both economic and labour market changes for different population groups (including by gender and age) is thus needed as a cross-cutting element of the analysis. In addition to disentangling the differentiated consequences of economic and labour market trends on diverse population groups, an overarching analysis of the combined effects of the changes on specific groups characterises the final part of the analysis. Understanding the changes in the poverty and inequality dynamics will help to formulate targeted policy priorities to a more human-centred recovery.

Drawing policy conclusions for the immediate future and promoting resilience in longer-term requires understanding of the interplay between the underlying structures and the current changes. Employment diagnostics does not only aim to describe the current state of affairs but provides also a deeper analysis of the causes and interlinkages behind the existing deficiencies of productive employment – and points to policy challenges and pathways for a more resilient and job-rich development going forward. For drawing actionable conclusions for a more resilient future, one needs to assess the structure and capacities of labour market institutions in countries as they are a principal conduit between economic shocks and labour market impacts. Providing evidence of the current challenges and their causes form the basis for evidence-based policy making both in short term to deal with the immediate consequences of a crisis, as well as for building long-term resilience and inclusive futures.

The remaining of this chapter provides guidance on how to conduct the analysis in the respective sections outlined above. For each section, some guiding questions are provided to support the main objectives, but not to limit the scope of the analysis. These questions are neither comprehensive nor compulsory in nature. They can be used to structure data analysis around the main challenges affecting the economy and the labour market, while keeping the flexibility that is required to contextualise the analysis on the key issues in each country.

A meaningful analysis of the labour market requires tracking indicators that cover both quantity and quality dimensions, and this guidance suggests a set of key indicators for the analysis. The analysis should draw its conclusions from several indicators that provide insights on the changes in the economies and labour markets. A set of key indicators and tables is suggested in the appendix with a reference to each heading of the analysis. These can be used to structure the primary data gathering but they should not be considered as comprehensive guidance for understanding the underlying dynamics. In addition to the key standard indicators, use of national sources is encouraged for a more thorough context-specific analysis. In contexts where labour market data is not regularly collected, the analysis may need to rely on an older benchmark of the latest available survey and assess the current states of the economy and labour markets using estimation techniques and new sources of data, such as rapid surveys (read more on this in chapter 3).

[5] See e.g. ILO (2022) Global Employment Trends for Youth 2022 – Investing in transforming the lives of young people, p. 226.

▶ Resource box 1: Identifying turning points and recovery trends

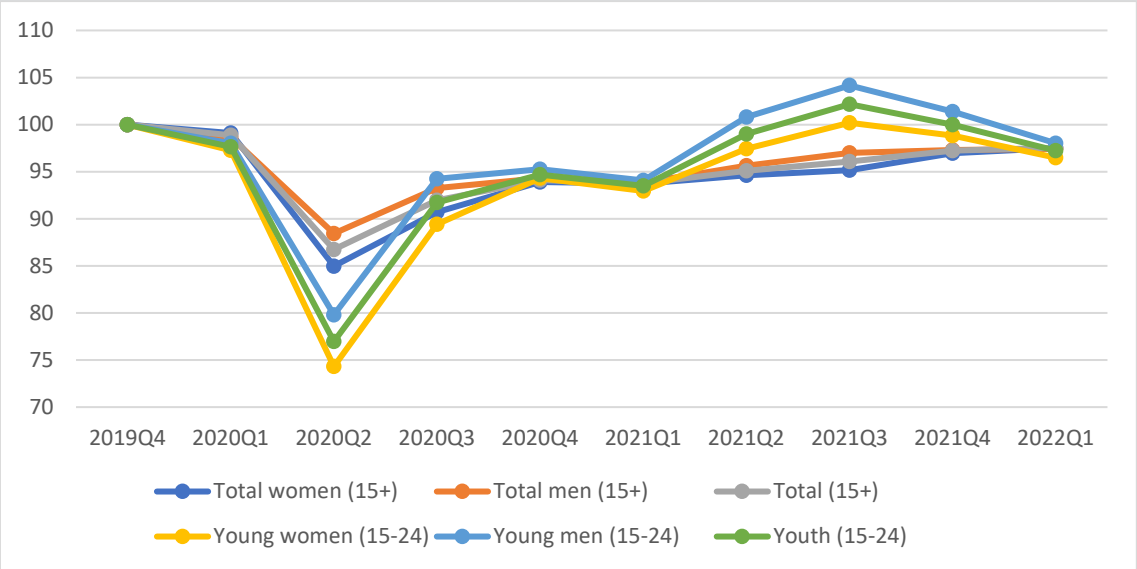
To assess the impact of a crisis or the extent of the recovery it is necessary to compare the latest data point (monthly, quarterly or annual figure) relative to the pre-crisis situation. For example, in many analyses of the COVID-19 crisis, including the ILO Monitor series, 2019q4 has been used as the benchmark for analysing change during the COVID-19 crisis. In addition, another quarter of 2019 has been considered a baseline in COVID-19 analyses when comparing to the same quarter in a specific year, such as 2022Q1 relative to 2019Q1 (e.g., if there is concern about seasonality and the data has not been adjusted for this effect). For annual comparisons, the figure for 2019 has been used or an average of a period prior to the crisis. Such an analysis needs to be disaggregated by sex, age and other variables that reflect the disparities in the labour market.

In general, three different cases can be identified in relation to the pre-crisis period:

- **Full recovery** if the level or rate has reached the pre-crisis situation. Care is needed in assessed changes in levels since the underlying working-age population is growing in most countries (especially developing economies). For this reason, it is better to use rates or ratios, which adjust for changes in the population (e.g. employment-to-population ratio).
- **Partial recovery** if the level or rate has improved from a peak (for indicators that increase during a crisis such as the unemployment rate, NEET rate, inactivity rate) or trough (for indicators that decreased during a crisis such as working hours, employment-to-population ratio), but remains above/below the pre-crisis situation.
- **Deepening crisis** if the level or rate continues to climb (for those indicators that rise during a crisis) or decline (for those which fall).

One way of displaying trends, which eases the comparison with the pre-crisis situation, is by using an index and setting the base figure to 100.0. Using such an approach, the example from trends in the employment-to-population ratio in the United States during the COVID-19 crisis shows that the ratio recovered from its trough in 2020Q2 but remains at a deficit even in 2022Q2 despite the strong growth for youth employment in 2021. This is an example of a relatively strong (thanks to the policy measures in the US, namely, massive fiscal stimulus) but partial recovery.

▶ Figure B1: Quarterly trends in employment to population ratio, USA (Index, 2019Q4=100.0)



Source: ILOSTAT.

Economic Dynamics

Understanding the changes imposed by a crisis requires analysing the underlying dynamics, strengths, and weaknesses of the economy. Prior to embarking on the analysis of the current changes in employment dynamics, a broader understanding of the main characteristics in the economy are important. This part of the study can be based on published data and a literature review of previously conducted employment analysis and broader studies.

Some key questions may include:

- What were the main segments of the economic structure prior to the crisis? What were the dominant sectors in terms of production and employment? Any signs of ongoing structural transformation?
- How exposed is the country to economic transmission channels? For instance, is the country reliant on labour migration/remittances, tourism, undiversified exports/imports as a share of GDP? Is it dependent on a handful of value-added chains? In case the country is very interconnected with global financial markets, it can imply that the economy more vulnerable for importing a crisis from its main trading partners and related economies.
- What is the status of labour market institutions and policies in the country? Is the regulatory environment strong and enforced? For instance, are mechanisms for collective bargaining, the regulation of employment contracts, and pension and other social protection policies in place or are they weak, absent or excluding significant portions of the working population?
- Was the country on track to reach the key objectives outlined in the Sustainable Development Goals prior to the crisis? For instance, deficiencies in achieving the main targets in SDG 8 (decent work and economic growth), SDG 10 (reduced inequality), SDG 5 (gender equality), SDG 1 (no poverty), and SDG 13 (climate action) can provide an indication of the country struggling to be on a decent work-led sustainable development path.
- Is the economy facing any ongoing acute crises (conflict, climate, financial) or longer-term challenges that may significantly impact the current dynamics?

▶ Resource box 2: Information sources for longer-term development and labour market dynamics

ILO tools and assessments:

Country Profiles in ILO Stats:
Country profiles – ILOSTAT.

Guidance for gender-sensitive employment analysis in the context of crisis:
UN Women - ILO Policy Tool: Assessing the gendered employment impacts of COVID-19 and supporting a gender-responsive recovery.

Recent ILO Country Assessments:
Employment diagnostic country studies (Employment promotion) (ilo.org).

Resources to analyse coverage of employment legislation and institutional settings:
Coverage of Employment Protection Legislation (ILO).
Employment Protection throughout the World: A roundup of a decade of reforms (2009-2019).

External databases:

UN Statistics SDG Global Database.

World Development Indicators (World Bank).

Penn World Tables.

OECD Labour statistics.

EuroStat.

Other tools and assessments:

Excel tools and data sources available at the Jobs Diagnostics page of the World Bank:
Jobs Diagnostics: Data, Tools and Guidance (worldbank.org).
Global Jobs Indicators Database | Data Catalog (worldbank.org).

For a list of COVID-19 socio-economic impact assessments conducted by the United Nations, see https://www.undp.org/coronavirus/socio-economic-impact-covid-19.

Systematic Country Diagnostics by the World Bank: Systematic Country Diagnostics.

Changes in the economic dynamics form the basis of understanding the subsequent changes in the labour market and provide the frame in which economic decisions are made. Economic dynamics can broadly be divided into two categories: (i) direct measures linked to the management of a crisis and the observed changes in output and productivity as a result of these changes, and (ii) the indirect changes in the economic environment caused by policy measures taken as a consequence of a crisis (such as the containment measures during the COVID-19 pandemic, or restrictions in trade regimes as a consequence of the Ukraine conflict) or secondary effects of such measures. External shocks to trade, tourism and capital flows induced by changes in the world economy and in main trading partner countries are important part of the analysis to gain an understanding of the economic landscape. In countries that are highly dependent on trade and have undiversified export patterns the external shockwaves caused by global supply chain disruptions and related inflation pressures may outweigh the domestic efforts to respond to a crisis.

Key issues and questions for analysing the direct impact of a crisis or recent changes on the domestic economy may include (See table 1 in the appendix):

- Looking at the trends in key macroeconomic indicators (e.g. GDP, GDP growth, value added by sector), are their signs of the country being impacted by a sudden shock or crisis?
- Given the global macroeconomic pressures, such as galloping inflation rates witnessed in many economies in 2022 due to geopolitical tensions and disruptions in supply chains, how has the domestic inflation responded to the pressures? What is driving the inflation, if any? What product categories are particularly affected, and what impact does that have on different sectors and groups in the society?
- If the main economic indicators are showing recovery from a recent crisis, which sectors and source of aggregate demand are driving the economic recovery?

▶ Resource box 3: Useful sources for analysing macroeconomic stance

National sources of data are preferred for analysing the domestic economy. Central Banks and/or national statistical offices usually publish balance of payment statistics. For quality assured global information sources, please refer to IMF World Economic Outlook, and IMF article IV reports that include balance of payment in a statistical appendix (IMF Article iv staff reports).

Sudden changes in the world economy are often transferred through trade and financial flows. Key questions to cover these impacts include: (See table 2 in the appendix)

- How were the international trade flows impacted by the changes in the global value chains and changes in demand from the main trading partners?
- What are the trends in the balance of payments? Is there evidence of external drivers of recovery (exports, remittances, FDI)? Has the current account balance improved / worsened as a consequence of global shocks? What are the main factors behind any changes?
- How has the nominal and real exchange rate changed in recent months?
- Have other financial flows, such as remittances and direct foreign investments, been affected?

▶ Resource box 4: Useful sources for tracking trade

The trade flows and relations by main export/import products and main trading partners can be explored and illustrated using the Observatory of Economic Diversity: OEC - The Observatory of Economic Complexity | OEC - The Observatory of Economic Complexity. Also, trade statistics by types of products can be found in UN Comtrade | International Trade Statistics Database.

The state plays a major role in managing external shocks and crises in many countries. The role of the state actors in responding to acute economic challenges was witnessed during 2020 and 2021 when globally unprecedented levels of fiscal stimulus were mobilised to counteract the economic and social impact of the COVID-19 pandemic. The level of the stimulus varied widely based on the resources available to the governments in terms of own resources or their ability to borrow: While the stimulus packages in high-income countries were largely successful in cushioning the economic blow from the pandemic, in many low- and middle-income countries the governments could not mobilise similar level of support. Subsequently, the extraordinary support has been withdrawn or repurposed, but the importance of active macroeconomic policies and proactive involvement by the state is generally recognised as a way to deal with shocks. Understanding the role of the state actors in economic, labour market, and inequality dynamics necessitates analysing the incidence of the support measures by group as the stimuli are often unequally distributed across sectors, population groups, and types of activity.

Yet, sizable fiscal mobilisation often takes a heavy toll on the balance of payments and the country's ability to bear debt. The global landscape for countries' indebtedness has undergone a fast change in the past decade. The overall levels of debt have increased, and the composition of creditors has changed from more concessional sources towards more commercial terms. Thus, the scope for any further stimulus to counteract unexpected shocks or a global economic downturn is likely to be limited. In addition, many countries are now facing a risk of defaulting on their current debt payments while struggling to protect their core social spending. Some of the key questions to analyse the status and role of the public sector include: (See table 3 in the appendix)

- What has been the level and nature of economic stimulus provided over the recent years by the government? Who and which sectors have been able to benefit from these efforts?
- Have the social security systems been able to cope with the shocks or have there been major gaps leaving certain groups behind? How is social security financed?
- How well have public finances and the public sector weathered the recent turmoil? Has there been a change in public revenues and expenditures, on one hand, and the level and structure of public debt, on the other? To what extent has a possible deterioration been due to: (i) falls in revenue, and/or (ii) increases in expenditures?
- Is the government currently counteracting a crisis or an economic downturn with fiscal stimulus? What has been the cost to Government of such extra-ordinary interventions and programmes?
- What interventions and programmes have been employed more recently to support of the recovery and/or cushion the impact of energy, food, or other crises impacting the economy?

▶ Resource box 5: Useful tool for analysing debt

IMF: Debt Sustainability Analysis -- Low-Income Countries.

Labour Market Dynamics

The direct and indirect economic impacts of a crisis or shocks have varying effects on the labour market. Thus, employment diagnostics need to cover the subsequent effects for different population groups on the labour market in terms of changes in hours worked, employment/labour force participation, sectoral/occupational shifts in employment, and impact on informal employment, and other measures of employment quality. In addition to job losses, changes in incomes and wages should also be monitored to track the impact of a shock/recovery among those who are still working, data allowing. The resulting impact on labour underutilization, including unemployment, inactivity and youth NEET (not in education, employment of training) rates, needs to be carefully monitored. Mismatches between vacancies and the jobless (both unemployed and inactive) also need to be assessed where relevant data is available. All the described changes are likely to vary by gender, age, and social grouping that to the extent possible should be disaggregated in the analysis to provide a more holistic understanding of how the recent crisis was and still is affecting different population groups.

As highlighted by the ILO Monitor series, change in working hours is a good measure of changes in economic activity and their implications for labour markets. Especially in countries that facilitate the adjustment of working time through the use of job retention schemes, the number of jobs lost will grossly underestimate the actual loss of work and consequently income. In countries where the employment protection is less readily available, the working hours tend to adjust by more than employment.[6] The loss of working hours thus reveals more than changes in unemployment trends in such cases as witnessed during the pandemic as well as in the recovery phase. The sex-disaggregated working hour data available in ILOSTAT show that while job losses affected men to a large extent, there were considerable female penalties for women's working hours. Analysing sudden trend breaks in employment and working hours can help to unveil income shocks that may push workers without access to social security schemes closer to poverty.

Some policy measures that are introduced for economic or social reasons can have secondary effects on the labour market. For instance, the secondary effects of the containment measures, such as school closures and quarantine practices following the recent COVID-19 crisis, have increased care responsibilities, which have disproportionally been borne by women. These effects are lingering still today. As indicated by the UN Women – ILO Policy Tool, the COVID-19 pandemic increased the need for home-based unpaid care work, both due to the decline in public and paid private provision of care (e.g. due to school closures) but also because more people are sick and need care during the different waves of the pandemic that continues to evolve. Women who were shouldering more of the housework, home schooling and childcare than men even before the pandemic have seen an increase in their total workload as they continue to carry out their paid work duties. In addition, an increasing number of people have

[6] For further information about the balance between employment protection legislation and necessary adjustments in workforce, see ILO What Works Research Paper No. 5 (2016) "Employment Protection Legislation to Promote Quality of Job Creation", ILO.

had to become unpaid carers for sick or disabled relatives, which restricts their opportunity for paid employment. Gender norms and related household power dynamics influence how the added care work is divided between sexes both when it comes to paid employment in the health sector and the unpaid work at home. All these trends need to be carefully monitored, by distinguishing between different household configurations. For further support in analysing the interaction between paid and unpaid work, please see step 3 in the UN Women – ILO Policy Tool.

Deteriorated employment prospects can also influence migration patterns and remittances. Shocks and crises can lead to changes in migration flows, both within a country (i.e. between rural and urban areas) and also between countries as people are forced to find new income sources or flee from a conflict. At the height of the COVID-19 pandemic, many migrant workers found themselves stuck in a situation where they no longer could earn an income from their jobs abroad but could not return home either due to travel restrictions. In the more recent crisis in Ukraine, millions of people, mostly women and children, have been forced to flee from the conflict. Remittances in some sending countries neighbouring the Russian Federation are facing significant falls in remittances.[7] Thus, migration and remittances are other channels through which current crises impact the workers in the global labour market.

In sum, the labour market reacts to changes in the economy in various ways, and careful analysis of the statistics is needed to draw the right conclusions. For instance, unemployment rates can be especially misleading as they consist of the change in the number of people who are employed and the number of people in the labour market looking for work. For instance, while many lost their jobs during the peak of the COVID-19 crisis, they often ended up leaving the labour market altogether rather than showing up as unemployed in the statistics. Thus, an improvement in unemployment figures may not tell the whole story if the improvement was driven by people becoming passive (decrease in the denominator) rather than an increase in employment (the numerator).

The interpretation of the employment statistics will need to be grounded in the realities in each context and investigating what is driving the change is essential for the analysis. Also, the changes have been very different for women and men, different age categories, and workers with different education levels. Table 4 in the appendix suggests a selection of useful statistics for analysing the employment dynamics of recovery.

Key issues and questions:

- What are the main changes in key labour market indicators (see table 4)? What changes have there been in formal and/or informal employment? Hours worked? Has there been a decline in un- and under-employment? Any improvement with regards to employed on furlough, involuntary reduced working hours etc.? And if, for whom?
- To what extent has employment recovery, if any, been driven by wage employment or other forms of employment? By formal or informal employment?
- Which categories of workers (differentiated by women / men, age groups, education levels, income categories) suffered most from a shock? Are they also the ones benefitting from the recovery?
- Is there evidence that some categories of the labour force are being left behind in the recovery? If so, in which sectors, social groups, or education categories? Are the jobless remaining in inactivity or long-term unemployment?
- What is the nature of the ongoing labour market transitions in the country (e.g. transition to green infrastructure, increased digitalisation, demographic transition), if any, and how do they interact with short-term changes? What is the evidence of more permanent changes in forms and types of employment?
- Can we trace the trends in unpaid care-work? How is this impacting the possibilities for paid employment for women and men?
- How about short- and long-term trends in migration? Are more people leaving or coming to seek for work?

Sectoral breakdown of production and employment is crucial for understanding what is going on in the economy. The analysis of the economic consequences in the previous section can guide the sectoral analysis of the employment trends, although the proportional changes in sectoral output can diverge from changes in employment in the given sector. For example, accommodation and food services, construction, and wholesale and

[7] ILO Monitor on the world of work. 10th edition.

retail trade were the most significantly affected by COVID-19 lockdowns and restrictions.[8] In these sectors the economic and employment impact went hand in hand as mobility restrictions and lockdowns directly were linked to the demand and production of the good or service, such as in recreation and food services. In other sectors, however, the workers may be better able to adjust to restrictions, e.g. through teleworking, whereas the economic impact of the crisis still affects the demand, such as in financing. In many countries, the labour markets are highly segregated by sex as women often dominate, e.g. in the care sector, and men in manufacturing and construction. Thus, a sectoral analysis will also shed light on the differentiated employment implications for women and men in the labour market.

Key questions to consider for a sectoral employment analysis include: (See table 5 in the appendix)

- What are the recent employment trends (overall and by sectors and by occupations)? Are there signs of deterioration as a consequence of, or recovery from recent shocks? How do the trends differ between women and men, younger and older workers?
- What sectors are driving the recovery, what sectors are laggards?
- Which sectors have been disproportionally affected? Who are working in these sectors (women/men, age)?

Changes in labour market situation do not only occur in terms of jobs but changes in working hours and the relative wages across sectors. As argued above, the number of jobs is a blunter instrument for understanding the labour dynamics, while changes in the hours worked provides a more nuanced view on employment by sector. Also, the analysis of nominal and real wages by sector should be conducted by hour of work. To track the wage dynamics of recovery, the following questions may be considered: (See table 6 in the appendix)

- What are the trends in working hours by sector (if possible, disaggregated by sex and age)?
- How have nominal and real wages changed? Have gender gaps increased / decreased? Have there been marked differences in the changes of wages across sectors? Skills groups? Regions?

▶ Resource box 6: Useful sources for analysing labour markets

Home - ILOSTAT - The leading source of labour statistics, Labour force surveys, population census.

For ISIC classification, see International Standard Industrial Classification of All Economic Activities (ISIC) - ILOSTAT.

For value added, see national accounts statistics. National Statistical Offices or Ministries of Finance or Economy usually publish statistics here: https://unstats.un.org/unsd/snaama/.

Poverty and Inequality Dynamics

The unequal impact of shocks and crises on different population groups requires analysis of distributional aspects of the economic and labour market dynamics. These may be reflected in differences by age (young/older versus prime-age workers), gender, skill level and enterprise size (smaller enterprises versus larger firms). While monitoring the average trends in the economy is important, going beyond averages to identify different groups that may have fallen behind is important. Thus, disaggregating the results by sector and population groups during the analysis of economic dynamics and labour market dynamics is necessary to understand the underlying welfare dynamics and need for targeted policy measures.

In addition to reporting disaggregated trends in the previous sections, the inequality and poverty dynamics section of the analysis strives to bring the pieces together to profile the different groups in the labour market to show who was affected, how the crisis impacted specific segments, and why.[9] As discussed above, the sectoral analysis of the economic and consequent labour market impacts can help to unveil the likely impact of crises on different population groups given that the labour market is often highly segregated by sex, age, and educational background. Also, the division between formal and informal workers is not a random selection but some population groups are more likely to be informal, and consequently more likely to lose their jobs without access to social

[8] ILO Monitor: COVID-19 and the world of work, 7th edition. wcms_767028.pdf (ilo.org).

[9] Analysing the poverty dynamics by asking 'who, how, and why' is inspired by Sida's Multidimensional Poverty Analysis approach.

security during a crisis. Giving a human face to the economic and labour market analysis and understanding who is likely to work where, provides information on how a shock can impact different groups of the population, and gives clues on what policies could be put in place to provide pathways (back) to productive jobs.

Looking both at individual characteristics that put workers at risk (supply side) and structural patterns that create unequal opportunities in the labour market (demand side) will need to be understood to derive actionable policy advice. For instance, during the COVID-19 pandemic, young people with weak labour market attachment, people with low education, and women were disproportionally affected by the crisis. If data allows, going beyond average effects for women and men to see which women and which men were affected, and cross tabulating how their education background, age, location, and sector of employment played in will provide a clearer picture of the current situation. However, in addition to profiling the groups by their individual characteristics, it is important to point out that these groups were also overrepresented in sectors such as hospitality, food services, and tourism that were heavily affected by the pandemic. Thus, acting on vulnerabilities and improving resilience of the heavily affected groups requires improving the employability of these groups, e.g. through training and education, but also addressing the segregation at the labour market and ensuring that sectors that were heavily hit can get back on track through sectoral policies.

Uncovering vulnerable groups and inequality dynamics may benefit from the following questions:

- How have different groups of the population have been affected by the recent changes? Any differences between ethnic groupings, age, sex, locality?
- Which sectors are they working in? Is the labour market segregated by sex, age or other characteristics or are opportunities available for all?
- How has income inequality changed since pre-crisis levels (using different measures, such as the GINI coefficient)?
- Does the country have adequate labour market institutions including that protect vulnerable groups?[10]
- How does the situation differ between formal and informal workers?

Crises can have devastating consequences on household income, pushing people into poverty. During the COVID-19 crisis, the sudden loss in incomes in low- and middle-income countries has led to food insecurity, negative coping strategies, and long-term scarring due to interrupted access to education and health care services. More recently the rapid rise in food and energy prices have driven many households into financial difficulties, as the real wages are not keeping up with the increased cost of living. For household who are living at the margin, effective minimum-wage regulation can help to protect decent living standard, while the level of appropriate minimum-wage will need to be adjusted for the country context.[11] If the loss of productive employment and incomes becomes protracted, it can have longer-term consequences as families may be forced to sell their productive assets and seek work in less productive sectors. The ordinary household and labour market surveys may not be able to capture the rapidly changing dynamics, and thus for an up-to-date monitoring of the situation it might be useful to refer to rapid surveys or other alternative local sources of information discussed in the next section.

The welfare implications of a crisis are not only dependent on the size of the shock, but also its duration and on people's vulnerability and ability to cope with it. Certain groups are more vulnerable to certain crises than others. For instance, indigenous populations are often disproportionally dependent on natural resources for income, and thus more heavily affected by climate shocks. Armed conflicts are often restricted to given geographic regions and/or ethnic groupings, while the COVID-19 pandemic hit disproportionally hard on the elderly. Common to the different types of shocks is that they often come unexpectedly and leave a certain group of population in need of external assistance. The COVID-19 pandemic as well as other simultaneous crises have exposed glaring gaps in social protection coverage leaving millions of people out of reach. The containment measures directed at controlling the COVID-19 crisis, on the other hand, hit population groups who were previously productively employed providing for their families, but who lost their livelihoods and often had to deplete their savings during the crisis in absence of adequate social protection coverage. The massive gaps in the social protection coverage revealed during the crisis not only led to increased levels of poverty, but also made it more difficult for the new

[10] For further reference on the links between , see labour markets, institutions and inequality, see ILO (2015) "Labour Markets, Institutions and Inequality: Building just societies in the 21st century", Edward Elgar.

[11] See ILO Minimum wage policy guide further guidance.

poor to bounce back once the recovery had started. Taking a sober look at the systems of social protection and their links to the functioning of the labour market can guide the recovery efforts towards a more resilient labour market before the next crisis.

When analysing the inequality and poverty dynamics, see table 7 in the appendix. Some relevant questions include:

- Have the household members changed jobs, been unable to work or experienced a decrease in income recently? Are there any new groups of working poor as a consequence of a new economic situation?
- Have the household experienced any serious signs of distress, such as poor food security, negative coping strategies, or sudden loss of income?
- Do the households have access to financial services to buffer the shock?
- Who is covered by social protection and who is not?
- Is the coverage adequate for those affected?
- Does the social protection system enjoy sustainable funding structure?

▶ Resource box 7: Selected dashboards and datasets for analysing rapid change in times of crisis

ILO World Social Protection Data Base and World Social Protection Report:
ILO | Social Protection Platform (social-protection.org).

COVID-19 Business Pulse Survey Dashboard:
https://www.worldbank.org/en/data/interactive/2021/01/19/covid-19-business-pulse-survey-dashboard.

COVID-19 Household Monitoring Dashboard (World Bank):
https://www.worldbank.org/en/data/interactive/2020/11/11/covid-19-high-frequency-monitoring-dashboard.

High-Frequency Phone Surveys (World Bank):
https://microdata.worldbank.org/index.php/catalog/hfps.

COVID-19 Labor Market Observatory (Inter-American Development Bank):
https://observatoriolaboral.iadb.org/en/empleo/.

IZA G2LM|LIC Jobs of the World Dataset:
https://datasets.iza.org/dataset/1390/g2lm-lic-jobs-of-the-world-database.

Economic Research Forum Data Catalog:
http://www.erfdataportal.com/index.php/catalog.

Analysis of the economic landscape, labour market impacts, and subsequent changes in inequality and poverty dynamics provides the necessary pieces of the puzzle for drawing robust conclusions for key policy areas in the short and longer-term. Triangulating the findings from the different parts of the employment dynamics will help in moving from descriptive presentation of data to analytics findings of the underlying drivers of change. Distinguishing between the effects caused by a short-term shock and unveiling the underlying longer-term trends, and finally analysing the interaction between the two provides clues towards policy action. While short-term disturbances can be combatted with temporary measures that may surpass the available resource envelope of a country, the longer-term policies will need to address the structural imbalances to ensure that that country is on a sustainable development path over time and is better able to deal with shocks and increase the wellbeing of the people across social groupings and generations.

Drawing conclusions requires looking at both the demand for and supply of labour, and distinguishing between policies geared towards individuals, on one hand, and structural imbalances, on the other. The aim of the employment diagnostics is to analyse the deficiencies of productive employment and identify the constraints and opportunities for decent employment for all. The issues may lay on the supply side of labour e.g. in case the labour force lacks the necessary skills that are needed for the available jobs. For instance, the ongoing green transformation will increase the demand for skills in green sectors that may not be widely available today. It could

also be that lack of childcare or discriminatory social norms limit the ability of parents to participate in the labour market on equal footing. Identifying such constraints and introducing policy measures to tackle the constraints while strengthening the employability of workers is needed to support full employment. Yet often, and especially in times of crises, the limiting factor is insufficient demand or productivity of labour. Here, macroeconomic and sectoral policy measures to support economic sectors that can produce productive jobs are in the forefront to stimulate the demand.

▶ II: Analysing evidence of longer-term effects and structural change

Economic and other crises can lead to longer-term changes in the labour market. Counteracting a short-term shock and building long-term resilience require different policy actions. What may start as a short-term shock can evolve into longer-term challenges unless addressed in a timely manner. For instance, indicators for productive employment for youth dipped in many countries at the start of the COVID-19 pandemic but appear now to have moved onto a lower long-term trajectory in some countries compared to pre-crisis levels. Moreover, the youth unemployment rate never returned to the level witnessed prior to the global financial crisis, rising from 12.3 per cent in 2008 to 13.8 per cent in 2016 before increasing further to 15.6 per cent in 2021 in the wake of the COVID-19 crisis.[12] Given the implications of such persisting (scarring) effects, the analysis of the long-term effects should pay attention to possible trends breaks and indicators that have not returned to their original paths.

Many economies are undergoing several simultaneous transitions that will shape the prerequisite for their future development. While a lot of policy attention has been paid to dealing with acute crises, structural transitions in terms of demographic change, increased digitalisation of economies, and ongoing climate change are changing the landscape for the foreseeable future. The magnitude of the ongoing shifts is potentially large, and each of the transitions cannot be dealt with in isolation as they are intimately related to each other. Thus, analysing the longer-term transitions alongside with the analysis of the current economic structure and potential short-term shocks will complement our understanding of the nature of change.

A crisis can open opportunities to accelerate a long-term change into a more productive economic structure, if used wisely. The structural transformation process may show signs of acceleration/deceleration due to a crisis and measures taken to accommodate its impact. The impact of technology (and the shift to work-from-home and remote work) is expected to accelerate digitalization trends, which may facilitate further structural changes in the economy and labour market. In other words, while short-term crises operate differently from long-term trends, the interaction of the sudden shocks and longer-term transition may provide avenues for better futures for all.

Deriving actionable policy conclusions towards a more resilient future requires taking a step back from the individual trends and looking at the different aspects of the policy sphere to identify strengths and weaknesses that characterise the context, such as:

- Are the identified deficits of productive employment mainly caused by structural factors or temporary shocks caused by the crisis?
- What recent changes are likely to be permanent, and what can be expected to disappear during the recovery?
- Based on the disaggregated data analysis, what are the priority groups and areas to target that would generate the greatest impact on productive employment in the short- and medium-term?

Analysing trends and drivers of structural transformation

The current global development context can be characterised by several parallel transformational processes that are ongoing in the countries. Policy choices to counteract pandemics, conflict, climate-related and other shocks can also provide an opportunity to adjust longer-term development trajectories, while the current structure of the economy will set boundaries to what kind of development can be achieved. Looking at the long-term trends is thus critical when drawing conclusions on the path going forward. Structural transformation plays a key role in the process of creating decent and productive employment through compositional shifts in employment and output

[12] Source: ILOSTAT, ILO Data Explorer.

towards higher productivity sectors, especially those leading sectors that offer economies of scale and the potential for macroeconomic spillovers.[13]

The increase in productivity that can accompany these shifts are the basis for increasing incomes and improving working conditions, if these gains are accompanied by the right policies and institutions and are equitably distributed. In addition, the process of structural transformation is inextricably linked to two other key development trajectories: 1) the movement from rural to urban areas; and 2) changes in women's participation in the labour market. From an employment diagnostic perspective, it is, therefore, important to analyse longer-term changes in the structure of the economy and labour markets, distinguishing between the contributions of between and within sectoral changes. In addition, changes in the urban/rural labour force, along with women's participation in the labour market need to be carefully analysed to capture these dimensions of longer-term change. Given the ILO's focus on inclusive structural transformation, it is critical to address the nature of these transformations in terms of the quality of and access to employment. This means that structural transformation needs to be assessed on whether it facilitates the transitions to formal decent and productive employment, which can be measured in comparison to the quality of jobs in traditional sectors (as the baseline).

The overall dynamics of structural transformation can be analysed by measuring changes in the share of output and employment in given sectors and analysing the characteristics of the change. Value added and employment shares can be expressed in real terms (i.e. constant prices) to identify whether there has been shift in output and jobs across sectors. Decomposition methodologies can be used to identify the contribution of changes within and between sectors to output/labour productivity growth, which allows for analysing the extent to which growth is being driven by "structural change" (i.e. intersectoral shifts).[14]

[13] ILO (2020) Global Employment Policy Review 2020: Employment policies for inclusive structural transformation – International Labour Office – Geneva: ILO, 2020.

[14] Sectoral decomposition can be carried out using shift-share analysis to highlight changes in labour productivity growth based on such formulas as (Lee and McKibbin 2014):

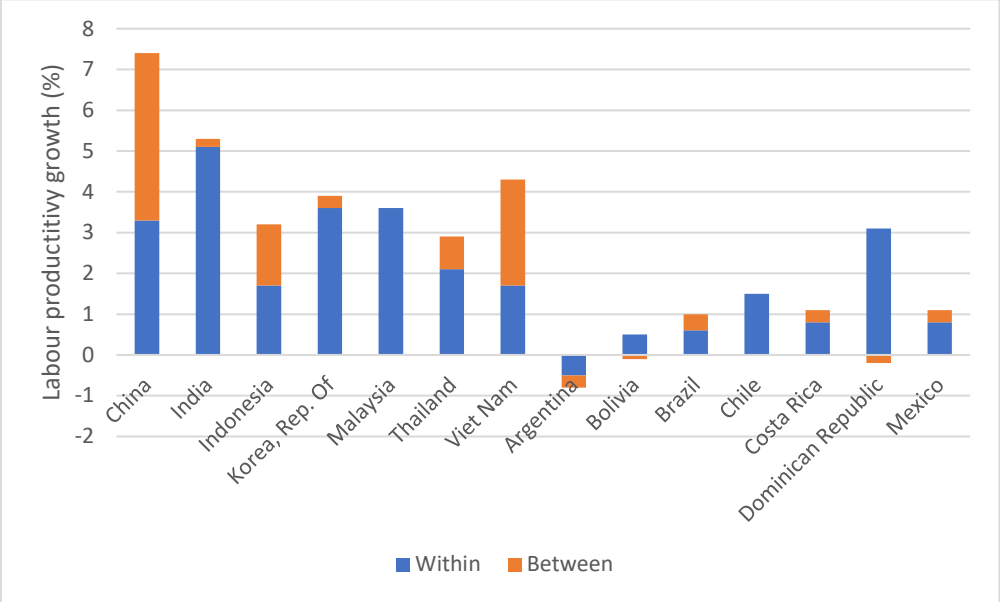
$$\Delta Y_t = \sum_{i=1}^{N} (s_{i,t-k}\,\Delta y_{it}) + \sum_{i=1}^{N} (y_{it}\Delta s_{it}),$$

which decomposes the overall growth of aggregate labour productivity ΔY_t into two components: 1) the contribution from productivity growth within sectors I, Δy_{it}, weighted by the share of employment in each sector in the period t-k $(s_{i,t-k})$ ("within effect"); and 2) the contribution from reallocation across different sectors, which is expressed as the sum of the multiples of labour productivity in sector i and the change in the shares of employment in each sector from period t-k to t ("structural change").

▶ Resource box 8: Analysing structural transformation

The decompositions presented below show that the productivity growth within sectors effect often dominates the effects of structural change (between sectors) in terms of contributions to aggregate labour productivity growth in a number of Asian and Latin American countries for the 1998-2008 period (Kucera and Roncolato 2012). However, in a number of Asian countries where productivity growth was high (e.g. China, Indonesia and Viet Nam), the structural change component makes an important contribution. In a few Latin American countries, namely Argentina, Bolivia and the Dominican Republic, the between effect is negative, indicating that workers, on average, reallocated from higher productivity sectors to lower productivity sectors, contributing negatively to productivity growth. It is important to bear in mind that at higher levels of income, productivity differences between sectors are typically smaller and hence there is relatively limited productivity gains to be experienced from the reallocation of workers and rather, productivity growth is driven primarily by within sector effects. Furthermore, the contribution of the structural change component is more evident when analysing the decomposition by aggregated sectors (i.e. within and between contributions to labour productivity in the manufacturing and service sectors).

▶ Figure B2. Decomposing Growth in Labour Productivity to Understand Trends in Structural Change, Selected Examples from Asia and Latin America (1998-2008)



Source: Kucera, D. and Roncolato, L. (2012). Structure matters: Sectoral drivers of growth and the labour productivity-employment relationship. ILO Working Paper No. 471734. International Labour Organization. Geneva.

In addition to the traditional decomposition, extensions can be undertaken to provide more granular results by quantifying the joint effect of changes in productivity and changes in sectoral employment shares. A recently conducted ILO analysis from Asia-Pacific[15] showed that the window of within sector-driven productivity and job creation gains is narrowing (and slowing) which implies that the economic gains of early industrialised economies is not so easily replicable. Also, the analysis did not find gains in job quality originating from structural transformation, which highlights the need for a more nuanced analysis of economic shifts and their impact on workers.[16] It is good to keep in mind that the decompositions by themselves provide limited information on whether productivity gains (or losses) were accompanied by employment generation (or declines), which is particularly

[15] ILO (2022) "Asia-Pacific Employment and Social Outlook – Rethinking sectoral strategies for human-centred future of work", Geneva, ILO.

[16] For further examples, see Timmer, M. P. and G. J. de Vries. 2009. "Structural Change and Growth Accelerations in Asia and Latin America: A New Sectoral Data Set." Cliometrica 3 (2):165–90. doi: 10.1007/s11698-008-0029-5 and Dasgupta, S.; Kim, K. B.; and Pinedo-Caro, L. (2017) As much to be gained by merchandise as manufacture? The role of services as an engine of growth, The Japanese Political Economy, 43:1-4, 9-37, DOI: 10.1080/2329194X.2018.1544031.

important for a country with a rapidly expanding labour force, and for which group of workers. As such decompositions need to be paired with analysis of quantitative and qualitative employment developments.

Structural change can also be analysed by looking at shifts in occupations, which can capture the effects of not only crises/shocks but also longer-term transformations through technological progress and other trends in both advanced and developing economies. In recent years, there has been a growing interest in understanding how the skill composition has changed in labour markets, particularly in relation to skill-biased technological change and automation.[17] One phenomenon that has been widely explored in advanced economies is the polarization of labour markets due to a decline in middle-skill level jobs (which are routine-task intensive).[18] There is less evidence of this process in developing countries. In practical terms, such an analysis can be done by comparing changes in employment or wages by occupation (or skill level which aggregate a number of occupations). Occupations and skill levels are based on the International Classification of Occupations (ISCO).[19]

Accelerating Just Transition

The aim of the direct policy measures is not only to return to the pre-crisis situation, but to use the opportunity to put the country on a different, more sustainable development path. For instance, if well planned, the economic stimulus for COVID-19 recovery could have been directed to cover some of the investment deficit on the transition towards a greener economy. Also, investment in education and health, care economy or more resilient social protection systems can serve as an investment for a more robust development trajectory. However, evidence suggests that only a small share of the unprecedented investments following the recent COVID-19 lockdowns has been used to support the green transition, while other pressing priorities take precedence.[20]

Analysing the nature of spending in light of the conclusions from the previous analysis of economic structure can provide insights into the expected growth path of the country. Commonly these types of analyses utilise sophisticated econometric models or other techniques to assess the outcome of an investment on the whole economy. The advantage of such methods is their ability to capture the secondary effects of the investment on other sectors and track the transmission mechanisms throughout the economy. Together with Cambridge Econometrics the ILO has developed a methodology to track job impacts of fiscal policies in projects that have been launched in auspices of the COVID-19 recovery.[21] It is planned that the methodology will be converted into an online planning tool for governments to assess job impacts of their fiscal policies and compare alternative green versus less green scenarios.

[17] For a recent summary, see Autor-Brookings-Tech-Inequality-NBER-rev-20220726.pdf.

[18] See, for example, Labour Market Polarization in Advanced Countries : Impact of Global Value Chains, Technology, Import Competition from China and Labour Market Institutions | OECD Social, Employment and Migration Working Papers | OECD iLibrary (oecd-ilibrary.org).

[19] For more information, see International Standard Classification of Occupations (ISCO) - ILOSTAT.

[20] O'Callaghan, Brian J., and Em Murdock. 2021. Are We Building Back Better? Evidence from 2020 and Pathways to Inclusive Green Recovery Spending. United Nations Environment Programme.

[21] ILO & Cambridge Econometrics (2022) Global employment impact of COVID-19 crisis and recovery policies: methodology and sample results, July 2022.

▶ Resource box 10:

The Global Recovery Observatory provides a database on green investment in the aftermath of the COVID-19 crisis. The database is regularly updated and provides an easy overview of recovery spending by country. The database can be found here: Global Recovery Observatory - Oxford University Economic Recovery Project.

Weighing different policy options against each other may require projecting the employment and social outcomes of different measures. The ILO Green Jobs Team has developed a guideline for ex-ante measurement of social and employment outcomes of climate and sustainable development policies. The training handbook for "How to measure and model social and employment outcomes of climate and sustainable development policies" provides tools for an in-depth analysis of the expected outcomes.

The Green Jobs Assessment Institutions Network (GAIN) provide an opportunity to connect to a network of individual researchers, research institutions and international organisations that are working to better understand the effects of green policies on employment and thereby contribute to promoting the just transition to the green economy.

Longer-term scarring on youth and human capital

Crises can result in long-term damage to vulnerable groups and human capital. The focus of analysing the economic impact of the climate-related shocks has moved from mitigation and adaptation to cover also acute loss and damages caused by the irreversible changes to the climate. Similarly, the largest cost of the acute COVID-19 pandemic is probably still to come in the form of foregone schooling and its implications on lifetime earnings. At the height of COVID-19 crisis, primary and secondary schools were closed in almost all countries in the world. At longest these school closures could deprive students from almost two years of schooling. Children from different socio-economic backgrounds were facing vastly different opportunities for coping with the situation where the better-off could benefit from distance learning while the worse-off have practically received no education during the pandemic. This will have permanent implications for their income-earning opportunities over the life cycle.

A temporary shock in the education system can lead to permanent losses despite mitigation measures. During the COVID-19 crisis, distance learning was common at higher levels of education, but the access was unequal. In many high-income settings school closures were compensated by distance learning, which provided an opportunity for many to continue learning. However, the difference between the 'haves' and the 'have nots' grew even larger as people without reliable access to internet were not only deprived from access to information but access to schooling as well. For some, the pandemic provided an opportunity to return to education to gain employable skills for the post-pandemic period, but very few took up this option. Instead, the increase in educational achievement at the tertiary level was marginal compared to losses at the secondary and primary levels.

The true cost of school closures in terms of lost incomes are expected to be high but need to be monitored through longitudinal studies. There have been serious efforts to estimate the cost of the school closured during the COVID-19 crisis, where even the conservative assumptions lead to devastating results in terms of future earnings lost.[22] While these outcomes can be ameliorated through policy measures, there is a need to monitor the real effects of scarring through longitudinal data that tracks people over a longer period.

Whilst brief periods of unemployment during a young person's early labour market experiences are not unusual, if unemployment becomes protracted due to a temporary crisis, it is likely to have life-long scarring effects on the individual's skills, employment and wages. Empirical evidence shows that entering the labour market during a recession can impact young people's labour market outcomes for a decade or more.[23] As a consequence of poor economic conditions, young people fail in their early attempts to find work or end up in a job that is not in line with their educational background. Long-lasting wage losses are, therefore, likely to be experienced by entire cohorts

[22] Psacharopoulos, George; Collis, Victoria; Patrinos, Harry Anthony; Vegas, Emiliana. 2020. Lost Wages : The COVID-19 Cost of School Closures. Policy Research Working Paper; No. 9246. World Bank, Washington, DC - Lost Wages: The COVID-19 Cost of School Closures (worldbank.org).

[23] For example, recent estimates for the United States indicate that for a moderate recession that raises unemployment rates by 3 points, the loss on cumulated earnings is predicted to be around 60 per cent of a year of earnings. See Schwandt, H. and T. von Wachter. 2019. "Unlucky Cohorts: Estimating the Long-Term Effects of Entering the Labor Market in a Recession in Large Cross-Sectional Data Sets", Journal of Labor Economics, 2019, vol. 37, no. S1, pp. S161-S198.

who have the bad fortune of graduating from school or college during the 2020-21 crisis and face the consequent greater competition for fewer jobs over the coming years. As the peak of the pandemic has been followed by other economic hardships, not getting established in the labour market may well become a longer-term issue for many young people. For this reason, monitoring youth employment outcomes, especially for young NEETs, broken down by different age groups, is critical over the coming years to identify if young people are facing additional barriers to returning the labour market.

▶ Resource box 11: Analysing scarring - examples

ILO (2020), Preventing exclusion from the labour market: Tackling the COVID-19 youth employment crisis.

ILO (2022), Global Employment Trends for Youth, Report: Global Employment Trends for Youth 2022: Investing in transforming futures for young people (ilo.org).

Addressing Economic Scarring from the Crisis in: Regional Economic Outlook, October 2020, Middle East and Central Asia (imf.org).

▶ III: Sources of data for employment diagnostics and recovery monitoring

Employment diagnostics in times of continuous change put increased demand for up-to-date data on different economic and employment indicators – a challenge especially in low- and middle-income countries. Recent years have been characterised by rapid changes of historic magnitude in several spheres of life. Monitoring change at quarterly or preferably monthly basis has become the modus operandi for many economic and labour market analysts. However, lack of recent data has become an all the more obvious problem especially in countries where access to data was already limited, and the institutional structures for collecting data are weak.

In line with the evolution of the analytical framework for employment diagnostics, there has been rapid developments in access to different data sources that answer the current and changing needs. Using different traditional and non-traditional sources of data that can help to shed light on different aspects of the analysis, combined with solid data processing and analytical skills can go far when answering the main questions of an employment diagnostics. This section discusses the respective merits and demerits of different types of data and proposes sources of data for conducting an employment diagnosis in times of change.

An employment diagnostic has traditionally relied on data from national labour force surveys (LFS)[24] as a basis for analysing labour market indicators along with other economic and social indicators from other sources. These surveys provide the highest quality and most reliable data on the labour force as their sample population is typically selected at random from a national respondent frame. LFS provide detailed employment related information that other economic or social surveys do not (for example, workers' employment status, if they are informally employed, their sector and occupation) and follows statistical guidelines in line with the International Conference of Labour Statisticians. They provide representative data at the national, regional, local and rural/urban level. While other sources of data have emerged recently to provide information about rapid changes in the economy, LFS continue to be the main source of employment data that governments and researchers use to monitor and analyse the labour market.

ILO's database, ILOSTAT, is the leading global source of labour force survey data that is regularly updated to include the most recent available information on the status of the labour markets. The ILO collects the underlying household survey datasets (mostly labour force surveys) compiled by national statistical offices around the world and processes the datasets to generate harmonized indicators based on international statistical standards.[25] There are currently more than 11,700 household survey datasets across 161 countries available in ILOSTAT.

In countries where labour force surveys are regularly conducted, they serve as an invaluable source of information also during acute crises (if surveys are conducted regularly). For instance, during Covid-19, data from labour force surveys were used to either undertake an analysis of the labour market before the crisis hit (as a baseline to identify at-risk sectors and groups) and/or to assess the labour market impact where data was available, using a range of key indicators (employment, unemployment, inactivity, etc.), disaggregated by gender, age, sectors, etc.

However, in low- and middle-income countries regular surveys are often not available, which makes monitoring changes more challenging. Many countries lack resources to regularly conduct LFSs (i.e., do not have a monthly or quarterly updates) and this situation was further aggravated by the COVID-19 crisis where containment measures prevented or limited the collection of such data. In some cases, LFSs were initially started and then had to pause when new measures were introduced, leaving only partially complete datasets. In other cases, the surveys did not capture the full employment impacts of the crisis due to the incongruous of the timing of the survey vis a vis the peaks and troughs of the pandemic. An ILO survey of 110 countries found that about half of countries had to

[24] For an overview, see Labour Force Surveys (ilo.org). For a guide on sources and uses of labour statistics, see wcms_590092.pdf (ilo.org).

[25] These figures may differ from those that are nationally reported. The magnitude of the differences depends on the extent to which a country is applying international statistical standards.

suspend face-to-face interviewing at some point in 2020, and that disruptions to LFSs were greater in Africa and the Americas than in Europe or Asia (Discenza & Walsh, 2021).[26]

During a crisis, it is often necessary to find alternative ways to provide high frequency and up-to-date insights on the labour market impacts. In a rapidly changing contexts, policymakers require timely evidence to allow design of appropriate and immediate policy responses. Hence, alternative sources of employment data began providing different and complementary types of information and indicators and can continue to do so as we move from a crisis to a recovery situation.

Rapid surveys

Rapid surveys can provide a means to fill data gaps and to collect data when other sources are not available.[27] Complementing the analysis of an LFS with a shorter rapid survey covering the areas of most profound change can be a feasible way forward when data otherwise is limited or can be assumed obsolete. Rapid surveys tend to emerge in a crisis or humanitarian situation where more rigorous methodologies are inconvenient or impractical.

While rapid surveys can be invaluable for conducting an employment diagnostic, collecting data through rapid surveys comes with challenges that are important to factor into the implementation of the study. In particular, the common characteristics that should be kept in mind when conducting a rapid survey include:

- **Modes of data collection**: During COVID-19, a major shift was made from face-to-face interviewing modes to computer-assisted telephonic interviewing (CATI) or computer-aided web interviewing (CAWI). These modes are in general more cost effective and can be rolled out in a quicker manner, but pose coverage and representation challenges, for example some countries have low mobile phone ownership, especially in rural areas. CAWI approaches are for the time being more feasible in high income countries where there is near universal internet access.
- **Sampling**: Rapid surveys typically adopt a narrow sampling strategy in order to limit representativeness to a specific regional area or population group. Respondents are chosen from a sampling frame, which during COVID-19 was often a national list of mobile phone users, or from a list of contact details from a previously implemented face to face survey. As mobile phone ownerships increases in low and middle income countries, the opportunity to increase coverage and therefore increase representativeness of the sample also increases, including in rural areas.
- **Sampling units**: Rapid surveys typically include individuals (or individual enterprises in the case of firm level surveys) as their target audiences, not households. This limits the amount of household information (for example the size, the composition, the history of the household) but can be partly remedied by asking household dimension questions to the individual respondent.
- **Survey content**: The questionnaire in a rapid survey is typically short and focuses on a few key issues or modules. This is mainly due to the survey being fielded over the phone or the web, where phones or internet connection can disconnect and network costs are high. The quality of information received is also more difficult to monitor. Additionally, rapid surveys may shorten or rephrase some question sequences and users need to be aware of how to interpret the resulting data (for example, determining an individual's employment status requires a series of at least three questions). Other rapid questionnaires focused on one sector or type of work which became important policy priorities during COVID-19, such as the care economy, health workers, mental health at work or teleworking.

In summary, rapid surveys are attractive because of their flexibility and ad-hoc nature, but they come with challenges. Rapid surveys are cheaper, easier to implement and can be fielded remotely. However, they are rarely fully representative and are ultimately not a replacement for labour force surveys.

[26] Discenza, A.R. & Walsh, K. 2021. Global review of impacts of the COVID-19 pandemic on labour force surveys and dissemination of labour market statistics. ILO Department of Statistics Report.

[27] This section summarizes an ILO brief, Technical brief: Using data from rapid surveys for employment policy: Applications in the COVID-19 era and beyond (ilo.org).

▶ Resource box 12: Useful sources on rapid survey design and implementation

ILO sources

Capturing impacts on employment and unpaid work using Rapid Surveys (ilo.org).

Other sources

Random Digit Dialing versus Address-Based Sampling using Telephone Data Collection | Published in Survey Practice.

Viewpoint: High-frequency phone surveys on COVID-19: Good practices, open questions - PubMed (nih.gov).

Representativeness of Individual-Level Data in COVID-19 Phone Surveys: Findings from Sub-Saharan Africa (worldbank.org).

Alternative data sources

In addition to primary data collected through conventional LFSs and the trend towards rapid employment surveys, there has been an increase in experimenting with other alternative sources of data.[28] Again, this increase was catalysed by the COVID-19 crisis in pursuit of timely evidence, and the new data will complement the traditional sources in monitoring the ongoing changes in the economy and labour force.[29]

The advantages and risks associated with each of the alternative data sources are discussed below, together with links to useful data sources that can complement the employment diagnostics in times of continuous change. Some of the key sources and practices that can be used alongside the more comprehensive employment surveys include:

Administrative data and non-LFS surveys

- Employment registry and unemployment insurance claims: Businesses are required to register their employees, and their corresponding employment information (wages, demographics, etc) in an employment registry. This allows workers to access social insurance and other benefits. Similarly, jobseekers can file a claim to receive unemployment insurance, which provides information on "jobless claims", which is often a leading indicator to assess the growth level of an economy. The value of these sources is how quickly data is compiled, analyzed and released and in theory it can provide a real-time assessment covering key moments of crisis and recovery. The main drawback of using the data from these registries is that they only cover formal employment and thus provide impartial information about the status in the labour market leaving the most vulnerable workers unregistered.
- Employer and enterprise surveys: also known as "establishment" surveys, collect general information about business operations and growth from employers and managers. They provide information about the employees, their skills levels, location and educations. This source offers a picture of the "demand side" of the labour market in order to complement the "supply side" provided by LFSs. The World Bank maintains a series of enterprise surveys through which it seeks to collect comparable data across multiple countries about firm business activities, expenditures, and employment. One challenge often cited in enterprise survey is that they are biased towards formal firms and informal firms are under-represented. Enterprise Surveys Indicators Data - World Bank Group.
- Purchasing manager index (PMI): The PMI is based on surveys of purchasing managers, who are targeted because of their insider knowledge about expenditure patterns and records in large firms. PMIs provide non-subjective data on business conditions (including measures on output, orders, employment costs, prices, exports, etc.) and are highly empirical. PMIs are conducted mainly on a monthly basis and their data can be

[28] This section summarizes an ILO brief, Technical brief: Alternative Data Sources for Labour Market Diagnostics and Policy Response: Applications in the COVID-19 era and beyond (ilo.org).

[29] For recent country examples, see here: Asia-Pacific labour market insights (ILO in Asia and the Pacific (under 'latest').

used as a leading indicator for changes in the economic trends. However, they do not cover the small and informal firms, nor do they provide direct information about employment implications of the changing business conditions. Combined with other indicators form the labour market, the PMI can be used to anticipate changes in the lagging indicators and to provide a more up-to-date estimates of the current status in the market conditions compared to the data from employment surveys that often come at a considerable delay. PMI, Purchasing Managers' Index – (markiteconomics.com)

Big data sources

Most countries possess a high level of expertise when it comes to conventional labour market surveys, as well as other traditional sources of labour market information such as enterprise surveys or employment registries, allowing them to field regular updates on the labour market situation. That been said, the traditional sources fall short when it comes to real-time monitoring of rapid changes and may be costly to implement at scale. To remedy these caveats, new sources of 'passive data' have been used to complement the analysis.

Non-conventional sources, including the umbrella of "big data", present an opportunity to add new dimensions and levels of analysis of employment and change in the labour market. This includes the opportunity to "real time" information as well as for modelling techniques that make use of big data to assess past trends and future forecasts. Big data is generated through digital technologies often linked to powerful digital processes like machine learning or artificial intelligence. Hundreds of millions of data sets and points are produced and researchers can work with the data to identify correlations and trends that can enable real time information but also the power to predict and model future outcomes.

However, many large data sources come with significant biases and risk underrepresenting large parts of the labour force, and thus a level of caution must be exerted, especially if these types of data are being used to plan crisis and recovery measures which require significant investments. Many of the data approaches discussed below suffer from coverage and bias issues. Important areas or populations can be excluded, and the technologies required, for example "smart" phones and internet access, make it impossible to attain data from large parts of the population, for example from rural areas. Finally, while traditional LFS approaches take special care when it comes to privacy and other ethical concerns, while there is a lack of ethical standards when it comes to data benefiting from digital technologies.

Most useful data sources for conducting an employment diagnostic analysis are presented below:

- **Mobility (mobile phone location) data**: In general, there are two types of mobility data which are produced by mobile phones. The first is "analog" type data which is generated by the "pinging" of data signals to cellular phone towers. The second is "digital" type data, which is generated by global positioning system (GPS) either through the operating systems of handsets produced by technology companies (google, apple, etc.) or though applications ("apps") downloaded onto the operating systems. Mobile phones can also create data trails through the digital signals they send to WiFi networks and Bluetooth devices. During the COVID-19 pandemic, both Google and Apple have made anonymized, aggregated mobility data available to the public for most countries and regions within countries. One of the categories that is tracked is movement to the "workplace", which allows researchers to model COVID-19's impact on labour markets. This type of data has been an important input for the ILO's nowcasting model used to estimate working-hour losses during the pandemic.[30] COVID-19 Community Mobility Reports (google.com)
- **Online Job Portals**: Online job portals provide an increasingly important means of matching employers with job seekers, given their ability to bring these two parties together at scale and to allow them both to focus or refine their searches. In doing so, these portals collect digital job opening descriptions for millions of jobs and, in turn, collect digital resumes for millions of applicants. Working with machine learning techniques, analysts can train artificial intelligence to trawl through these digital documents to identify data points related to demographics, skills, education, job titles, job activities, and salaries.
- **Internet search and social media**: Researchers are exploring using data created through internet search or social media posts to understand individual preference for jobs, skilling or career aspirations. Baker and

[30] See, for example, COVID-19 Pandemic in the World of Work: ILO Monitor: COVID-19 and the world of work. 8th edition.

Fradkin[31] have used Google search data to construct a job search index and assess whether access to unemployment insurance limits job search activity. Other researchers[32] are using social media data to estimate the income of individual users based on the content and frequency of their posts. Two main sources for this type of data are Linkedin and Google Trends.

▶ Resource box 13: Links on alternative sources of labour market data

Enterprise Surveys Indicators Data World Bank Group.
PMI, Purchasing Managers' Index (markiteconomics.com).
COVID-19 Community Mobility Reports (google.com).
Emsi - Labor Market Analytics & Economic Data (economicmodeling.com).

[31] Baker, S.R. and Fradkin, A., 2017. The impact of unemployment insurance on job search: Evidence from Google search data. Review of Economics and Statistics, 99(5), pp.756-768.

[32] Matz, Sandra, Jochen Menges, David Stillwell, and Andrew Schwartz. "Predicting individual-level income from Facebook profiles," Plos One, Vol. 14, No. 3.

▶ IV: Process – How to Implement Employment Diagnostics

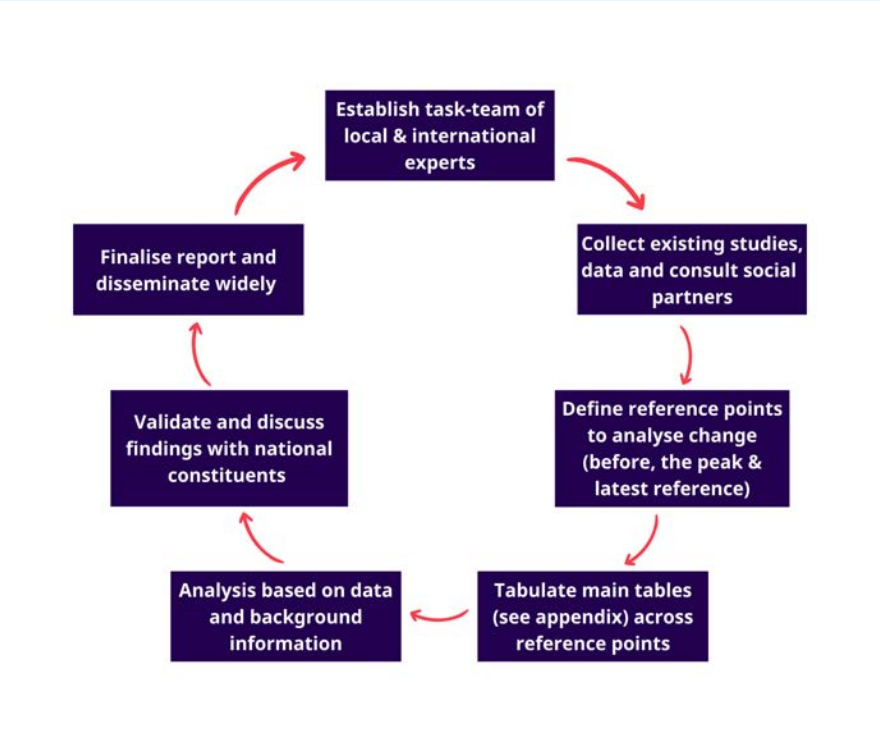
ILO's approach to employment diagnostics follows a participatory process involving constituents (government, and workers' and employers' organizations), along with development partners (UN, multilaterals, bilaterals), academics, thinktanks and NGOs, where relevant. This process ensures that relevant information is embedded in policy responses linked to crises and shocks, while supporting different views that have bearing on the analysis. While the conclusions of the study should be objective and fact-based, the consultative process during the analysis will enrich the insights and ensure ownership among actors who can act based on the study findings.

The key steps when conducting an employment diagnostic study include:

- ***Establish a task team***: Undertaking employment diagnostics requires planning and resources. Depending on the time and resources available, the mix of involved experts may vary. When possible, establishing a task team early on, composed of international and national labour market and employment specialists and development economists, will facilitate the work and ensure that different skills are covered. This task team will be responsible for the analytical work and will consult with a broader range of stakeholders during the process.
- ***Collect and review existing evidence, data, and studies***: The analytical work does not start from scratch but should be based on existing studies and information from partners. Before starting the analysis, it is necessary to identify and review existing recent diagnostics and impact assessments on the economy, employment and labour market. There is commonly a myriad of studies produced in a country that will be essential for setting the scene and providing a baseline for analysing change and recovery monitoring. Also, discussions with key partners will be helpful to set the scene for the analysis.
- ***Define the reference points for analysing change***: To be able to analyse change and monitor recovery, it is important to understand the reference points before a crisis, at the peak of a crisis, and the present. Depending on the evolvement of a crisis over time and data availability in the given country, this step may look different across the different country studies. Note also that there is likely a time lag between the peak of an economic/financial shock (or in the case of the COVID-19 pandemic, a health shock) and that of the employment impact, and that different groups may bounce back at different levels.
- ***Collect the data and tabulate core tables for analysis***: Once the framing of the research question has been established, it is time to collect and sort the data for analysis. Collect and compile the statistics and tabulate core tables (outlined in the Appendix) across all three reference points. These tables may be adjusted according to the context, data, and main areas of interest. Some of the tables provided may be aspirational for countries with limited data availability but provides a sense of direction with regards to the type of information that is needed. What do the data tell you? Is it in line with the information from previous studies and from partners?
- ***Write up the analytical conclusions that arise from the data and other available material***: Write up the analysis based on the data and background information received from the key stakeholders. While the situation is likely to be complex, distilling the main messages and trends will be helpful to get the message across and to facilitate drawing actionable policy conclusions. Using both quantitative and qualitative sources of data will help to deepen the understanding of the local context.
- ***Validation and consultation with national constituents***: Presentation and discussion of main findings and conclusions at a meeting with constituents are important for validation of the results. Preferably this could take place in form of a joint analytical workshop. Here, the conclusions can be discussed in light of the government strategies, policy notes, and other relevant frameworks that have bearing for the policy actions ahead.
- ***Finalise the report and disseminate widely***: After validation and consultation, the finalised report can be disseminated widely to all stakeholders and interested parties. Making sure the analysis is available to

decision-makers and development actors, as well as general public contributes to transparency, mutual learning, and knowledge generation.

▶ Figure 3: Process for employment diagnostics



Source: Author.

▶ V: Final words

The main purpose of employment diagnostics in times of multiple shocks and accelerating challenges is to provide adequate and up-to-date advice for policy responses that would guide the economy on a path of rapid, resilient, and human-centred recovery. To come up with actionable advice, it is important to make a clear distinction between short-term rapid impact policies focusing on the temporary income and employment losses on the one hand, and more strategic policies aimed at addressing more lasting underlying issues of structural changes triggered or sped up by the crisis, on the other hand. The issue of time and timing differs between these two. When making the analysis, rapid assessments can be useful to get up-to date information for the former, while in-depth analysis of labour force survey data may be more useful for the latter.

When tailoring policy recommendations, there is a need to look at the incidence of different policy options and opportunities to increase resilience for future shocks. Who is in need of policy interventions and who is in the end benefitting from the planned action? Who is not covered and risks being left behind? The COVID-19 and previous crises have revealed many gaps in the system where vulnerable populations can easily fall behind, and where the stress-test of the economy did not fall out well. On the other hand, a crisis also provides an opportunity to strive towards a different long-term development plan if the recovery measures are used to build sustainable institutions and social security systems, and to adjust the economic incentives towards a greener and more inclusive path.

While much of the policy focus is commonly invested in the acute phase of a crisis or change, some effects of the crisis period will likely linger and become permanent characteristics of the economy. For instance, new ways of working introduced during the COVID-19 lockdowns, such as remote working arrangements, will characterise the labour market dynamics also going forward. Analysing how this will impact the labour market dynamics overall, who, or which groups, will benefit from these changes and who risks falling behind will inform the policy recommendations and projections for long-term development.

The current geopolitical situation makes the development path of countries unpredictable, and policy makers do wisely when preparing for a period of continuous change. Since the start of the conflict in Ukraine, the following rises in food and oil prices, and geopolitical shifts play in on the stage where the recovery from the pandemic continues to take place. Many countries are facing an uphill struggle to recover from the losses imposed the COVID-19 crisis while simultaneously responding to these new global challenges. As the situation may develop in different directions for different sectors and population groups, providing policy advice based on different scenarios may be useful to allow quick adjustment from one scenario to another.

Employment dynamics in a turbulent world is not a one-off exercise. As situations evolve, continuous monitoring of trends is needed. Recognising that trends may differ for different groups in society is a prerequisite for putting targeted measures in place to mitigate the impact and ensure no one is left behind or falling off the development path. While current figures should be updated regularly, redoing the entire analysis will not be necessary as the interpretation of the latest development can be done in light of the previous analysis and comparison with the baseline.

Monitoring and up-to-date analysis requires continuous effort and adequate access to data. As a key input for policymaking, monitoring recovery trends requires careful diagnostics of the labour market and an assessment of deficits (relative to a pre-crisis period and/or longer-term trends). New indicators may be needed to capture the nature of change depending on the availability of data. The recent pandemic era has broadened the use of data from different sources in employment diagnostics.[33] Still, in most countries labour force surveys remain the main source of information for employment diagnostics, and in many middle-income countries these are now produced on quarterly bases. However, time-lags persist between data collection and publication of the results and access to micro-data. Overall, regular assessments and dialogue within national statistics offices, governments, social partners and other stakeholders are critical to ensure access to sufficient information about labour market indicators from various sources.

[33] See, for example, ILO's rapid employment assessments, https://www.ilo.org/emppolicy/Whatsnew/WCMS_754961/lang--en/index.htm.

Employment diagnostics is not the end goal in its own right but need to be translated into policy priorities that bring about real change. As with any analytical effort, understanding the nature of the problem and the main drivers of change provide the keys to acting on the discovered discrepancies. However, this does not happen automatically; the diagnostics need to feed into policy formulation and implementation. Ensuring that the process of making the analysis is inclusive enhances the chances of the conclusions being picked up by the local actors. While guidance for policy formulation is beyond the scope of the report, contributing to actionable, inclusive, and gender-responsive policies and action is the ultimate goal of the effort.

▶ Appendix: Suggested tables for analysing change in times of crisis

▶ Table 1: The Domestic Economy

	In national currency or USD			As per cent of GDP		
	Year prior to crisis/ reference year	Peak of crisis	Latest quarter	Year prior to crisis/ reference year	Peak of crisis	Latest quarter
GDP				X	X	X
Per capita GDP				X	X	X
GDP growth	X	X	X			
Inflation, CPI, %				X	X	X
Total final consumption						
– Households						
– Government						
Gross fixed capital formation						
Gross savings						
Total value added produced						
- A.-B. Agriculture						
- C.- Industry						
- G., I. Trade						
- H., J. Transport & communication						
- K.-U. K-U Other services						

Note: Recalculate quarterly / monthly figures to annual Note where figures are preliminary.

For reference figure prior to crisis: GDP growth in the latest year prior to crisis over the year before, for peak of crisis and latest quarter over the time period before the crisis.

Sources: National sources are preferred. National Statistical Offices or Ministries of Finance or Economy usually publish national accounts statistics. IMF World Economic Economic Outlook, IMF article IV reports include national accounts data in a statistical appendix (IMF Article iv staff reports). UN publishes detailed national accounts statistics with some delay https://unstats.un.org/unsd/snaama/.

▶ Table 2: External accounts

	National currency or USD			Per cent of GDP		
	Year prior to crisis/ reference year	Peak of crisis	Latest quarter	Year prior to crisis/ reference year	Peak of crisis	Latest quarter
Export of goods						
– Food products, SITC 0 - 1						
– Raw materials, SITC 2 - 3						
– Manufactured and processed goods, SITC 5 - 8						
Import of goods						
– Net export of services						
– Trade balance						
Memorandum items:						
GDP						
Net remittances						
Net direct inward investments						
Exchange rate (vis-à-vis EUR or USD)				X	X	X

Note: Recalculate quarterly / monthly figures to "annual".

Worker remittances include “compensation of employees”, that is transfers by nationals temporarily abroad, are included in the GNI, but not in the GDP. A broader definition of remittances that also includes “private transfers” is sometimes also used.

Note where figures are preliminary.

Sources: National sources are preferred. Central Banks and/or National Statistical Offices usually publish balance of payment statistics. IMF World Economic Economic Outlook, IMF article IV reports include balance of payment in a statistical appendix (IMF Article iv staff reports). Trade statistics by types of products can be found in UN Comtrade | International Trade Statistics Database.

▶ Table 3: The public sector

	National currency or USD			Per cent of GDP		
	Year prior to crisis/ reference year	Peak of crisis	Latest quarter	Year prior to crisis/ reference year	Peak of crisis	Latest quarter
Total public revenues						
Total public expenditures						
Budget deficit / surplus						
Public debt						
– Domestic						
– External						
Public expenditure						
– Health						
– Social protection						
– ALMP						
Debt servicing						
– Domestic						
– External						

Note: Recalculate quarterly / monthly figures to "annual". Note where figures are preliminary.

Sources: National accounts statistics, Ministries of Finance, IMF.

▶ Table 4: Participation in the labour force and in employment by sex and age

	Prior to crisis			Peak of crisis			Present		
	Total	W	M	Total	W	M	Total	W	M
Total population									
Working age population									
In the labour force									
– Employed									
– LU2 Under-employed									
– LU1 Unemployed									
LFP rate, %									
Unemployment rate %									
Employment-to-population ratio %									
Outside the labour force									
– Working but not employed									
– Subsistence food producers									
– Working abroad									
– LU3 Potential labour force									
– Other inactive									
NEET %									
Informally employed %									
Working poor %									

Notes: LFP rate - % of working age population who are in the labour force.

Unemployment rate - % of labour force who are unemployed.

Employment-to-population ratio– % of working age population who are employed.

Working, but not employed, according to post 2013 definition.

Potential labour force, according to post 2013 definition.

▶ Table 5: Impact of a crisis on production, employment and productivity by sectors. Absolute figures

	Prior to crisis			Peak of crisis			Present		
	VA	Emp	Prod	VA	Emp	Prod	VA	Emp	Prod
A. Agriculture									
B. Mining and quarrying									
C. Manufacturing									
D.-E. Electricity, gas, water									
F. Construction									
G. Trade, repair									
– 47. Retail trade									
H. Transport & storage									
I. 55 Accommodation									
I. 56 Food and beverage									
J. Inf. & Com.									
K. Finance & insurance									
L. Real estate									
M. Professional scientific & technical activities									
N. Admin. & support services									
– 79 Travel & tourism									
O. Public administration									
P. Education									
Q. Health & social work									
R. Arts, entertainment									
S. Other services									
T. Households as employers									
U. Extraterritorial org.									
Total									

VA: Value added, Emp: Employed, Prod: Productivity (Value added produced per employed)

Note: Use quarterly (or monthly) average for periods. Based on ISIC rev 4. Use ISIC rev. 3 if information according to ISIC rev. 4 is not available.

For ISIC classification, see International Standard Industrial Classification of All Economic Activities (ISIC) - ILOSTAT.

Sources: ILOSTAT, Labour force surveys. For value added see national accounts statistics. National Statistical Offices or Ministries of Finance or Economy usually publish https://unstats.un.org/unsd/snaama/.

▶ Table 6: Real wages by sector

		Prior to a crisis / Reference year			Present		
		Both sexes	Women	Men	Both Sexes	Women	Men
A.	Agriculture						
B.	Mining and quarrying						
C.	Manufacturing						
D.-E.	Electricity, gas, water						
F.	Construction						
G.	Trade, repair						
	– 47. Retail trade						
H.	Transport & storage						
I.	55 Accommodation						
I.	56 Food and beverage						
J.	Inf. & Com.						
K.	Finance & insurance						
L.	Real estate						
M.	Professional scientific & technical activities						
N.	Admin. & support services						
	– 79 Travel & tourism						
O.	Public administration						
P.	Education						
Q.	Health & social work						
R.	Arts, entertainment						
S.	Other services						
T.	Households as employers						
U	Extraterritorial org.						
Total							

Note: Use consumer price index to recalculate nominal wages into real wages.

Source: ILOSTAT, Labour force surveys.

▶ Table 7: Social protection coverage

	Prior to a crisis / reference year	At present
% of children benefitting from income support		
% of unemployed receiving unemployment benefits		
– Men		
– Women		
% of population aged 65+ benefitting from a pension		
– Men		
– Women		
% of total population covered by social health protection		
Public expenditure on social protection, % of GDP		
Public expenditure on health, % of GDP		
Private out-of-pocket expenditure on health as % of total expenditure		

Source: ILO World Social Protection Data Base and World Social Protection Report, ILO | Social Protection Platform (social-protection.org).

Advancing social justice,
Promoting decent work

The International Labour Organization is the United Nations agency for the world of work. We bring together governments, employers and workers to drive a human-centred approach to the future of work through employment creation, rights at work, social protection and social dialogue.

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