

tepaV

The Economic Policy Research Foundation of Turkey

Needs Analysis for the Earthquake Zone

13 July 2023

Berlin

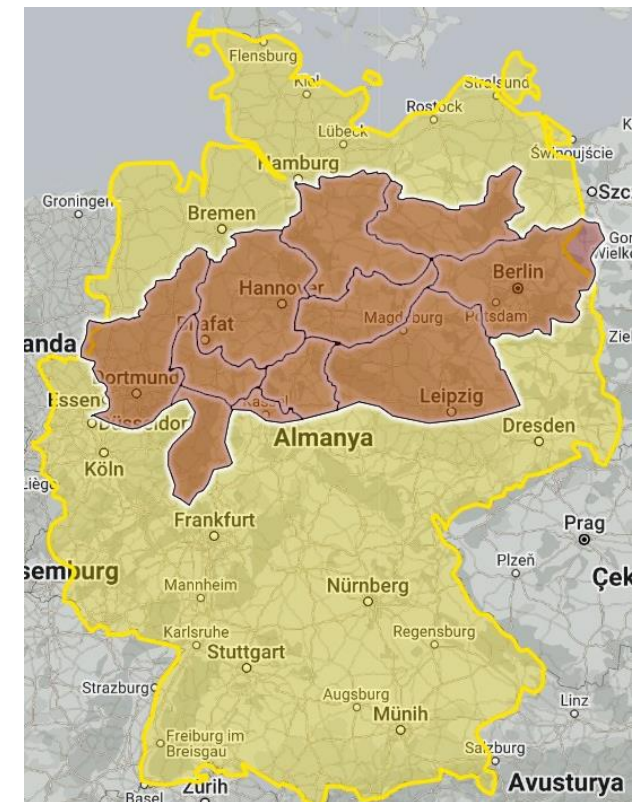
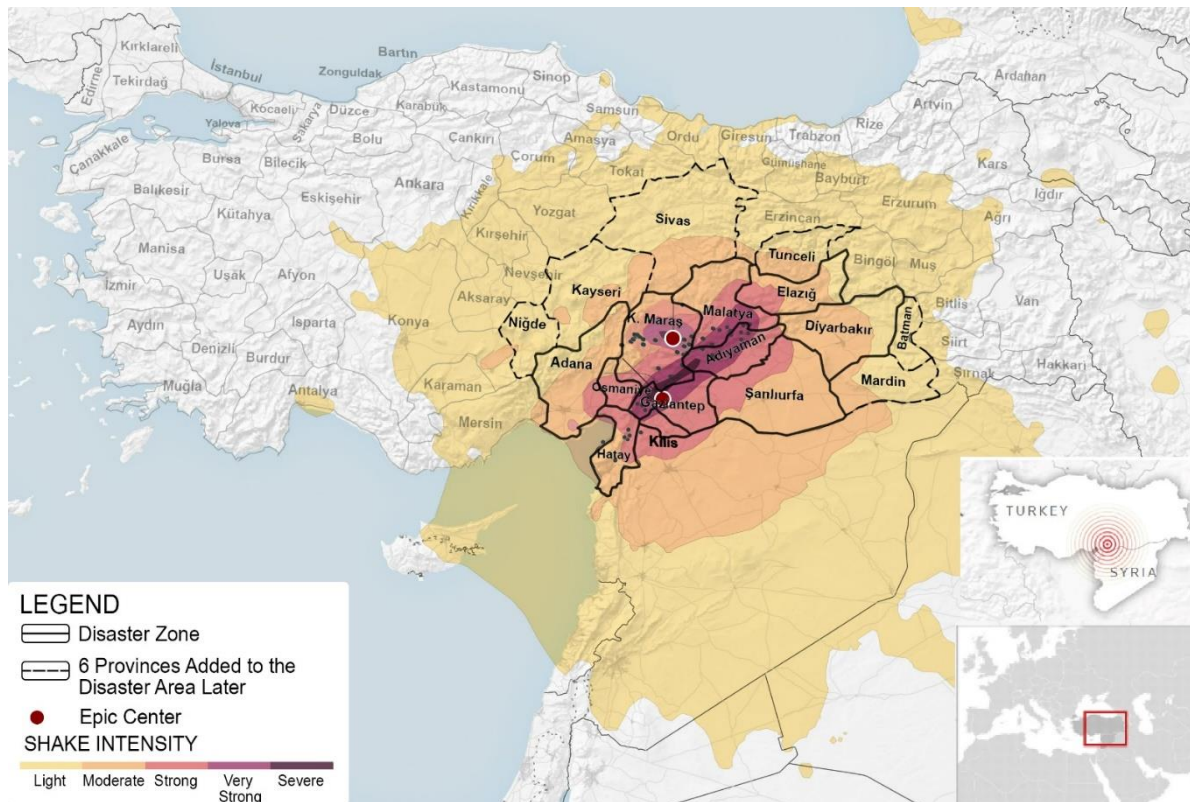
Framework

- The twin Kahramanmaraş earthquakes caused **one of the deadliest disaster of the century** in Turkey
 - The earthquake zone consists almost 1/5 of the Turkish population and generates nearly 10 percent of Türkiye's GDP; the region is also home to more than 1/3 of the Syrian refugees
- The **impact and cost of the earthquake is high**
 - 40 percent of the total building stock was damaged or destroyed at various levels and the construction requirement is far above Türkiye's capacity to build
 - There is an urgent need for medium to long-term shelters and facilities to provide civilized living conditions
 - The earthquake financing need is high and in a scale that will spread to the coming years
 - There is a substantial loss of workplaces and workforce
- The earthquake **also affected other provinces** in Turkey due to heavy internal displacement
 - Increasing population result in infrastructure and superstructure problems
 - Housing is an acute problem, rent prices and other living costs have risen dramatically
 - Job opportunities have decreased
- A **policy framework** is needed for **settling back** and **back to business**

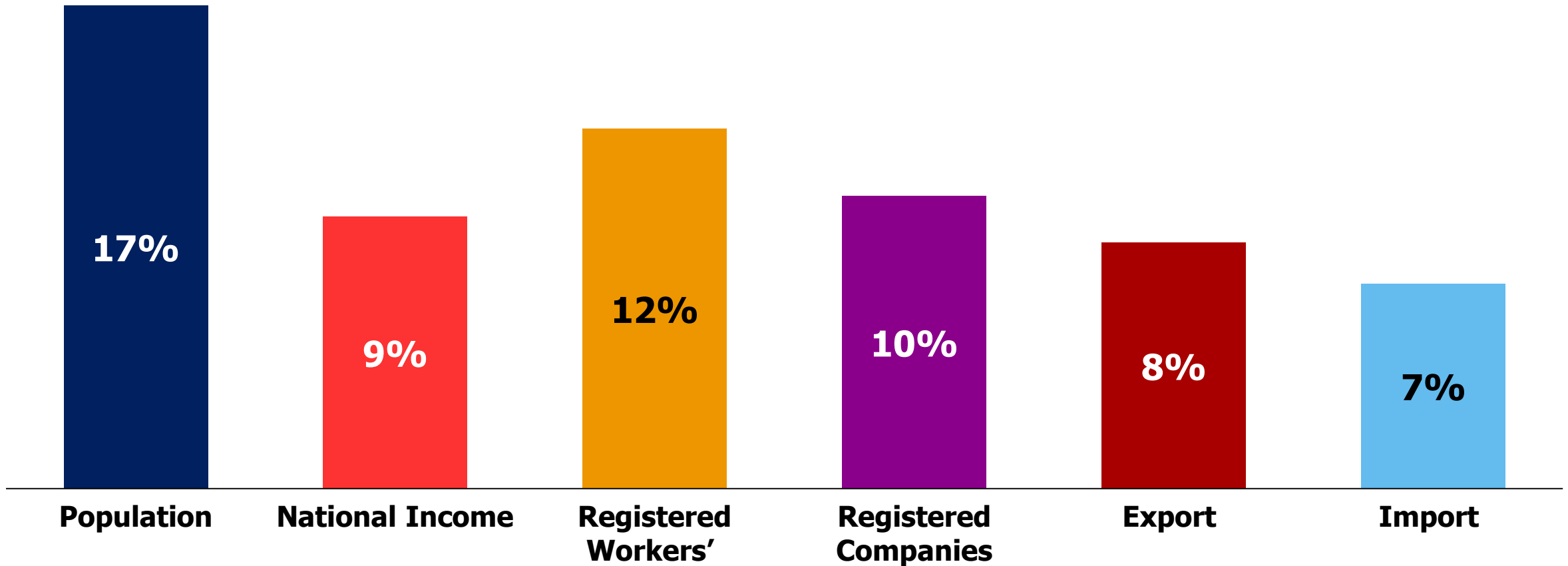
Heavily affected provinces, first disaster zone, covers an area 1/3 the size of Germany

The whole earthquake zone covers an area of more than half the size of Germany

Earthquake zone in Turkey and Syria

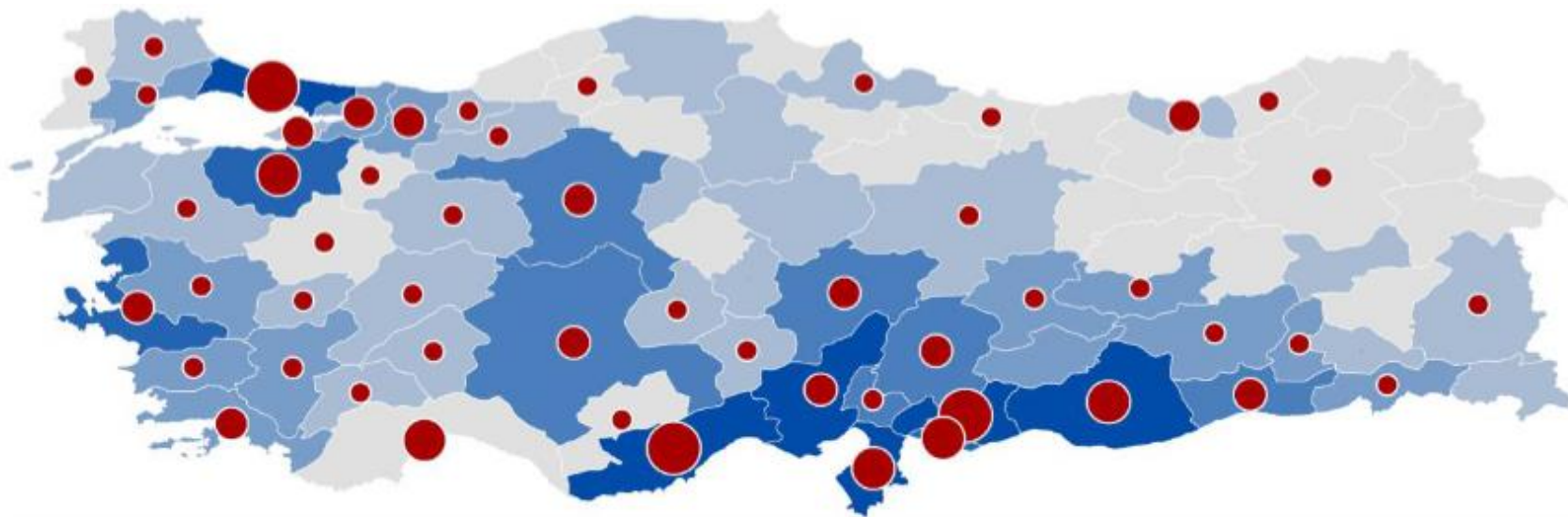


The first disaster zone is home to nearly 1/5 of the total population and generates almost 10% of Türkiye's GDP



The earthquake also hit areas where more than 1/3 of Syrian refugees live

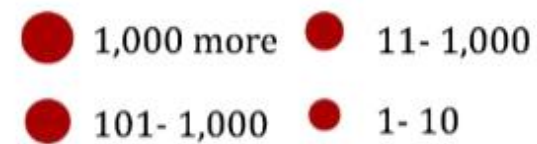
Distribution of the Syrian population and companies in Türkiye, 2018



Number of Syrians



Number of companies by Syrians



* Syrian companies indicate firms that are owned by Syrians and/or having a Syrian partner
 Source: DGMM, TEPAV: Syrian Entrepreneurship and Refugee Start-ups in Turkey: Leveraging the Turkish Experience

There has been major internal displacement

- Presidency of Migration Management issued circulars for Syrian refugees in the region
 - Allowing to travel to other provinces excluding Istanbul without permission up to **3 months**
 - Allowing to travel to Syria for up to **6 months** if they could secure their own accommodation
 - There is **no return policy** for Turkish citizens
- A policy framework is needed for **settling back** and **back to business**
 - Ensuring facilities to provide civilized living conditions
 - Rapid completion of **temporary sheltering, clean water** and **waste infrastructure**
 - Repair of **electricity, natural gas** and **communication** networks
 - Availability and accessibility of **healthcare** centers, **education** and **security** services
 - Fighting against poverty
 - Implementing **universal basic income** schemes
 - Providing **support to companies** on a sectoral basis
 - Planning and execution of the **region's recovery and development program**

TEPAV carried out timely research to guide an effective “damage management strategy”

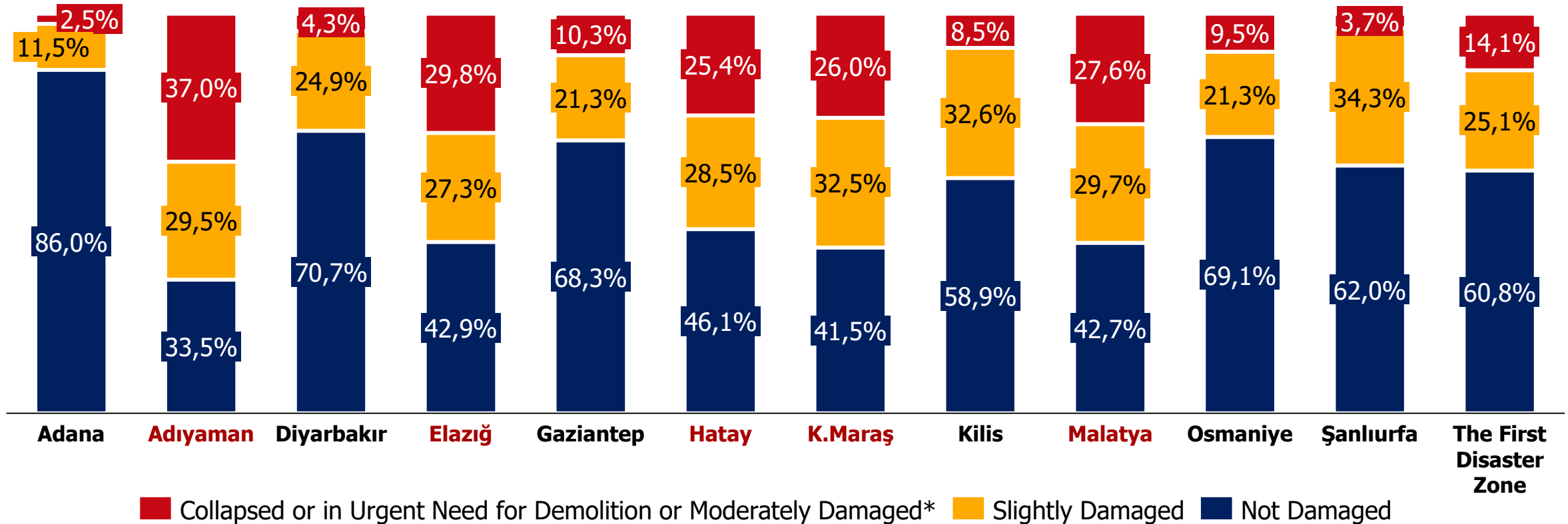
- The impact and cost of the earthquake
- Needs analysis for the earthquake zone
 - Field Survey (March 2023)
 - Survey on Workforce Assessment (April 2023)
 - Earthquake and Migration Research (June 2023)



The impact of the earthquake

Nearly 40% of the total building stock in the region was damaged or demolished

Damage assessment of 11 provinces, %, 04.07.2023

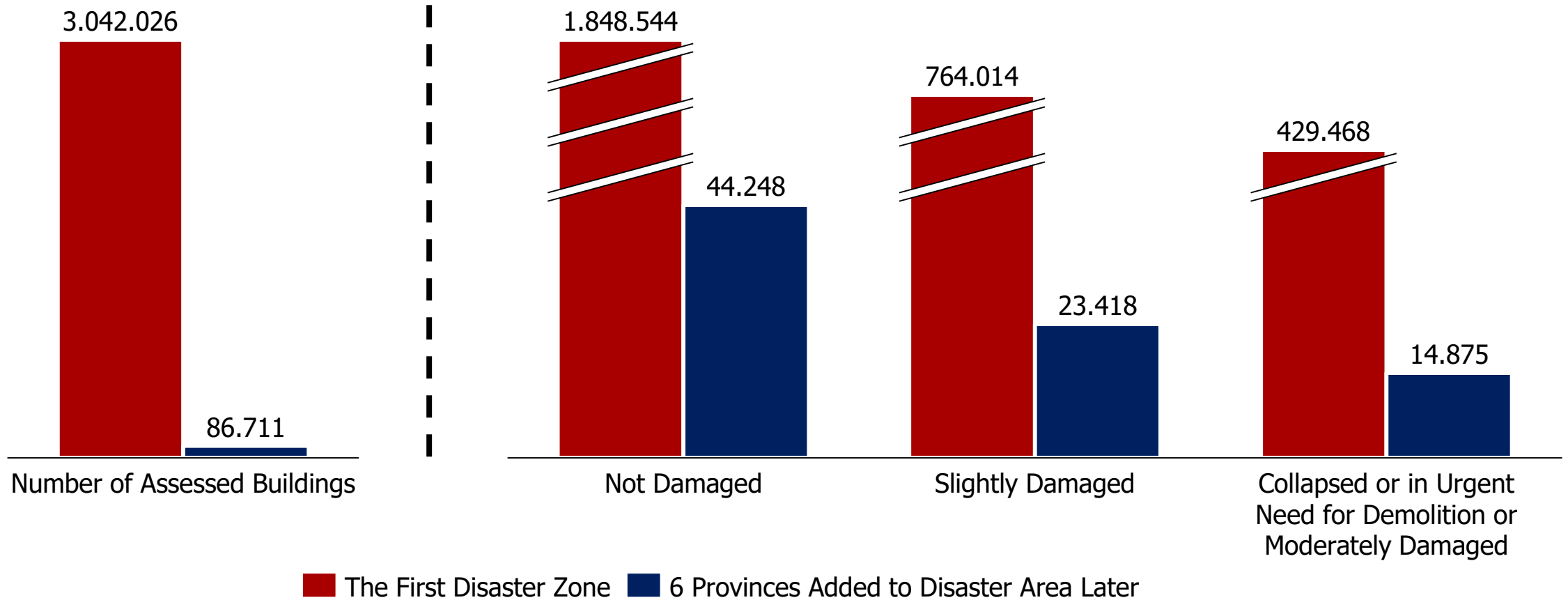


* Buildings rendered uninhabitable.

Source: Ministry of Environment, Urbanisation and Climate Change Damage Assessment, <https://hasartespit.csb.gov.tr/> , Retrieved at 04.07.2023

The number of demolished / to be demolished houses is far above the building capacity

Damage assessment of earthquake zone, %, 04.07.2023



The cost of the earthquake

The earthquake financing need is estimated as 150 billion dollars over a 5-year period

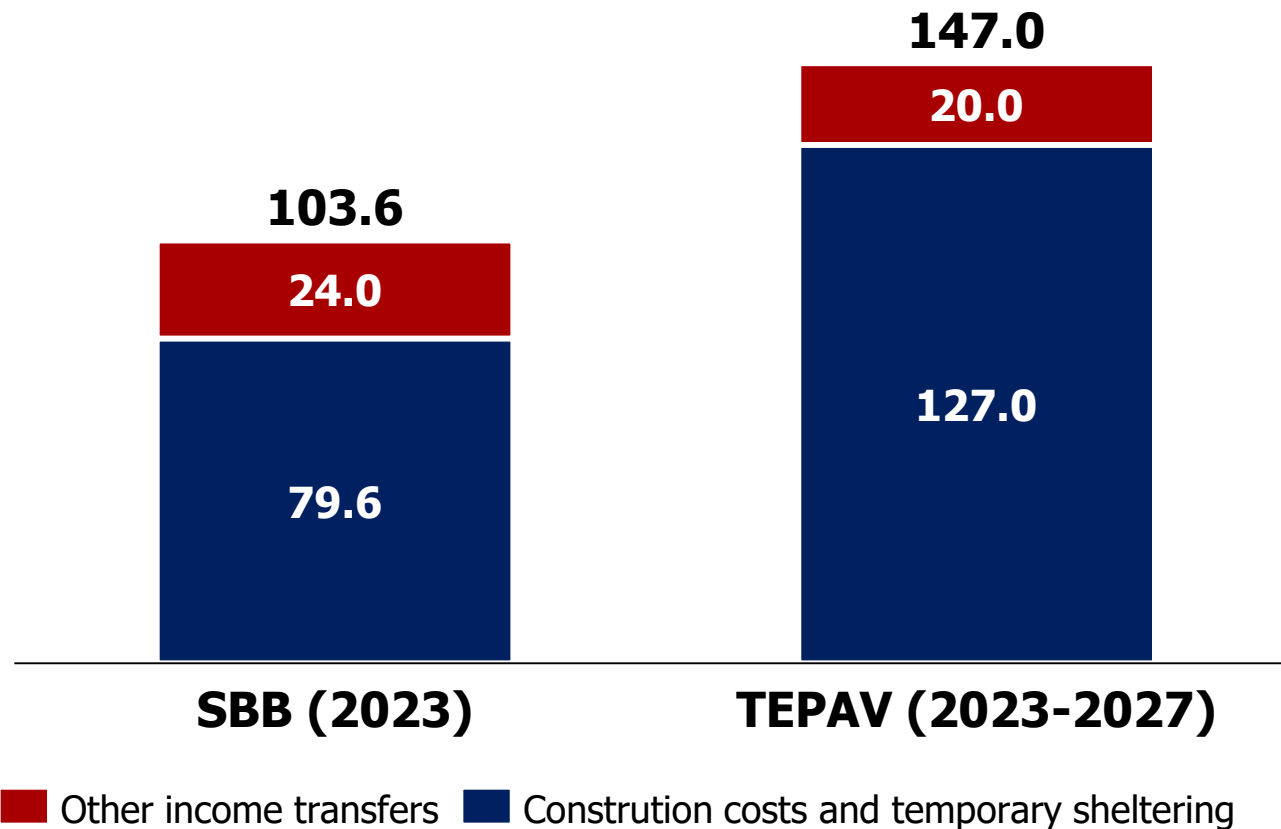
Financing estimate for earthquake-related expenses (billion USD)

	2023	2024	2025	2026	2027	TOTAL
Construction Costs	22	24	20	13	9	88
Property Losses	5	12	12	5	1	35
Temporary Sheltering	4	1	-	-	-	5
Household Transfers	8	4	2	-	-	14
Employment Support	3	2	1	-	-	6
TOTAL	41	43	34	18	10	147

The cost of the earthquake

Presidency of Strategy and Budget (SBB) estimates the total cost of the earthquake is around 9% of GDP in 2023

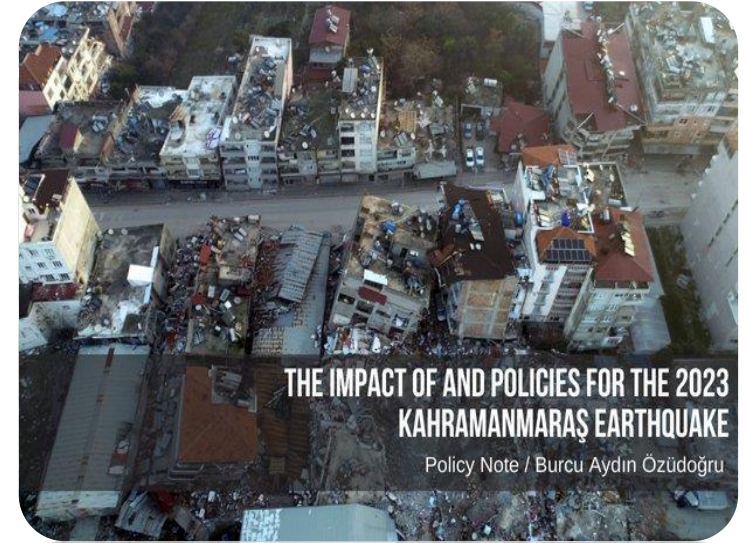
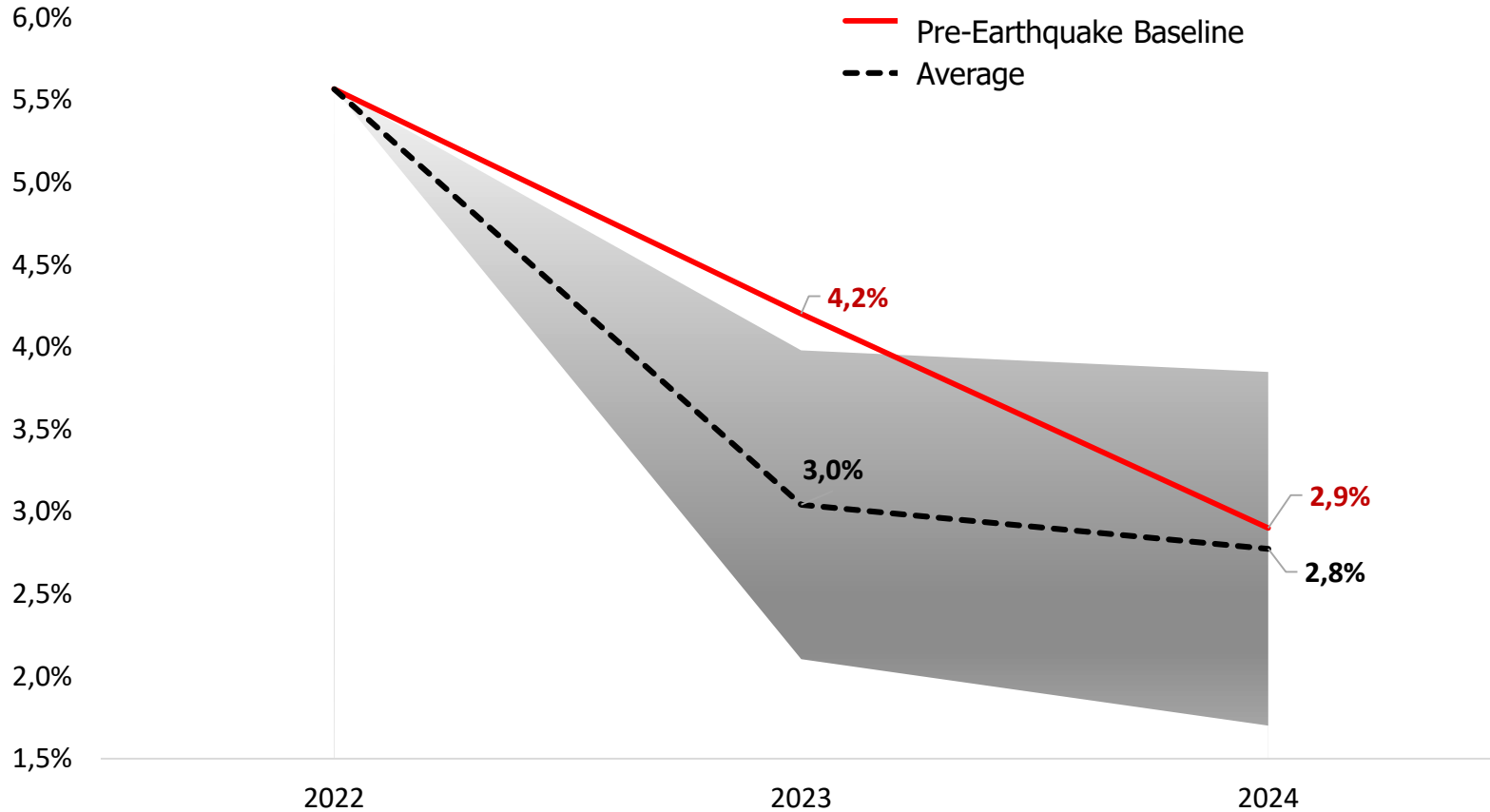
Financing estimate for earthquake-related expenses (billion USD)



The impact of the earthquake on economic growth

Growth is expected to be 1.2 points lower than expected in 2023

Economic Growth Projections (2023-24)



More than 50% of the workforce was lost due to death, migration to other provinces or low motivation

Labor losses of the interviewed enterprises (%)

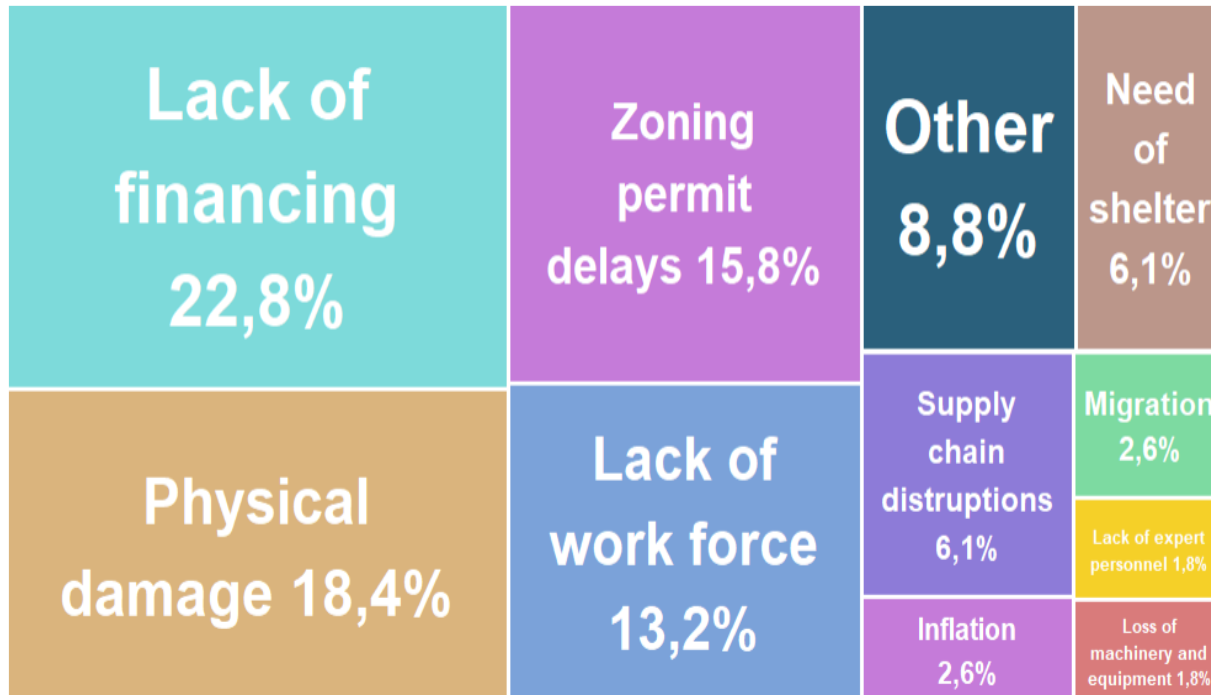
Province / Sector	Agriculture and Food	Manufacturing	Construction	Wholesale and Retail Trade	Service	Mining	TOTAL
Malatya	30	*	79	57	46	53	30
Hatay	73	78	*	56	*	69	73
Gaziantep	*	*	*	*	70	-	*
Adiyaman	53	47	55	*	24	45	53
Kahramanmaraş	45	55	39	52	42	47	45
TOTAL	50	60	58	55	46	53	50

* Only one business responded, so the average is not calculated.

- Labor losses in the construction, trade and manufacturing sectors are around 60%. The highest losses in these sectors were reported in Hatay and Malatya.
- The number of workers in the service and agriculture sectors has decreased by around 50%. The highest decreases are in Hatay in the agricultural sector and in Gaziantep in the service sector.
- The low capacities in the agricultural sector are mostly justified by the lack of labor force.

Heavy damage of the workplaces is the most binding constraint limiting business activities

Barriers to business activities (%)



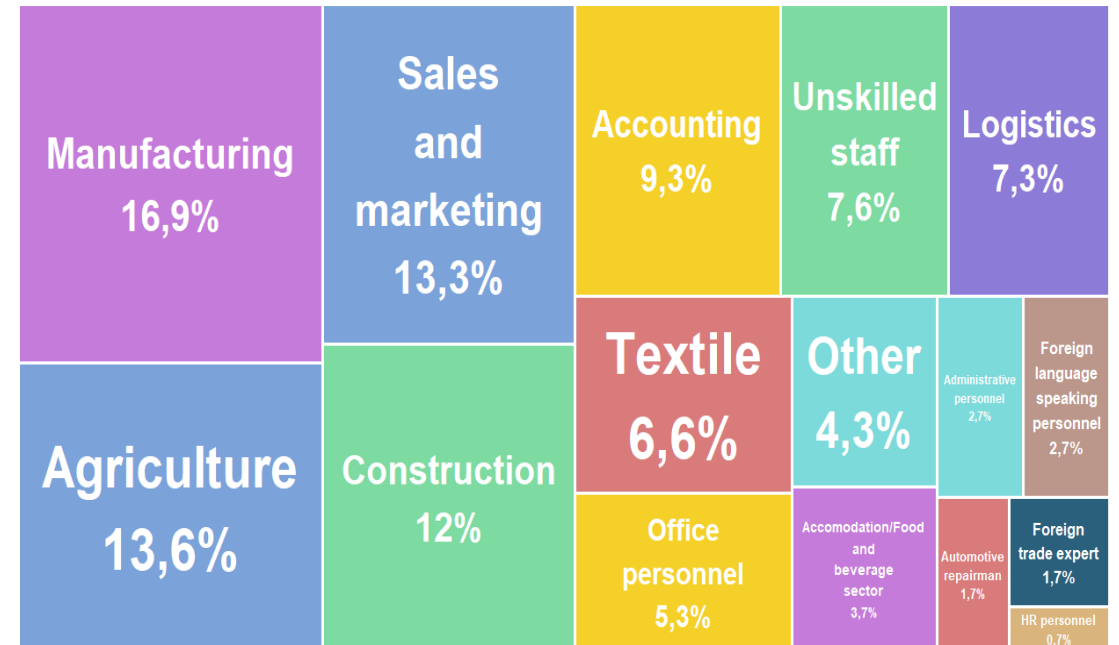
- Heavy damage of the earthquake to the workplaces and stores, loss of machinery-equipment, products and stocks (26.3%)
- Blocked payment system and insufficient funding (22.8%)
- Significant loss of employment (17.6%)
- Continuing infrastructure and superstructure problems and delaying zoning plans (15.8%)
- Infrastructure and logistics problems disrupting the supply chain (6.1%)

Half of the job requirements are for technical staff

Work experience is commonly preferred qualification

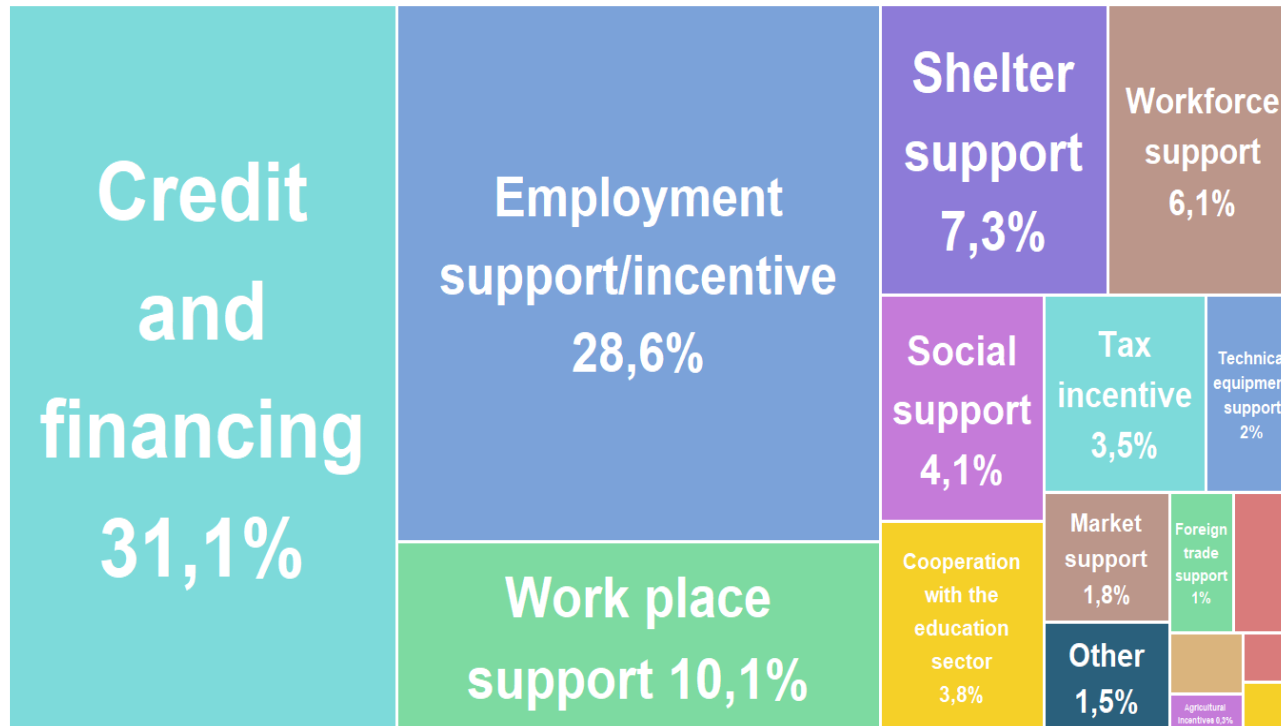
Workforce demand by occupations (%)

- Machine operator is the most frequently stated occupation
- Unskilled agricultural worker is highly demanded
- There is demand for sales - marketing personnel and accountants
- Product knowledge (cotton, olive) is important
- Being a vocational high school graduate and/or experienced personnel is preferred



Employment and financial support are the most requested incentives

Proposed support areas (%)



- Most fundamental and urgent needs are stated as:
 - ➔ Removal of the debris, rapid maintenance and repair works, provision of container workplaces and warehouses
 - ➔ Compensation of the loss of workforce due to displacement, death or psychological trauma
- Financing requirements should be met immediately, access to KGF is a solution
- Measures supporting the employer and motivating the employee to live in the region seem critical
- Exemptions and exceptions for taxes, the cancellation of debts constitute the main public support areas

Conclusions

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TEPAV's further research agenda

- The support requirements of the enterprises/households differ according to the damage of the region. Measures should be carefully designed and **focused to the target groups**.
- TEPAV has carried out timely research to guide an effective "damage management strategy" and can conduct **further background studies** on the level of provinces, sectors and firms to direct resources efficiently
 - **Situational analysis of Syrian companies and employees** in the earthquake area / an update of the survey on "Syrian Entrepreneurs in Turkey" carried out in 2018
 - **Trade complementarity analysis** for Syrian companies and/or companies with a large number of Syrian employees to establish strategies for the development of domestic and foreign trade
 - **Establishing company matching platforms** to facilitate sales and marketing of the region's products, extending TOBB's "my supplier is from the earthquake zone" campaign including for foreign trade
 - B2B occasions aimed at **interactions between businesses** and exploring opportunities for collaboration can be organized such as business conferences and summits, trade fairs and other networking events

TEPAV's research on the earthquake



- The Impact of and Policies for the 2023 Kahramanmaraş Earthquake, TEPAV Policy Note / Burcu Aydın Özüdoğru (April 2023)

https://www.tepav.org.tr/upload/mce/2023/notlar/the_impact_of_and_policies_for_the_2023_kahramanmaras_earthquake.pdf



- Needs Analysis for Earthquake Zone from TEPAV (*in Turkish*, April 2023)

https://www.tepav.org.tr/upload/mce/2023/notlar/hasar_yonetimi_ve_on_celikli_destek_alanlarinin_belirlenmesi_projesi_birinci_saha_raporu.pdf

- Workforce Assessment in the Affected Region Project: EBRD-TEPAV Field Survey (*will be published on 19 July 2023*)
- Earthquake and Migration Research – Pilot Survey Study (*work in progress*)