Increasing Turkey's resilience under the Covid-19 Pandemic

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TSKB Economic Research

* Figures, graphs and numbers are last updated as of April 7th

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Time to Act: Broad Thinking, Smart Financing

The global economic landscape is changing dramatically right in front of our eyes with terrifying speed. As we face such a historic challenge, now is definitely not the time to panic, but rather discuss the timely policy measures and financial moves.

The severe blow triggered by COVID-19 comes at a time when the global economic outlook was already weak and chasing only a “sluggish recovery” at best, in the words of the IMF in its World Economic Outlook dated January 2020. The impact of the pandemics came hard and fast, and almost two months after its previous report, the IMF warned of a “recession at least as bad as that seen during the global financial crisis, or worse”.

Following the earnings revisions for the world’s largest multinationals, UNCTAD notes that the downward pressure on foreign direct investment flows could range from 30-40% during 2020-2021. Thus, COVID-19 will cast a long shadow over the global economy beyond 2020.

Although no country is secure in this “You can run, but you can’t hide” environment, developing countries certainly require a closer look. The disruption to global trade and sudden plunge in the capital markets are likely to pave the way for long-lasting pressure on these countries.

According to data submitted by the International Institute of Finance, some USD 78 billion of capital fled emerging markets in the first three months of 2020, of which USD 57.8 billion fled equity markets and USD 20.5 billion was from fixed income markets.

The global COVID challenge came at a time when Turkey’s GDP per capita has been already on a falling track in USD terms since 2013. A simple Hodrick-Prescott calculation indicates that country has been posting subpotential growth performance since the last quarter of 2018.

The green shoots of recovery that emerged in the Turkish economy, especially towards the end of 2019, are now threatened by the global headwinds created by COVID-19. With an expected annual population growth of 1.2% and on the back of assumption that the current labour force participation rate will converge to the levels of its peers, one of the biggest challenges facing the Turkish economy has always been creating jobs. Now this challenge is even bigger and more urgent than ever.

At this very point, it is time to act with unrelenting resolve. The Government has already announced monetary and fiscal packages aimed at easing the stress. However, tapping the international pool of financing will help deliver a faster recovery while also securing a more structured path in line with the international development agenda.

For the period ahead, it is most imperative to bridge the facts of the pre-COVID world with the needs of the post-COVID world. This discussion paper aims to address this, suggesting three main pillars for effective financing based on economic analysis:

⇒ Protecting the supply chain from the immediate negative impacts of the global downturn

⇒ Securing and supporting the workforce

⇒ Investing in the transformation of industry and services

Extraordinary times require extraordinary measures and decisions. The bold decisions to be taken today will be the starting point of a brighter performance in the future. Therefore any financing work under today's extraordinary times should strive to stick to development principles.

In line with the mission of the Industrial Development Bank of Turkey (TSKB) and following the aforementioned three main pillars which we suggest, we lay down four main principles:

⇒ Promoting sustainable investment for every sector and each sector player

⇒ Working to support the inclusion of the groups in most need in the most needed times

⇒ Supporting gender equal responses

⇒ Acting pro-actively and investing in readiness for climate risks

The headwinds are fierce and here to stay for a long time. This is a time for timely and decisive actions. Comprehensive quantitative and qualitative studies will help deliver more effective policy responses. And yet, this time the task is too big to be handled alone. It is now the duty of international and local financial institutions to cooperate to set out the right goals and act in a timely fashion.

Burcu Ünüvar

Department Head—Economic Research

Macro Economic Rationale

Global Outlook

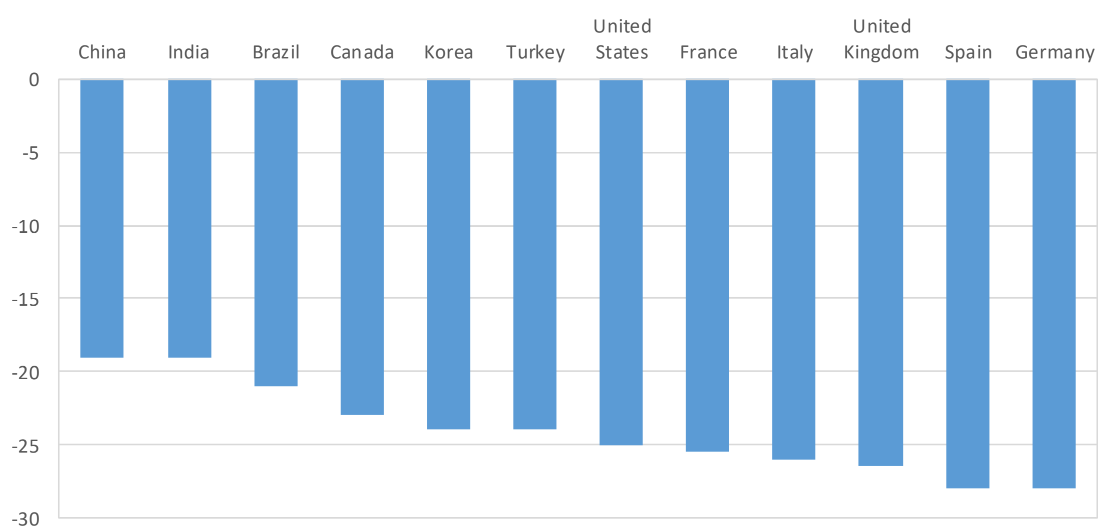
While the IMF had referred to some tentative signs of stabilization in global growth at a sluggish pace at the beginning of the year, Coronavirus (COVID-19) related developments derailed that outlook in the first quarter of 2020. As the virus became a global pandemic, spreading from China to the rest of the world, the lockdowns imposed to contain the spread of the epidemic have led many businesses to shut down and restrictions on travel and borders have sharply reduced global economic activity .

Even though central banks and fiscal authorities have taken some expansionary measures, high volatility in financial markets and worsening confidence have intensified uncertainty over the extent of the shock to the real economy. In all economies, the majority of this impact has come from the blow to output in retail and wholesale trade and in services. In the meantime, SMEs have been among most distressed groups in most countries due to the ongoing uncertainties.

According to the Organization for Economic Co-operation and Development (OECD), despite variations in the scale and the composition of weakening, COVID-19 related lockdown will lead to significant short-term declines in GDP and many economies will fall into the recession. Based on their preliminary estimations, the initial direct impact will lead output to decline by 25% in a median economy, and there will be a loss of 2 percentage points in annual GDP growth for each month of containment.

Meanwhile, the OECD and IMF have urged countries to take coordinated and urgent economic policy responses to reduce the economic pain inflicted by the virus. In the meantime, they have underlined that the timing and communication of these measures will be crucial in restoring confidence to the global economy.

Initial Impact of Containment Measures (% of GDP)



Sources: OECD, TSKB Economic Research

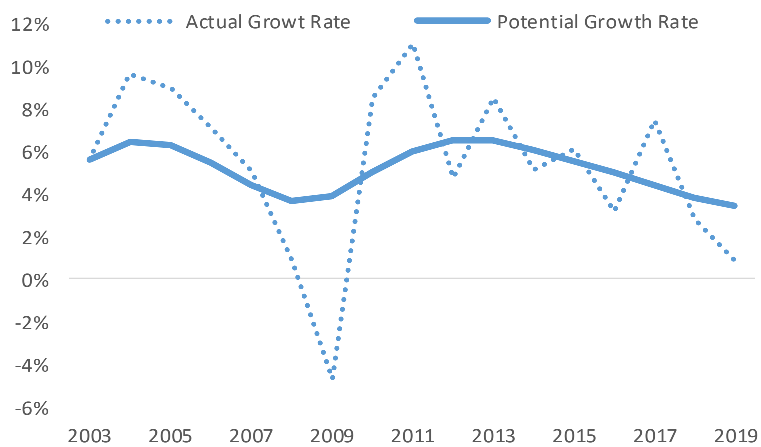
Macro Economic Rationale

Turkish Macro Environment

While the Turkish economy enjoyed a quick rebound after the 2008-2009 Global Financial Crisis (GFC), the trend growth rate had already entered a deceleration process. As trend-growth rate in Turkey slowed from over 6% to less than 4% as of 2019, per capita GDP declined from USD 12,395 in 2013 to USD 9,127 in 2019 .

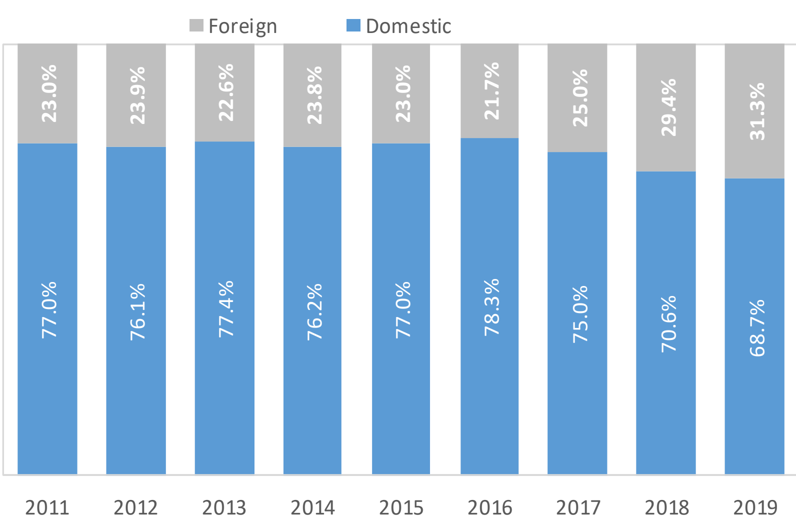
Thus, the improvement in labour market conditions has diminished to some extent. While the employment rate held at 45.5% at the end of 2019, overall unemployment stood at 13.1% with youth unemployment reaching 24.0% at the end of 2019.

Turkey's Actual and Potential GDP Growth Rates



Sources: Turkstat, TSKB Economic Research

The Composition of Demand Side of Turkish Economy



Sources: Turkstat, TSKB Economic Research

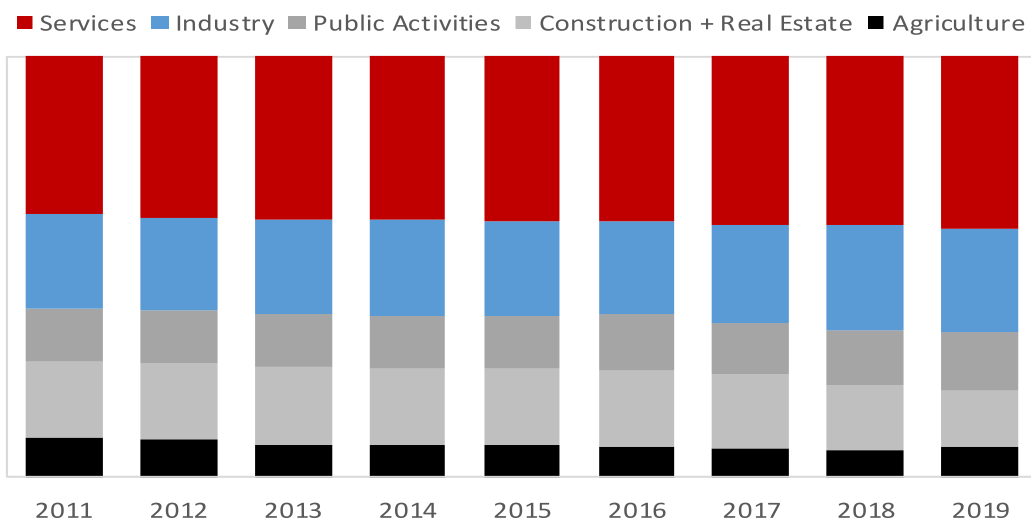
Meanwhile, some changes in the composition of total demand have emerged over the last couple of years. Although the share of domestic demand items has declined to some extent (from 77% in 2011 to 68.7% in 2019), the share of foreign demand in GDP (excluding stocks) has increased (from 23.0% to 31.3% in the same period).

Macro Economic Rationale

Turkish Macro Environment

In the meantime, there have been consistent changes in the supply side of the economy, pointing to the importance of foreign demand and tourism activities. As the share of industry has climbed from 22.5% in 2011 to 24.8% in 2019, the share of services including finance, information, support and other sectors, rose from 37.3% to 41.0% in the same period.

The Composition of Supply Side of Turkish Economy



Sources: Turkstat, TSKB Economic Research

To contain the adverse impacts of the COVID-19, Central Bank (CBRT) and Banking Regulation and Supervision Agency (BRSA) have taken series measures recently. While CBRT cut policy interest rate by 100 basis points, it reduced FX reserve requirements by 500 basis points, providing FX and/or gold liquidity at the amount of approximately USD 5.1 billion to the market. Besides, CBRT decided to carry out in a front-loaded manner its government bond-buying program from the market and introduced new liquidity facilities to improve banks' lending capability. In the meantime, BRSA temporarily relieved the rules on non-performing loans classifications.

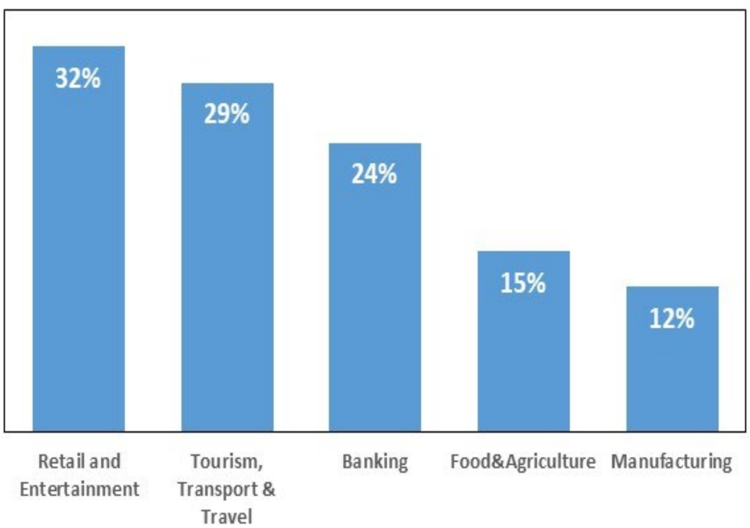
As the Turkish economy has become more dependent on foreign demand and tourism activities, COVID-19 related developments have heightened the downside risks to the Turkish growth outlook. However, we still believe those risks could yet be contained by entrenching the financial channels with appropriate funding along with the economic policy program introduced by Turkey.

Sectoral Overview - World

Sector Specific Measures in the World

In the face of the direct and indirect effects of the pandemic, the measures taken by states to bring relief to firms can be grouped under three headings. In order to improve the cash flow of firms, 65% of governments have eased financial conditions while 26% of governments have restored demand for firms' goods and services and 53% of governments have announced support packages for employment and salaries and reduced or eliminated government related fees (McKinsey, 2020).

Share of Countries with Measures by Sector, as a % of 34 Countries Studied



Source: Gobal benchmark of economic stimulus packages in repsponse to Covid-19

The dissemination of sectoral measures announced by major countries as 23rd March can be seen in the graph.

The first two groups are the sectors facing direct shutdowns. Measures taken for the banking sector assist all economic activities by ramping up the resilience of the financial sector. Healthy financial sector would contribute all non financial stakeholders. Thus, the effects of financial volatility on the real economy will be limited. On the other hand, various support packages have been extended to the food and agriculture sector so countries can meet their own nutritional needs.

Various measures have also been offered to manufacturing industry companies experiencing difficulties due to the breaking of the Global Value Chain (GVC).

Some of the announced measures in many countries address the firms' working capital needs and these measures directly target SMEs, which have more difficulty in accessing finance during periods. France announced a 2 billion Euro package to support SMEs. The UK launched a low-cost medium-term lending program aimed at SMEs. The EIB dedicated liquidity lines to banks to ensure additional working capital support for SMEs and mid-caps of €10 billion. Financial supports are mostly allocated with the condition of protecting employment.

A wide range of financing opportunities have been offered worldwide to soften the effects of Covid-19. These opportunities focus mainly on securing and supporting the workforce and protecting from the immediate negative impacts of the disruption in Global Value Chain (GVC).

Sectoral Overview - Turkey

Turkey's Sectoral Positioning

Covid-19's impact on manufacturing has spread through the global value chain. The containment policies implemented by China reduced output and precipitated a severe impact on countries using inputs from China.

The cessation of production in China gave rise to a supply shock which sent reverberations through the global value chain on the one hand, and a demand shock with the decrease in imports on the other.

Using Baldwin's (2020) calculations, based on the inter country input output tables, we can present the China's value added in other countries' manufacturing production. For example 16.4% of South Korea's manufacturing production is exposed to inputs from China. This ratio is 6.5% for USA, 4.6% for Germany and 4.8% in the UK. The negative effect of disruption to the global value chain on European countries is also significant.

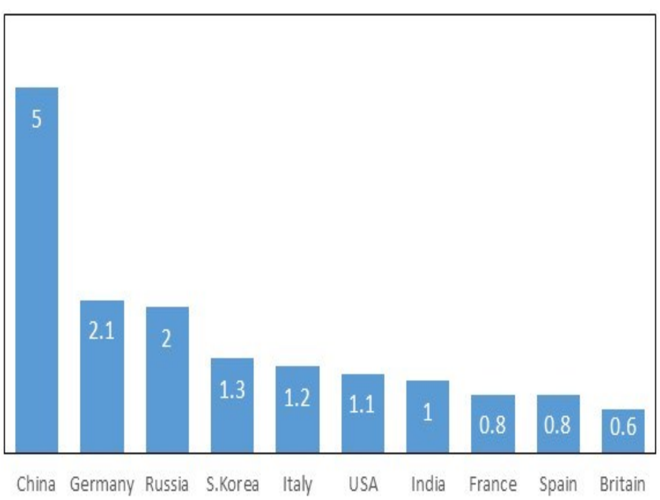
The graph on the left hand side shows Turkey's manufacturing production exposure to major trading partners. In Turkey 5% of manufacturing value added is generated using input from China. The share of inputs from EU countries in the manufacturing industry is around 6%. Thus the supply of inputs used for more than 10% of manufacturing industry is in the danger of facing a shortage in the upcoming period.

However, the extent of the impact will vary depending on the integration of the sectors into the global value chain. According to UNCTAD (2020), the textile & apparel and automotive industries would be hit hardest by a decline in China's exports of intermediate goods.

Because of the disruption to the global value chain, both the supply and demand side effects are expected to continue to cause distress for firms.

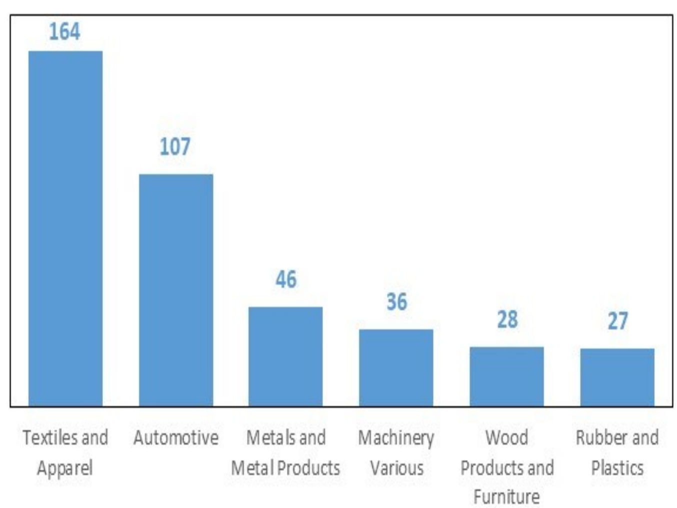
Turkey's Manufacturing Sectors Exposure to Countries

Global Value Chain Approach



Source: Supply chain contagion waves: Thinking ahead on manufacturing 'contagion and reinfection' from the COVID concussion, April 2020, Voxeu

Effect of a 2% Reduction in Exports from China in Intermediate Inputs (for Turkey, USD million)



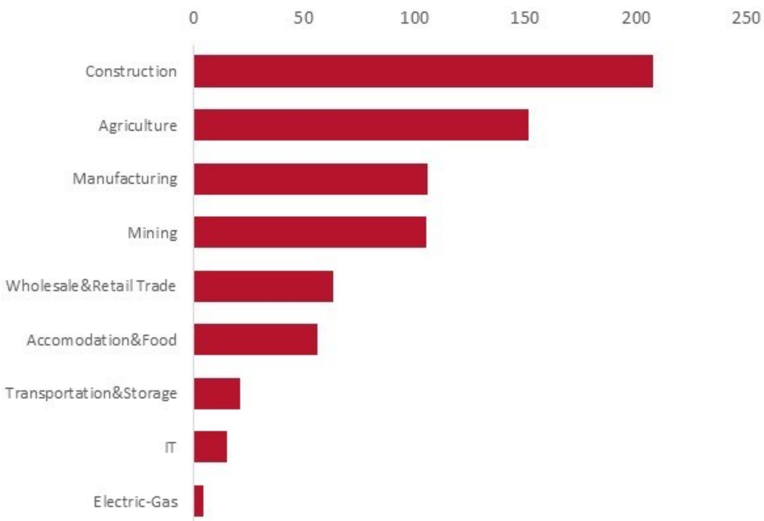
Source: UNCTAD, Global trade impact of the coronavirus (Covid-19) epidemic, March 2020

Sectoral Look-Turkey

Current Outlook - Working Capital Need

In the period ahead, companies will face problems due to disruption of the global value chain, amongst other reasons, both on the supply and demand sides. The problems on the demand side will increase the financing needs of companies. Thus firms' ability to maintain their employment and production will depend on their ability to meet their working capital needs at reasonable costs.

Cash Conversion Cycle in Turkey (days)



Source: Ministry of Industry and Technology, Autor's Own Calculation

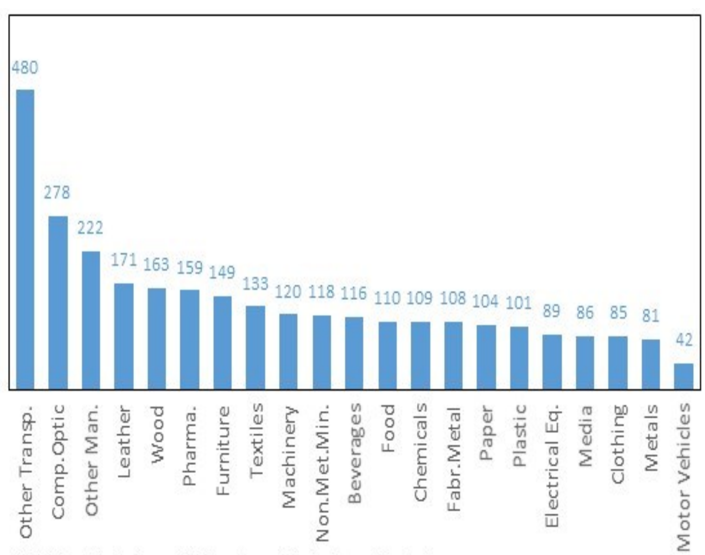
Working capital needs should be taken into account both on the basis of quantity and maturity. In measuring the quantity, it can be assumed that short-term loans are an indicator of working capital needs. As of February 2020, short-term loans in Turkey stood at 550 billion Lira (about USD 80 billion).

The cash conversion cycle can be considered as an indicator of the maturity of firms' working capital needs. Prolonging this cycle in times of crisis plays an important role in increasing companies' financing needs.

During times of financial challenge, companies put extra effort in trying to improve their working capital management in order to extract cash from balance sheets and reduce external financing needs. However, Covid-19 is testing resilience across all sectors amid faltering consumer demand, presenting an obstacle to companies' working capital targets. Thus, businesses will rely more on external financing to overcome liquidity shortages until a tangible demand recovery takes hold.

Measures to promote quick access to finance will help firms survive.

The Cash Conversion Cycle in the Manufacturing Industry (days)



Source: Ministry of Industry and Technology, Autor's Own Calculation

Sectoral Look - Turkey

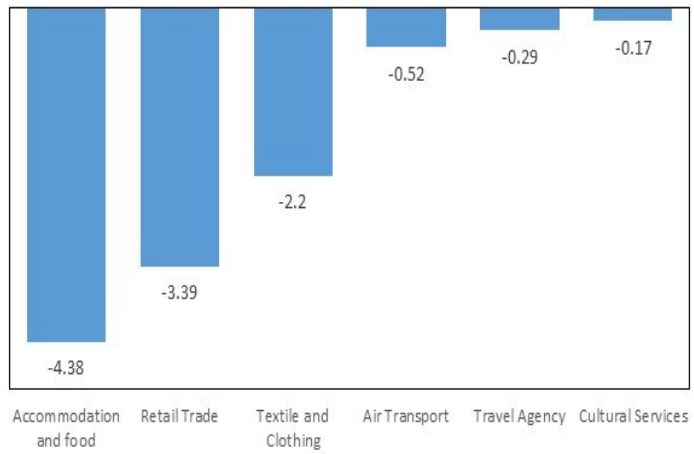
Current Outlook - Possible Job Loss Effects

Despite the potential advantage of Turkey's young population, the country has been languishing with double digit unemployment in recent years. In other words, Turkey entered the Covid-19 pandemic with an already high unemployment rate.

New job losses resulting from the Covid-19 pandemic will have negative consequences both on demand and socially. We will reference two different studies to mention the potential level of job losses.

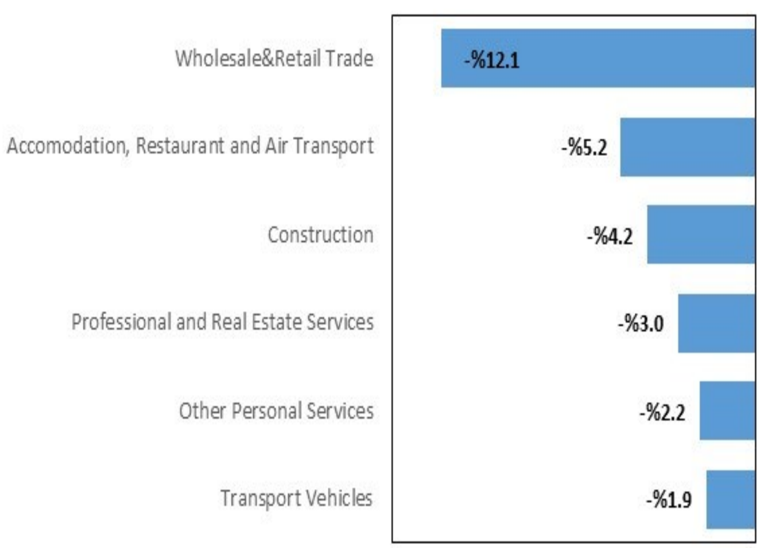
The first study (Taymaz, 2020) is based on the assumption that job losses in sectors severely affected by the crisis could reach 60%, with job losses in sectors more mildly affected of around 30%. The study conducted using the Input Output (IO) tables reveals that after direct and indirect effects, employment could decrease by up to 10.7%. This prediction indicates that the number of people unemployed in Turkey could rise from 4.3 million to 7.3 million.

Potential Effects of Covid-19 Measures on Emloyment Change (%)



Source: Taymaz, E. (March, 2020), Covid-19 Tedbirlerinin Ekonomik Etkileri ve politika Önerileri, www.sarkac.org

Potential Employment Effects (OECD Approach)



Source: Social Security Institution, Autor's Own Calculation based on OECD assumptions

To generate an alternative scenario on potential job losses in Turkey, we performed a simple simulation for the labour market. We employed the perspective and assumptions of the OECD (2020) which rests on the presumption of no measures being taken. We treat this as a worst-case scenario for what could happen in the absence of measures.

The results imply that job losses could reach 28.7% of total employment.

During periods of uncertainty, simulations may have a high margin of error. However, the forecasts for employment losses in both studies demonstrate that securing and supporting the workforce is a critical issue. Formulating steps to reduce this risk in the labour market should be addressed as one of the most important topics on the agenda.

Sectoral Look - Turkey

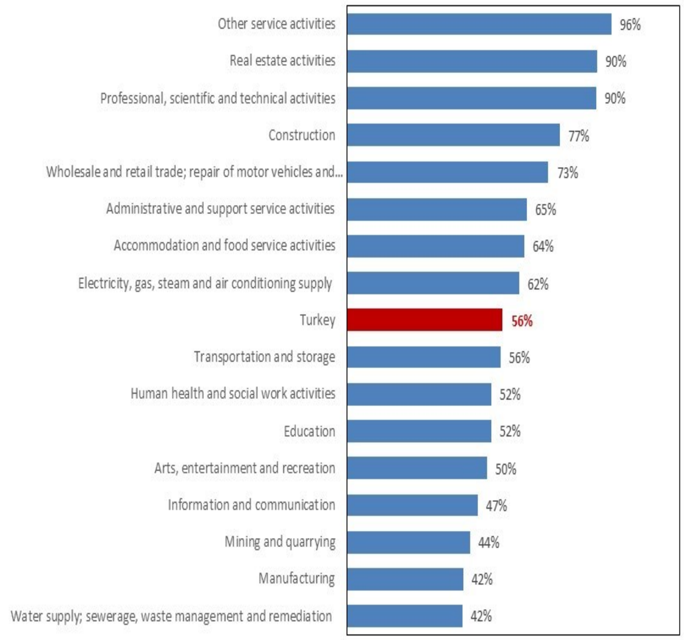
Current Outlook - SMEs in Turkey

To be able to alleviate the pressure on jobs, we need to look at the SME segment, which has more difficulty accessing finance during times of crisis.

SMEs are the backbone of the Turkish economy. SMEs, which make up 99% of companies, generate 74.4% of national employment, realize 56% of production, 55.4% of exports and 35% of imports in Turkey. SMEs sustain substantial value added and employment, boosting, or at times, holding back economic growth.

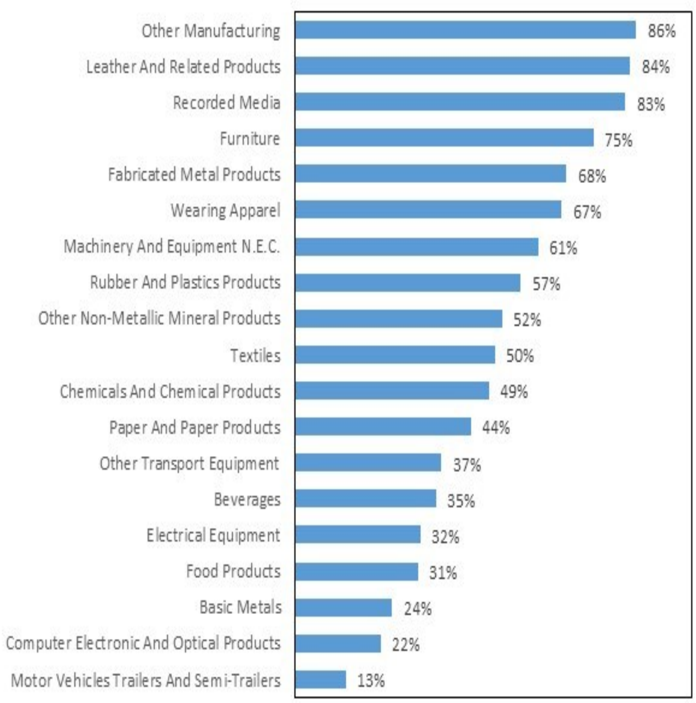
The important difference between large enterprises and SMEs is that the latter experience greater difficulty in accessing bank finance in an environment of high uncertainty.

Share of SMEs in Production



Source: Turkstat, TSKB Economic Research

Share of SMEs in Production - Manufacturing Subsectors



Source: TurkStat, TSKB Economic Research

Looking at manufacturing sub-sectors, the share of SMEs in production ranges from 13% to 86%. Notably, sectors with a low share of SMEs are capital-intensive or human capital-intensive. This situation may be related to the problems SMEs face in accessing finance, or their lack of scale advantages. This confirms our emphasis on the importance of SME financing.

The existence of strong commercial ties between SMEs and large firms causes the two groups to be affected by the dynamics of each other. The increasing need for working capital in large firms during periods of financial distress causes them to pay their commercial debts to SMEs in the longer term. Thus, large-scale companies and mid-caps reflect their working capital troubles to SMEs. Therefore direct lending to the large firms and mid-caps has a rationale to support SME's financing needs.

The Road Ahead

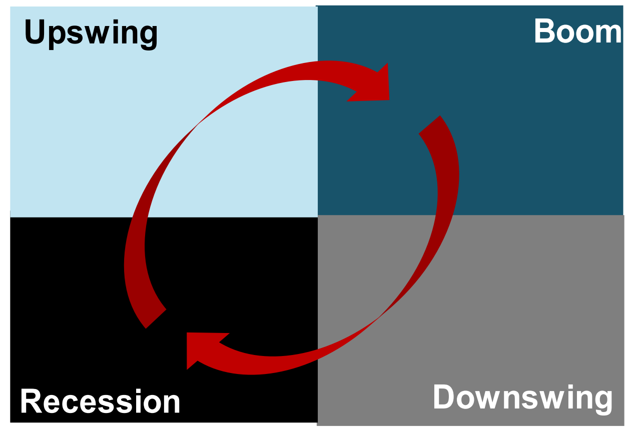
The Economic Clock

Economic clock methodology characterizes four distinct phases of business cycles in a given sector.

In the upswing region, the standardized annual change in economic activity is negative, while the monthly change in annual change is positive. In the downswing region, economic activity behaves conversely.

In the recession region, both the annual change in activity and monthly change is negative, meaning that economic activity is diverging from its long term trend.

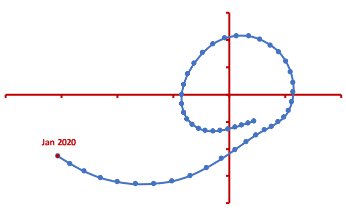
Economic Clock



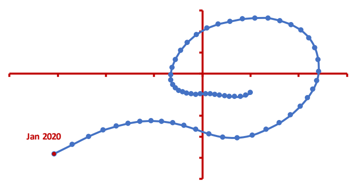
In this method, the long-term growth trend of the sector and its near-term growth performance are compared. This method is adapted to Turkey's manufacturing industry sub-sectors to identify the position of each sector in the business cycle. Each point in the charts is created by using monthly industrial production data. The last observation (marked in red) shows which region the sector is in as of January 2020.

Sectors in Recession

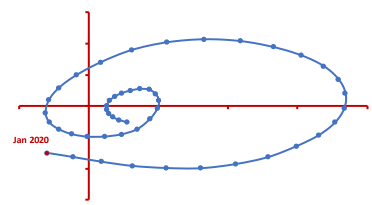
Tobacco Products



Beverages

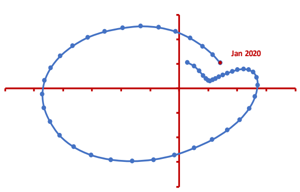


Other Vehicles

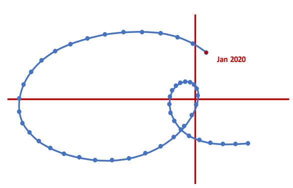


Sectors in Boom

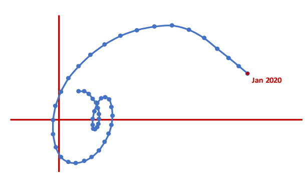
Leather Products



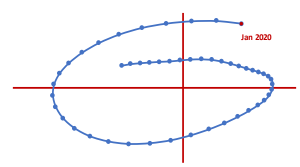
Paper Products



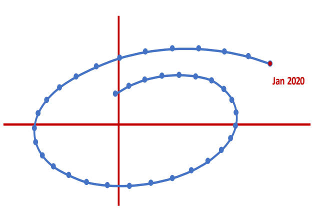
Computers, Electronics, Optical Products



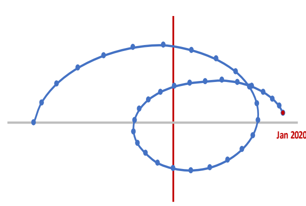
Food



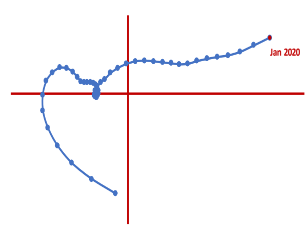
Textiles



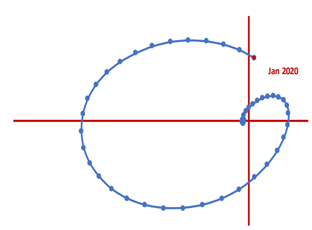
Wearing Apparel



Basic Pharmaceutical Products



Fabricated Metals



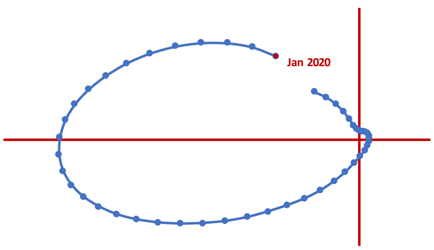
Source: Turkstat, TSKB Economic Research

The Road Ahead

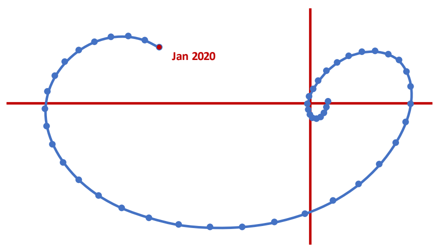
The Economic Clock

Sectors in Upswing

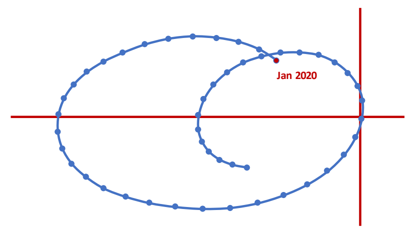
Wood Products



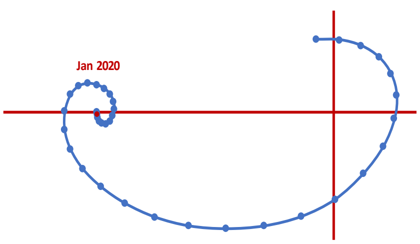
Other Non-metallic Minerals



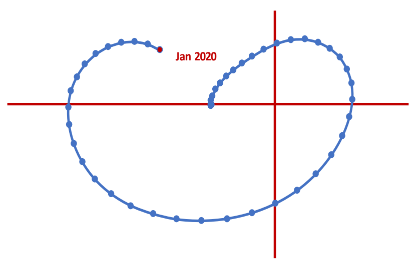
Electrical Equipment



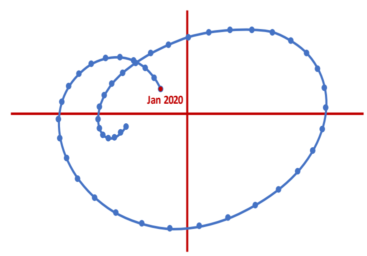
Furniture



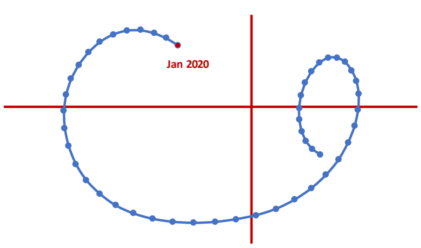
Basic Metals



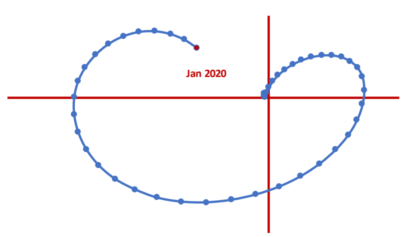
Chemical Products



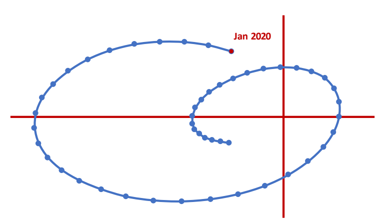
Motor Vehicles



Rubber and Plastic Products



Machinery and Equipment N.E.S.



Source: Turkstat, TSKB Economic Research

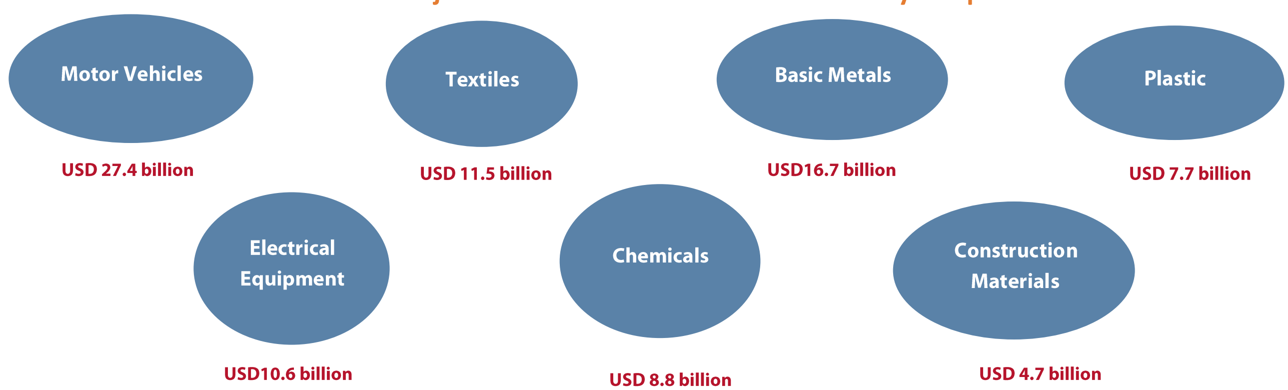
The Road Ahead

The European Green Deal

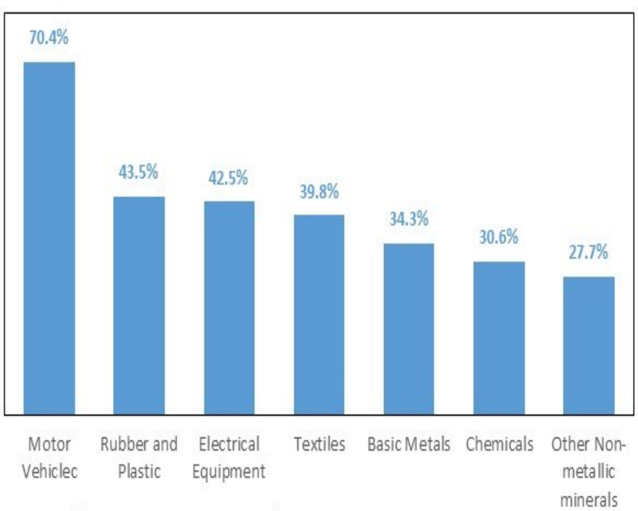
The European Green Deal (EGD) is a road map that aims to make the EU's economy sustainable. One of the focal points of the EGD is pronounced as 'turning climate and environmental challenges into opportunities across all policy areas', which is an important point to follow for countries like Turkey that have strong trade ties with the Union.

The roadmap includes the 'efficient use of resources by moving to a clean, circular economy'. Within this perspective the sectors below will be among the first to be affected.

Sectors that could be the subject of a carbon border tax and Turkey's export volume



Share of EU Countries



Source: Turkstat, TSKB Economic Research

Turkey directs 42% of its exports to the EU. Turkey's total exports in the sectors listed above amounts to USD 41.4 billion, pointing to a vast area that is open to reinvestment for transformation and capacity renewal.

In the EGD, the EU urges actions by all sectors including

- ⇒ Investing in environmentally friendly technologies
- ⇒ Helping industry innovate
- ⇒ Rolling out cleaner, cheaper and healthier forms of private and public transport
- ⇒ Decarbonising the energy sector
- ⇒ Ensuring buildings are more energy efficient
- ⇒ Working with international partners to improve global

While an immediate recovery in the economic activity is the top prioritization, it definetely does not contradict with the responsible approach of European Green Deal. Such a perspective requires putting the seeds today for reaping the fruits in the post-COVID era.

Obviously, the approach prioritizes the responsible financing practices of development banks rather than a straightforward financial intermediary. It also requires a total re-handling approach for infrastructure in almost any given industries, with the cooperation of local and international development institutions.

Therefore combining the growth need of Turkey with the transformation need mandated by EGD will definitely be more opportunity than a challenge, given that right financing pie is managed by the right investment philosophy.

The Road Ahead

Structural Transformation

When it is said that the blow to the global economy from COVID-19 is like nothing that has come before it, it also means that tomorrow will not be like yesterday. The severe hit to 'business as usual' will force almost all economic agents to rethink their business practices.

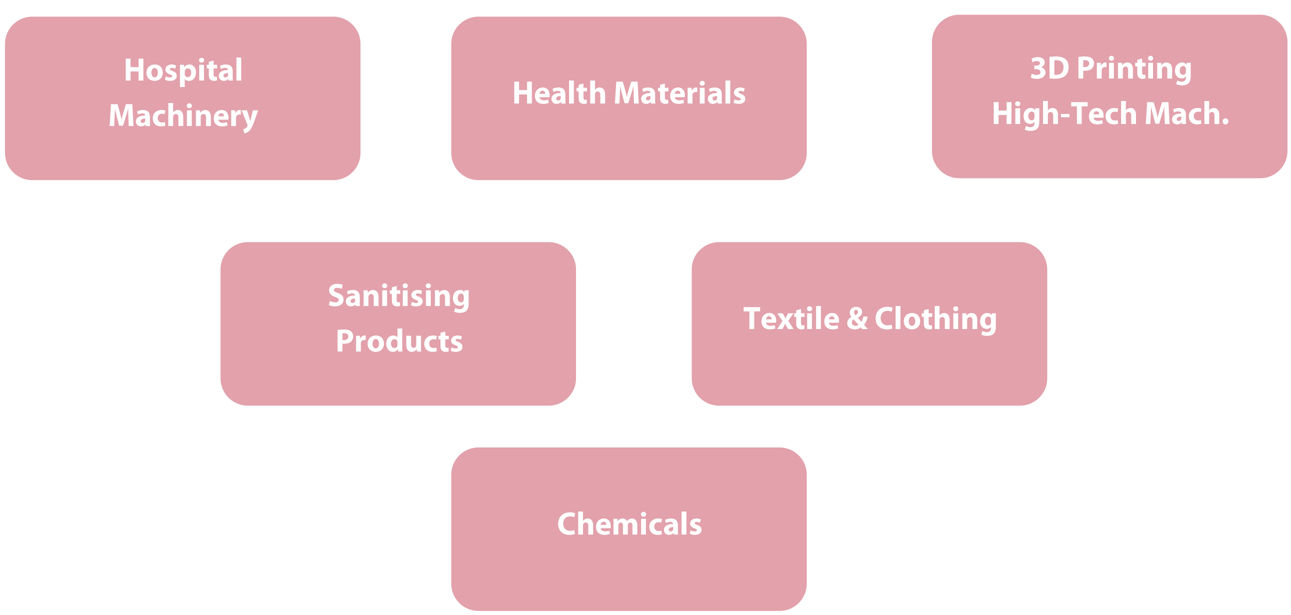
There might be two immediate dimensions to this rethinking:

⇒ Expanding sectoral coverage to fit the needs of the new world

⇒ Transforming the traditional business practices

With the rise of the need for health materials, sanitising products and hospital machinery, the sectors that can switch to the production of these products will invest for expanding their coverage; product mix and know-how pool. We have already seen such new production prioritization in petrochemical sector in Turkey. High-tech machinery with 3D printing abilities, textile and clothing, chemicals are sure also in the same direction.

Meanwhile, as social distancing and hygiene will be more central in our lives, we expect to observe a transformation in certain industries. Big hotel campuses may be rebuilt into apart hotels, all-inclusive hotels may move to a more a la carte concept, while food packaging might change completely. Although this transformation phase may seem of secondary importance at the moment, it is definitely worth giving some thought now for ways of reaping the fruit after the dust settles.



The Road Ahead

Pillars for Effective Financing

To deal with the economic impact of the pandemic, three main pillars should be considered for effective financing: workforce protection, supply chain protection and structural transformation. Each sector needs these pillars in varying proportions to overcome the effects of the crisis.

We conducted an assessment based on the priority for each sector in three pillars. While carrying out our assessment, we determined a data-based method in the first two pillars. The employment share of each sector is considered for the workforce protection aspect. To assess the supply chain protection component, we used cash generating cycle as the working capital need indicator. However, our gradings for structural transformation dimension mainly reflect the common expectations over the change in operational tools of the sector following the pandemic.

We prioritized the sectors amongst each pillar. Although all sectors need to protect the workforce, we have ranked these sectors among themselves. Accordingly, the highest priority in the labor protection component is the manufacturing sector, while the highest priority in terms in supply chain protection is the construction sector. SMEs and mid-caps are considered to have a very high priority in all of the three aspects, as they have difficulty in accessing finance. Providing direct financing to large-scale companies from the value chain perspective is seen as an applicable and important way to alleviate the financing problems of SMEs.

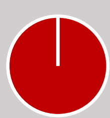
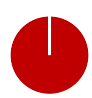
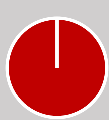
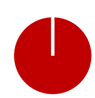
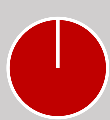
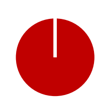
Low Priority 

Medium Priority 

High Priority 

Very High Priority 

Prioritization of Each Sector Among Each Pillar (Grading from Low Priority to Highest Priority)

Pillars	Mid-Caps & Working Capital Need	Manufacturing	Tourism	Construction	Wholesale & Retail Trade
Workforce Protection					
Supply Chain Protection					
Structural Transformation					

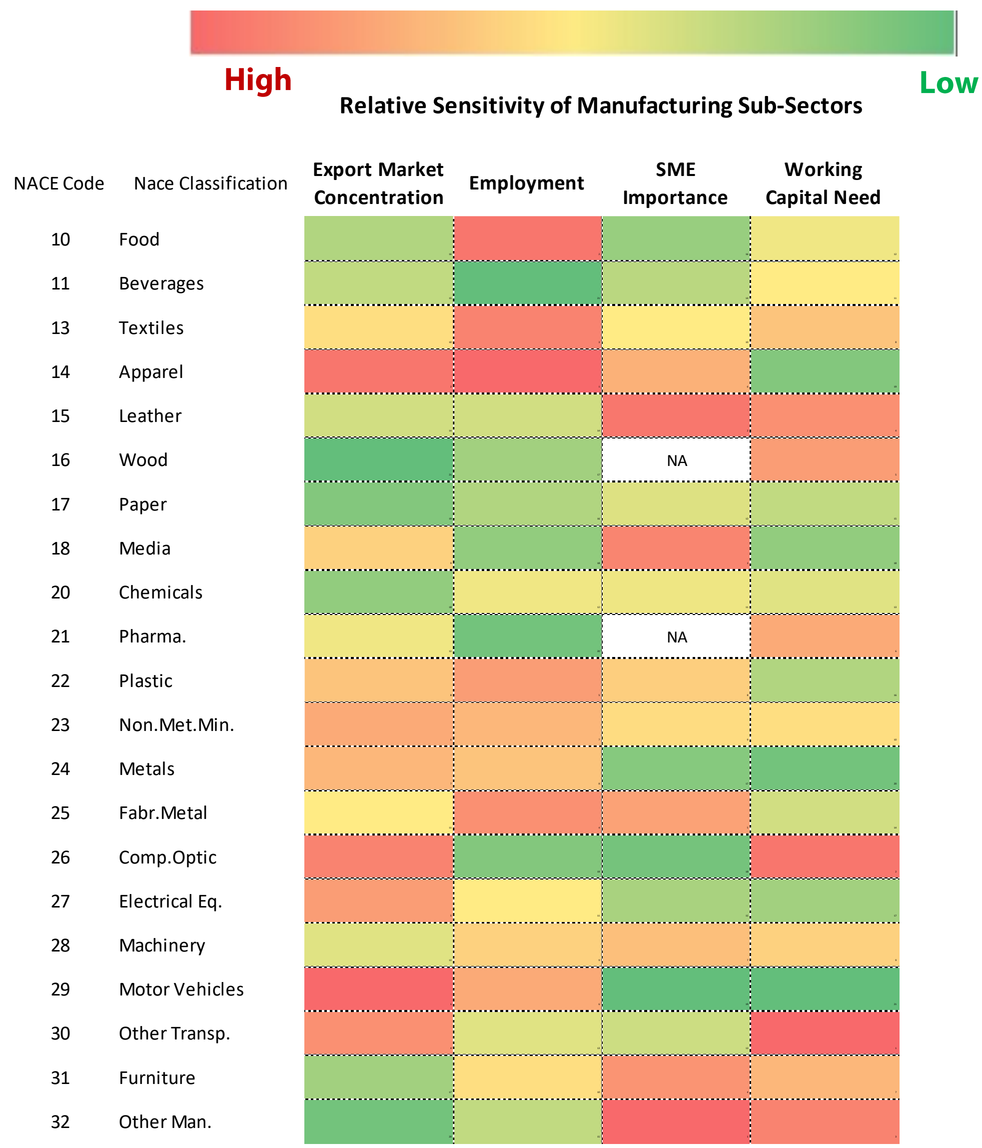
The Road Ahead

Sensitivity of Manufacturing Sub Sectors

We have prepared a heat map regarding the sensitivity of the manufacturing industry sectors using some variables selected in accordance with the framework we have put forward. The map is colored according to the relative position of the sectors in each variable.

We used the Herfindahl index to take into account the risks related to foreign markets in exports. Employment and the SME share is used to identify the importance of each sector for the labour market. The cash conversion cycle is used to determine the need for working capital.

The apparel, textile, non metalic mineral products, fabricated metal products and other transport equipment sectors stand out in terms of these criteria. However, in order to better understand the situation of the sectors, it would be more instructive to perform comparisons on each criterion one by one.



Source: TurkStat, Ministry of Industry and Technology,Social Security Institution, Autor's Own Calculations

Concluding Remarks

Bringing an end to the COVID-19 storm requires a coordinated international response addressing the focal economic, financial and societal issues. The unprecedented loss of economic activity and related job losses demonstrate that flexible financing facilities are a *sine qua non*.

While the push side factors for the financing lines are obvious, it is imperative to discuss and design the pull side factors taking country-specific needs into consideration. Current dedicated financing policies should not be deemed as tools to "save today" but rather means to "build tomorrow".

While the global community takes dedicated steps forward in terms of financing, any failure to direct these resources to the right sectors and the most purposeful goals will be fatal. Such a perspective requires a thorough economic analysis built on the development path in line with the local and global agenda. In aiming to fulfill such a study, our discussion paper suggests designated financing based on

⇒ The urgent needs of Turkey, affected by changing global economic landscape

⇒ Structural planning for a post-COVID world

We believe that financing based on a road map will deliver faster and more fruitful results for each and every economic agent, accelerating the pace of recovery.

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