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IS THE IMPACT OF THE COVID-19 PANDEMIC ON THE TAX ACCRUAL/COLLECTION RATE? EVIDENCE FROM TÜRKİYE

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Article Info

ABSTRACT

DOI: 10.35379/cusosbil.1296949

Article History: Received 14.05.2023 Accepted 18.12.2023 Keywords: Covid-19 Pandemic, Tax Accrual, Tax Collection, Türkiye. The COVID-19 pandemic has had a significant impact on the global economy, including in Türkiye. The tax accrual-collection rate is one area that has been impacted. The purpose of this study is to examine how the COVID-19 pandemic has affected Türkiye's tax accrual-collection rates at the provincial and regional levels. Data will be collected and analyzed to determine the extent to which the COVID-19 outbreak has affected the tax accrual and collection rate in Türkiye, as well as any potential mitigating factors or strategies that have been implemented to address the impact. In the study, accrualcollection rates in the pre-pandemic period and the post-pandemic period were compared at the provincial and regional levels. According to the findings, there have been serious decreases in tax collection in Türkiye after the pandemic process. At the regional level in 2020, the accrual/collection ratio decreased in all regions of Türkiye compared to the prepandemic period. At the provincial level, this rate has decreased in 51 of the 81 provinces. The basis of this decrease in tax revenues was the tax regulations implemented to eliminate the economic disruptions caused by the Covid-19 pandemic.

COVID-19 SALGINININ VERGİ TAHAKKUK/TAHSİL ORANINA ETKİSİ VAR MI? TÜRKIYE'DEN BİR KANIT

Makale Bilgisi

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ÖΖ

COVID-19 salgını, Türkiye dâhil olmak üzere küresel ekonomi üzerinde önemli bir etkiye sahip olmuştur. Salgından etkilenen alanlardan birisi de vergi tahakkuk-tahsilat oranıdır. Buradan hareketle, bu çalışmanın amacı, COVID-19 salgınının Türkiye'nin vergi tahakkuk-tahsilat oranlarını il ve bölge düzeyinde nasıl etkilediğini incelemektir. Veriler, COVID-19 salgınının Türkiye'deki vergi tahakkuk ve tahsilat oranını ne ölçüde etkilediğini ve etkiyi ele almak için uygulanan olası hafifletici faktörleri veya stratejileri belirlemek için toplanacak ve analiz edilecektir. Çalışmada pandemi öncesi ile pandemi sonrası döneme ait tahakkuk-tahsilat oranları il ve bölge bazında karşılaştırılmıştır. Elde edilen bulgulara göre, pandemi süreci sonrası Türkiye'de vergi tahsilatında ciddi düşüşlerin yaşandığı tespit edilmiştir. Bölgesel düzeyde tahakkuk/tahsilat oranı (2020 yılı için) Türkiye'nin tüm bölgelerinde pandemi öncesine göre düşüş gösterirken, İl düzeyinde ise bu oran 81 ilin 51'inde azalmıştır. Vergi gelirlerindeki bu düşüşün temelinde, Covid-19 pandemisinin yol açtığı ekonomik aksaklıkları ortadan kaldırmak için uygulamaya konulan vergi düzenlemelerinin yer aldığını görülmüştür.

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INTRODUCTION

The socioeconomic structures of regions and provinces in Türkiye are quite different from each other. Each region and province have its characteristics that grow and develop its economy. From this point of view, it is seen that the western regions (provinces) of Türkiye are more developed than the eastern regions (provinces). When this difference at the advanced level is considered, when the taxes included in the national tax system are considered, these taxes cover the country, but also include different applications at the rate of regions or provinces within the scope of tax advantages, tax incentives, and tax amnesties. As the tax regulations made specifically for the region/city for different purposes will have an impact on the tax revenue to be obtained, the specific dynamics of the region/city will also affect the tax revenue and its structure. On the other hand, extraordinary situations such as economic crises, natural disasters, and epidemics can significantly affect the tax collection of a region/province.

As of the end of 2019, the "COVID-19" virus pandemic that emerged in Wuhan, the capital of China's Hubei region, was first seen on March 11, 2020, in Türkiye. To eliminate the difficulties faced by taxpayers due to the epidemic, some tax regulations have been introduced. Considering the socioeconomic structures of the regions/provinces along with these tax regulations, it is obvious that there are serious changes in the tax accrual-collection rates of the regions/provinces pre-and post-COVID-19 pandemic. From this point of view, this study aims to reveal the change in tax accrual-collection rates on a regional and provincial basis in the pre- and post-COVID-19 period.

The rest of this paper is structured as follows: Section 2 presents tax adjustments introduced pre-and post-COVID-19 pandemic in Türkiye; Section 3 presents the accrual-collection rate on a regional and provincial basis with the R programming language and Section 4 study concludes with an overall assessment.

A Brief Overview of the Covid-19 Pandemic and Tax Regulations

The COVID-19 pandemic has had a significant impact on the global economy, leading many governments to implement various tax relief measures to support individuals and businesses affected by the crisis. Some of the most common tax relief measures include:

Deferral of tax payments: Many governments have allowed individuals and businesses to defer the payment of their taxes until a later date. This allows people to retain more of their cash flow to help them through the economic downturn caused by the pandemic.

Tax credits and deductions: Governments have also implemented various tax credits and deductions to help individuals and businesses offset the financial impact of the crisis. For example, some governments have introduced deductions for charitable donations, while others have expanded existing credits for things like childcare expenses.

Temporary tax rate reductions: Some governments have temporarily reduced tax rates to provide additional support to individuals and businesses. For example, the US government implemented a temporary payroll tax cut in 2020 to provide a boost to workers' paychecks.

In addition to tax relief measures, many governments have also introduced special tax provisions related to the COVID-19 pandemic, such as allowing businesses to carry back net operating losses to previous tax years or permitting businesses to claim refunds of certain taxes paid in prior years. In this context, the Government of the Republic of Turkey has implemented various measures to support public services, people, and businesses to alleviate the effects of the humanitarian and economic crisis caused by the Covid-19 epidemic. The measures taken focused on supporting employment, reducing costs, and providing cash flow support to businesses. The growing economic challenges for many industries have made these measures even more important. These measures include:

Lowering interest rates, the Central Bank of the Republic of Türkiye (CBRT) reduced interest rates during the COVID-19 pandemic, thereby reducing the credit costs of businesses.

Providing liquidity, the CBRT has also taken a series of liquidity provision measures to increase the lending capacity of banks in the country. In this way, the liquidity problems of the enterprises have decreased.

Delaying taxes and insurance, the Government of Türkiye has taken measures such as delaying taxes and insurance and improving payment conditions to reduce the liquidity problems of businesses.

Reducing labor costs, the government has also taken several measures to reduce the labor costs of businesses.

Credit support, the Government of Türkiye has also taken several credits supports measures to facilitate businesses' access to credit. Among these measures are credit supports especially for small and medium-sized enterprises.

The purpose of these measures is to reduce the effects of the COVID-19 pandemic and maintain the stability of the Turkish economy. The measures taken due to the epidemic in Türkiye were not only limited to the

"Economic Stability Shield" financial incentive package, but also support and aid package announced by different institutions. In this context, the financial measures proposed by the Ministry of Treasury and Finance and the measures included in the Economic Stability Shield package are as follows:

a) Retail Trade and Malls, Iron and Steel and Metal Industry, automotive, logistics transportation, cinematheater, accommodation, food-beverage, textiles-clothing, and events-organization sectors will have their April, May, and June Concise statement, VAT and SGK premiums payments deferred for 6 months.

b) Accommodation tax payments have been deferred until January 2021 in the first version of the incentive package, and subsequently until January 2022 due to the continuation of the pandemic situation.

c) In addition to taxpayers who are currently benefiting from force majeure in terms of tax payments, 1.9 million income taxpayer citizens can benefit from force majeure within the scope of Article 13 of the Tax Procedure Law No. 213 has been recognized. In this way, taxpayers who benefit from force majeure are prevented from being subject to any penal action because they do not fulfill their tax duties until the reason for force majeure disappears.

d) The principal and interest payments for loans to artisans and craftsmen who declare that their business has been negatively affected by Banks will be deferred for 3 months and interest-free for the months of April, May, and June.

e) Fee payment for the right of usufruct and revenue share payments for hotel rentals will be deferred for 6 months for the months of April, May, and June.

f) Support provided to the Credit Guarantee Fund will be increased from TL 25 billion to TL 50 billion. These credits will be prioritized for firms with liquidity needs and collateral gaps that have been negatively affected by developments, as well as for SMEs.

g) According to the decision taken by the Banking Regulation and Supervision of Agency (BDDK), the waiting period before transferring delayed credit payments to follow-up accounts has been extended from 90 to 180 days, and the transfer follow-up period has been extended, to provide flexibility for delays in credit payments.

h) Stock financing support will be provided to exporters to maintain capacity utilization rates during the temporary slowdown in exports.

i) Firms that defaulted in April, May, and June because of Coronavirus will have a "force majeure" note entered in their credit records.

j) Flexible and remote work models will be made more effective.

k) The minimum pension was increased to 1500 TL billion liras of cash state aid was allocated to be given to the needy part of the society.

1) The process for benefiting from the short-term work allowance will be simplified and accelerated.

m) It has been decided to continue the minimum wage support applied by the Ministry of Family, Labor, and Social Services.

n) Make-up work time will be increased from 2 to 4 months.

o) The deadline for filing and paying income tax returns for 2019 has been postponed for 1 month.

p) Value Added Tax declaration and payment deadlines have been postponed.

q) Declaring force majeure for taxpayers has been made easier

r) Due to their circumstances, the tax liabilities of the segments of society who are the addressees of the curfew have been postponed.

s) The delivery periods of Ba and Bs forms, which should be arranged by taxpayers regarding the purchase and sale of goods and services and submitted to the units of the Ministry of Treasury and Finance, have been postponed.

Overall, Türkiye has implemented financial measures to address the economic impact of the COVID-19 pandemic. These measures include reducing interest rates, increasing liquidity, and modifying payment terms for taxes and insurance to ease the financial burden on businesses. Besides, the tax implications of the COVID-19 pandemic are complex and continue to evolve as governments respond to the crisis. Individuals and businesses need to stay informed about the latest tax developments to ensure that they take advantage of all available tax relief measures.

Analysis of Accrual-Collection Rate

According to the tax procedure law (art. 23-24); the tax is accrued, and a tax that is levied and notified comes to a stage where it must be paid. On the other hand, the collection of tax is payable by the law.

The tax accrual/collection rate may vary according to a specific period, and many factors can affect the tax accrual/collection rate. These factors include economic conditions, tax burden, tax evasion, and other issues.

However, there is a likelihood of a decrease in the tax accrual/collection rate due to the economic impact of the COVID-19 pandemic. This decrease may be due to a decrease in tax revenues because of the closure of businesses and the reduction of working hours of employees, which may lead to a decrease in the tax accrual/collection rate. However, to gain a clearer understanding of whether the tax accrual/collection rate has changed due to the impact of the COVID-19 pandemic, it would be more accurate to analyze official data. Based on this, the tax accrual/collection rate for Türkiye will be analyzed below, at both regional and provincial levels.

Analysis of Tax Accrual-Collection Rate on a Regional Level

In this section, the tax accrual-collection rate will be evaluated at the regional level pre-and post-COVID-19 pandemic. It would be wrong to evaluate the pre-covid period using only the data of 2019. For this reason, it would be more accurate to take the 5-year average tax accrual collection rate covering the years 2015-2019. On the other hand, the data for 2020 and 2021 are based on the post-Covid-19 pandemic period. Figures 1 and 2 show the accrual-collection rate for 2020 and 2021, respectively, pre-and post-COVID-19 pandemic. The pre-and post-COVID-19 pandemic periods are represented by the red and blue dots, respectively. The R software program was used to visualize the data.

Tax Accrual/Collection Rate Pre and Post the COVID-19 Pandemic TR, Regional Level

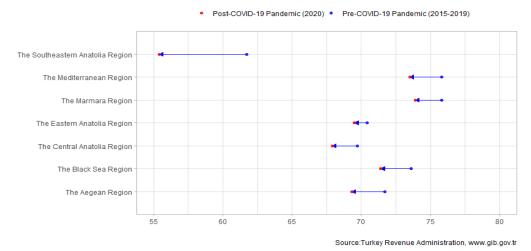
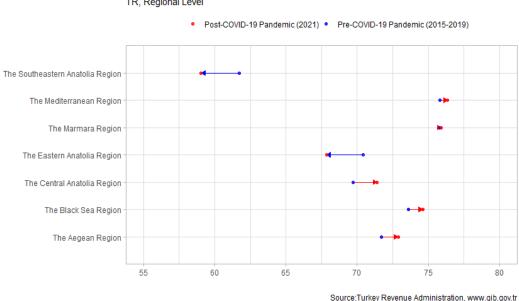


Figure 1. Tax Accrual/Collection Rate Pre and Post the COVID-19 Pandemic (Provincial Level, 2020). (Source: Türkiye Revenue Administration. www.gib.gov.tr.)

As seen in Figure 1, when the pre-and post-COVID-19 pandemic is compared, it is seen that the tax accrualcollection rate decreased in all 7 regions in 2020. While the region with the highest decrease in tax accrualcollection rate was the Southeast Anatolian region, the region with the lowest rate was the Eastern Anatolia region. In addition, it is observed that the tax accrual-collection rate of the Southeast Anatolia region in 2020 is very low compared to the rates in other regions. From this point of view, it reveals the fact that a large part of the calculated taxes could not be collected. Reductions in tax revenue collection occurred in all regions in Türkiye post-COVID-19 pandemic. The COVID-19 pandemic resulted in the closure of workplaces and increased remote work. This contributed to both a decreased tax collection and a low tax accrual-collection ratio due to the high tax accrual. According to the 3rd article of this communiqué, for the taxpayers who have income tax liability in terms of commercial, agricultural and professional income or are directly affected by the epidemic, and for the sectors whose activities are temporarily suspended within the scope of the measures taken by the Ministry of Interior, have been given the right to benefit from the force majeure provisions of the Tax Procedure Law No. 213, covering the dates between 01 April - 30 June 2020 (Official Gazette, 2020). In 2020, these tax regulations resulted in periodic decreases in tax revenues as well as delays in the collection of taxes. As a result, the rate of tax accrualcollection in 2020 was lower than it was prior to pandemic in every region. Besides, when the decrease in the accrual-collection ratio is analyzed in terms of tax types, the collection of income tax has decreased, while the collection of indirect taxes such as VAT (Value Add Tax) and SCT (Special Consumption Tax) has increased

(Ministry of treasury and finance, 2020). It can be said that the reason for this decrease in income tax is the layoffs experienced during the pandemic process. On the other hand, due to the emergency and fear of infection, people's mobility decreased significantly and physical economic activities stopped (Kawaguchi et al., 2022). This situation has led to an increase in online shopping, resulting in an increase in the collection of indirect tax types.. However, because that this increase in some indirect tax revenues was lower than the decrease in income tax collection, the accrual-collection ratio remained low (Güner, 2021).



Tax Accrual/Collection Rate Pre and Post the COVID-19 Pandemic TR, Regional Level

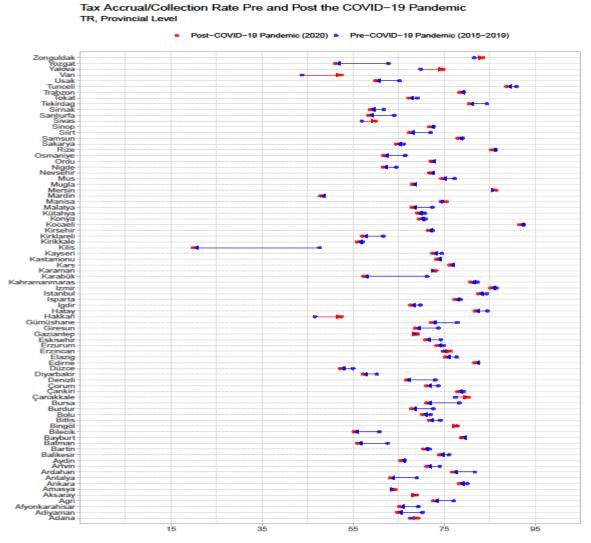
Figure 2. Tax Accrual/Collection Rate Pre and Post the COVID-19 Pandemic (Provincial Level, 2021). (Source: Türkiye Revenue Administration. www.gib.gov.tr.)

Figure 2 shows that only 2 regions in 2021 still have lower tax accrual-collection rates than the pre-COVID-19 pandemic. Southeast Anatolia and East Anatolia are those regions. However, it is seen that the accrual-collection rate in 5 regions is higher than in the period pre-pandemic. In many countries, such as Türkiye, the COVID-19 pandemic has had detrimental economic impacts, which have also had a negative impact on tax revenues. However, as of July 1, 2021, with the start of the normalization period, an increase in tax revenues has been achieved. In general, situations such as the elimination of the restrictions in the pandemic process, the end of tax deferral practices, and the active re-operation of workplaces have increased the amount of tax collection and tax accrual/collection rates have increased.

Analysis of Tax Accrual-Collection Rate on a Province Level

In this section, the accrual/collection rate before and after the covid-19 pandemic is evaluated on a provincial basis. Figure 3 shows the accrual/collection rates in the pre and post-covid-19 pandemic period on a provincial basis for 2020. Looking at Figure 3, it is seen that the tax accrual/collection ratio decreased in 66 of 81 provinces in 2020 compared to the pre-pandemic situation. Among these 66 provinces, the highest decrease occurs in Kilis. On the other hand, while Türkiye's average 2020 accrual/collection rate is approximately 69%, the rate of Kilis province is 19.90%. In other words, unfortunately, about 80% of the taxes accrued in Kilis in 2020 could not be collected. After the province of Kilis, the highest decrease occurred in the provinces of Karabük and Yozgat compared to the pre-pandemic province. In the provinces of Karabük and Yozgat, the approximate accrual/collection rate decreased by 20% in Karabük, while it decreased by 19% in Yozgat. Since the main thing is to pay the tax, the increase in the figures is meaningless without realization, and there is a proportional decrease in tax revenues in real terms (Özcan, 2019). It can be said that this situation is caused by the pandemic process. As a result, with the first case seen in Türkiye on March 11, the restriction of production, especially the

restriction of the circulation of people and goods within the scope of the struggle in the Covid-19 process, caused a slowdown in the economy and subsequently, a decrease in tax revenues occurred. In addition, tax regulations introduced due to the Covid-19 pandemic have also led to reductions in tax collection. The reason for this decrease in Kilis is the distribution of tax revenues in Türkiye from the highest to the lowest as Value Added Tax, Income Tax, Special Consumption Tax, Corporate Tax, and Fees, while in Kilis Income Tax, Fees, Stamp Tax, Motor Vehicles Tax, Value Added Tax. and Corporate Tax (Kutlar, 2020). In fact, in the pre-Pandemic period, the accrual/collection rate of Kilis was not very high and was around 47% on average. One of the reasons why Kilis is different from Türkiye in terms of tax revenue distribution is that the informal economy is high. When this situation coincided with the pandemic process, it caused a dramatic decrease in the accrual/collection ratio. It would be correct to say that the decrease in the accrual/collection ratio in Karabük and Yozgat is only due to the pandemic process, unlike Kilis in 2020. In summary, every step the government will take to reduce these negative effects of the pandemic, the financial incentive package, and all the tax measures has caused a decrease in tax revenues. However, in 2021, this situation started to reverse gradually



Source:Turkey Revenue Administration, www.gib.gov.tr

Figure 3. Tax Accrual/Collection Rate Pre and Post the COVID-19 Pandemic (Regional level, 2020). (Source: Türkiye Revenue Administration. www.gib.gov.tr.).

Figure 4 shows, on a province level for 2021, the accrual/collection rates during the pre and post-Covid-19 pandemic period. Accrual/collection rates in 2021 have mostly increased compared to the pre-pandemic period. This rate is increasing in 51 of the total 81 provinces. On the other hand, the decrease in accrual/collection ratio continued in 31 provinces compared to the pre-pandemic period. The most striking example of this decline belongs to the province of Kars. Because while it had a 76% accrual/collection rate in 2020, it was approximately 21% in 2021. Although the province of Kilis caused an increase in the accrual/collection rate compared to 2020, it still has not reached the level of accrual/collection rate in the pre-pandemic period. However, in 2021, with the gradual decrease of the effects of the covid-19 epidemic, practices such as the removal of restrictions in the pandemic process, the end of tax deferral practices, the active re-opening of workplaces have increased tax revenues and increased tax accrual/collection rates.

On the other hand, the highest accrual/collection rate both pre (average 2015-2019) and post-pandemic (2020 and 2021) was realized in Kocaeli province. While this rate was approximately 92% in the pre-pandemic period, it was approximately 91% after the pandemic. As can be seen, there has not been a great decrease compared to the pre-pandemic period. One of the main reasons for this is the Special Consumption Tax, which is one of the taxes on expenditures. While the Special Consumption Tax has a share of approximately 50% among the taxes in Kocaeli province, the Accrual/Collection ratio in the Special Consumption Tax is approximately 99%. In this context, Kocaeli province has not been affected much by the regulations on taxes from the east during the pandemic process.

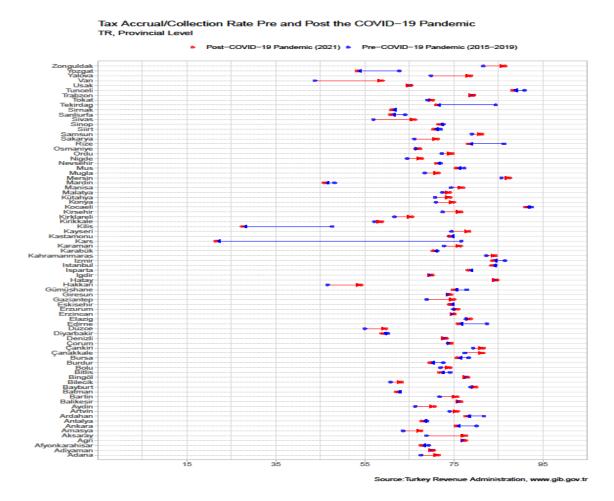


Figure 4. Tax Accrual/Collection Rate Pre and Post the COVID-19 Pandemic (Regional level, 2021). (Source: Türkiye Revenue Administration. <u>www.gib.gov.tr</u>.).

CONCLUSION

The Covid-19 pandemic has negatively affected many countries in the world, including Türkiye, economically. While many of the economic indicators were negatively affected during the pandemic process, tax revenues were also seriously affected. From this point of view, this study aims is to examine how the COVID-19 pandemic affects Türkiye's tax accrual-collection rates at the provincial and regional levels. The study is divided into two parts, before and after covid. In this way, it has been tried to reveal how the tax accrual/collection rate was affected at the provincial and regional level by the epidemic. According to the results obtained from the study, it was determined that tax revenues decreased during the Covid-19 pandemic, and the accrual/collection ratio decreased. At the regional level in 2020, the accrual/collection ratio decreased in 7 regions in Türkiye compared to the prepandemic period. In 2020, at the provincial level, this rate decreased in 51 of the 81 provinces. The pandemic process has been very effective here. Because of the pandemic process, there has been a serious contraction, especially in the tourism, transportation, and entertainment sectors, which has led to a decrease in the salaries of the employees in these sectors and thus a decrease in tax revenues. In addition, the fact that many people were unemployed due to the Covid-19 pandemic also negatively affected tax revenues. This situation was more evident, especially in small and medium-sized enterprises. In addition, due to the Covid-19 pandemic in Türkiye, the financial measures taken within the scope of the "Economic Stability Shield" and the tax regulations implemented by the Ministry of Treasury and Finance also caused reductions in tax revenues.

In summary, there has been a serious decrease in tax revenues during the Covid-19 outbreak. This situation led to an economically difficult period. However, with the management of the epidemic and taking measures, it is seen that tax revenues have started to increase gradually in Türkiye as of 2021. At both the provincial and regional levels, the accrual/collection rate increased compared to the pre-pandemic period with the increase in the tax collection rate.

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