

Mechanisms of Exploitation: Economic and Social Changes in Syria During the Conflict



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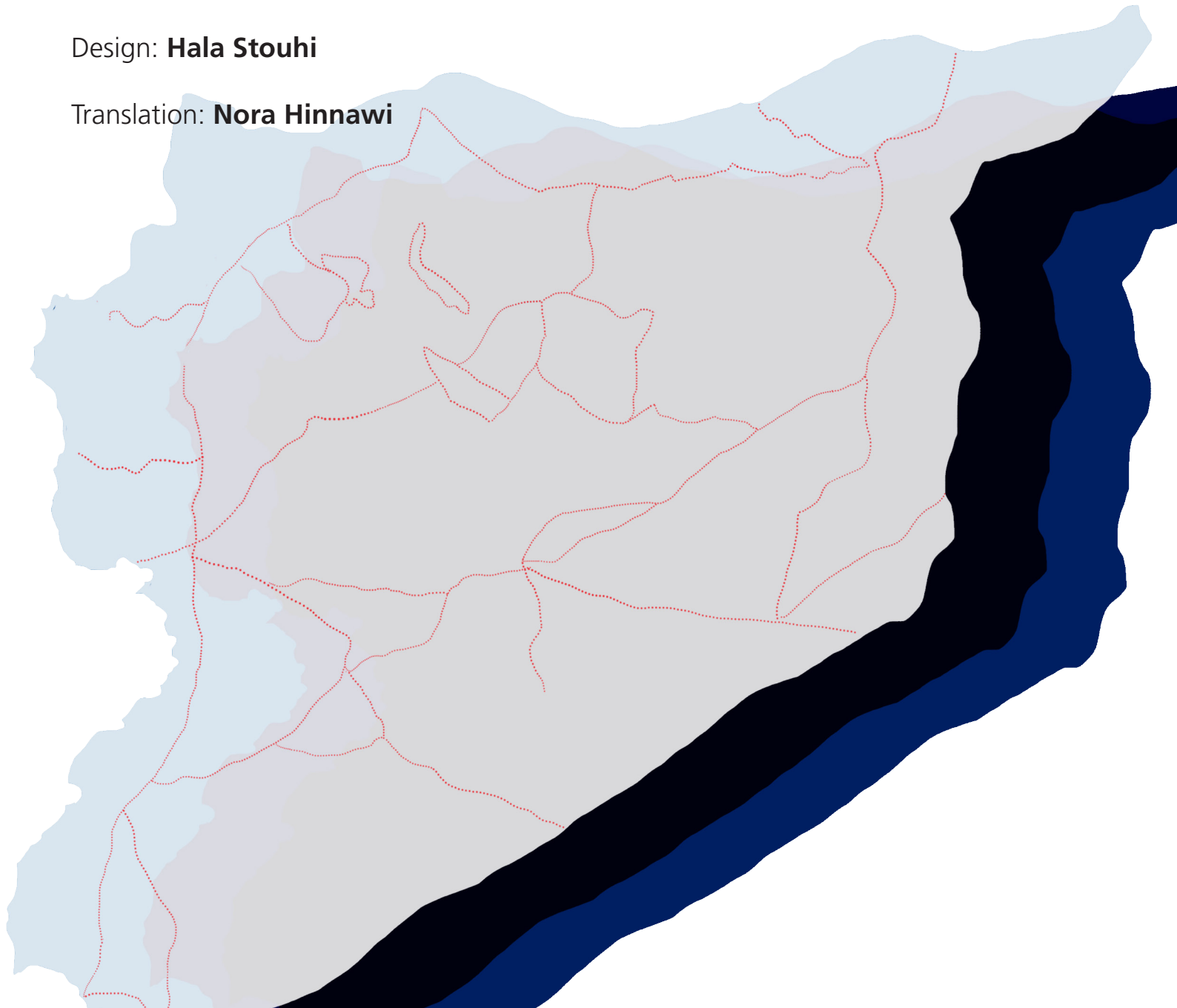
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Executive Summary

The report adopts a comprehensive approach to understanding the economic and social situation and the dynamics in Syria during the conflict by analyzing a number of socio-economic variables at both the macro and micro levels. The macro analysis examines the general situation and the impact of the conflict, while the micro analysis provides a reflection of the total variables on the living situation of families in all Syrian regions, which helps develop an accurate comparative analysis among these regions. The research provides an understanding of the mechanisms of exploitation adopted by the various de facto forces in Syria and links between these mechanisms and the authoritarian nature of these forces. It also focuses on the mechanisms of the authoritarian regime in Syria before the conflict and how they prevailed post-conflict.

Since 1963, the Baathist regime in Syria has worked to create identification between the Baath and state institutions to exploit the country's resources and put them in the service of the party's interests and ideology. However, the party's authoritarianism was gradually replaced by individual authoritarianism with Hafez al-Assad's assumption of power, who continued to invest in populist policies based on anti-Israel and social justice. He implemented open-economy policies that benefited those closely affiliated with his regime, who expanded the process of exploiting the country's resources and citizens under the protection of the dominant security networks based on pre-state loyalties and affiliations.

Upon Bashar al-Assad's assumption of power in 2000, Syrians expected the new president to adopt a different governance methodology that included radical political and economic reforms. Indeed, the first months of his rule witnessed an expansion in the civil society movement, but soon the president returned to adopting the ironclad security approach and arresting dozens of activists. As for the economic aspect, the regime adopted neoliberal decisions that included partial liberalization of the prices of several major commodities and issued laws to encourage private investment. However, this was not accompanied by an increase in the productivity of the Syrian economy, as most private investments went to rentier sectors such as real estate. Thus, wealth was concentrated among the regime's affiliates and relatives, and the mechanisms of exploitation took root with the emergence of people who own major projects in all economic sectors, with protection from and coordination with the security apparatus.

In March 2011, the Syrian regime tried to absorb popular anger through the duality of authoritarian regimes represented by bargaining and violence. It raised the bar for bargaining with society through its apparent approval of some popular demands, but this was accompanied by the intensification of violence, which led to the deterioration of the security situation and the breakout of armed conflicts in all Syrian regions. With the continuation of the conflict, the depletion of available resources and the need to finance security and military services, the regime began implementing new exploitation mechanisms related to the conflict. Most of the de facto authorities in Syria have also resorted to using exploitation mechanisms similar to those used by the regime, with different sizes and tools, which has led to a deterioration in the living conditions of most families in various Syrian regions.

The impact of the conflict on the economic sectors:

The ongoing conflict in Syria has led to the destruction of the infrastructure and the economy's capacity in its agricultural, industrial, and service sectors. It has also changed the methods of governing these sectors in a way that helps divert the bulk of their resources to serve various de facto authorities at the expense of the majority of the population. Despite the relative stability of the security situation in many regions, economic production deteriorated, with growth rates declining in most sectors in 2020 after achieving some gains in 2019.

Agricultural sector:

The Baath Party realized the importance of this sector and sought to build its popular base by promoting policies that achieve justice and prosperity for farmers and adopting agrarian reform decisions. However, with Hafez al-Assad's assumption of power, the Baath Party turned into a tool to subjugate and test the loyalty of the productive forces, especially the farmers, and the authority of the General Union of Peasants took root as a tool for implementing power policies and controlling all agricultural activities. During this period, the authority in Syria sought, by supporting the agricultural sector, to achieve food security and reduce dependence on the outside, in addition to using this support in exchange for farmers' tacit acceptance not to join any real and effective political or union activity. In this context, the Syrian governments have invested in many agricultural infrastructure projects and secured agricultural inputs at subsidized prices. Strategic agricultural crops have also been supported. However, the absence of sustainable agricultural planning has led to many adverse effects on lands, the most important of which is an increase in water deficit and soil salinization.

During the first ten years of Bashar al-Assad's rule, the productivity of the agricultural sector weakened, and its economic contribution declined as a result of many interrelated factors. These included agricultural policies, especially price liberalization and subsidy reduction, the absence of any institutional reform to reduce waste and corruption, weak agricultural technology, climatic conditions and lack of rain, small holdings of agricultural land, and the lack of conformity of agricultural production in Syria to many international standards, which has led to the low competitiveness of the product at the international level. The decline in the productivity of the agricultural sector and the number of workers in it during this period reflects a trend opposite to what was adopted by the ruling Baath Party, especially in its beginnings. It also reflects the change in the dynamics of forces inside Syria, even in its nominal form, in favor of the merchant class and cronies that took over and controlled an important part of the national economy. Thus, when the conflict began in Syria, the agricultural sector witnessed major transformations regarding its role in production and employment, in addition to the gradual withdrawal of the authority from the responsibility to support it in favor of the rentier economy.

The conflict in Syria has destroyed a large part of the infrastructure of the agricultural sector and negatively affected the agricultural production chain. The sector was subjected to labor bleeding, destruction of irrigation networks and water sources, theft and looting of machinery and crops, a sharp drop in the supply of fuel needed for greenhouses and water pumping, and inability to secure the inputs needed for agricultural production such as fertilizers, seeds and medicines, let alone the difficulty of farmers' access to their lands as a result of checkpoints, military operations, assault on agricultural land ownership and politicization of food production. The conflict also exacerbated the agricultural transport sector internally and with neighboring countries, negatively impacting supply and sales chains.

The GDP of the agricultural sector at constant prices in 2000 decreased by more than 30% between 2010 and 2020. The study indicates the gradual decline in agricultural production from 2011 to 2015, which then witnessed a growth of about 10%, driven by the relatively good climatic conditions that year, after which the decline resumed and reached its lowest level in 2018, equivalent to almost half of the output of 2010. The year 2019 witnessed the highest growth rates of agricultural output since the beginning of the conflict, reaching 56% due to the significant increase in plant production, especially wheat and barley. However, estimates for the year 2020 indicate a negative growth of the agricultural sector by 16%, affected by the unfavorable climatic conditions and the sharp collapse of purchasing power in various Syrian regions. Despite the decline in agricultural output, its contribution to the GDP increased from 18% in 2010 to about 33% in 2020. This can be explained by the fact that the decline in the output of other economic sectors was more severe than the decline in agricultural output and thus increased the relative importance of the latter in the overall economy.

Industrial sector:

Since the seventies of the last century, a large investment has been made in the industrial public sector in the desire of the authority to achieve self-sufficiency and implement the import substitution policy. However, this sector has faced many challenges, the most important of which are poor marketing, lack of effective quality control, the presence of a large number of surplus workers, and selling goods, especially petroleum products, at less than their production costs, which tremendously accumulated the losses of public facilities like refineries. This transformed the industrial public sector into a heavy burden on the state budget in the eighties. At the beginning of the nineties, the role of the manufacturing industry in the national economy weakened as a result of the start of oil production in economic quantities and the neglect of private industrial production, with the private sector investing rather in service activities with quick profits. Consequently, between 2000 and 2010, the industrial sector's contribution to the GDP decreased from about 24% to less than 14%, and the manufacturing industry's contribution was relatively shy, reaching about 3% in 2010.

The conflict in Syria since 2011 has destroyed a large part of the industrial facilities and infrastructure necessary for industrial work, including electricity, water, roads, and transportation networks. It has also negatively affected the value chains of industrial production, as the ability of industrialists to obtain production inputs from raw materials, semi-manufactured materials, and industrial machinery has sharply decreased.

Huge industrial facilities were looted and stolen by the various warring parties, industrial capitals fled outside the country, and most of the industrial expertise and labor left Syria. As a result, the manufacturing industry's output decreased by about 43% in 2020 compared to what it was in 2010, bringing the estimated loss to more than ten times the value of the output of the manufacturing industry in 2010. Note that this loss is related to production only and does not include losses resulting from the destruction, looting and theft of capital.

As for the extractive industries, the decline in output began in the second half of 2011 with the exit of foreign companies investing in the oil fields in Syria, and the subsequent years witnessed a collapse in the extractive industry sector as a result of many oil and gas fields being out of service for the production process and the significant increase in sabotage and looting of facilities oil. The estimated value of the output of this industry in 2020 was about 10% of what it was in 2010. The study also assessed the total productive loss of the sector by the end of 2020 at more than 1500 billion Syrian pounds at constant prices for the year 2000, which is about ten times the value of the extractive industry output in 2010. The losses resulting from the destruction, looting and theft of facilities and mechanisms for extracting oil and natural gas were estimated at \$19.3 billion by the end of 2020.

Construction sector:

Since the Baath Party took power in Syria in 1963, the socialist state and its institutions have become the main player in securing housing, distributing land, and building and construction. This approach continued when Hafez al-Assad assumed power, with housing cooperatives given a more significant role and several government agencies related to the construction sector established, the most important of which was the Military Housing Corporation. At that time, the government was unable to cover the demand for construction, especially low-cost housing, which contributed to the growth of slums in urban areas.

With the arrival of Bashar al-Assad to power in 2000, the trend began towards a greater role for the private sector, which launched many housing projects. Still, these projects were limited in coverage and high in value and cost, thus deepening the housing problem in Syria. Nevertheless, the GDP of the building and construction sector witnessed high growth rates between 2001 and 2006 as a result of the significant increase in housing and land prices due to the influx of investments, especially from the Gulf area. Accordingly, the sector's contribution to the GDP doubled but remained relatively low at 4%. The conflict and military actions have greatly affected the productivity of the construction sector, in

addition to destroying a large part of this sector's capital stock due to the direct targeting of fixed assets like residential and commercial buildings in most of the Syrian regions. The sector's GDP decreased by about 45% annually in 2012 and 2013 and continued its decline for four more years. In 2017, positive growth rates were achieved mainly thanks to the start of construction operations in all Syrian regions, especially in its random form. Notably, in 2020, the construction sector achieved growth rates of about 20%, accompanied by relative stability on the internal battle fronts. However, the sector's output did not exceed 35% of what it was in 2010. The governance of the building and construction sector saw looting and exploitation mechanisms, especially in the regime-controlled areas, with the expansion of demolitions in the areas it regained control over. This was associated with the goal of expanding private housing projects and preparing for the legislative framework necessary for the work of real estate investment companies, most of which were owned by the regime's affiliates.

Services sector:

The state in Syria has played the main role in the service sector since the sixties of the last century. However, since Hafez al-Assad took power in Syria, the role of the private sector has increased to become the most influential in the service sector through powerful businessmen. With power transferring to Bashar al-Assad, the private sector's role expanded significantly and noticeably, and policies more inclined towards economic neoliberalism were adopted. This role was evident in the field of mobile communications, in addition to the insurance and banking sector. The sector maintained positive annual growth rates between 2000 and 2010, and its contribution to GDP increased from 42% to about 60%, respectively. The service sector at that time achieved huge profits for a small number of cronies, and the sector's growth was not inclusive in a way that produced sufficient job opportunities. To infer that, the growth of the service sector between 2000 and 2010 more than doubled, while the increase in the number of sector employees did not exceed 30% during the same period.

The armed conflict since 2011 destroyed the infrastructure needed for this sector, not to mention the great destruction of the assets and properties of service institutions. The service business environment was also affected by many factors, including the absence of security and stability, the flight of investments and capital, the migration of qualified people, the collapse and fluctuation of the exchange rate, the sharp contraction in the volume of demand, and the considerable increase in costs due to the lack of energy carriers and the imposition of royalties by the de facto authorities. These authorities also raised the fees and taxes imposed on this sector significantly and geared the sector's gains to serve the military machine and the individual interests of authority members and regime affiliates.

Accordingly, the service sector in all its activities saw negative growth rates, the highest of which was about -35% in 2013. In 2018 and 2019, the sector witnessed positive growth, averaging 1%, but this originally modest growth occurred on a low output and therefore had no tangible impact on the economy. And in 2020, negative growth rates returned to the services sector, with the collapse of the exchange rate, the unavailability of goods and the cessation of the purchasing power of the majority of Syrians.

The impact of the conflict on the financial and monetary sector:

The conflict led to the depletion of the Syrian state's resources, of which the regime had controlled a large part. The infrastructure of the extractive industries was destroyed, and most of the oil fields fell out of the Syrian regime's control, in addition to the loss of the local production structure's ability to continue. This has led to near-absolute dependence on foreign supply, placing significant financial burdens on the Syrian economy now and in the long run. The total trade balance deficit has been estimated at more than 90% of the general budget for 2021. Syria also lost the bulk of its hard currency reserves through using them to stabilize the exchange rate or finance the budget deficit, or as a result of freezing part of them due to sanctions, as it is estimated that 20% of these reserves are not accessible to the Syrian government.

The regime has resorted to a number of mechanisms to increase its financial solvency, maintain its ability to finance its military and security machinery, and secure the minimum number of basic commodities to absorb popular anger and contain dissatisfaction with the living conditions of all Syrians. These mechanisms include reducing public spending, specifically spending on wages, and subsidizing the prices of basic goods and services. As a result, value of the salaries and wages block decreased by about 75% between 2011 and 2021 despite the nominal increase of this block by more than eight times during this period. The value of social support, denominated at the official exchange rate, decreased to more than half between 2012 and 2020, noting that the budget appropriations are not necessarily spent. The regime has also resorted to increasing public tax revenues through using security threats to a number of business owners to pay huge sums of money under the umbrella of recovering the state's right from taxes, relying on profits resulting from the trade in illegal substances, especially drugs, and benefiting from remittances, whether by individuals to their families inside Syria or from international organizations to implement early recovery projects and send humanitarian aid.

Many overlapping factors play a role in the massive rise in the price level in all Syrian regions during the conflict period. The collapse in the production process that affected all economic sectors and the monetary policies practiced by the Central Bank are among the main reasons for the increased pressure on the local currency. The central bank focused on achieving a basic goal, which is to stabilize the exchange rate in the short term, without taking into account the negative impact of its direct interventions in the money market on the overall economy. The absence of the sovereignty of law, the ineffectiveness of monetary institutions, and the significant change in the exchange rate of the Syrian pound have encouraged many people and companies to speculate on the pound and achieve fantastic profits at the expense of the purchasing power of most Syrians. The large deficit in the trade balance and the rise in the external debt contribute to the devaluation of the Syrian pound and the increase in inflationary pressures. The economic sanctions imposed on the Syrian regime, the Lebanese banking crisis since October 2019, and the global consequences of the spread of COVID-19 have deepened the inflationary effects in Syria.

The consumer price index and annual inflation in Syria were estimated until the end of 2021. The results indicate that prices at the end of 2021 increased by about 61 times compared to the price level in 2010. The years 2020 and 2021 witnessed the largest part of this rise. By the end of 2019, prices rose to about 11 times the price the price level in 2010. They continued to reach 37 times by the end of 2020 and 61 times by the end of 2021. This explains the significant rise in the annual inflation rate (from to the same month the following year) from mid-2020 until the beginning of the second quarter of 2021. The continuous and substantial price hike was accompanied by the absence of productive job opportunities in all economic sectors, which led to the collapse of purchasing power and, consequently, the living conditions of most families in Syria, pushing more than 90% of Syrians below the poverty line and more than half of them facing the threat of food poverty. Some de facto forces in north and northwest Syria have tried to disengage from the Syrian pound and use the Turkish lira or sometimes the US dollar, which may provide a little stability in some monetary transactions. However, curbing the rise in prices requires achieving recovery and structural reform in all sectors of the productive economy.

The demographic impact of the conflict:

The conflict caused drastic changes in the country's demographic map as a result of several factors, including asylum, migration, displacement, and high mortality, in addition to changes in fertility rates in some areas. The significant decrease in the population compared to what it would have been without the conflict is an irreparable loss of human capital inside Syria. It is estimated that until 2020, the population inside Syria had reached about 20.5 million, while the number could have reached 29.7 million if the conflict had not broken out, meaning that the country has lost the capabilities of about 9.2 million Syrians. The conflict also led to a significant increase in death rates, reaching a maximum of 10.8 per thousand in 2014. However, those rates have declined in recent years, reaching about 7 per thousand, meaning 60% higher than the crude death rate before the conflict. As for the fertility

and crude birth rates, they differ sharply between regions and according to the living and security conditions, but both have likely decreased during the conflict period.

The conflict has led to millions of Syrians leaving their places of residence for other areas inside or outside Syria. Data from the United Nations High Commissioner for Refugees indicate that the number of Syrians registered as refugees and asylum seekers reached 6.8 million in 2021, about 85% of whom are in neighboring countries. The situation in various Syrian regions does not encourage Syrian refugees to return to their areas, as UNHCR data recorded the return of about 38,000 refugees to Syria in 2020, bringing this number down to 18,000 in 2021. Refugees face many obstacles that prevent them from returning, among which are primarily security concerns, the lack of a home to return to as a result of destruction, confiscation, or lack of sufficient ownership documents, fear of being dragged to military service for young males, and the deterioration of economic and living conditions. As for displacement, the total number of displaced people among the various Syrian regions reached about 6.7 million people at the beginning of 2021, and the year 2020 only witnessed the displacement and return movement of about 1.8 million, of whom 440,000 returned to their region. The governorates of Aleppo and Idlib are among the areas that have witnessed the biggest internal population movement.

The estimated number of Syrians at home and abroad at the beginning of 2020 was about 28.7 million, 52% of whom left their original place of residence to become displaced, refugees or immigrants. Within a very short period of time, this violent population movement has radically changed the demographic reality in Syria, whether in terms of gender and age distribution or ethnic and sectarian distribution. The ratio of females to males has increased in most regions. Syria has lost many of its youth either because of the armed conflict and all related arrests and enforced disappearances or because of migration and asylum seeking. Estimates indicate a decrease in the percentage of young people between 15 and 39 years to the total population by about five percentage points during the conflict period. All de facto authorities have invested in politicizing identities and linking individuals' affiliation to their sectarian and ethnic backgrounds. Demographic change is one of the outcomes of this investment, which has increased the collapse of social capital at the level of Syria and deepened differences between regions. Furthermore, many indications show the intervention of external countries such as Iran and Turkey to influence the redrawing of the demographic and sectarian map in Syria to serve their interests.

Impact of the conflict on education:

From the time the Baath Party took power in Syria up until 2010, the educational sector in Syria had witnessed many things that positively affected the quantitative education indicators in the country. Among these were compulsory and free basic education, high rates of enrollment in basic education, a significant increase in the number of schools and educational staff, a remarkable rise in female education rates, especially university education, and a decrease in illiteracy rates. However, this was accompanied by many negative matters, the most important of which was the transformation of education into an ideological tool through the party's direct intervention in formulating the objectives and vocabulary of the educational process for all stages. This eliminated the student's free-thinking space and led to the formation of an educated yet domesticated generation with a single cultural understanding used by the authority to stay in power. In addition to such low effectiveness and low quality of education, Syria ranked No. 100 in the world in 2010 for producing research papers and refereed papers. This reflected the weakness of the institutions responsible for knowledge production and the formality of modernization in these institutions, such as the introduction of informatics in some curricula.

The conflict led to massive destruction of the infrastructure of schools, institutes, and universities and adversely affected the availability of teaching staff and the ability of students to enroll in education. The conflict also transformed educational curricula into a tool used by various de facto forces in all Syrian regions to cement divisions and promote violence and hatred of the different other. As a result, the number of basic education schools in Syria decreased to less than 9 thousand schools in 2020 after the number exceeded 17 thousand schools in 2010. In areas not under the regime's control, the average percentage of out-of-

service schools reached about 15%. Warplanes caused the destruction of 43% of the destroyed schools, wholly or partially. The schools affiliated with non-governmental organizations and bodies constituted more than 20% of the total schools in these areas. The education sector also witnessed a significant decrease in the qualified teaching staff as a result of asylum, immigration, arrest or enforced disappearance, from about 221,000 teachers in 2010 to less than 150 thousand teachers in 2020, a drop of 32%. The various de facto authorities have promoted their own curricula and adopted certain teaching methods as a means to impose their ideology, which is often directed against other Syrians. This affects social cohesion and civil peace now and in the long run and creates varying levels of knowledge and culture for students. The revised curricula in the areas of the Salvation Government or the Interim Government were devoid of any inclusion of the human values on which the Syrian revolution was based, including equality, justice, transparency and citizenship. Moreover, because of the support provided by the Turkish side, the Turkish language was introduced as a basic official language within the revised curriculum, and more Islamic subjects were added. As for the areas of the Autonomous Administration, a special curriculum has been imposed in 38% of the schools operating there, including the introduction of the Kurdish language and a focus on glorifying Kurdish leaders and their achievements. As for the regime-controlled areas, the curricula have been modified and “developed”, and explanations about the causes of the conflict have been introduced, stating that what happened in Syria was nothing but terrorism and a conspiracy carried out by Syrian “agents” at home. In addition, Iran and Russia’s cultural and educational influence has increased in these regions.

Impact of conflict on health:

Before the conflict, free health services in Syria were considered part of the social contract between society and the regime, in which the latter guaranteed the availability of basic goods and services for all and, in return, prevented any form of participation in political life. However, this prompted health policies to focus on the quantitative aspect and neglect the qualitative aspect of health services provided by the public and private sectors. The number of hospitals in Syria increased from 390 in 2000 to 493 in 2010, most of which were private hospitals. This rise was accompanied by a decrease in the average number of people per bed in hospitals across Syria. However, the expansion in the number of hospitals and health services did not take into account the geographical distribution of these services according to the population. In general, many health indicators witnessed improvement between 1970 and 2010, but this was accompanied by significant challenges and obstacles, including the absence of adequate health insurance, the insufficiency of qualified medical personnel, especially in the public sector, and the need to pay attention to the lack of transparency about health indicators.

The conflict led to the destruction of a large part of health facilities in all Syrian regions, as the data indicate partial or complete destruction that affected about 40% of hospitals and 45% of health units in Syria by the end of 2020. The air raids carried out by the Syrian regime and its allies caused the largest part of the destruction in health facilities, and therefore facilities in areas outside the regime’s control were the most affected. In total, about six thousand attacks were monitored on 350 medical facilities; more than 90% of these attacks were committed by the Syrian regime. Even health facilities that were not destroyed as a result of military operations have suffered and still suffer from tremendous pressure on their services as a result of the internal displacement movement. They have also suffered from the loss of many medical materials and equipment, which is partly due to the sanctions imposed on the Syrian regime. Furthermore, the health sector has witnessed a significant decrease in medical personnel because of several factors, including arrest and murder, whether under torture or as a result of targeting their medical institutions. The mass exodus from Syria is a major factor in the loss of medical skills and expertise. It is estimated that about 70% of health sector workers have left the country, which led to a significant decrease in the ratio of doctors to the population, resulting in one doctor for every ten thousand people inside Syria.

It is also estimated that there are about a million and a half casualties due to the war in Syria, many of whom suffer from difficulty accessing the necessary medical services. This lack of accessibility for Syrian families is not only limited to physical access but also obtaining appropriate health services. This is due to their low income compared to the significant increase in the costs of treatment, diagnosis, medicine, tests, and medical photos. The spread of the Coronavirus has also exacerbated the fragility of the health system and further limited the ability of patients to access health facilities. This was accompanied by a significant deterioration in the quality of medical services, which sometimes turned into a tool for various de facto authorities to punish those who disagreed with them. These challenges have prompted many patients to refrain from medication or only buy medicine when necessary without prescriptions, which has added to the collapse of the health system and the deterioration in health awareness among members of society.

The impact of the conflict at the Syrian family level:

The micro analysis of the economic and social situation in Syria in this study was based on a household survey of a representative sample that included six Syrian cities that reflected the main de facto forces in the country. These cities are Damascus, Aleppo (located in the areas under the Syrian regime), Qamishli, Raqqa (mainly under the Autonomous Administration), the city of Azaz (administratively controlled by the Interim Government), and the city of Idlib (under Hay'at Tahrir al-Sham). Analysis of the survey results showed the following:

- * 40.4% of the total houses in the six cities had one or more people who left the country during the conflict period, and the percentage of males out of the total number of departures was 68%, the highest rate in Azaz city reaching 50.2% and the lowest in Idlib city with 28.4%. The rates in Qamishli and Aleppo approached the highest value, i.e., about half of the families, while it decreased in Damascus to around 36% and in Raqqa to about 31%. The relative decline in the cities of Idlib and Raqqa can be explained by what was previously mentioned, that it might be that a large part of the families left these two cities in their entirety and therefore was not included in the percentage.
- * The average rate of males in the studied cities was 48.4%, the lowest was in Idlib at 46.2%, and the highest was in Azaz at 50.3%, which is considered low compared to the gender composition in Syria before the conflict. As for the age structure, the societies in the studied cities were still young societies, but the conflict contributed to the decrease in the percentage of young people between 15 and 34 years on average in the six cities to 36%, compared to 46.5% in 2010.
- * The average illiteracy rate in these cities was 5.1% of the total population (15 years and over), but this percentage varied between cities, reaching 9.7% in the city of Raqqa and decreasing in the city of Damascus to 2.4%, mainly due to the accumulation of the educational process in a certain period before the conflict. Furthermore, there were significant differences in the educational level according to gender, as 78.7% of the illiterate in the studied areas were female, reaching 85.4% in the city of Aleppo.
- * The non-enrollment or drop-out rates in the six cities reached about 8% for children between 7 and 12 years old and more than 17% for adolescents between 13 and 15 years old. These rates are considered relatively low in the context of the Syrian conflict; this may be due to a sort of security stability witnessed in these areas, in addition to targeting the main cities in urban areas with this survey, which usually have low rates of non-enrollment.
- * 57% of families in the city of Damascus believed that the education provided by schools to their children was good enough, and less than 4% considered it bad in terms of quality. However, the situation was different in the city of Aleppo, which is also under the authority of the regime, as about 20% of families in that city considered the quality of Education poor, while the percentage of those who considered it good did not exceed 30%.

- * More than half of the families that send their children to schools in the city of Azaz considered the education to be good, while about 18% described the level of educational services in the city as bad. In Idlib, most families thought that the quality of education was acceptable in the current circumstances, and the percentage of families who thought it was bad dropped to 6%. On the other hand, in the Autonomous Administration areas, the rate of families dissatisfied with the quality of education provided by the region's schools increased, reaching an average of 25% between Raqqa and Qamishli.
- * The results of the survey reflected a considerable gap between males and females in terms of participation rates in the labor market, where the male participation rate ranged between 76% in Idlib and 83% in Azaz, while these rates among females dropped to the lowest value in the city of Idlib at 22% and the highest in the city of Qamishli at about 46%. The results also showed that more than 45% of women did not participate in the labor market because they were devoted to domestic work. As for males, 43% of those not in the labor market have returned to their studies.
- * The survey showed that 59% of females aged 12 years and over in the studied cities spent four hours or more on housework per day. This rate rises to reach 82% of those who spent at least two hours on this work. For males, 35% of those aged 12 years and over did not participate at all in household chores, and 23% of them contributed less than an hour a day to these chores, including childcare.
- * 52% of families in the cities of Aleppo and Damascus had at least one of their working members paying money and royalties to facilitate their work. This rate reached 58% in the city of Aleppo. In the Autonomous Administration areas, it dropped to about 35%, on average, between the cities of Raqqa and Qamishli. As for Azaz, this percentage was recorded at 18%, decreasing significantly in Idlib city to 6%.
- * The data showed that most families in all studied cities suffered from the lack of at least one major good or service. The availability and quality of services and main goods were not only related to the nature of the ruling authority in the city, but they were also affected by many factors, including the state of service before the conflict, the destruction caused by military operations, and the lack of the ability to renew and repair infrastructure. However, the data indicated that the regime-controlled areas with their high population density suffered from a greater deterioration in the availability of basic goods and services such as fuel and electricity, and this deterioration appeared clearly in the city of Aleppo.
- * In terms of living conditions, half of the residents of Qamishli considered their condition to be "middle" and below. This percentage rose in the city of Raqqa, which is also subject to the influence of the Autonomous Administration, reaching 63% of the city's total population. In the regime's areas of influence, it reached about 65% in Aleppo and 51% in Damascus. As for the areas under other forces' influence, it reached 58% in the city of Azaz and 68% in Idlib, which was considered the relatively worst rate in terms of the living conditions index. This can be partly explained by the destruction caused by the military operations and the instability of the security situation in Idlib and its surrounding areas.
- * The results indicated that the percentage of families who considered that corruption greatly affected their living conditions reached more than 70% in these areas, and the rate was highest in Damascus at 81% of families. Data showed that this phenomenon was widespread, albeit to a lesser degree, in all other regions, as this rate reached about 57% in the Autonomous Administration areas and dropped to around 50% in Idlib and Azaz.
- * The rate of families who believed that the inefficiency and ineffectiveness of the governing institutions greatly affected their living conditions in the regime-controlled areas was 61% of the total households and exceeded 75% in Damascus. In comparison, in the Autonomous

Administration areas, it averaged about 57%, slightly decreasing in Azaz to 56% and reaching 46% in Idlib city. These rates reflected the widening gap of mistrust between the population in the studied cities and the governing institutions in terms of the latter's ability to secure the minimum requirements for living.

- * The data indicated that about 60% of families in the regime's areas of influence believed that the sanctions negatively and significantly affected their living conditions. This percentage reached nearly 50% in the Autonomous Administration areas, which can be explained by the dependence of the economy of these regions on trade with the regime's regions, in addition to the role of sanctions in impeding dealing with the outside world and preventing effective and sustainable oil investment. This rate dropped significantly in Idlib to less than 25% to reach 5% in Azaz, as most families considered that the sanctions were directed primarily against the Syrian regime, which had no authority over them.
- * The sovereignty of law, according to the assessment of most families, was not applied in all regions, as more than 85% of families in the six cities believed that decisions and laws did not apply to everyone. This rate ranged between 95.8% in Idlib city and 70.7% in Raqqa city. It averaged more than 90% in the regime's areas of influence and approached 80% in the Autonomous Administration areas, while reaching 79.3% in Azaz.
- * Most of the families in the six studied cities believed that their ability to participate in decision-making processes was non-existent or almost non-existent, as 82% of the total families included in the survey indicated that they could not participate in the decision-making process or that they rarely participated in some decisions at the local level. This rate was highest in Idlib at 97.3% and converged between the regime areas and the of the Autonomous Administration areas to reach about 80%, while in the city of Azaz, it reached 78%.
- * About 90% of families in these cities considered themselves unable to hold the authorities accountable, with rare exceptions regarding some local decisions. This rate ranged between 81% in Damascus and 98% in Idlib, while it averaged about 92% in the Autonomous Administration areas and 87% in the city of Azaz.
- * More than half of the families in the six studied cities trusted cooperation with a member of their area, and this rate ranged between 71.2% in Damascus and 40.6% in Aleppo. This may indicate that the form and nature of the governing forces did not directly affect the level of societal trust, as the two cities were under the regime's control. In the Autonomous Administration areas, this rate reached 45%, compared to 64.5% and 41.6% in the cities of Azaz and Idlib, respectively.
- * About half of the families included in the questionnaire from the six cities considered women's economic and social participation weak or very weak. This percentage ranged between 71% in Idlib and 30% in Raqqa. The average participation rate in the Autonomous Administration areas was about 34%, which was the lowest among the different areas of influence, as this rate reached 47% in the regime areas and 58% in the city of Azaz.

Policy recommendations:

Overcoming the catastrophic situation and the structural, economic, social and institutional imbalances in all Syrian regions requires long-term coordination and cooperation between a number of actors, including civil activists in local communities, Syrian expatriates, and international bodies and institutions supporting human rights. Cooperation between actors can take place according to two interrelated tracks. The first is at the institutional level and aims to gradually change governance mechanisms in all regions and disrupt mechanisms for exploiting de facto forces for the population. It includes the following proposals:

- * Supporting a greater role for civil society in public policy-making mechanisms and pushing for a free and safe space for it.
- * Linking development support provided by Western countries to de facto powers with the institutional reform process.
- * Taking measures that protect local communities from the adverse effects of sanctions, with the need for the international community to continue contributing to disrupting exploitation mechanisms by imposing effective sanctions on warlords and conflict beneficiaries.
- * Designing international support based on priorities set by Syrians in a participatory manner that takes into account the interests of all without discrimination.
- * Distinguishing between regime institutions and state institutions and working to communicate with experts and professionals in regime-controlled areas.
- * Reducing dependence on traditional institutions to reach local communities and replacing them with civic institutions and initiatives based on participation, transparency and non-discrimination.
- * Coordinating donor and international efforts to support Syrian refugees, depoliticize their cause and empower them economically
- * Documenting human rights violations by all parties to the conflict in a professional, non-politicized manner, in addition to documenting the rights of Syrians to land, housing and property.

As for the second track, it seeks to support productive economic activities, thus improving the standard of living of families and alleviating the state of deprivation they suffer from. Among the proposals in this context are:

- * Providing technical support to bodies responsible for economic governance in areas where US sanctions have been lifted.
- * Developing the financial and banking sector in these areas and seeking to network and coordinate with international expertise in order to attract foreign capital to invest in the banking sector.
- * Supporting alternative energy projects, especially solar energy, by investors and actors interested in the Syrian issue.
- * Supporting the education sector in coordination with civil society initiatives, organizations, and relevant local bodies.
- * Facilitating the arrival of medicines, supplies and medical devices, developing the current medical cadres, and providing them with the necessary technical and financial support to help them stay in all Syrian regions.
- * Achieving sustainable food security based on local and imported agricultural/food production.
- * Providing financial and technical support by local and international organizations to implement small and micro projects in all Syrian regions.
- * Strengthening the oversight role of civil society initiatives and organizations on market work mechanisms in order to monitor cases of exploitation, monopoly, nepotism, corruption and fraud, and highlight them and push for accountability for perpetrators.

Introduction

In March 2011, Syrians came out to protest the state of political, economic and social exclusion practiced by the Syrian regime. This demand was met with extreme violence by the regime. This laid the foundations for armed violence, external interventions, and entering the tunnel of the power struggle that has been going on for more than a decade, during which various de facto forces took control of different regions in Syria. These forces have developed exploitation mechanisms through which they exercise the process of transforming economic resources, which were already compromised as a result of the conflict and harnessing traditional social structures to serve their goals and achieve the sustainability of their authority at the expense of the interests of the majority of Syrians. Overcoming the catastrophic effects of this conflict requires understanding the current situation of Syrians in various regions through monitoring and analyzing economic and social changes, in addition to analyzing the mechanisms of economic and social exploitation practiced by the various de facto forces. This research attempts to build on the understanding of these changes and mechanisms to reach policy and practical proposals that help Syrians not adapt to the current situation but rather change it in line with their aspirations to achieve inclusive development in various Syrian regions.

The research is divided into two main sections, the first analyzing the economic and social situation at the macro level in the various Syrian regions and the second analyzing the living situation at the level of the Syrian family by surveying a representative sample of six cities under different de facto authorities. The macro analysis includes studying the reality of Syria's economic, financial and monetary sectors before 2011, how the conflict affected them, and an understanding of the demographic, educational and health dynamics before and during the conflict. The results of the research indicated a sharp decline in agricultural, industrial and service output as a result of the destruction of the economic infrastructure and acts of looting by all armed groups. Other reasons included warlords and de facto authorities controlling the economic dynamics in various regions with the complete absence of the sovereignty of law and the spread of nepotism and corruption. Also, relying almost entirely on foreign markets to secure the inputs of economic production and basic commodities played a significant role, which led to the loss of the country's economic sovereignty.

The report highlighted the depletion of the financial resources of the de facto forces and their financial dependence on non-stimulating sources of production such as illegal activities, reduction of actual subsidies on goods and services, increased fees and taxes, financial extortion of merchants, and the dependence on external transfers from expatriates and support of allies. This was accompanied by the collapse of the Syrian pound exchange rate and the Syrians' shrinking purchasing power, in addition to the lack of basic goods and services. Furthermore, the labor market has been affected by many distortions, including the emigration of qualified cadres, the exploitation of workers by employers, especially women, and the almost lack of decent job opportunities in the productive sectors, in addition to the revival of criminal and conflict-related activities.

The Syrians continue to be dispersed among displaced and refugees. Most of them suffer from difficult economic and living conditions, in addition to the exploitation of their situation by internal and external forces to achieve political and economic gains, sometimes pushing them to bring about demographic changes in some areas inside Syria to serve the interests of these forces. Despite the relative security and military stability since 2019, the health and education sectors are still in a state of deterioration in terms of quantity and quality, with the various forces politicizing these sectors and using them to enhance loyalty to the authority. The results also indicated the development of the relationship between the de facto forces in Syria and the sectarian, tribal and regional institutions, which strengthened the status of these institutions and led to a further deterioration in social capital at the national level and a decline in the already weak role of women in contributing to public decision-making.

The study data indicated a significant expansion of the role of civil society initiatives and organizations

in providing economic and social support to local communities, but this role has often remained limited by the available resources and the workspace allowed by the existing authorities. The results of the study did not show that any of the de facto forces in Syria sought to establish a participatory and inclusive regime. On the contrary, all signs indicated that these forces copied the mechanisms of tyranny and exclusion from the Syrian regime and exploited the available resources to consolidate their authority at the expense of the interests of the majority of members of society.

In addition to the executive summary, introduction, and research methodology, the report falls into four main sections. The first section deals with understanding the mechanisms of exploitation in the Syrian context. The second section examines the overall analysis of the impact of the conflict on the economic, financial and monetary sectors, in addition to its impact on the demographic characteristics in Syria and the effectiveness of the health and education sectors. The third section includes a study of the living situation of the Syrian family and how the conflict affects this situation in terms of education, the relationship with the labor market, income, consumption and social relations, in addition to the relationship between individuals and the governing institutions. The report concludes with the fourth section on policy recommendations and proposals based on the results of the study, which can contribute to overcoming the effects of the conflict in Syria and establishing a state based on the principles of freedom, justice and equality.

Research Methodology

This report adopts a comprehensive approach to understanding the economic and social situation and dynamics in Syria during the conflict, by analyzing a number of socio-economic variables at both the macro and micro levels. The macro analysis identifies and analyzes the situation in Syria on a large scale and the extent of the conflict's impact in this context. The micro analysis provides a reflection of the total variables of the living situation of families in different regions — allowing for an accurate comparative analysis between these regions. The research seeks to understand the mechanisms of exploitation adopted by the various de facto forces and links between these mechanisms and the authoritarian nature of the controlling forces on the ground, with a focus on the mechanisms of the authoritarian regime in Syria before the conflict and how it took hold after the conflict. This integrated analysis between the macro and the micro, with its link to the mechanisms of exploitation, contributes to providing practical policy recommendations that take into account the general context but also focus on the specificity of the different regions.

The report focuses on the entire Syrian territory in its research, highlighting the differences and discrepancies among the areas of control of the various de facto forces. The report identified four main forces: (1) the Syrian regime, which currently controls the largest area of the country, (2) the Autonomous Administration of North Eastern Syrian (AANES), which is located in the northeast regions and includes large parts of Hasaka, Raqqa and Deir Ezzor, in addition to a few areas in the northern countryside of Aleppo, (3) the Hay'at Tahrir al-Sham (HTS), which controls a large part of Idlib Governorate, including Idlib city, and lastly, (4) the Syrian Interim Government (SIG), which controls areas in northern Aleppo and some parts of Hasaka and Raqqa. In this report, the analysis of some economic and social sectors was more focused on the regime-controlled areas due to several factors, the most important of which was that regime-held areas included the largest segment of the Syrian population, the availability of economic and social data allowed for analysis of changes during the years of research, and the State monetary and financial institutions were mostly located in regime-held areas, such as the Central Bank of Syria. The macro analysis in this report covers the exploitation mechanisms adopted by the various de facto forces that include economic sectors, such as agriculture, industry, services, building and construction, and the financial sector, with a focus on public revenues, expenditures, and the monetary sector — specifically prices and inflation, the demographic situation, including asylum and displacement, and the education and health sectors. First, the report provides an overview of each sector during the pre-conflict period, with a focus on the time from 2001 to 2010. It then moves on to analyzing the impact of the conflict on the specific sector while addressing the mechanisms of exploitation in this sector. The research also includes an analysis of cross-sectoral dimensions such as work, discrimination against women, some indicators of poverty and deprivation, and the impact of sanctions.

The report uses secondary data, information from previous reports or official statements, and data and information from informal interviews with experts from each studied sector. The overall analysis covers the conflict period until the end of 2020 with a quick reference to the year 2021 because of the rapidly changing indicators in Syria, such as prices and inflation. For sources and citations, the research relies on international organizations, official bodies and research centers.

The economic output for the year 2020 was estimated, and some figures for the previous years' output were adjusted based on official statements about productivity indicators, in addition to informal interviews with sectoral experts. For example, the agricultural output for the years between 2012 and 2019 and the estimate of the output for 2020 were adjusted based on official statements by officials from various de facto authorities about major crops production and livestock production. The accuracy and realism of these amendments were discussed through informal interviews with experts and workers in the agricultural sector within the studied areas. Regarding prices and inflation, the researchers relied in their estimation of these indicators for the years 2019, 2020 and 2021 on the model of the relationship between exchange rates and the consumer price index between 2012 and 2018.

The micro analysis of the economic and social situation in Syria for this study was based on a household survey conducted in six Syrian cities that represented the dynamics of the main de facto forces in the country. These cities were Damascus and Aleppo, located in the regime-held territory, Qamishli and Raqqa, which are mainly under the control of the AANES, the city of Azaz, which is administratively controlled by the SIG, and the city of Idlib, which is under the influence of Hay'at Tahrir al-Sham. The sample of the survey included 2314 households distributed in six cities, with a confidence level of 95% and a margin of error of 5%.

The research used the questionnaire as the main tool for obtaining micro-analysis inputs. The questionnaire included 64 questions covering a large number of indicators of social and family functioning, including living conditions that include housing quality, assets, availability of services needed by families and their access to them, and coping strategies adopted by the family to deal with the shortage of basic services and commodities such as fuel, electricity and drinking water. The questionnaire also included questions about families' education, health status, quality of services provided in these two sectors, family income sources and consumption habits, social cohesion and conflict resolution mechanisms, and the role of women in the family and society. These indicators were analyzed based on family functionality, the city and the area of influence; some other indicators were analyzed according to gender, age, number of family members, work status and education level of the head of household.

An "Enumerator's Guide" was prepared and shared with all field enumerators to provide a full explanation of each question in the questionnaire and to form a common understanding of all questions. The main research team also conducted workshops with the field team to explain the questionnaire, its purpose and main themes and presented them with the "Researcher's Guide" to emphasize the importance of using it during interviews. Experts from "The Day After" supervised the work of the field team, with daily follow-up from all team members. The workshops and survey implementation took place from early January until the end of the first week of February 2022. TDA staff followed up with the data entry team and periodically reviewed the data to ensure its accuracy. They then cleaned the data and analyzed the questionnaire entries using Excel and StataBE17.

The results of the questionnaire provide a detailed description and understanding of the living, economic and social situation of families in the sampled cities and the differences in their dynamics. However, the results only reflect the situation in the six sampled cities, and therefore, there is a limitation to the data. Furthermore, there are significant differences not only among the different areas of control but within one area that falls under one de facto authority. The accurate representation of all these areas requires a survey at the level of the whole country of Syria, which will need more resources and pose many challenges and security and logistical difficulties.

The report adopts a comprehensive approach based on an integration between the macro and micro analyses. It provides facts from the ground that can be used to support policy proposals in the short and long term. The proposals can take into account the economic and social factors that were elicited during the survey and which presented the differences among the various sampled regions. The data analyzed in this report can be useful in proposals and policies that aim to improve the living situation of all Syrians by presenting the exploitation mechanisms and activating economic and social inclusion in a fair and transparent environment at both the local and national levels.

First: Mechanisms of Exploitation in the Syrian context

Confronting authoritarian regimes requires understanding and analyzing their institutions and mechanisms of action when faced with internal threats that may come from society or intellectual, political and military elites. Authoritarianism in this confrontation depends on a bargaining mechanism — based on two conditions; the first is that the results of bargaining are implemented by institutions subordinate to the authority and not independent institutions, and the second condition is that any disagreement that may arise during the bargaining is resolved by using excessive violence (Svolik, 2012). This mechanism and its conditions reflect the way in which the Syrian regime has dealt with its people since the beginning of the conflict in March 2011.

Several studies indicate that the components of power in authoritarian regimes result mainly from the domination of these regimes on state institutions. Therefore, there is an analytical necessity to distinguish between state institutions and the authoritarian regime and work to understand the mechanisms of the latter's use of these institutions in order to sustain its hegemony (Slater and Fenner, 2011). In Syria, the authoritarian regime has been based on a one-party authority since 1963 and has worked to create ambiguity between the Baath party and state institutions to exploit the country's resources and put them in the service of the party's interests and ideology. However, the Baath Party's authoritarianism was gradually replaced by individual authoritarianism when Hafez al-Assad came to power. Assad, Sr., invested in populist policies based on anti-Israel sentiment, social justice, and the implementation of open-economy policies that paradoxically opened up space for cronies who exploited the country's resources and citizens – with protection from pro-state intelligence networks (Van Dam, 2011; Perthes, 1995).

Hafez al-Assad enabled security and military institutions to consolidate his authority. These institutions oversaw civil state institutions while preserving the Baath Party's role in organizing, mobilizing, and securing a political and ideological cover for the regime. Thus, two main types of government institutions were formed in Syria. First: Authoritarian Institutions, which include security agencies with absolute powers to exercise excessive violence, granted by the head of state, who runs these agencies without any coordination among them. They are asked to monitor each other so that they do not form any security alliance that may threaten the head of state. Authoritarian institutions generally include some military formations in the army with absolute loyalty to the head of state and based on sectarian and regional affiliations (Batatu, 1999). Examples of these formations in Syria are the Republican Guard, Special Forces, and Defense Brigades, founded by Rifaat al-Assad and disbanded in 1984. The second type of institution includes administrative, legislative and executive bodies. These institutions work within the laws and regulations adopted by the state.

Authoritarian institutions use several strategies to control the civil state apparatus and threaten to exercise violence, which is still not sufficient for the survival of the dictatorship. Authoritarian regimes also adapt laws and legislation to serve their interests and thus legislate their rule (Scheppele, 2018). In Syria, repressive practices are common, in which legislation and imposed provisions transform into laws. These institutions also direct the judiciary to abuse its authority to use public service laws that eventually manifest into nepotism. Thus, authoritarian institutions continue to control public administrations and use laws and legislation as a tool to punish those whose loyalty they suspected was compromised against the state. In addition, the security services exercise control over state institutions either through the public presence of security elements (the security office or the party) or through the reports they receive from government employees about their colleagues in an effort to win the trust of the security to ward off their danger and obtain higher positions or financial and in-kind benefits. These result in an environment of fear and caution across all sectors of the government. These strategies that were used by the authoritarian regime in Syria to control state institutions resulted in emptying these institutions of qualified human capital and weakening their structures, which in turn increased the difficulty of reforming these institutions.

Therefore, the Syrian regime was able to control the civil state institutions and exploit their resources to consolidate its authority. It also gave workers in the intelligence and military services the liberty to achieve personal benefits, which gave them grounds for corruption and a greater incentive to continue protecting the regime. Using similar tools, the regime in Syria also controlled the private sector through its established networks of cronies to achieve maximum exploitation of the available resources. Since the mid-eighties, and with the tendency to rely more on private sector investments, some traders and their partners from the intelligence and army became wealthy at the expense of the deterioration of the living conditions of the majority of the population (Haddad, 2012).

From an economic perspective, most authoritarian regimes, including the Syrian regime, find themselves facing two approaches. The first is based on adopting policies that stimulate economic growth and encourage capital accumulation, which increases their legitimacy. However, economic growth reduces the chances of the dictator to remain in power because such policies may lead to the empowerment of society who will be able to overthrow the existing regime through the formation of economic and social forces outside the direct control of the authority (Acemoglu and Robinson, 2006). The second approach is based on securing the minimum required for development and covering only the basic needs of society. Thus, these regimes avoid empowering society in any way that may pose a threat to them. However, this approach also significantly reduces the chances of the dictator continuing to rule as a result of the increase in resentment against him (Overland et al., 2005). The Syrian regime adopted the second approach since, in its bargaining with society, it provided services and basic goods in exchange for the monopolization of political power (Mehchy, 2021). Thus, it gained control over the state's economic resources through authoritarian institutions ready to use excessive violence in the event that society violates the results of this bargaining.

Upon Bashar al-Assad's assumption of power, Syrians expected the new president to adopt a different governance methodology that included radical political and economic reforms. Indeed, the first months of his rule witnessed an expansion of the civil society movement, but soon the president preferred the intelligence approach, closing forums and arresting dozens of activists (Lesch, 2005). From an economic perspective, the regime was quick to rely more on the private sector to stimulate economic growth in an attempt to gradually move from securing basic requirements to achieving economic development. However, during the few years preceding the conflict, Assad failed to achieve economic development, and authoritarianism continued. The comprehensive development policies promoted by the regime in that period turned into neoliberal-oriented decisions that included partial liberalization of the prices of a number of main commodities and the adoption of laws to encourage private investment. However, these laws did not contribute to an increase in the productivity of the Syrian economy, as most private investments were directed to rentier sectors such as real estate. As a result, the economic gap widened tremendously between society and a few cronies of the regime. Wealth was concentrated in what can be defined as an 'authoritarian-neoliberal scope' (Dahi and Munif, 2011).

The mechanisms of exploitation took root and became more visible during the era of Bashar al-Assad. His cousin Rami Makhlouf owned major projects in all economic sectors. He is considered an example of the mechanisms of authoritarian regimes in using intelligence services to exploit the country's resources and protect the wealth of the regime's cronies. At the time, the People's Assembly questioned the telecommunications company owned by Makhlouf, and as a result, he was imprisoned (Dahi and Munif, 2011). Rami Makhlouf's wealth was estimated in 2005 at about \$3 billion (Wieland, 2006) at a time when more than 30% of Syrians were living below the poverty threshold (El Laithy and Abu Ismail, 2005).

In March 2011, the regime tried to contain popular anger through the duality of its authoritarianism represented by bargaining and violence. It raised the bar for bargaining with society through its apparent approval of some popular demands, such as ending the state of emergency. Nevertheless, it was accompanied by violence against the Syrian people and the culmination of the anti-terrorism law, which resulted in the deterioration of the security situation and the emergence of an armed conflict in all Syrian regions. With the continuation of the conflict, the depletion of available resources, and the

need to finance the intelligence and military agencies, the regime began to resort to new exploitation mechanisms more related to the crisis, including royalties, looting, theft, smuggling, confiscation and financial extortion. In the absence of transparency and accountability, all de facto forces in Syria have resorted to using exploitation mechanisms similar to those used by the regime, with different variations and tools, resulting in a deterioration in the living conditions of most families in the various Syrian regions.

Second: A holistic analysis of the socio-economic effects of the conflict

This section provides an analysis of the economic, financial and monetary sectors during the conflict period, in addition to presenting the most important population changes that occurred and the outcomes and mechanisms of work in the health and education sectors during this period. The subsections contain a brief overview of each sector in the pre-conflict phase to give a broader understanding of the changes that have occurred in it. These departments also try to monitor the mechanisms of exploitation practiced by the de facto forces and their cronies and their effect on society.

I. The impact of the conflict on the economic sectors

The protracted conflict in Syria has led to destruction of the infrastructure and has compromised the productive capacity of the economy in its agricultural, industrial, and service sectors. It also changed the methods of governance of these sectors in a way that helped divert the bulk of their resources to serve the various de facto authorities at the expense of the majority of the population. Despite the relative stability of the security situation in many regions, economic production deteriorated, with growth rates declining in most sectors in 2020 after achieving some gains in 2019.

1. The Agricultural Sector

a. An overview of the agricultural sector and its dynamics before the conflict:

Agriculture in Syria is one of the most important sectors of the economy that contribute to production and employment, in addition to its primary role in achieving food security. Political movements, including the Baath Party, realized the importance of this sector and sought to build their popular base by promoting policies that achieve justice and prosperity for farmers and adopting agrarian reform laws. After the Baath Party came to power in Syria in 1963, the Agrarian Reform Law was issued in 1964. It was strictly implemented so that the majority of private agricultural practices were linked to agricultural cooperatives owned by the state (1995). The same year, the General Union of Farmers (GUF) was established under the Baath umbrella. The GUF organized the work of farmers and participated in developing agricultural strategies. With Hafez al-Assad's assumption of power in Syria in 1970, the Baath party entered a stage of an "Assadist Baath" and subjugated and tested the loyalty of various workforces, especially farmers — by coercing affiliation with the party and facilitating procedures because of the affiliation. This was especially common in the early nineties following the decrease in the number of affiliated farmers in the early eighties (Batatu, 1999). During that period, the work of the Baath-affiliated General Union of Farmers continued to serve as a body for implementing power policies and controlling all agricultural activities.

By supporting the agricultural sector, the authority in Syria sought to achieve food security and reduce dependence on imports, in addition to using this support in exchange for farmers' tacit acceptance not to join any effective political or union activity. In this context, the Syrian regime invested in many agricultural infrastructure projects, including modern irrigation projects and dams, in addition to securing agricultural inputs at subsidized prices, including machinery, fertilizers and agricultural medicines. Agricultural crops that were considered strategic crops, such as wheat, were also funded at a price that included a good profit margin for farmers. However, the absence of sustainable agricultural planning has led to many negative effects on lands, the most important of which was an increase in water deficit and soil salinization in large areas of irrigated agricultural lands (FAO, 2015).

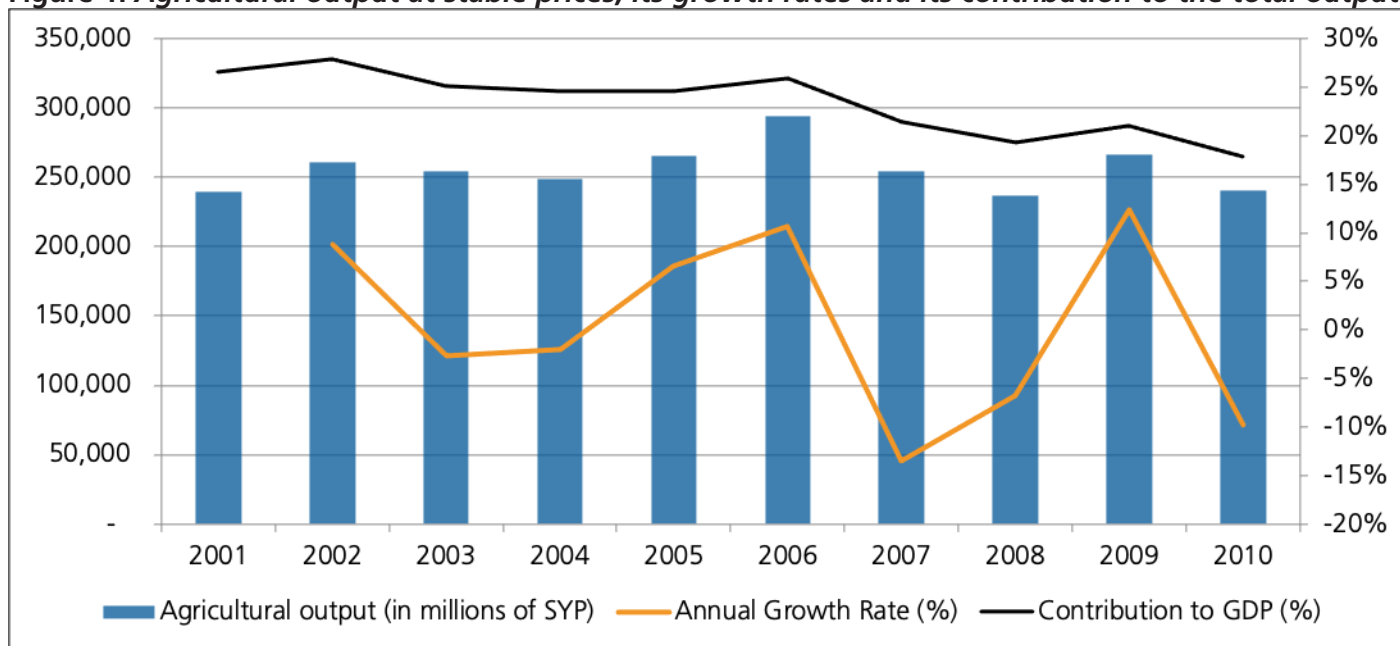
When Bashar al-Assad came to power in 2000, he emphasized the importance of economic reform and the need for a gradual liberalization of the economy under the umbrella of a social market economy. The "reform" of the agricultural sector was included in economic liberalization policies under the pretext that the support

provided to farmers was a burden on the national economy and must gradually end. This would contribute to solving many of the problems of the agricultural sector mentioned in the tenth five-year plan, including the weak growth and fluctuation of agricultural production and because the sector was wasteful in energy consumption and negatively affected the sustainability of natural resources, mostly water (Madi, 2019).

In 2005, the Syrian regime began implementing neoliberal policies in the agricultural sector, which aimed to reduce the amount of subsidized agricultural medicines provided to farmers to stop providing for them permanently in 2010. It began liberalizing fertilizer prices in 2008, which was accompanied by a rise in fuel prices — an extremely important commodity for agricultural production. However, the Syrian regime did not amend any of these policies to mitigate the effects of the drought that hit Syria between 2007 and 2009. On the contrary, it continued to apply them despite the disastrous consequences of this drought on the agricultural sector in terms of production and workers.

Figure 1 below shows the total output of the agricultural sector in Syria between 2001 and 2010 at stable prices. The large fluctuation in growth rates during this period reached the lowest at -13.5% in 2007 and the highest at 12.4% in 2009. In sum, the agricultural sector did not achieve any significant growth during this period, and its contribution to Syria’s GDP decreased from 28% in 2002 to about 18% in 2010. The decline in productivity in the agricultural sector and the decrease in its economic contribution is the result of many interrelated factors, including agricultural policies, especially those related to the imposition of certain crops and the reduction of subsidies, the absence of any institutional reform to reduce waste and corruption that usually accompanies the process of providing support, poor agricultural technology, climatic conditions and lack of rain, small holdings of agricultural lands¹, which deprive farmers of benefiting from economies of scale, the lack of conformity of agricultural production in Syria to global standards, and thus the lack of competitiveness of the product globally.

Figure 1: Agricultural output at stable prices, its growth rates and its contribution to the total output

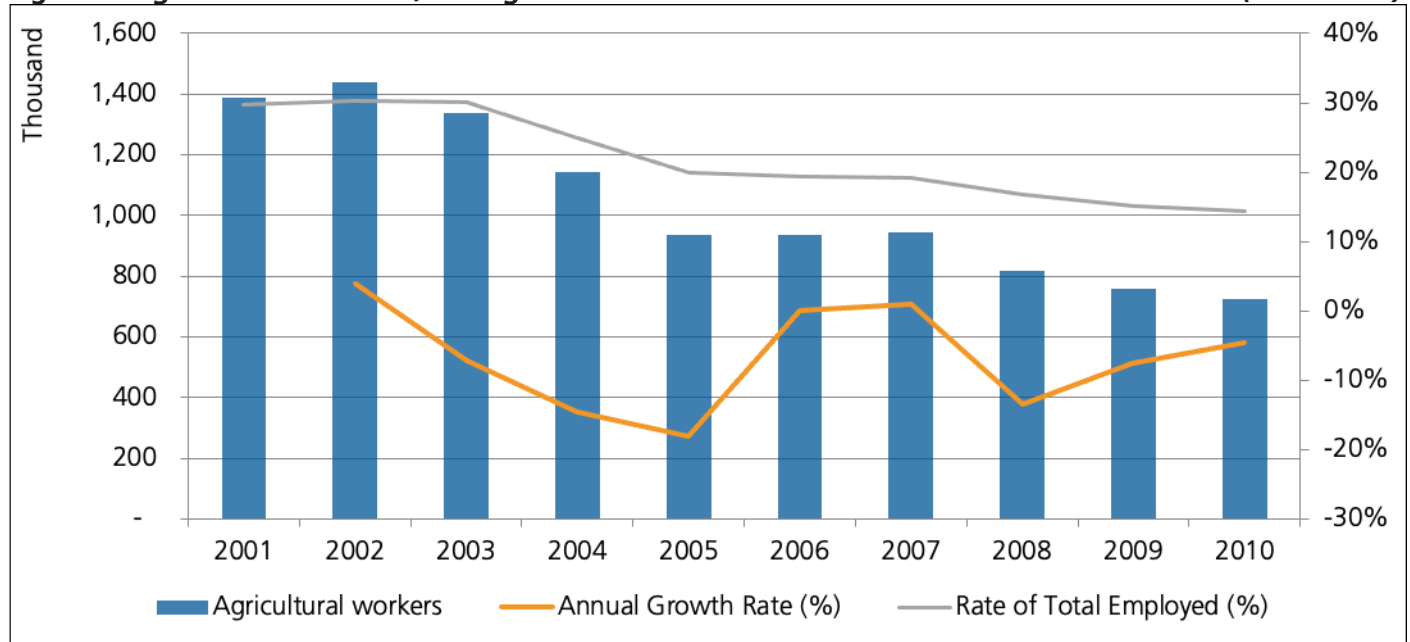


Source: Central Bureau of Statistics - Statistical Group (2000-2011) and researchers’ calculations

The decrease in the returns of agriculture and the increase in the challenges facing farmers in Syria prompted many of them to leave the agricultural sector and limited the entry of new workers into this sector. **Figure (2)** shows the significant decrease in agricultural workers. The total number of agricultural workers declined in 2010 to about half of that in 2001, which led to a decrease in the agricultural sector’s contribution to domestic employment from 30% to 14% during the same period.

¹ Note that these holdings continue to decline in terms of area, as the data of the Central Bureau of Statistics in 2011 indicate that the average size of agricultural land holdings decreased from about 110 dunums (acres) in 1970 to less than 80 dunums (acres) in 1994.

Figure 2: Agricultural workers, their growth rates and their contribution to the workforce (2001-2010)



Source: Central Bureau of Statistics - Labor Force Surveys (2001-2011) and researchers' calculations

The continuous decline that hit the agricultural sector in production and its workforce during the first ten years of Bashar al-Assad's rule reflects a trend opposite to what the ruling Baath Party had applied over the years. Especially in its early days, the Baath party used this sector as one of the main industries to support its power base (Batatu, 1999). This decline also reflects the change in the power dynamics in Syria, even in its nominal form, in favor of the merchant class and cronies who controlled an important part of the national economy during that period. Thus, when the conflict began in Syria, the agricultural sector underwent major transformations in its role in production and employment, in addition to the gradual withdrawal of the authorities from the responsibility to support it in favor of a rentier economy.

b. The Agricultural Sector During the Conflict

The conflict in Syria destroyed a large part of the agricultural infrastructure and affected the agricultural production chain, as the sector witnessed a sharp decline in its labor force, destruction of irrigation networks and water sources, theft and looting of machinery and crops, a sharp decline in the supplies of fuel needed for greenhouses and water pumping, and a shortage in securing the necessary inputs for agricultural production such as fertilizers, seeds and medicines. In addition, farmers' access to their lands became more challenging as a result of checkpoints, military operations and attacks on agricultural land. The conflict also disastrously affected the agricultural transport sector both domestically and with neighboring countries, negatively impacting supply and sales chains (ESCWA, Madi 2020, 2019; FAO, 2017a;).

The significant decline in agricultural production, especially strategic crops, was accompanied by the politicization of food production by de facto forces and war merchants by controlling the inputs of the agricultural sector and impeding the delivery of agricultural products and food by imposing a siege on certain areas. The Syrian regime's siege of areas in Ghouta, Homs and Aleppo is a prime example. Furthermore, agricultural commodity exchanges have been subject to many bargains and financial extortion by military and security apparatuses or de facto forces — such as wheat deals between the Syrian regime and the Autonomous Administration. Additionally, simple agricultural production regarding households played a key role in maintaining the minimum food security for many families, especially in rural areas.

The following sections discuss the severe changes in agricultural production, both plant and animal, to further analyze the state of the agricultural sector and the estimated GDP of this sector in 2020 — by relying on the available data between 2011 and 2019. The analysis also discusses the enormous devastation inflicted on the agricultural infrastructure and production supplies. It examines the mechanisms that the de facto authorities used to manipulate this sector and its resources to their advantage.

Plant Production²:

All kinds of agricultural crops have been affected by the protracted conflict since 2011, including strategic crops. Wheat production, for example, decreased significantly during conflict years to reach its lowest point in 2018 with around 1.2 million tons compared to 3.8 million tons in 2011. However, thanks to favorable climatic conditions and the relatively increased stability security-wise in 2019, production grew again to reach 3.1 million tons. Based on production in the areas of control of the different de facto forces, wheat production can be distributed as follows: 50% is produced in Deir Ezzor, Hasakah, and Raqqa provinces, which are mainly under the Autonomous Administration authority, 35% is produced in Hama, Homs, Damascus countryside, and Daraa provinces, which are under the regime's control, and 15% is produced in the north and north-west, which include parts of Aleppo and Idlib provinces, controlled by the Salvation Government and the Syrian Interim Government. Estimates for the year 2020 indicated a decrease in wheat production by about 15% compared to 2019, which was predicted to decrease to more than 50% in 2021. The reason for that is the unfavorable climate conditions, the massive fires that affected large areas of agricultural lands, in addition to the massive reduction in the yield of wheat cultivation caused by the absence of support for its production and the depreciation of the Syrian currency. As a result, farmers are abandoning the cultivation of this strategic crop.

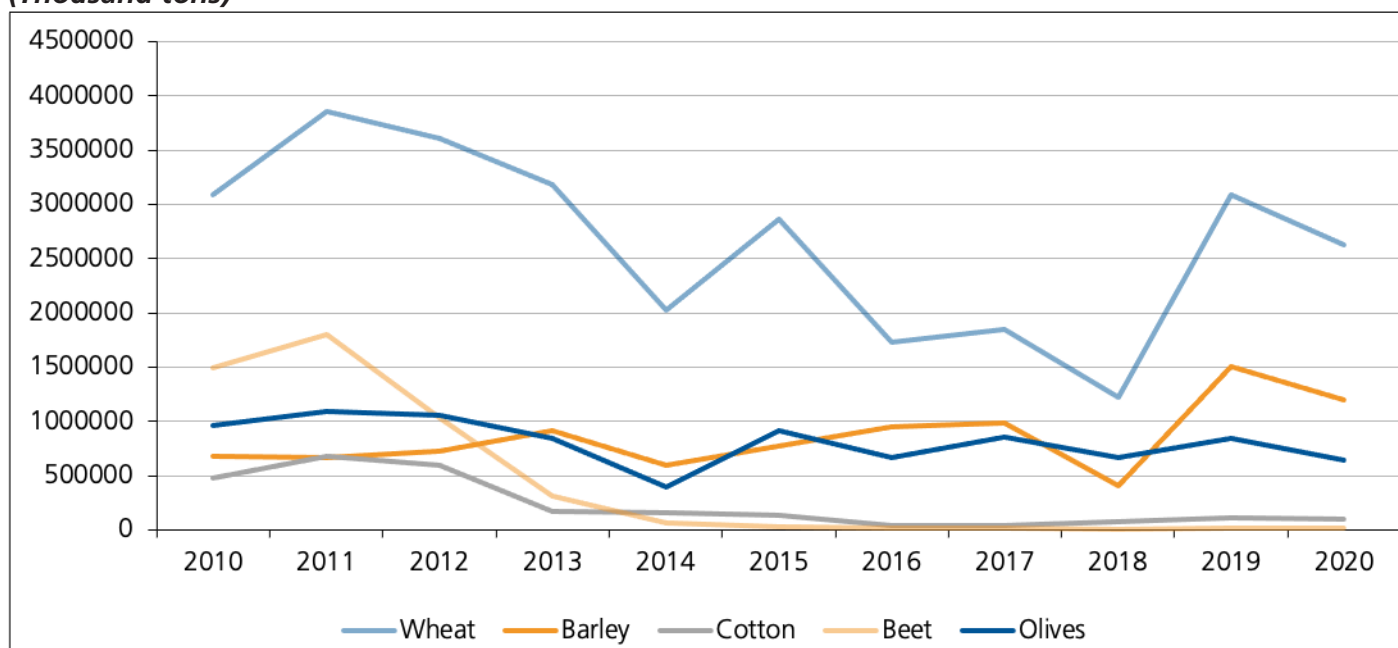
With barley production, the crop's output relatively maintained its capacity during the conflict, and that is because barley is more likely to endure bad weather conditions and lack of rain. However, due to the cultivation of most barley crops in rain-fed agriculture, the yield reached its lowest levels in 2018 due to the significant decrease in rainfall rates, bringing the production that year to less than half a million tons, compared to about 0.7 million tons in 2010. Production increased back up dramatically in 2019 to reach about 1.5 million tons, but estimates showed that barley production dropped again to about 1.2 million tons in 2020, meaning about 20% less than in 2019, and it was predicted to continue decreasing until about half a million ton in 2021. This fluctuation in barley production can be explained by the fact that it is a rain-fed crop, in addition to the absence of effective agricultural policies and financial yields that can motivate farmers to continue producing it.

Cotton and beetroot sugar are some of the crops that underwent a massive production decrease during the conflict because such crops need constant following up and care. Unfortunately, this option was not available to many farmers because of the difficulty of access to agricultural territories as a result of the military operations. In addition, the destruction of sugar and textile production factories in various Syrian regions aggravated the scarcity of resources such as fertilizer, seeds, agricultural medicines and water, and the difficulty of obtaining the needed diesel to pump it forward to the lands cultivated with these crops, and thus it furthered the high demand for these crops. Consequently, the production of cotton decreased in 2019 to less than 25% of its production levels in 2010 to reach about 115,000 tons, and it reached its lowest level in 2017 with an approximate amount of 34,000 tons. It was estimated that production decreased in 2020 by about 15% compared to the previous year to reach the limits of 97,000 tons. As for beetroot sugar, it is considered among the crops most affected by the conflict. The production reached around 18,000 tons annually in 2019, compared to 1.5 million tons in 2010, with an expectation of a further decrease in 2020 down to 15,000 tons.

Olive production has seen a steady rise since 1980 until Syrian-produced olive oil reached fourth place globally in 2005 (A. El Ibrahim et al., 2007). However, olive cultivation is largely concentrated in Idlib and Aleppo regions, and both were subjected to military operations, including continuous air strikes and deliberate razing of lands, which have negatively affected olive cultivation and production. Moreover, many trees were cut for wood to be used as fuel for heating — especially in refugee camps in Idlib. As a result, olive production decreased from about one million tons in 2010 to less than 400,000 tons in 2014, gradually rising again and reaching 840,000 tons in 2019. Because of the lack of rain in 2020 compared to the previous year, olive production is expected to decrease by 25% to reach 640,000 tons annually.

2 *The calculations and estimates of plant production were based on the agricultural statistical group for the year 2020 and several press statements by officials from the regime, the Autonomous Administration and the Interim Government, in addition to the accounts of researchers.*

Figure 3: The amount of production of a number of agricultural crops between 2010 and 2020* (Thousand tons)



Source: Agricultural Statistical Group and researchers' calculations

* Production in 2020 was estimated based on the statements of officials of the agricultural sector in the Syrian government, the Autonomous Administration (Rojava) and the Interim Government, in addition to informal interviews with a number of landowners and farmers.

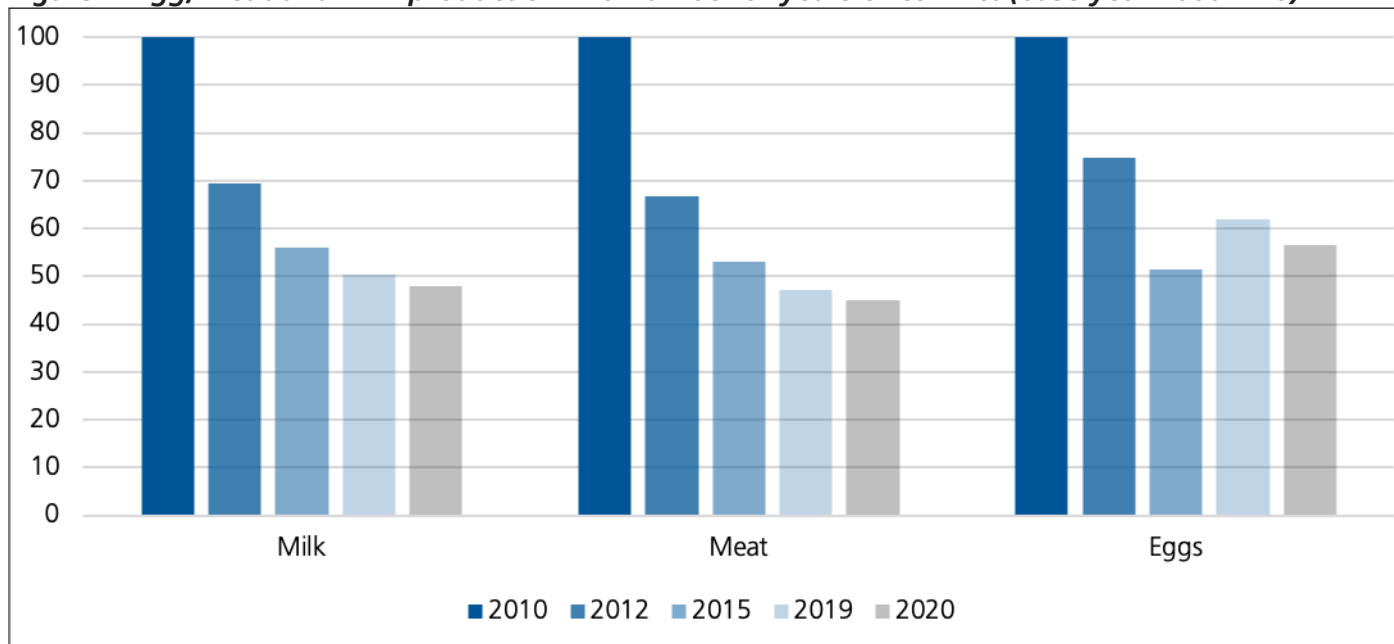
Figure 3 above summarizes the chain of production of strategic agricultural crops that can be divided into three groups; the first is cotton and beet crops, which the conflict has led to a severe and continuous decline in their production to reach almost zero value compared to 2011. The second group has relatively maintained its production level, such as olives, while the third group, which includes wheat and barley, has been characterized by a large fluctuation in production, especially in the last three years, as a result of its association with rainfall amounts and climate suitability.

Livestock Production:

Animal products make up an essential part of the agricultural sector's outputs and contribute significantly to providing job opportunities and enhancing food security in Syria. In one of its articles, FAO mentioned the importance of animal production in the Syrian economy before and during the conflict, as it still contributes to 40% of the gross agricultural product and provides about 20% of job opportunities in the Syrian countryside, especially for women. Despite the great losses it suffered during the conflict, livestock production still contributes significantly to food security, especially for the rural population in various Syrian regions (FAO, 2017).

Figure 4 below shows the sharp decline in livestock production in Syria during the conflict. The year 2012 witnessed the highest drop of about 30% compared to 2010, on average, for milk, eggs, and red and white meat. Furthermore, the gradual decline in animal production continued to reach more than 50% in 2020 for meat and milk and about 45% for eggs compared to 2010 levels. These percentages are consistent with the 2017 FAO report on the situation of the agricultural sector in Syria, as the report indicates a sharp decline in household ownership of cows, sheep and poultry; the 2016 rates were 57%, 52% and 47%, respectively, compared to 2010 (FAO, 2017a).

Figure 4: Egg, meat and milk production in a number of years of conflict (base year 2000 = 10).



Source: Agricultural Statistical Group and researchers' calculations.* Livestock production was estimated in 2020 based on separate statements by agricultural officials in the Syrian government and the Autonomous Administration areas.

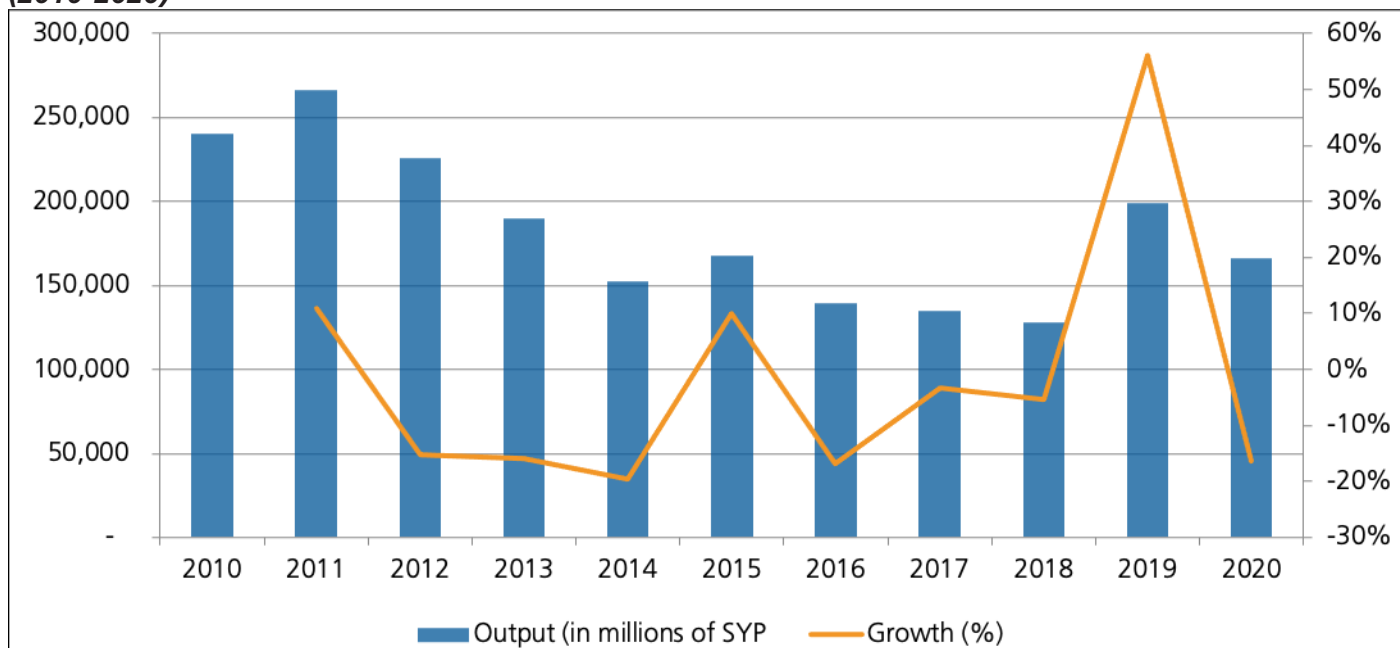
The reasons for the continuous deterioration of animal production varied with the development of the conflict and the change in its dynamics. Serious damage was inflicted on livestock between 2012 and 2015, with the intensification of battles and bombing and the widespread robbery and smuggling of livestock. Consequently, security became the major factor in this deterioration. Since 2016, the deterioration of the economy resulted in the continued decline in animal production, as many rural families consumed livestock they owned or sold to buy basic goods and services. In 2019, prices of fodder, medicine, veterinary medicine and fuel skyrocketed due to the collapse in the value of the Syrian lira. Alongside the deterioration of the purchasing power of Syrian families, the inability to buy their need of animal products, and the absence of any positive role for the authorities of the de facto forces, this prompted most of the livestock breeders and owners of poultry farms to close their businesses due to their economic futility.

The destruction of the infrastructure and the looting of produce were significant factors in the deterioration of agricultural production in both its animal and plant parts. A World Bank report in 2017 showed that the bulk of the irrigation networks in Syria had been sabotaged, in addition to the suspension of two-thirds of the water treatment stations and half of the pumping stations as a result of military operations and looting. This prompted many farmers to rely so much on rainwater that forecasts could not be accurately predicted (World Bank, 2017).

GDP of the Agricultural Sector:

The previous analysis of plant and animal production during the conflict in Syria indicates a sharp decline with the fluctuation in the production of some crops, such as wheat and barley, as a result of changing climatic conditions and precipitation. **Figure (5)** below shows the changes in the GDP of the agricultural sector at constant year 2000 prices between the years 2010 and 2020. Agricultural production decreased by more than 30% in 2020 compared to 2010. The figure also indicates the gradual decline in agricultural production from 2011 to 2015, when it witnessed a growth of about 10%, driven by the relatively good climatic conditions that year. Afterwards, it declined again and reached its lowest level in 2018, equivalent to almost half of the output of 2010. The year 2019 witnessed the highest growth rates of agricultural output since the beginning of the conflict, reaching 56%, thanks to the significant increase in plant production, especially wheat and barley. However, estimates for 2020 indicated a negative growth of the agricultural sector by 16%, affected by the unsuitable climatic conditions and the sharp collapse of purchasing power in various Syrian regions.

Figure (5): Gross Domestic Product of the Agricultural Sector and Its Growth Rates at Constant Prices (2010-2020)*



Source: Agricultural Statistical Group, Statistical Group and Researchers' Calculations

* Year 2020 researchers' estimates.

Despite the decline in agricultural output, its contribution to the GDP increased from 18% in 2010 to about 33% in 2020. This can be explained by the fact that the decline in the output of other economic sectors was more severe than the decline in agricultural output and thus increased the relative importance of the latter in the overall economy. However, this does not negate the challenges and difficulties that the agricultural sector has suffered from, which greatly increased during the conflict, including the exit of a quarter of a million agricultural workers from the labor market, thus reducing the number of workers in the agricultural sector to about 500,000 workers, compared to 750,000 in 2010. The sector also suffered from the destruction of essential parts of its infrastructure, lack of agricultural labor outcome, high prices of the inputs to the production process, fires in agricultural lands, unsuitable climatic conditions, agricultural policies of the de facto forces that lack any effective and sustainable support for farmers, and exploitation mechanisms imposed by these authorities to use the sector's resources to maintain its power.

c. Mechanisms for exploiting the agricultural sector:

The relative importance of the agricultural sector decreased before the conflict in Syria, both in terms of production and workers. Farmers witnessed the gradual abandonment of the authority through the application of economic liberalization policies and the lifting of support for this sector. However, the conflict returned agricultural production to the priorities of the de facto forces due to its importance in achieving food security and its use as a weapon for negotiation and control and, in some cases, as means of resistance. An example of this is the regime's siege of eastern Ghouta for years and the use of food and agricultural commodities as means to pressure locals to hand over their areas. Nevertheless, besieged communities were able to rely on simple local agricultural products to resist the siege.

The presence of various authorities, each of which controls a part of the Syrian territory, made it impossible for any of these authorities to rely on their agricultural production without resorting to imports or purchasing agricultural products from other authorities. By comparing the areas of geographical control with the regional distribution of the current agricultural production, it can be estimated that about 50% of this production is under the control of the regime, 35% of it takes place in the territory of the Autonomous Administration (Rojava), and 15% is distributed between the Interim Government and the Salvation Government. However, control varies according to the crop. For example, the Autonomous Administration controls about 60% of wheat and barley production, regime-controlled areas produce approximately 90% of citrus fruits, and 55% of olives are grown in the northern and northwestern regions.

The mechanisms of exploitation of the agricultural sector are at multiple and interrelated levels that can be categorized as follows:

- * Agriculture: a large segment of farmers work on their land without financial compensation or income, but the data indicates that there is exploitation of women in agricultural work, as the percentage of unpaid female workers was four times more than the percentage of unpaid men in 2010, according to the labor force survey that year. And it is predicted that the conflict has increased the pressure on women in this sector, especially with the decrease in the number of male workers as a result of asylum, migration, military conscription, enforced disappearance and death in battles.
- * Local merchants: The absence or availability of the agricultural sector's support at a minimum by the various de facto authorities in Syria prompted farmers to rely on the market and the black market to obtain the requirements and inputs of agricultural work. Consequently they were forced to pay large profit margins to local traders associated with the cronyism of those authorities. Also, many small farmers were forced to sell their crops to traders due to the absence of effective and organized purchasing mechanisms. These traders sell these crops to the authorities or wholesalers at profit margins that are many times more than the farmers'.
- * Trade exchange and transfer of agricultural commodities between the different areas of control: Data and statements indicate that there is a large volume of agricultural commodity exchange between the areas of control, as the report on the economic situation in northern Syria states that 13% of the agricultural commodities produced in the area go to the regime's areas (Information Management Unit, 2021), and thus, during their transportation, these goods are exposed to financial extortion by the security and military checkpoints of the various forces, which increases their cost for the final consumer who bears the burden of this extortion. The cronies associated with these authorities also control the commercial exchange of agricultural commodities, such as Katerji, who monopolizes the wheat trade in the Autonomous Administration areas in favor of the regime.
- * Foreign trade: Most of the de facto forces depend on importing food commodities to fill the gap between supply and demand for these commodities. For example, the regime imports more than half of its wheat needs from countries like Russia and Ukraine, whose traders invest under the pretext of sanctions to sell their commodities to Syria at high prices and low quality. Regime cronies like Samer Al-Fawz import these goods with large profit margins that are justified by the cost of bypassing the sanctions. The regime pays the import value from treasury resources, a large part of which is supplemented by fees and taxes imposed on the Syrians (Mehchy, 2021). On the other hand, the de facto authorities encourage the export of agricultural products to increase their income from foreign currency without considering what this export causes in terms of shortage of supply of these products in the local market, which consequently increases their prices locally and, in turn, increases pressure on Syrian families already suffering from a collapse in purchasing power.

These mechanisms were accompanied by acts of sabotage, looting and theft of crops and livestock in all Syrian regions by the de facto authorities, who also use their military and security capabilities to control the access of the locals to agricultural and food products and their right to food, linking their access to this right based on the degree of their loyalty to the ruling authority. Exploitation mechanisms, in addition to the deterioration in the agricultural sector, have exacerbated the problem of food security for Syrians, as data indicates that 12.4 million people inside Syria are food insecure and two-thirds of Syrians need food support (OCHA, 2021). The number of food-insecure people has increased significantly since 2019 as a result of the sharp decline in the purchasing power of Syrians and the depreciation of the Syrian lira. Food security does not only mean the availability of food commodities but also the ability of families to obtain them. It should be noted that in the year 2020, the spread of Covid-19 affected the agricultural sector — indirectly — through the increase in freight rates and the disruption of transportation with the external market.

2. Industrial sector

a. An overview of the industrial sector and its dynamics before the conflict:

The changes witnessed by the industrial sector in Syria, with its transformative and extractive aspects³, reflect the control mechanisms and the dynamics of the ruling authority in the country. With the Baath Party coming to power in 1963, nationalization decisions were passed, some of which were issued towards the end of the union with Egypt in 1961. These decisions were strictly applied in the sixties to most of the private sector factories, which strengthened the power of the emerging class of state capitalists, including military officers, ministers, and leaders of the Baath Party, at the expense of the industrial bourgeoisie (Matar, 2016). This contributed to the private industrial sector dissolving in Syria and the public industrial production taking over (Al-Hamesh, 2010).

In the 1970s, a large investment was made in the industrial public sector, due to the desire of the authority to achieve self-sufficiency and implement the import substitution policy⁴, thus reducing dependence on the outside and providing goods at cheap prices to Syrians in exchange for their continued inactive political participation/activism. However, this sector was rife with challenges, the most important of which were poor marketing, the absence of effective quality control, the presence of a large number of surplus workers as a result of the public employment policy implemented by the authority, and selling goods, especially petroleum products, at less than their production costs, which accumulated enormous losses for public facilities like refineries. This resulted in the industrial public sector becoming a heavy burden on the state budget in the eighties. In the early 1990s, the role of the manufacturing industry in the national economy deteriorated as a result of the start of oil production in economic quantities. Industrial production was neglected, and the private sector turned to invest in service activities with quick profits (Al-Zaeem, 2003).

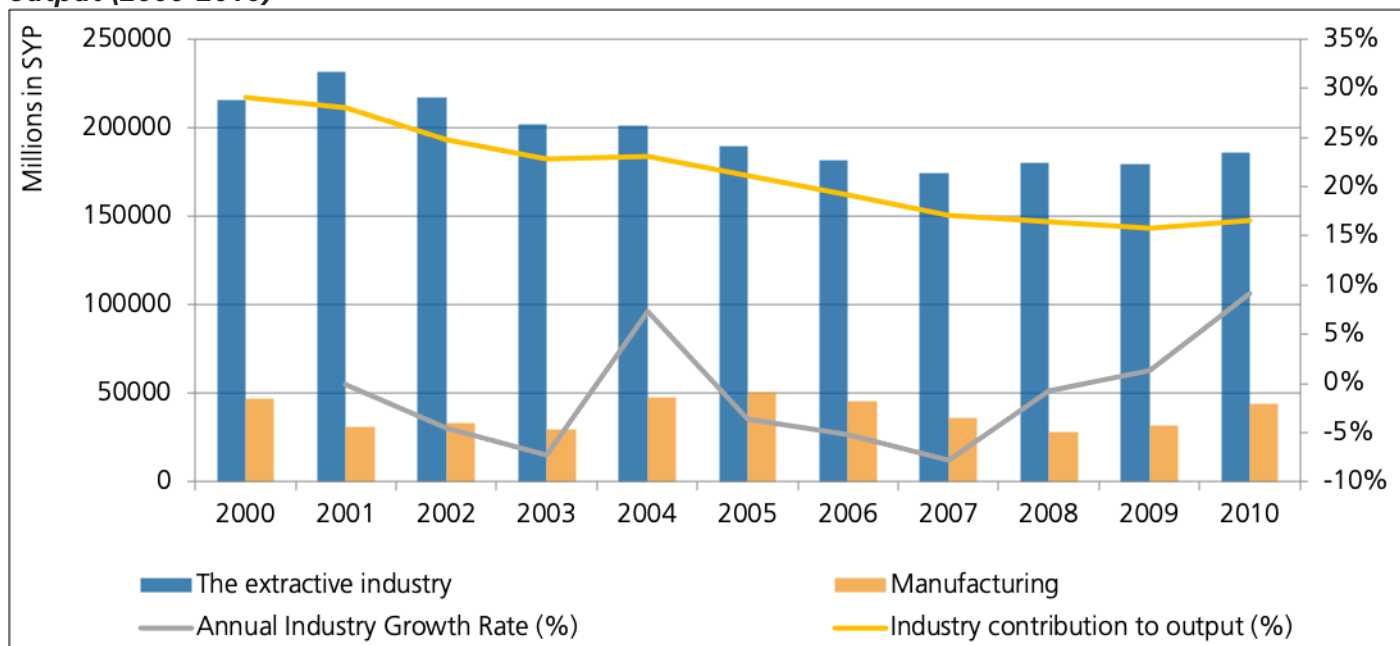
Figure (6) shows that between 2000 and 2010, the contribution of the industrial sector to the GDP decreased from about 24% to less than 14%, driven by a decrease in the output of the extractive industries⁵ by 15% during this period. This was a result of the sharp drop in production from 613 thousand barrels/day in 2001 to 385 thousand barrels/day in 2010, in addition to the fluctuation of international oil prices (British Petroleum, 2020). Consequently, the contribution of the manufacturing industry to the national economy was modest, reaching about 3% in 2010, noting that the year witnessed the highest growth rates of the manufacturing industry, reaching 9%, especially with the expansion of private industrial investment and industrial cities.

3 *The extractive industries mainly include the extraction of petroleum and natural gas, in addition to phosphates, gravel, sand, salt and asphalt lime. As for the manufacturing industries, they include textile, engineering, chemicals, food and mineral industries.*

4 *It is an economic approach that aims to replace foreign imports with locally made products.*

5 *In 2010, the extractive industries accounted for about 80% of the total industrial sector, compared to 20% for the manufacturing industries.*

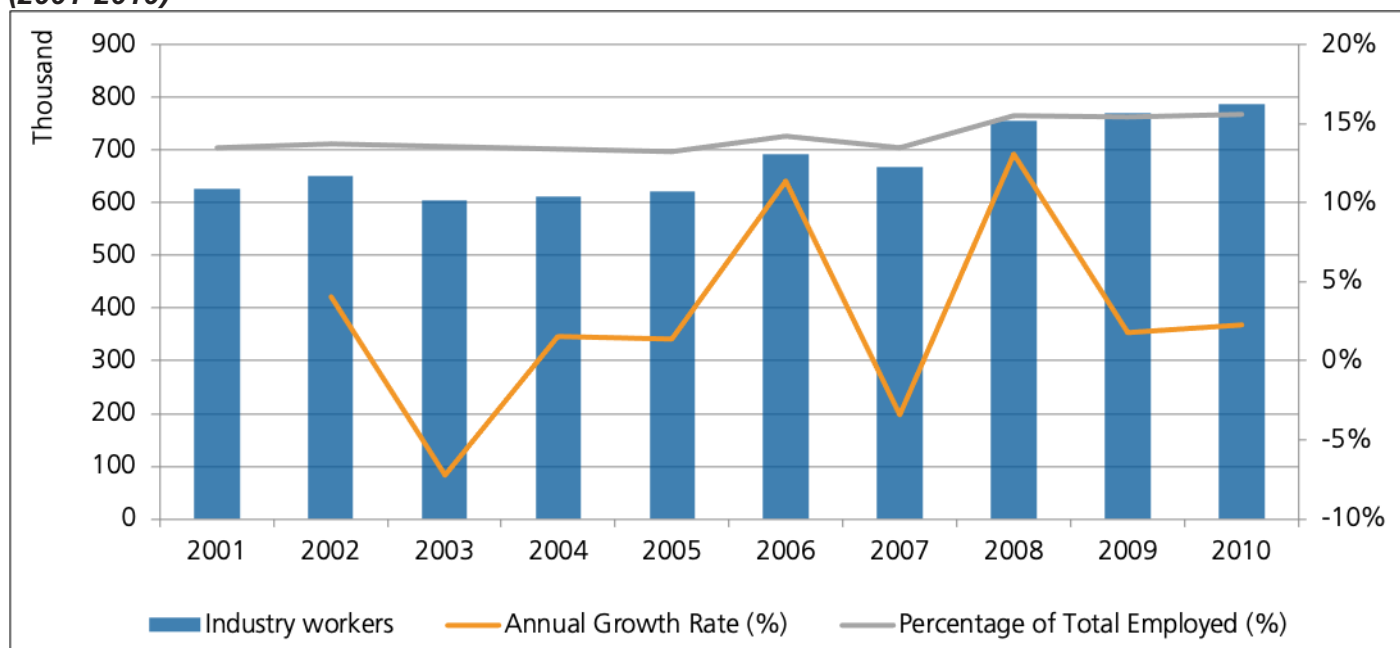
Figure (6): Extractive and transformative industrial output, its growth rates and its contribution to output (2000-2010)



Source: Central Bureau of Statistics - Statistical Group (2000-2011) and Researchers' Calculations.

The industrial sector was not one of the economic sectors that generated job opportunities in Syria, as most of the industrial output was linked to the extractive industry, one of the capital-intensive industries with few workers. In fact, the number of workers in the extractive sector did not exceed 26,000 in 2010. Job opportunities in the manufacturing industry witnessed some stability until 2008 when the industry began to expand and thus create more job opportunities. However, the number of workers in the industrial sector did not exceed the threshold of 16% of the total employed people across all economic sectors in Syria in 2010, rising only 3% compared to the year 2001 (Fig. 7). Most of the workers in the industrial sector were males. The number of females involved in this sector was less than 7% in 2010, most of whom worked in public sector establishments.

Figure (7): Workers in the industry, their growth rates and their contribution to the total employed (2001-2010)



Source: Central Bureau of Statistics - Labor Force Surveys (2001-2011) and researchers' calculations.

Private industrial establishments comprising 1-2 workers constituted more than 99% of the number of Syrian private manufacturing sector establishments in 2008 (Kharbutli, 2016⁶), which reflected the weak productivity of these establishments and their lack of competitiveness in the global market. At the time, the Syrian government did not provide sufficient support to this sector. On the contrary, it took ill-considered economic decisions that increased challenges. Among these decisions was the implementation of the Greater Arab Free Trade Zone and bilateral agreements with Turkey, which allowed the products of these countries to enter the Syrian market at lower prices and better quality than the Syrian product, which led to great losses for many industrial facilities. Consequently, Syria entered the conflict with an industrial sector that relies heavily on a declining oil production industry, public industrial facilities that constituted a burden on the state budget, and private manufacturing that contributed modestly to the national economy.

b. Industrial sector during conflict:

The conflict in Syria destroyed a large part of the industrial facilities and infrastructure necessary for industrial work, such as electricity, water, roads, and transportation networks. It has also negatively affected the value chains of industrial production, as the ability of industrialists to obtain production inputs from raw materials, semi-manufactured materials and industrial machines. Huge industrial facilities were looted and stolen by the various warring parties, industrial capitalists fled outside the country, and most of the industrial expertise and labor left Syria. The industry sector was affected by the collapse of the export market, the limited purchasing power of the Syrians, the difficulty of carrying out financial and commercial transactions as a result of sanctions, in addition to royalties from the security and military agencies, and the control of warlords over the economic decision in various Syrian regions.

This was accompanied by the struggle of the various parties to control the extractive industries and the entry of external parties into the line of that conflict to obtain economic gains. Furthermore, the resources of these industries were turned into weapons of war by terrorist organizations such as ISIS and led to the establishment of complex networks of individuals and institutions inside and outside Syria to sell oil to and from all Syrian regions regardless of the nature of relations between the de facto forces controlling these regions. The major collapse in the local production of oil and gas prompted the de facto forces and the Syrian regime to rely on foreign support, specifically Iran, to obtain these products, which increased the control of these countries over Syria's resources, economy, and current and future decisions.

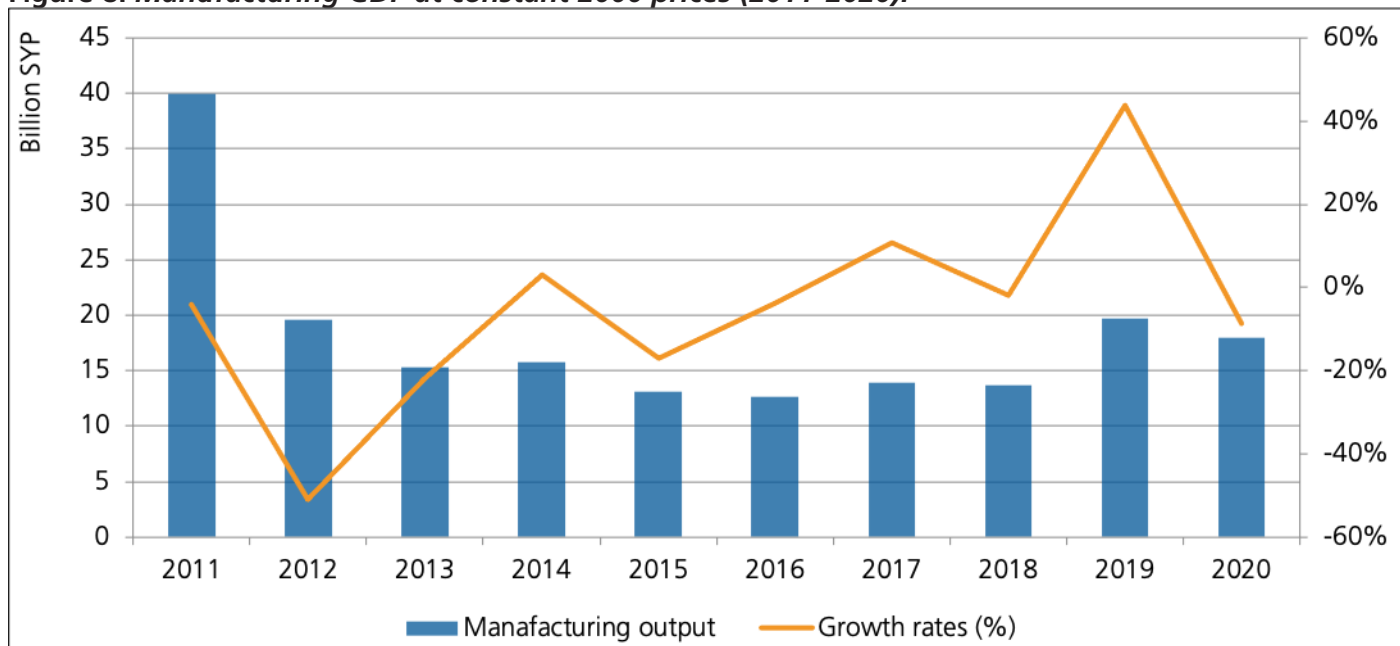
In order to analyze the state of the industrial sector and the impact of the conflict on the sector, the following sections address the significant changes in industrial production, both transformative and extractive, and accordingly estimate the gross domestic product of this sector in 2020. It also relies on the available data on this output between 2011 and 2019. Besides, the analysis also examines the massive destruction of the industrial infrastructure and industrial production facilities and highlights the exploitation networks that arose and rooted themselves during the conflict to take advantage of the structural changes that affected the industrial sector, especially those related to oil production and distribution.

Manufacturing sector:

The GDP of the manufacturing sector fell sharply at the beginning of the conflict. **Figure (8)** shows that the output declined by 4% in 2011 to collapse by about 50% in 2012. The negative growth rates continued until 2017, which witnessed some improvement, only to decline again in 2018. A large number of small workshops started working again in 2019, especially in regime-controlled areas, which at that time began to witness relative stability security-wise. Thus, the manufacturing sector saw annual growth of more than 40% compared to the previous year. However, this situation did not continue as the sector suffered a new setback in all Syrian regions in 2020 as a result of the collapse of the exchange rate and the significant increase in the prices of energy carriers, in addition to the negative effects of Covid-19 (OCHA, 2021). Eventually, the output of the manufacturing industry decreased by about 43% in 2020 compared to what it was in 2010.

6 The researcher relied on surveys of public and private establishments carried out by the Central Bureau of Statistics and not on the official records of workers in industrial establishments.

Figure 8: Manufacturing GDP at constant 2000 prices (2011-2020).



Source: Central Bureau of Statistics - Statistical Group - Researchers' estimates and calculations.

Assuming that the annual growth rates of the manufacturing industries in the absence of the conflict would have been 7%, which is equal to the average annual growth rate for the period between 2001 and 2010, the total loss of the sector to the end of 2020, compared to what it would have been without the occurrence of the conflict, amounts to about 470 billion Syrian pounds at constant prices for the year 2000, which is more than ten times the value of the manufacturing output in 2010. This loss is related to production only and does not include losses caused by the destruction, looting and theft of the physical capital of the manufacturing industry.

The conflict has negatively affected industrial facilities in all Syrian regions, but the size of losses varies from one region to another depending on many factors, the most important of which is the extent of the destruction as a result of military and combat operations. An ESCWA report indicates that the extent of the destruction of physical capital, including industrial facilities and their infrastructure, varies significantly between regions. The report considered Aleppo, the largest textile factories hub in Syria, among the most ravaged areas, followed by the Damascus countryside governorate, where thousands of small industrial workshops were also destroyed (ESCWA, 2020). As a result, a number of facilities moved from conflict areas to safer areas on the Syrian coast and As-Suwayda, which led to a slight increase in the number of workshops and a relative improvement in 2019 in the output of manufacturing industries. These then declined in 2020 as a result of the aforementioned factors. Nevertheless, regardless of these direct factors, industrial investment needs the sovereignty of law and a transparent institutional environment, which was not available in Syria even in the pre-conflict period. As for the regions of northeastern and northwestern Syria, the manufacturing sector suffers from severe fatigue and the inability to overcome difficulties related to obtaining raw materials, weak markets, and securing electricity and fuel for machinery, in addition to the lack of security and stability and the absence of effective and transparent governance institutions. Most of the industrial establishments in these areas are simple workshops that rely heavily on the local market to sell their products. Some traders sell these products in the markets of neighboring countries. No more than 3% of them are sold in the markets of regime-controlled areas, which are also considered, alongside Turkey and Iraq, as some of the most important sources of raw materials for the industrial sector in northwestern and northeastern Syria (Information Management Unit, 2021).

The sanctions imposed on the Syrian regime, directly and indirectly, affected the manufacturing sector in all Syrian regions. The sanctions were one of the factors that led to the collapse of the exchange rate of the Syrian lira and, consequently, the lack of ability to purchase products available in the local markets, including industrial products. These sanctions have also limited the ability of

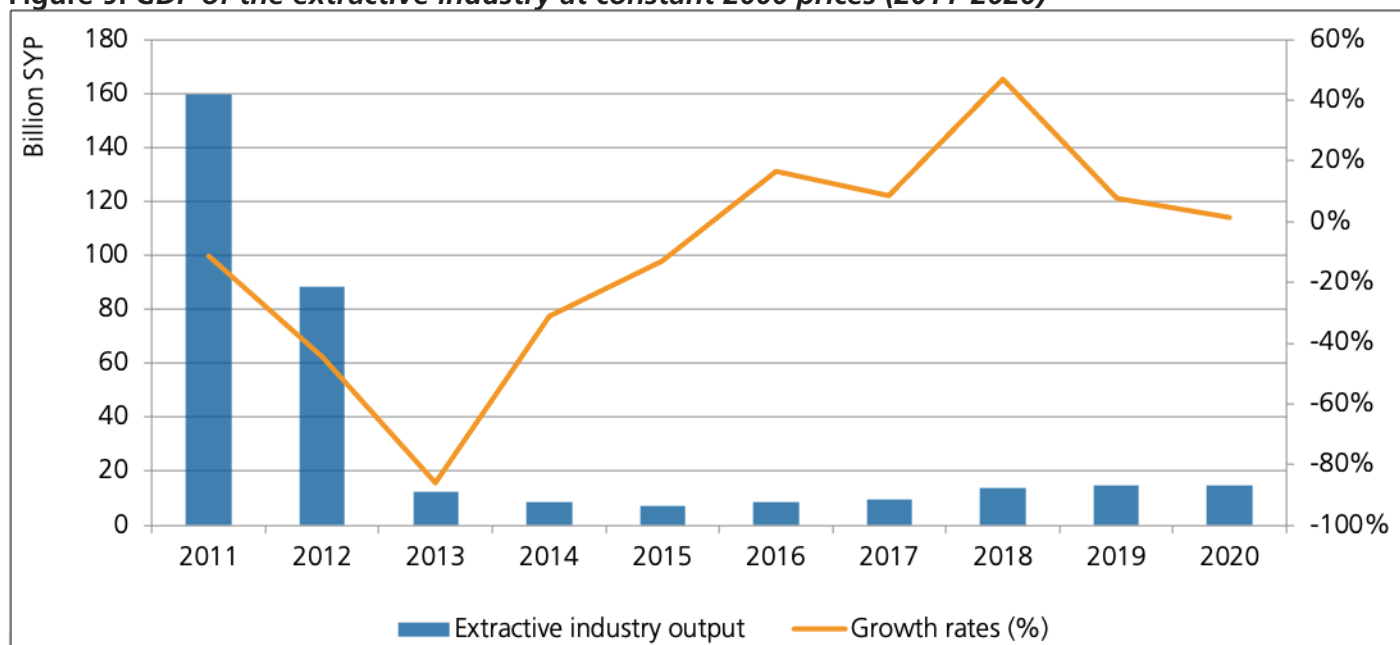
industrialists to import and export materials that fall under the broad definition of goods with dual uses (civilian, military), and for fear of being affected by these sanctions, financial and banking institutions distanced themselves as much as possible from dealing with any institution or Syrian individual. This negatively affected most industries, including the pharmaceutical industry, which depends on imports to secure raw materials, machinery and equipment for the pharmaceutical industry, knowing that this industry suffered great destruction during the conflict (Ghosn, 2020).

Extractive industry sector:

The decline in the output of the extractive industry began in the second half of 2011 with the exit of foreign companies investing in the oil fields in Syria. Despite that this year witnessed an increase in natural gas production, this output declined by about 11% compared to 2010, affected by the drop in oil production (Fig. 9). Subsequent years witnessed a collapse in the extractive industry as a result of many oil and gas fields halting production, and as shown in **Figure (9)**. The sector's output reached its minimum in 2015 to reach less than 5% of what it was in 2010. During that period, oil production collapsed from 386,000 barrels/day to less than 10,000 barrels/day, and natural gas production decreased from 29 to 8 million cubic meters per day (British Petroleum, 2020). Since 2016, the extractive industry has started to witness positive growth rates. However, the estimated value of the output of this industry in 2020 did not exceed 10% of what it was in 2010.

It should be noted that the data on oil production during the years of conflict did not take into account what was looted from various armed groups, especially ISIS. The output of the current extractive sector depends mainly on what is produced in the regime-controlled areas. According to the statements of a number of officials in the Syrian government, oil production in the regime's areas is only a small part of the total oil production in Syria⁷. Thus, the actual output of the extractive industry will be higher than estimated if oil production is taken in all Syrian regions, but the conflicting data and figures related to oil render the dependence on relevant international institutions (such as British Petroleum) for oil and gas production in Syria more robust in terms of methodology and source (Fig. 9)

Figure 9: GDP of the extractive industry at constant 2000 prices (2011-2020)



Source: Central Bureau of Statistics - Statistical Group - British Petroleum 2020 - estimates and calculations of researchers

⁷ Russia Today website: "Syria...an official reveals the volume of oil production", on October 30, 2019, link: <https://bit.ly/3IFm97i>

Assuming that the annual growth rates of the extractive industry sector in the absence of the conflict would have been 1%, taking into account the trend of the decline in oil production and the increase in gas production, the total loss of the sector by the end of 2020, compared to what it could have been were it not for the conflict, would have amounted to more than 1500 billion Syrian pounds at constant prices for the year 2000, which is about ten times the value of the output of the extractive industry in 2010. It should be noted that this loss is related to production only and does not include losses caused by the destruction, looting and theft of facilities and mechanisms of oil and natural gas extraction, which Syrian regime officials estimated at 19.3USD billion by the end of 2020⁸.

c. Mechanisms of exploitation in the industrial sector:

The conflict led to a radical change in the structure of the Syrian economy, including the contribution of the industrial sector to the GDP, which decreased from 17% in 2010 to less than 7% in 2020 — the decline being the result of the collapse in industrial production, with its transformative and extractive aspects. However, the industrial sector, especially oil production, had a pivotal role in shaping the relationships between local and international actors involved in the conflict and determining the ability of de facto forces to maintain power and their relationship with their local communities.

The nature of industrial production varies between the different areas of control, as the regime-held areas include the largest number of manufacturing facilities, including medium and large factories such as pharmaceutical industry facilities and oil derivatives. In contrast, the extractive industry is concentrated in areas currently controlled by the Autonomous Administration, as most of the oil fields in Syria are located in the northeastern regions. The industrial production in the north and northwest of Syria depends largely on simple food industries. The report of the Assistance Coordination Unit indicates that more than half of the industrial production includes dairy and its derivatives, olive oil, and other food products (Information Management Unit, 2021). Thus, there is a need for the exchange of industrial products between these areas that are subject to various de facto authorities, which has stimulated the establishment of transport and smuggling networks managed and coordinated by the cronies of these authorities. The most important exchanged product is oil, which is transported from the Autonomous Administration areas to regime-held areas by a few warlords such as Hussam Katerji. It should be noted that the oil trade between these two regions decreased in 2020 after passing the Ceasar Law sanctions (Mehchy et al., 2020). On the other hand, the collapse of the industrial sector prompted all Syrian regions to rely heavily on the external market to secure their requirements, which made way for intermediaries and foreign parties to exploit the Syrians' need for basic commodities to achieve profit and material benefits.

The industrial sector exploitation mechanisms can be classified into the following overlapping levels:

- * The industrial unit: the difficult economic conditions caused by the continuing conflict pushed many workers in the industrial sector to submit to the conditions of the owners of establishments and accept low salaries and unhealthy work environments. During the conflict, child labor increased, especially in small industrial workshops, and the exploitation of women in industrial work rose, such as in sewing workshops, as they were forced to work for long hours without contracts or work rights, with the possibility of expulsion at any moment by employers.
- * The industrial sector: a large part of the industrial facilities was destroyed and sabotaged as a result of military and war operations, but another part was subjected to financial extortion by various armed groups at the beginning of the conflict, in addition to extensive operations of looting, robbery, dismantling production lines and selling them at low prices inside and outside Syria, as what happened with a number of pharmaceutical industries (Ghosn, 2020). Several producers took advantage of the corruption of regulatory institutions to manipulate the composition of industrial products, including food, to maximize their profits without any consideration of the impact on consumers⁹

⁸ *Russia Today website: A statement by the Minister of Oil in the Syrian government, on 02/03/2021, link: <https://bit.ly/3rQRHuO>*

⁹ *An example of this is a news report by SANA (the Syrian Arab News Agency and the official spokesman for the regime) about the seizure of entire factories that manufacture expired food products, published on 11/19/2021 at the link: <http://sana.sy/?p=1261152>*

- * The production process: Industrialists suffer from a significant increase in production costs as a result of royalties that they are forced to pay to military and security checkpoints to secure the arrival of raw materials. Many are also forced to obtain the necessary fuel for their facilities from the black market. There, they are exposed to the exploitation by the individuals who monopolize the market and take advantage of the unavailability of these materials in the white markets, knowing that the prices of fuel in these markets have become very high after the price liberalization decisions enforced by the de facto forces, especially the regime.
- * The relationship with the de facto authorities: Some industrialists tried at the beginning of the conflict to maintain their profits and good relations with the regime, and they, therefore, engaged in directly supporting military and security actions as a form of proof of loyalty. Examples of these industrialists are Faris Shehabi, who is currently the head of the Aleppo Chamber of Industry. The regime took advantage of this behavior to finance part of its security operations. However, following the relative stability of the security situation in recent years, the regime focused on collecting, levying, and forcing many industrialists to pay large sums of money as fees and taxes due without providing any justification or reason. The regime used its security forces to inform industrialists of their sums as an implicit threat to the problems they might encounter if they refused to pay (Miller and Sly, 2021).
- * Foreign relationships: the industrial sector, especially its extractive part, is subject to exploitation by external forces supporting the de facto authorities in Syria. This is evident in Russia and Iran giving priority to the extraction of oil, gas and phosphate in regime-held areas with easy conditions and low prices (Mehchy et al., 2020). On the other hand, the sanctions create great difficulties in the way of the recovery of industrial production in all Syrian regions, which gives the cronies an excuse to sell imported industrial goods in the Syrian market with a significantly high-profit margin (Mehchy, 2021).

Exploitation mechanisms in the industrial sector have also impacted environmental sustainability. Air pollution rates have increased due to primitive oil burners that have become extremely common in the northeastern regions, and many unlicensed facilities distributed in different Syrian regions have been excessively consuming groundwater and accumulating solid waste. They discharge industrial waste into rivers, causing pollution¹⁰. Consequently, disabling exploitation mechanisms in the industrial sector is considered not only an immediate economic and development necessity but also an urgent need to contribute to changing the current power dynamics in favor of building transparent and inclusive governance institutions capable of overcoming the effects of the conflict and achieving sustainable development.

3. Building and Construction

a. An overview of the construction sector before the conflict:

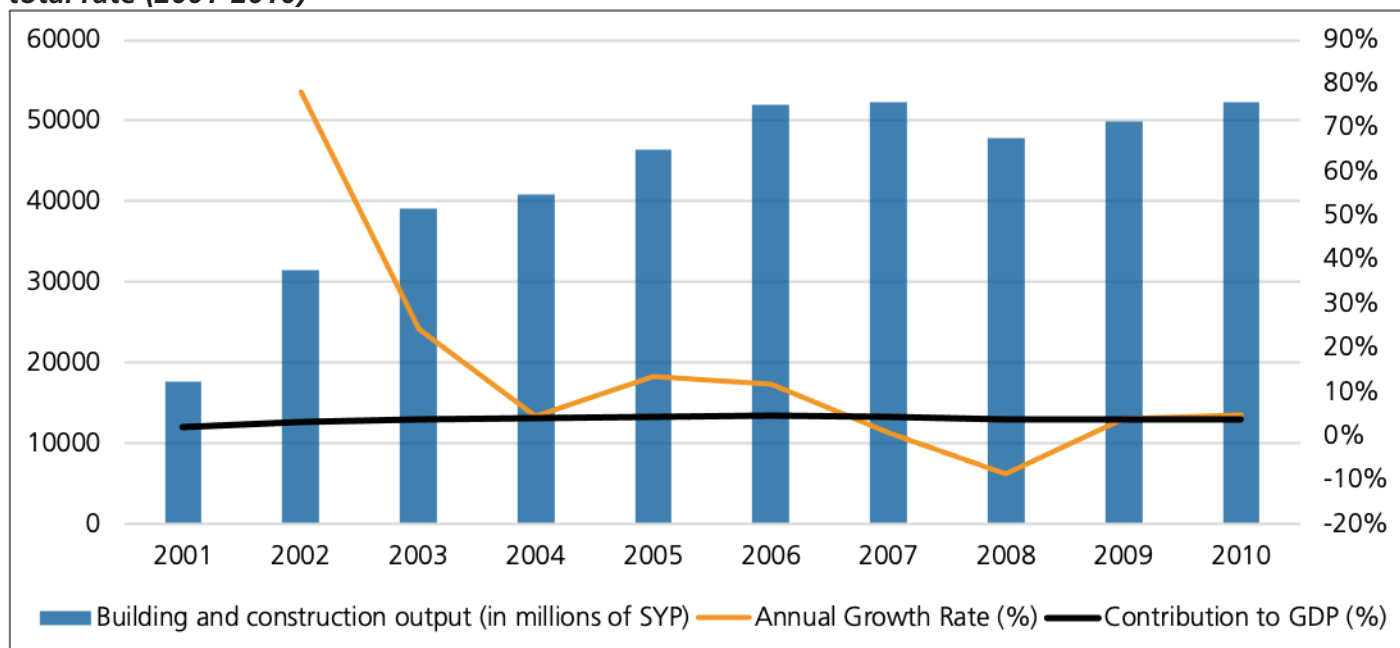
Like other economic sectors, the construction sector in Syria was affected by the ideologies of the ruling authorities. With the Baath Party coming to power in 1963, the socialist state and its institutions became the main authority in securing housing, distributing land, and the building and construction process. This approach continued when Hafez al-Assad assumed power in Syria in 1970, with housing cooperatives given a greater role through Law No. 69 of 1974 (Sukkar et al., 2021). As a result, a number of government agencies related to the building and construction sector were established, the most important of which was the Military Housing Corporation, established in 1975 to provide adequate housing for the military. Its role expanded significantly to include the civil construction sector. However, the government at that time was unable to cover the demand for construction, especially low-cost housing, which was accompanied by high population growth and extensive migration from the countryside to the city, which contributed to the growth of slums in urban areas during the second half of the 1970s and the early 1980s. Accordingly, the Central Committee of the Baath Party decided

¹⁰ Example of an article in the semi-official Damascus News Network on the pollution caused by the waste of the industrial zone in Hisya, published on 8/04/2019, link: <https://bit.ly/3rlyEJ>

in 1982 to provide basic services and the necessary infrastructure for these communities as an indirect recognition of the right of the residents of these areas to own property (Sukkar et al., 2021). With the arrival of Bashar al-Assad to power in 2000, the private sector grew. As a result, many housing projects were launched, especially in the areas surrounding the city of Damascus. However, these projects were limited in coverage and high in value and cost. They thus deepened the housing problem in Syria, reaching a demand for housing of about 120,000 units annually in 2006 (Almanafsi, 2019).

In this context, the gross domestic product of the construction sector witnessed high growth rates between 2001 and 2006¹¹, the highest of which was about 78% in 2002. These high rates can be explained by the real estate boom and the significant rise in the prices of housing and land for construction resulting from the flow of investments, especially from the Gulf, which aimed to make a quick profit from the rents of land and real estate. Accordingly, the contribution of the construction sector to the GDP increased by about double (Figure 10).

Figure 10: Building and construction output at constant prices, growth rates and contribution to the total rate (2001-2010)



Source: Central Bureau of Statistics - Statistical Group (2000-2011) and researchers' calculations.

The high growth rates of this sector were not accompanied by the creation of sustainable job opportunities, which also reflected the real estate rent bubble, as labor force surveys between 2001 and 2010 issued by the Central Bureau of Statistics indicated that the average growth rate of the number of workers in the construction sector did not exceed 4% during this period. The percentage of people employed in this sector out of the total number of employees increased by only about two percentage points, from 12.7% in 2001 to 14.8% in 2010 (Central Bureau of Statistics, 2001-2011).

b. The Construction Sector During the Conflict:

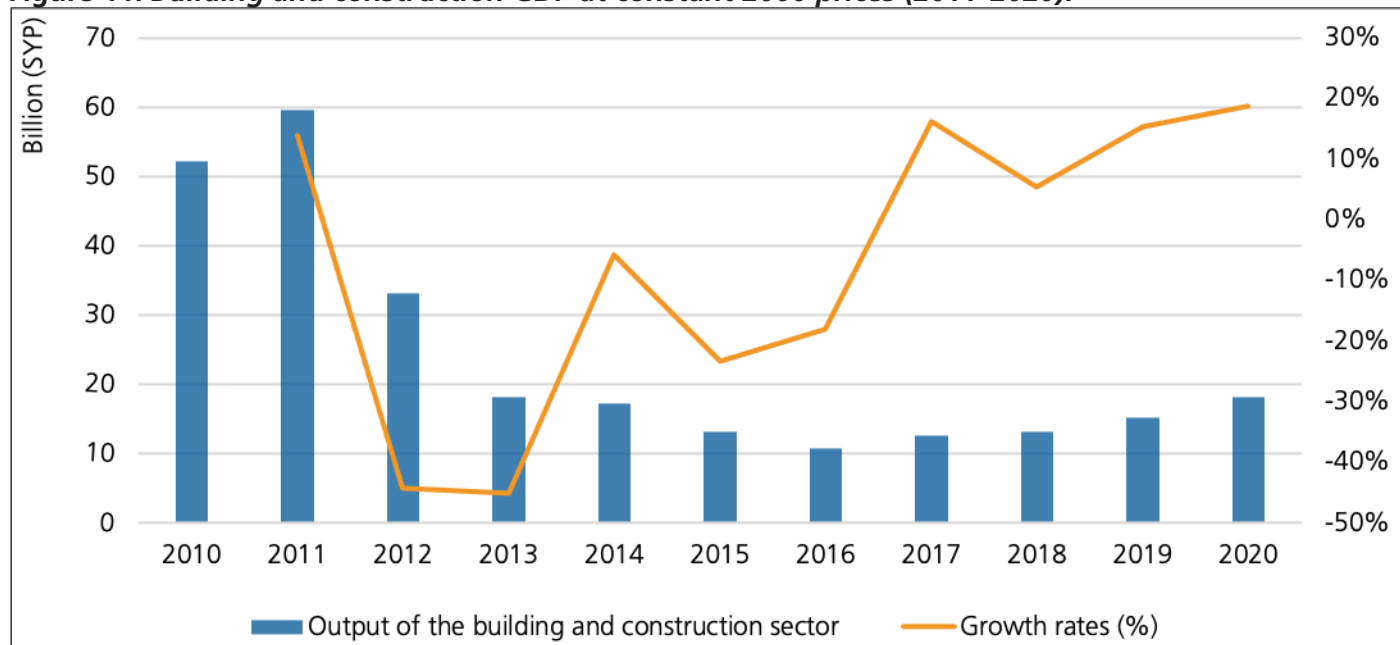
The conflict and military operations have greatly affected the productivity of the construction sector and destroyed a large part of this sector's capital stock as a result of the direct targeting of fixed assets of residential and commercial buildings in most of the Syrian regions. The continuation of the conflict led to a sharp decrease in the production and import of building materials, in addition to the emergence of challenges related to the absence of modern technologies, the migration of qualified labor, the inefficiency of the quality control system for construction works, and the prevalence of slums. In this context, it should be noted that the first year of the conflict in Syria witnessed a noticeable increase in the output of the construction sector as a result of the expansion of random

¹¹ This section focuses on the domestic product of the building and construction sector, i.e. on what is being built as residential homes, factories, shops, roads, bridges and other urban activities during one year, and this differs from the investment accumulation (capital stock) in this sector, which was subjected to great destruction during the conflict in Syria.

construction work, especially in main cities such as Damascus, Aleppo and their surroundings. At that time, the regime authorities overlooked these actions because of their focus on suppressing the uprising and their desire to avoid any potential confrontations with people in the slums (Clerc, 2014).

Figure (11) below indicates the impact of the conflict on the GDP of the construction sector at constant prices, which was manifested in a sharp decline in output by about 45% annually in 2012 and 2013 — as a result of the prevalence of slums — following the growth of 14% that was achieved in 2011. However, since 2017, the sector saw positive growth rates, which can be explained by two points. The first is that the sector’s output reached a record low level in 2016, and therefore any simple construction movement achieved positive growth. The second point is adapting to the dynamics of the conflict and its outcomes and starting construction operations, in all Syrian regions, specifically since 2020, in which the construction sector achieved growth rates of about 20%, accompanied by relative stability on the internal battle fronts.

Figure 11: Building and construction GDP at constant 2000 prices (2011-2020).



Source: Central Bureau of Statistics - Statistical Group - Researchers’ estimates and calculations.

Despite the positive growth rates in recent years, the sector’s output in 2020 did not exceed 35% of what it was in 2010. To find out what the sector would have been if the conflict had not occurred, annual growth rates were adopted equal to the average growth rate of the building and construction sector between 2006 and 2010, which was equivalent to 4.5%. By comparing the value of the real output of the sector in 2020 with what it would have been in the absence of the conflict, we find that the losses of the construction sector until 2020 amounted to about 120% of the sector’s total output in 2010.

The conflict stage saw significant changes in the governance of the construction sector and the escalation of looting and exploitation mechanisms, especially in regime-held areas. In 2018, the Syrian regime began demolishing areas it regained control of. These demolitions were associated with the aim of expanding private housing projects (Sukar et al., 2021) and preparing for the legislative and legal framework necessary for the work of real estate investment companies, often owned by accountants directly associated with the regime. The framework focused on limiting random construction and imposing strict penalties on violators, as is the case with legislative decree No. 40 of 2012, which stipulated strict measures towards slums, including the removal of illegal buildings. This legislation could be considered an attempt to punish those who participated in the civil protests since many of those protests started in the slum areas.

Furthermore, a number of laws and decrees were passed that allowed the private sector and the authority’s cronies to acquire investments and real estate projects at the expense of small owners of land and housing. The most important of these legislations was Decree 66 in 2012, which formed the basis for Law No. 10 of 2018, which in turn legitimized the seizure of land on the pretext that there was no proof of ownership (Arab Reform Initiative, 2018).

As for the areas outside the regime's control, the construction sector witnessed activity in illegal/random construction due to the massive displacement movement to those areas, especially the areas of north and northwest Syria. However, this activity was not accompanied by real growth in this sector due to several factors, including weak purchasing power, high prices of burners, fluctuations in exchange rates, borders being closed for crossing, and consequently the difficulty of securing building materials, in addition to royalties imposed by influential people and cronies of the de facto authorities (Assistance Coordination Unit, 2021).

4. Services sector:

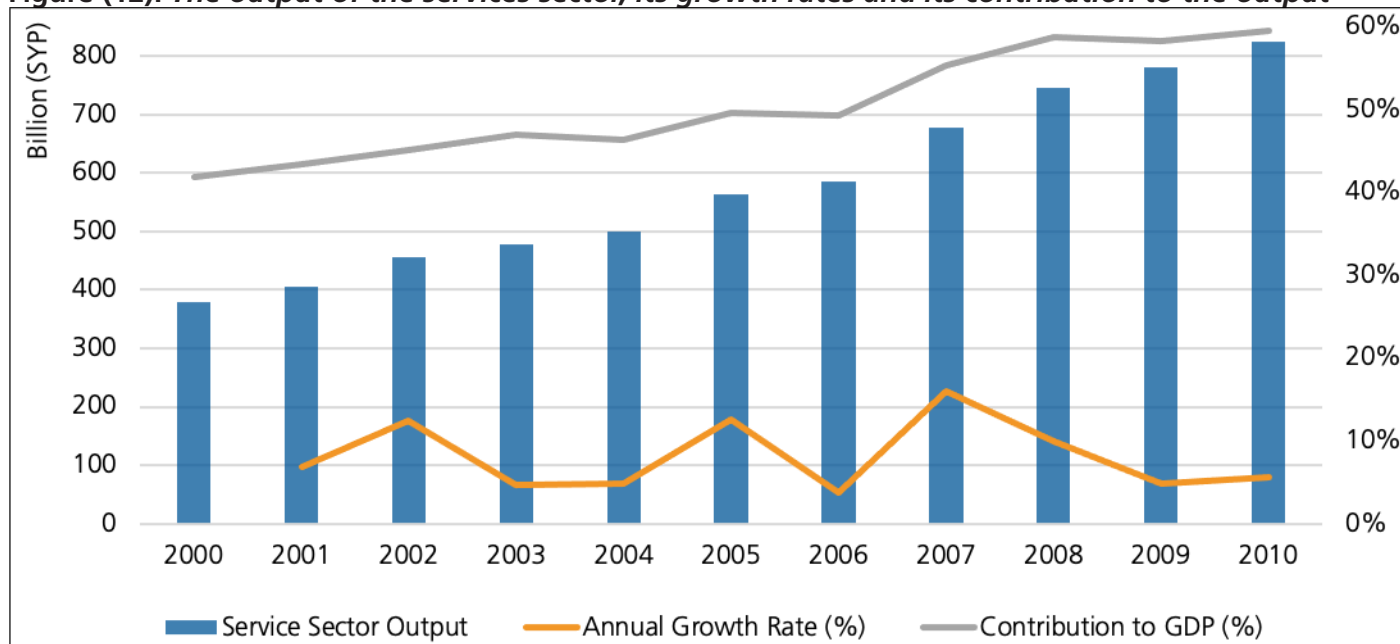
a. An overview of the service sector before the crisis:

The Syrian state has had full control over the service sector since the 1960s, and this role was aligned with the socialist ideology of the ruling Baath Party. However, since Hafez al-Assad came to power in Syria, the role of the private sector became more influential in the service sector through influential businessmen such as Othman Al-Aidi in the field of tourism, Saeb Nahas in transportation, and Abdul Rahman Al-Attar in trade (Haddad, 2012). With Bashar al-Assad's assumption of power, the role of the private sector expanded significantly, policies became more inclined towards economic neoliberalism, and a market economy was adopted. This was evident in the field of cellular communications in which regime cronies were in control of the sector, most notably Rami Makhlof, Bashar al-Assad's cousin. Other sectors strongly emerged and became part and parcel of the private sector headed by regime cronies, such as the insurance and banking sector (Haddad, 2012).

Figure (12) shows that the service sector ¹²maintained positive annual growth rates between 2000 and 2010, the highest of which was about 16% in 2007. The service sector's contribution to GDP increased significantly from 42% in 2000 to about 60% in 2010. This was explained by the large-scale involvement of the private sector in providing services, especially banking, insurance, cellular communications and tourism during that period, in addition to the noticeable decline in the output of extractive industries, which contributed to the relative increase in the service sector's share of GDP at constant prices. The service sector at that time achieved huge profits for a small number of cronies, and its growth was not inclusive in a way that produced sufficient job opportunities. To infer that, the growth of the service sector between 2000 and 2010 more than doubled, while the increase in the number of sector employees did not exceed 30% during the same period (Central Bureau of Statistics, 2001-2011)

12 The services sector includes the following activities: wholesale and retail trade, finance, insurance and real estate, transportation and communications, government services, social services, and non-profit organizations.

Figure (12): The output of the services sector, its growth rates and its contribution to the output



Source: Central Bureau of Statistics - Statistical Group (2000-2011) and researchers' calculations.

Based on the above data, it can be said that during the years preceding the conflict, the services sector made huge profits for the regime's cronies, who controlled investment in fast-profitable sectors such as cellular communications. This came at the expense of the majority of workers and daily-wage workers and to the detriment of the state's rights to benefit from the profitability of this sector. Cell phone companies benefited from unjustified financial advantages and exemptions.

b. The service sector during the conflict:

The protracted conflict in Syria since 2011 has affected the service sector significantly in terms of productivity and governance. Military operations destroyed the infrastructure needed for this sector, in addition to the destruction of the assets and properties of service institutions. The service business environment was also affected by many factors, including the absence of security and stability, the emigration of qualified individuals, the collapse and fluctuation of the exchange rate, a sharp reduction in the volume of demand, and a huge rise in costs due to the lack of energy carriers and the imposition of royalties by the de facto authorities. The authorities also significantly raised the fees and taxes imposed on this sector and geared its gains towards serving their military apparatus and the individual interests of the members of the authority and its cronies.

Figure (13) below indicates a sharp decline in the output of all service activities at constant prices, except for the non-governmental organizations sector, which grew by more than 17 times between 2010 and 2020. This can be explained by an unprecedented rise in the activities of charities and development institutions — that do not aim for profit — as a result of the increased huge demand for humanitarian support for most families in all Syrian regions. However, the de facto authorities have not hesitated to use exploitation mechanisms to control this sector, which has attracted the support of dozens of international organizations and donors and thus has become an important source of income for these authorities. These mechanisms were clearly demonstrated in regime-held areas, where most of the humanitarian aid programs are controlled by two non-governmental organizations that are considered part of the regime, namely the Syrian Arab Red Crescent and the Syrian Trust for Development, of which the latter is supervised by Asma al-Assad. Some estimates indicate that 60% to 80% of international aid provided in regime-held areas are funneled through these two institutions. Therefore, this aid is directly or indirectly serving the objectives of the regime (Hall, 2022).

Figure (13): Output of service activities for the years 2000 at constant prices for 2010 and 2020.



Source: Central Bureau of Statistics - Statistical Group - Researchers' estimates and calculations.

The finance, insurance, real estate and government services sectors experienced the largest decline among service activities, as the volume of output of the two sectors at constant prices in 2020 did not exceed 20% compared to 2010 (Figure 13). The financial and real estate sector has been greatly affected by the financial and monetary sanctions imposed on the regime. The significant deterioration in exchange rates, the increasing debts, and dependence on foreign markets and imports increased pressure on the local currency, depreciating it further. In the real estate sector, activity has decreased as a result of the absence of the sovereignty of law and the process of real estate purchase and sale, which has been made extremely challenging by the de facto authorities – in addition to legitimizing the seizure of property and housing by these authorities, with Law No. 10 of 2018 as an example (discussed in the construction sector section). As for government services, their relative contribution to the GDP increased during the early years of the conflict through the regime's attempt to maintain the work of government institutions and continue to pay salaries, in addition to the large increase resulting from the salaries of the military and security sector. Later on, however, the government services sector began to deteriorate sharply with the significant depreciation of the Syria lira and, consequently, in the value of wages for workers in the public sector. The depletion of financial resources available to the government led to a sharp decline in the value and quality of public services. Public institutions in areas outside the regime's control have suffered from a lack of resources and the inability to increase resources, in addition to the novelty of these institutions and their instability due to the political and security conditions.

The wholesale and retail trade sector witnessed a significant reduction, as the value of the output of this sector in 2020 amounted to 33% of what it was in 2010 (Figure 13). The following factors contributed to the reduction:

1. The purchasing power of Syrians in all regions
2. The high costs of energy and the difficulty of securing it
3. The disruption of insurance services and financial operations with traders abroad as a result of sanctions
4. The subjection of work mechanisms in this sector to exploitation and extortion by the de facto authorities and their cronies with the imposition of royalties and the acquisition of goods for sale in the black market

As a result, the sector has suffered from the arbitrariness of the economic policies of the authorities, whose decisions aim to collect the largest possible amount of money from stakeholders in the trade sector and reduce their logistical support and the subsidizing of energy carriers.

There was a slight improvement in this sector in 2018 and 2019, but the collapse of the exchange rate in 2020 led to a setback in the sector and negative growth rates (Central Bureau of Statistics and researchers' estimates). With the continued deterioration of economic conditions, new mechanisms of exploitation of internal trade began in 2020, especially in regime-held areas, where state institutions, including customs and finance, were used to collect money from merchants. Subsidies for basic commodities were lifted, and consumer goods control was imposed through the smart card, all monopolized by key figures in the provision of goods and services, such as Rami Makhlouf (Terkawi, 2021).

In 2020, the output of transport and communications reached about 40% of what it was in 2010 (Figure 13). The conflict caused a sharp decline in the work related to the transport sector as a result of high fuel prices, theft of vehicles and public and private cars, the destruction of road and railway networks, royalties and checkpoints on transport routes, looting of goods from transport trucks, in addition to a decrease in the demand for commercial transport services due to the deterioration of other economic activities such as agriculture, manufacturing and foreign trade. The various de facto authorities in Syria have exploited the activities of the transport sector. For example, the regime forced the owners of transport companies to harness what they had of service vehicles for security and military requirements. The business of commercial transport and the transport of individuals constituted a financial source for these authorities through extortion, looting and the imposition of royalties at checkpoints scattered in all Syrian regions (EASO, 2021).

The telecommunications sector suffered significant losses during the conflict period as a result of the sabotage and theft of infrastructure. Still, it was able to compensate for part of these losses and maintained its high profitability, which in its entirety goes to the cellular telecommunications companies Syriatel and MTN at the expense of the rights of the state and the beneficiaries of the telecommunications service. This explains the interest of the narrow circle of the Syrian regime in controlling the management of these two companies through two stages. The first phase aimed to protect and sustain the profits of the two companies. In 2014, the Al-Halqi government transferred the contract with the two companies from a B.O.T investment system. According to that, ownership should have been transferred to the state at the beginning of 2015 to form a work licensing system that provides cellular communications service in exchange for an initial fee with the transfer of a decreasing percentage of public treasury revenues until the year 2034 (Ghosn, 2021). The second stage began in 2018 with the government's intention to impose judicial custody on the two companies, claiming they had not paid their due amounts (Ghosn, 2021). This trend was only a reflection of the regime's will, specifically the Presidential Palace's, to tighten its control over this sector and send a message, especially to its cronies, that the palace is the only entity that controls the private sector and its influencers, regardless of the degree of their influence. Several press reports indicate that the third operator, which bears the name "Wafa Telecom", will emerge in the sector soon and will be directly controlled by people closely affiliated with the Presidential Palace¹³. Other de facto authorities in Syria are working to benefit from the telecommunications sector and turn its profits to their advantage. For example, the Salvation Government in Idlib, affiliated with Hay'at Tahrir al-Sham, supported the work of the E-Lux Mobile Communications Company by benefiting from the coverage of Turkish towers and other towers in regime-held areas. It recently started using its own dedicated towers in Idlib city and other areas, but the service still suffers from technical problems and high prices in proportion to the standard of living of residents in these areas¹⁴.

The activities of social and personal services such as health and education services provided by the private and civil sectors were significantly affected during the conflict, especially in the early years, as a result of the decline in the economic activity of local communities, the destruction of facilities, the decrease in the number of the qualified labor force, the collapse of the exchange rate, and the suffering of service providers in obtaining the materials needed for their work. These included energy carriers, which raised the prices of their services significantly and limited the demand for them. Consequently, many owners of service activities were forced to close their businesses. The output of the social and personal services sector in 2020 amounted to about 60% of what it was in 2010 (Figure 13), noting that

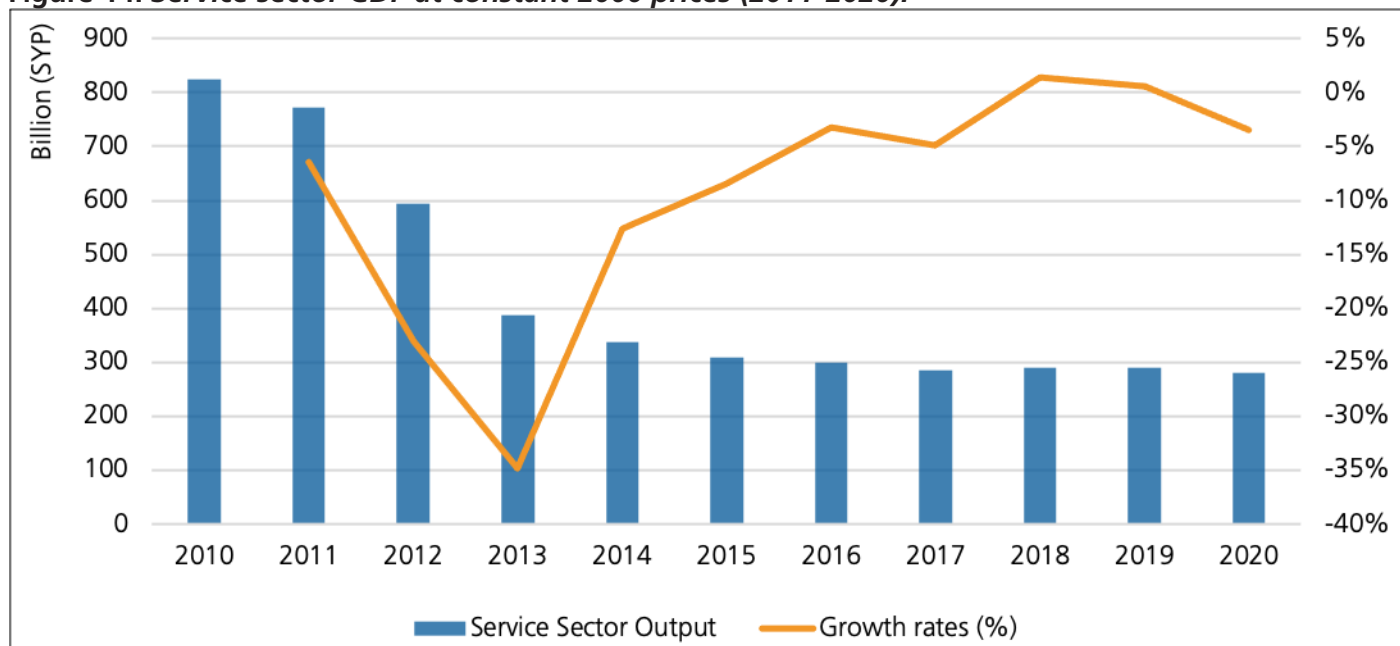
13 An article dated June 26, 2021, on Al-Hal.net about the third cellular operator in Syria, link: <https://bit.ly/311fyNX>

14 Article dated May 15, 2020, on the Iqtisad website about the Ilux network in Idlib, link: <https://bit.ly/3gXPOG8>

the years 2018 and 2019 witnessed low positive growth rates that quickly turned into negative rates in 2020 (Central Bureau of Statistics and researchers' estimates), affected by currency depreciation and further deterioration in public services, especially electricity.

In total, the service sector with all its activities saw negative growth rates during the conflict in Syria, the highest of which was about -35% in 2013. In 2018 and 2019, the sector witnessed positive growth that reached an average of 1%, but this originally modest growth occurred on a low output and, therefore, had no tangible impact on the economy. In 2020, negative growth rates returned to the services sector (**Figure 14**), with the collapse of the exchange rate, the unavailability of goods and the dissolution of the purchasing power of the majority of Syrians.

Figure 14: Service sector GDP at constant 2000 prices (2011-2020).



Source: Central Bureau of Statistics - Statistical Group - Researchers' estimates and calculations.

In addition to the material impact, the conflict altered the power dynamics and governance of the service sector, with de facto authorities seeking to control and benefit from the sector. The authorities used several methods to achieve this, including the domination of official institutions (such as municipalities, finance, catering and customs) to extort money from business owners who are service providers by imposing often unjustified fees and taxes. Another method was direct control over sectors with high profitability, such as cellular communications, usually carried out by authority cronies and those close to them, while imposing limits on the influence of these cronies, who are abandoned and replaced as soon as they step out of line.

Exploitation mechanisms against business owners and influential people have been accompanied by the collapse of services provided to consumers in terms of quantity and quality, the dwindling purchasing power of most Syrians, and the increase in work challenges facing many workers in this sector. Owners of small transport vehicles, for example, suffer from the risk of theft and the continuously increasing fuel prices and financial extortion by the checkpoints with almost complete absence of the sovereignty of law. In return, they work for long hours and with a financial return that is not enough to purchase the basic requirements of their family. Also, most owners of small and micro-enterprises suffer from the difficulty of continuing to work with the deterioration in the business environment and the absence of basic services and the absence of any indication of the de facto authorities' intention to stop the depletion of this sector for their own benefit and those close to them.

II. The impact of the conflict on the financial and monetary sector:

The financial and monetary indicators in Syria during the pre-conflict years showed economic stability at the macro level. The country saw low levels of public debt and deficit in the public budget and trade balance, in addition to stability in the consumer price index and inflation rates. However, these indicators were hiding major structural imbalances in the Syrian economy. The low deficit in the public budget is due to the noticeable decline in the value of public spending, which includes spending on health and education (Central Bureau of Statistics, 2000-2010¹⁵). Public budget revenues indicate a decrease in tax revenue and dependence mainly on indirect taxes, which negatively affect the concept of tax justice. In terms of the balance of trade, Syrian exports depended largely on oil, which accounted for an average of 72% of the total Syrian exports in the period between 2000 and 2004. This percentage decreased to 40% for the period between 2005 and 2010. This decrease was accompanied by a shift in the surplus in the balance of trade during the first years of the third millennium which reached a deficit of 8.7% of GDP in 2010 (Central Bureau of Statistics, 2000-2010). The stability in inflation rates and the consumer price index at that time was due to the state intervention in setting and supporting prices, especially the prices of basic materials, including fuel. In 2008, when fuel prices were liberalized, the consumer price index rose by more than 15% compared to an average inflation that did not exceed 5% in previous years (Central Bureau of Statistics, 2000-2010). These structural imbalances negatively impacted the competitiveness of the Syrian economy. As a result, Syria's ranking in the Global Competitiveness Index deteriorated from 78th (out of 134 countries) in 2008 to 97th (out of 139 countries) in 2010 (World Economic Forum, 2010).

The fiscal and monetary policies reflected the indirect bargaining relationship that the authoritarian regime established with Syrian society since the Baath Party took power in 1963. The party adopted subsidizing the prices of basic commodities, providing free health and educational services, in addition to implementing public employment policies on a large scale. But, in return, it expanded security and military expenditures, restricted freedoms and prevented political action (Mehchy, 2021). With the assumption of power by Hafez al-Assad in 1970, this bargaining continued, but at the end of the eighties, the state's financial resources were exhausted, and the government began to increase taxes and indirect fees and increase the prices of some subsidized goods, which led to a significant deterioration in the living conditions, especially for the middle class in Syria (Haddad, 2012). Since 2000, with the advent of Bashar al-Assad to power, a clear trend emerged to adopt the policies of economic liberalization and raise support. The actual implementation of these policies, which only benefited the regime's cronies, widened the income gap tremendously within the society, without being accompanied by any change in the regime's approach towards restricting liberties. During the conflict period, the dynamics of the regime's fiscal and monetary policy changed significantly, but it remained aimed at its core for its continuing existence in power without any regard for the catastrophic deterioration in the living conditions of the majority of Syrians.

1. Financial policies:

The ongoing conflict since 2011 has depleted the resources of the Syrian state, of which the regime was controlling a large part. The extractive industries' infrastructure was destroyed, and the Syrian regime lost control of most of the oil fields. In addition, the loss of the local production structure's ability to continue led to almost absolute dependence on foreign countries, which has placed great financial burdens on the Syrian economy both currently and over the long term.

Official data issued by the Syrian government indicated that the volume of exports in 2021 amounted to 664 million euros, while the volume of imports exceeded 4 billion euros¹⁶, with a deficit of about 3.3 billion euros. This is equivalent to approximately 60% of the general budget in that

¹⁵ *Statistical groups and researchers' accounts*

¹⁶ *Article in Enab Baladi about the trade deficit, link: <https://www.enabbaladi.net/archives/540076>*

year, according to the official exchange rate¹⁷. However, these official foreign trade figures indicated that the volume of trade exchange with Iran would amount to about a quarter of a billion euros in 2021¹⁸. At the same time, the Minister of Oil in the Syrian government stated that Iran supplies 3 million barrels of crude oil per month to Syria through the Iranian credit line¹⁹. Considering that the average price of a barrel in 2021 amounted to about 60 euros²⁰, the total Iranian oil exports to Syria amounted to 2.16 billion euros. Therefore, the official figures for foreign trade do not include all oil imports to Syria, in which if they were added to the official deficit in the trade balance, the value of this deficit would account for more than 90% of the general budget for the year 2021.

Revenues resulting from taxes and fees decreased sharply during the conflict, as a result of the collapse of all economic sectors, as the report mentioned in the previous sections, in addition to the regime's loss of control and the collapse of the effectiveness of financial institutions capable of collecting these revenues. Tax and fee revenues fell between 2011 and 2021 by more than 85%, denominated in US dollars at the official exchange rate²¹. Syria also lost the largest part of its hard currency reserves, whether through their use in stabilizing the exchange rate, financing the budget deficit, or as a result of freezing part of it due to sanctions. It was estimated that 20% of these reserves have been inaccessible to the Syrian government since 2011 (IMF, 2016).

With this deterioration in financial resources, the regime has resorted to a number of mechanisms to increase its financial solvency to maintain its ability to finance its military and security machinery, secure the minimum number of basic commodities to absorb public anger and contain the dissatisfaction with the living conditions of all Syrians. These mechanisms include reducing public spending, specifically spending on subsidizing the prices of basic goods and services, and increasing public tax revenues through the use of security threats to a number of business owners to pay large sums of money under the umbrella of recovering the state's right from taxes. They also include relying on profits resulting from the trade of illegal materials, especially drugs, and benefiting from remittances, whether they are sent by individuals to their families inside Syria or from international organizations to implement early recovery projects and send humanitarian aid.

The general budget of the Syrian government witnessed a significant decrease in public spending, estimated in US dollars at the official exchange rate. The value of the salaries and wages block decreased by about 75% between 2011 and 2021, despite the nominal increase of this block by more than 8 times during this period²². Noting that public sector salaries have witnessed several increases since the beginning of the conflict, and the regime has considered that salaries and public jobs contribute to increasing public sector workers' association with it and therefore form part of the mechanisms to extend its control over the facilities of the Syrian state, including the security and military sector. The latest data of the Central Bureau of Statistics indicated that the number of workers in the public sector reached about 1.6 million employees in 2019, in addition to about half a million retirees (Central Bureau of Statistics, 2011-2020).

The item of social support is considered one of the most important items of the budget from the economic and political point of view, as the regime uses this item to appear in the form of a sponsoring state that cares about the affairs of its citizens. The support is considered part of the implicit indirect bargaining between the regime and the Syrian citizens, in which the latter gives up its right to engage in effective political participation. Economically speaking, the support was an important tributary for Syrian families in reducing

17 *In 2021, the total budget amounted to 8,500 billion Syrian pounds, the official exchange rate was 1250 Syrian pounds per US dollar*

18 *Article in Enab Baladi about the trade exchange between Iran and Syria, the link: <https://www.enabbaladi.net/archives/546077> indicates that the volume of exchange amounted to 190 million euros for the first nine months, i.e. around 21 million per month, and therefore the annual exchange was estimated at about A quarter of a billion euros (21 * 12 = 252)*

19 *Article in Syria TV about Iranian oil to Syria, link: <https://bit.ly/3tKuco5>*

20 *According to the US Energy Information Administration website, link: <https://bit.ly/3IIAGYK>*

21 *Researchers accounts and statistical bulletins of the Central Bank of Syria at the link: <https://bit.ly/3tI9dlB>*

22 *Ibid*

the gap between family revenues and expenditures. During the conflict and with the state's resources shrinking, the provided support decreased significantly under the pretext of rationalizing the support and directing it to those who deserve it. Despite the great variation in the support numbers from year to year and not being added to the budget as a clear item since 2012, the approach to support allocations with the collapse in the exchange rate showed the continuous decline of its actual value (Ghisn, 2021).

Central Bank data indicated that the value of social support, denominated at the official exchange rate, decreased to more than half between 2012 and 2020²³, knowing that budget appropriations are not necessarily spent. For example, data on cutting off official accounts (that is, actual expenditure) for 2016, the last year for which cutoff data was available from the Ministry of Finance at the time of writing this report, showed that the real deficit amounted to 26 billion Syrian liras compared to the estimated deficit in the budget for that year, which amounted to 642 billion Syrian liras, indicating that actual expenditure is much less than the estimated expenditure in the general budget items (Hegazy, 2021).

The Syrian regime coordinated with the private sector to find executive mechanisms to reduce subsidies, and the smart card was adopted and distributed to families inside Syria to obtain main goods and services at a subsidized price, claiming that this mechanism does not allow families to exceed their allocations. The private company that manages the matter, Takamol, profits greatly, at 25SL per thousand for each sale of fuel through the smart card. The company is owned by one of the regime's cronies called Muhannad al-Dabbagh (Mehchy et al, 2020).

Cooperation with the private sector is another significant financial source for the regime and a way to recycle public money for its own benefit and that of its cronies. An example of this, in addition to Takamol Company, is the import of basic commodities, including oil and wheat, as the government contracts with companies in the private sector to import these commodities. These companies are owned by regime cronies such as Samer Al-Fawz and Hossam Katerji, who are included in the imposed economic sanctions on the Syrian regime but run a network of companies distributed in different countries such as Lebanon and Russia, in addition to their cooperation with economic networks in the northeastern regions to purchase these goods (Mehchy, 2021). The contracted goods are often priced at amounts higher than the international price on the pretext of the costs of bypassing sanctions, and the government pays the value of these contracts from public funds. In this process, what is collected from public money, including foreign exchange, is transferred to the benefit of those cronies who in return must show absolute loyalty and unlimited financial support to the regime, knowing that the latter can seize them, their money, and their property, as it did with Rami Makhlof, who was considered one of the most important pillars of the economic system (Mehchy, 2021).

Since 2019, the Syrian regime has started blackmailing businessmen, including loyalists, to turn them into a source of financing for the regime's apparatus and the public treasury. This process is managed by Yasar Ibrahim, a businessman/regime patron and responsible for the economy dossier in the Presidential Palace in coordination with the security services. Yasar communicates with businessmen and asks them to come to one of the security branches to negotiate the amounts they must pay to the state treasury under the pretext of evading taxes and customs. It is difficult for those that are called to the meeting to do anything but comply with payment. Yasar Ibrahim runs a group of companies working in the fields of energy, oil and communications, and many consider him to be the treasurer of the regime who replaced Rami Makhlof (Miller and Sly, 2021).

Most of the de facto authorities, especially the regime, benefited from illegal activities that drastically increased during the conflict, including theft, looting, kidnapping, royalties and smuggling. However, since 2018, after the regime began to regain control over many areas, especially in the countryside of Damascus and Daraa, the drug trade, specifically Captagon, has emerged through Jordan and Lebanon. Syria has become one of the most important exporters of this substance globally, and the value of its Captagon exports is estimated at about 3.5 billion dollars, which is an estimated figure that could be higher (COAR,

2021). In fact, it is about 4 times the value of the official exports of the Syrian government in 2021. It should be noted that the Captagon trade was one of the funding sources for the regime's armed groups, but the regime turned it into an important source of income, especially for its security services (COAR, 2021).

With the decline of the regular foreign exchange resources as a result of the deteriorating economic situation and economic sanctions, the regime relied heavily on remittances coming to Syria through official financial channels, as it kept the hard currency and exchanges at the official rate, which is significantly lower than the market price. It is estimated that the value of transfers made through official channels amounted to 1.6 billion US dollars in 2019 (Zuntz, 2021), which is about twice the value of exports of the official Syrian regime in 2020. The Syrian regime also benefits from the transfers of financiers of United Nations projects operating in its areas of control. The Syrian regime requires UN organizations to make all these transfers through the Central Bank and receive them in Syrian liras at the official exchange rate. Data indicate that these organizations transferred a minimum of 113 million US dollars through the Central Bank in 2020, and by converting this amount into the Syrian lira at the official exchange rate, it lost about 45% of its value (Hall et al, 2021). The regime often uses the foreign exchange it obtains through these transfers to import basic commodities at high prices through its cronies.

The Syrian regime was able to secure various sources, most of which are illegal, to maintain its financial stability, even at a minimum level. To a large degree, it was able to manipulate the negative effects of the sanctions to affect the majority of the Syrian people and benefit the merchants closely affiliated with it. These sanctions have raised the value of commissions obtained by these traders and, consequently, the prices of most commodities in the internal market. The sanctions have also negatively affected small traders and owners of small and medium-sized enterprises because of the difficulty of financial transfers dealing with foreign companies and importing raw materials needed for a number of local industries, including pharmaceuticals. Therefore, like any other authoritarian regime, the continuation of sanctions for a long period of time has led to the empowerment of the regime and the development of its capabilities while increasing the negative economic effects on most of the population (Mehchy and Turkmani, 2021).

The financial policies adopted by other de facto forces are similar to those of the Syrian regime, where transparency is absent from most of the financial policies of these forces; corruption, nepotism and weak institutions are prevalent. They aim to collect royalties and other forms of financial compensation to maintain their stability and authority and finance their military and security apparatus. However, the financial policies of the Syrian regime remain the most influential, as it controls the largest number of the population and the state's financial apparatus, in addition to its ability to control large economic networks and its control over the Central Bank and hence the monetary policies.

2. Prices and inflation:

Many overlapping factors play a role in the massive rise in the price level in all Syrian regions during the conflict period. The collapse in the production process that affected all economic sectors, as the report mentioned in the previous section, is one of the most important factors, as this collapse negatively and significantly affected the availability of goods and services in the market and their prices. The monetary policies practiced by the Central Bank are one of the main reasons that led to increased pressure on the local currency. The Central Bank focused on achieving a primary goal of stabilizing the exchange rate in the short term without taking into account the negative impact of its direct interventions in the money market on the overall economy. For example, until 2015, the Central Bank sold hard currency in Syrian liras in public auctions through exchange companies in order to stabilize the exchange rate of the lira, but this did not materialize and resulted in a loss in Syria's hard currency reserves estimated at about 1.2 billion US dollars. The Central Bank also tripled the monetary supply in the market until 2017 without any coverage from the productive sector, which led to an increase in prices in the local markets (Mehchy, 2019).

The absence of the sovereignty of law and the ineffectiveness of monetary institutions, in addition to the significant change in the exchange rate of the Syrian pound, have encouraged many people and companies to speculate on the lira and achieve great profits at the expense of the purchasing power of most Syrians. Speculators often cooperate with members of the security services to ensure the continuation of their work. These speculations deepened the difficulties of the local currency situation (Mehchy, 2019).

The large deficit in the balance of trade and the rise in the external debt also contributed to the depreciation of the Syrian lira and the increase in inflationary pressures, especially since Syria relies almost entirely on foreign countries to secure basic commodities. The Lebanese banking crisis since October 2019 has deepened the inflationary effects in Syria, as most Syrians residents depend on Lebanese banks to conduct their transactions and put their savings in hard currency. Consequently, the limitation of their ability to access their bank accounts in Lebanese banks as a result of the banking crisis led to a decrease in the available amount of hard currency for Syrians and, consequently, a shortage of supply of hard currency in the domestic market.

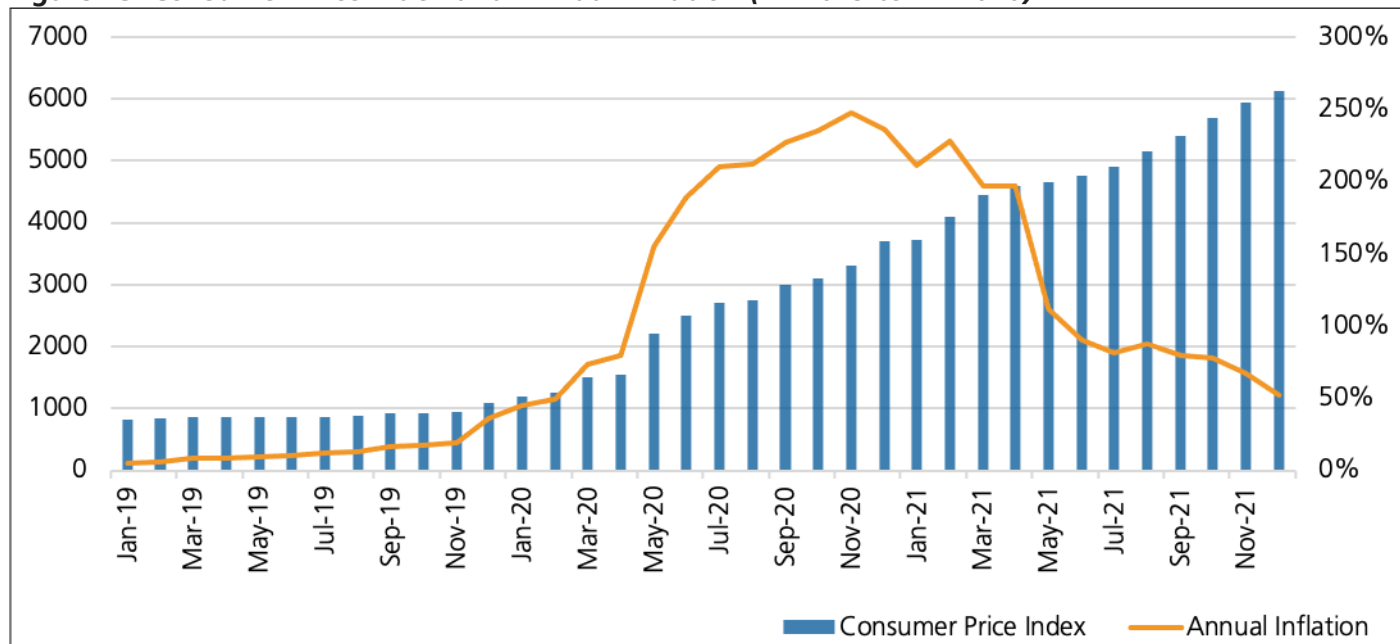
The economic sanctions imposed on the Syrian regime have limited the ability of individuals and institutions inside Syria to transact cash and financial dealings with other countries and have had negative ramifications on foreign investment entering Syria (now or in the future). Foreign direct investment in Syria has fallen to nearly zero after an annual average of about \$1.5 billion US dollars between 2005 and 2010, increasing the scarcity of hard currency inside the country²⁴. As the report indicated in the Financial Policies Section, these sanctions have also raised the cost of imports and remittances, in addition to the increase in this cost already at the global level due to COVID-19 and closure policies since the first quarter of 2020, contributing to a continuous rise in the prices.

The study estimated the consumer price index in Syria and annual inflation until the end of 2021, based on the expectations of the model of the relationship between this indicator and the exchange rate of the Syrian lira against the US dollar in the market on a monthly basis from January 2012 to December 2018 (i.e. 84 months²⁵). The results in **Figure 15** indicate that prices at the end of 2021 increased by about 61 times compared to the price level in 2010. The years 2020 and 2021 saw the largest part of this rise, as by the end of 2019, prices rose about 11 times compared to 2010 to reach 37 times by the end of 2020 and 61 times by the end of 2021. This explains the significant rise in the annual inflation rate (from one month to the same month in the following year) from mid-2020 until the beginning of the second quarter of 2021.

24 CEIC data on foreign direct investment in Syria, available at: <https://www.ceicdata.com/en/indicator/syria/foreign-direct-investment>

25 The data of the Central Bureau of Statistics was relied on for the consumer price index and on the "Lira Today" website <https://sp-today.com/en/> for exchange rates

Figure 15: Consumer Price Index and Annual Inflation (K2 2019 to K1 2020).



Source: researchers' accounts.

It should be noted that the rise in the prices of goods and services was accompanied by a large fluctuation in the exchange rate, which amounted to more than 4,600 Syrian liras for every US dollar in mid-March 2021, only to decline and stabilize between 3,200 and 3,500 liras²⁶ until the end of that year. This relative stability in the exchange rate can be explained by direct security interventions in the currency market and the arrest of some currency exchange agents, in addition to the decisions of the Central Bank to control the cash liquidity of the Syrian lira in the market by setting a limit for daily withdrawals²⁷. Therefore, the stability of the exchange rate in that period is not linked to structural reforms and economic recovery and did not affect the limitation of the continued rise in prices.

The continuous and significant price hike was accompanied by the absence of productive job opportunities in all economic sectors, which led to the collapse of purchasing power and, consequently, the living conditions of most families in Syria, pushing more than 90% of Syrians below the poverty line and more than half of them facing the threat of food poverty²⁸. All regions in Syria were affected by close rates of price increases as a result of similar economic and financial conditions. In addition, the monetary policies of the Central Bank affect the regions that deal in the Syrian lira, even if they are not under the regime's control.

Some de facto authorities in north and northwest Syria have attempted to disengage from the Syrian lira and use the Turkish lira instead in an official decision since June 2020, with the aim of mitigating the negative effects of the sharp deterioration of the Syrian lira on the living conditions of the residents of those areas (Syrian Dialogue Center, 2022). However, the adoption of the Turkish lira faces major challenges, including the loss of economic sovereignty, linkage to decisions issued by another country, the inappropriateness of local wage and income with the purchasing power of the Turkish lira, and the increase in the costs of daily consumer goods as a result of pricing in the Turkish currency. This prompted some local residents to continue using the Syrian lira when purchasing simple food and consumer goods. Furthermore, the sharp decline of the Turkish lira since mid-2021 led to a massive rise in the prices of goods and services without any tangible increase in income. Therefore, abandoning trading in the local currency, not to mention the sovereignty issue, does not necessarily lead to limiting price increases and achieving economic stability, which essentially requires achieving recovery and structural reform for all sectors of the economy.

²⁶ The "Lira Today" website <https://sp-today.com/en/> for exchange rates

²⁷ An article in Enab Baladi about the Central Bank's decisions to limit cash withdrawals, link: <https://www.enabbaladi.net/archives/549740>

²⁸ A press release issued by the United Nations Secretariat on the impact of the continuing conflict in Syria, link: <https://www.un.org/press/en/2021/sqsm20664.doc.htm>

III. Demographic change during the conflict:

1. A glimpse into the demographic map before the conflict:

The population residing inside Syria reached about 20.6 million in 2010, according to official data issued by the Central Bureau of Statistics. However, other estimates indicated that the population reached a limit of 21.8 million people in the same year if the rates of under-inclusion of the population census in 2004 were taken into account (Syrian Center for Policy Research, 2016). The average annual population growth rate reached 2.45% between 2004 and 2010, according to official data, but it reached 2.9% according to the modified data, down from 3.29% between 1981-1994. Despite this decline, it is considered a high rate globally (Syrian Center for Policy Research, 2016).

Looking at the age demographic in 2010, we find that the Syrian society is a young society, with about 37% of the population under the age of 15 years. The population change in that period aged between 15 and 64 years reached about 59% of the total population (Alhay, 2019). It should be noted that the economic indicators in Syria in 2010 showed that the country would not be able to benefit from the demographic window²⁹. For example, the participation rate in the labor market decreased from 52% in 2001 to 42.7% in 2010, meaning the relatively high economic growth that was achieved during this period did not create sufficient job opportunities for manpower in Syria (Nasser, 2012), and therefore the growth was rentier rather than inclusive and was limited to a group of beneficiaries.

The first decade of the third millennium in Syria saw changes in demographic indicators that reflected the failure of development policies from an inclusive perspective. Birth rates increased between 2007 and 2010 after witnessing stability since the mid-nineties of the last century. This indicated a rise in fertility rates and, consequently, a deterioration in development indicators related to it, such as women's participation in the labor market and their access to education. The same period also witnessed a rise in the death rate, and despite the limitedness of this rise, it indicated a decline in the available health services and care (Syrian Center for Policy Research, 2016).

Migration had a major role in establishing the demographic map in Syria, and the number of migrants abroad in 2010 was estimated at about one million people. Migration can be defined as individuals who were born in Syria and left for more than 12 consecutive months. The Syrian diaspora, which includes generations born in the diaspora, reached about fifteen million people (Mehchy, 2011). On the other hand, until 2009, Syria has hosted about 1.4 million Iraqi refugees, which had economic and social repercussions, including higher house rents and an increase in tension and problems between Iraqis and some host communities (Mehchy, 2011). Internal migration also changed the demographic structure in Syria before the conflict, especially migration from the countryside to the city, where the proportion of the rural population to the total population in Syria decreased from about 63% in 1960 to 44% in 2010³⁰. This migration reflects a failure in balanced development policies between regions and a deterioration in living conditions and job opportunities in the Syrian countryside, which contradicts the social contract enforced by the Baath Party since it took power in 1963, which prioritized farmers and rural development. Hanna Batatu explains the phenomenon of the affiliation of rural people, especially in coastal areas, to the armed forces (Batatu, 1999). With the absence of productive economic activities in the countryside, most of these soldiers served in the military and later settled in urban areas.

At that time, the government adopted neo-malthusian-oriented population policies aimed primarily at reducing fertility rates through policies and programs on the importance and methods of birth control without addressing developmental imbalances that directly affect fertility rates, such as the significant

²⁹ The demographic window is the time period in the demographic transition during which the population group between 15 and 64 becomes the main group, with the proportion of children under 15 years of age less than 30% and the proportion of those over 64 years of age not exceeding 15%. The demographic window continues to open for a period of time that exceeds 30 years and is considered an important opportunity for countries to improve their economic situation and increase their production rates with the relative increase of the population at the age of production.

³⁰ World Bank data is available at: <https://data.worldbank.org/indicator/SP.RUR.TOTL.ZS?locations=SY>

decrease in the rate of women's participation in the labor market and the decrease in education rates and unbalanced development. This led to adverse results for the objectives of the demographic policies that the regime had developed and a rise in fertility rates and birth rates in the last three years preceding the conflict.

2. The impact of the conflict on demographic indicators:

The ongoing conflict since 2011 has caused drastic changes in the country's population map as a result of several factors, including asylum, migration, displacement, high mortality, and changes in fertility rates in some areas. The significant decrease in the population, compared to what it would have been without the conflict, is an irreparable loss of human capital inside Syria.

Estimates indicate that until 2020, the population inside Syria had reached about 20.5 million, while the number could have reached 29.7 million if it weren't for the conflict. In short, the country lost the capabilities of about 9.2 million Syrians (Barri, 2019). Assuming that the current low rates of refugee return will continue and fertility, mortality, asylum and migration rates will remain the same as in 2020, it is expected that the population of Syria in 2030 will reach about 25.5 million, compared to 37.5 million if the conflict had not taken place — resulting in the potential loss of 12 million Syrians (Barri, 2019). In conclusion, the drain on Syria's human capital as a result of the conflict will continue in the medium and long term.

The death rate in the country has increased significantly as a direct and indirect result of the conflict, as the hostilities have led to the loss of thousands of fighters and civilians in addition to the spread of crime and murder as a result of violence and insecurity in various Syrian regions. In this context, the victims are considered a direct result of the conflict. The Commission for Human Rights has documented the killing of more than 350,000 people by 2021, but according to the Commission, this figure does not entail the total number of direct deaths as a result of the conflict but rather the minimum number of deaths, which is certainly less than the actual number³¹. In addition, there are deaths resulting indirectly from the crisis due to poor health services, inability to reach medical points, loss of medicines and medical equipment, absence of qualified medical staff, and severe food shortages, especially in areas that have been subjected to siege and extensive military actions, such as the regime's siege on Eastern Ghouta in the Damascus countryside. The Syrian Center for Policy Research estimated the indirect death rate at about 15% of the total deaths (Syrian Center for Policy Research, 2016), and adding this number to direct deaths, the total deaths resulting from the conflict have reached more than 400,000 deaths, which is a very conservative estimate of human loss in Syria.

Accordingly, the death rate increased to 10.8 per thousand in 2014 compared to the death rate before the conflict, which amounted to 4.4 per thousand in 2010 (Syrian Center for Policy Research, 2016). Estimates indicate that this rate has begun to decline in the recent period as a result of the decrease in the fighting fronts and the prevalence of a state of semi-stability on all front lines among the different forces — dropping to about 7 per thousand (Al-Haysh, 2019); i.e., still 60% higher than the death rate before the conflict. The relatively high rate can be explained by the high rate of indirect deaths, with the continued deterioration of the living conditions of most Syrian families, including their inability to receive adequate health services, secure adequate housing conditions and achieve food security.

Estimates of the trend of fertility and birth rates were divided into two groups. The first group believes that the conflict has negatively affected the determinants of fertility that are inversely proportional to its rates. These determinants include the educational level of women, women's participation in the labor market, and the economic and living situation, including securing adequate housing and living requirements. Since the conflict has led to a deterioration in all of these indicators, the total fertility rate has risen, according to this group, to 4.1 births per woman, which is accompanied by an increase in the crude birth rate (Al-Haysh, 2019). As for the second set of estimates, the difficult conditions of the

³¹ News on the United Nations website about the death toll in Syria during the ten years of conflict, available at the link: <https://news.un.org/ar/story/2021/09/1083822>

Syrian crisis, including the massive destruction of property and family assets, human insecurity, living in a state of permanent displacement, the growing fear of the unknown, the spread of uncertainty about the future, and the collapse of health services related to childbirth and reproductive health changed the relationship of the fertility rate with its determinants and led to a decline in the total fertility rate by about 40% from what it was before the conflict (Syrian Center for Policy Research, 2016).

In general, the fertility and birth rates differ sharply between regions and according to the living and security conditions, but given the overall increase in the population in Syria, taking into account the mortality rate, the numbers of immigrants and refugees (Barri, 2019) and the trends of marriage and divorce in different regions (Syrian Center for Policy Research 2016), it is likely that fertility rates and crude births have decreased during the conflict period and, therefore, it is necessary to redefine the traditional determinants of total fertility that usually do not include spatial stability and a sense of security and certainty of the future.

The conflict has led to millions of Syrians leaving their places of residence for other areas inside or outside Syria, and data from the United Nations High Commissioner for Refugees indicate that the number of Syrians registered as refugees and asylum seekers reached 6.8 million in 2021, about 85% of them are in neighboring countries. Turkey ranks the first in terms of hosting highest number of Syrian refugees, which reached about 3.7 million refugees in 2021³². The pace of emigration from Syria increased significantly, especially in the early years of the crisis, but immigration rates dropped in the subsequent years as a result of the decrease in the proportion of the remaining Syrians inside the country with the ability to emigrate. The number of immigrants was estimated at the end of 2014 at about one million people (Syrian Center for Policy Research 2016). With the adoption of changes in the migration rate between 2011 and 2014 from the Syrian center, the total number of migrants until the end of 2020 was estimated at about 1.4 million people.

Data indicate that the situation in various Syrian regions does not encourage Syrian refugees to return to their areas, as UNHCR data recorded the return of about 38,000 refugees to Syria in 2020, bringing this number down to 18,000 in 2021³³. Refugees face many obstacles that prevent them from returning, mostly due to security concerns. A large number of returnees have been subjected to investigations in the intelligence branches, and some of them have been arrested. Other obstacles include the lack of a home to return to as a result of destruction, confiscation or lack of sufficient ownership documents, fear of conscription for young males, and the deterioration of economic and living conditions (EASO, 2020).

Regarding displacement, the total number of displaced people between the various Syrian regions reached about 6.7 million people at the beginning of 2021, and the year 2020 witnessed the movement of displacement and return of about 1.8 million, 440,000 of whom returned to their regions. The governorates of Aleppo and Idlib³⁴ are among the regions that have witnessed the highest rate of internal displacement as a result of the security situation and the military tensions that they are facing. The regions outside the regime's control in these two governorates are also considered a refuge for families and individuals fleeing from security pursuits in all regime-controlled regions, including Damascus and its countryside.

Based on the previous data, the total number of Syrians at home and abroad at the beginning of 2020 amounted to 28.7 million, 52% of whom left their original place of residence to become a displaced person, refugee or immigrant. This violent population movement, within a very short period of time, has radically changed the demographic reality in Syria, whether in terms of gender and age distribution or ethnic and sectarian distribution. The demographic change during the conflict period led to major distortions in the population pyramid of Syria, as the ratio of females to males has increased in most regions for several reasons, including that most of the direct deaths as a result of the conflict were males (Syrian Center for Policy Research, 2016), and the percentage of male migrants and refugees was higher due to their greater motives to leave Syria. These included the compulsory military service,

32 UNHCR database on Syrian refugees, available at: <https://data2.unhcr.org/en/situations/syria>

33 Population and IDP data in Syria from the UNHCR database, available at: <https://reporting.unhcr.org/syria?year=2021>

34 IDPs Tracking, Humanitarian response, OCHA, Available at: <https://www.humanitarianresponse.info/en/operations/stima/idps-tracking>

security persecutions, and the absence of job opportunities in Syria. For example, the percentage of male refugees in the age group between 18 and 59 years is 26.6% of the total number of refugees, while this percentage is at 23.2% for women³⁵. As for the age structure, Syria has lost a large number of its youth, whether as a result of the armed conflict and all the related arrests and enforced disappearances or because of migration and asylum. Estimates indicate a decrease in the proportion of young people between 15 and 39 years to the total population by about five percentage points during the conflict period (Syrian Center for Policy Research, 2016).

All de facto authorities have invested in politicizing identities and linking individuals' affiliation to their sectarian and ethnic backgrounds. Demographic change is one of the outcomes of this investment, which increases the collapse of social capital in Syria and deepens differences between regions. The Syrian regime is considered one of the most important actors in the process of demographic change and uses several tools, foremost of which is violence and intimidation, such as forcing many families in different areas like Ghouta and Homs to leave their homes and move to the northern regions and Idlib. It also uses legal tools, as the Syrian government has issued several decisions that contribute to the appropriation of the lands and properties of thousands of displaced and detainees and distributing them to the regime's cronies and supporters (Arab Reform Initiative, 2018). There are many indications of the intervention of foreign countries like Iran to influence the redrawing of the demographic and sectarian map in Syria to serve their interests. The rest of the de facto forces are carrying out similar practices in northeastern and northwestern Syria, pushing the ethnically and sectarianly different to leave their areas of control (Al-Mutlaq, 2020). Despite the use of sectarian and ethnic identities to re-engineer the demographic distribution, the de facto authorities, especially the regime, depend mainly on the loyalty scale of its supporters, and through that scale determines who from the population they will force to vacate their homes by all available means.

IV. Impact of the conflict on education:

1. An overview of education and its dynamics in Syria before the crisis:

Since the Baath Party took power in Syria in 1963 and until 2010, the educational sector in Syria witnessed many things that positively affected the quantitative education indicators in the country. The noticeable rise in female education rates, especially university education, in addition to the decrease in illiteracy rates (Al-Sayed, 2011). However, this was accompanied by many negative factors, the most important of which was the transformation of education into an ideological tool through the party's direct intervention in formulating the objectives and vocabulary of the educational process for all stages. This eliminated the student's free thinking and led to the formation of an educated yet domesticated generation with a single cultural understanding used by the authority to continue to rule. In this context, educational party organizations were established such as the Vanguard of the Baath and Youth of the Revolution to promote the full integration between the Baath culture and the educational process in Syria (Al-Maaloli, 2016).

a. Infrastructure:

Syria witnessed a remarkable increase in the number of schools, especially in the ten years preceding the conflict, as the number of government schools for basic education increased between 2000 and 2010 by about 30% to reach 17,120 schools. The number of private schools witnessed unprecedented growth rates during this period, as well, amounting to 60% to reach about 500 schools. This increase was concentrated in and around the capital, Damascus (Statistical Group, 2011). This can be explained by the facilities provided by the government to the private sector during this period to invest in all sectors, including the education sector, under the umbrella of the social market economy. This increase also indicated that the population, especially the privileged, were enrolling their children in private schools, which reflected the significant deterioration in the quality of public education and the lack of confidence in it.

35 UNHCR database on Syrian refugees, available at:

Similarly, the first decade of the second millennium witnessed a significant increase by about double the number of government colleges, increasing from 61 colleges in 2000 to 121 colleges in 2010 (Statistical Group, 2011). The tuition fees in public universities were symbolic, through which it was not possible to cover the high expenses of the higher education sector. Accordingly, the government in this period introduced parallel, open and virtual education with relatively high fees into the university admission system. In 2003, licensing of private universities was founded in an attempt to relieve pressure on public universities. These universities were subject to direct supervision by the Ministry of Higher Education to ensure the sustainability of control over the education sector (Al-Fattal, 2010). This oversight was often limited to the formal aspect, in addition to making sure that the curricula, regardless of their quality, did not touch on any political issues that contradict the general trends of the regime.

b. Enrollment in education:

Free and compulsory education contributed to the increase in school enrollment rates for basic education, especially in its first cycle, in the pre-conflict period. The average completion rates of primary education for children in Syria reached more than 96% in the first decade of the second millennium (UIS, 2006). However, this was accompanied by a decrease in the average years of schooling, that is, the number of years an individual spends in school, which indicates a decrease in enrollment rates for post-primary education (UNICEF, 2014).

It should be noted that enrollment rates differed greatly among regions, as they decreased in 2010 to less than 80% for the basic education stage in Deir Ezzor, Raqqa and Aleppo countryside, with lower enrollment among females due to various economic and social reasons, including the employment of their children, the high costs associated with educational services (transportation, stationery, etc.), and adherence to traditions, especially rural ones, that prevent girls from pursuing their education (Al-Sayed, 2011). The significant decrease in education outputs³⁶ in Syria during this period played a role in the absence of financial incentive for students and their families to enroll in schools, institutes and universities, in addition to the failure to link education outcomes with the needs of the labor market (Kabbani & Kamel, 2009).

Compulsory education in Syria had a negative aspect — the school transition law — which required students to be move up to the next grade when a specified number of years of repetition has been exhausted without taking into consideration the level of their knowledge and skills nor working to avoid the points of failure to possess the minimum skills of their peers in the next grade. Accordingly, it can be said that the proportion of students enrolled in compulsory education has witnessed a quantitative increase without real interest in the educational development of students.

c. Curriculum and education quality

Global indicators show the low effectiveness and quality of education in Syria in the pre-conflict stage. In 2010, Syria ranked 100th in the world in terms of research production and refereed papers (SJR, 2010), which reflected the poor quality of the institutions responsible for knowledge production, the ineffectiveness of educational institutions and their curricula in stimulating innovation and creativity among students, and the formality of modernization in these institutions, such as the introduction of informatics in some curricula. During this period, Syria saw an amendment to the school curricula, in addition to the issuance of laws and legislations to modify educational behavior in the country, such as the decision to prevent teachers from hitting students. However, the traditional educational staff faced difficulties in implementing these decisions and teaching the new curricula (Khoury, 2010).

The International Standard for the Study of International Trends in Science and Mathematics (TIMSS) also indicated the poor quality of education in Syria during the pre-conflict years. Syria's achievement in 2007 according to this standard was about 395 points, knowing that the minimum is 300 points, which put Syria in the list of countries with low achievement. This criterion decreased further in 2011 and reached 380 points (Mullis et al., 2011). This reflected the low quality of education in Syria despite

³⁶ Education output is defined as the relative increase in an individual's income for each additional year of study, whether at school, university or institute

the various measures taken by the government at the time under the pretext of modernizing the educational process. Consequently, the apparent stability in the quantitative indicators of the education sector before 2011 concealed structural and qualitative imbalances that compounded the negative effects of the conflict later.

2. Education during conflict:

The conflict in Syria caused widespread destruction in the education sector, as it led to massive destruction of the infrastructure of schools, institutes, and universities, and negatively affected the availability of teaching staff and the ability of students to enroll in education. The conflict also transformed educational curricula into a tool that was used by various de facto forces in all Syrian regions to cement divisions and promote violence and an 'us and them' mentality. Nevertheless, education, if reformed, plays a major role in restoring social cohesion, and it is possible to benefit in the future from the qualifications acquired by a large number of Syrians who fled the war and were able to obtain high academic qualifications at prestigious universities.

Data from the Central Bureau of Statistics indicate that the number of basic education schools in Syria continued to decline reaching less than 9 thousand schools in 2020 after the number exceeded 17 thousand schools in 2010 (Statistical Group, 2010-2020). This decrease was due to several reasons, the first of which was the extensive military operations that led to the destruction of a large number of schools, in addition to using a large part of them as military centers in different regions. However, the continued decline during the last two years, despite the relative stability in the security situation, especially in regime-controlled areas, was mainly due to the weak financial capacity of the Syrian government and its inability to build or renovate destroyed schools. It should be noted that about 50% of the decrease in the number of schools occurred in the governorates of Aleppo and Raqqa (Statistical Group, 2010-2020) as a direct result of the intense military operations in these two governorates.

In the areas not under the regime's control, the percentage of out-of-service schools reached about 15% on average, and the military air force caused the destruction of 43% of the destroyed schools, fully or partially. And schools affiliated with non-governmental organizations and bodies constituted more than 20% of the total schools in these areas (Support Coordination Unit, 2021).

During the conflict period, new universities were opened, including Euphrates in Deir Ezzor and the universities of Tartous and Hama, following the drop in the intensity of military operations in the contested areas of Deir Ezzor and Hama, raising the number of colleges to 152, about 25 more colleges compared to 2010 (Statistical Group, 2010-2020). The infrastructure of universities was less affected than that of schools, and attendance continued, even if partially. When the armed conflict intensified, success criteria were adopted according to the final exam system only, with reliance on theoretical lectures and books, but this was accompanied by a significant lack of educational services provision, including the inability to use the internet in universities effectively due to power shortages. In a press report on the occasion of World Education Day, UNICEF stated that the United Nations documented at least 700 attacks targeted various educational institutions in Syria, whether through demolition, bombing, or transforming them into military barracks, leading to the inability to use them again. The report indicated that after ten years of war in Syria, more than half of the children are still deprived of education, as one out of every three schools is out of service (UNICEF, 2021).

The stability of the security situation in some areas, especially those under the regime's control, did not lead to an increase in school enrollment rates. This can be attributed to a number of reasons, the most important of which are the destruction of the education sector's infrastructure, the inability of the Syrian financial government to rebuild the infrastructure, the dire economic conditions, and the sharp rise in poverty rates, which drove many families to force their children into the labor market instead of school or at least take them out of school not to bear any kind of financial burden. It also led to the reluctance of some parents to send their children to schools, especially females, due to kidnapping and organized

crime, and a significant decrease in the teaching staff qualifications as a result of asylum, immigration, arrest or enforced disappearance. The number of teachers dropped from about 221,000 teachers in 2010 to less than 150,000 teachers in 2020 (Statistical Group, 2010-2020). The spread of COVID-19 since 2020 can also be considered a negative factor that caused a decrease in external support provided to educational services. Another reason is the measures taken by the de facto authorities to prevent the spread of the virus, including closing the schools, and in other cases, some parents' preference not to send their children to schools fearing infection and potentially carrying it home.

The issue of the different educational curricula is one of the most serious effects of the conflict on the educational process in Syria, as the various de facto authorities have promoted their own curricula and adopted certain teaching methods as a means to impose their ideology. The curricula are often directed against other Syrians, which hinders any kind of social cohesion and peace both now and in the long run and also creates varying levels of knowledge and culture for students.

In this context, 47% of the schools operating in the areas outside the regime's control teach the modified regime curriculum, as the authorities responsible for education in those areas canceled the subjects and topics in which glorification of the Baath party and its leader was mentioned. Yet, they did so without updating and developing the curriculum. 6% of the schools kept teaching the regime's curriculum as it is so that students were still eligible for a high school certificate according to the regulations of the Syrian government, increasing their chances and options in Syrian universities (Assistance Coordination Unit, 2021). The amended curricula in the areas of the Salvation Government or the Interim Government were devoid of any inclusion of the human values on which the Syrian revolution was based, including equality, justice, transparency and citizenship. Furthermore, taking into consideration the support provided by Turkey, the Turkish language was introduced as a basic official language within the modified curriculum, and additional Islamic subjects were introduced.

In the regions of the Autonomous Administration, a special curriculum was enforced in 38% of the schools, including the introduction of the Kurdish language and a focus on glorifying the Kurdish leaders and their achievements, angering a large number of the people of the region, especially those of Arab descent. The Autonomous Administration allowed the UNICEF curriculum to be taught in 6% of the operating schools in the governorates of Deir Ezzor and Raqqqa (previous source).

In regime-held areas, the Syrian government worked since 2013 on a national plan to gradually develop curricula, and a body affiliated with the Syrian Ministry of Education was created, called the National Center for Curriculum Development, which worked on developing textbooks, qualifying staff and training them to practice the modern curriculum. The semi-official Al-Watan newspaper referred to the cooperation between this center and the faculties of political science, literature and law, as well as thinkers and researchers to analyze the causes of the conflict to be incorporated into the curriculum in a number of academic courses³⁷. It goes without saying that the causes of the conflict mentioned in the curriculum would be based on how the Syrian regime's leadership defines them, attributing what happened in Syria to terrorism and a conspiracy carried out by Syrian "agents" inside the country, which increases the polarization and social rift in the country.

With the growing military, security and economic role of Russia and Iran, their educational and cultural influence grew in Syria, as well. The Russian language was introduced as a second language with English in the preparatory stage, a Russian language department was established in some universities, and a well-studied plan was developed for years to support the Russian language in Syria. Farsi has also been taught in Iranian cultural centers in a number of Syrian regions. Since 2015, branches of a number of Iranian universities have been established, at a time when Russia announced its intention to establish a branch for Moscow State University in Damascus³⁸.

37 Al-Watan newspaper, an article entitled "The concept of war on Syria to enter the education curricula next year," issued on 8 T2 2021, and the article can be opened through the following link: <https://alwatan.sy/archives/280107>

38 Asharq Al-Awsat Newspaper, an article entitled "Demand to learn Russian in Syria and reservations about publishing Farsi," issued on January 28, 2020. The article can be opened through the following link: <https://bit.ly/3FzAVDS>

3. Mechanisms of exploitation in the education sector:

These mechanisms can be placed in two groups. The first is direct exploitation mechanisms, such as modifying the curricula to serve the interests and ideologies of the de facto authorities or the use of education infrastructure such as schools in hostilities. The second group includes indirect exploitation mechanisms that take place through the exploitation of children who are of school age and forcing them to leave their education. The direct mechanisms were referred to in the context of understanding the impact of conflict on the education presented above. As for the indirect mechanisms, they can be summarized in the following points:

- * **Child Recruitment:** The years of conflict witnessed widespread recruitment of children by all parties, where children were trained to carry weapons by the regime's military forces, forming paramilitary groups and allowing young people and adolescents to volunteer. The National Defense Forces, Iranian militias and Hezbollah recruited children, and so did the armed opposition forces, where they established training camps for children under the age of 18 called 'Unification Camps'. The Autonomous Administration areas also recruited children and trained and offered them financial compensation (Human Rights Network, 2018). Recruitment contributed to changing the path of thousands of children from enrolling in education to engaging in armed violence.
- * **Child marriage for girls:** The percentage of child marriages in Syria during the conflict has increased significantly. This number was around 7% of the total number of minor females in 2010 and rose to 30% in 2015 mostly due to the factor of mitigating the impact of the deteriorating economic situation of families during the conflict, especially in poverty-stricken areas, such as camps. Girls from the age of 13 were married off in informal conditions with the aim of avoiding personal expenses of the minor and handing that responsibility to another person without taking into account the husband's age or social status, who is often married. The phenomenon of forced marriage of girls to ISIS emirs and fighters became very common, in addition to exploiting the difficult situation of girls and families in countries of asylum and marrying them off without the slightest bit of preservation of the wife's rights. In Idlib and the northern countryside of Aleppo, marriage of underage girls to fighters became so common to meet basic needs and protection from rape and murder. This was facilitated because Sharia courts registered marriage in unregulated ways to contain the practice of combatants kidnapping young girls against their will as they considered them 'spoils of war' (Hawija, 2018). Indeed, these practices reflected negatively on female enrollment in schools, adding yet another obstacle that stood in the way of their education.
- * **Beggary and child labor:** The Syrian conflict led to the displacement of more than five million children, both internally displaced and refugees outside the country. Most have not had any formal education, accompanied by a significant deterioration in their economic conditions, which led to children resorting to beggary, sometimes being forced by adults to do so, especially in neighborhoods of big cities that have seen some stability recently, e.g., Damascus city. Networks were formed to exploit these children and use them by forcing them to beg. Likewise, child beggary has become common in areas outside the regime's control in Idlib and Aleppo countryside, and the difficult living conditions prompted many parents to send their children to the streets to beg, depriving them of their right to education (Mustafa et al., 2021).

The continued deterioration of economic and living conditions prompted a large number of children to leave their education and enter the labor market in order to reduce the financial burden on their families, who sometimes resorted to forcing their children to work due to high cost of living. Many families lost their breadwinners as a result of the hostilities, arrest or travel, which prompted children to assume the role of the breadwinner and enter the labor market. They were often taken advantage of and forced to work in inappropriate working environments for low wages and long hours (Mustafa et al., 2021). The children involved in the labor market or beggary constitute a huge loss in the human capital of Syria, which will negatively affect any future development process in the country, not to mention forcing them directly or indirectly to give up their right to receive appropriate education.

V. Impact of the conflict on the health sector:

1. An overview of the health sector before the conflict:

Before the conflict, free health services in Syria were considered part of the social contract between Syrian society and the regime, in which the latter guaranteed the availability of basic goods and services for all and, in return, prevented any form of activism in politics (Mehchy, 2021). This prompted health policies to focus on the quantitative aspect and neglect the qualitative aspect of health services provided by the public and private sectors alike. In addition, despite some achievements such as comprehensive vaccination campaigns, the health sector still suffered from many challenges before the conflict, including poor coordination among the authorities in the health sector, the lack of necessary capabilities to achieve comprehensive coverage, the lack of transparency of the authorities supervising health care services in terms of numbers of beneficiaries and expenses, the inability to account for medical errors, and the poor distribution of services as a result of the concentration of advanced medical services in main cities (Fouad, 2015).

The Ministry of Health and its institutions were considered the authority responsible for setting health policies in the country before the conflict, but it was not the only authority overseeing the health sector. The Ministry of Higher Education, with its medical educational institutions, contributed to the provision of health services, in addition to hospitals and health institutions affiliated with the Ministries of Defense and Interior Affairs, which took care of free care for their employees and their families. The private sector, which includes private hospitals and clinics, played a much bigger role in civilian healthcare, especially with the deterioration of the quality of public health services. This sector did not contribute to the financing of public health effectively, but instead reaped huge profits despite the prices set for health services by the Ministry of Health. This reflected the state of corruption of the sector and the absence of evaluation and control over the material and professional aspects of the work of these institutions (Damascus Center for Research and Studies, 2020). Before the conflict, the health sector in Syria was supported by several international bodies, such as the World Health Organization, the United Nations Development Fund, UNICEF, and the United Nations Population Fund, in addition to grants from the European Union (previous source).

The number of hospitals in Syria increased from 390 in 2000 to 493 in 2010, most of which were private hospitals. This increase was accompanied by a decrease in the average number of people per bed in hospitals across Syria. But the expansion of the number of hospitals and health services did not take into account the geographical distribution of these services in proportion to the population. For example, the average number of people for each health center in the city of Aleppo was about five times the average in the city of As-Suwayda, which increased the pressure on health facilities and cadres in areas of high population density (Central Bureau of Statistics, 2000-2010).

Medical specializations were concentrated in major cities such as Damascus and Aleppo, causing a shortage of competencies required for the governorates far from the center of the capital, which witnessed a rise in population density and thus a greater demand for health services. The medical educational policy also provided the public health sector with human cadres by relying on medical students who did not have any experience, yet they diagnosed and treated under the supervision of a specialized doctor who was not permanently present in the countryside and remote areas. Consequently, the issue of providing the health service was left to the trainees, with the number of doctors decreasing and reaching 15 doctors per 10,000 people, a deficit rate of more than 40% compared to the global average (Assi, 2020).

In this context, the university admission policy to enter medical colleges was not able to fill the shortage of medical cadres, as many of these cadres traveled with work contracts, especially to the Gulf countries with relatively high incomes, prompting the Ministry of Health to impose restrictions on the travel of doctors. In addition, there was insufficient attention to medical staff

in public health centers in terms of salaries and working conditions, which prompted many doctors to leave their work in the public sector and join the private sector, especially after issuing Investment Law No. 10 that supported private hospitals and exempted them from taxes (Assi, 2020).

The Syrian regime worked to subsidize and secure medicine at symbolic prices. Therefore, public spending on medicine amounted to about half of the total expenditure on the health sector, with private pharmaceutical companies remaining the main source of medicine in Syria (WHO, 2011). It should be noted that the pharmaceutical industry witnessed a qualitative leap in the ten years preceding the conflict, especially with regard to private laboratories, many of which obtained licenses for the manufacture of medicine locally from European and American companies, allowing them to cover more than 90% of the local needs for medicines (Central Bureau of Statistics 2011) and exporting the surplus abroad. **The number of private pharmaceutical laboratories has exceeded 60 laboratories, 44 of which were working with distinction from international pharmaceutical companies. The Ministry of Health was importing certain medicines that were not manufactured in Syria, such as cancer medicines and distributing a large part of them for free through public hospitals (WHO, 2011).**

In general, many health indicators saw improvement between 1970 and 2010, as life expectancy at birth increased from 56 to about 73 during this period. Besides, the infant mortality rate, the mortality rate of children under five years of age, and the maternal mortality rate at birth decreased. However, this was accompanied by great challenges and obstacles, including the absence of effective health insurance, the insufficiency of qualified medical personnel, especially in the public sector, and the need to pay attention to the lack of transparency regarding health indicators (Kherallah, 2012). The disparity was also evident between urban and rural areas for certain health indicators, such as the high mortality rates of infants and children under-five in rural areas. At that time, the government was unable to improve Syria's lagging position in the world rankings on the performance of health systems. Despite the increase in the need for health services, the proportion of public spending on health in the total public budget declined from 3.4% in 2000 to 3.1% in 2011 (Fouad, 2015).

2. The health sector during the conflict:

The conflict in Syria has put the health sector in a state of constant emergency, as it has led to great destruction in the health sector infrastructure and rendering many health units out of service. It also yielded the loss of a large part of the medical staff as a result of asylum, immigration, arrest and killing, which has severely worsened health care services provided in all Syrian regions both in quantity and quality. Despite the relative decrease in hostilities since 2019, and consequently the decrease in attacks on the health care sector, the COVID-19 effects, together with the economic hardship of most Syrians, led to a further deterioration in the provision of health services and difficulty in accessing them (OCHA, 2021).

a. Health sector governance and infrastructure:

The governance of the health sector in Syria during the conflict period was characterized by fragmentation and ineffectiveness. It also witnessed the entry of international and local organizations as new and main actors often working within political and international agendas, focusing on the emergency aspect without providing an effective and sustainable health service. The health system in regime-held areas relied on the remaining health service providers in the public and private sectors, in addition to international aid and support from NGOs, most of which were politicized, leading to conflicting goals and instability of service continuity in the long-term. As for the areas outside the regime's control, field hospitals and medical centers affiliated with international organizations formed one of the foundations of the new health system, but their services remained dispersed and depended on the emergency needs of the local population without the ability to achieve sustainability or provide high-quality medical care services. The ongoing conflict has led to the destruction of a large part of health facilities in all Syrian regions, as the data indicate partial or complete destruction that affected about 40% of hospitals

and 45% of health units in Syria by the end of 2020 (Health Cluster, 2021). The air raids carried out by the Syrian regime and its allies caused the largest part of the destruction in health facilities, and therefore facilities in areas outside the regime's control were the most affected. In total, about six thousand attacks were monitored on 350 medical facilities, and more than 90% of these attacks were carried out by the Syrian regime (Physicians for Human Rights, 2021).

Even health facilities that were not destroyed as a result of military operations have suffered and still suffer from great pressure on their services as a result of internal displacement of civilians, the lack of qualified cadres, and the loss of many medical materials and equipment, which is partly due to the sanctions imposed on the Syrian regime (Ghosn, 2020). Although the sanctions aim to weaken the regime, the regime was able to divert that impact to affect the majority of Syrians and the services provided to them. It should be noted that the destruction and poor effectiveness of public facilities such as water and sewage networks, in addition to the deteriorating economic situation causing malnutrition to millions of Syrians, have led to greater pressure on the already dilapidated health facilities because of the spread of deadly diseases such as measles, typhoid and hepatitis³⁹.

b. Medical personnel and medicines:

The health sector witnessed a significant decrease in medical personnel during the conflict period, as a result of several factors, including arrest and killing, whether under torture or as a result of targeting their medical institutions. The killing of 930 medical personnel was documented during the ten years of conflict (Physicians for Human Rights, 2021), and the mass exodus from Syria is considered a major factor in the loss of medical skills and expertise. It is estimated that about 70% of health sector workers have left the country, leading to a significant decrease in the ratio of doctors to the population, which amounted to one doctor for every ten thousand people inside Syria (IRC, 2021). This decrease was accompanied by an increase in the need for these qualifications, in addition to Syria's need for new medical specialties, such as psychiatry services, as the conflict made most Syrians vulnerable to complex psychological traumas. This resulted in 3-4% of the total population suffering from critical psychological conditions and 15-20% of them suffering from mild to moderate psychological conditions (Haidar, 2019).

The shortage of medical personnel was reflected in the de facto authorities' ability to provide services. For example, the maternity hospital in Damascus refused to receive any new emergency cases for a whole week due to the lack of a sufficient number of anesthesiologists, as there was only one doctor assisted by students from the Faculty of Medicine with no prior experience, resulting in potentially fatal errors. Furthermore, the Ministry of Health of the Syrian regime confirmed that there was a shortage of about 1,500 anesthesiologists, as there have been no more than 500 anesthesiologists working in all public and private hospitals, and they are often of retirement age, especially that many young medical staff had immigrated⁴⁰. It should be noted that during the past two years, COVID-19 caused a high number of deaths among medical staff due to the lack of sufficient attention on the part of health institutions to follow safety procedures, in addition to the inability to secure the necessary equipment for protection against viruses⁴¹.

The availability of medicine during the conflict was affected by pharmaceutical laboratories in Syria stopping their manufacturing of many medicines as a result of the destruction that afflicted part of them, the difficulty of importing raw materials needed for medicine, the depreciation of the Syrian lira leading to a significant increase in production costs, the withdrawal of foreign concessions, and the secondary effects of the sanctions imposed on the regime in Syria and its role in raising the costs of freight and remittances. The latter caused a shortage of essential medicines that were used to treat chronic diseases, such as blood pressure, heart disease and diabetes. In an attempt to motivate drug

39 An article on WHO website on the role of the organization in supporting the health sector in Syria, published in March 2019 at the link: <https://bit.ly/3svpg4F>

40 An article in the Syrian Al-Watan newspaper about the shortage of medical personnel in the regime areas, published in January 2022 at the link: <https://bit.ly/3rDIHds>

41 An article on Enab Baladi's website about doctors' deaths in Syria as a result of the spread of Corona, published in December 2020 at the link: <https://bit.ly/3slElvB>

manufacturers to produce and sell in the local market, the Ministry of Health in regime-held areas raised the prices of drugs by about 65% in 2021, but the producers considered that this increase was insufficient to cover the significant rise in production costs, which again led to insufficiency of medicine and a reliance on the black market for medicines, where they were sold at astronomical prices not commensurate with the low income of most Syrian families. Furthermore, pharmaceutical companies preferred to export production abroad rather than sell at home at a price lower than the costs⁴².

c. Quality and access to health services:

The warring forces and the various de facto authorities, especially the regime, have worked to use the health sector as a weapon to discipline regions out of its control, either through direct targeting or making individuals' access to health services difficult, mostly through checkpoints deployed in all Syrian regions. The patient wishing to obtain a certain health service passage permit must pay fees, for example. Using health services as a weapon reached its climax particularly when the military and security services tightened their grip on the roads and exits of some cities to prevent medical equipment and supplies arriving to areas in need as a form of collective punishment, as what happened in Eastern Ghouta following its siege by the regime (Amnesty International, 2018).

In this context, Russia and China in 2019 and 2020 used their veto to prevent the renewal of the Security Council's resolution that allowed the passage of cross-border aid without interference from the government in Damascus. As a result, the Bab al-Salam, al-Yarubiyah and al-Ramtha crossings were shut down. Bab al-Hawa crossing remains the only official crossing for humanitarian aid to cross into areas outside the regime's control in Syria, in accordance with UN Security Council Resolution 2533, which is periodically extended⁴³, noting that these areas are in dire need of health assistance. Doctors Without Borders warned in a press release that the failure to renew Resolution 2533 exposes more than 4 million people, more than half of whom are displaced, to the risk of not receiving the necessary medical and humanitarian assistance, which exacerbates the dire health situation in these areas, especially following the outbreak of the COVID-19 pandemic⁴⁴.

It is also estimated that, until 2017, there had been about 1.5 million casualties due to the war, many of whom suffered from difficulty accessing the necessary medical services (WHO, 2017). The lack of accessibility for Syrian families is not only limited to physical access but also obtaining appropriate health services. This comes as a result of their low income compared to the significant increase in the costs of treatment, diagnosis, medicine, tests, and X-rays. The spread of COVID-19 has also exacerbated the fragility of the health system and further limited the ability of patients to access health services fearing transmission of infection and overcrowding health facilities with people infected with the virus⁴⁵.

The challenges of obtaining the appropriate health service prompted many patients to refrain from medication and only buy medicine when necessary without prescriptions. This was accompanied by a significant deterioration in the quality of medical services due to the weak effectiveness of the emergency system with a drop in the number of vehicles as a result of theft and destruction. Other reasons for this deterioration included the scarcity of fuel and maintenance available and the continuous power cuts causing damage to emergency and necessary medical materials, such as blood bags or vaccinations. Among the indirect factors that affected the health of individuals were the destruction of the sewage system and clean water tanks and the accompanying deterioration in the quality of the health service provided. Data indicates that the quantity of available and drinkable water decreased in Syria by about 40% compared to what it was before the conflict in addition to the disruption

42 An article on Sky News Arabia about the lack of medicine in Syria, published in February 2022 at the link: <https://bit.ly/3IMzpk4>

43 An article on Al-Araby Al-Jadeed website about the Security Council's decision to get aid to enter Syria, published on July 2020 at the link: <https://bit.ly/3HCpyMs>

44 Doctors Without Borders press release in June 2021, at the link: <https://bit.ly/3gyCoQD>

45 An article on the Swissinfo website in April 2021 about hospital overcrowding with Corona patients, published on the link: <https://bit.ly/3MnSMIT>

of about half of the sewage network⁴⁶. Other factors included the unhealthy living conditions in displacement camps and informal settlements, the accompanying poor health and infrastructure, and the escalation of malnutrition rates, weakening immunity against diseases, especially among children.

The conflict has affected the health sector in Syria significantly, and access to health services has been turned into a tool among the various de facto authorities to punish those who disagree with them. Therefore, any reform of this sector must not depend on financing the reconstruction of health facilities and providing financial assistance to attract qualified medical personnel. Instead, this reform must include mechanisms and governance systems based on the principle of the right to health for all individuals, regardless of their affiliations and financial conditions, and prevent any exploitation and politicization of health needs now and in the future.

46 Article on the ICRC website on the water crisis in Syria, published in October 2021 at the link: <https://bit.ly/35W7Rdv>

Third: The impact of the conflict on Syrian families

I. Microanalysis methodology

The microanalysis of the economic and social situation in Syria was based on a household survey of a representative sample that included six Syrian cities reflecting the main de facto forces in the country. These cities are Damascus and Aleppo (located in the Syrian regime's areas of control), Qamishli and Raqqa (mainly under the control of the Autonomous Administration), the city of Azaz (administratively controlled by the Syrian Interim Government), and the city of Idlib (currently under the control of Hay'at Tahrir al-Sham).

The household sample was calculated to be statistically representative for each of the selected cities with a confidence level of 95% and a margin of error of 5%, according to Table (1):

Table (1): Population and Sample Size by City

CITY	TOTAL POPULATION (000)	TOTAL HOUSEHOLDS (000)	SAMPLE SIZE (HOUSEHOLD)
DAMASCUS	2050	402	386
ALEPPO	1750	312	392
QAMISHLI	268	43	394
RAQQA	154	25	379
IDLIB	212	35	377
AZAZ	247	40	386
TOTAL	4,681	857	2314

* OCHA 2020 data and researchers' calculations

** Based on the average number of family members in 2011, Central Bureau of Statistics

The survey aims to understand and analyze the current living reality of families in these cities in order to assess the effects of the conflict, taking into account many variables that occurred in families' lives during this period, including displacement, migration, asylum, the deteriorating economic situation, economic sanctions, the spread of the COVID-19 pandemic in recent years, the continued state of security instability in many Syrian regions, the accompanying spread of negative social phenomena, and the exploitation of these conditions by all parties of the conflict.

A questionnaire was prepared to be the main tool for field work. It included 64 questions and covered a wide range of indicators and economic, social, and institutional variables, including:

- * The family's living conditions in terms of the quality of housing, assets, availability of services the family needs and their ability to obtain them, in addition to the coping mechanisms adopted by the family to face the shortage of services and basic commodities such as fuel, electricity and drinking water
- * The status of human capital, including the educational and health status, the quality and costs of services provided in these two sectors, and the ability of individuals to access them. The questionnaire also included questions related to the status of the labor market, its indicators, and work environments.
- * Sources of income and places of consumption in households, in addition to questions about the family's ability to secure main commodities and their affordability

- * The institutional and social environment in terms of the relationship of individuals among each other and their relationship with the local authorities. In this context, the questionnaire included questions about the level of safety in families, community trust, the role of civil society, conflict resolution mechanisms, and the ability of individuals to participate in decision-making at the local level.
- * Women's role in society and the family in terms of the independence of their decision, the degree of their economic and educational empowerment in society, their ability to participate in public affairs and community activities, their ability to work, and the challenges they face in this context.

These themes were analyzed at the level of the family, the city, and the region, taking into account general information about gender, age, number of family members, work status and educational level of the head of the family.

In addition to the questionnaire, the research team worked on preparing a "Researcher's Guide", which includes a full explanation of each question (See [Appendix 1](#)), in order to ensure that all field researchers have the same understanding of the questions they're asking, especially questions that require determining the quality of a service or a particular commodity. For example, "Bad" is a relative concept that differs from one field researcher to another, and thus the presence of evidence helped unify concepts and overcome the possibility of personalization in answering questions. The main research team also conducted workshops with the field team to explain the questionnaire, its purpose and main themes, in addition to presenting the "Researcher's Guide" and clarifying the importance of using it during interviews. "The Day After" supervised the work of the field team with daily follow-up of all team members, which continued from the beginning of January until the end of the first week of February 2022. It should be noted that "The Day After" possesses the necessary expertise to implement field surveys in all areas, always giving priority to the safety and security of field team members.

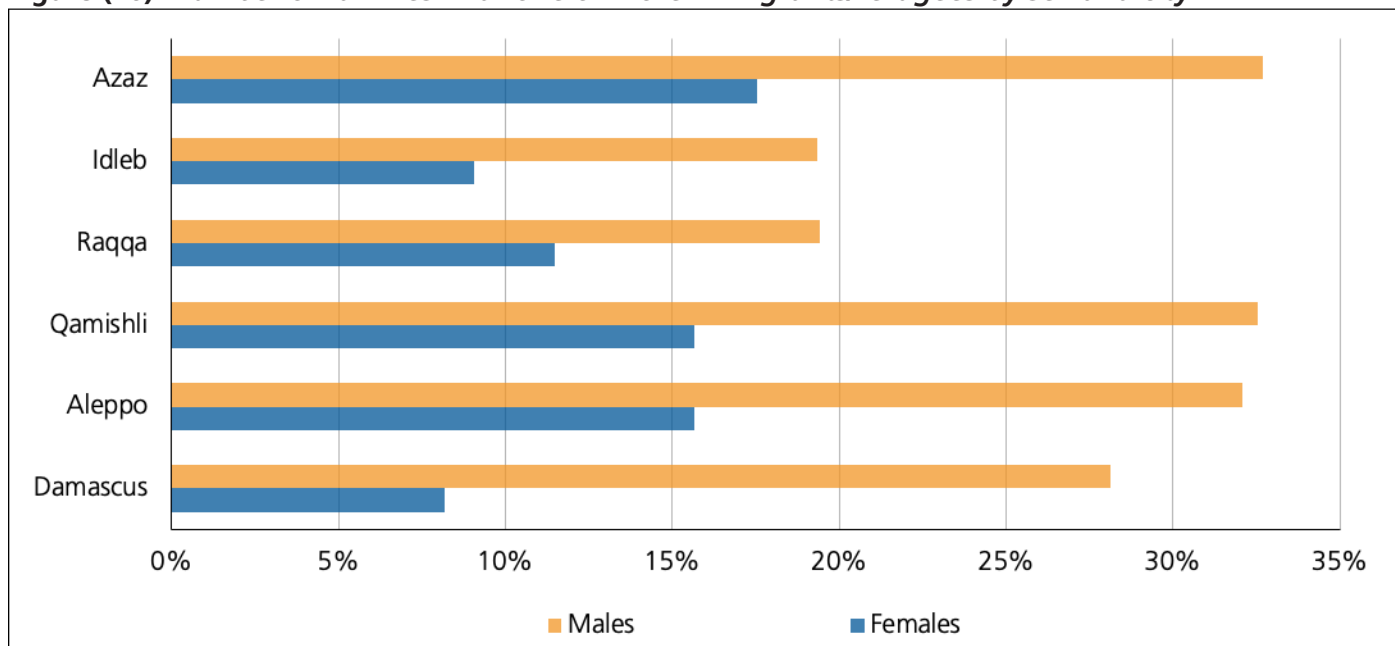
The sample included in the survey is only representative of the designated six cities, and therefore any reading of the results is a description and understanding of the living, economic, and social situation of families in these cities only and does not reflect the situation in any other Syrian regions not included in the survey. Of course, this affects the analytical ability to cover various topics that may not exist in urban areas, such as dependence on the agricultural sector. However, this does not diminish the importance of this survey in analyzing the reality of living in major Syrian cities that are subject to various de facto authorities, laws, and different political, social, and economic conditions. This helps complete what was presented in the first section of the overall analysis of the differences between regions and focus in more detail on the living conditions of Syrian families. The people interviewed as representatives of the targeted families were distributed by gender as 74.1% males and 25.9% females. This distribution varied between cities, with the percentage of females reaching the highest in Damascus (43.3%) and the lowest in Azaz with 18.1%. The total number of household members covered by the survey was 11,675, including 51.57% females and 48.43% males. The relatively high number of females can be explained by a large number of males leaving the country to escape military service or in search of better economic opportunities. In addition, the largest number of those killed in direct military operations, as well as detainees, forcibly disappeared persons, and participants in various military formations, were mostly males.

II. The gender and age composition of families

The conflict has led to significant changes in the composition of the Syrian family in terms of gender and age for many reasons the most important of which were migration and asylum. The questionnaire noted the proportion of immigrants/refugees out of the total number of household members included in the survey according to gender and city, but the data does not include information about families who left the country. The results indicate that 40.4% of the total houses in the six cities have one or more people who left the country during the conflict period, and the number of males out of the total number of those was 68%, which can be explained by the males' desire to escape from military service and security raids, in addition to seeking jobs abroad.

Figure (16) shows the difference in the number of families who have one or more immigrants/refugees according to the city, as it reached the highest in the city of Azaz at 50.2% of the total families of the city and the lowest in the city of Idlib with 28.4%. The percentages in Qamishli and Aleppo were close to the highest value at about 50%, while the percentage decreased in Damascus to the limits of 36% and in Raqqa to about 31%. The relative decline in the cities of Idlib and Raqqa can be explained by what was previously mentioned, that it may be that a large part of the families left these two cities with all their members, and consequently, were not recognized in the mentioned percentage. Particularly, the two cities, specifically Raqqa, were subjected to great destruction in homes and residential buildings, which prompted families to leave. In terms of gender, the number of males out of the total departing people was highest in the city of Damascus, reaching about 78%, while it ranged between 66% and 68% in the rest of the cities.

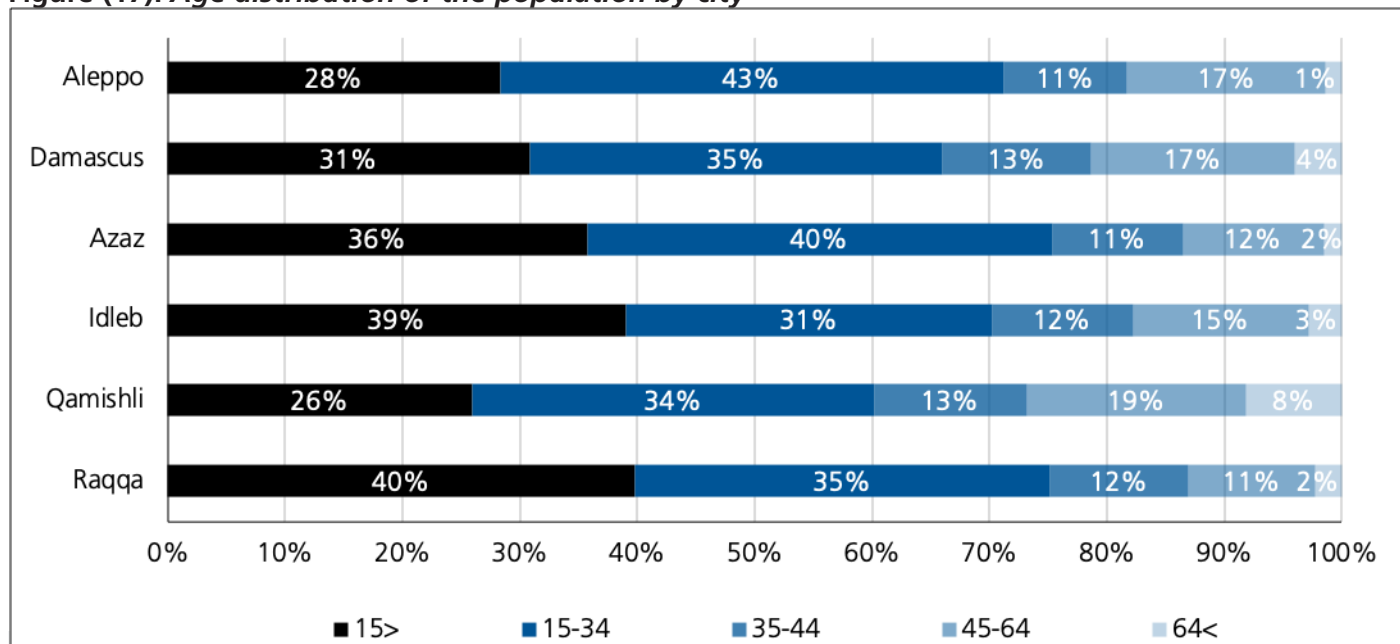
Figure (16): Number of families with one or more immigrants/refugees by sex and city.



Source: Syrian Household Living Condition Survey 2022.

The average percentage of males in the studied cities reached 48.4%, the lowest being in Idlib at 46.2% and the highest in Azaz at 50.3%. This number is considered low compared to the gender composition in Syria before the conflict, as the percentage of males in Syria reached about 51% in 2010 with no significant difference between regions (Central Bureau of Statistics, 2011-2020). Therefore, the conflict has clearly changed the gender structure of Syria. This can be explained by the high percentage of males in the total number of migrants and refugees, in addition to the high percentage of male deaths as a result of hostilities and military operations. As for the age structure, **Figure (17)** shows that the societies in the studied cities are still young societies, as most of the population is 34 years old and under. However, the conflict contributed to a decrease in the proportion of young people between 15 and 34 years compared to what it was in 2010. The data of the Central Bureau of Statistics indicate that the proportion of this age group of the total population in urban areas and cities amounted to 46.5% in 2010 (Central Bureau of Statistics, 2011-2020). However, current data indicate that this percentage does not exceed a maximum of 43% in the city of Aleppo and decreases to 31% in Idlib, while the average number of this category in the six cities does not exceed 36% of the total population.

Figure (17): Age distribution of the population by city



Despite the different percentages of gender and age composition and the rate of immigrants/refugees in families in the different areas of control, the general trend of these indicators is similar in these areas in terms of the relative increase of females and decrease in the percentage of young people, in addition to the departure of large numbers of residents outside the country. These changes must be taken into consideration when formulating development policies at the local or national level.

III. Educational Status

The educational situation in the studied cities is affected by several factors, including those directly related to the conflict and its impact on infrastructure, educational staff and quality, and factors related to educational imbalances that preceded the conflict, such as regional differences (rural/urban and governorates). Table (2) indicates the differences between the six cities with regard to the educational level of the population as a whole and by sex, noting that all studied areas are urban areas.

The average illiteracy rate in these cities was 5.1% of the total population (15 years and over), but this rate varied between the cities, reaching 9.7% in the city of Raqqa and 2.4% in Damascus mainly due to an accumulation of several factors in the education process before the conflict. Data indicates that the highest illiteracy rates were recorded in the northern and northeastern regions of Syria in 2010 (Central Bureau of Statistics, 2011-2020). The table also shows the significant differences in the educational level by sex, as 78.7% of those illiterate in the studied areas were female. This rate reached 85.4% in Aleppo, with its lowest at about 68% in the city of Raqqa, which saw high rates of migration and displacement. Therefore, a higher rate would have been recorded if the population of Raqqa had remained intact, based on the data of the Central Bureau of Statistics on education levels in Raqqa governorate in 2010.

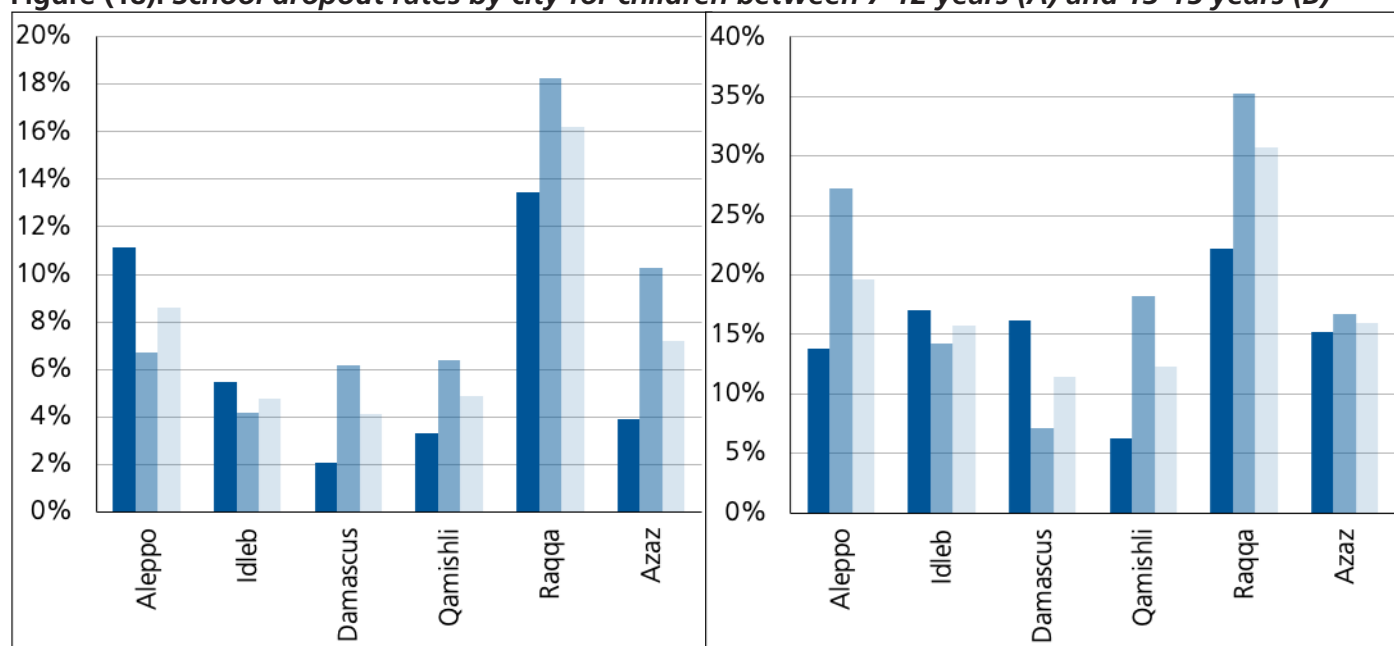
The difference in the educational level by sex is also shown in view of the rates of those with an institute or university education and above. The data indicates that 34% of the total males in all the studied cities held a higher than secondary certificate, while this percentage dropped to 25% for females. This expands the gender gap in post-secondary education in the cities of Azaz and Aleppo.

Table (2): Educational level by sex and city

	ILLITERATE		READS AND WRITES		PRIMARY		ELEMENTARY		SECONDARY		UNIVERSITY AND ABOVE	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
ALEPPO	7%	1%	9%	5%	13%	7%	20%	21%	21%	22%	30%	44%
DAMASCUS	3%	1%	6%	4%	17%	12%	27%	34%	25%	24%	21%	25%
RAQQA	12%	7%	11%	12%	14%	15%	17%	17%	20%	17%	26%	32%
QAMISHLI	11%	2%	7%	4%	10%	10%	15%	21%	21%	22%	35%	40%
IDLIB	4%	1%	7%	6%	23%	21%	33%	31%	15%	19%	18%	22%
AZAZ	7%	2%	15%	6%	17%	9%	22%	30%	20%	18%	20%	36%
TOTAL	8%	2%	9%	6%	15%	12%	22%	25%	21%	21%	25%	34%

In contrast to education levels, which are affected to some extent by what was the situation before the conflict, school enrollment rates for children aged 7-15 years may reflect the impact of the conflict more closely on the educational sector. The six cities amounted to about 8% for children between 7 and 12 years old and reached more than 17% for adolescents between 13 and 15 years old. These rates are considered relatively low in the context of the Syrian conflict, and this may be due to a relative stability in these areas, in addition that the survey targeted main cities, where non-enrollment rates are usually low.

Figure (18): School dropout rates by city for children between 7-12 years (A) and 13-15 years (B)

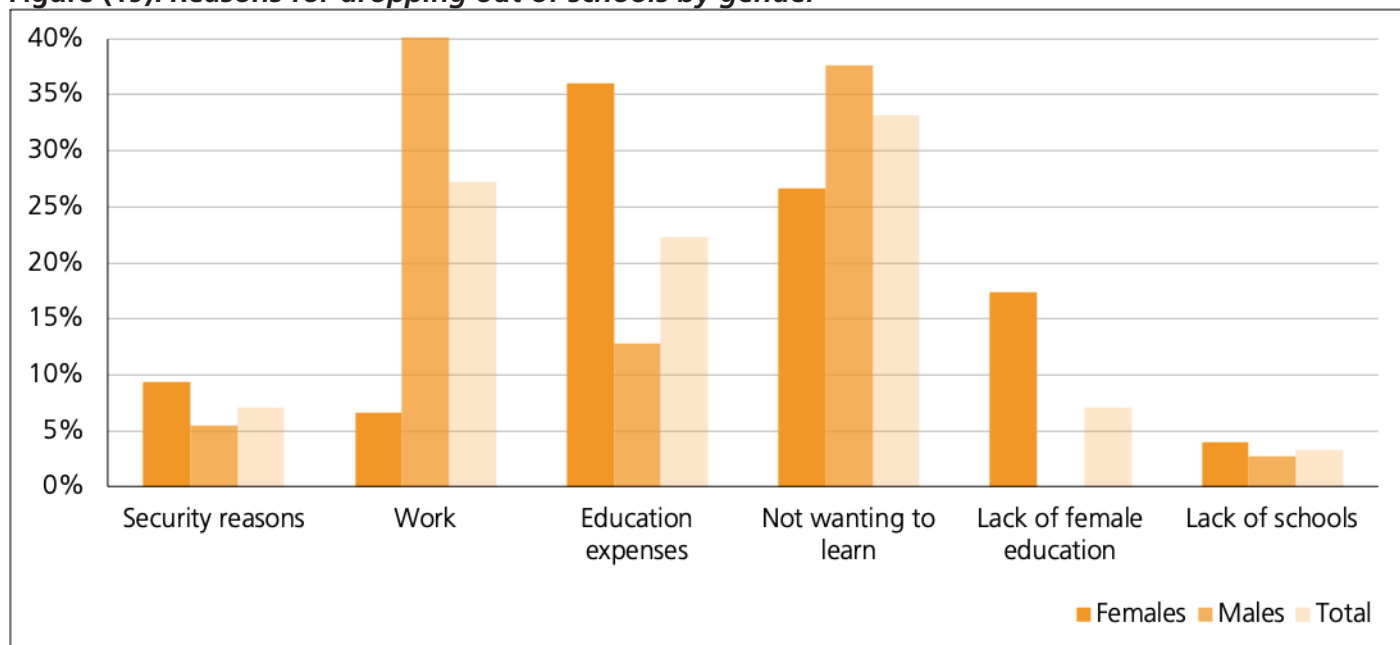


The above figure shows that the drop-out rates by gender differ between cities and according to age groups. For example, in the city of Aleppo, these rates are higher for females than for males in the first age group, while they become significantly lower in the age group between 13-15 years. In contrast, in

Damascus, the Female dropout rates are more than double that of males for the age group 13-15 years. In general, school dropouts are high in the city of Raqqa and Aleppo and relatively low in the cities of Damascus and Qamishli, which indicates significant differences in educational indicators even within the same sphere of influence and, consequently, the presence of many factors affecting the education process and the influence of the ruling institutions.

The reasons for dropping out of schools vary according to gender and city. **Figure (19)** indicates that the child's lack of desire for education was one of the most important reasons for not enrolling in the six cities. It is noted that the rate of male dropouts from school for this reason was about ten percentage points higher than this rate among females. The involvement of children in the labor market was the second most important cause of children dropping out of school and the first cause of dropout among males, as 40% of them were not enrolled in school because of work. This rate drops among females to about 6%. The inability of parents to pay the costs of education was the main reason for educational deprivation of 22% of the total dropout children, most of whom were female, which may indicate that female education in some families was acceptable, but it was not a priority and could be abandoned in the event of the family's living situation worsening.

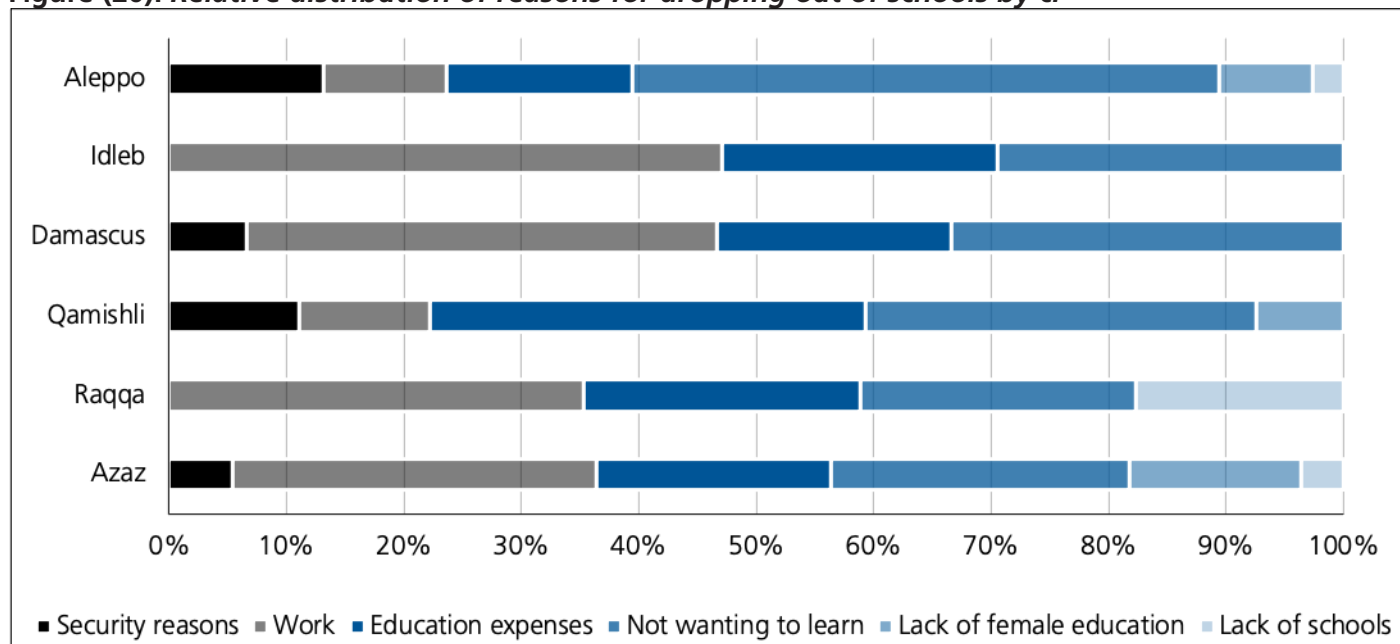
Figure (19): Reasons for dropping out of schools by gender



Source: Syrian Household Living Condition Survey 2022

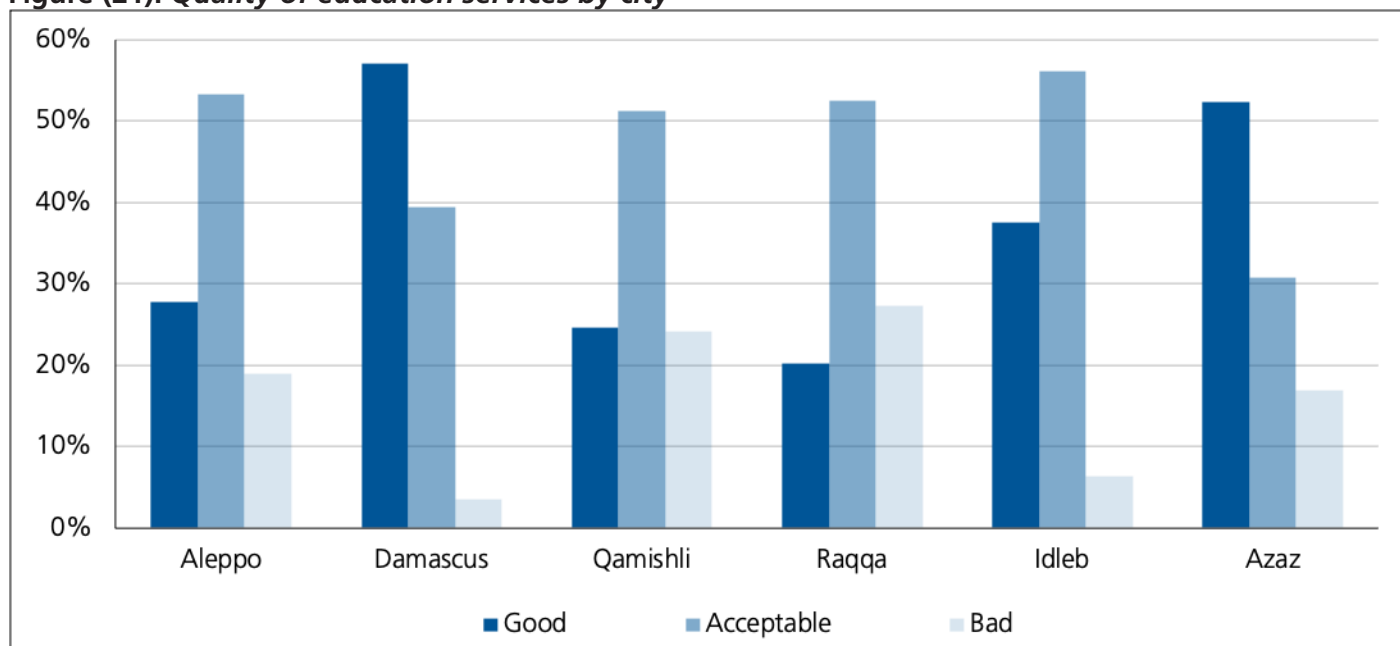
Figure (20) illustrates the difference in the distribution of the reasons for dropping out by city. Some reasons were influential in some cities but not others, such as parents' unwillingness or rejection of their female children's education. This was one of the main reasons for dropping out in Raqqa and to a lesser extent in Idlib and Aleppo. However, it did not seem at all influential in the cities of Azaz, Qamishli and Damascus. Similarly, security conditions did not appear as a reason for dropping out in Damascus and Qamishli, unlike other cities. Lack of schools had a significant role in the high dropout rates in Qamishli, and this can be explained by the unwillingness of some parents to teach their children the Autonomous-Administration curriculum. But in Aleppo, the lack of schools as a cause for dropout was mostly due to the destruction of a large part of the schools and the lack of ability of the rest of them to accommodate all students.

Figure (20): Relative distribution of reasons for dropping out of schools by ci



The results in **Figure (21)** indicate that 57% of families in the city of Damascus believed that the education provided by schools to their children was good, whereas less than 4% considered it bad in terms of quality. However, the situation was different in the city of Aleppo, which was also under the control of the regime, as about 20% of families considered the quality of education to be bad, as opposed to the rate of those who considered it good, which did not exceed 30%. In the city of Azaz, more than half of the families that send their children to schools considered the education to be good, while about 18% described the level of educational services as bad. In Idlib, most families thought that the quality of education was acceptable in the existing circumstances, and the rate of families who thought it was bad dropped to 6%. As for the areas of the Autonomous Administration, the percentage of families dissatisfied with the quality of education provided by the region's schools increased, reaching an average of 25% between Raqqa and Qamishli. This can be explained by the fact that many families in this region were not convinced by the quality and effectiveness of the curriculum enforced by the Autonomous Administration, in addition to the destruction of schools, especially in Raqqa.

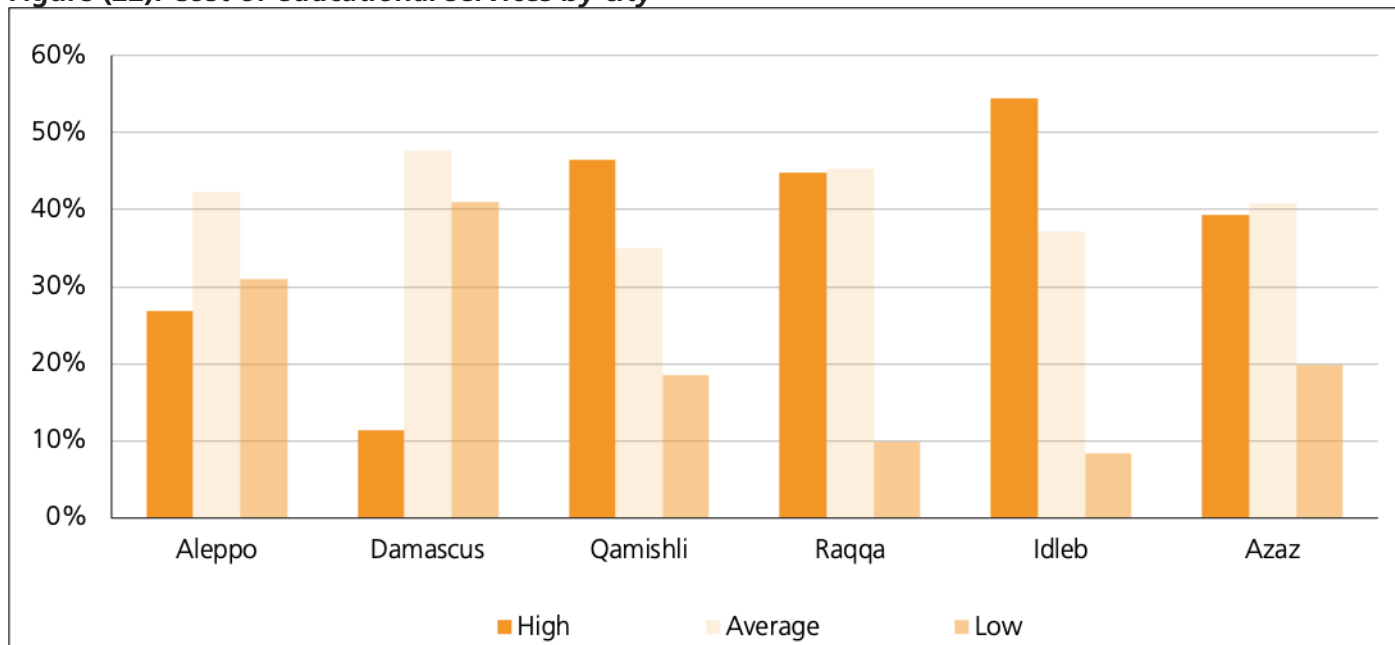
Figure (21): Quality of education services by city



The survey shows that education costs were low in regime-controlled Aleppo and Damascus compared to the rest of the regions (**Figure 22**). This may be due to the fact that more than 90% of children

enrolled in education in these two cities went to public schools where education was almost free, while the rate of those who go to private schools was 6%. The city of Idlib saw the highest rate of families who believed that tuition costs were high, and this may be due to the reason that about 20% of those enrolled attended private schools. Similarly, 45% of families in the Autonomous Administration areas considered tuition costs to be high, which goes hand in hand with the rate of enrollment in private schools reaching 24% of the total enrollment in education in these areas. In the city of Azaz, most families (more than 60%) believed that tuition costs were low or medium, noting that 7% of students in the city went to private schools and 5% to schools affiliated with associations or organizations.

Figure (22): Cost of educational services by city



The education policies adopted by the various de facto forces affected the rate of school enrollment and the quality of education. This was clearly evident in the areas under the Autonomous Administration, which prompted many families not to send their children to schools that adopted the curriculum imposed by this administration. It was also reflected in the high rate of dropouts due to the lack of suitable schools and the increase in education costs, with some parents heading to enroll their children in private schools that offered different curricula. However, the data also shows many differences in educational indicators within the same sphere of influence or similarity between two cities in different spheres of influence, which means that the factors affecting education were not limited to the policies of the de facto forces, despite their significance. They were also related to the education infrastructure, the education staff, the economic capacity of families, the social customs and traditions in the studied regions, and the difference in the education situation in the regions during the pre-conflict period.

IV. Relationship with the labor market

Survey data indicates that participation rates in the labor market in the six cities ranged between 60% in Qamishli city and 47% in Idlib city (**Figure 23**). These rates are good compared to the participation rate at the whole of Syria level in 2010, which amounted to about 43%. Participation rates reflected the percentage of the employed and unemployed out of the total population aged 15 years and over. Therefore, the high rates of these indicated an increase in the economic activity of the population. The acceptable rates in all the studied regions can be explained by the stability of the security situation in recent years and, thus, the increase in economic activity. The survey includes only major city centers in Syria, where economic activity is often high compared to the rest of the regions. However, the survey results regarding participation rates reflected a huge gap between males and females, as the male participation rate ranged between 76% in Idlib and 83% in Azaz, while among females, it dropped to the lowest value in the city of Idlib at 22% and the highest in the city of Qamishli at 46%. This

gap, which has persisted since the pre-conflict period, constitutes a clear bias in the labor market and culture against women. It should be noted that participation rates and the gender gap do not differ significantly in the different spheres of influence, with the exception of the significant decrease in the rates of women's participation in Idlib, which could be due to the nature of the ruling authority there, in addition to the customs and traditions of this region towards women's work.

Figure (23): Labor force participation rate by gender and city

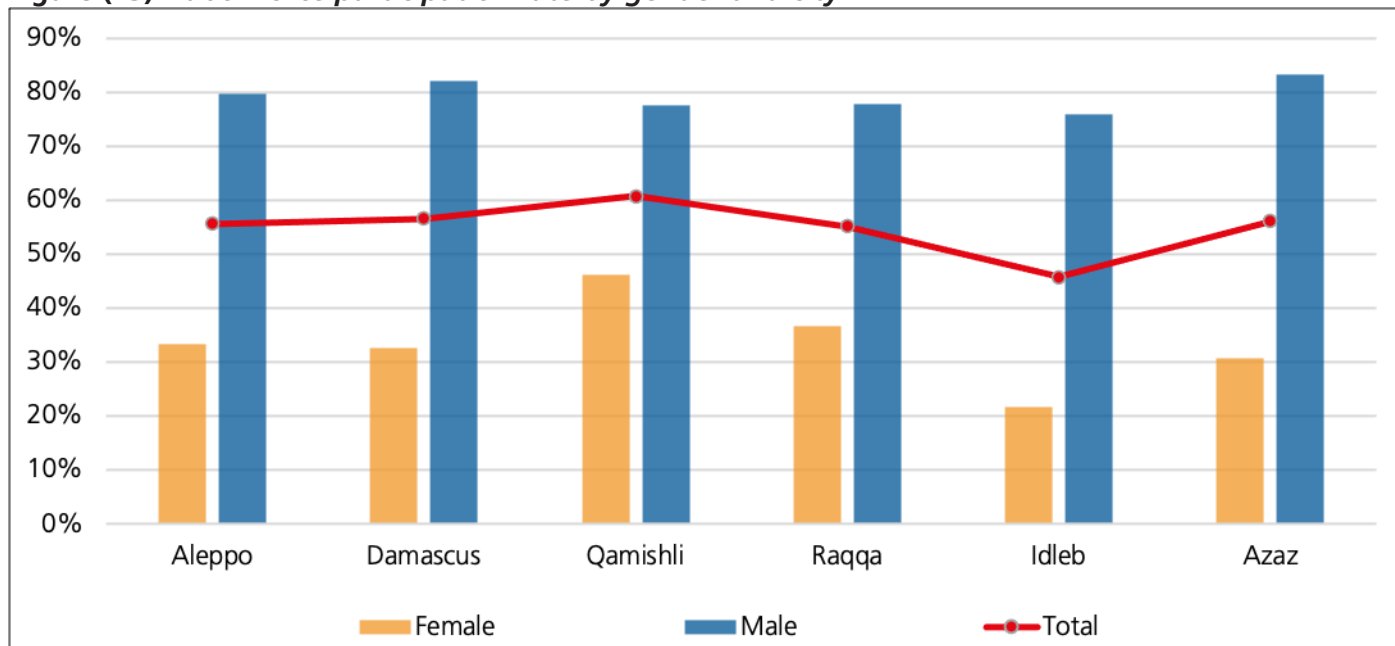
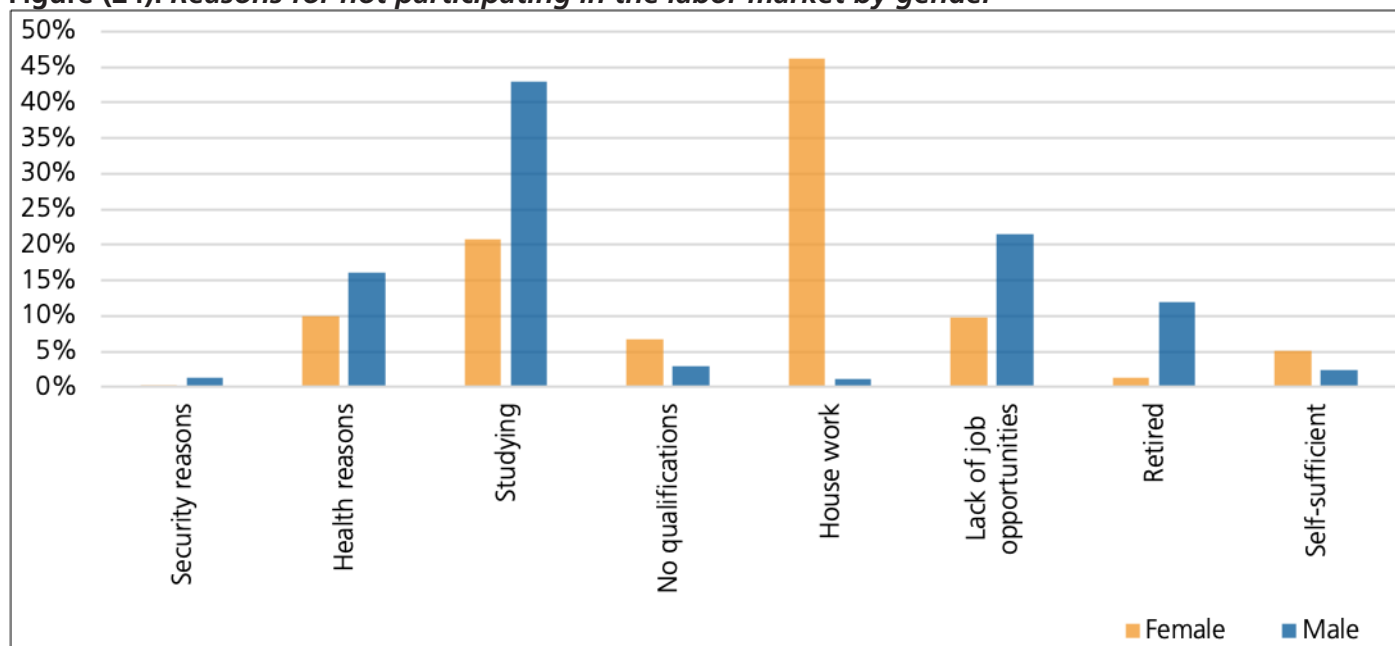


Figure (24) explains the reasons for non-participation in the labor market by gender, which does not differ significantly among the six cities. The results indicate that more than 45% of women did not participate in the labor market because they were devoted to domestic work and 20% of them because of their studies. As for males, 43% of those not involved in the labor market have returned to their studies, followed by the lack of suitable job opportunities and then by health reasons.

Figure (24): Reasons for not participating in the labor market by gender

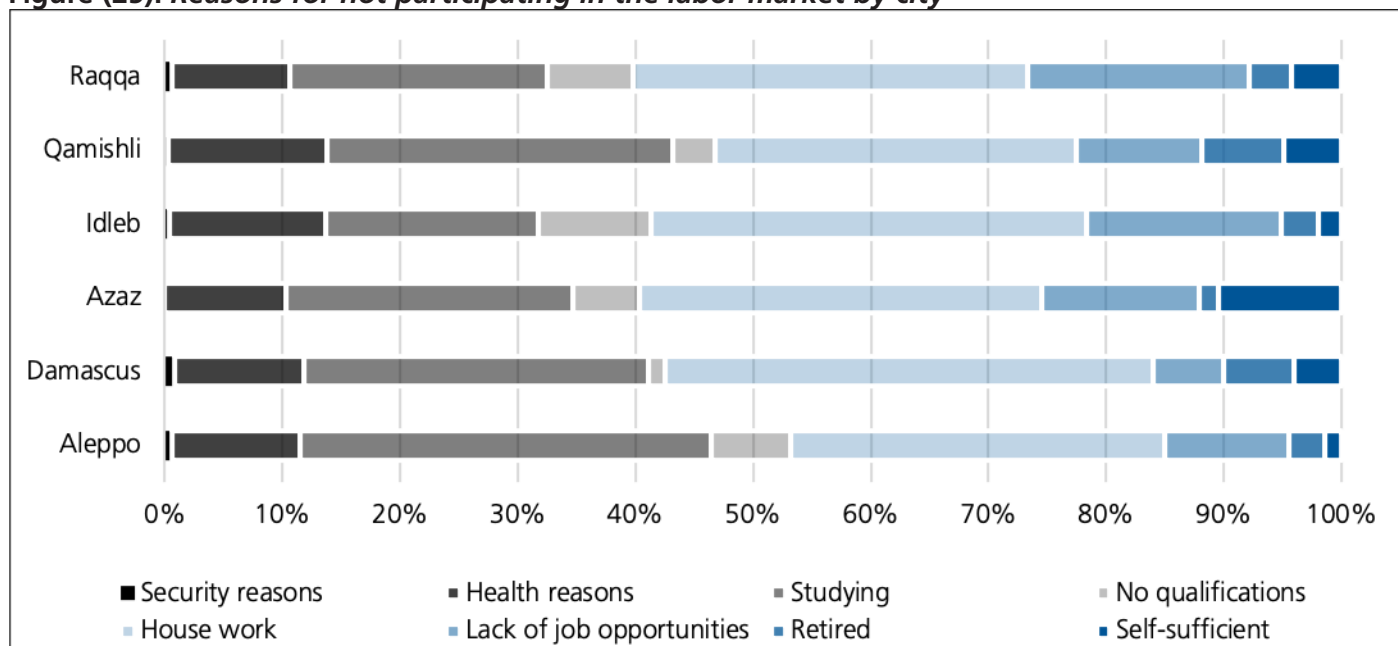


The results show that security pursuits played a role in males involvement in the labor force, especially in regime-held areas, despite the low rate. It reached about 1% among the total males outside the labor force in Damascus and Aleppo and decreased in the Autonomous Administration areas to 0.6%, 0.3% and 0.2% in Idlib and Azaz, respectively. Although the rates were low, they indicated that

thousands of people were persecuted by the security forces. Part of the security concerns, especially among young males, can be explained by evading military service, in addition to political reasons.

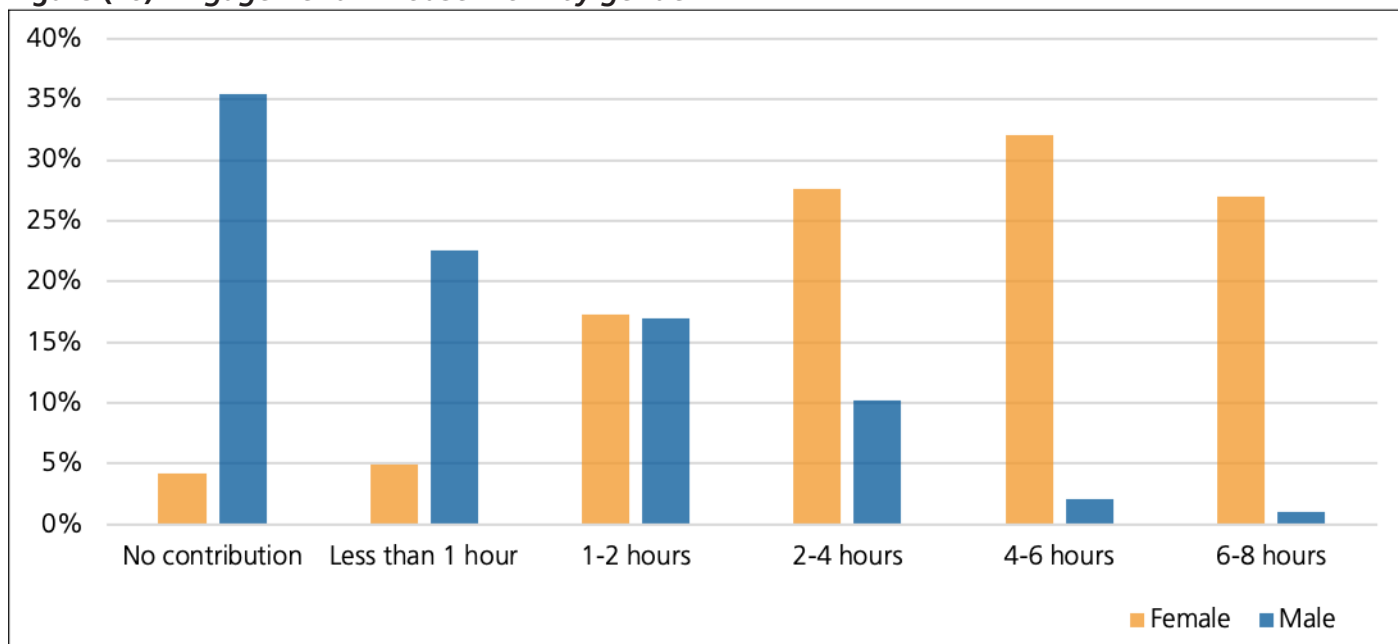
The high rate of people leaving the labor market due to health reasons, which exceeded 15% for males, reflected one of the main outcomes of the conflict, as many people were subjected to work-related injuries as a result of military operations in various regions. This rate did not differ significantly in the studied cities, as it ranged between 16% in Idlib and 14% in Damascus. In general, **Figure (25)** shows that the relative structure of the reasons for not participating in the labor market was somewhat similar among the six cities, but differed significantly between males and females, as the study shows that the largest proportion of these reasons was among males. However, housework constituted the largest proportion of reasons for females' lack of engagement in the labor market.

Figure (25): Reasons for not participating in the labor market by city



These results are in line with the data on the distribution of responsibility for doing housework between males and females. The survey showed that 59% of females aged 12 years and over in the studied cities spent four hours or more on housework per day. This rate rose to 82% representing females who spent at least two hours on housework per day. For males, 35% of those aged 12 years and over did not participate at all in household chores, and 23% of them contributed less than an hour a day in these chores, including childcare (**Figure 26**). These rates differed among the six cities. The rate of females who did housework for four hours or more in Azaz rose to 70% and reached the lowest in Damascus at 52%. This difference can be explained by several factors, including customs, traditions, and the degree of women's involvement in various economic and social activities. However, despite this difference, the gender gap remains huge in all the cities surveyed in terms of the degree of responsibility for household chores and childcare.

Figure (26): Engagement in house work by gender



Employees and working conditions

The survey showed that most employees in all studied cities worked in the service or commercial sector, including education, health, transportation, and real estate, in addition to buying and selling products of all kinds in domestic or foreign markets. The percentage of workers in these two sectors of the total employed ranged between 63.7% in Aleppo and 77.4% in Qamishli. The relative decrease in Aleppo can be explained by the high number of people engaged in other sectors, especially the industrial sector, in which the rate of workers in Aleppo and Damascus was on average 21%. This rate dropped in the Autonomous Administration areas to about 10%, while in Idlib and Azaz, the rate of those employed in the industry ranged at 17%. As for the agricultural sector, as expected, the rate of workers did not exceed 10% because the survey was conducted in major cities and did not include rural areas, and therefore there was a small part of workers residing in cities and working in surrounding agricultural lands.

The results indicate that the rate of workers in the security and military sector was about 10% of the total workers in regime-held areas, which was similar to the rate of workers in this sector in the city of Azaz. It was also close to the rate in the Autonomous Administration areas at about 9% on average between the two cities of Qamishli and Raqqa. In Idlib, the number of workers in the military and security sector decreased to only 3% of the total employed. It should be noted that these rates do not include volunteers who work in this sector as a second profession and young people who perform compulsory military service, especially in areas controlled by the regime and the Autonomous Administration.

The questionnaire included several indicators that reflect the conditions of work and its return in different cities. The results in **Figure (27)** show that more than 65% of workers in the regime areas worked nine hours or more daily, and 15% of them worked more than 12 hours a day. This high rate can be explained by the fact that workers were involved in more than one profession in these areas and were being exploited by the owners of establishments, obligating them to work additional hours in the absence of effective control over these facilities. The situation was not much different in the remaining cities. About 58% of employees worked more than nine hours a day in Azaz and Qamishli, and this rate dropped to 43% in Raqqa and 38% in Idlib, which was characterized by a high rate of workers working less than four hours a day out of the total number of employees, reaching about 25%. This may indicate the increase of part-time work in this city. In general, the number of working hours that reflects part of the decent work conditions is not appropriate in all the cities studied, but this needs more specific research on the reasons for the increase in the number of working hours for workers and the compensation they receive as a result of their overtime work.

Figure (27): Employed people by number of working hours and city

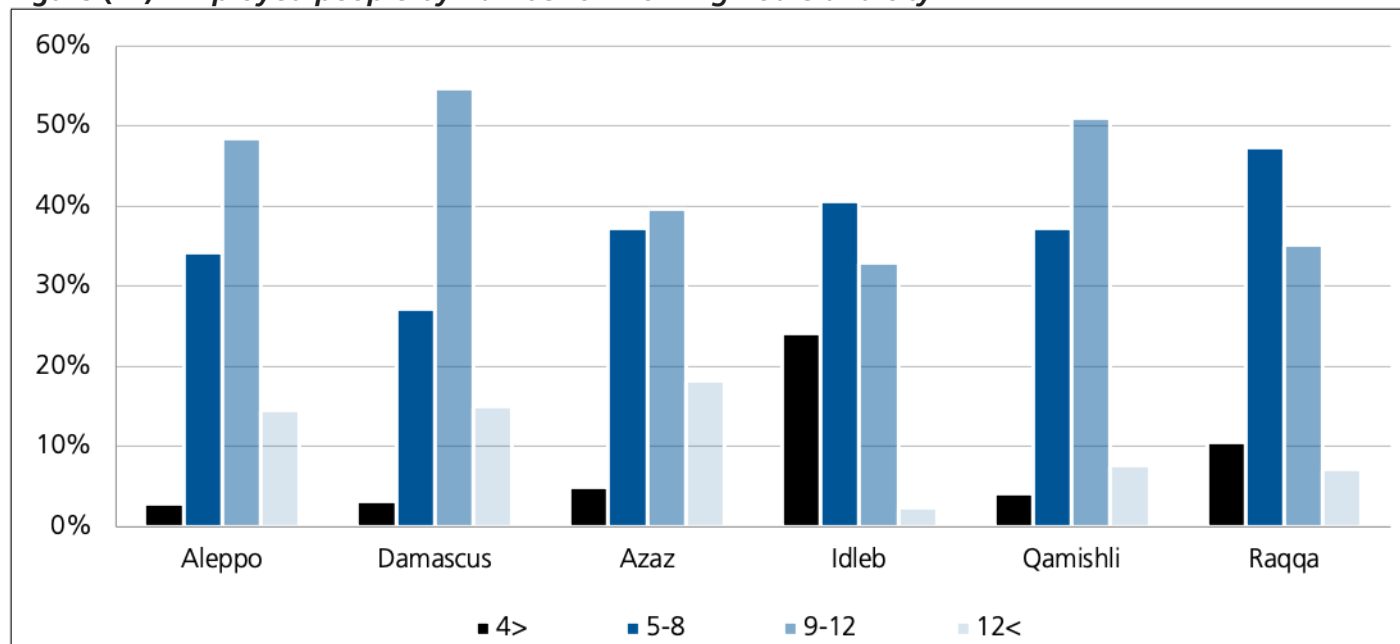
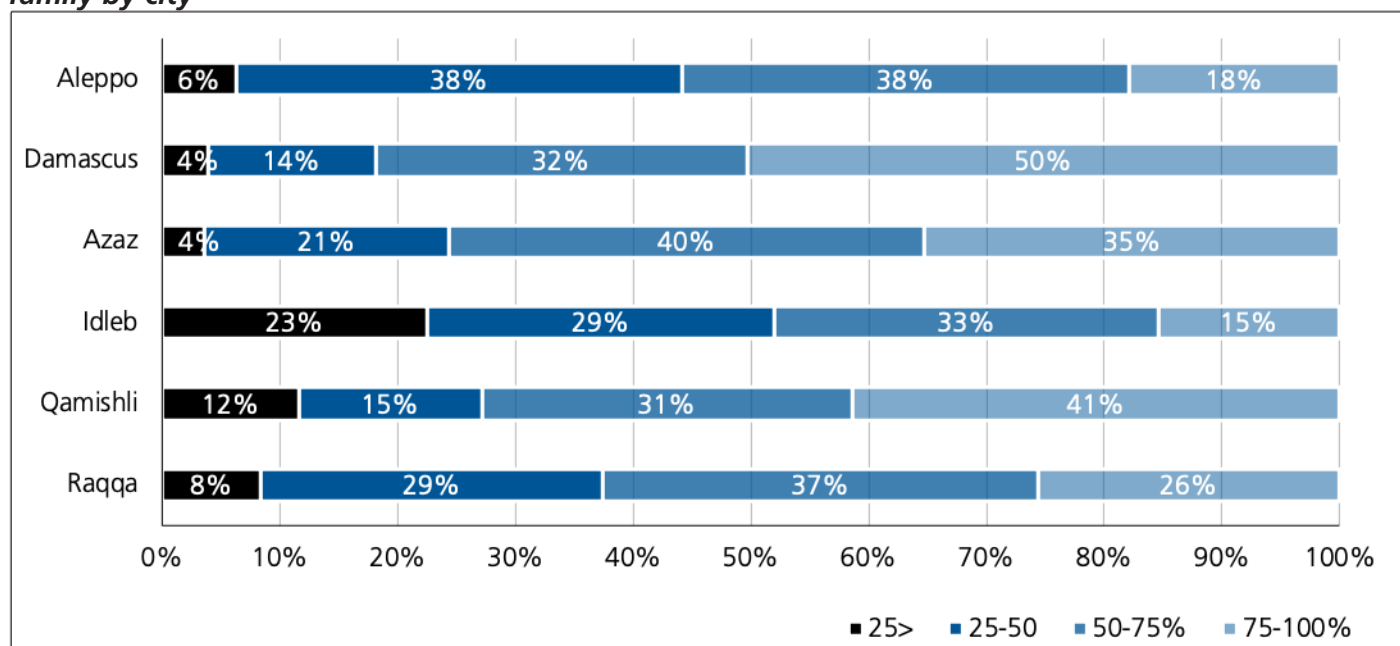


Figure (28) shows that most families in all cities except Damascus did not cover the income generated by their members' work for more than 75% of their monthly consumption expenses, and the rate of these families ranged between 85% in Idlib and 65% in Azaz. As for the city of Damascus, the data indicates that half of the families covered more than 75% of their monthly expenditure through the income generated from the work of their members, but this was not related to the de facto authority in the city, as this percentage in regime-controlled Aleppo reached 82%. It should be noted that these rates apply only to families in which there is at least one person involved in the labor market (i.e., employed). These results can be explained by the active economic movement in Damascus compared to the rest of the studied cities, which can allow the individual to work in more than one job for long hours, as shown in the previous figure (27).

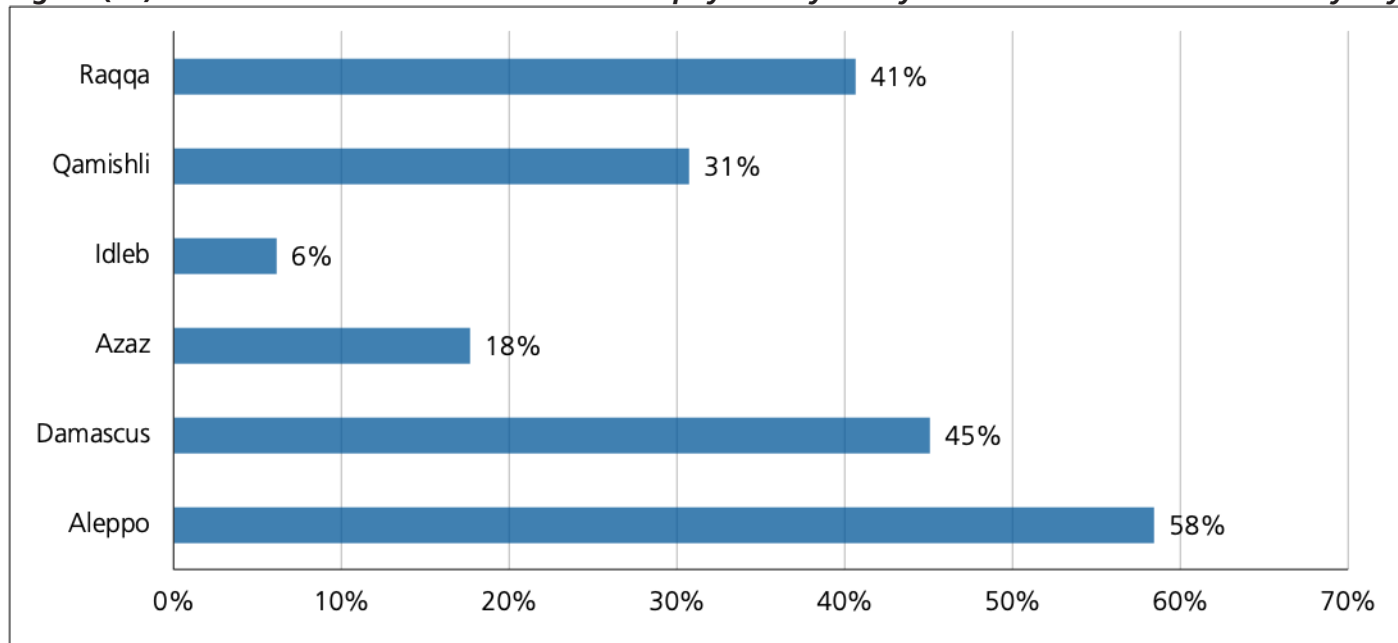
Figure (28): The estimated rate covered by the labor income from the monthly consumption of the family by city



The questionnaire included a question about the need to pay money or royalties by operators to facilitate their work, with the aim of evaluating the business environment in the studied cities. The results shown in **Figure (29)** showed a spread of this phenomenon in regime-held areas, as 52% of families in the cities of Aleppo and Damascus paid at least one of their working members money and royalties to facilitate their work. This rate reached 58% in the city of Aleppo. In the Autonomous Administration

areas, it dropped to about 35%, on average, between the cities of Raqqa and Qamishli. As for Azaz, this rate was recorded at 18%, dropping significantly in the city of Idlib to a mere 6%. The spread of this phenomenon reflects the absence of an environment that attracts business and the prevalence of a culture of corruption in facilitating economic activities, but its causes are related to various factors, including the weak effectiveness and corruption of governing institutions, the size of the market, the complexity of economic relations, and the expansion of the informal and illegal sector.

Figure (29): Rate of households whose members pay money or royalties to facilitate their work by city



The data of the relationship between families and the labor market in the studied cities showed that there were structural imbalances in the relationship, some of which dated back to the pre-conflict period, such as the gender gap in participation rates in the labor market and others related to conflict outcomes, such as the deterioration of working conditions and environment. However, regardless of the extent of the depth of these imbalances and the reasons hindering their solution, the de facto authorities in all cities failed to improve the reality and conditions of the labor market. Some of them, especially the regime, reinforced the spread of negative aspects related to work, such as paying royalties to facilitate economic activity.

V. Living conditions for families

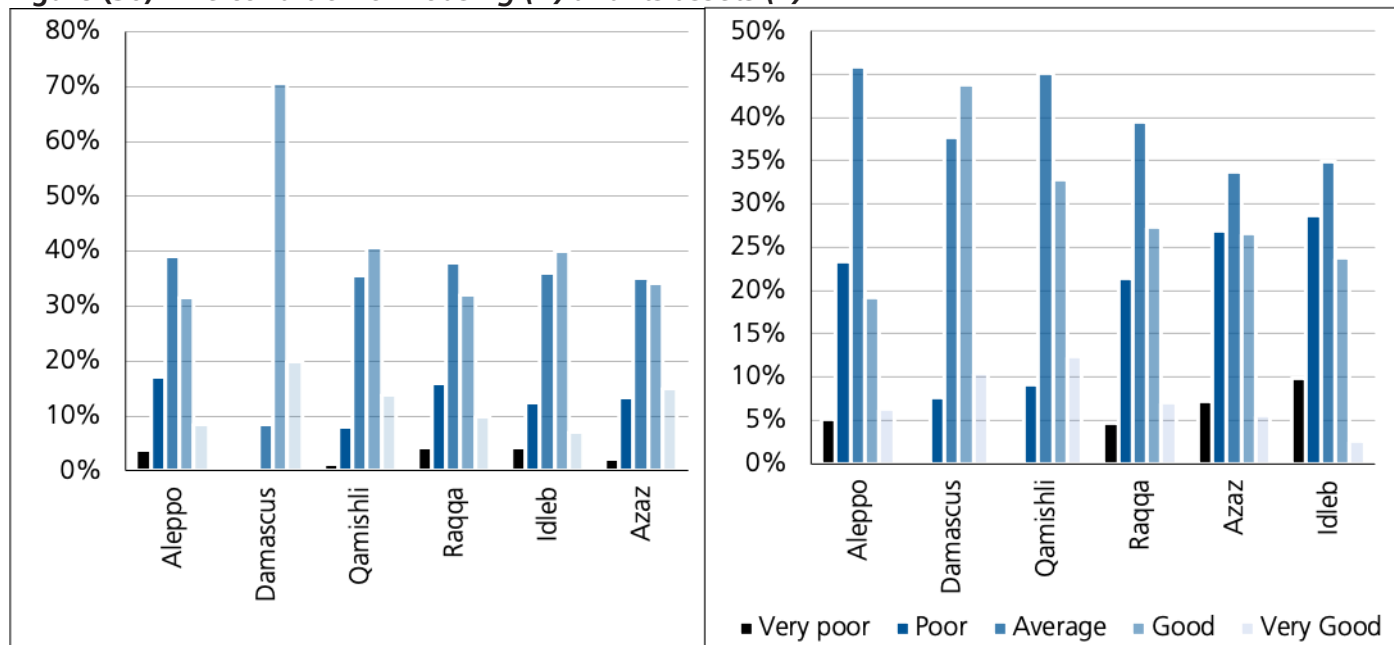
The questionnaire monitored the living conditions of families by asking about a set of 11 indicators that include the quality of housing in terms of the general structure and the availability of furniture and electrical equipment, cooking and heating fuel, electricity, potable water, sewage network, landline telephone, mobile communication Internet, public transportation, and waste transportation. Each category is answered on a scale ranging from 1 to 5, where 1 means “very bad”, and 5 means “very good.” (See: Living conditions of families ([Appendix 1](#))).

1. The condition of the dwelling and its assets

The data shows the difference in housing status among the six cities and even in cities within the same sphere of influence (**Figure 30a**), where housing in the city of Damascus is considered the best among the studied cities in terms of structure, building materials and availability of windows and sturdy doors, while the city of Aleppo is considered the worst despite both cities being under regime control. This is largely due to the intensity of military operations that the city of Aleppo witnessed compared to Damascus. In the Autonomous Administration areas, Raqqa and Qamishli, the situation is different. As the percentage of houses that are classified as bad or very bad amounts to less than 10% of the total houses in Qamishli, this rate doubles in the city of Raqqa to reach about 20%. This can be explained by

the large-scale military operations that took place in the city of Raqqa, which caused great damage to the houses. It should be noted that the survey applies to inhabited homes, meaning that the rates do not include destroyed and uninhabitable homes. The distribution of families in terms of housing quality is somewhat similar in the cities of Azaz and Idlib, both of which witnessed many military operations and conflicts, contributing to the low quality of their housing, as about half of the inhabited houses in these two cities are of medium and low quality.

Figure (30): The condition of housing (A) and its assets (B)



For assets which include the availability of furniture and electricity in the house (**Figure 30b**), more than 60% of the houses in all the studied cities considered that their assets were of poor quality and not sufficient. This rate varied among the six cities, as it reached the lowest in the city of Damascus at 46% and the highest in Aleppo at 75%. This again reflects the differences in the living situation within the same areas of influence. The situation was similar in the areas of the Autonomous Administration, where the rate in the city of Qamishli reached 55% compared to 66% in Raqqa. The rate of houses that have poor-quality assets was 74% in Idlib and 68% in Azaz. The rate of homes that did not have enough furniture and electricity was high in all Syrian regions and reflected a state of depriving families of basic assets due to several reasons, including theft and looting of assets by various armed groups, forcing families to sell some of their assets to secure basic needs, and the inability of many homes to renovate worn out or old assets.

2. Services and commodities

The results shown in Table (3) below indicate the state of services and major commodities by city and on a scale of 1 to 5, where 1 means “very poor”, and 5 means “very good”. Cooking and heating fuel was not well available in all the studied cities. In regime-held areas, it was the least available. At the level of cities, Qamishli was relatively the best, while Aleppo was the worst.

With the exception of the city of Azaz, which received electricity from Turkey, the lack of electricity was a major problem for the rest of the cities, but the problem was clearly exacerbated in regime-held areas, especially in Aleppo. This was due to the lack of fuel needed to operate the remaining stations, the ineffectiveness of the institutions managing the electricity sector, and their corruption.

Drinking water was available at an acceptable level in all cities, at least in Damascus. This might have been due to the high population density and its connection to rainfall. As for sanitation, it was considered good in all cities, especially in Damascus and Qamishli, the reason being the good condition of the sewage network before the conflict, in addition to the limitedness of military operations in these two cities compared to other cities.

Military operations have led to the destruction of the communications infrastructure in most areas, and the results of the survey indicate that the efficiency of this service has significantly decreased in all cities except for the city of Damascus and, to some extent, the city of Qamishli. As for mobile phone services, data shows that these services ranged between “acceptable” and “good” in the studied cities, with the exception of Idlib city, where most families suffered from poor service. Internet service was acceptable in all cities and was considered of good quality in Azaz city. The rate of families suffering from poor Internet service recorded the highest value in the city of Aleppo.

The state of public transportation in the studied cities ranged from “poor” to “moderate”, with the exception of the city of Qamishli, where most families residing there considered transportation “acceptable” or “good” to some extent. The state of public transportation was linked to several factors, the most important of which was the lack of fuel, the lack of available means of transportation compared to the demand for it, and high fees. Most of the families in the city of Qamishli believed that the process of waste disposal was taking place in a good and efficient manner, while in the rest of the cities, most residents considered that this process was carried out in an acceptable manner.

Table (3): Status of Main Services and Goods by City and Area of Influence*

	REGIME		AUTONOMOUS ADMINISTRATION		SALVATION GOVT	SIG
	Aleppo	Damascus	Qamishli	Raqqa	Idlib	Azaz
COOKING/HEATING FUEL	2.6	3.2	3.5	3.4	3.3	3.3
ELECTRICITY	1.7	2.1	3.0	3.0	3.0	3.6
DRINKING WATER	3.8	2.8	3.7	3.6	3.1	3.2
SEWAGE	3.7	4.3	4.3	3.5	3.6	3.5
LANDLINES	2.7	4.0	3.1	1.0	1.5	1.6
CELLPHONES	3.7	3.9	3.1	3.4	1.3	3.6
INTERNET	2.9	3.4	3.4	3.6	3.3	4.1
TRANSPORTATION	2.3	2.9	3.4	2.7	2.3	2.2
WASTE DISPOSAL	2.9	3.1	4.3	3.0	2.9	3.4

Source: Syrian Household Living Condition Survey 2022

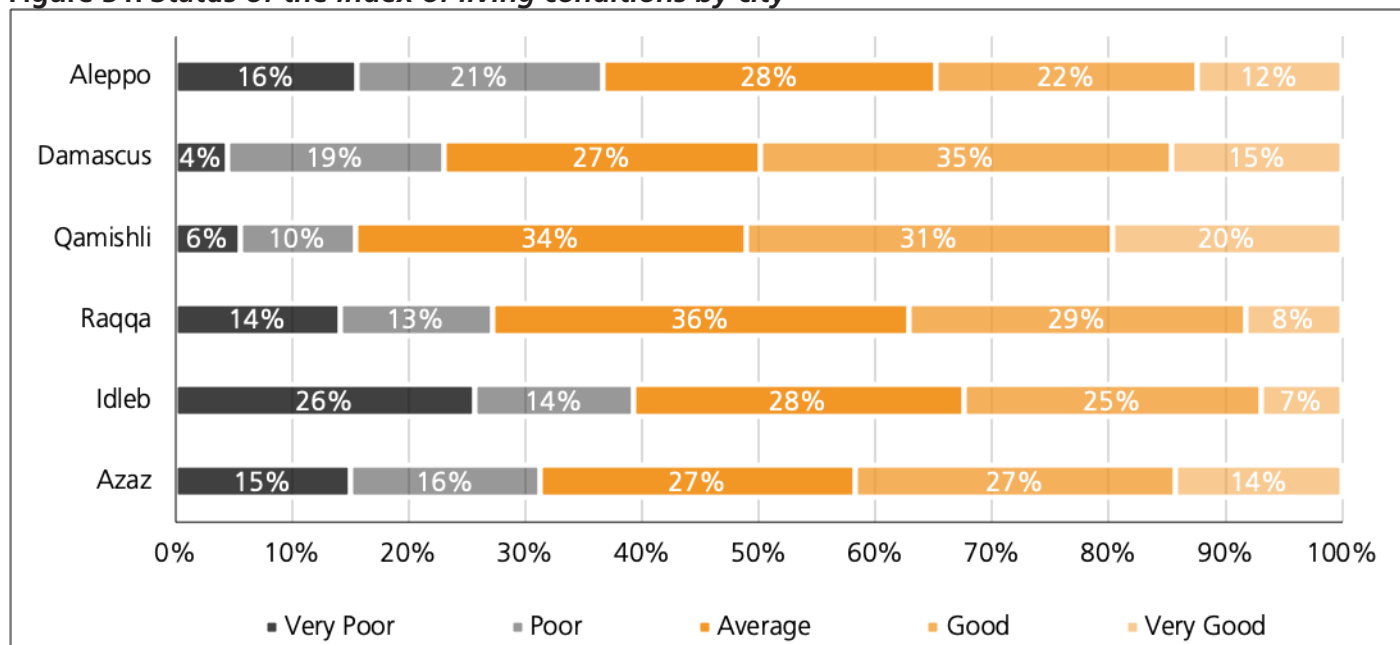
*Scale is from 1 to 5, with 1 very bad and 5 very good

In general, the data show that most families in all the studied cities suffered from the lack of at least one major good or service, and the availability and quality of services and main goods were not only related to the nature of the ruling authority in the city, but they were also affected by many factors, including the state of service before the conflict, the resulting destruction from military operations, and the lack of the ability to renew and repair infrastructure. However, the data indicate that the regime-controlled areas with their high population density suffered from a greater deterioration in the availability of basic goods and services, such as fuel and electricity. This deterioration appeared clearly in the city of Aleppo. The deterioration was not limited to these goods and services, but extended to health services, as well, as the percentage of families who considered the health services available in the city of Aleppo good did not exceed 25% of the total households. This percentage reached 33.4% in Damascus, compared to 43.8% and 45.1% in each of Azaz and Idlib, respectively. Part of this difference can be explained by the fact that civil society organizations working in the health sector have had more support and space to work in areas outside the regime’s control.

3. Living Conditions Guide

The research installed the Living Conditions Index, which consists of 11 indicators that were mentioned in the introduction to this section of the study. This guide equals the average value of these indicators overburdened by the number of family members, and its value ranges from 1 to 5, where 1 means “very bad”, and 5 means “very good”. This guide helps give an integrated and brief picture of the reality of the living situation in each of the studied cities.

Figure 31: Status of the index of living conditions by city



The results shown in **Figure (31)** above indicate that the city of Qamishli was better compared to the rest of the studied cities in terms of living conditions, although half of its residents considered that their living conditions were “average” and below according to the index. However, this evidence decreased significantly in the city of Raqqa, which is also subject to the influence of the Autonomous Administration. Therefore, the rate of the population who considered their living conditions as “average” and below reached 63% of the city’s total population. Similarly, in regime-held areas, there was a clear difference in the guide to living conditions between Damascus and Aleppo. The rate of families whose living conditions were “average” and below was about 65% in Aleppo, compared to 51% in Damascus. As for the areas of influence of other powers, this rate was 58% in Azaz and 68% in Idlib, which were considered in worse condition in terms of the index of living conditions, part of which can be explained by the destruction caused by military operations, in addition to the instability of the security situation in the city of Idlib and its surrounding areas.

4. Family coping practices

The above descriptive analysis shows that all the studied cities, with the difference between them, suffered from deteriorating living conditions for most of their residents. This prompted families in these areas to adopt various coping mechanisms that helped them overcome the challenges hindering them from obtaining a number of basic goods and services. The survey covered the coping mechanisms used by families to deal with the shortage of cooking/heating fuel, electricity and drinking water by city. The results indicated that many families used more than one coping mechanism in order to secure each of these basic commodities.

The table shows the difference in the coping mechanisms used in the studied cities, as many families in regime-held areas and the Autonomous Administration — in addition to reducing their consumption — depended on buying from the black market to address the shortage of fuel, which reflected the existence

of extensive networks to monopolize and exploit the trade of basic commodities in these areas. In the cities of Idlib and Azaz, the rate of families that depended on the black market to secure fuel decreased, with an increase in the rate of families that reduced consumption or used firewood and coal as an alternative to fuel. The increased dependence on solar energy was also observed in these two cities. The adoption by most families in all studied cities of a mechanism to reduce their consumption of fuel to cope with the shortage of this commodity meant a decrease in the ability of these families to meet their basic needs of heating and food, which negatively affected the health of all family members, especially children. In addition, the increase in dependence on firewood directly affected the environment, as it contributes to air pollution, in addition to encouraging the trade in firewood based on illegal logging. The use of solar energy was considered a positive coping mechanism if it was accompanied by effective control over the quality of materials and devices used and with financial facilities to enable a larger number of families to adopt it.

The data in the below table indicate that most families in the Autonomous Administration areas depended on buying amperes from private companies to generate electricity and, to a lesser extent, depended on storage batteries. In the city of Qamishli, reliance increased on private home generators and sharing transmission lines, which negatively affected the public network. These mechanisms indicate the growing trade of “amps” by private companies, which increases the need for public institutions to regulate and monitor the work of these companies to ensure quality, prevent monopoly and protect consumers’ rights.

In regime-held areas, the ampere trade was only present in the city of Aleppo, and the regime claimed that this mechanism was temporary until the public electricity stations that feed the city were rehabilitated. However, this trade has been institutionalized and has exploited the families’ need for electricity with the absence of any kind of control over it. In the city of Damascus, where this trade was forbidden, most families adapted to the severe shortage of electricity by relying on small storage batteries, from which a limited number of merchants have exploited the trade, and the destruction of thousands of them daily negatively affected the environment. In the cities of Azaz and Idlib, in addition to relying on storage batteries, there was a clear increase in reliance by many families on the use of solar energy to generate electricity, which is one of the most effective and sustainable coping mechanisms if accompanied by effective quality and price control.

Most families in all the cities studied depended on purchasing water from private tanks to cope with the shortage of water in the public network. This mechanism places additional financial burdens on the family and may cause health problems for its members in the absence of oversight from the owners of these tanks. Some families were also forced to reduce their water consumption. The rate of families that adopted this mechanism reached 63% of the total families in the city of Idlib, while it reached the lowest in Damascus at 17%. This mechanism may be positive if it leads to a cessation of wasteful water consumption. However, it turns into a negative approach in the event that consumption is reduced below the minimum necessary water per capita, which is accompanied by problems in the health of individuals and public health.

Table (4): Coping mechanisms used by households by commodity and city*

		REGIME		AUTONOMOUS ADMINISTRATION		SALVATION GOVT	SIG
		Aleppo	Damascus	Qamishli	Raqqa	Idlib	Azaz
FUEL SHORTAGE	Black Market	41	60	63	79	34	19
	Reducing consumption	54	56	69	50	80	61
	Coal or wood	39	20	4	14	50	63
	Solar energy	6	3	6	4	17	17
	Nothing	13	7	3	4	7	8
ELECTRICITY SHORTAGE	Amperes	62	0	96	84	36	13
	Private generators	9	23	23	11	4	19
	Electricity storage battery	48	81	35	45	75	64
	Sharing transmission lines	10	12	36	4	11	19
	Solar energy	13	21	7	5	37	50
	Nothing	5	3	1	7	4	10
WATER SHORTAGE	Bottles	17	27	41	13	18	36
	Reservoirs	43	64	46	33	86	72
	Reducing consumption	43	17	44	39	64	39
	Turbines	7	30	20	25	4	18
	Nothing	26	3	2	10	1	2

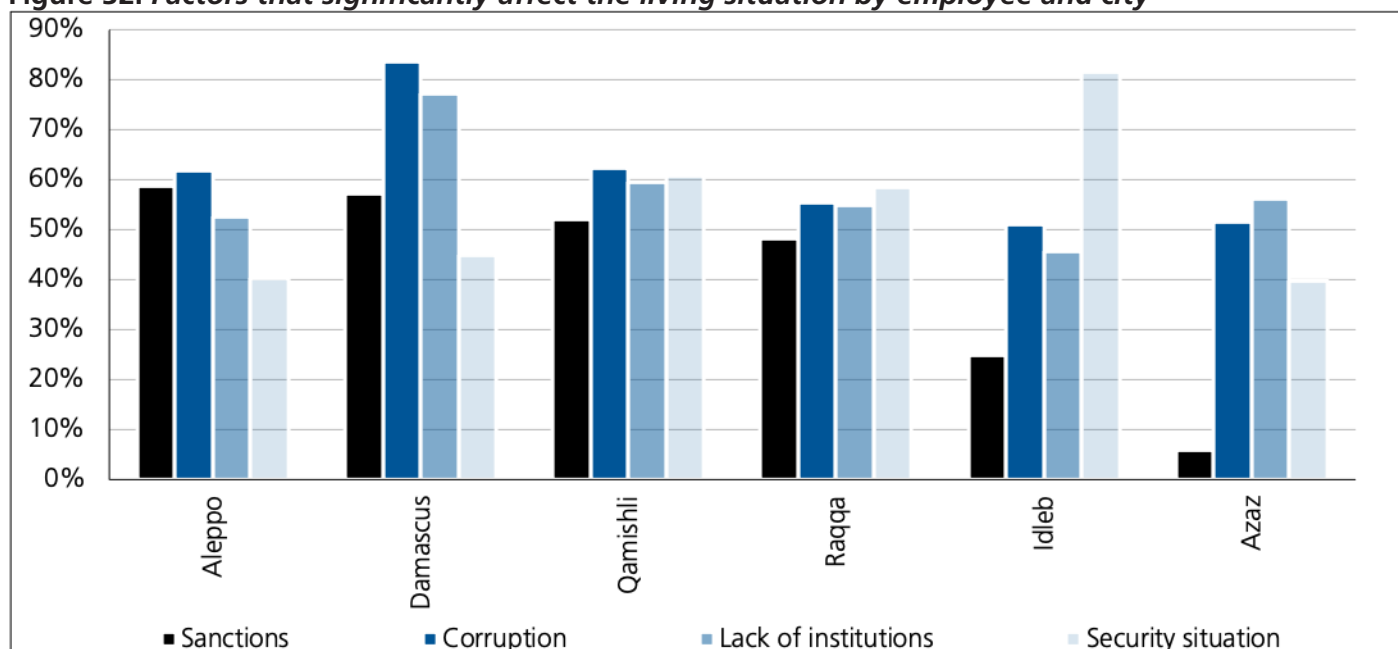
Source: Syrian Household Living Condition Survey 2022

* It is possible for each family to use more than one mechanism to cope with the shortage of a particular commodity, and therefore the total distribution is greater than 100%

5. Factors affecting living conditions

The questionnaire included questions about a range of institutional and external factors that may affect the living conditions of the population in the studied cities. These factors included the security situation, the sanctions imposed on the Syrian regime, corruption, and the weak effectiveness of institutions. The surveyed households estimated the impact of each of these factors on their living conditions using a scale from 1 to 5, where 1 means “a very small effect”, and 5 means “a very large effect”. **Figure (32)** shows the rate of households that considered each of these factors has a significant impact (scales 4 and 5) on their living condition by city. The data indicates that about 60% of families in the regime’s areas of influence believed that the sanctions negatively and significantly affected their living conditions. This can be explained by the shortage of fuel and basic materials for these families and their inability to deal financially with the outside world, in addition to the regime’s relative success in transferring the negative impact of these sanctions onto individuals (Mehchy & Turkmani, 2021). The rate reached about 50% in the Autonomous Administration areas, which can be explained by the dependence of the economy of these areas on trade with the regime’s regions, in addition to the role of sanctions in impeding trade with external regions and preventing effective and sustainable oil investment. This rate dropped significantly in Idlib to less than 25% and to 5% in Azaz, as most families considered that the sanctions were directed primarily against the Syrian regime, which had no authority over them.

Figure 32: Factors that significantly affect the living situation by employee and city



Corruption was rampant in all the studied cities, but it was the most common in regime-held areas, as the results indicate that the rate of families who considered that corruption significantly affected their living conditions reached more than 70% in these areas, with a maximum of 81% in the city of Damascus. Corruption reflects the mechanisms of exploitation through which wealth is transferred from the majority of the population to a corrupt group that holds security and military positions and public jobs with the state. The data shows that this phenomenon was widespread, albeit to a lesser degree, in all other regions, as the percentage reached about 57% in the Autonomous Administration areas and dropped to around 50% in Idlib and Azaz.

Similarly, the impact of corruption on the rate of families who believed that the ineffectiveness and inefficiency of the ruling institutions greatly affected their living conditions was highest in regime-controlled areas at 61% of the total families. It even exceeded 75% in Damascus. However, in Autonomous Administration areas, it averaged at about 57% to decrease slightly in Azaz to 56% and in Idlib to 46%. These rates reflect the widening gap of confidence between the population in the studied cities and the governing institutions in terms of the latter’s ability to secure the minimum requirements for living.

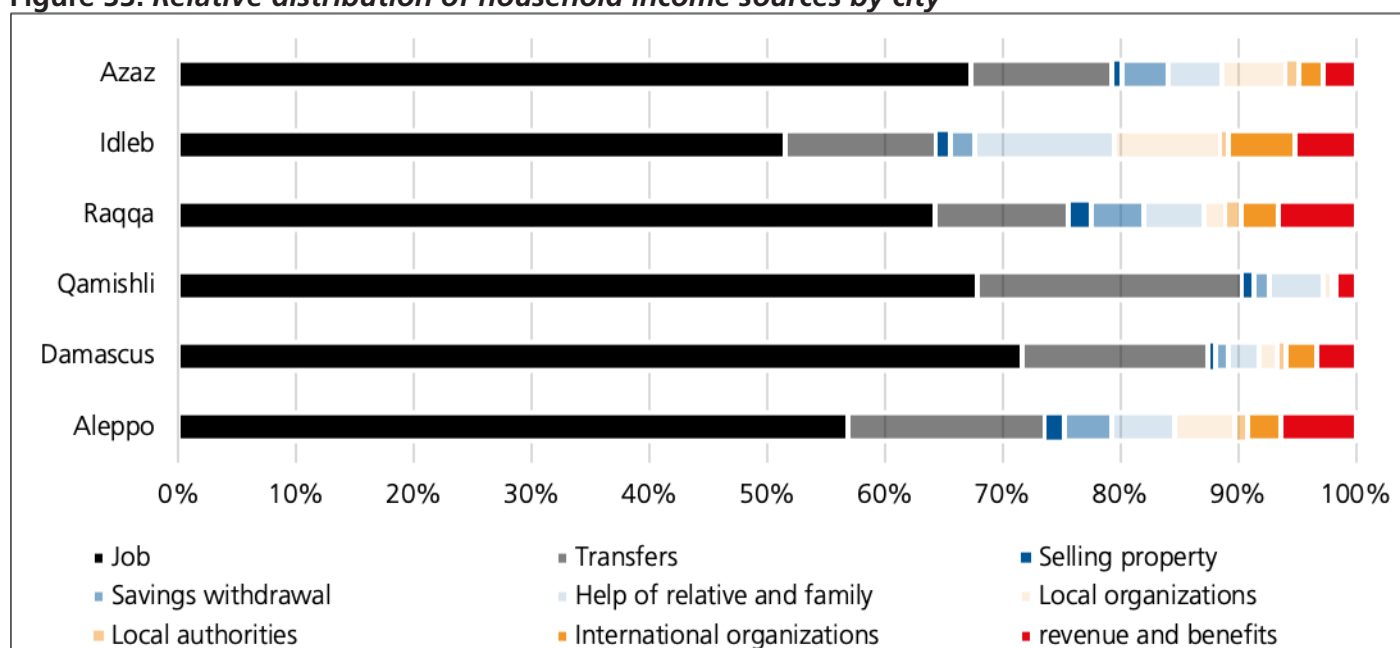
Security instability was one of the factors that many families believed to have a negative and significant impact on their living conditions. The rate of these families was the highest in the city of Idlib, exceeding 80%, due to the security problems and the continuation of military operations, albeit to a limited extent. This rate decreased to about 60% in the Autonomous Administration areas, which faced several security challenges. The rates in the city of Azaz and regime-held areas in Damascus and Aleppo reached about 40%, reflecting a relative stability in security among families in these cities.

VI. Household income and consumption composition

The questionnaire included questions about the composition of household income and consumption in the six cities studied, and the results help to conduct a comparative analysis of income sources and consumption behaviors between these cities. **Figure (33)** shows that the bulk of the income of families in all cities results from work, as the share of this work income is on average about 63% of the total income, and this rate rises to reach its maximum in Damascus at 71%, while the lowest amounted to 50% in the city of Idlib. The figure also shows a difference in this rate within the same sphere of influence, especially between Damascus and Aleppo, where this percentage drops to 57%. Despite the importance of the contribution of work to income, the percentage of families that depend on work as their sole source of income does not exceed 15% of the total households in the six cities, and ranges between 26% in Raqqa and 6% in Idlib. Therefore, the vast majority of families cannot rely on income generated from work only to secure its requirements.

The data indicate the role of remittances in supporting income generated by work, as the proportion of these remittances constitute 16% of the total income on average in the six cities, reaching its highest in the city of Qamishli at 22% and the lowest in Azaz with 11.9%. It should be noted that the contribution of remittances to total income does not reflect the total value of these remittances by city. When studying the relationship between transfers and the situation of family members, we find that the rate of transfers is inversely proportional to the increase in the number of family workers in all cities, as the average rate of transfers to total income decreases from 22.3% for heads of families who are outside the labor market to 12.5% for heads of households workers.

Figure 33: Relative distribution of household income sources by city



Source: Syrian Household Living Conditions Survey 2022

Relatives and acquaintances who help out families constituted a noticeable part of the family's income in the studied areas, as it averaged about 6% of the total income among the six cities, and ranges from 11% in Idlib city to less than 3% in Damascus. To some extent, this rate reflected the informal social protection networks,

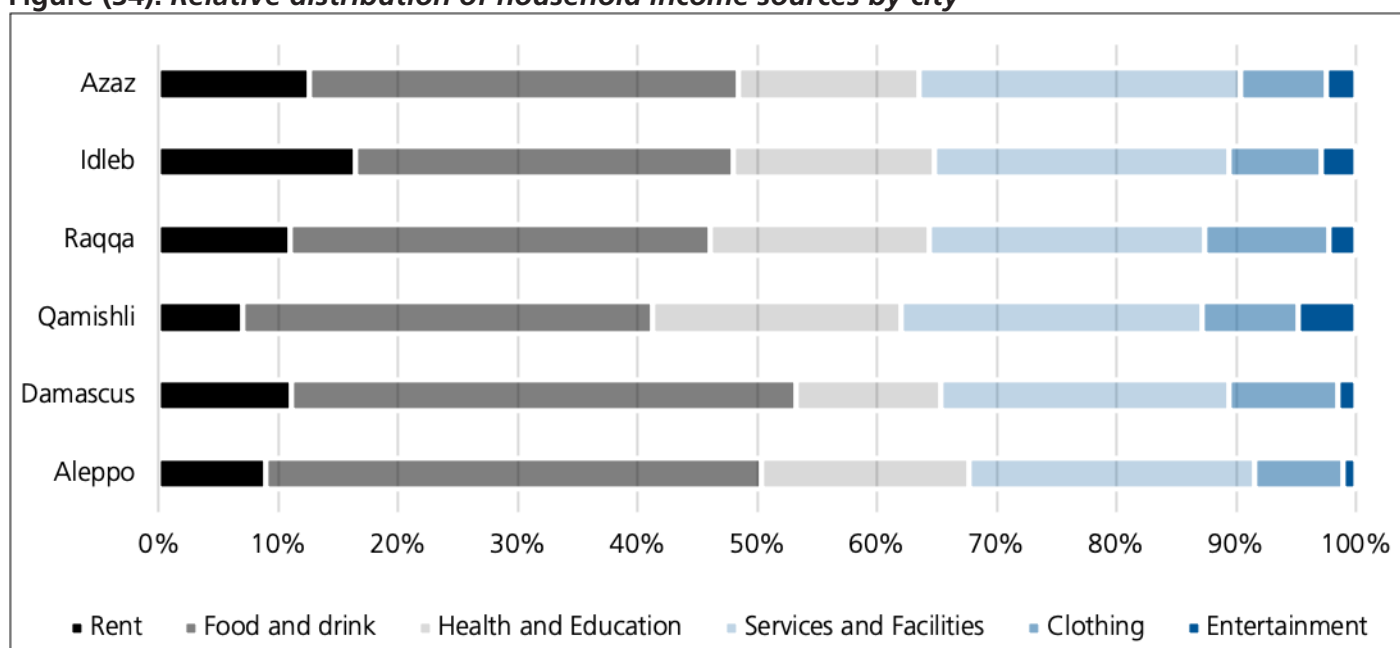
as this assistance is provided on a regular basis and has become part of the income structure of many families. As for the support of local and international organizations, the average rate among the six cities reached 7% of the total income. This rate varied among the studied areas, and reaches the lowest in Qamishli, where it does not exceed 1%, but in the city of Raqqa, which is also subject to the influence of the Autonomous Administration, it reached more than 5%. Supporting organizations working in the food sector — in regime-held areas, this rate was recorded in Damascus at 5% and in Aleppo at 8%, and this discrepancy can be attributed to several factors, including the relatively higher needs in the city of Aleppo, the presence of a larger number of relief organizations and projects, and the relative decrease in other sources of income such as jobs compared to with Damascus. By analyzing the relationship between the value of the organizations' support and the living situation, it was found that the rate of the contribution of this support to the family income is inversely and statistically proportional to the index of living conditions compounded in the previous section of 11 sub-indicators, in all the studied cities, and therefore any reduction in the amount of aid has had a significant negative impact on the most disadvantaged families.

Consumption composition

The relative distribution of consumption in the family is greatly affected by the degree of economic and security stability in the region, and there is a great discrepancy in this distribution between urban and rural areas, and between city centers and the rest of the urban population. The results indicate a similarity in the relative weight of each category of consumption among the six studied cities, and this can be explained by several reasons, including the convergence in consumption behaviors among households in city centers which have a unified range of spending, including food and fuel prices, and similar challenges regarding the impact of the conflict on the living situation.

Figure (34) shows that spending on food was the largest part of the total consumption of families in all cities, and the rate of this spending ranges between 32% in Idlib and 42% in Damascus and Aleppo, which are the areas under the control of the regime. The increase in the value of spending on food out of total consumption is usually associated with the deterioration of living conditions, but the difference between the areas of influence of the regime and other areas can be explained by the high rates of spending on other basics. In the city of Idlib, the rate of spending on rent is 17% of the total consumption, and in the city of Azaz it is 13%, compared to about 10% in the areas under the regime's influence. As for the Autonomous Administration areas, especially Qamishli, the rate of spending on health and education is high, as the report mentioned in the Status section. Many families in these areas prefer to send their children to private schools with higher costs to learn a curriculum other than the Autonomous Administration curriculum.

Figure (34): Relative distribution of household income sources by city



Source: Syrian Household Living Condition Survey 2022

The study of the relationship between the living conditions index and the relative distribution of income groups with other variables remaining constant, shows the negative and statistically significant correlation between the values of the guide and the rate of spending on rent, food, education, health, services and utilities. While the correlation with the rate of spending on clothing is not statistically significant, and with the rate of spending on entertainment, the relationship is positive for the total families in the studied cities. This means that the improvement in living conditions is accompanied by a decrease in the rate of spending on necessities in exchange for an increase in the rate of spending on entertainment and luxury. These results apply to the areas of influence of the regime and the Autonomous Administration, but the relationship between the index and consumption categories becomes statistically insignificant in the cities of Idlib and Azaz. In these two cities, changes in living conditions are generally not associated with a change in the composition of consumption categories.

In terms of the adequacy of all sources of income for the consumption requirements of families, the results show that more than 70% of the families covered in the survey in the studied cities indicated that their entire income is not sufficient to spend on basic needs, and this rate ranges between 60% in the city of Azaz and 81% in the city of Damascus. In the Autonomous Administration areas, the median between Raqqa and Qamishi was about 67%, and in Idlib city, this rate reached 79%. These data indicate the catastrophic situation of income compared to the needs in all regions, with the relative deterioration in the areas of the regime and the city of Idlib. And since this gap takes into account all sources of income that include transfers and aid, it will not decrease unless families reduce their consumption of basic services and commodities, including food, which has a negative current and long-term impact on human capital.

VII. Institutional and social environment

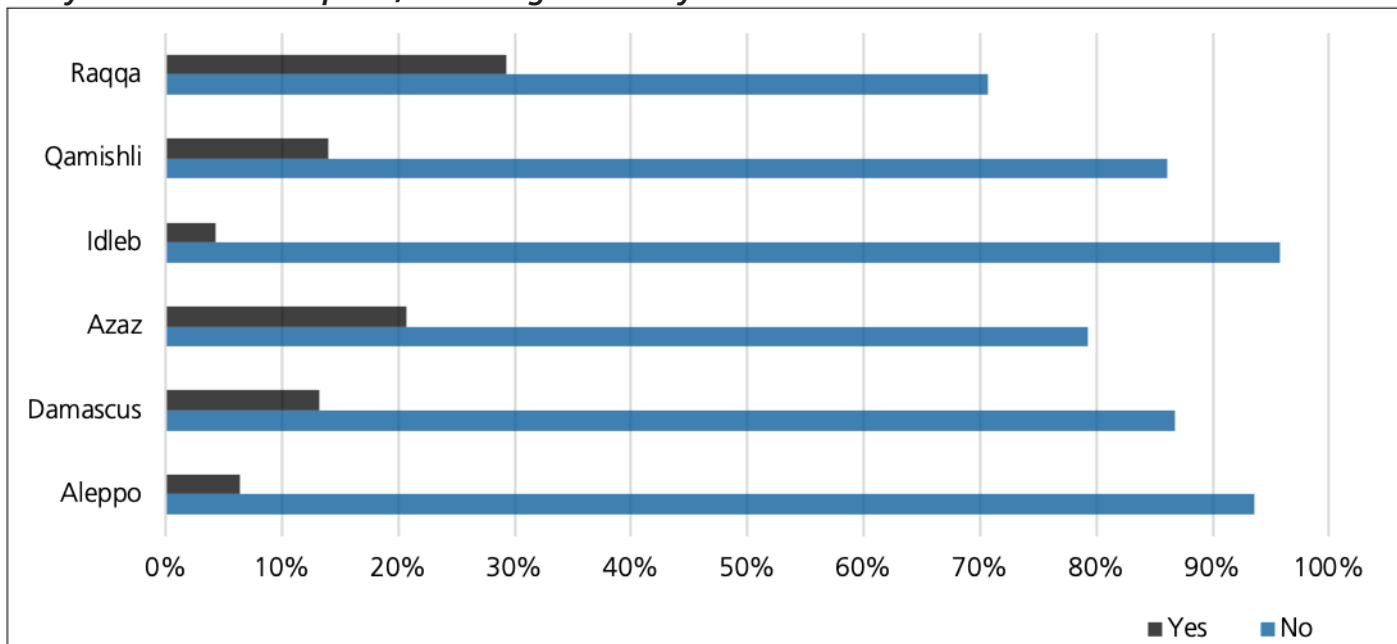
The questionnaire monitored three indicators that reflect the institutional situation in the studied areas, and these indicators include the rule of law. It was assessed through a question about the possibility of applying decisions and laws to everyone without exception, and the answer was “yes” or “no”, and the second indicator was the question about the level and ability of local communities to participate in the decision-making process on a scale from 1 to 5, where 1 means no participation at all and 5 means permanent possibility of participation. The third indicator is related to the ability of local communities to hold the authorities accountable for their decisions also on a scale from 1 to 5, where 1 means no accountability at all and 5 are always aware of accountability. These indicators help to understand the governance mechanisms of the de-facto authorities, and their relationship with the living situation of families and the job situation of the head of the family can be analyzed.

Despite the differences between the studied cities, the rule of law, according to the estimation of most families, is not applied in all regions, as more than 85% of families in the six cities believe that decisions and laws do not apply to everyone, and this rate ranges between 95.8% in the city of Idlib and 70.7% in the city of Raqqa, and it averages more than 90% in the regime’s areas of influence and approaches 80% in the Autonomous Administration areas, while in Azaz it reached 79.3% (Figure 35).

However, this percentage and the six cities as a whole decrease significantly to less than 65% of the total families that have one or more people working in the security or military field. This can be explained by several reasons, including the bias of these families to the security and military rule imposed by all de-facto forces in the country, and demonstrating it as a protector of the rule of law, and the ability of these families to enforce the law is greater compared to others, and thus the bias of the “law” to the military and security forces.

By analyzing the relationship between the rule of law and the index of living conditions, the results show that families with a relatively better standard of living increase the belief that the rule of law applies to everyone compared to those with a lower standard of living, which indicates that the greater the material deprivation of families, the more vulnerable they are to the belief that they are deprived from the protection of the law, that is, the law is biased towards the rich and influential in all the studied areas.

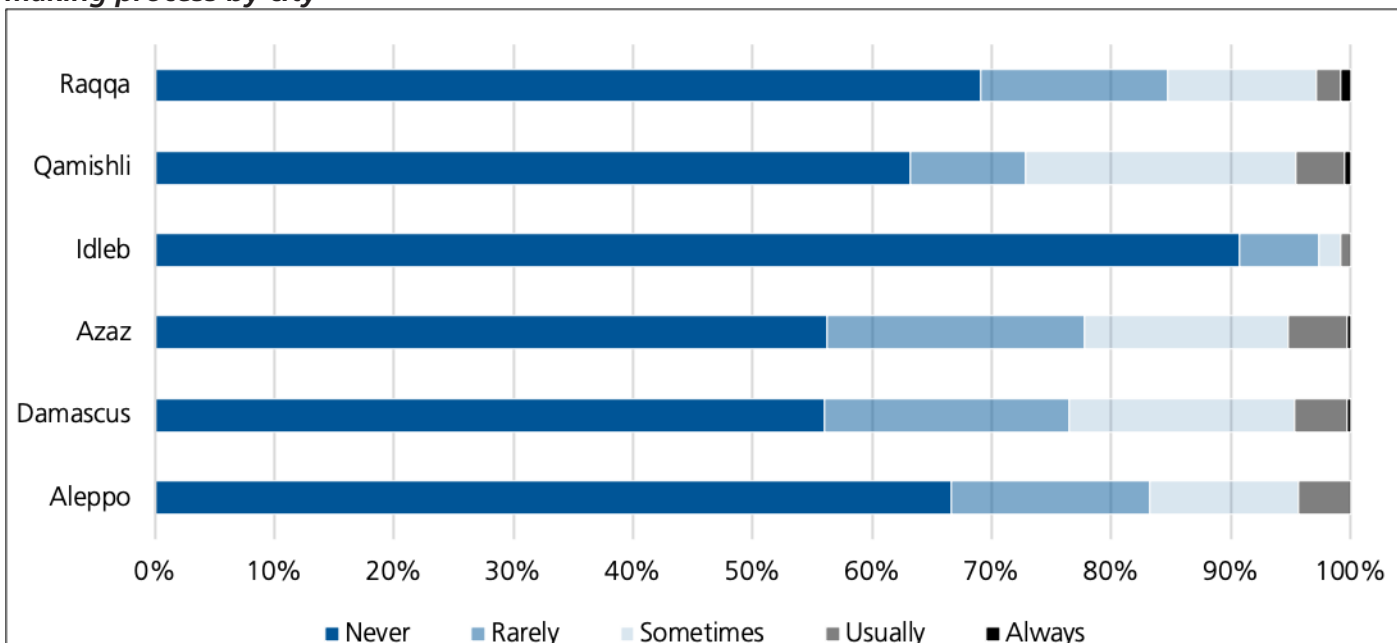
Figure (35): Relative distribution of families according to their belief that decisions are applied to everyone without exception, according to the city



Source: Syrian Household Living Conditions Survey 2022

Most of the families in the six cities studied believe that their ability to participate in decision-making is non-existent or almost non-existent, as 82% of the total families included in the survey indicated that they cannot participate in the decision-making process or that they rarely participate in some decisions at the local level. This rate is highest in the city of Idlib at 97.3%, and it converges between the areas of the regime and the areas of the Autonomous Administration to reach about 80%, while in the city of Azaz it reaches 78% (Figure 36). That is, all regions suffer from low participation rates significantly, which reflects the nature of governance for the various de facto forces, based on imposing decisions and not expanding the base of engagement in the process of decision-making, and the relative discrepancy in the rate of participation among the regions does not reflect a difference in the essence of the nature of governance. This disparity results from giving local communities limited powers to engage in making decisions at the grassroots level.

Figure (36): Relative distribution of families according to their ability to participate in the decision-making process by city



Source: Syrian Household Living Condition Survey 2022

Families' assessment of their ability to participate varies with the different employment status of their members, as the data indicate that the rate of families who believe that they have the ability to participate in the decision-making process permanently or in most cases is about 23% in families that have one or more people working in the security sector and the military, while this rate is less than 4% of all families in the studied areas. Meaning that the families of the security and military think that they have a relatively greater ability to participate in decision-making, which reflects the clear bias of the governance mechanisms of the various de-facto forces in favor of this sector. On the other hand, the study of the relationship between the ability to participate and the index of living conditions shows that families with relatively better living conditions believe that their ability to participate is higher compared to families whose index is lower, and this applies to all cities studied, and therefore participation mechanisms exclude the most disadvantaged families.

Regarding communities' ability in the studied cities to hold the authorities accountable for their decisions, the results indicate that more than 90% of families in these cities consider themselves unable to hold the authorities accountable, with rare exceptions regarding some local decisions, and this rate ranges between 81% in Damascus city and 98% in Idlib city, and the average in the Autonomous Administration areas is about 92%, while in the city of Azaz it reaches 87%. There is some disparity in the regime's areas, where the rate in the city of Aleppo rises to 97%, and this can be explained by the fact that the Syrian regime resorts from time to time, especially in Damascus city (being a center for ministries and public administrations) to hold administrators and government employees accountable for negligence or corruption in order to decongest popular frustration. As a result of the deteriorating living situation, those who are being held accountable are held responsible for this situation, thus demonstrating the regime, especially the President of the Republic, as a fighter against corruption and administrative and career laxity.

Despite some discrepancies between the studied cities regarding the ratios related to the families' ability to hold the existing authorities accountable, the data indicate that the lowest value for these ratios is significantly high and reflects the similar nature among all the de-facto forces in Syria, where monitoring, evaluation and accountability mechanisms are absent and disrupted. Some of them can be selectively reactivated by these forces for several reasons, including the desire to increase popular legitimacy or liquidate people no longer desirable. As for the relationship of levels of accountability with employment status and living situation, the result is similar to that monitored in the indicators of the rule of law and participation, as the assessment of accountability capacity increases relatively among the families of workers in the security and military sector, and increases with the improvement of the index of living conditions in all regions.

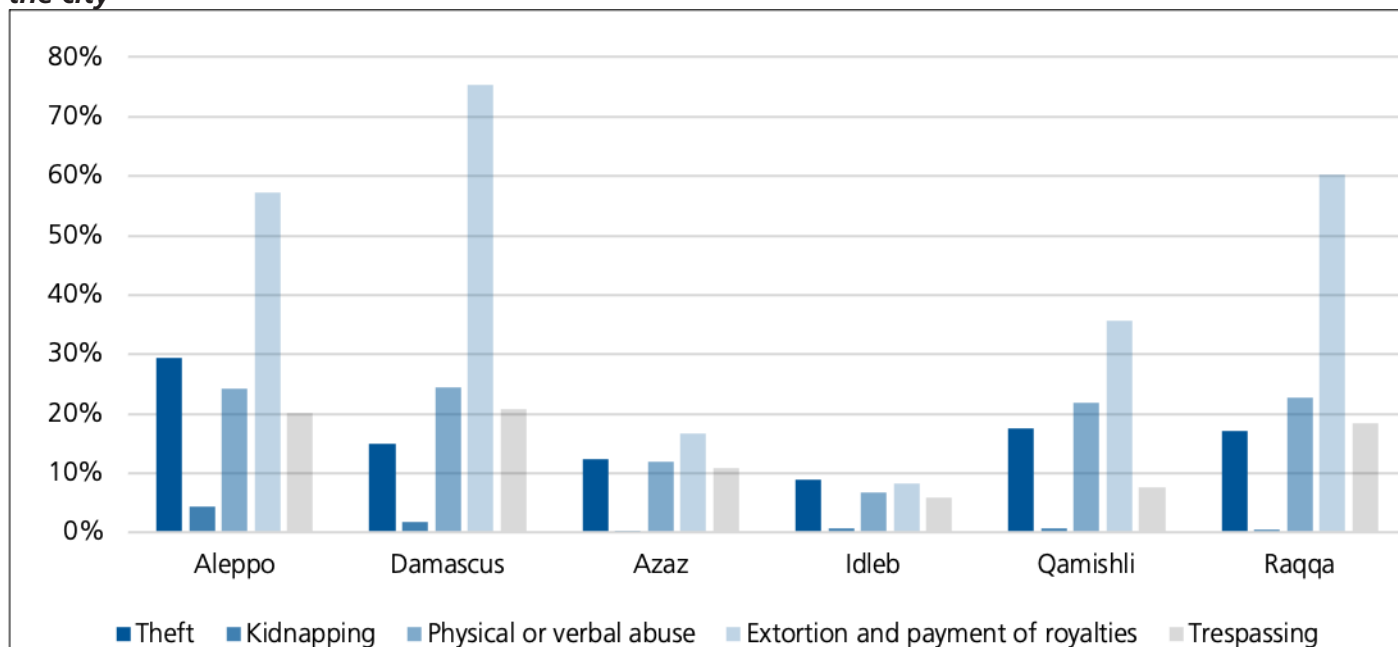
1. Negative social phenomena

The questionnaire monitored the degree of prevalence of a number of social incidents, according to the city, as it included the question about the exposure of one or more family members to theft, kidnapping, verbal or physical violence, financial extortion and payment of royalties, and assault on property during the three months preceding the survey. The results in **Figure (37)** indicate a clear discrepancy between the different cities and areas of influence, as the rates of families that have been exposed to social incidents increase in the regime's areas, i.e. the cities of Damascus and Aleppo, followed by the Autonomous Administration areas, and decreased significantly in the cities of Idlib and Azaz.

75% of families in the city of Damascus have one or more individuals who have been subjected to some form of extortion or payment of royalties, and this includes incomplete official transactions or disrupting economic activities until bribes are paid to influential people and government employees. This rate is about 58% in the city of Aleppo, and part of this discrepancy can be explained by the relative intensity of public transactions and businesses in Damascus city. In the Autonomous Administration areas, this rate reaches an average of 49%, where it reaches 60% in Raqqa, and decreases in Qamishli to 37%, which may indicate the existence of more effective and controlled governance mechanisms in the city of Qamishli compared to those who are of Arab majority in Raqqa.

Despite the existence of financial extortion and royalties in other areas of influence, it is relatively low, as it reaches about 18% in the city of Azaz and does not exceed 10% in the city of Idlib, and this may be due to several factors, including the desire of the de facto forces and their ability in these two cities to combat this phenomenon. And the communities' desire to fight it due to its connection to the corrupt governance mechanisms that prevailed in Syria before the conflict and which society revolted to get rid of, in addition to the relatively limited official and economic transactions in these two cities and the ability to monitor them.

Figure (37): Rate of families exposed to social accidents, according to the nature of the accident and the city



Source: Syrian Household Living Conditions Survey 2022

The city of Aleppo recorded the highest rate of families whose members or more were subjected to theft, reaching about 30% of the total families, and this reflects the lack of security and its weak effectiveness in protecting the property of families, and this rate drops in the city of Damascus to 15%, which may indicate a relatively higher effectiveness of the police forces in the city, even though it is in the areas of influence of the regime as well. The city of Idlib recorded the lowest rate of families that were robbed at the level of 9%, followed by the city of Azaz at 12.4%, while the Autonomous Administration areas recorded a rate, on average, of about 17%. Despite the discrepancy between the cities studied, and the levels of theft reaching dangerous levels in the city of Aleppo, the rates in all cities, including the city of Idlib, are considered high and indicate an increase in the insecurity of families.

The rate of families who have had one of their members kidnapped shows the degree of insecurity in the regime's areas, especially in the city of Aleppo, as this rate reached 4.3% of the total families in the city, which is considered a high rate for this type of incident. In contrast, this rate was recorded at about 1.8% in the city of Damascus to become almost non-existent in the rest of the cities studied. The rate of families that have been subjected to an attack on property clearly increases in the regime's areas to reach 20% of the total families in these areas, and this can be explained by the regime's decisions related to the seizure of the property of political opponents in addition to the property of many merchants and businessmen under the pretext of non-payment of taxes and other relevant fees/royalties. In addition, the increase in this rate is usually accompanied by a complete absence of the rule of law and the lack of confidence of the victims in the justice and effectiveness of the judicial and legal system. The data indicate that this rate increased in the city of Raqqa to reach 18.5%, despite its decrease in the city of Qamishli, which is also subject to the Autonomous Administration control.

With regard to verbal or physical violence, the regime regions recorded the highest rate of families where at least one of their members was exposed to this type of social incident, reaching about 24%,

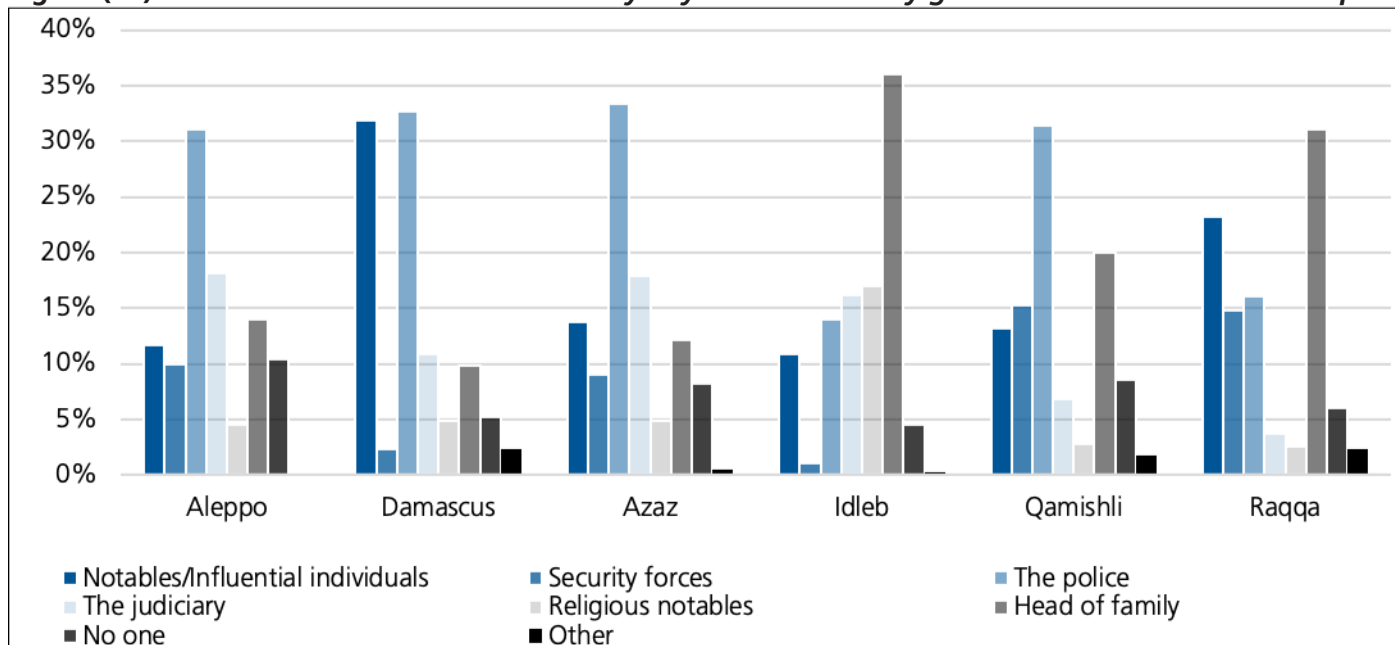
on average between the cities of Aleppo and Damascus without a clear discrepancy between them, while in the Autonomous Administration areas, this rate reached 22.3 % on average between the cities of Qamishli and Raqqa, with a slight difference between the two (less than one percent). The rate drops in the city of Azaz to 12%, reaching its lowest value in the city of Idlib at 6.8%. It should be noted that this rate only reflects violence in public places and entities and does not include domestic violence, which most families are reluctant to mention.

2. Conflict Resolution Mechanisms

The questionnaire included a question about who family members would turn to if they had a financial dispute with a person in the city, and the answer indicated several factors, including trust in relevant institutions and power dynamics between actors at the local level. The results in **Figure (38)** indicate that only 38% of the families covered by the survey in all cities go to the police or the judiciary in the event of a financial conflict, and this rate rises in the areas of the regime and the city of Azaz to more than 45% and decreases in Qamishli to 38%, reaching in Idlib city to 30%, and its lowest rate in Raqqa at 20%. Despite the discrepancy between the cities studied, this percentage is considered low in all regions, which can be explained by several factors, including the preference of individuals to resort to traditional methods in line with norms to resolve disputes quickly and effectively, in addition to the lack of confidence in the effectiveness of the police and the judiciary in resolving disputes.

The rate of families that rely on influential people to resolve their financial disputes ranges between 32% in Damascus and 11% in Idlib. These people include current or former officials, business owners, and collective leaders of good reputation, in addition to tribal heads, especially in the city of Raqqa. These people often seek to enhance their influence at the community level, either for personal interests or to support the popularity of the de-facto forces to which they are affiliated, or a desire to use their influence to facilitate the affairs of individuals.

Figure (38): Relative distribution of families by city and where they go to to resolve a financial dispute



The data shows that 36% of families in Idlib city prefer going to the head of the family to solve a financial conflict, while this rate drops to about 10% in Damascus. The effectiveness and extent of this mechanism is related to the strength of extended family relations and the extent to which the hierarchy of these relations is respected. Therefore, it is more effective in cities and societies that still adopt this form of traditional family relations, such as Idlib and Raqqa. On the other hand, the relatively high rate of families who resort to clerics to resolve financial disputes in Idlib city, at 17%, reflects the significant role of religious institutions in Idlib in civil issues such as financial disputes.

The data shows the role of security in resolving these conflicts, especially in the Autonomous Administration areas, where 15% of families consider it the main party they resort to in resolving financial disputes, and this rate drops to about 10% in the cities of Azaz and Aleppo, while it does not exceed 2% in Damascus and Idlib. The security authorities may constitute an alternative to the police and the judiciary to resolve disputes in some areas, and some families believe that the decisions of these influential parties are quick and effective, although in many cases they are based on nepotism and corruption.

The average rate of families who do not go to any party to resolve their financial disputes is 7% in all the cities studied, and ranges between 10% in Aleppo city and 4.5% in Idlib city. The rate indicates a loss of confidence for members of these families in all traditional and institutional conflict resolution mechanisms, which reflects a state of frustration, helplessness and inability to find a party to resolve disputes in a fair, transparent and fast manner. In general, the conflict resolution mechanisms adopted by families in all the cities studied indicates the relatively limited role of official institutions and thus the loss of confidence in their effectiveness, which prompted the majority to resort to informal and traditional parties whose rulings may be biased towards personal interests or unfair norms towards some groups of society, such as women.

3. Community trust and women's participation

Societal trust and the participation of everyone, including women, in social activities are considered indicators of social capital, and therefore the improvement of these indicators indicates an increase in societal cohesion, which is positively reflected on the dimensions and economic and institutional relations in the studied area (Bruegel et al., 2005). The questionnaire monitored societal trust through a question about the willingness of one or more members of the family to cooperate with people from the region which were previously addressed through the indicators of rule of law, participation and accountability.

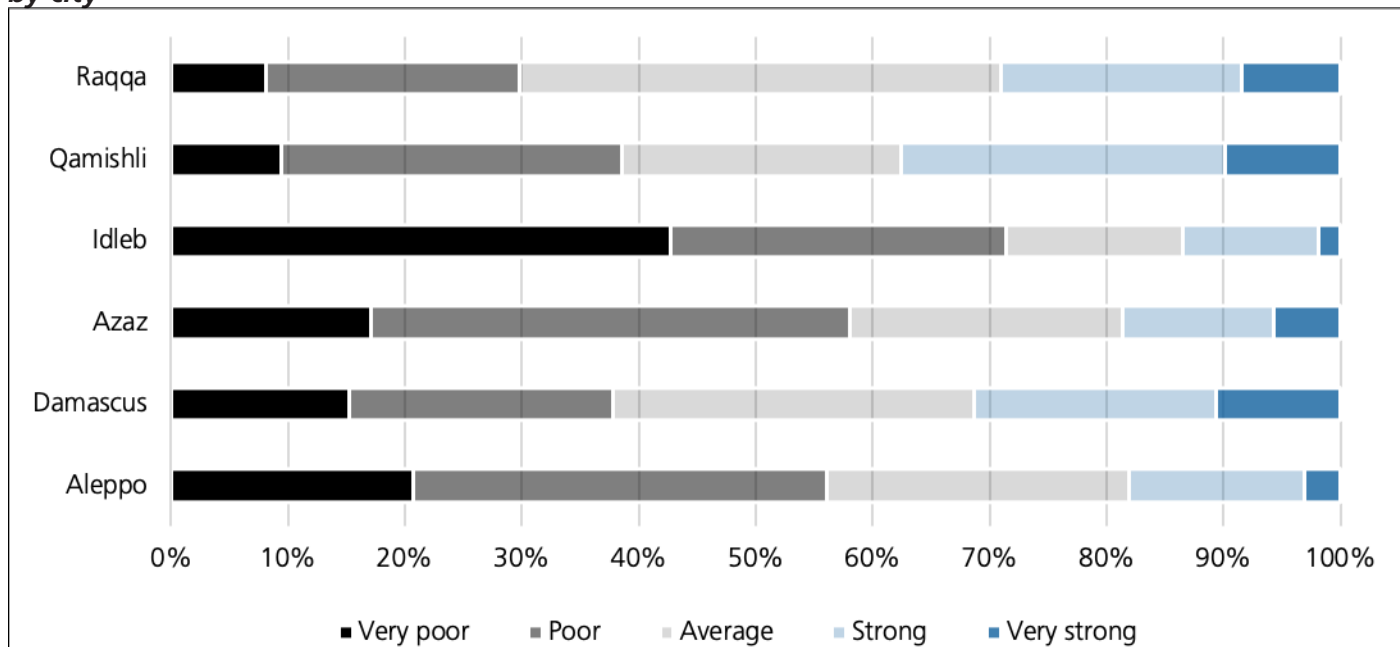
The results indicate that more than half of the families in the six studied cities trust cooperation with a member of their area, and this rate ranges between 71.2% in the city of Damascus and 40.6% in the city of Aleppo, and this may indicate that the form and nature of the ruling forces do not directly affect the level of trust in community as the two cities are subject to the influence of the regime. In the Autonomous Administration, this rate reaches 45%, compared to 64.5% and 41.6% in the cities of Azaz and Idlib, respectively. Societal trust is usually linked to several determinants, including age, gender, educational level, customs and traditions, and employment status (OECD, 2018).

The study analyzed the determinants of societal trust by analyzing the regression between trust in cooperation with a member of the region as a dependent variable, gender, age, educational level, work status of the head of the family, number of family members and the index of living conditions as independent variables. The results showed that the relationship is positive with all the variables mentioned except for the age of the head of the family, where there is no significant relationship with this factor, and confidence increases if the gender of the head of the family is male compared to female, and also increases with the improvement of the educational level of the head of the family and his/her association with a job which increases the trust in higher number of family members and the improvement of their living conditions. These relationships explain a limited part of the variables that affect societal trust, but they are useful in developing programs and policies that increase this trust, in addition to pushing for research in understanding the causes of current associations. It is worth noting that the trust studied in this questionnaire is among the people of the same region, as the survey did not address trust between the people of the different regions.

The questionnaire monitored the effectiveness of women's participation in social and economic activities by asking families about the degree of this participation on a scale from 1 to 5, where 1 is considered very weak and 5 is very strong. These activities include voluntary work, meetings related to the situation in the neighborhood or area, public events or those related to members of the area, and economic and professional work. The results shown in **Figure 39** indicate that about half of the families included in the questionnaire from the six cities consider that women's participation weak or very weak, and this rate ranges between 71% in Idlib city and 30% in Raqqa city. The average participation rate in the Autonomous Administration areas is about 34%, which is the lowest among the different areas

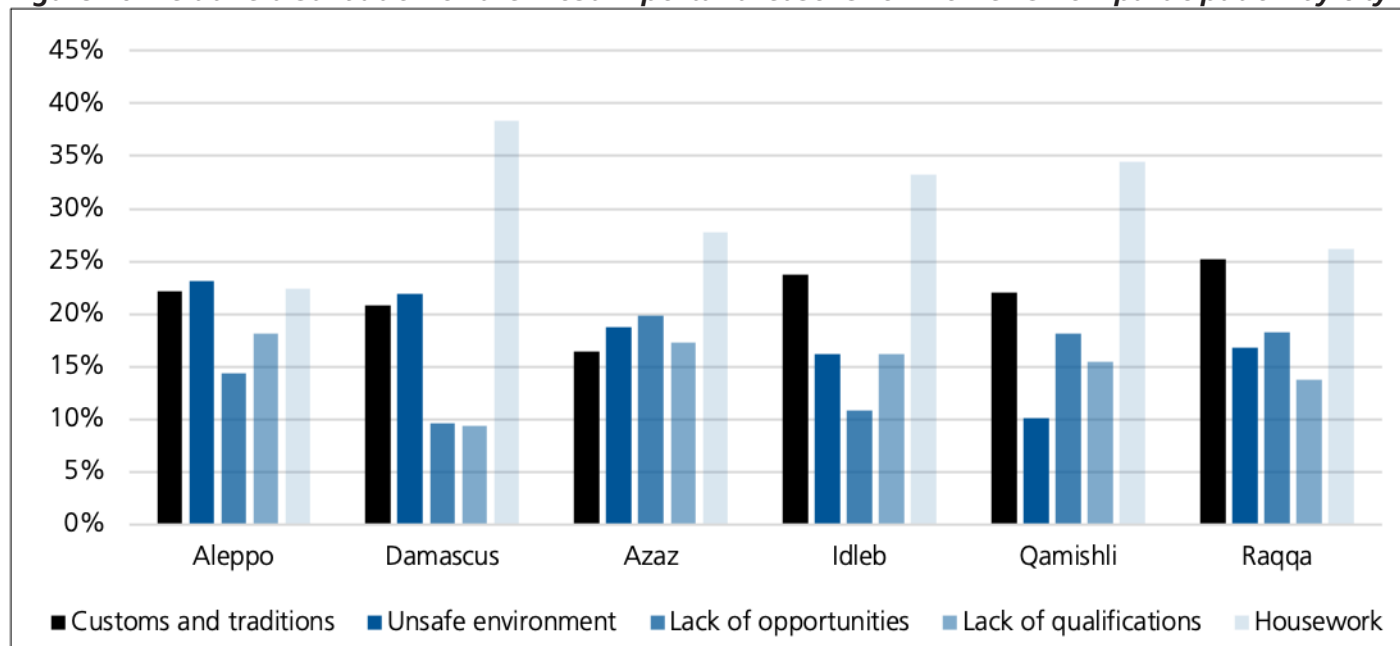
of influence, and the rate reaches 47% in regime-held areas, and 58% in the city of Azaz. Part of the relatively good engagement in the Autonomous Administration areas can be explained by the laws and legislation in those areas that support women's rights and their participation in all activities, but it is necessary to distinguish between nominal participation and active participation by women, which requires in-depth and separate research.

Figure 39: Relative distribution of the degree of women's participation in social and economic activities by city



The analysis of the data shows that the level of women's participation is directly proportional to the educational level and the living situation, meaning that the increase in this participation is associated with better living conditions and a higher level of education for women and the head of the family, which indicates the importance of the role that improving living conditions and women's education plays in raising the possibility of their participation in social and economic activities.

Figure 40: Relative distribution of the most important reasons for women's non-participation by city



The questionnaire included a question about the reasons for the non-participation of women, and the results showed that the most important reasons in all cities are women's preoccupation with housework, which reflects a prior screening of the job role of women and confining it to the home,

and customs and traditions ranked second as reasons hindering women's participation (Figure 40), and it is worth mentioning here two points. The first is that customs and traditions in preventing women from participating indicate the deeply-rooted patriarchy of society and its exclusion of women. This exclusion produces one of the foundations of the authoritarian regime at the level of the region and at the level of Syria. The second point is the strength of patriarchal customs and traditions in all cities, including the capital, Damascus, which, by virtue of its relatively active economic and social movement, was expected to be more able to break free from the influence of these patriarchal norms.

Policy recommendations:

These recommendations present the general framework through which it is possible to break the cycle of exploitation imposed on local communities and on Syrians by the de facto authorities. They are based on the evidence and the macro and micro analysis that the research touched on, the results of which can be summarized in the following points for the various Syrian regions:

- * A sharp decline in agricultural production and an increase in dependence on the outside in securing food commodities and agricultural labor inputs, accompanied by the de facto forces and warlords' control over the trade of these inputs and the control of food distribution to regions according to loyalty, which contributed to the rise in food prices and thus the collapse of food security for most population inside Syria.
- * The destruction of a large part of the industrial facilities and the infrastructure necessary for industrial work as a result of the armed conflict, in addition to the looting that these facilities were subjected to. The ability of local industrialists to secure production inputs has also deteriorated, and the challenges they face have increased with the weakness of the local market and the difficulty of entering foreign markets.
- * The struggle of the various de facto powers to control the extractive industry and the emergence of complex networks of warlords in various regions to sell oil to and from all Syrian regions with almost a total dependence of some powers, especially the Syrian regime, on the external market to secure its need of oil and gas.
- * The deterioration of the service sector with the collapse of the exchange rate of the Syrian pound and the lack of goods and evaporation of the purchasing power of the Syrians. During the conflict, this sector witnessed a deepening of the exploitation mechanisms practiced by the cronies of the de facto authorities in all Syrian regions.
- * The depletion of the financial resources of the de facto authorities and their financial dependence on sources that discourage the productive economy, such as illegal and conflict-related activities, taxes and fees imposed on the population, savings from reducing actual support in public budgets, and reliance on expatriate remittances and external support from allies.
- * The spread of corruption, the absence of the sovereignty of law, the control of authority cronies over the main economic activities, and the absence of any protection or support for the sustainability of small and micro enterprises. This was accompanied by the expansion of the informal and unproductive economy, the waste of resources, and the weak possibility of implementing any economic vision or strategy.
- * The distortion of the labor market as a result of the revival of activities related to the conflict, the lack of decent job opportunities in terms of working conditions and wages in the productive sectors, the emigration of qualified cadres, and the exploitation of workers by employers, especially female workers.
- * A deterioration in education indicators and the use of the de facto authorities of this sector to reinforce loyalty to the authority and hatred of the "different" other. Similarly, the health sector witnessed a collapse in the health services provided in terms of quantity and quality with the politicization of the various forces of this sector and its usage as a weapon during the conflict period.

- * The alliance of the various de facto forces with the traditional sectarian, tribal, family and regional institutions has strengthened the position of these institutions and contributed to increasing the intensity of polarization within the Syrian society. It also led to a further deterioration in the social capital at the national level and a decline in the already weak role of women in contributing to decision-making at the regional level, confining most of them to housework.
- * The difficult living conditions of most families in all regions as a result of the significant deterioration in these families' ability to secure a minimum level of basic goods and services either due to their unavailability or high prices.
- * The continued dispersion of the Syrians among the displaced and refugees, the exploitation of their situation by external and internal forces to achieve political and economic gains, and using them to change the demographic composition in some areas inside Syria.
- * The dominance of external powers over the dynamics and decisions of the de facto authorities inside Syria, which depend for their survival on the support of these forces, leading to the loss of economic, political and military sovereignty in the short and long term.
- * The role of civil society initiatives and organizations has expanded in providing the minimum number of basic services and commodities to disadvantaged families in all regions. However, this role remains insufficient given the limited resources, the politicization by the de facto authorities of civil work, and the effort to adopt it.
- * None of the de facto forces in Syria were able to establish a participatory and inclusive governance system. On the contrary, they copied the mechanisms of tyranny and exclusion from the Syrian regime and sought to exploit the available local resources and the proceeds of conflict-related activities to consolidate their authority, sustain their control, and bury any civil societal movement by using violent repression methods.

Overcoming the catastrophic situation and the structural, economic, social, and institutional imbalances in all Syrian regions requires long-term coordination and cooperation between a number of actors, including civil activists in local communities, Syrian expatriates, and international bodies and institutions supporting human rights. This cooperation can take place according to two interrelated paths: The first is at the institutional level and aims to gradually change the mechanisms of governance in all regions and disrupt de facto authorities' mechanisms for exploiting the population. The second track seeks to support productive economic activities and thus improve the standard of living of families and alleviate the state of deprivation they suffer from. Working on the two tracks in parallel is more effective in terms of a positive impact on local communities, as transparent and fair governance forms the basis for productive economic work, which in turn pushes towards more effective governance mechanisms. Reform at the institutional level faces many challenges, the most important of which is the protection of the dominant powers and their control over the current governance mechanisms to lease resources and achieve their interests in sustaining their authority, in addition to their resistance to any positive institutional change, such as strengthening the rule of law and transparency, as this negatively affects the elements of their existence. The de facto authorities have woven networks of beneficiaries that include an important part of the local communities, including religious, sectarian, clan, family and commercial institutions. Consequently, any attempt at institutional reform will be confronted not only by the dominant forces but also by multiple groups within society, which makes it more difficult to implement any positive change. With the presence of these challenges, it is difficult to achieve the required institutional change in a short period and in a smooth manner. However, the adoption of the following proposals can contribute to a gradual change on this path:

- * Supporting a greater role for civil society in public policy-making mechanisms and pushing towards securing a free and safe space for it in all Syrian regions in order to activate civil action and launch dialogue and debate on public policies at the local and national levels. In this context,

international organizations and Syrian expatriates can provide financial and technical support without interfering with the work of the local civil society and predetermining its orientations. External forces that adopt support for human rights and participatory regimes can pressure their allies inside to secure this space, albeit in a limited manner.

- * Linking the development support provided by Western countries to de facto powers with the institutional reform process in areas outside the regime's control. These countries can provide technical and financial support to activate this process, including assistance in conducting transparent and fair local elections with effective monitoring by local civil society activists. On the other hand, the international community must continue to provide relief and humanitarian support to the Syrians inside without any condition, while seeking to provide this support through direct cooperation with civil actors and activists on the ground and an effective monitoring and evaluation system in order to prevent the de facto forces from exploiting humanitarian aid and shifting it to their own interests.
- * The international community needs to continue contributing to disrupting the mechanisms of exploitation by imposing effective sanctions on warlords and conflict beneficiaries. However, this must be done without aggravating the already deteriorating living conditions of local communities, as is the case with sanctions in their current form. Therefore, it is useful to take measures that protect these communities from the negative effects of sanctions, and among these measures are the open channels of direct technical and financial communication with actors on the ground, including civil activists, civil society initiatives and organizations, and small and micro private projects. However, this requires an effective monitoring system to ensure that the support reaches the right authorities.
- * Designing international support for the Syrians based on priorities set by the Syrians themselves in a participatory manner that takes into account the interests of all without discrimination. Donors should also make a greater effort to work with activists and civil actors who are not able to use foreign languages or communicate with international bodies, thus expanding the circle of cooperation with Syrian civil society to become more inclusive and participatory.
- * The necessity of distinguishing between the institutions of the regime and the institutions of the Syrian state, despite the control of the regime's security and military apparatus over the governance and mechanisms of state work in Syria. However, many experts and workers in government agencies are convinced that the main reason for the miserable living situation of Syrians is the repression and excessive violence of the regime, in addition to its corruption. Yet, they do not see the appropriate alternative to this system, and they do not have the tools and support necessary to reform their government institutions, even gradually, from the bottom up. Extensive migration of government cadres out of the country reflects this trend. Accordingly, international bodies can work to find channels of communication with these experts and government employees inside Syria and provide them with technical support and knowledge in a way that does not expose them to security problems (For example, providing support through UN institutions), so long as this communication and support is based on human rights principles and reforming government institutions is a necessity to improve the living conditions of Syrians not a means to empower the system.
- * The results of the study showed that traditional institutions, such as religious, clan and family institutions, are among the main forces that determine local governance contexts and mechanisms of action. Many of these institutions expressed their rejection of the policies of repression, violence and tyranny practiced by the regime or any other de facto authority, which paved the way for international bodies to cooperate with these institutions in providing all forms of support to local communities in Syria. Most of the traditional institutions have proven their ability and effectiveness in delivering aid to those in need. However, this does not negate that most of these institutions

are patriarchal, authoritarian and non-inclusive, as they exclude many social groups, especially women, from having a role in the decision-making process. Thus, their structure and composition give space for discrimination, nepotism and corruption. Accordingly, it is necessary for international bodies to reduce reliance on traditional institutions to reach local communities and replace them with civic institutions and initiatives based on participation, transparency and non-discrimination.

- * Coordinating the efforts of donors and international organizations with regard to supporting refugees in the countries that receive them, without politicizing their cause, and empowering them economically through programs that qualify them to be productive while preserving their identity and connection to Syria so that they can return voluntarily if a safe environment is available. These programs may include supporting small projects around traditional industries in Syria or industries that depend on Syrian raw materials, in addition to technical and vocational training courses according to market requirements and what Syria may need in the reconstruction phase of the human capital. Refugees must also be protected from all forms of exploitation that they may be exposed to as a result of their financial need and their precarious legal situation, with financial and technical support provided by international bodies to the refugee-receiving countries to help them protect all the human rights of refugees until they meet the appropriate conditions for return.
- * Support initiatives and programs that seek to document human rights violations by all parties to the conflict in a professional, non-politicized manner, which creates appropriate conditions for holding war criminals and warlords accountable in a fair manner inside and outside Syria. It is also necessary to support the documentation of the rights of Syrians to land, housing and property, which helps to ensure the return of these rights to their owners, including the displaced and refugees. In general, the professional documentation of rights paves the way for more just and transparent institutions and an ability to overcome the consequences of the ongoing conflict in Syria since 2011.

As for the second track, which aims to support productive economic activities, it can be worked on by all interested actors (civil initiatives, expatriates, international organizations and bodies, local bodies and expertise) immediately according to the following proposals:

- * Building on the exemption of a number of areas inside Syria from US sanctions by providing technical support to the bodies responsible for economic governance in these areas from international bodies and organizations. Among the most important things that this support can provide is the development of a modern legislative framework for economic work, including a law for private banks, framing the partnership between the public and private sectors, regulating internal and external private investment, implementing labor tax and fees law, and protecting the rights of workers, provided that this framework is based on participation, transparency, equality, and the sovereignty of law.
- * Technical and professional assistance to the bodies and organizations located in the areas that have been lifted from sanctions in order to develop the financial and banking sector and seek networking and coordination with international expertise in order to attract foreign capital to invest in the banking sector. The success of such investments helps to enhance the confidence of foreign investors in the local economy and the effectiveness of the decision to lift sanctions. It also shows to local communities the desire of international bodies to activate local economic activity, in addition to the contribution of these investments in the transition from simple financial systems (transfer system) to banking systems that facilitate the development of local economic activities and their entry into foreign markets.
- * The results of the study showed that the lack of electricity and energy carriers is one of the main reasons for the deterioration of the living conditions of the population and the disruption of economic activities. Therefore, there is a need to support alternative energy projects, especially solar energy, by actors interested in the Syrian issue. The support can be done in two axes. The

first is direct financial and technical assistance to establish private and public alternative energy projects. The second axis is to provide technical support to local authorities to become able to control and regulate the alternative energy market in terms of quality, efficiency and validity of the devices used. It should be noted that focusing on alternative energy does not mean that there is no need to rehabilitate the infrastructure of the extractive industries sector and the electricity sector, but that rehabilitation can only take place gradually and requires a long period of time. The presence of effective and transparent institutions to ensure that these vital sectors are made use of for the benefit of all members of society without discrimination and not for the benefit of the networks of war merchants and power cronies is highly important.

- * Supporting the education sector by international bodies and organizations, in coordination with civil society initiatives and organizations, in addition to the relevant local bodies. This support can cover three axes: compensation for educational losses for children who have dropped out of school, providing vocational and technical training courses related to market needs, and developing the capacity of the current educational institutions in terms of quantity and quality of educational curricula. The results of the study showed that the various de facto forces in Syria used education as a means of promoting hatred towards the different other and sanctifying the existing authority. Therefore, any support provided to this sector must enhance the role of education as means to restore social cohesion and social capital at the level of Syria.
- * The collapse of the health sector in Syria dictates the need to depoliticize this sector and provide the necessary health support to all Syrian regions directly or through international organizations operating inside Syria. Consequently, the arrival of medicines, medical supplies and devices must be facilitated, in addition to developing the current medical staff and providing them with the necessary technical and financial support they need to help them stay in Syria. Syrian expatriate doctors can play a major role in assisting local medical staff by providing medical advice to them or working directly with them to address specific cases through modern communication techniques.
- * Moving from dependence on foreign food aid to achieving sustainable food security based on local and imported agricultural/food production. Accordingly, there is a need to support the agricultural sector by studying the value chains of agricultural products, both plant and animal, and identifying and addressing imbalances in order to achieve the economic benefit of the farmer. This is followed by providing financial and technical assistance to food industry projects in accordance with credible feasibility and market studies and facilitating the import of agricultural and food needs and food industry inputs from foreign markets in accordance with strict controls regarding quality and food safety.
- * Finding appropriate mechanisms for owners of small and micro-enterprise ideas to obtain financial and technical support from local and international organizations to implement their projects in all Syrian regions, provided that these projects are based on market needs and solid technical studies. The implementation should be accompanied by the existence of an effective monitoring and evaluation system by the supporting authorities to ensure the cost-effectiveness and entitlement of the support. These mechanisms help to create decent job opportunities, ensure correct labor market distortions, and divert huge human resources towards productive economic activities. They also contribute to empowering marginalized groups, including women and the displaced, by giving them priority access to support.
- * Strengthening the supervisory role of civil society initiatives and organizations on the mechanisms of market work in order to monitor cases of exploitation, monopoly, nepotism, corruption and fraud, and highlight them and push for accountability of perpetrators, in addition to their role in producing studies, research and knowledge independently and scientifically, which establishes a general dialogue based on evidence with those interested in the Syrian issue inside and outside the country regarding the form of development required in Syria and the mechanisms for accessing it.

- * The above-mentioned proposals provide a general framework for improving the economic, social, and living situation in all Syrian regions. They also form the basis for technical and detailed recommendations at the sectoral and regional levels to be formulated by groups comprising local experts in the studied sectors and their workers, in addition to those interested in public affairs and decision-makers. These groups can benefit from networking with international experts who are familiar with and experienced in the Syrian context. All detailed recommendations must include clear and transparent governance mechanisms that prevent exploitation and push for inclusive and integrated development at the level of Syria.

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Appendix (1): Guide to the Standards of Living Indicators Scale

The quality of housing in terms of the general structure

• **Very poor:** it means that the ceilings and the floor are not concrete (tin - dirt - mud - cloth), and there are no windows and doors separating the rooms.

• **Poor:** It means bad building materials other than concrete (tin - dirt - mud - fabric) and the presence of windows with limited space.

• **Average:** It means the ceilings and the floor are irregular - prefabricated houses and building materials used in the middle do not completely cover the internal cladding in terms of the presence of doors between rooms or windows.

• **Good:** It means regular ceilings and floor, the building materials used are good, such as tiles, and there are windows and doors for the whole house.

• **Very good:** It means the ceiling and the floor are regular, the building materials used are of good quality, such as marble and ceramics, and there are windows and doors for the whole house with interior decorations.

Home assets – furnishing

• **Very poor:** It represents the presence of rugs and cardboard to sit on the floor - no household utensils for cooking and household uses, with a lack of covers and blankets.

• **Poor:** There are rugs and mattresses for sitting on the floor - there are some simple household utensils for cooking and blankets.

• **Average:** It represents the availability of a sitting room, mattresses for sleeping and an acceptable number of household utensils for cooking and household uses.

• **Good:** It represents the availability of sitting rooms, beds for sleeping, and all household utensils, including kitchen utensils and household use utensils.

• **Very good:** It represents the availability of more than one furnished room to sit, an office, bedroom furniture, including beds, and storage for all members of the house.

House assets – electrical appliances

• **Very poor:** There is no machine or device that needs electricity to be used, such as a refrigerator, washing machine, or electric oven.

• **Poor:** There is only one electrical appliance (e.g., a refrigerator).

• **Average:** Two or three electrical appliances are available, (e.g., refrigerator, washing machine, or oven).

• **Good:** It represents the availability of all basic electrical appliances and some secondary appliances (refrigerator, washing machine, oven, gas, computer, etc).

• **Very good:** It represents the availability of almost all basic and secondary electrical appliances such as a vacuum cleaner, kneading machine, mixer, portable devices and smart devices, such as tablets and children's electric toys.

Fuel for cooking and heating

(Availability at home includes the availability of the commodity in the market and the ability to buy it. That is, if gas is available, but the family cannot buy it on the black market, it is measured as "very poor")

- **Very poor:** Not available most of the days
- **Poor:** Available for limited days during the month
- **Average:** Available for more than half of the month
- **Good:** Available most of the days
- **Very good:** Always available

Electricity

(Includes electricity from the public network, amperes, or private generators, but storage batteries and LEDs are not counted)

- **Very poor:** Less than 2 hours of electricity during the day
- **Poor:** Electricity for 3-6 hours, intermittently or continuously
- **Average:** Electricity for 7-15 hours during the day
- **Good:** Electricity for 16-22 hours per day
- **Very good:** Power cuts are less than 2 hours per day

Drinking water

(Whether from the public network or purchasing; measuring the availability of water and the family's ability to purchase it)

- **Very poor:** The family's unable to obtain sterilized and filtered water from the public network. Drinking water is unavailable, or the family is unable to purchase it unless necessary.

• **Poor:** The network is connected to the house, but the cutting period is more than 25 days during the month.

• **Average:** The family obtains sterile and filtered water, but not permanently, and the cutting period may last a week.

• **Good:** There is semi-permanent availability of sterilized and filtered water that reaches the house, and there is the ability to buy it.

• **Very good:** Sterilized and filtered water is always available, and there is an ability to buy it in case of cutting.

Sewerage network

• **Very poor:** There is absence of sewage channels in the house and closed technical pits; the family uses public bathrooms.

• **Poor:** There are closed technical pits without sewage networks connected to the house.

• **Average:** There is an extension of sewage channels that do not comply with the technical specifications, extending to the streets in an open, random, and hand-built manner.

• **Good:** There are sewage networks and closed technical pits with problems of blockage of sewage channels on the main street of the house.

• **Very good:** It represents the presence of permanent and effective sewage networks.

Landlines

- **Very poor:** There is no landline phone service at all.

- **Poor:** There is phone service, but it is cut off most days of the month.

- **Average:** There is a telephone service, but it is cut off for more than 10 days during one month, or there is a bad and intermittent connection.

- **Good:** There is a telephone service most days of the month, with good and uninterrupted communication.

- **Very good:** There is a permanent telephone service without interruption of the connection.

Mobile service

- **Very poor:** There is no service, and there are no transmission towers in the nearby area.

- **Poor:** There is service and towers, but there is always a need to walk some distance in order to reach the main broadcast points, and it is not helpful to make and receive calls inside the house.

- **Average:** There is a cellular service, towers, and a network, but the connection is intermittent and unclear inside the house, with the need for enhancement.

- **Good:** There is good and clear service and communication inside the house often with rare reception problems.

- **Very good:** There is good and clear service and communication at all times without any problem with reception.

Internet

- **Very poor:** There is no internet service.

- **Poor:** There is a weak Internet service that does not allow you to make a connection or navigate the Internet.

- **Average:** There is an average Internet service that allows connection to be made, but it is intermittent and not clear and only allows limited browsing.

- **Good:** There is a good Internet service that allows a clear and continuous connection, and it can be done using programs that require a quick Internet speed.

- **Very good:** All of the above is good by adding the presence of more than one Internet line and the ability to operate the Internet via mobile phones.

Public Transport

- **Very poor:** There is no public transportation.

- **Poor:** There is a weak network of transportation, but there is a lot of congestion and a need to walk a long distance to catch a ride.

- **Average:** There is a good transportation network, but it is crowded most of the time and not enough, and there isn't access to all the main streets.

- **Good:** There is a transportation network that reaches all the main streets within the city and is not crowded.

- **Very good:** There is a transportation network which reaches all the main streets, and it is easy to take transportation at any time and at any point within the city.

Availability of waste migration service

• **Very poor:** There is no waste transportation service, no containers, and piles of garbage are piled up in the area.

• **Poor:** There are containers, but the waste removal service only makes rounds about once a month or less.

• **Average:** There are containers in the streets, but the waste is migrated once every two or three weeks.

• **Good:** There are containers on the streets that are migrated once every week or two.

• **Very good:** Garbage is removed at least once a week.
