

syria



the syrian catastrophe:
socioeconomic monitoring report
first quarterly report (january – march 2013)

prepared by the syrian centre for policy research
for the United Nations Relief and Works Agency (UNRWA)
june 2013

www.unrwa.org

المركز السوري
لبحوث
السياسات
Syrian Center For
Policy
Research



Table of content

Acknowledgments	3
Acronyms and abbreviations	4
Executive Summary	5
Introduction	7
I. Economic Impact of the Crisis	8
Severe Economic Contraction	8
Collapse of Demand	14
Total Economic losses Reach USD 84.4 billion	15
Surge in Fiscal Deficit and Public Debt	16
Exchange Rate Deterioration	18
Unemployment Rate hits 48.8 per cent	20
II. Social Impact of the Crisis	21
HDI Rolls Backward by 35 Years	21
Dramatic Demographic Shifts	22
Poor People increased by 6.7 Million Persons	23
Loss of Human Capital	24
Devastation of the Health System	26
Concluding Summary	28
Appendix	31
References	33

Acknowledgments

This report was produced by the Syrian Centre for Policy Research (SCPR) for UNRWA, benefiting from various background papers and experts consultations. The SCPR team members are: Nabil Marzouk (team leader), Zaki Mehchy, Rabie Nasser, Khuloud Saba, Ahmad Nawar Awad, and Shamel Badran (fellow members).

The SCPR highly appreciate the valuable support of Alex Pollock, Director of Microfinance, UNRWA. The SCPR also thanks the UNRWA team in Damascus for their timely support.

The SCPR would like to express its gratitude for the significant support of the experts in the Syrian Central Bureau of Statistics, the Planning and International Cooperation Commission, the Regional Planning Commission. Moreover, the SCPR thank Fouad Al-Lahham, economic and Industry expert, and Maen Daoud, expert in agriculture sector.

Acronyms and abbreviations

CBS	Central Bureau of Statistics in Syria
CPI	Consumer Price Index
DSE	Damascus Stock Exchange
EU	European Union
GDP	Gross Domestic Product
GNI	Gross National Income
GoS	Government of Syria
HDI	Human Development Index
HDR	Human Development Report
IDP	Internally Displaced People
J-RANS	Joint Rapid Assessment in Northern Syria
LFS	Labour Force Survey
MoET	Ministry of Economy and Trade
MoH	Ministry of Health
MoLA	Ministry of Local Administration
MoSA	Ministry of Social Affairs
NGO	Non Governmental Organization
OCHA	United Nations Office for the Coordination of Humanitarian Affairs
PHCs	Primary Health Centres
PL	Poverty Line
SARC	Syrian Red Arab Crescent
SCPR	The Syrian Centre for Policy Research
SYP	Syrian pound
PICC	Planning and International Cooperation Commission
UN	United Nations
UNDP	United Nations Development Programme
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
UNRWA	United Nations Relief and Works Agency for Palestine Refugees
USD	United States Dollar
WDI	World Development Indicators
WFP	World Food Programme
WHO	World Health Organization
WHS	World Health Survey
WTO	World Trade Organization

Executive Summary

In order to track key macroeconomic and social changes in Syria during the current crisis, UNRWA commissioned five quarterly reports from the Syrian Centre for Policy Research (SCPR). These begin from the first quarter of 2013 until the first quarter of 2014. This report is the first of the five quarterly reports contracted. The analysis and projections of SCPR indicate that:

Social impact

- Armed-conflict in Syria has resulted in the systematic dislocation of communities, with a pattern of forced and voluntary displacement that has led to almost a third of the population (31%) departing or fleeing their normal place of residence, with 1.3 million refugees from Syria (equivalent to six per cent of the population) in neighbouring countries, 1.33 million persons temporarily and voluntarily migrating from the country (approximately 6.2 per cent of the population), with another 3.92 million persons (equivalent to 18.3 per cent of the population) internally displaced within Syria.
- Syrian human development indices have been rolled back 35 years.
- More than half the population of 21.4 million persons now live in poverty, with an additional 6.7 million persons descending into poverty during the period of the conflict, with some 3.6 million of these becoming extremely poor.
- Since the start of the conflict 2.3 million jobs have been lost, while the unemployment rate has skyrocketed to 48.8 per cent. While those on fixed incomes have seen the purchasing power of their salaries plummet as the consumer price index spiked by 84.4 per cent and the value of the Syrian pound depreciated by over 300 per cent against the US dollar.
- The educational system is in crisis with damage and destruction to almost 3,000 schools, while another 1,992 provide shelter for IDPs. The school attendance rate has dropped to 46.2 per cent, with a shortage of teachers as thousands have joined the throng of refugees and IDPs.
- The healthcare system has been devastated by the loss of 32 government hospitals, 31 per cent of PHC facilities, the collapse of the domestic pharmaceutical industry and international sanctions blocking the import of lifesaving drugs, specialised modern medical equipment and spare-parts. The system has also been stressed by shortages of health care workers, 80,000 deaths and approximately 240,000 persons that were injured or maimed during the conflict.

Economic impact

- The economy is facing widespread de-industrialisation and large scale capital divestment due to destruction, looting and the flight of capital, with total economic loss of USD 84.4 billion during the past two years, which is equal to 142 per cent of GDP in 2010. At a growth rate of 5 per cent per annum in the future, it will take the country 30 years to recover this loss.
- Damage to capital stock through destruction and looting is estimated to have resulted in economic loss of USD 41.2 billion, or 49 per cent of total economic losses. This loss of productive assets will slow-down any future re-gearing of the Syrian economy as these will have to be replaced by new investments.

- GDP declined by 3.7 per cent in 2011, by 28.9 per cent in 2012 and by a further 6.8 per cent in the first quarter of 2013 resulting in a loss of USD 38.4 billion, or 45 per cent of total economic losses.
- Indicating the extent of this regress, the agricultural sector now accounts for 27 per cent of GDP, compared to just 17 per cent in 2010.
- As public investment retrenched by 75 per cent, this was bettered by private investment which slumped by 81 per cent. Moreover, an increasing share of public expenditure is been invested in defence with an estimated USD 4.85 billion being redirected for military purposes over the conflict period.
- During the period, exports fell by 75 per cent and import by 60 per cent, while net foreign reserves dropped from USD 23 billion to just USD 2 billion.
- While still low by international standards, the budget deficit is now estimated to have reached 65 per cent of GDP. This is likely to spiral even further in the future as the government has lost significant revenue streams form oil and state industries that have been directly affected by sanctions, looting and takeover by opposition forces.
- Fiscal management of the budget is also in crisis as the tax base has been substantially eroded, with income tax returns declining due to massive job loss and value-added tax receipts undermined by dramatic reduction in private consumption, which retrenched by 25.3 per cent in 2012 and by a further 4.8 per cent the first quarter of 2013.
- As the formal economy has imploded there has been a growth in informality, rent-seeking operations, criminal enterprise and the economics of violence that will plague post-conflict economic regulation, reform, equity and development.

Introduction

This report is the first of five quarterly reports commissioned by UNRWA from the Syrian Centre for Policy Research (SCPR). These aim to provide an on-going assessment of the socioeconomic landscape in Syria during the current crisis by using available official updates and utilizing econometric models to estimate other key indicators. These reports will provide a planning tool and framework for UNRWA, which will also be available to the UN system and interested parties, to build policies and programmes that look beyond the current humanitarian emergency toward relevant interventions to guide rehabilitation and development efforts for Syria.¹ This report builds on the framework, methodology and analysis developed in the Centre's earlier report on "Socioeconomic Roots and Impacts of the Syrian Crisis" that analysed the situation in 2012 (SCPR, 2013).

For more than two years, Syria has witnessed an internal armed-conflict that emerged out of a deep socio-political crisis. While the initial catalyst of the conflict appeared to be domestic, it has subsequently assumed debilitating national, regional and international dimensions, which now underpin a crisis of manifold complexity with manifest political, economic, and social consequences that will not be easily resolved either through diplomacy or warfare. Moreover, the armed-conflict is rapidly draining the human capital, productive assets and economic wealth of the country, while fostering violence and antagonism that is distorting social cohesion and diversity. The conflict has resulted in the diversion of resources from productive to destructive activity in an anti-social environment that is compounded by criminality, lawlessness and terror. The continuation of such trends throughout 2013 will have calamitous impact on the overall development in the country.

In estimating the short-term impact of the crisis during 2011, 2012 and the first quarter of 2013, this report uses the economic concept of 'opportunity cost' to determine the extent of economic losses. The methodological approach is based on counterfactual procedures that compare the "crisis scenario", or the actual indicators during the crisis, with the "continuing scenario", or the indicators that would most likely have been achieved had the crisis not emerged. The gap between these two scenarios equals the socioeconomic losses attributable to the crisis. The report includes multiple macroeconomic and social performance indicators that were compiled and estimated based on official sources and in consultation with a large number of experts, and also by using several models, such as financial programming, within a comprehensive developmental framework.² These indicators allowed the team to draw a relatively clear picture of economic trends in 2011, 2012 and the first quarter of 2013.

Section one of the report focuses on the economic indicators and the impact of the crisis on economic sectors, the public budget, prices, and employment. Section two covers the impact of the human development indicators including poverty, health, education, Human Development Index, and social solidarity.

I. Economic Impact of the Crisis

This report uses the most recent evidence on the economic situation in Syria to update our current knowledge on the economic state of the country since the emergence of the conflict in March 2011. This has been done by estimating economic losses until 2012 and projecting the additional losses for the first quarter of 2013. The applied methodology and analysis are based mainly on the Syrian Centre for Policy Research's previous report on "Socioeconomic Roots and Impacts of the Syrian Crisis" that examined the economic situation in 2012. (SCPR, January 2013)

This report continues the story and analyses economic growth/decline across different sectors, together with recent changes in the pattern of the conflict that have essentially affected the economy. Moreover, the main indicators of public finance, trade, prices, exchange rate, and employment are highlighted in this report.

Severe Economic Contraction

Economic growth (or the lack thereof) is a key indicator of the economic fortune and activities of a country that reflects changes in the welfare of its people over time. The study estimates the real economic growth based on proxy indicators for each sector during 2011, 2012, and the first quarter of 2013 (henceforth 2013-Q1) using econometric projections and financial programming. The report then estimates the structural changes in Gross Domestic Product (GDP) in real terms.

Table 1 shows real growth/contraction rates of GDP in Syria by sector, reflecting the volume of the collapse in the Syrian economy during the present crisis. Had crisis not occurred, and the "continuing scenario" been maintained, Syria would have achieved an annual GDP growth rate of approximately 7.1 per cent in 2011, 6.5 per cent in 2012, and 1.7 per cent in 2013-Q1.³ However, using the projections from the "crisis scenario", the GDP of Syria contracted by 3.7 per cent in 2011, followed by 28.9 per cent in 2012 and 6.8 per cent in 2013-Q1. From the beginning of 2011 until 2013-Q1, GDP loss to the Syrian economy is estimated at SYP 1,080 billion in constant 2000 prices. (Table 1) This loss is equal to 74.4 per cent of Syria's GDP in 2010, and at current prices the loss equals USD 38.4 billion.⁴

The scale of this economic contraction is considerable when compared to previous growth rates in Syria over the past decade, moreover, this is a quite spectacular downturn compared with the experience of other countries that witnessed protracted armed-conflict.

The contraction in GDP was heavily weighted across four key sectors that accounted for more than two-thirds of GDP losses. The most significant loss was in trade which lost SYP 253 billion, accounting for 23 per cent of the contraction in GDP. Transport losses accounted for 20 per cent of total GDP loss at SYP 218 billion, with mining (mainly petroleum) down by SYP 165 billion and accounting for 15 per cent of GDP loss, while manufacturing was down by SYP 138 billion and 13 per cent of GDP loss.

The **wholesale and retail trade sector**, which includes restaurants and hotels, suffered most significantly from the contraction in GDP; as one of the main employers of low-skilled workers, cutbacks and closures resulted in the shedding of tens of thousands of jobs in this sector. The level of retrenchment was substantial, with contraction of almost a third (32.6%) in 2012 and a further 8.1 per cent in 2013-Q1. The cutback was primarily driven by the conflict as the sector was impacted by bankruptcy and closure, reduction in demand, high inflation, bottlenecks in supply chains, higher energy and import costs due to depreciation of the Syrian pound, restrictions on the movement of people and goods, and most importantly, the lack of security as the armed-conflict escalated.

International sanctions have played a role in reducing the flow of goods, which is especially significant in the health of the sector where there are shortages of a number of key life-saving drugs due to trade restrictions.

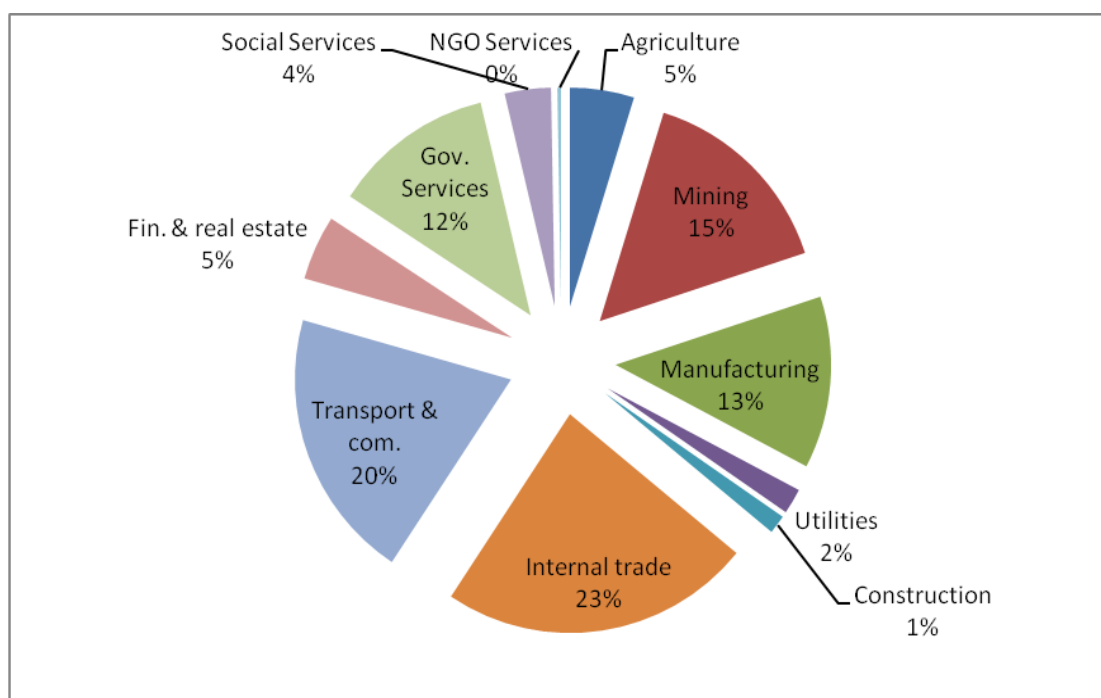
Table 1: GDP by sector 2010-2013-Q1 and estimated crisis impact, billions of SYP (in constant 2000 prices)

	Actual	Continuing Scenario			Crisis Scenario			Crisis Impacts			
	2010	2011	2012	2013 - Q1	2011	2012	2013 - Q1	2011	2012	2013 - Q1	Till Mar 2013
Agriculture	240	263	247	49	263	276	73	0	29	23	52
Mining	186	163	83	6	185	185	46	23	102	40	165
Manufacturing	100	78	24	3	105	110	29	26	86	26	138
Utilities	37	39	35	8	42	48	13	3	12	5	20
Construction	52	59	41	7	54	55	14	-5	13	7	15
Internal trade	297	263	177	30	311	326	85	49	149	56	253
Transport & com.	191	158	104	17	208	227	62	51	123	45	218
Fin. & real estate	80	87	61	10	88	96	26	1	35	16	52
Gov. Services	207	228	163	37	230	257	71	3	94	35	131
Social Services	59	60	55	12	67	76	22	7	21	9	37
NGO Services	1	1	3	1	1	1	0	0	-2	-1	-3
GDP	1,452	1,398	994	181	1,555	1,656	442	157	662	261	1,080

Source: SCPR' estimations based on preliminary data from the PICC and CBS.

The result of the conflict on the tourism sector was ruinous, as its share of GDP collapsed by 87 per cent in 2012, and by a further 22 per cent in 2013-Q1, The sector is highly security-sensitive as few tourists or business people travel to war zones. But a revealing paradox of the conflict is that parts of the sector are being kept afloat by the flight of refugees and hundreds of thousands of internally displaced persons (IDPs), as well as humanitarian workers, who are now using services formerly serving foreign tourists.

Figure 1: Sector structure of estimated total GDP loss (gain) 2011, 2012, and 2013-Q1



Source: SCPR estimation.

The **transport** sector was severely damaged by the conflict, when its share of GDP contracted by 57 per cent in 2012 with further contraction estimated at 8.5 per cent in 2013-Q1. In addition to bankruptcy and closure, the sector was affected by a number of conflict-related elements, including: the looting and sequestration of private and public vehicles for military purposes; the insecurity and physical risk of travel on public transport restricted and reduced human travel to a minimum; attacks on trucks and convoys carrying commodities reduced the stock of transport; combat around neighbourhoods adjacent to airports caused a sharp reduction in air transportation; while international sanctions reduced port activities as international trade was curtailed.

The **communication** sector was less affected than transport, even although there was significant damage to infrastructure and equipment. The GDP in the communication sector contracted by just 5.9 per cent in 2012 and by a further 1.5 per cent in 2013-Q1. One explanation of why this retrenchment was significantly lower than elsewhere is that uniquely digitally mediated nature of the conflict, which maintained a high demand for communication services. This is the result of an unprecedented use of communications devices to report and receive news of the conflict, family and friends, with access to a digital phone, computer and internet almost becoming a new universal basic need.

The **mining** sector also experienced appalling losses, initially due to international sanctions and the withdrawal of foreign companies from October 2011. But in 2012, the armed-conflict and the lack of security resulted in contraction in the mining sector GDP by 49 per cent. While in 2013-Q1, the situation was more dramatic as the government lost control of many oil wells, resulting in a further decline in the sector by 18.1 per cent. This resulted in the economy losing its primary strategic source of foreign currency. Moreover, the potential illegal and criminal misuse of fossil fuel resources could result in environmental hazard and increased health risks through land and water contamination, air pollution, and disease, while undermining the future sustainability of the resource. Thus, while oil exports were almost at a halt, local production was substantially below the capacity of local refineries, with limited possibility of importing oil derivatives such as diesel fuel or

home-use gas to compensate. Energy scarcity has affected all economic sectors and households, with shortages in the local market causing prices to surge and creating a hike in the cost of living for all households.

In 2012, GDP in the **manufacturing** sector contracted sharply by 69.7 per cent and by a further 12.5 per cent in 2013-Q1. In both the public and private sectors, the destruction of firms and infrastructure has been mounting due to military operations, widespread pillage and looting, bankruptcy and closure, as well as the abduction of workers and managers. The decline of the sector accelerated as the crisis gained momentum in the first half of 2012, with value-added regressing as a result of sanctions on financial transactions, rising costs of imported inputs, energy shortages, bottlenecks due to transport dislocation, damage to infrastructure, and physical damages to industrial firms. Moreover, during the second half of 2012, sustained conflict in Aleppo and Rural Damascus, the primary centres of manufacturing activities, destroyed most of the industrial infrastructure of the country. Additionally, many firms relocated within the country to Tartous, Latakia and Al-Swayda, or moved investments across borders, for example, to Egypt, Jordan, and Turkey. The sharp reduction in public and private investment and the loss of capital stock will continue to hobble manufacturing production in the short- and medium-term. The mass reduction in manufacturing production has resulted in a slump in Syrian exports and squeezed the supply of goods within the local market, which contributed to price inflation and rising exchange rates. This has resulted in the deterioration in the welfare of households throughout Syria, but especially so in the main manufacturing centres where former employees have joined the ranks of refugees and IDPs.

With one of the largest peasant communities in the Middle East, **Agriculture** in Syria remains a key sector that is fundamental to food security, providing jobs for low-skilled labour in rural areas and an important source of poverty mitigation. While the agriculture GDP grew by 9.5 per cent in 2011, it contracted by six per cent in 2012, and by another 5 per cent in 2013-Q1.⁵ Fortunately, better climate conditions during the conflict period played an important role in improved plant production that reduced the potential severity of the crisis, especially on the most vulnerable groups in the rural areas. Despite this, many farmers had difficulty shipping and marketing their produce, while others could not fully access their lands due to lack of security in their regions.

The last quarter of 2012 and 2013-Q1 witnessed an escalation in the armed-conflict, especially in the Northern and Eastern regions, which caused significant destruction within the agrarian sector through damage to farms, equipment, crops, irrigation systems and farm infrastructure. Moreover, cultivation on fertile lands was curtailed by limited access to seeds, fertilizers and other intermediary goods, as well as scarcity of fuel and rising energy prices. Additionally, while there was inflation of agricultural prices in wholesale and retail markets, improved returns to producers were undercut by a dramatic increase in the cost of crop production by approximately 22 per cent in 2012.⁶ Moreover, decline in animal production in 2012 was significant, with its GDP share contracting by 10 per cent, while the capital stock of animal wealth was lost due to violence and bombing, pillage and theft.

The **financial and real estate sector** GDP contracted by 30 per cent in 2012 and by a further eight per cent in 2013-Q1 due to the restrictions on financial transactions, deteriorating exchange rates, international sanctions on the finance sector and the Central Bank's failure to stabilize the financial system and maintain the value of the Syria pound, which has pitched many households on fixed incomes into poverty, including the mass of public sector workers. This was exacerbated by investors and business people transferring their capital outside the country, while ordinary depositors were withdrawing their savings and converting them into hard currencies on the black market to safeguard the value of their wealth for the future. Simultaneously, in order to combat increasing risk and financial hazard, the commercial banks restricted access to credit as financial inflation was

running higher than interest rate charges. While the financial system continues to function, it does so in a state of elevated crisis that may result in the collapse of banks and finance institutions. A telling sign of the future for formal financial sector is the major financial crisis of the nascent Syrian microfinance sector which experienced significant loss in 2012.

The **utility** sector contracted by nine per cent in 2012 and by a further 2.3 per cent in 2013-Q1. This has been largely due to contraction in the electricity share of GDP by 10.4 per cent in 2012, which is projected to decrease a further 2.6 per cent in 2013-Q1. With most regions suffering prolonged electricity outages and rationing, with complete blackouts in major conflict zones, consumption of electricity has slumped. This has also worsened through destruction to electricity transfer and generating stations, including widespread damage to high-voltage cables that increased electricity wastage, while the armed-conflict curtailed the effective maintenance of the electricity network.

Production in the **construction** sector is partially dependent upon investments in other sectors. Prior to the intensification of the conflict, in early 2011, the GDP of the construction sector was booming because of the proliferation of informal housing and construction activity that emerged due to the lack of enforcement of housing regulation. But this was short-lived, in 2012 the construction sector contracted by 29.7 per cent as new private construction activities stopped due to escalation of the conflict. This contracted by a further eight per cent in 2013-Q1. The sharp reduction of investment, including public investment in infrastructure and private investment in housing and commercial buildings is likely to continue in the near future, further diminishing the value-added of the sector. Nevertheless, construction will be a key motor of investment, job-creation and development in the post-crisis period as the country mobilizes to recover from the massive destruction of residential, commercial and public buildings and infrastructure that were obliterated during the armed-conflict.

While the government's delivery of personal services was affected by the conflict, **NGO services** provided by social and civil society organizations increased to SYP 3 billion during the crisis as social groups, charities and other institutions responded to provide humanitarian and social support. However, despite the financial increase, NGO service outreach remained a miniscule part of national GDP.

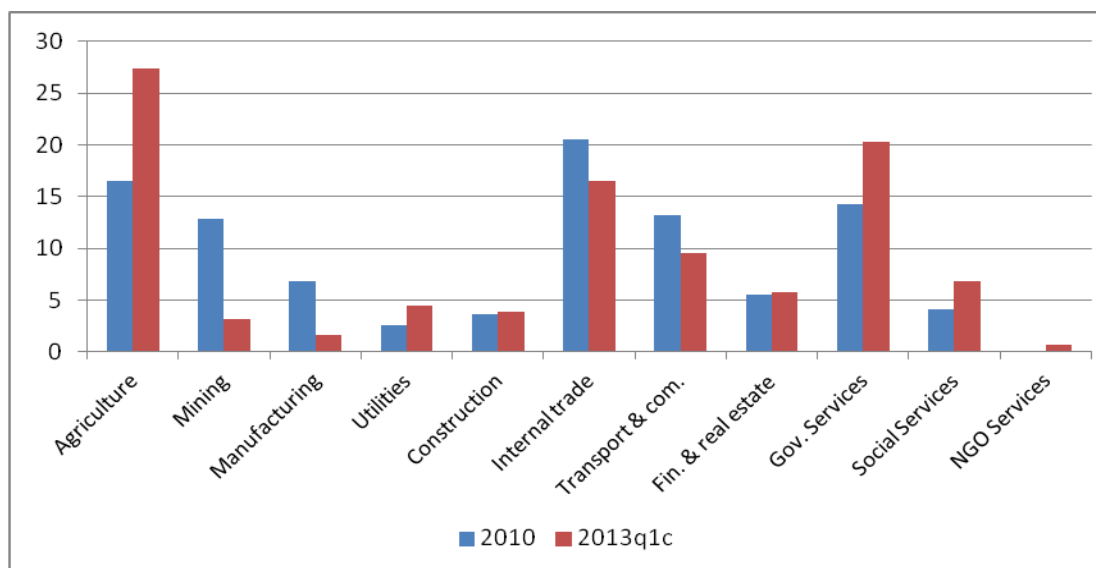
On the public sector side, there was a significant increase in **government services** in 2011 as the state responded to the crisis. But this was not sustained in 2012, when the GDP share of public services contracted by 28.4 per cent, and again by a further 2.5 per cent in 2013-Q1. Also, in 2012, the **personal** and **social services** provided by the government contracted by 8.8 per cent, with a further contraction of 2.8 per cent in 2013-Q1. The state's continued payment of government services was pinched by a growing budget deficit that was exacerbated by a decline in public revenues, as oil-related earnings drained and receipts from direct and indirect taxes diminished. At the same time, other budget lines were squeezed or redirected to meet growing military expenditures. This failure to provide sufficient support those at the bottom of the social pyramid has created a potentially precarious political predicament for the state. At a time of deteriorating household welfare, increasing poverty, rising unemployment and widespread geographic displacement, the public sector is less able to provide the services that are needed to ameliorate the hardship of households. While this is being partially offset by humanitarian intervention and assistance by the United Nations, other international organizations, NGOs and charitable organizations, this has not reached sufficient scale, volume or value to offset the real decline in government spending on the growing welfare and humanitarian needs of the population.

Thus, while there was a comprehensive slump in GDP, the contraction was not uniform across each sector, as some sectors lost relatively more than others. However, the overall contraction reflects a "negative structural transformation" of the economy resulting in the hollowing out private and

public sector capital. While the overall GDP contracted by 50.2 per cent between 2010 and 2013-Q1, the hollowing out was most deep in the dominant and capital-intensive sectors of manufacture which contracted over the period by 88.1 per cent, mining (including oil and petroleum) which slumped by 87.7 per cent, transport and communication which fell by 64.2 per cent and wholesale and retail trade which contracted by 59.8 per cent. Moreover, finance and real estate, construction, government services and agriculture sectors contracted by 48.4 per cent, 46.2 per cent, 29.1 per cent, and 17.7 per cent, respectively.

The new **structure of GDP** resulting from the crisis is reflective of economic fortune that armed-conflict has delivered. This shows that the agriculture has become the primary source of value-added in the country as its share of GDP spiked sharply from 17 per cent in 2010 to 27 per cent in 2013-Q1. (Figure 2) The government services share of GDP also grew, while the social services share was maintained, when the government service share increased from 14 per cent in 2010 to 20 per cent in 2013-Q1, while the service sector share was maintained at seven per cent in both periods. There was also a small positive growth in the NGO service share of GDP, but this remains a barely perceptible component of GDP with the lowest share of any sector. However, these growing shares are relative and are not indicated by any increase in value-added.

Figure 2: Sectors' share of GDP between 2010 and 2013 - Q1



Source: SCPR' estimations

All other sectors either depict stasis or a significant reversal of fortunes that represents a state of **de-industrialization** and **de-capitalization** that is producing de-development or a state of "development in reverse". The mining sector share of GDP decreased from 13, per cent in 2010 to three per cent in 2013-Q1, while the manufacturing sector share decreased from 7 per cent to 2 per cent. The trade sector share fell from 20 per cent to 17 per cent, while the transportation sector share decreased from 13 per cent to nine per cent. The new composition of GDP reflects an increase in services and agriculture in the component shares GDP on the account of industry and productive services.

This scale-back and downsizing has been accompanied by divestment by private investors, which can be seen in activity on the Damascus Stock Exchange. Even if it hosts a relatively small number of listed companies with a low level of market capitalization, the DSE reflects both economic performance in the private sector and shifting investor confidence and appetite for risk during the crisis. Thus, the DSE Index lost approximately 45 per cent of its value between March 2011 and March 2013.

Collapse of Demand

The calamitous contraction of GDP is reflected in the dramatic reduction of the **private consumption** that has placed the security and welfare of households at risk, leading to increased poverty, unemployment and vulnerability among the population. As shown in Table 2, in 2012 private consumption contracted by 25.3 per cent compared to 2011, and by a further 4.8 per cent in 2013-Q1 compared with 2012. The armed-conflict severed a vast number of Syrian households from their previous sources of income through displacement, business closure and job loss, while the destruction of public and individual properties contributed to deterioration in people's welfare. Furthermore, surging prices, together with shortages of goods and services have increased the volume of marginalized people who are now struggling to survive, most of whom have now exhausted the savings they had accumulated. The continuing development of the crisis will further escalate helplessness in households that are no longer able to secure their basic needs for food, shelter, health and education.

Table 2: GDP by expenditure 2010-2012, billions of SYP in constant 2000 prices

	Actual	Continuing Scenario			Crisis Scenario			Crisis Impacts			
	2010	2011	2012	2013-Q1	2011	2012	2013-Q1	2011	2012	2013 - Q1	Till March 2013
Consumption	1209	1193	891	175	1267	1329	346	74	438	171	682
<i>Public</i>	255	283	202	36	281	309	85	-2	107	49	154
<i>Private</i>	955	910	689	139	986	1019	261	76	331	122	529
Gross capital formation	326	363	152	29	360	389	108	-3	237	79	313
<i>Public</i>	142	112	44	9	143	143	36	31	99	27	157
<i>Private</i>	191	172	52	9	204	218	58	32	166	49	247
Change in inventory	-8	80	56	11	13	28	14	-66	-28	3	-91
Net Foreign Export	-84	-158	-49	-23	-72	-61	-12	86	-12	11	84
<i>Exports</i>	399	372	190	25	407	415	106	35	226	81	341
<i>Imports</i>	483	530	239	48	480	477	118	-51	238	70	257
GDP (market prices)	1452	1398	994	181	1555	1656	442	157	662	261	1080

Source: SCPR' estimations based on preliminary data from the PICC and CBS.

Public consumption contracted by 28.4 per cent in 2012 and by a further seven per cent in 2013-Q1, as government revenue shrank and an increasing chunk of resources were reallocated to military expenditure. The public wage bill to public employees is an essential means of maintaining remaining demand and shoring up continuing support for the government, but this is now under pressure as real wages have been devalued due rising prices.

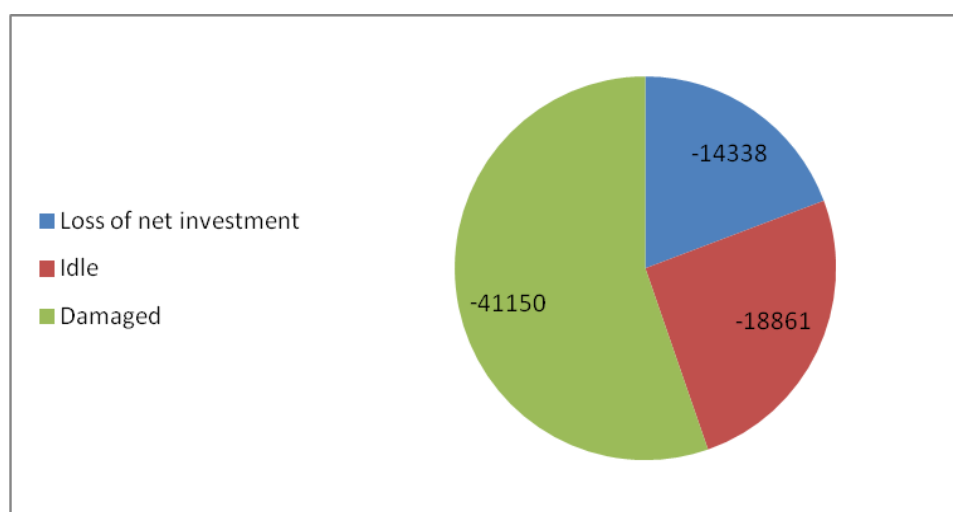
Moreover, there was a massive contraction in **Investment** due to the crisis, with **public investment** contracting by 60 per cent in 2012, and by a further five per cent in 2013-Q1. The security situation and scarcity of resources has restricted the mobilization of the investments needed to restore damage to infrastructure and capital stock. More, significantly **private investment**, not surprisingly given the huge risks in the economy, contracted substantially by 69.7 per cent in 2012, and by a further eight per cent in 2013-Q1. The level of uncertainty is dramatically reflected in broad market collapse and the wanton destruction and looting of firms and infrastructure. The burgeoning refugee population has been accompanied by the flight of private investment and capital stock from Syria, e.g. to Egypt, Jordan, Lebanon and Turkey. By 2013-Q1 both public and private investment formed just 9.8 per cent of GDP, which is substantially below the annual depreciation rate of capital stock.

Exports, which are dependent upon domestic production, almost halved (49%) in 2012, constricting by a further 11.9 per cent in 2013-Q1. This contraction was driven by the turndown in the oil and manufacturing exports, which deprived the economy of crucial sources of hard currency. Simultaneously, **imports** shrivelled by 55 per cent in 2012, with a further slim-down of 4.8 per cent in 2013-Q1. Ironically, with declining domestic production contributing to market shortfalls, there is a greater need for exports to cover the reduction in goods and services, while the economy is no longer able to generate the finance needed to pay for this. Moreover, international sanctions are a serious disincentive for importers who might otherwise be willing to take higher risks. Consequently, the trade and current account deficit is projected to surge dramatically in 2013.

Total Economic losses Reach USD 84.4 billion

GDP losses are only part of total economic loss. Another significant element is the impact of the armed-conflict on capital stock, which is fundamental to current and future economic growth. Using the counterfactual methodology, it is estimated the total loss of capital stock until 2013-Q1 was USD 74.3 billion (at current prices). (Figure 3) This loss consists of three components. First, there is the **reduction in net investment**, which is equal to USD 14.3 billion and is already accounted for in the estimate of GDP losses.

Figure 3: Estimated loss 2010-2013-Q1 of Capital Stock, millions of USD in current prices



Source: SCPR calculations based on (Nasser, Mehchy 2012b: capital stock estimation of Syria 1965-2010)

Then there is the loss due to poor capacity utilization and **idle capital stock** resulting from physical capital ceasing to contribute to production, services and value-added. The mining and tourism sectors are obvious examples of sectors where capital stock is idle as a result of sanctions, insecurity, falling demand, and insufficient energy sources. The estimated impact under this component is USD 18.8 billion, which has already been included in the previously estimated GDP loss. In principle, as this capital stock is merely idling, it can be placed in gear to once again to bring production and services into action when the crisis ends.

Finally, there is the value of **partial or full damage to capital stock** incurred as a result of the armed-conflict, which includes destroyed firms, equipment, and buildings. This component was not accounted for in the previous estimate of GDP loss and should be added to the total economic losses to provide a more comprehensive assessment of economic losses. It is estimated that the loss attributed to this component is USD 41.2 billion. (SCPR, 2013)

Another aspect of the economic loss is the increase of the military expenditure. An increasing share of military expenditure is generally a reallocation of budget resources from public good, for example education, health and welfare, to public safety and security. Moreover, as outflows on military expenditure and manufacture are treated as off-budget items they were not reflected in the calculation of GDP loss. As transparent data is not readily available, it is difficult to estimate the extent of the increase in the military expenditure account. But by utilising cross-country empirical evidence, it is estimated that the off-budget military expenditure in Syria increased annually during the conflict by an average of 2.2 per cent of GDP in 2011, 8.8 per cent in 2012, and 13.2 per cent in 2013-Q1.⁷ However, it should be noted that the domestically-financed military expenditure of armed-groups has not been estimated (SCPR, 2013).

Table 3: Total economic losses in millions of USD (at current prices)

	2011	2012	2013-Q1	Total
GDP loss	6,460	24,020	7,896	38,376
Capital stock damaged	5,144	23,408	12,598	41,150
Increase in military expenditure	951	3,175	722	4,848
Total economic losses	12,555	50,603	21,215	84,374

Source: SCPR estimations 2013.

Thus, based on the foregoing analysis, the armed-conflict in Syria generated a total estimated economic loss of USD 84.37 billion by 2013-Q1, which is equivalent to 142 per cent of the GDP of 2010 in constant prices. (Table 3) The loss of GDP is 45 per cent of the total loss. Damaged capital stock accounted for 49 per cent, while reallocation to increased military expenditure accounted for six per cent of total economic loss.

Surge in Fiscal Deficit and Public Debt

The budget deficit grew almost four-fold in 2011 and is expected to increase almost ten-fold in 2013, growing from SYP 2.2 billion in 2010 to SYP 21.4 billion in 2013. Government revenue is at a critical point due to the dramatic drop in oil-related income, tax receipts and revenues from public enterprises that are necessary to replenish the treasury. The state budget decreased from 26.5 per cent of GDP in 2010 to 23.8 per cent in 2012, although the projection of expenditure in 2013-Q1 shows that this will grow to 29.6 per cent. However, this merely represents a larger piece of a much smaller pie, which presents a serious challenge to public budget management that is exacerbated by public revenue falling from 16.4 per cent of GDP in 2011 to 8.1 per cent in 2013-Q1. (Table 4)

The primary macroeconomic policy intervention of the government to counter this fiscal crisis has been to substantially reduce public investment in favour of current expenditure. Thus, public investment dropped from 6.9 per cent of GDP in 2011 to 4.1 per cent in 2012, and is projected to increase slightly to 4.5 per cent in 2013-Q. While, the current expenditure share of GDP grew from 19.6 per cent in 2011 to 25 per cent in 2013-Q1, this was mainly composed of transfers to public sector employees, with the wage share of the current account increasing from 13.6 per cent in 2011 to 19.3 per cent in 2013. However, the maintenance of public expenditure on public sector workers has been significantly eroded by the increasing cost of living that is rising faster than public sector salary hikes.

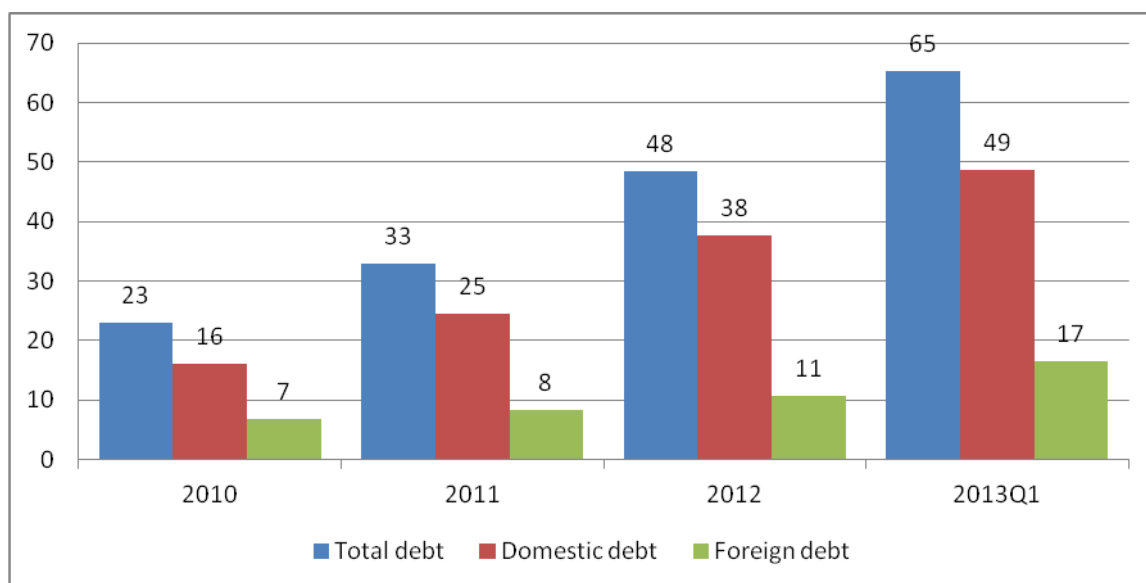
Table 4: Revenue, expenditure and government budget deficit (in percentage of GDP), 2010-2013-Q1

	Preliminary	Projected		
	2010	2011	2012	2013 Q1
Revenue	23.0	16.4	9.3	8.1
Oil-related proceeds	7.1	5.7	3.6	2.7
Non-oil tax revenue	9.5	6.7	3.9	4.3
Non-oil non-tax revenue	6.4	4.0	1.8	1.1
Expenditure	25.2	26.5	23.8	29.6
Current expenditure	16.4	19.6	19.7	25.0
Wages and salaries	10.8	13.6	15.2	19.3
Goods and services	1.3	1.4	0.9	0.9
Interest payments	0.8	0.9	0.6	1.6
Subsidies and transfers	3.5	3.7	3.1	3.1
Development expenditure	8.8	6.9	4.1	4.5
Budget balance	-2.2	-10.1	-14.5	-21.4

Source: ibid

Accordingly, the result was a combined surge in the budget deficit from 10.1 per cent in 2011, to 14.5 per cent in 2012, and to 21.4 per cent in 2013-Q1, while total public debt jumped from 33 per cent of GDP in 2011, to 48 per cent in 2012, to 65 per cent in 2013-Q1 (Figure 4). Thus, the fiscal window created by debt reduction over the period from 2004 to 2010 has been eroded. Moreover, in order to stave-off potential insolvency, the government will need to significantly increase its long-term debt burden, which will prove most difficult in the present international environment.

Figure 4: Total debt by domestic and foreign component (% of GDP), 2010-2013-Q1



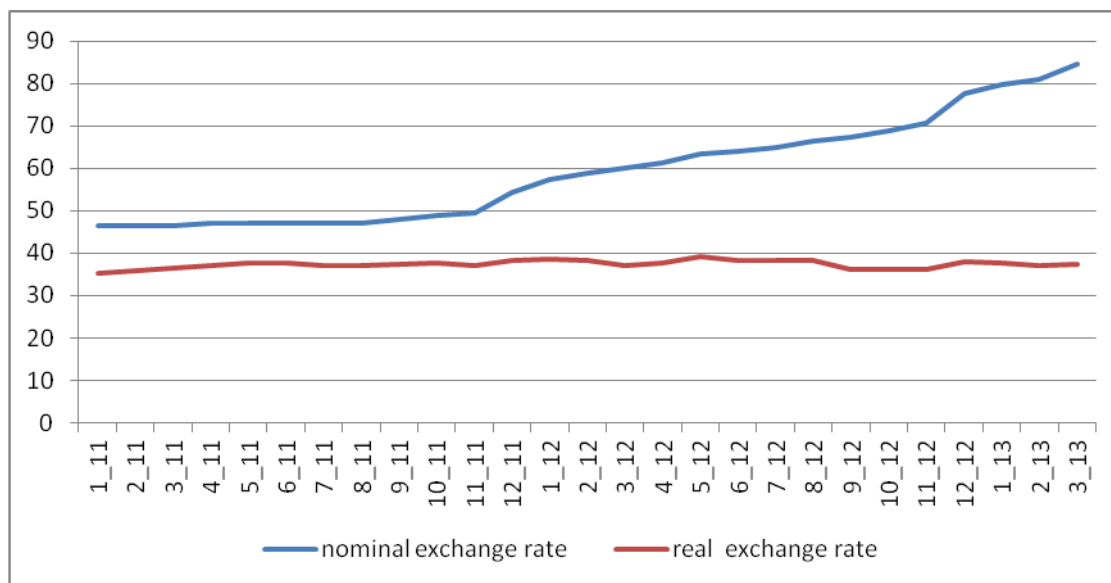
Source: SCPR' estimations.

Exchange Rate Deterioration

The counter-crisis interventions of the Central Bank of Syria have had little effect in mitigating the impact of the crisis across the various economic sectors. Since the 1990s, the main focus of monetary policy was to stabilise prices. This approach was maintained during the current crisis with the Central Bank directly intervening in the exchange market to shore-up stability. Despite these stabilisation interventions, the Central Bank has been forced to depreciate the official rate of the Syrian pound by 82 per cent until March 2013. This was done to limit speculation against the pound and to promote non-oil exports. Conversely, this devaluation has contributed to the expansion of a shadow market, with the unofficial exchange rate at one point during the first quarter of 2013 exceeding SYP 118 per US dollar. Moreover, depreciation in the nominal exchange rate was accompanied with a relatively stagnant real exchange rate having no positive impact on non-oil exports, which have already deteriorated due to sanctions and conflict-related damages (Figure 5).

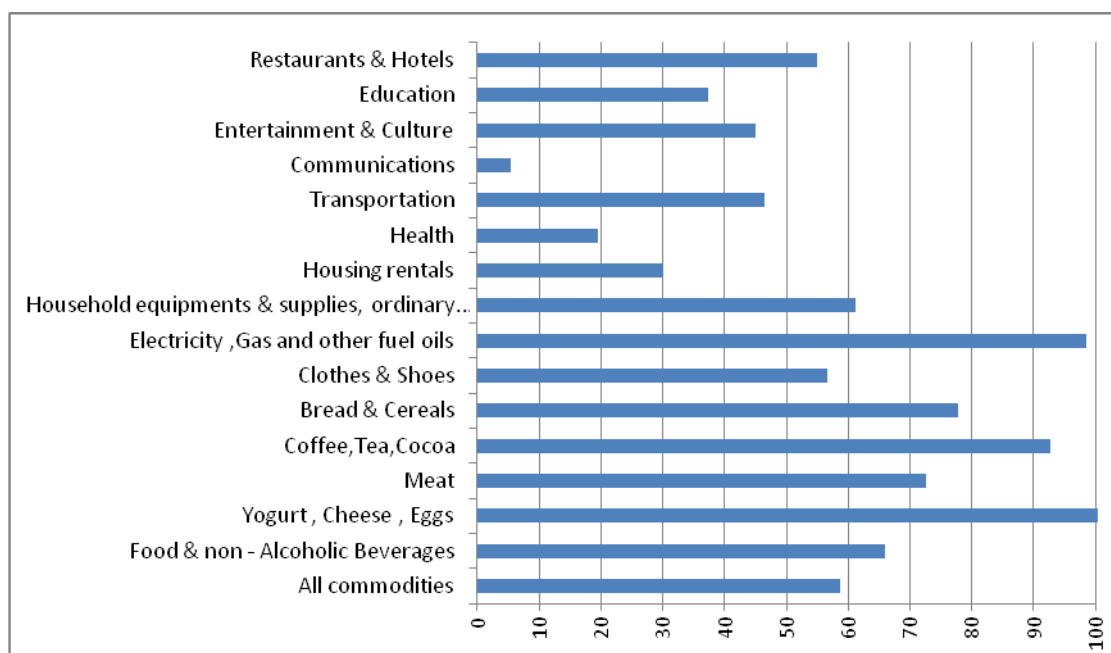
The deleterious impact of the armed-conflict on the Syrian economy has led to a swingeing increase in domestic consumer prices, with prices hostage to socioeconomic policies, market disruption, sanctions and supply chain bottlenecks that have created shortage and scarcity of goods in the market. For example, significant price shocks occurred in December 2011 and September 2012 in parallel with sudden exchange rate devaluation and an increase in energy prices. The consumer price index (CPI) increased by 84.4 per cent from the outset of the crisis until March 2013. Between March 2011 and November 2012 prices of food items like yogurt, cheese and eggs have ballooned by 101 per cent. Electricity and gas prices have almost doubled, and bread and cereals prices witnessed an increase of 78 per cent, while clothing and shoe prices increased by 57 per cent. The increasing costs are most directly impacting poor and vulnerable households whose expenditures are primarily devoted to foodstuffs and basic needs. While the impact is variable across the different governorates, Aleppo has recorded the highest rate of price inflation.

Figure 5: Nominal and Real Exchange Rate (January 2011 to March 2013)



Source: Central Bank of Syria and authors' calculations

Figure 6: Inflation of main categories (March 2011 to November 2012)



Source: Central Bureau of Statistics and authors' calculations

*Official CPI used till November 2012, from Dec 2012 to March 2013 CPI is based on PICC estimation.

Unemployment Rate hits 48.8 per cent

Even prior to the crisis, Syria's labour market was not performing well due to major structural deficiencies in the economy as the labour force participation rate witnessed significant decline from 52 per cent in 2001 to 42.7 per cent in 2010. While this affected both rural and urban regions of Syria, it was most substantial in rural areas. Moreover, the female participation rate estimated at 12.9 per cent in 2010 was considered as one of the lowest world-wide.

An official Central Bureau of Statistics (CBS) labour force survey conducted in 2011 shows that the employment rate decreased from 39 per cent in 2010 to 36.1 per cent in 2011, but during this period the public sector labour force increased, mainly in the spheres of public administration, education and defence. The survey also showed that the unemployment rate increased from 8.6 per cent in 2010 to 14.9 per cent in 2011. Moreover, the number of the unemployed people increased by 80 per cent, from 475,000 to 865,000 without work.

Table 5: Impact of the crisis on the labour market (in thousands)

Employment Status	Continuing scenario			Crisis scenario		
	2011	2012	2013-Q1	2011	2012	2013-Q1
<i>Employed</i>	5,226	5,389	5,432	4,949	3,367	3,112
<i>Unemployed</i>	589	636	646	865	2,653	2,965
<i>Out of LF</i>	7,594	7,857	7,926	7,594	7,862	7,926
<i>Total Active Population</i>	13,409	13,881	14,003	13,409	13,881	14,003
<i>Unemployment Rate</i>	10.12%	10.55%	10.63%	14.88%	44.07%	48.79%

Source: SCPR estimations based on LFS (2006 – 2011), CBS

To assess the impact of the crisis on the labour market in 2012 and 2013-Q1, this study develops a counterfactual analysis, similar to the one applied to estimate economic growth/decline. By comparing between "continuing" and "crisis" scenarios, the results show that the labour market in Syria lost about 2 million job opportunities in 2012, rising to more than 2.3 million by 2013-Q1. The crisis increased the unemployment rate in 2012 from a "continuing scenario" rate of 10.6 per cent to a "crisis scenario" rate of 44.1 per cent. At the end of March 2013, the unemployment rate is estimated to be 48.8 per cent. (Table 5) The increase in the number of unemployed people to 2.3 million by the end of 2013-Q1 is estimated to significantly affect the welfare of almost 9.6 million persons, based on the 2010 dependency ratio of 4.14.

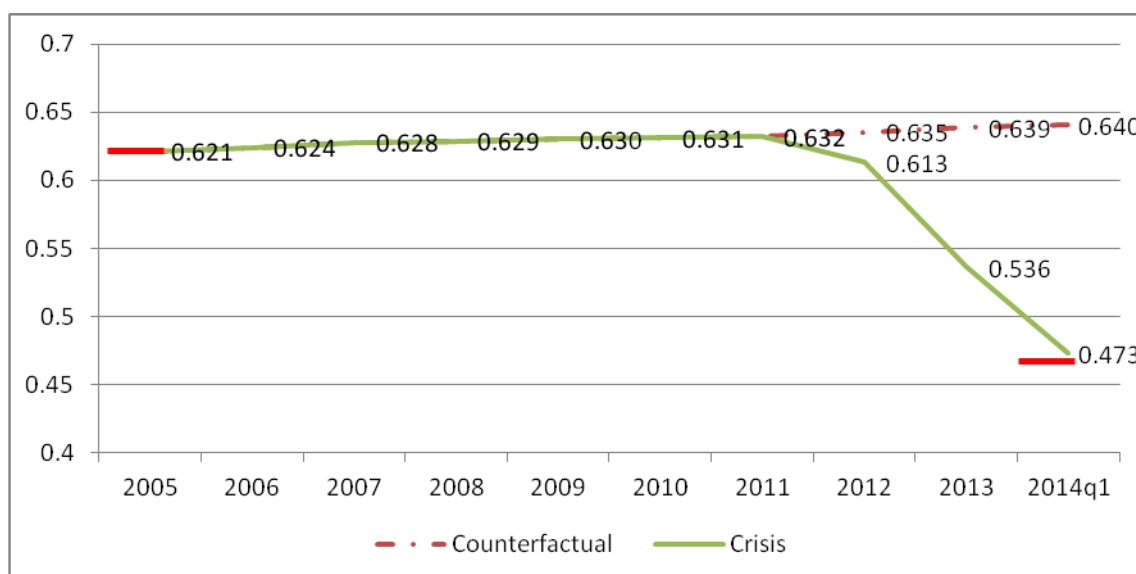
II. Social Impact of the Crisis

Compared to other Arab and developing countries, during the previous decade, Syria had achieved good progress in its social indicator achievements, most notably in the health and education dimensions. Yet, these outcomes were achieved from a relatively poor quality of service provision that was hampered by institutional inefficiency, weak monitoring and evaluation systems, and the lack of relevant programmes. This section of the report highlights that the armed-conflict and economic crisis has dramatically worsened the already challenging social situation in Syria. This deterioration has had immediate catastrophic effect on the direct welfare of the population, which is likely to plague the longer term development outlook of Syria.

HDI Rolls Backward by 35 Years

To assess the impact of the crisis on the development situation until 2013-Q1, the report conducted a counterfactual analysis on the Human Development Index (HDI) which consists of three main components: income, education, and health. In terms of the first two components, GDP per capita and years of schooling have already been estimated for "continuing" and "crisis" scenarios. The life expectancy as a proxy for health, the third component of HDI, is calculated based on the gain of life expectancy by reducing it for violent deaths (Ferguson et al, 2010) using the Eastern Mediterranean as reference for Syria. The results showed that the estimated life expectancy in Syria fell by 7.9 years in 2013-Q1, to 68 years.

Figure 7: HDI for Syria, 2005-2014



Sources: HDR 2011 and SCPR estimations (for HDI of 2012 – 2014).

The deleterious impact of the armed-conflict on income, education, and health has rolled back Syria's human development record. The results show that in "continuing scenario", the Syrian HDI would increase from 0.632 in 2011 to 0.640 in 2014-Q1,⁸ whereas, the "crisis scenario" shows a dramatic drop in Syria's HDI from 0.632 in 2011 to 0.473 in 2014-Q1. (Figure 7) Consequently, the HDI of Syria is estimated to have lost 25.2 per cent of its HDI value compared to 2011, and 26.2 per cent from its potential in 2014. This estimated contraction in HDI means that Syria has lost the equivalent of 35 years of human development achievements over two crisis years. While in the post conflict period, there will undoubtedly be a substantial mobilisation of capital and human resources both nationally and internationally in an effort to rehabilitate and re-establish the social, political

and economic foundations to the country, the scale of contraction in the HDI is an indication of just how mammoth the task that lies ahead will be.

The previous coherence and cohabitation of social and human capital in Syria has been indelibly damaged to a point where it almost appears irreparable. While the vast majority of Syrians long for security and the end of violence, the destruction and bloodletting unleashed by the armed-conflict is increasingly grounded on intolerance and bigotry that has damaged social solidarity and fraternity and deepened the social and cultural gaps between different groups and communities in a manner justifying hatred and violence towards the “other”. Already the normative framework of social interaction and human values has been undermined by lack of adherence to laws and regulations. The behaviour of numerous armed elements that operate beyond the law and military discipline is both vengeful and criminal. The absence of the rule of law in many regions has given rise to economies of violence that includes: trafficking in people, weapons and drugs; confiscation of private and public buildings; looting of businesses, industrial plants, private homes, museums, schools and hospitals; extortion of businesspeople and minorities; and, abduction and hostage-taking for ransom. This does not include increasing human rights abuse of men, women, and children who are “other” or challenge the authority of such groups.

While the environment of fear and uncertainty pushed hundreds of thousands of citizens to flee the country and millions more to become IDPs seeking succour elsewhere than their neighbourhoods, it has led other communities to promote older forms of traditional solidarity based on affiliation and the affinity of belonging to a specific family, clan, region, ethnicity or religion. While this may be a healthy form of communal solidarity and self-protection in a situation where the state and society is riven with polarisation and fragmentation, such primordial ethnographic alliance is no substitute for modern civil society, which is necessary for economic development and normative regulation, i.e. kinship is not a viable substitute for citizenship.

Dramatic Demographic Shifts

As well as creating social fragmentation, the armed-conflict has already had significant impact on several demographic indicators, including the population growth rate which is estimated to have sunk annually from 2.45 per cent in 2010 to minus 4 per cent in 2012, growing to minus 5.2 per cent in 2013-Q1.⁹ Two years into the crisis, the total population in Syria has been hollowed out by 9 per cent. While the doubling of the mortality rate between 2011 and 2013-Q1 contributed more marginally to this reduction, it was largely been driven by the exodus refugees and voluntary migrants who have fled the country. Moreover, the mass movement of internally displaced people has altered the population distribution within Syria, with a number of villages and urban districts resembling ghost towns.

The total number of Syrian refugees in neighbouring countries reached to 1,299,822 people by March 2013. (UNHCR) With Lebanon and Jordan hosting the highest number at 31.5 per cent each, while Turkey and Iraq hosted 23.1 per cent and 9.8 per cent, respectively (OCHA, 2013). About 75 per cent of the Syrian refugees are women and children, and almost half of them are under 18 years old. Their distribution by cities/regions of origin indicated that almost a quarter (23.3%) fled from Homs, while 15.1 per cent fled Dara’a. The other main regions of refugee flight were Hassakeh which constitutes 14.1 per cent of the refugee population, while Rural Damascus accounted for 13.2 per cent. (UNHCR, 2013) Based on separate and formal UN mandates, the Syrian refugees in hosting countries are administered by UNHCR, while Palestine refugees from Syria (PRS) are administered by UNRWA. Within Syria, UNRWA provides a variety of services to a Palestine refugee population of 525,000. By 2103-Q1, 400,000 Palestine refugees were assessed as requiring humanitarian assistance, while some 40,000 PRS who had fled to Lebanon and 5,000 who had fled to Jordan were

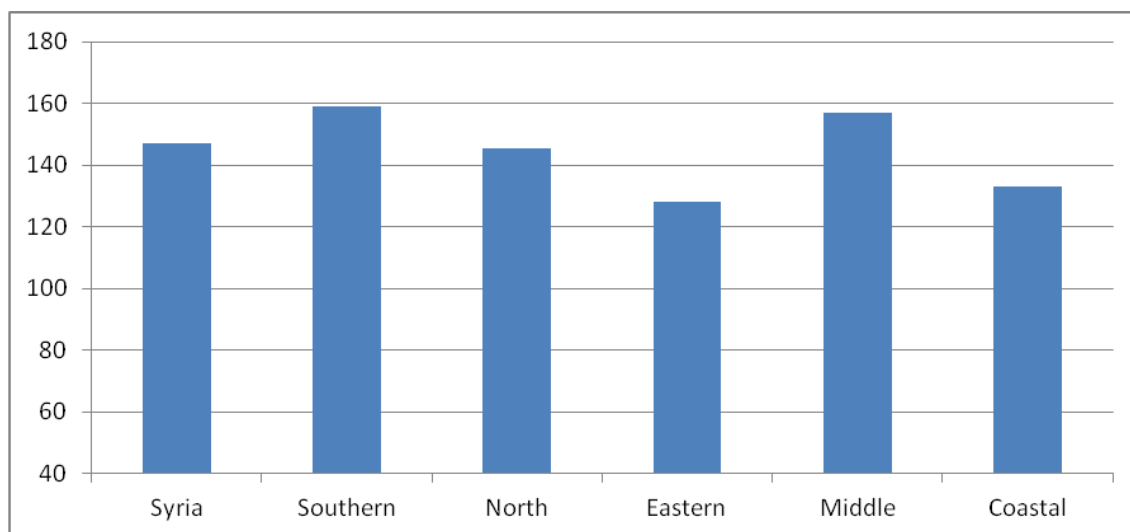
receiving humanitarian assistance and educational services in the hosting countries from UNRWA. (UNRWA, April, 2013)

Moreover, the rate of voluntary migration also increased during this period. SCPR assessed the total number of voluntary migrants at 1,334,727 by 2013-Q1, based on changes that occurred in labour market over the past two years. This was an increase from 1,167,100 at the end of 2012. However, the most dramatic pattern of human movement was due to the mounting increase in IDPs, who have been forced to move from their neighbourhoods, from place-to-place in search of security and a haven from the armed-conflict. This has radically altered the normal settled population distribution in Syria. According to the MoLA, 3.92 million people were internally displaced by the end of March 2013, mainly fleeing conflict areas such as Aleppo, Deir Ezzor, Idlib, and Homs. Many families were displaced multiple times due to the fluctuating security situation. Moreover, it is difficult to accurately track the population movement between governorates, while a significant share of IDPs relocate within the same governorates.

Poor People increased by 6.7 Million Persons

Money-metric poverty in Syria has been assessed in several studies; most notable were those that were carried out by UNDP in 2005 and 2010. The results of these studies show that the share of total population living below the upper poverty line increased from 30.2 per cent in 2004 to 33.6 per cent in 2007. Likewise, the share of total population living below the lower poverty line also increased from 11.4 per cent in 2004 to 12.3 per cent in 2007.¹⁰ Thus, even before the current crisis, a third of the Syrian population, or approximately 6 million persons, lived under the upper poverty line. The studies indicated that deep poverty was more endemic in rural areas than in urban ones, with 15.1 per cent of those in rural areas living below the lower poverty line, compared to 9.9 per cent of the total urban population.

Figure 8: Percentage increase in overall poverty in 2013-Q1 compared to 2010 by region



Source: SCPR calculations

Using the counterfactual methodology and a micro-simulation technique, this study made a number of assumptions to determine the poverty rate. Assuming no change in expenditure distribution and based upon the estimated decrease in real household expenditure until the end 2013-Q1, it is estimated that an additional 6.7 million individuals became poor in 2013-Q1, with 3.6 million becoming extremely poor. Thus, more than half the population of Syria are now living in poverty. Figure 8 shows that while there was significant overall increase in poverty in every region of the

country, this was especially pronounced in the southern, central and northern regions and less distinct in the eastern and coastal areas. Moreover, there was acceleration in the rate of poverty during the last quarter of 2012 and 2013-Q1. Thus, the continuation of the crisis will lead to a striking increase in the level of poverty in Syria by the end of 2013.

This increase in money-metric poverty stems from a number of determinants, including:

- Surge in the cost of goods and services, especially the sharp increase in food and fuel prices;
- Declining real income of those on fixed incomes and monthly salaries, which has resulted in many working and even middle-class people becoming poor;
- Reduction of household income due to lack of employment opportunities, loss of existing jobs, and the damage of physical assets have pushed many formerly self-reliant households into poverty.

Moreover, multidimensional poverty, which includes education, health, and living standards has also increased dramatically and is likely to shoot even higher after widespread damage and destruction to public infrastructure and private facilities. Furthermore, poverty among 3.9 million internally displaced people and 1.3 million Syrian refugees is anticipated to be chronic due to the lack of appropriate living conditions and shelter, overcrowding, loss of livelihoods and deteriorating health conditions.

Loss of Human Capital

The combination of the escalation of the conflict through intensified violence, military operations, blockades and insecurity, together with mass displacement and population movement across borders, has dramatically affected the educational process and the educational system, with many children losing the opportunity to continue their education. And even when they have had the ability to enrol in school, their chance of regular, uninterrupted school attendance is often low. The same is true for students in the secondary and post-secondary education. Consequently, school attendance remains low in an environment that is hardly conducive to active learning, with the attendance rate of girl students particularly affected.

Data from the Ministry of Education for 2013-Q1 shows that 2,963 schools were totally or partially destroyed since the beginning of the crisis, with damage estimated to SYP 6.9 billion. (Table 6) The vast majority of affected schools located in the conflict zones of Idlib, Aleppo, Dara'a, and Rural Damascus. Moreover, a further 1,992 schools are being used as shelters for IDPs across the country. In addition to schools, other educational assets have been damaged or destroyed, including warehouses and school buses. The education sector has also suffered tragic human cost with 222 teachers killed (MoE), while many more were injured, kidnapped, arrested or threatened.

Moreover, financial difficulties and security concerns have led many parents to keep their children, particularly girls, at home. This substantially increased the national dropout rate, which was estimated at 31.7 per cent in the school calendar of 2011/12, reaching 46.2 per cent in 2013-Q.¹¹ Thus, almost half of all school children are not attending school. Available data shows wide variations in attendance rates between governorates, which is explained by the fluctuating security situation and the intensity of the conflict in different regions. Thus, in 2013-Q1, Latakia maintained a 100 per cent school attendance rate, whereas the rate in Idlib was 38 per cent, and a mere six per cent in Aleppo.

Table 6: Number of Damaged Schools and Estimated Cost (2012 – 2013)

Governorate	Number of damaged schools	Estimated cost* (million SYP)
Dara'a	300	356
Idlib	772	1,049
Damascus	181	132
Homs	210	1,163
Rural Damascus	210	612
Al-Hasakeh	195	86
Deir Ezzor	49	374
Aleppo	500	1,360
Tartous	65	253
Latakia	97	327
Hama	195	903
Al-Raqqa	82	239
Qounaitra	107	52
Total	2,963	6,907

Source: Ministry of Education, Damascus – Syria

*SCPR estimations based on data from Ministry of Education

In order to quantify the negative impact of the deteriorating attendance rates on future human capital, the value of each school-year was calculated as an average between 2006 and 2010 by dividing the GDP at current prices over the total number of years of schooling. The result produced a value of USD 680 per year of schooling (SCPR, 2013). This number was multiplied by the loss in student-years due to the crisis using the dropout rate 46.2 per cent for 2013-Q1, which resulted in a loss of USD 1.6 billion that increased the aggregated total loss since the beginning of the crisis to USD 3.1 billion. Moreover, based on a counter-factual calculation, the report estimates a 4.7 per cent reduction in the mean “years of schooling” since 2011, which will have a significant impact on the quality of human capital, and, thus, on future economic growth, employment and productivity.

During the current period the government’s ability to financially mitigate the impact of the crisis has been compromised by declining public investment in the educational sector. Thus, public spending on education has decreased from SYP 35.4 billion in 2010 to SYP 26 billion 2011 and it expected to contract to around SYP 16 billion in 2013.

Although stewardship of the educational system in Syria falls to the MoE and MoHE, there are other actors from the private, charitable and humanitarian sector that operate in parallel. While no information is available on the level of damages to charitable or privately-run pre-school and school facilities, UNRWA which operates 118 schools for Palestine refugees in Syria, has closed 58 of its schools in Damascus due to deteriorating security conditions and armed-conflict in Palestine refugee camps. (UNRWA, 2013) UNRWA has attempted to mitigate the impact of school closure on the education of students, by providing distance learning materials for children in affected areas.

The crisis has also affected the quality of education in operating schools due to staff shortages and absenteeism resulting from the displacement and migration of teaching staff. Moreover, the

deteriorating economic situation has pushed many children into the labour market in order to support their families. Thus, the armed-conflict has created a major educational crisis that will affect the life trajectories and economic prospects for today's school children for the rest of their lives. The conflict has endangered the right to education for millions of Syria children and students

Devastation of the Health System

The armed-conflict has significantly impaired the health system through damage to medical facilities, destruction of healthcare infrastructure, flight of healthcare professionals, death of medical personnel and the collapse of the pharmaceutical industry. It has also impacted the national health profile due to the vast increase in the number of fatalities, injuries and disabilities in need of treatment, and has challenged the capacity of the system to cope. Consequently, the public health system in many regions of Syria is in a state of collapse, creating enormous burdens on functioning facilities, while the private and civil society health facilities have serious capacity limitations. The Ministry of Health (MoH) has reported that 32 of its 88 public hospitals across the country are out of service, with the highest numbers on non-functioning hospitals in Aleppo (7 hospitals), Rural Damascus (7 hospitals), Homs (6 hospitals) and Der Ezzor (6 hospitals).¹² Moreover, private and charitable hospitals tend to have limited facilities, and these have been seriously overstretched during the crisis due to the increasing number of people seeking care from their services.

The infrastructure of Primary Health Care (PHC) providers was also affected, with 31 per cent of centres out of service. (MoH, 2013) The disruption of PHC within the country is evident in the reduction of vaccination coverage by almost 50 per cent. Moreover, medicines that were delivered by PHC facilities to the chronically-ill throughout the country have been disrupted, leaving people without lifesaving medicines and basic drugs in several conflict zones. The reduced capacity and disruption to PHC facilities will impact on key health indicators, including infant mortality rates, child health and survival, maternal health, together with increasing incidence of communicable and lack of treatment for non-communicable diseases.

The scarcity of medicines has been exacerbated by the armed-conflict in Homs and Aleppo, which are primary centres of the pharmaceutical industry. Many companies have now closed or been destroyed and looted, with the MOH reporting that almost 90 per cent of the industry was disrupted (MoH, 2012). As a consequence, the local pharmaceutical industry which previously supplied the bulk of the domestic market requirement is no longer able to do so. Furthermore, international sanctions have already affected the importation of lifesaving medicines used in the treatment of hepatitis, cancer, and variety of inoculations not produced in Syria. Sanctions have also disrupted the importation of specialised medical equipment and spare parts.

Moreover, the human resources of health system were directly affected by the conflict, with the MoH reporting the loss of 142 medical personnel who were killed while on duty since the beginning of the crisis. At the same time, many trained and qualified health professionals and workers have fled the country. A rapid assessment conducted by the UN agencies in Aleppo in March 2013 found that only 36 doctors were practicing a city that once retained 5,000.¹³ The loss of such valuable human capital has serious implications for maintaining the quality of health care for the population and for the training of medical students and other healthcare professionals.

Lack of access to health care services and scarcity of medications in conjunction with the mass movement of IDPs within Syria and the large-scale flow of refugees across borders have contributed to the increased incidence of diseases and illness, such as influenza-like illnesses (ILI) and diarrhoea among children under-5, hepatitis A, and leishmaniasis. Most refugees and IDPs suffer poor and overcrowded living conditions, where they commonly lack access to clean water or decent sanitary

conditions. They also lack the funds needed to secure access to quality healthcare in hosting countries. Moreover, with the reduced coverage of prenatal healthcare, nursing mothers and new born infants face increased health risks due to the increase in premature births, an elevated rate of underweight births and delivery complications.

The appalling death toll remains one of the most tragic aspects of the armed-conflict, while the fragility of the health system and inaccessibility to lifesaving medical care has magnified the level of death and suffering as many preventable deaths could have been avoided with appropriate care and facilities. By 2013-Q1, as the level of violence and hostilities escalated, there was a registered increase in fatalities by a third compared with the previous period. The total number of deaths rose from 60,000 to 80,000 according to UN estimates.¹⁴ The cartography of the death toll shows the evolving geographic pattern of the violence in 2013-Q1, with most of this increase in Aleppo (7,532 deaths), Damascus (4,671 deaths) and rural Damascus (4,396 deaths). These records indicate the violence and hostilities remains concentrated in highly populated urban environments among predominantly unarmed civilian populations. (OCHA, 2013) Moreover, counting cadavers belies the true extent of the tragedy. A greater number of individuals and families have been traumatised by injury sustained in the conflict, which has affected approximately 240,000 maimed and wounded people. By 2013-Q1, approximately 1.5 per cent of the population were dead, maimed, or injured.¹⁵ Among the maimed and wounded there are an increasing number of persons with life-long, life-changing disabilities and chronic conditions that were worsened by lack of access to proper trauma and surgical care, shortages of medical staff and lifesaving medicines.

Equipping combatants with more lethal force through heavier munitions and firepower based on modern technology will only add to the grief and suffering of hundreds of thousands more families as well as the hundreds of thousands that have already been devastated by death and injury to their loved ones. Humanitarians must temper any naive Manichaeian mentality that favours militarism over peacemaking by focusing on the tragedy, economic suffering and physical hardship that has befallen the whole population of Syria. This is perhaps most clear in the psychological trauma of violence that has affected millions of people, with whole communities living under conditions of continued and constant trauma, with children exposed to the brutality of death and warfare, bloodshed and violence continuing to be plagued by post-traumatic disorders, while women face specific risk of violence and violations, including sexual harassment, assault and rape.

Concluding Summary

The current Syrian crisis began with small public demonstrations but soon escalated into an internal armed-conflict, which quickly took on regional and international dimensions that have promoted militarism and religious and ethnic cleavages that are destroying the social and economic fabric of the country. Seen from the human development perspective, the impact has been catastrophic as the economic, social, and human capital of the country has been comprehensively wrecked and ruined, creating capital divestment and de-industrialisation that will hobble present and future generations to underdevelopment and poverty.

This report shows the economic effects of the conflict, with total economic losses over the period reaching USD 84.4 billion, which is equivalent to 142 per cent of Syria's GDP in 2010. GDP loss over the period is estimated at USD 38.4 billion through contraction of 3.7 per cent in 2011, 28.9 per cent in 2012, and 6.8 per cent in 2013-Q1. But this is only 45 per cent of the total economic loss, with loss of capital stock due to damage and destruction valued at USD 41.15 billion accounting for 49 per cent of total economic losses. Additional military expenditures accounts for six per cent of this loss, with USD 4.85 billion redirected from the public purse to pursue the war. Total public debt is now at 65 per cent of GDP, while the CPI increased by 84.4 per cent over a two year period. The labour market lost 2.3 million jobs and the unemployment rate reached a staggering 48.8 per cent.

In terms of social impact, the rollback of performance in the Human Development Index has taken the country back 35 years in terms of its past progress due to deteriorating health, education and income indices. Half the citizenry is now poor and the population has been hollowed out by 9 per cent due to the flight of 1.3 million refugees and the departure of another 1.33 million "temporary" migrants. Moreover, the population pattern and settled communities have been disrupted by the displacement of almost 4 million people from their homes and neighbourhoods by violence, homelessness, fear and intimidation. The educational system is in a state of crisis with damage and destruction to 2,963 schools at a cost of SYP 6.1 billion, while another 1,992 schools are hosting IDPs.

The school dropout rate reached 46.2 per cent, while schools are suffering from teacher shortages, as educationalists have been displaced and taken flight among the refugees and migrants. The health care system has also been devastated by war damage as 32 hospitals and 31 per cent of primary health care facilities are out of services, while services have been disrupted by the flight of healthcare professionals. The service is plagued by a shortage of lifesaving and basic drugs due to the widespread destruction and collapse of the domestic pharmaceutical industry, while international sanctions prevent the importation of more advanced drugs and modern medical equipment.

It is estimated that by 2013-Q1, there were 80,000 conflict-related deaths, while another approximately 240,000 persons were injured during the conflict, many with life-long and life-changing disabilities and chronic conditions that will mar their futures and burden the healthcare system. In addition, preventive inoculation rates have dropped to alarming levels, while disease and illness are on the rise, with women, children and refugees especially at risk.

Moreover, as the government lacked a comprehensive crisis response strategy, it has been unable to respond effectively to urgent demands in critical sectors, but particularly in conflict zones. This is particularly evident in the lack of crisis management and resource allocation to internally displaced populations. The absence of transparency, weak accountability and low commitment to declared policies has created a lack confidence in public institutions. A similar attitude is widespread toward United Nations humanitarian actors in Syria. Thus, there is a need to build a humanitarian strategy that is participatory and inclusive that involves the government, civil society institutions, the private

sector and the international community in a manner that protective and rebuilds social stability and coherence, while recognising the conflicting political and diplomatic challenges this poses.

Endnotes

1 The data sources in this report are mainly from the Central Bureau of Statistics, Planning and International Cooperation Commission, Ministry of Health, Ministry of Education, Ministry of Local Administration, Ministry of Social Affairs, the Central Bank of Syria and UN agencies. In addition, formal interviews were conducted with experts and key national informants.

2 Financial programming is an integrated system of macroeconomic accounts that includes national accounts, balance of payments and fiscal and monetary accounts, which provide the information needed to assess the impact of the crisis on the Syrian economy and the options for policy adjustment. The tool also provides a framework for policy analysis and indicates key consistency checks. SCPR integrated capital stock calculations, money-metric poverty at the household level, and labour market performance, with standard financial programming. The financial programming tool has been chosen over microeconomic time-series and CGE models as these do not efficiently account for dramatic changes in economic variables. The financial programming model more efficiently reflects the current situation of the Syria economy in a time of dramatic change.

3 The report, in all its sections, calculates the growth rate of the first quarter GDP of 2013 through comparing it to the total GDP of 2012, since the GDP of the first quarter of 2012 is not available.

4 The GDP losses are only part of the total economic loss. Another important element is the impact of the loss of capital stock, which is a fundamental source of economic growth (SCPR 2013).

5 SCPR projections

6 SCPR estimate; based on data and information from the Ministry of Agriculture and CBS.

7 Calculations were made by using data from Collier and Hoeffler, 2002b. In 2012 and 2013-Q1 intensive combat fronts continued in Aleppo, Rural Damascus, Idlib, Der Ezzor and Homs.

8 HDI 2014 measures human development indicators in 2013.

9 SCPR estimations

10 The *upper* money-metric poverty line reflects the actual consumption expenditure of the poor that satisfied a reasonable level of basic needs, while the *lower* poverty line calculates the essential food and non-food requirements of the poor.

11 These estimations are based on MoE in addition to SCPR calculations.

12 No hospital is working in Der Ezzor.

13 J-RANS, 27 March, 2013 (Joint Rapid Assessment in Northern Syria).

14 OCHA, 26 April, 2013.

15 According to mortality to wounded ratio of 1:4.

Appendix

Institutional Responses

The long-held demands of Syrian civil society organisations, intellectuals and political dissidents for civil liberties, political reform and social and economic development through efficient, transparent and representative institutions, were largely policed rather than enacted. While the government had embarked the path of political and economic reform, the pace was slow and its achievements less than inclusive, leaving large segments and regions of Syrian society in a state of marginalisation and underdevelopment. While the government of Syria was initially confident that the conflagration of the Arab spring would not reach Syria, the public demonstrations in southern Syria in March 2011 was the flint that sparked its arrival. But in Syria this soon took a tragic turn toward armed-conflict that destroyed decades of Syria's development achievements through de-industrialisation, redundancy, divestment and capital flight. Unfortunately, it has become even more complex and intractable due to its regionalisation and internationalisation.

The underlying roots to the crisis lie in "institutional bottlenecks" which reflect deficiencies in the nature of formal institutions that prevented large segments of society from effectively contributing to political, economic and social development and sharing in the fruits of that progress (SCPR, 2013). While cognisant of the result of institutional weakness, lack of participation and corruption, the government has continued address such issues formally through legislation, even if many say this is too little, too late.

Laws and Regulations

While the state's response to the armed-conflict has been forceful, it has lacked an equally robust strategy capable of ameliorating the social and economic consequences of the conflict, as identified in the various areas of crises indicated in this report. It has not, for example, responded effectively to urgent demands in critical sectors, especially in conflict zones. This is particularly evident in the poor handling and lack of services for the mass of internally displaced populations. Strategic failure to deal with the needs of an increasingly desperate population in a transparent and accountable manner undermines people's confidence in the institutions of state.

However, from a *de jure* perspective, the government proposed a variety of laws and regulations through Parliament and Presidency. During the first quarter of 2013, number of decrees and laws were issued. Among them were:

- Legislative Decree No. 10 dated 15/01/2013 which established a public prosecution authority for financial crimes related to public funds. The decree aims to protect public money and the transparency of financial management of the state.
- Law No. 3 of 20/03/2013 regulating economic sanctions is designed to combat economic and financial crimes and to protect the national economy. It includes penalties on the abusers of public money.
- Legislative Decree No.16 which provides exemptions from all interest, penalties and fines on taxpayers if they pay the tax and fees until June 2013. These exemptions are aimed to stimulate tax collection by the Ministry of Finance in the face of shrinking tax revenues.
- Legislative Decree No. 15 divided the Ministry of Labour and Social Affairs into two ministries instead of one. It established a separate Ministry of Social Affairs and a separate Ministry of Labour.
- Ministry of Economy and Foreign Trade's Decision No. 3 dated 03/01/2013 allows the private sector to import gas, oil and fuel to be paid by their own funds. This is a short-term measure that

expires in June 2013. This decision is an attempt to get around difficulties faced by the government in delivering oil derivatives for the domestic market and its limited ability to finance imports in foreign currencies.

- Legislative Decree No. 2 of 2013 establishes the provision of social care centres to provide assistance for vulnerable people, such as the elderly and the poor.

Many critics point out that while these laws identify some of the challenges facing the government in dealing with the current crisis, the underpinning of such laws suffer from the absence of a clear vision to deal with the extraordinary challenges that face the country during this period of exceptional crisis.

References

Abadie. A, Gardeazabal. J, (2003): "The Economic Costs of Conflict: A Case Study of the Basque Country", *The American Economic Review*, Vol. 93, No. 1, pp. 113-132.

Acemoglu. D, Johnson. S, Robinson. J, (2001): "The Colonial Origins of Comparative Development: An Empirical Investigation", *American Economic Review* 91, No. 5, pp. 1369–1401.

Canuto. O, Giugale. M, (2010): "The Day After Tomorrow: A Handbook on the Future of Economic Policy in the Developing World", *The World Bank*.

Central Bureau of Statistics in Syria (1963-2011): *Statistical Abstracts, Household Income and Expenditure Surveys, Labour Force Surveys, Household Health Surveys*.

Central Bank of Syria (2000-2011): *Quarterly Statistical Bulletins*.

Collier. P, (1999): "On the Economic Consequences of Civil War", *Oxford Economic Papers*, 51, pp. 168-83.

Collier. P, Hoeffler. A, (2004) "Greed and Grievance in Civil War", *Oxford Economic Papers*, 56, pp. 563-95.

Ferguson. B, Restrepo. J, Villamarín. A, (2010): "Estimating Life Expectancy Potential Gains and Lost Product by Violence Reduction in Selected Countries", paper presented in "The Global Costs of Conflict", International Research Workshop of the Households in Conflict Network (HiCN) and the German Institute for Economic Research (DIW Berlin) 1-2 February 2010.

Garfinkel. M, Skaperdas. S, (2006): "Economics of Conflict: An Overview"(April), prepared for inclusion in T. Sandler and K. Hartley (eds.), *Handbook of Defense Economics*, Vol. 2 (chapter 3).

Groot. O, Brück. T, Bozzoli. C, (2009): "Estimation of the Economic Costs of Conflict", *DIW Berlin, Department of International Economics, Discussion Papers: 948, Berlin, (November)*.

Hoeffler. A, Reynal-Querol. M, (2003): "Measuring the Costs of Conflict", *Centre for the Study of African Economies*, (March).

Justino. P, (2009): "The Impact of Armed Civil Conflict on Household Welfare and Policy Responses". *MICROCON Research Working Paper 12, Brighton: MICROCON*.

Mehchy. Z, Nasser. R, Schiffbauer. M, (2013): "Trade Determinants and Potentials of Syria: Using Gravity Model: With an Estimation of Syrian Crisis Impact on Exports", Submitted to the 19th Annual Economic Research Forum (ERF) Conference.

Nasser. R, (2008): "Could New Growth Cross-country Empirics Explain the Single Country Growth of Syria during 1965-2004?" *Arab Planning Institute, working paper 0802*.

Nasser. R, Mehchy. Z, (2012): "Determinants of Labor Force Participation In Syria (2001 – 2010)", Submitted to the Labor and Human Development Theme of the 18th Annual Economic Research Forum (ERF) Conference 2012.

Nasser. R, Mehchy. Z, (2012): "Role of Economic Factors in Political Movement: The Syrian Case", Arab Planning institute. Kuwait.

North. D, (1990): "Institutions, Institutional Change and Economic Performance", Cambridge: Cambridge University Press.

Planning and International Cooperation Commission in Syria (2000-2011): 10th Five Year Plan 2006-2010, Mid Term Review of 10th FYP.

Rodrik. D, (2007): "One Economics, Many Recipes. Globalization, Institutions and Economic Growth", Princeton University Press.

Syrian Centre for Policy Research, (2013): "The Socioeconomic Roots and Impacts of the Syrian Crisis". Damascus, Syria.

Sen. A, (2009): "The Idea of Justice", Harvard University Press.

Sen. A, (1999): "Development as Freedom", Oxford: Oxford University Press.

The World Bank (2012): World Development Indicators 2012 database.

The World Development Report (2011): "Conflict, Security, and Development", The World Bank.

UNDP (2010): El Laithy. H, Abu-Ismael. K: "Poverty and Distribution in Syria", Unpublished.

UNDP (2010): "Human Development Report", New York: UNDP.

UNDP (2011): "Human Development Report", New York: UNDP.

UNHCR (2013): "Syria Regional Refugee Statistics", April.

United Nations (2010): "Rethinking Poverty: A Report on the World Social Situation". Department of Economic and Social Affairs.

United Nations, (2012): "World Economic Situation and Prospects 2012"

United Nations: OCHA (2013): "Humanitarian Bulletin: Syria". Issue 22, 19 March – 8 April.

UNRWA (2013): "Syria Crisis Situation Update", Issue 42, 14 April.

World Economic Forum (2010): "Global Competitiveness Report".