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THE ECONOMIC IMPACT OF THE SYRIAN WAR AND THE SPREAD OF ISIS

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Introduction: The Syrian war and the subsequent emergence and spread of the Islamic State (ISIS) have transformed the Levant in ways one could not have imagined prior to 2011. As the numbers of dead and of refugees and internally displaced kept climbing, and as families were torn apart and neighborhoods were turned into war zones, economies slumped and regional economic ties broke down. The shock of these events, henceforth referred to as the Levant conflict or war, has changed the region in profound ways, yet there are no systematic evaluations of its economic impact. Our objective was to address this gap and quantify both the direct and indirect economic effects of the war on the countries in the greater Levant--Turkey, the Syrian Arab Republic, Iraq, Jordan, Lebanon, and the Arab Republic of Egypt.

The direct effect stems from the decline in the size and skills of Syria's labor force due to loss of life, and refugee outflows, infrastructure destruction, Syria's trade embargo, increases in the costs of conducting business, and a decline in productivity. The indirect effect captures the opportunity cost of foregone deep trade integration initiatives aimed at liberalizing agricultural trade with Turkey,

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improving transport logistics within the greater Levant, and liberalizing intra-Levant trade in services. The indirect effect is important to consider because the war put an end to plans for deepening intra-regional trade ties as envisioned by the "Levant Quartet" agreement in 2010. The benefits of deep trade integration reforms, especially the liberalization of services trade, were expected to be sizable, reflecting significant economic complementarities among the six Levant countries and possibilities to generate productivity gains and attract foreign investments (World Bank, 2014).²



Syrian Refugees in Jordan

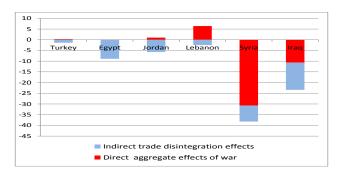
Who Loses and How Much? Our assessment suggests that the three years of war (from mid-2011 to mid-2014) have cost the greater Levant an estimated US\$35 billion in output, measured in 2007 prices. However, these losses have been unevenly distributed within the region. Those countries most affected by the war, Syria and Iraq, have borne the brunt of the economic costs of it (Figure 1). Their economies could have been respectively a third and a quarter larger in real terms had they avoided the

 $^{^{\}rm 2}$ World Bank (2014) Over the Horizon: A New Levant, the World Bank, Washington, D.C.

conflict. In the case of Syria, most of the costs are associated with the direct costs of war and the trade embargo is a major factor behind these costs. In the case of Iraq the split between direct and indirect costs is even and the direct cost are associated mostly with the deteriorating environment and the resulting decline in productivity.

Other Levant countries' losses mainly reflect the foregone benefits of deep trade integration, while the direct effects lead to declines in average per capita incomes, but not declines in aggregate output (Table 1). Why is this? The inflows of refugees have boosted consumption of goods and services, investment, and labor supply, and therefore the size of these economies (Figure 1). But in all cases, aggregate output has increased less than the size of the population so the war has hurt household incomes.

Figure 1: Direct v. indirect welfare effects of war (percent)



Source: Ianchovichina and Ivanic (2014) *Economic Effects of the Syrian War and the Spread of the Islamic State on the Levant*, World Bank Policy Research Working Paper #7135, Washington, D.C.

Table 1: Aggregate v. per capita welfare effects of war (percent)

	Turkey	Egypt	Jordan	Lebanon	Syria	Iraq
Aggregate direct and indirect effect	-1.1	-8.8	-4.7	3.9	-38.3	-23.4
Direct aggregate effects of war	0.3	0.1	1.0	6.4	-30.7	-10.7
Indirect trade disintegration effects	-1.4	-8.9	-5.7	-2.5	-7.5	-12,7
Per capita direct and indirect effect	-2.0	-9.1	-7.2	-12.8	-22.6	-28.1

Source: Ianchovichina & Ivanic (2014) *Economic Effects of the Syrian War & the Spread of the Islamic State on the Levant*, World Bank Policy Research Working Paper #7135, Washington, D.C.

The difference between aggregate and per capita welfare effects are most pronounced in Lebanon (Table 1), where the increase in the number of refugees relative to the population is greatest, and minimal for Turkey and Egypt, where refugees account for a small share of the population. In Syria, the difference between aggregate and per capita welfare effects is also sizable because of the effect of Syrian refugees and war casualties on the population count.

Table 2: Real factor returns (percent)

			Unskilled	Skilled	Physical	Natural
		Land	Labor	Labor	Capital	Resources
Turkey	Indirect effects	-4.1	0.2	-0.6	-1.1	-4.8
	Direct effects	1.6	-0.5	-0.5	0.2	1.8
Egypt	Indirect effects	-19.3	-7.3	-8.3	-7.7	-12
	Direct effects	-0.8	-0.1	-0.1	0.1	0.5
Jordan	Indirect effects	-17.9	-5.1	-6.4	-5.3	-17
	Direct effects	-2.5	-1.5	-1.3	0.7	3.1
Lebanon	Indirect effects	-4.1	-2.2	-2.4	-2.5	-8.6
	Direct effects	39.5	-9	-9.7	3.4	30.1
Syria	Indirect effects	-15.1	-4.5	-6.9	-2.2	-18
	Direct effects	-48.4	-18.6	-19	-18.2	-16.4
Iraq	Indirect effects	-34.7	-5.9	-11.2	-7.2	-12.8
	Direct effects	-6.7	-20.6	-20.2	-12.3	5.3

Source: Ianchovichina and Ivanic (2014) *Economic Effects of the Syrian War and the Spread of the Islamic State on the Levant*, World Bank Policy Research Working Paper #7135, Washington, D.C.

The average welfare effects of the Levant war are not indicative of its incidence within countries. In Syria, almost every economic sector has been affected negatively, but real estate ownership has been particularly badly hurt as demand for land declined steeply because of the huge numbers of refugees leaving the country. By contrast, in Lebanon and Turkey, land and business owners have benefited but workers have suffered because the arrival of Syrian refugees has increased local demand for goods and services, raising prices, and has augmented the labor supply, lowering wages. With quality of services deteriorating and real wages falling due to intense competition for jobs, all in all many people, especially the poor and the unskilled,

have suffered and poverty rates have increased throughout the region.

In conclusion: It is important to note that the analysis in our paper does not factor in several types of costs. We do not assess the cost of delivering basic services to refugees in receiving countries; these costs could be substantial for Jordan, Lebanon, and Turkey. The costs of replenishing depleted human and physical capital in Syria would also be sizable. We also ignore important dynamic investment-growth links that may amplify the effects discussed here.

These simulation results indicate the qualitative changes likely to occur as a result of the conflict and regional trade disintegration, mainly associated with the failed services trade liberalization. The magnitudes of the direct effects of the war reflect the intensity and scope of the conflict as of mid-2014 and could change depending on the course of the war. In this assessment, we assume that ISIS has not captured the main oil extractive facilities in Southern Iraq. If this were to happen, the impact on Iraq would be much larger in magnitude than the one portrayed in the paper. We also assume that the spread of ISIS remains contained within Iraq and Syria.

This assessment relies on a global computable general equilibrium (CGE) framework³ updated with economic and trade data pertinent to the Levant economies and accurately reflecting trade preferences on the eve of the Syrian war. Unlike less formal methods of assessment, the CGE approach ensures consistency, includes important behavioral considerations, industry, trade and factor input details, and captures second-order feedback effects, which are most significant for Syria and Iraq. The accounting relationships and behavioral linkages constrain outcomes in ways not possible with partial equilibrium models. We find that the pure general equilibrium effects of war and foregone deep trade liberalization differ in sign and size and are large for

Syria and Iraq, which experience the largest shocks. This finding validates the value added of using the global general equilibrium framework in this assessment and suggests that conventional (linear) approaches would misstate the "true" effects of the war shock, making it difficult to determine the direction of bias, especially for those countries most affected by the shock.

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³ Hertel (1997) Global Trade Analysis: Modeling and Applications, Cambridge University Press.