Economic Effects of the Syrian War and the Spread of the Islamic State on the Levant

by

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Extended Summary

This paper quantifies the economic effects of the Syrian war and the advance of the Islamic State (IS or ISIS) on six Levant economies - the Arab Republic of Egypt, Iraq, Jordan, Lebanon, the Syrian Arab Republic, and Turkey. The analysis relies on a global computable general equilibrium model with new details on the Levant economies and factors in both the direct economic effects of the conflict and its opportunity costs due to foregone deep trade integration initiatives in the region. The latter are particularly important since the conflict put a halt to the regional trade integration process considered essential for accelerating economic growth, diversification, and job creation in the region.

The simulation results reported in the paper indicate the qualitative changes associated with the conflict while the magnitudes of the effects reflect the intensity and scope of the war as of mid-2014. The analysis suggests that Syria and Iraq bear the brunt of the direct war costs, losing 14% and 16% in per capita welfare, respectively (Table S1). The embargo on trade with Syria is a major factor behind this country's real GDP decline, which is estimated at 30% and is much larger than its per capita output decline of 13%, due to the effect of Syrian refugees and war casualties on the population count. In Iraq, the per capita welfare losses are associated with the deteriorating environment and the resulting decline in productivity. All other Levant economies lose in per capita terms, but not in aggregate terms (Table S1) because the inflows of refugees boost population numbers, and therefore consumption, investment, and labor supply. Lebanon's

per capita welfare losses reach close to 11%, while those of Turkey, Egypt, and Jordan do not surpass 1.5%. The difference between aggregate and per capita welfare effects have been most pronounced in Lebanon, where the increase in the refugee-to-citizen ratio is greatest, and minimal for Turkey and Egypt, where refugees have remained a small share of the population.

Table S1. Welfare effects of war and trade disintegration in the Levant (%)

	Turkey	Egypt	Jordan	Lebanon	Syria	Iraq
Direct per capita effects of war	-0.5	-0.1	-1.4	-10.6	-14.0	-16.1
Output effects	0.0	0.0	0.0	-0.1	-6.3	-12.6
Capital destruction	0.0	0.0	0.0	0.0	-5.4	-0.1
Trade cost escalation	0.0	0.0	0.0	-0.1	-0.1	-0.2
Trade embargo on Syria	0.0	0.0	0.1	0.0	-15.4	0.0
Labor force effects of refugees	0.4	0.0	1.0	6.0	-7.5	2.8
Population effects of refugee movements	-0.9	-0.2	-2.5	-16.4	20.8	-6.1
Per capita effects of trade disintegration	-1.4	-9.0	-5.8	-2.2	-8.6	-12.0
Foregone agricultural liberalization	0.0	-0.1	0.0	0.0	0.0	0.0
Foregone transport logistics reform	0.0	-0.1	0.0	-0.2	0.1	-1.0
Foregone services liberalization	-1.4	-8.8	-5.7	-2.1	-8.7	-11.0
Per capita cumulative effects	-2.0	-9.1	-7.2	-12.8	-22.6	-28.1
Aggregate cumulative effects	-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
Trade disintegration effects	-1.4	-8.9	-5.7	-2.5	-7.5	-12.7
Cumulative effects in US\$ 2007	-6,510	-10,483	-834	912	-12,280	-3,997

Source: Ianchovichina and Ivanic (2014), Policy Research Working Paper No. 7135, the World Bank.

The direct effects of the Levant war are an understatement of the real economic costs of disintegration in the Levant. If the costs of foregone regional trade integration are included then the total costs of war for Syria and Iraq almost double, reaching 23% and 28%, respectively, and

escalate to 10% for Egypt and 9% for Jordan. The failed services liberalization is a major source of trade-related losses. Stated differently, had Iraq and Syria managed to avoid conflict their average per capita incomes could have been as much as a third and a quarter larger, respectively.

The average welfare effects are not indicative of the incidence within countries. In Syria, all economic agents are hurt but landowners lose the most as derived demand for land declines dramatically reflecting the outflow of refugees (Table S2). By contrast, in Lebanon and Turkey land and capital owners benefit while workers lose because the inflows of refugees put pressure on demand for goods and services and depress wages by augmenting labor supply.

Table S2 Real price changes (%)

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

Source: Ianchovichina and Ivanic (2014), Policy Research Working Paper No. 7135, the World Bank.

The direct sectoral effects of the conflict are negative and sizable across the board only in Syria and Iraq, where the war has led to a productivity decline, and in the case of Syria considerable capital destruction and loss of labor. In fact, Jordan and Lebanon register sectoral expansions in response to the refugees' effect on the demand for goods and services and supply of labor. The direct sectoral effects of conflict in Turkey and Egypt are negligible. Regional trade disintegration, however, drags down intra-Levant trade and services productivity, putting upward pressure on the cost of producing and importing services within the Levant area with negative

effects for output of services in all Levant economies. To the extent that services are used as intermediate inputs into other service sectors, the Levant economies see broad-based contraction of economic activity. The effects, however, differ by country. Turkey's economy is relatively unscathed by the trade disintegration because it already has the most open services sectors in the Levant. It suffers losses mostly because of foregone opening of business services and construction. Given its size, however, Turkey's trade losses are largest in dollar terms as it foregoes nearly US\$1.6 billion in exports to Levant countries (Figure S1).

Turkey Egypt Jordan Lebanon Syria Iraq 200 0 -200 -400 -600 -800 -1000 -1200 -1400 -1600 -1800 ■ Intra-Levant imports ■ Intra-Levant exports

Figure S1. Effects of trade disintegration on intra-Levant trade volumes (in US\$ millions)

Source: Ianchovichina and Ivanic (2014), Policy Research Working Paper No. 7135, the World Bank.

Finally, the paper demonstrates the advantages of using a general-equilibrium approach over conventional frameworks for disaster evaluations. It shows that by assessing the "pure" general-equilibrium effects of conflict, defined as the difference between the non-linear and linear solutions to the model, where the linear solution is a first-order approximation of the solution

with data coefficients kept constant at initial levels. These pure general-equilibrium effects differ in sign and size and are large for Syria and Iraq, which experience the largest shocks. Thus, the paper shows that simpler approaches would misstate the "true" effects of war, making it difficult to determine the direction of bias, especially for those most affected by the shock.

The size of the effects will 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, Iraq's welfare, output, and export losses would be much larger in magnitude than those portrayed here. It is important to note that the analysis does not factor in several types of costs. The paper does not include the fiscal costs 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. Important investment-growth links that may amplify the effects of conflict are also not included in the paper.